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R95 **Russian Economy in 2018. Trends and Outlooks. (Issue 40**) / [V. Mau at al; ed. Editors – Alexei Kudrin, doctor of sciences (economics), Alexander Radygin, doctor of sciences (economics), Sergey Sinelnikov-Murylev, doctor of sciences (economics)]; Moscow: Gaidar Institute Publishers 2019. – 616 pp. – ISBN 978-5-93255-556-9

The review "Russian Economy. Trends and Outlooks" has been published by the Gaidar Institute since 1991. This is the 40th issue. 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 sphere; institutional changes. The paper employs a huge mass of statistical data that forms the basis of original computation and numerous charts confirming the conclusions.

Reviewer: Lev Yakobson, Doctor of sciences (economics), professor, first pro-rector, NRU-HSE.

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2018: Results

The annual review of the Russian economy for 2018, while following its traditional structure, has been prepared by the Gaidar Institute with a due regard for the increasing uncertainty in the system of global economic connections. Especially destabilizing were the factors associated with the economic sanctions, the latter reaching far beyond the scope of Russia-US relations, and the growing tit-for-tat trade conflict between the USA and China, which has outgrown the scale of economic competition and is acquiring the typical features of global technological and geopolitical confrontation. The situation was further aggravated by the toughening monetary policy of the US Federal Reserve, which primarily affected the developing markets.

The socioeconomic situation in Russia remains complicated, being influenced, among other things, by the aforesaid factors. Although the transition to a positive phase of growth has continued, the quantitative and qualitative characteristics of that growth cannot be regarded as satisfactory. Besides, the GDP growth indices for 2018 released by Rosstat are far above both the official targets and experts' forecasts: the issues that arose in connection with data comparability and the methods employed in calculating personal income, investments in fixed capital, building construction activity, etc., are such that require an open and thorough discussion that must involve the concerned government departments and the expert community.

At the same time, some of the indices that point to a negative economic dynamic are not necessarily indicative of negative trends. Thus, the plunge in agricultural output was to a certain extent preconditioned by the bumper harvest of 2017, the largest harvest in Russia's post-Soviet history. Industrial production growth largely occurred due to the increased mineral extraction and the shift in the industrial structure toward the raw materials sector, while the growth observed in machine-building was determined by the expanded government orders and direct government subsidies.

Investment activity was mainly performed by the State or by companies with state stakes. This is not enough for an actual switchover to an investment-based growth model, as private businesses stubbornly focused on small-scale investments, while foreign direct investments shrank dramatically.

The processes going on in the social sphere appeared to be controversial. The public's response to the government decision to raise the retirement age was adamantly negative, bearing in mind that Russia, among the countries with a comparable level of development, was one of the last to undertake such a measure. It is hard to assess its long-term effects, including the effects on the demographic situation, which recently has been characterized by a rather negative vector. In 2018, Russia's natural population decline for the first time in a decade was not offset by migration. For five years in a row, personal income in real terms has been declining, thus giving rise to questions

concerning both the movement pattern and the actual value of that index, because real wages (first of all in the budget-funded sector) increased significantly.

Shrinking incomes did not translate into a decline in consumption, the latter evidently being sustained by borrowed funds. Moreover, for the first time since 2014, the retail lending growth rate surged above that of individual bank deposits. Against the backdrop of a high activity in the retail lending and housing mortgage segments, the volume of new loans issued to corporate clients also somewhat increased. As far as the bond market is concerned, it hit an absolute historic high, but its actual growth relative to 2017 was minuscule.

The macroeconomic situation was developing quite positively – at least if the already mentioned uncertainty factors are taken into consideration. Those factors (coupled with the expectations of increased VAT rates) were among the reasons why the Bank of Russia, for the first time in years, raised its key rate in an attempt to bring inflation back to its target value. As a secondary measure, the Bank of Russia also suspended its foreign currency purchases on the market on behalf of the RF Ministry of Finance, in order to make the ruble's exchange rate less volatile in face of the faster capital outflow. Importantly, capital outflow did not result in a zero balance of the current account, because it was vastly offset by a positive foreign trade balance thanks to the favorable situation in the world raw materials market. At the same time, the national currency's exchange rate became significantly less dependent on oil prices, while being increasingly responsive to the effects produced by geopolitical risks.

Having run a federal budget deficit for six consecutive years, Russia finally achieved a significant budget surplus. As far as the consolidated budget of the regions is concerned, its increasing revenue coupled with reduced expenditure made it possible, for the first time in 11 years, to chalk up a surplus. On the whole, the consistently conservative budgetary policy was supported by arguments that the risks posed by economic sanctions could become even greater, as well as by expectations of a new cyclical decline of the world economy.

The May 2018 Presidential Executive Order, which set forth the medium-term national development goals, as well as national projects to be implemented until 2024, has placed an emphasis on human capital development, infrastructure, and technological modernization. In this connection, it is essential that the program-based goals should not be achieved at the expense of macroeconomic destabilization. Likewise, it would have been wrong to make an undue fetish out of the economic growth indices in nominal terms. Those growth indices are not so important per s*e*, they are only important as an indicator of growing public welfare.

Section 1. Socioeconomic policy in 2018: national goals and a model of economic growth[1]

A number of unique anniversaries fell in 2018–2019: 30 years since the collapse of the communist system, 20 years since the start of the Asian economic crisis, 20 years since the introduction of the Euro (the new currency was introduced into noncash circulation on 1 January 1999), and 10 years since the development of the global structural crisis. There is a specific date that is important in the history of the Russian economy and economic policy: in 1999 the ten-year decline changed to economic growth, which led to doubling the GDP and a restoration of the pre-crisis level by 2008.

These are not just anniversaries of events that remain in the past but key milestones of socioeconomic development that in many ways formed the priorities and phobias of the political elite of the world's leading countries, both developed and developing. These events of the past continue to have significant influence of today's economic policy.

1.1. Global trends and challenges

In 2018 the global economy grew steadily at an acceptable rate – around 3.7%[2]. Moreover, this economic growth has continued for almost 10 years – a rare occurrence in the modern economic history of developed countries. However, the prevailing topics of economic and political discourse among experts and politicians in the leading countries is the instability of this growth and predictions of a new crisis. These sentiments and expectations are partially due to the long-lasting growth itself: it cannot be permanent. However, the main point of the discourse regarding the upcoming crisis is an analysis of the nature of the 2008–2009 crisis and the specific reactions to it during

[1] This section was written by V. Mau, RANEPA.

[2] World Economic Outlook Update. January, 2019, p. 8. URL: https://www.imf.org/en/Publications/WEO/Issues/2019/01/11/weo-update-january-2019

the past decade. Of course, the problem now is not a global structural crisis (these happen once every several decades) but the *next normal-sized recession*[1].

Currently, *the events which occurred ten years ago are usually interpreted as a global structural crisis* comparable to the Great Depression of the 1930s and, by analogy, now called the Great Recession. This entails both the length of the subsequent period of instability (turbulence) and the need for the profound structural and political (including geopolitical) transformations that have determined the development pattern for the leading countries during the past decade.

However, the problem is not only the protracted adaptation of socioeconomic and political systems to the new challenges. The situation is complicated by the fact that the direction of this adaptation has aroused resentment among a significant portion of the traditional economic and political elites, leading to conflicts and uncertainty. Despite the economic growth and declining unemployment, there is an evident intensification of social tensions and the associated rise of populism, waning integration trends (globalization), and stronger support for protectionism and 'national identity' (mostly in developed countries), as well as the spreading phenomenon of non-liberal democracies against the sustained background trend towards democratization. The scale of the distribution of these tendencies allows us to conclude that this is not a temporary episode (reaction to the crisis) but a stable trend that will exist for a considerable time.

Apart from the remaining sociopolitical problems, the past decade has not brought about any solutions to a number of the actual economic problems that factored into the 2008–2009 crisis and which still pose risks. First of all, we are speaking about the exceptionally high global debt which, instead of decreasing, grew to USD 184 trillion in 2017, and is estimated to have exceeded USD 200 trillion in 2018, whereas sovereign debt is now around USD 63 trillion. Investment activity remains weak, while middle class incomes are stagnating. Developed economies (except the United States) are unable to escape the deflation trap, which imposes strict limitations on anti-crisis policy tools in the event of a cyclical downturn. Political instability is leading either to counter-reforms (stronger disintegration and populism, with examples observed in the United States, United Kingdom, and Italy) or to the stagnation of reforms (France)[2].

[1] Kenneth Rogoff. Central Bankers' Fiscal Constraints. Project Syndicate, January 4, 2019. URL: https://www.project-syndicate.org/commentary/countercyclical-fiscal-policy-no-cure-in-next-recession- by-kenneth-rogoff-2019-01/russian

[2] "The West is in crisis – and so is economics. Rates of return on investment are meager. Wages – and incomes generally – are stagnating for most people. Job satisfaction is down, especially among the young, and more working-age people are unwilling or unable to participate in the labor force. Many in France decided to give President Emmanuel Macron a try and now are protesting his policies. Many Americans decided to give Donald Trump a try, and have been similarly disappointed. And many in Britain looked to Brexit to improve their lives" Edmund S. Phelps. The Three Revolutions Economics Needs. *Project Syndicate*, January 23, 2019. URL: https://www.project-syndicate.org/commentary/economics-must-change-in-three-ways-by-edmund-s--phelps-2019-01/russian.

A significant remaining macroeconomic problem *is monetary policy*: 10 years since the 2008–2009 crisis, the Federal Reserve System is the only one that managed to escape the zone of ultra-low rates. The monetary regulators of the eurozone, the United Kingdom and Japan failed to give up on monetary easing policies in 2018, for fear of triggering a recession[1]. On the other hand, they are losing a vital tool for fighting the next crisis, i.e. the option of monetary easing. The central banks of developed countries have no leeway for easing monetary policy, whereas fiscal policy will be very difficult to ease due to the huge national debts that are not decreasing.

This situation has political as well as economic ramifications. Monetary policy is technocractic, with decisions made quickly and mostly outside of the political process (by a respective body of the central bank), whereas fiscal policy is highly vulnerable to political conditions (a review by parliament is mandatory), and decision-making requires a long time, with ambiguous results. Meanwhile, recessions nowadays usually last for a year, and failure to take quick and adequate steps to fight it might precipitate a long-term deterioration in conditions, where cyclical problems may become structural. This poses a high risk under political instability in most leading democratic countries[2].

A substantive factor in the instability and uncertainty is the disruption of the traditional international order, including *geopolitical tensions and the abandonment of international coordination*. In 2008 and 2009, an understanding emerged regarding the need for a global system of economic regulation to overcome the sharp and painful global crisis, which would become an answer to the emergence of a global financial market capable of moving capital around the world in a matter of seconds. One of the main initial objectives for the G20 was to create an effective global regulatory system[3]. In 2018, it became clear that multilateral cooperation in macroeconomic regulation (between central banks and governments) is practically impossible: countries

[1] In early 2018, "central banks had no doubts that they could easily begin to wind down their extraordinary monetary stimuli, while investors in stock markets were almost unanimous in their bullish sentiments. However, 2018 has turned out to be the worst year for investors since the financial crisis. Central banks were forced to give up their initial plans to normalize monetary policy, and economists were forced to reduce their economic growth forecasts, and a lot of businesses began preparing for a recession in 2019 or 2020." Anatole Kaletsky. The World Economy Goes Hollywood. Project Syndicate, January 18, 2019. URL: https://www.project-syndicate.org/commentary/volatile-financial-markets-despite-fundamentals-by-anatole-kaletsky-2019-01/russian

[2] Rogoff suggests a specific institutional response to this risk, i.e. to set up an independent budget council that would be essentially equivalent to a central bank for monetary policy (Kenneth Rogoff. Central Bankers' Fiscal Constraints. *Project Syndicate*, January 4, 2019. URL: https://www.project-syndicate.org/commentary/countercyclical-fiscal-policy-no-cure-in-next-recession-by-kenneth-rogoff-2019-01/russian). Of course, this idea, while being attractive from a technocratic point of view, has no chance politically to be implemented in democratic countries, since it would entail a complete revision of legislative powers, i.e. surrendering their key powers to review and approve the national budget, for which they have fought for nearly a thousand years.

[3] Larionova M. V., Ignatov A. A., Popova I. M., Sakharov A. G., Shelepov A. V. Desiat let Gruppe dvatsati. Bezuslovnye dostizehniia, ustoichivye vyzovy, novye riski, budushchie prioritety [The G20 Is Ten. Definite Achievements, Persistent Challenges, New Risks, Future Priorities]. Moscow: Delo, 2019.

increasingly resort to protectionism, preferring to lay blame on each other rather than coordinating their actions.

The instability is caused by the overall declining confidence in national institutions. Another factor in this is the rapidly intensifying sanction policy, especially with respect to global currency access. The risk of getting cut off from the dollar for sanctioned countries has caused a revaluation of the structure and role of foreign exchange reserves, not just in sanctioned countries, but also in others which, as it may seem, should not be concerned about American sanctions. The early 2019 precedent with Venezuela's gold reserves kept in the Bank of England has added to the uncertainty. As a result, a number of countries began to take steps to diversify their foreign exchange reserves in 2018, to move them between countries and to increase their share of bullion gold. This is happening not only in Russia (to be described at the next sections of this paper) but in the EU, which has begun to take measures to augment the role of the euro in international payments.

The sanctions, which have turned into an essential component of modern global policy, are becoming an important factor disrupting the world order, and not just for sanctioned countries. The sanctions are now justified mostly by national security considerations, which may be used in response to any action by any country, company, or individual. This heightens risks for everyone and will inevitably affect the stability of financial markets.

Uncertainty is also maintained by the United States initiating *a revision of existing international trade agreements and threatening trade wars*. At the onset of the global crisis, one of the anticipated geopolitical and geoeconomic consequences was the emergence of the Big Two (USA and China), which largely reflected the growing interdependency of the two countries, especially concerning the ratio between savings (in China) and consumption (in America)[1].

The most significant event in 2018 was the marked aggravation of the confrontation between the two states, including the arrest of Huawei's financial director in Canada, at the request of the United States. This is a confrontation, on the one hand, between China's political and economic ambitions, striving to expand its companies (especially high-tech) and investments around the world, and, on the other hand, the new attitude of the U.S. administration which is reviving the old-fashioned traditions of mercantilism (active trade balance). However, the countries agreed on a truce at the end of 2018, though this does not suggest that global risks have been reduced.

The national security considerations are becoming the most vital element in political rhetoric (and practical policies) for leading countries, primarily the United States and China. This exacerbates the problem of correlation between security and economic

[1] Niall Ferguson wrote about a hypothetical country called Chimerica (China+America), in which the economies of both parts complement each other and have a substantial impact on global processes. Ferguson N. The Ascent of Money: A Financial History of the World. The Penguin Press, 2008, pp. 335–336. Zbigniew Brzezinski analyzed the phenomenon of G2 in "The Group of Two That Could Change the World," *The Financial Times*, January 14, 2009.

openness, which China and a number of other countries still regard as the most important factors in their sustainable growth, since they are not very compatible in practice. Naturally, the question arises concerning the prospects for rapport between the public sector and the intensification of market reforms in China. Security arguments require maintaining a strong public sector, limiting the financial market's role in raising investment capital, and strengthening the communist party. However, to maintain sustainable growth, the country needs to expand the private business sector, develop the securities market, continue decentralization efforts, and encourage competition. However, these two approaches are very difficult, if not impossible, to combine in practice.

We must expect greater conflict between the state and market approaches to the future model of China's economic development. Two possible forms of development are possible. One: an escalation of the conflict between state interference and furtherance of market relations, which will require a new stage of institutional reforms in the direction of increasing the role of the state, or its gradual replacement with institutions of market democracy (but not a liberal one). Two: the preservation of the significant role of state and Party, which will take on the functions that are performed in developed democracies by nongovernmental institutions – enforcement of social, ecological and other public interests through its presence in the management of major corporations. The second path is more complex and has no convincing precedents in the experience of post-communist transformations. But it cannot be excluded, especially since in the last decades China has demonstrated the ability to find non-standard solutions to the tasks it faces.

The global structural crises in the twentieth century led to the formation of new configurations of global reserve currencies. In 2008–2009, there were discussion about the prospects of the yuan, artificial currencies (SDRs, in expectation of the strengthened role of the G20 and international economic coordination), and regional reserve currencies. In 2016–1017 cryptocurrencies received greater attention, however 2018 demonstrated their extreme instability. Apparently, the current crisis will not bring substantive changes in the system of global currencies, if we don't count the probably strengthened positions of the euro[1] and the desire of a number of countries to diversify their currency reserves with the aim of reducing the share of the dollar. However, historical experience tells us that in the (medium near) future we can expect the rise of the role of the yuan: for the dollar replaced the British pound approximately a half century after the American economy surpassed Britain's, and after global military cataclysms in Europe. The future role of cryptocurrencies should not be ignored, because after improvements in information technology they could take a more significant role in the global monetary system.

[1] The European Commission is elaborating plans to strengthen the euro's global positions-increasing its role in international settlements and in the markets of strategic sectors, including oil and gas. The Commission's report of 5 December 2018 makes this clear. (EU, 2018a; 2018b; 2018c).

Despite significant market fluctuations, new steps were taken in 2018 towards developing blockchain technology, which underlies any cryptocurrency, to exploit it in practice, and to legalize it politically. First of all, some central banks that previously rejected this instrument have announced their willingness to experiment with cryptocurrencies. In other words, we are speaking of the emergence of national cryptocurrencies in the foreseeable future. (However, this would contradict their ability, in principle, to act as private money.) Second, political regimes in difficult political and financial positions (primarily Venezuela) have made (failed) attempts to rely on cryptocurrencies[1]. Third, a discussion has begun as to how a cryptocurrency could be integrated into the existing fabric of economic relations, particularly with respect to taxation[2]. Fourth, critical articles are appearing about cryptocurrencies and the blockchain technology, including the condemnation of it as a 'big lie'[3].

Thus, the emergence of cryptocurrencies is a logical response to market requirements, leading to lower costs and higher payment and transaction efficiency. On the other hand, the full-blown development of the cryptocurrency market will only be worth discussion when it is populated by major institutional investors (insurance companies, pension funds, etc.). This requires a robust institutional infrastructure, which is not in place as of yet.

1.2. National goals and the model of economic growth

The socioeconomic situation in Russia remains complicated. It allows for no definitive evaluations, while economic policy discussions are abundant with very controversial recommendations. The following key characteristics of the current situation should be identified (see *Table 1*).

1. Economic growth is evident, but its rate, which lags far behind the world average, bewilders the elite and the experts. However, in early 2019, Rosstat's revaluation of economic growth rates from 1.6–1.8% (official forecast) to 2.3% caused equal bewilderment. Although the Ministry of Economic Development believes this 'acceleration' is temporary and that growth during 2019 will be roughly at the potential level.

2. However, growth is important not for its own sake but rather as an indicator of rising standards of living. Meanwhile, Russians' real disposable incomes have been declining for the fifth year in a row. The number of people with incomes below the poverty threshold has remained close to 20 million.

3. However, unemployment fell below 5% in 2018, real wages increased by 6.8%, and end-use consumption by households and retail turnover grew by 2.2% and 2.6%, respectively. Thus, consumption growth surpassed income growth.

[1] Levashenko A. D., Ermokhin I. S., Zubarev A. V., Sinelnikova-Murylev E. V., Trunin P. V. (2019) *Kriptoeconomika* (Cryptoeconomics). Moscow: Delo, 2019, pp. 29-30.
[2] *Ibid*., pp. 33-35.
[3] Roubini, N. The Big Blockchain Lie. Project Syndicate, October 15, 2018. URL: https://www.project-syndicate.org/commentary/blockchain-big-lie-by-nouriel-roubini-2018-10/

4. Under stagnating real income (and, possibly, as a compensatory measure) retail lending increased substantially. Overall loan debt reached RUB 2.7 trillion, and mortgage debt, RUB 1.2 trillion, whereas bank deposits grew by over RUB 2.5 trillion. Borrowing outstripped deposits for the first time since 2014. These data may point either to the insufficiency of internal resources (consumption at the expense of borrowing) or to a stabilized situation, which allows people to take out loans (see *Table 2*). Another problem is that loan interest growth rates are higher than growth in nominal household income. This results in a rising proportion of payments for servicing debt owed to banks out of total household income.

5. The macroeconomic situation remains favorable. The national debt is very low, while the debt denominated in foreign currencies is close to zero. After six years of deficit financing, the federal budget was balanced with a surplus of 2.7% of the GDP, whereas the oil and gas deficit continued to fall, reflecting a reduced dependence of the budget on hydrocarbon prices. Consumer inflation is hovering around the target of 4%. The Bank of Russia's international reserves are growing. The only alarming indicator is perhaps the unprecedentedly high producer price index during the past decade (11.7%), which may be indicative of the risk of future inflation surges.

6. Investment activity remains rather weak, increasing by 4.3% (4.8% in 2017). This is especially relevant with respect to private investments, which must be a vital indicator not only of the stability of economic development itself, but also of the level of confidence in the government's socioeconomic policy.

7. The year 2018 saw increased tensions among various social groups. To a large extent, this resulted from popular discontent with government decision to raise the retirement age. Even though Russia was one of the last among the countries at the comparable level of development to make this decision, it was met with disapproval by the public. This disapproval will remain a significant factor in economic and social policies for some time and will have to be taken into account by the authorities while making other economic and political decisions.

In this situation, increasing economic growth rates and ensuring sustainable growth in well-being are becoming key objectives – not just economic but political as well. Their achievement was targeted by the Presidential Decree on May 7, 2018[1], providing for a complex set of macroeconomic, institutional, and structural measures. However, elaborating the set of measures should take into consideration a number of conditions that, when ignored, have led to dire consequences in Russia's economic history (including during the past 30 years).

First, economic growth must be accompanied with technological modernization and improved well-being.

Second, it must not be achieved at the price of macroeconomic destabilization, i.e. uncontrolled increases in the national debt and budget deficit.

[1] Russian Federation Presidential Decree No. 204, dated May 7, 2018, "On the National Goals and Strategic Development Objectives for the Russian Federation Through 2024."

Third, growth must continue in the medium- and long-term perspective, and not be limited to a short-lived spike followed by a recession or stagnation. This is especially important, since there are actual discrepancies between the measures ensuring short-term and long-term growth.

Fourth, the institutional changes needed for growth must not lead to the social and political destabilization of the country.

All these conditions are interrelated, and a failure to meet any of them would automatically entail failure in all the others. The experience of the USSR between 1986 and 1989, clearly demonstrates how failure to meet these conditions resulted in an economic and political downfall after a short-lived acceleration.

In other words, nominal economic growth figures must not be fetishized.

Table 1

Maim economic indicators of the Russian Federation, 2007–2018

Indicator	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1	2	3	4	5	6	7	8	9	10	11	12	13
Macro indicators (rates of growth in 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	–2.5	0.3	1.6	2.3
Industry	6.8	0.6	–10.7	7.3	5.0	3.4	0.4	1.7	–0.8	2.2	2.1	2.9
Agriculture	3.3	10.8	1.4	–11.3	23.0	–4.8	5.8	3.5	2.6	4.8	3.1	–0.6
Construction	18.2	12.8	–13.2	5.0	5.1	2.5	0.1	–2.3	–3.9	–2.1	–1.2	5.3
Wholesale trade	9.5	5.4	2.0	3.0	4.4	3.6	0.7	3.9	–5.5	3.1	5.7	2.4
Retail trade	16.1	13.7	–5.1	6.5	7.1	6.3	3.9	2.7	–10.0	–4.6	1.3	2.6
Households final consumpsion	14.3	10.6	–5.1	5.5	6.8	7.9	5.2	2.0	–9.4	–1.9	3.2	2.2
Investments in fixed assets	23.8	9.5	–13.5	6.3	10.8	6.8	0.8	–1.5	–10.1	–0.2	4.8	4.3
Wages as a percentage of GDP, %	46.7	47.4	52.6	49.6	43.8	44.3	46.2	47.2	46.5	47.3	47.1	45.7
Share of profits and mixed income in GDP, %	34.1	32.7	30.8	32.6	41.8	41.4	40.0	38.9	42.3	41.7	42.1	42.9
Foreign direct investments in Russia, USD billion	55.9	74.8	36.6	43.2	55.1	50.6	69.2	22.0	6.9	32.5	28.6	4.8
Foreign direct investments in Russia, excluding banks, USD billion	49.4	64.9	29.9	38.0	50.0	42.8	60.1	17.6	6.3	30.9	27.1	1.9
Indicators of public finance 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	0.49
Surplus (+) / deficit (–) of the federal budget as % of GDP	5.4	4.1	–6.0	–3.9	0.7	–0.1	–0.4	–0.4	–2.4	–3.4	–1.4	2.7
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	–6.0
Domestic state debt, end of year, RUB billion)	1,248.8	1,499.8	2,094.7	2,940.4	4,190.6	4,977.9	5,722.2	7,241.2	7,307.6	8,003.5	8,689.6	9,169.6
Foreign state debt (Ministry of Finance data, USD billion)	44.9	40.6	37.6	40.0	35.8	50.8	55.8	54.4	50.0	51.2	49.8	49.1
Total state as a% of GDP	7.1	6.5	8.3	9.0	8.9	9.9	10.3	13.0	13.2	12.9	12.6	12.1
Reserve Fund (2007 – Stabilization Fund), end of year, USD billion	156.81	137.09	60.52	25.44	25.21	62.08	87.38	87.91	49.95	16.03	0.00	0.00
National Welfare Fund, end of year, USD billion		87.97	91.56	88.44	86.79	88.59	88.63	78.00	71.72	71.87	65.15	58.10
International reserves of the Bank of Russia, end of year, USD billion	478.8	427.1	439.0	479.4	498.6	537.6	509.6	385.5	368.4	377.7	432.7	468.5
Prices and interest 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	4.3
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	11.7

Cont'd

1	2	3	4	5	6	7	8	9	10	11	12	13
Bank of Russia key rate (before 2013 – minimum rate on repurchase operations for 1 day), 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	7.4
Average interest rate on RUB loans to businesses, 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	8.9
Average interest rate on retail ruble deposits (except for demand deposits), yearly average % per annum	7.2	7.6	10.4	6.8	5.4	6.5	6.5	6.7	9.7	7.3	6.0	5.5
Labor market												
Overall unemployment rate (ILO methodology), annual average, %	6.0	6.2	8.3	7.3	6.5	**5.5**	5.5	5.2	5.6	5.5	5.2	4.8
Average wages (RUB thousand/month)	13.6	17.3	18.6	21.0	23.4	26.6	29.8	32.5	34.0	36.7	39.2	43.4
Wages in real terms, %	17.2	11.5	–3.5	5.2	2.8	8.4	4.8	1.2	–9.0	0.8	2.9	6.8
Real disposable household income, %	12.1	2.4	3.0	5.9	0.5	4.6	4.0	–0.7	–3.2	–5.8	–1.2	–0.2
Population with money income below the subsistence level, millions	18.8	19.0	18.4	17.7	17.9	15.4	15.5	16.1	19.5	19.5	19.3	18.9
Banking system												
Number of active credit organizations, end of year	1,136	,108	1,058	1,012	978	956	923	834	733	623	561	484
Banking licenses revoked during the year	49	33	43	27	18	22.0	32	86	93	97	51	60
Rate of assets 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	6.1
Indebtedness of resident corporations (excluding banks) under 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	7.8
Indebtedness of resident individuals under 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	21.7
Share of overdue loans to resident corporations, excluding banks, %	0.9	2.5	6.0	5.5	4.8	4.6	4.1	4.1	6.0	6.1	5.9	5.7
Share of overdue loans to resident individuals, %	3.1	3.6	6.9	7.1	5.3	4.1	4.5	6.0	8.4	8.3	7.3	5.3
Profit, RUB billion	508	409	205	573	848	1,012	994	589	192	930	790	1,345

Sources: Rosstat; Ministry of Finance; Bank of Russia

Table 2

Retail loans and deposits (RUB billion)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Increase in loan debt										
Total	–454.6	499.6	1,452.9	2,194.2	2,197.1	1,231.8	–727.2	176.6	1,368.8	2,703.2
mortgages	–99.0	113.5	315.7	500.7	644.4	816.6	354.5	519.8	685.4	1,206.8
Consumer	–355.6	386.1	1,137.1	1,693.5	1,552.7	415.2	–1,081.7	–343.3	683.4	1,496.3
Housing loans issued										
Mortgage loans issued	182.2	437.4	765.9	1,072.0	1,404.5	1,819.7	1,168.2	1,483.1	2,028.4	3,019.6
% y-o-y		140.1	75.1	40.0	31.0	29.6	–35.8	26.9	36.8	48.9
Deposit growth										
Total	1,557.4	2,408.9	1,945.5	2,281.3	2,337.3	823.1	3,870.5	1,318.1	2,511.8	2,527.9
RUB	1,196.3	2,445.9	1,797.2	1,871.2	2,129.7	–419.2	2,612.4	2,283.2	2,315.3	2,243.0
foreign currencies	361.2	–37.1	148.2	410.1	207.6	1,242.4	1,258.1	–965.1	196.5	284.9

Source: Bank of Russia.

1.2.1. The Policies of Stimulating Growth

Since the early 1990s, three stages can be identified in trends for the Russian economy.

1. *The 1990–1998 recession*, when the structural and institutional transformation from a centrally planned economy into a market economy took place.

2. *The recovery growth between 1999 and 2008*, when the pre-crisis production level was almost reached, while the entire socioeconomic structure of the society was reorganized. This growth model utilized idle production capacity and workforce, as well as a strong inflow of financial resources thanks to favorable foreign economic conditions[1].

3. *The economic deceleration from 2009 to 2018.* The recovery model had exhausted itself by 2008, as seen from the decelerated economic growth rates during that period. The new global crisis became an important reason, but not the only one for deteriorating conditions in Russia. More specifically, the global crisis caused the 2009 recession, but not the low growth rates during the subsequent decade. Between 2010 and 2018, against the background of the intertwining global (structural) crisis and the cyclical crisis within Russia, the search continued for a new economic growth model that would be based not on cheap resources (idle capacity and rent income) but on increasing total factor productivity.

Within the "slowdown decade," we can further identify several relatively distinct yet logically interconnected phases.

First, there were periods of economic deterioration – in 2009 and 2015. The first of these was caused by the global crisis, while the second resulted from overlapping geopolitical tensions and cyclical investment slump. The anti-crisis measures undertaken in response were, in our view, exceptionally effective. They minimized the extent of the recession and prevented a macroeconomic destabilization. Yet on the other hand, the anti-crisis policies had the side effect of blocking the forces of "creative destruction;" this has been a contributing factor behind the makes its own contribution to the deceleration of post-crisis trends, i.e. the lack of a V-shaped rebound[2].

Second, there were periods of economic improvement – in 2010–2014 and 2016–2019. These two are substantially different from each other, both in quantitative and in qualitative terms. The period of 2010–2014 was characterized by the initially high yet steadily declining rate of growth that by the end of 2014 slid into recession. Meanwhile, the period of 2016–2019 started off from very low rate of growth; how steadily it will increase remains to be seen.

However, the main differences were not in the GDP indicators. The 2010–2014 model relied upon encouraging demand, including compensation for losses from the crisis and subsequent wage increases, especially for employees in the budget-funded sector. This

[1] Sinelnikov-Murylev, S., Drobyshevsky, S., & Kazakova, M. (2014). Decomposition of Russian GDP growth rates in 1999–2014. *Ekonomicheskaya Politika*, 2014, No. 5.

[2] See in more detail: Mau, V. A. At the final stage of the global crisis: Economic tasks in 2017–2019. *Voprosy Ekonomiki*, 2018, No. 3, p. 8.

was also made possible by the significant size of the Reserve Fund, accumulated thanks to the high rent income during the previous decade. The Presidential Decrees of May 7, 2012, contributed to the demand factor (wages in paricular) by a great extent.

The year 2018 marked *a turn towards a supply-side economy*. The Presidential Decree of May 7, 2018, is focused primarily on supporting investment activity for developing industrial, transportation and social infrastructure.[1] These are two different growth models mentioned in the Strategy-2020, developed as early as in 2011, which played a significant role in shaping the framework of social and economic policy for the next decade[2].

Thus, the framework of economic growth articulated by Vladimir Putin in 2018 substantially differs from the approaches used in the preceding decade. In this framework, public resources are to be channeled toward providing the requisite investment in the implementation of the national goals and priorities, while the increase in consumer demand is mostly supposed to follow investment demand[3]. The decision to raise the age of retirement fits into this framework by increasing supply in the labor market.

From the macroeconomic point of view, this path may resemble the acceleration policy pursued from 1986 to 1989, when a budget maneuver was made from consumption to investment. Of course, there can be no direct analogy here. First of all, the present Russian economy is entirely different from the Soviet economy: it is far more flexible due to private property and market pricing. Second, the current maneuver contemplates the preservation of the current conservative fiscal policy (low national debt and balanced budget). All this enables a positive evaluation of the current turn towards a supply-side economy. However, the lessons from 30 years ago still should not be ignored, and the main lesson is that an irresponsible macroeconomic policy, while resulting in a short-run acceleration, subsequently turns into a disaster. Or, in other words, stability and severe crisis may only be four years apart, while during two of those years the economy will accelerate and government finances will lose balance[4].

The shift towards a supply-side economy determines *the macroeconomic* framework for the economic growth model. However, this model has *its own institutional* framework, i.e. the dominating role of financial and industrial groups. The discourse (both among experts and among politicians) about a more preferable growth model has been going on throughout the entire three decades of post-communist development, sometimes expressly and sometimes implied. Three distinctively different models have been

[1] Drobyshevsky, S., & Sinelnikov-Murylev, S. Peculiarities of Russia's economy growth in 2017 and 2018: Stimuli and limitations. *Russian Economic Development*, 2018, No. 2, pp. 3–7.
[2] Mau, V. A., & Kuzminov, Ya. I. (eds.). *Strategy-2020: A new growth model – new social policy*. In 2 vols. Moscow: Delo Publishers, 2013. Vol 1, pp. 10–11; Mau, V. Economic policy in 2010: In search of innovations. *Voprosy Ekonomiki*, 2011, No. 2, pp. 18–21.
[3] The 2 percent VAT increase in 2019 does not negate this conclusion, although the model of a demand-side economy usually requires lowering taxes, since VAT is a tax on consumption.
[4] Mau, V. (2014). Waiting for a new model of growth: Russia's social and economic development in 2013. *Voprosy Ekonomiki*, No. 2, pp. 22–23.

competing from the very beginning: the development of private entrepreneurship and competitive market institutions; the creation of financial and industrial groups (or 'chaebolization' according to the term from the South Korean practice); and the dirigiste model, i.e. the enhancement of direct government influence on economic development, including pricing[1]. At different stages of the country's development, the discussion of these three models varied in intensity, but, in practice, the trend towards 'chaebolization' almost always prevailed. Currently, this institutional model can be regarded as firmly established, whereas the key role in economic development is played by financial and industrial groups with government membership.

This model leads to a number of diverse results. First, these groups supply, to a large extent, Russia's exports of energy, military-industrial equipment, and even agricultural products, thereby facilitating their diversification.

Second, these are the groups tasked with import substitution. Moreover, the government also emphasizes the importance of export-oriented import substitution[2].

Third, corporations with government membership often perform vital social functions, which are not usually intrinsic to them.

Fourth, chaebolization holds back competition, and this is one of the most painful institutional problems in ensuring economic growth, much more so as the level of competition is also declining due to other reasons (geopolitics and the low ruble rate).

1.2.2. National goals and national projects

The Presidential Decree dated May 7, 2018, outlined the medium-term socioeconomic policy. We can clearly see the development of the 'project management' approach which was first tested from 2004 to 2006 and demonstrated very high effectiveness. However, the nature and effectiveness of project management depend on the circumstances in which they are implemented.

The initial projects were primarily aimed at intensively developing the human capital sectors and residential construction. They were implemented during the period of sustained growth in budget revenues and the economy. This provided the necessary resources for implementing the projects outlined at that time. The 2008 global crisis limited the available resources, but by this time positive shifts had already occurred in respective sectors, which led to a positive evaluation of the project implementation experience. Moreover, rent income was quite quickly restored, paving the way for developing a system of national priorities in 2012.

Based on the experience gained, a number of Presidential Decrees were adopted in May 2012, setting the key objectives for developing various aspects of the country's life, including the economy and public well-being[3]. However, their implementation,

[1] Mau, V. Economic and political results of 2001 and prospects of sustainable economic growth. *Voprosy Ekonomiki*, 2002, No. 1, pp. 14-15; Mau, V. Economic and political results of 2002 and the problems of economic policy at the election year. *Voprosy Ekonomiki*, 2003, No. 2, pp. 10-11.
[2] Medvedev, D. A new reality: Russia and global challenges. *Voprosy Ekonomiki*, 2015, No. 10, p. 19.
[3] See: Russian Federation Presidential Decrees dated May 7, 2012, Nos. 596–601, 606.

unlike previous projects, was affected by unfavorable geopolitical and macroeconomic conditions, aggravated both in the autumn of 2008, and in 2014. The 2018 decree builds upon this experience, which is reflected in a number of specific important features of the document. They include:

– defining human capital and infrastructure as key industries. Digitization is particularly emphasized, but in essence, it is actually a combination of both of the above groups of problems;

– the goals and priorities are consistent with current technological, economic, and social challenges. And similar challenges are facing all developed and leading developing countries;

– as noted above, the 2018 Decree shifted emphasis to supply, i.e. economic growth based on investment. In other words, it is not expenses (increased wages) as in 2012–2017, but investments, which become the driving force of the projects:

– funding of the projects is contemplated almost exclusively at the expense of the federal budget, i.e. without additional burden on regional budgets. The issue of the size and sources of funding was resolved when the federal documents were prepared and was taken into account in the federal budget. Out of the RUB 25.7 trillion earmarked for national projects, regional budgets account for RUB 4.9 trillion;[1]

– the regions must sign agreements with the federal government, containing obligations to achieve national goals by spending the respective budget funds.

At the same time, the development and implementation of particular federal projects revealed problems and controversies that require serious discussion and adjustment.

1. The correlation between the projects being developed and the national goals are not quite evident. Federal projects often fail to meet national goals and do not ensure their achievement. This, in turn, is transferred to the regional level as the subjects of the Russian Federation must undertake obligations not only to spend the money allocated for national projects, but also to achieve the respective strategic goals.

2. The issue of the total discounted project costs is still not resolved, i.e. the long-term financial consequences of their successful implementation have not been estimated. It is not clear whether the regions (or municipalities) of the Russian Federation will have enough funds to operate the new social and transportation infrastructure. There is a risk that investment projects will end in a large number of suspended and unfunded facilities. The proposals to leave them under federal ownership forever make no economic sense but are unacceptable from a political point of view. The lack of an answer to this question would mean that national projects are focused on addressing the current growth tasks as opposed to long-term tasks, entailing severe macroeconomic and political risks.

3. In spite of the high importance of national projects, they only account for around 10.5% of the federal budget and 6.5% of the general government budget. Therefore, the

[1] RF Government (2019). *National projects: Target indicators and main results*. Information materials of the government of RF (as of 07.02.2019). Moscow. http://static.government.ru/media/files/p7nn2CS0pVhvQ98OOwAt2dzCIAietQih.pdf

focus on national projects should not be accompanied with less attention paid to the efficiency of other federal budget items.

1.3. Macroeconomic situation and sanctions

Fiscal policy. In 2018, the government continued pursuing an exceptionally conservative fiscal policy, attributing it to the complicated geopolitical situation and the need to avoid risks in case of further deterioration. An additional argument in favor of this course of action was the anticipation of a new cyclical crisis in the world economy. The federal budget was balanced with a surplus again as a result of the measures to reduce costs (by 1.7% of GDP) and increase budget revenues (by 2.4% of GDP) in 2018 (see *Table 1*).

The analysis of regional budgets points to their improved condition as compared with previous years. The surplus of regional budgets is evident, while debt for the subjects of the Russian Federation is decreasing[1].

In outlining the fiscal policy, the main issue was ensuring budget stability and finding funds for implementing national projects. We point out a number of important fiscal policy decisions made in 2018.

First of all is the VAT increase from 18% to 20%. This was made possible upon completion of the period subject to the thesis proclaimed in 2012, regarding the permanent nature of the main tax system parameters. Tax increases are always unpleasant, but in the Russian tax system an increase in the VAT rate is the best option compared with other taxes. This decision was justified by the need to find additional resources to fund national projects.

Other ways to increase budget revenues were proposed, i.e. to change the budget rule (set the cut-off price of oil revenues at USD 45 per barrel instead of the current USD 40) or to increase budget borrowings. These methods would be more acceptable from a political point of view. However, they posed additional risks to the stability of the macroeconomic system. The government chose a solution that is more complicated from a sociopolitical standpoint, demonstrating that ensuring financial stability and preventing destabilization are its highest priorities. Given the unstable hydrocarbon pricing trend and the extremely volatile international political situation, this solution appears justified.

The new tax on self-employed persons became a politically important, though not very significant decision from a fiscal point of view. While being administratively unburdensome and low, it provoked a negative reaction of a more sociopsychological than economic nature:

– psychologically, it was perceived as an increase in the tax burden, although in reality it is only a simplified mechanism for fulfilling tax obligations. However, the opportunity for the self-employed to not pay taxes has always been perceived as an

[1] Klimanov, V. V., Deryugin, A. N., Mikhailov, A. A., & Yagovkina, V. A. *Fiscal federalism: Financial participation of regions in achieving national development goals*. Moscow: Delo Publishers, 2019, p. 25.

aspect of business relations and not as tax evasion. Under current conditions, however, they have become mandatory;

– given low confidence, potential taxpayers are concerned that by registering as self-employed on the Federal Tax Service website and paying the tax, they would run a higher risk of receiving claims from other monitoring and supervisory agencies, as well as tax audits for previous years.

Tax administration requires special mention. In recent years, thanks to the active involvement of information technology, tax administration actually entered a new stage in its development, producing two different but exceptionally significant results.

First, technology has almost made tax evasion impossible, in addition to the purge in the banking system. The result was unexpected: society perceived it to be an actual increase in the tax burden.

Second, the tax system is now capable of going beyond the resolution of fiscal tasks. Tax authority is becoming a center for collecting diverse micro- and macroeconomic information, using Big Data technology to substantially improve the understanding of socioeconomic processes. Thus, new opportunities are emerging for a thorough transformation of the monitoring and supervision system, for improving its efficiency while reducing the burden on business entities.

Monetary policy was quite consistent with fiscal policy, i.e. it remained conservative and focused on achieving a 4% inflation rate target. Following a series of key rate reductions, in the autumn of 2018, as the risk of changes in price trends occurred (due to the increased VAT rate and the reduction in oil prices during late 2018), the Bank of Russia raised the key rate, confirming the consistency and predictability of its actions.

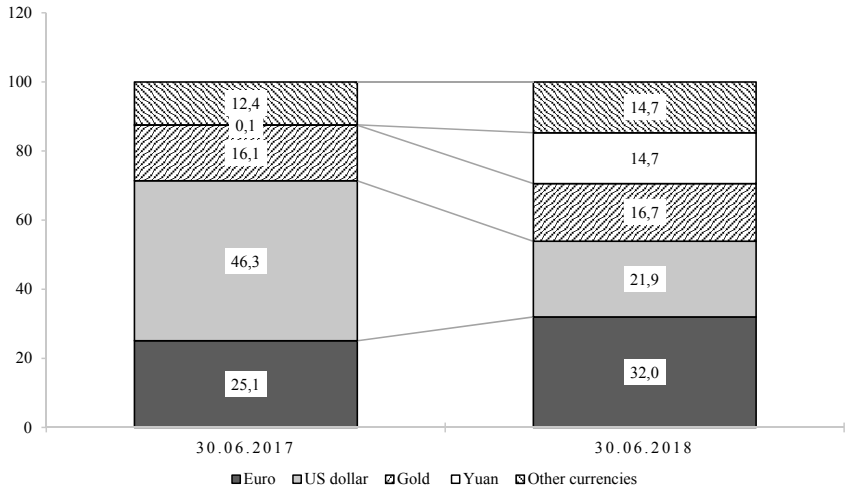
A persistently serious problem is the strong dependence of the ruble exchange rate (and, consequently, price trends) on external factors, i.e. geopolitics and related hydrocarbon pricing trends, the rates of global currency issuers (Federal Reserve System and European Central Bank), the behavior of international investors, etc. We could even say that the ruble, while losing dependence on oil pricing trends, has become hostage to geopolitical trends.

An important innovation during 2018, was the significant alteration in the composition of gold and foreign exchange reserves at the Bank of Russia, in which the share of the US dollar decreased while the proportion of gold, euro, yuan, and several other currencies increased. Thus, between July 1, 2017 and July 1, 2018, the proportion of US dollar holdings declined from 46.3 to 21.9%, whereas the share of the euro increased from 25.1 to 32.0%, the yuan from 0.1 to 14.7%, other currencies from 12.4 to 14.7%, and gold, from 16.1 to 16.7%[1]. The geographic distribution of assets changed substantially in favor of international organizations, China, France, and Germany (see *Fig. 1* and *2*).

[1] In 2018, the Bank of Russia was the largest gold buyer, having purchased 273 tons. As a result, by the beginning of 2019, Russia's gold reserves exceeded 2,100 tons, accounting for around 18.5% of the country's international reserves.

In 2018, Russian authorities changed their attitude towards cryptocurrencies. Despite their high volatility, the Bank of Russia switched from interpreting their role to be criminal, where all comments on this topic could be boiled down to the formula 'surrogates are forbidden,' to attempts to regulate this market and even discuss the prospects for issuing Russia's own cryptocurrency[1]. On the other hand, long-term prospects of transactions into account where settlements have not been completed.

The development of cryptocurrencies will be determined not only, and even not so much, at the discretion of the regulator as by consumer preferences, i.e. be dependent on the convenience (credibility) of using cryptocurrencies as compared to other means of payment.



* The distribution of the Bank of Russia's assets is given taking conversion transactions into account where settlements have not been completed.

Fig. 1. Distribution of Bank of Russia assets denominated in foreign currencies and gold

Source: Bank of Russia, 2019, p. 12.

The *sanctions* became a significant factor in the discussion about current and future problems in socioeconomic trends and economic policy. In 2018, it seems that a perception took root in the public consciousness that the sanctions are here to stay, and

[1] "In October 2017, the instructions of the Russian President will be issued, identifying the need to adopt laws regulating cryptocurrencies, ICO, mining, smart and contacts. In executing the instructions, the Russian Ministry of Finance, jointly with the Bank of Russia, is preparing a bill titled 'On Digital Financial Assets,' while the State Duma is working on a bill that amends the Civil Code aimed at creating a framework for regulating the crypto-economy." Levashenko, A. D., Ermokhin, I. S., Zubarev, A. V., Sinelnikova-Muryleva, E. V., & Trunin, P. V. 2019. *Cryptoeconomics*. Moscow: Delo Publishers, p. 38.

the objective is not to endure them for a short period. The history of sanctions during the second half of the 20th century and the experience gained since 2014 suggest a few conclusions with respect to the issues and risks associated with this kind of policy.

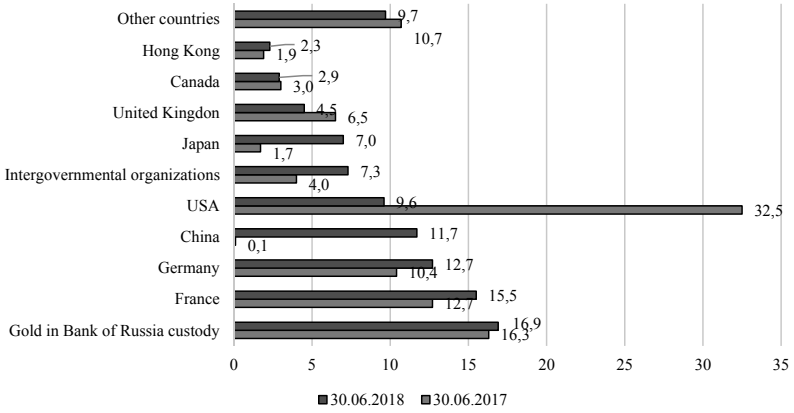


Fig. 2. Geographic distribution of Bank of Russia assets, %

Source: Bank of Russia, 2019, p. 12.

Sanctions do not usually yield immediate results. More often than not, they encourage the consolidation of forces and the political system within the sanctioned country. In some cases, they even lead to improvements in the economic situation.

The most recent experience with sanctions demonstrates that the associated uncertainty leads to the most serious problems. The nature of the anticipated sanctions and the period over which they will potentially be imposed, while being protracted, destabilize socioeconomic processes and hamper quick adaptation to potential challenges. This entails fluctuations in financial markets, the higher volatility of the ruble, the refusal of foreign investors to partner with Russian companies, and capital flight.

Another most dangerous consequence of the sanctions is the risk of technological backwardness. In the modern world, this problem becomes especially acute, since technical progress is global in nature, and sustainable socioeconomic development requires participation in global value chains[1]. This is most visibly demonstrated by the trend in foreign direct investments, which inflow in 2018 decreased to the trifling amount of USD 1.9 billion, as compared with USD 27.1 billion in 2017.

In a situation like this, the risks associated with the sanctions need to be neutralized, and their repeal should be fought for as they represent an inadequate tool for modern

[1] Kadochnikov, P., Knobel, A., & Sinelnikov-Murylev, S. (2016). Openness of the Russian economy as a source of economic growth. *Voprosy Ekonomiki*, 2016, No. 12.

political and economic relations. This policy can be called the stabilization of the sanction regime[1]. The following steps are expedient parts of it.

Creating your own agenda, which must be active rather than reactive. It must rely on its own logic within the political process, rather than being just a reaction to imposed sanctions. In other words, counter sanctions may be foregone in favor of the country's own positive agenda.

Building a sanction infrastructure that would consist of elaborating a medium-term policy taking sanctions into account, rather than taking retaliatory actions (counter sanctions). A correct step in this direction was establishing the Department for External Limitation Control within the Finance Ministry, the equivalent of the U.S. Office of Foreign Assets Control (OFAC), which purpose is to develop a corresponding policy.

Liberalization. The experience of a number of countries (including China since the early 1990s) shows that an effective way to neutralize sanctions is economic liberalization combined with political consolidation. This requires creating the most favorable conditions for the national business (and business in general): first of all reducing administrative interference and loosening control and supervision. However, this requires not only political will, but also complex institutional decisions[2].

Intensifying the international integration of the national business. The involvement of Russian companies in global markets is intensifying the mutual dependence from sanctions. The deeper a country or a particular firm is integrated into the global market, the more complicated it becomes to impose sanctions on it. The attempt to impose sanctions on Oleg Deripaska's companies in 2018, demonstrated this quite clearly, forcing the U.S. Department of the Treasury to revise its own decisions. Therefore, "it is necessary to identify isolated mutual interests with American and European companies, especially those operating in sectors that are the most vulnerable to sanction pressure"[3,4].

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[1] "Stabilization of the sanction regime is the most acceptable strategy for foreign political and foreign economic positioning... Therefore, the government's efforts should be focused, in the short-term and in the medium-term, on stabilizing the current level of sanctions to reduce uncertainty, and not on their complete repeal." Knobel, A. Yu., Bagdasaryan, K. M., Loshchenkova, A. N., & Proka K. A. *Sanctions: Seriously and for a long time*. Moscow: Delo Publishers, 2019, pp. 65, 68.

[2] A number of deregulation issues in foreign economic activity are reviewed in Balandina, G., Ponomarev, Yu., Sinelnikov-Murylev, S., & Tochin, A. Customs administration in Russia: Directions of improvement. *Ekonomicheskaya Politika*, 2018 No. 3. Bozhechkova, A., Goryunov, E., Sinelnikov-Murylev, S., & Trunin, P. Capital controls: World experience and lessons for Russia. *Ekonomicheskaya Politika*, 2017, No. 2.

[3] Knobel, A. Yu., Bagdasaryan, K. M., Loshchenkova, A. N., & Proka K. A. (2019). *Sanctions: Seriously and for a long time*. Moscow: Delo, 2019, p. 58.

[4] Similar arguments are voiced by the authors of a study into the potential for privatization under sanctions: "A significant portion of foreign companies, even in the United States and Germany, where the problem of anti-Russian sanctions is the most acute, are not interested in sanctions since the global market dictates its own rules... In a sense, one could state that a new round of extensive Russian privatization may become an incentive for weakening anti-Russian sanctions": Radygin, A. D.,

* * *

The formation of the paradigm for the next stage of socioeconomic development occurred in 2018. It can be described as consisting of several provisions.

First. A key objective for economic policy is to accelerate socioeconomic development. However, it should avoid the errors made in the Soviet past.

Second. Economic growth is ensured through transition to a supply-stimulating policy. This includes a budget maneuver in favor of investments, with predominant emphasis on the human capital and infrastructure (transportation and digital) sectors.

Third. Government administration is restructured based on the project method which was founded on the rigid administration of priority projects to achieve national goals.

Fourth. The sanctions are here to stay. Russian socioeconomic policy should treat them as a long-term factor.

Fifth. The macroeconomic policy will remain conservative, as it has proved itself in the past, and is capable of insuring the country against the risks of geopolitical turmoil.

Entov, R. M., Abramov, A. E., Chernova, M. I., & Malginov, G. N. *Privatization 30 years later: The scale and effectiveness of the public sector*. Moscow: Delo Publishers, 2019., pp. 56–57.

Section 2. Monetary and fiscal policy

2.1. Monetary policy[1]

2.1.1. Monetary policy trends

Russia's central bank adopted a new monetary policy regime in 2018 by raising the key interest rate for the first time since December 2014. After slashing the key interest rate on February 9th and on March 23rd by 0.25 percentage points to 7.5 and 7.25 percent per annum, respectively, the central bank lifted the rate on September 14th by 0.25 percentage points to 7.5 percent per annum, with another hike on December 14th of 0.25 percentage points to 7.75 percent per annum.

The transition to a neutral monetary policy regime[2] slowed as far back as in 2017. There were more constraints to interest rate cuts in 2018 that came from new April and August anti-Russia sanctions that spurred capital outflows from the country and depreciation of the Russian ruble, a VAT hike decision scheduled for 2019, a late-year fall in energy prices, and concerns about possible heightening of inflation expectations. The key interest rate hike suggested that the Bank of Russia is committed to bring inflation back down to target in the medium term. For instance, according to a forecast of the central bank, end-of-year inflation for 2019 may reach 5–5.5 percent, and it is not until 2020 that inflation is back to its target.

Another important decision the central bank took in August 2018 besides changes in the monetary policy was a decision to suspend until January 2019 its sales of rubles in the domestic foreign exchange market to purchase foreign exchange for Russia's Finance Ministry in order to comply with the fiscal rule in effect. The goal of the policy was to reduce volatility in financial markets. Amid unfavorable external environment currency interventions could indeed constitute an extra source of pressure on the Russian ruble and spur growth in exchange rate volatility. Decision on the suspended in 2018

[1] This section was written by A. Bozhechkova, Gaidar Institute, RANEPA; A. Kiyutsevskaya, Gaidar Institute; A. Knobel, Gaidar Institute, RANEPA, VAVT; P. Trunin, Gaidar Institute, RANEPA.

[2] A neutral monetary policy means setting a key interest rate that is suitable for achieving a target inflation rate and a zero output gap. A neutral level of interest rate has neither stimulating nor restraining effect on real economy.

foreign currency purchases in the domestic market will be adopted as soon as they are resumed on a regular basis in January 2019. The suspended foreign currency purchases can be brought into effect, as planned by the central bank, in 2019 and beyond.

Credit terms remained relatively tight despite some surge in inflation and inflation expectations in 2018. For instance, there were months when the real interest rate on corporate loans with maturities less one year that is calculated using actual inflation rate over past 12 months was equal to levels seen late in 2014/early in 2015 (see *Fig. 1*). Maintaining a positive real interest rate in the money market dampens growth in consumption and investment, putting downward pressure on inflation, as well as keeps savings attractive, while posing downturn risks for the economy.

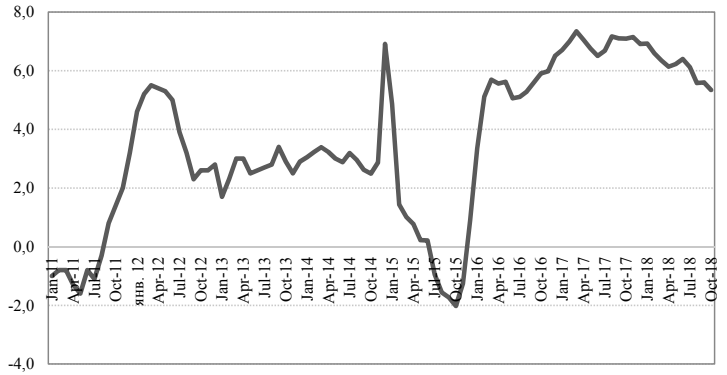


Fig. 1. Real interest rate on corporate loans with maturities of less than one year in Russia, 2011–2018, percent per annum[1]

In 2018, the real rate of interest under the monetary policy in place remained one of the highest in the world (see *Fig. 2* and *Table 1*). The 2018 year-end key interest rate stood at 3.5 percentage points above inflation.

Table 1

Inflation and key interest rate in developed and developing countries (2018 year end)*

	Actual rate of inflation	Key interest rate
1	2	3
Developing countries		
Poland	1.19	1.5
Peru	2.19	2.75
India	2.19	6.5
Chile	2.57	2.75
Hungary	2.71	0.9
Indonesia	3.13	6

[1] Real interest rate is measured using inflation data for the previous 12 months, assuming that inflation expectations in Russia are adaptive.

Cont'd

1	2	3
Columbia	3.18	4.25
Brazil	3.75	6.5
Russia	**4.27**	**7.75**
South Africa	4.4	6.75
Mexico	4.83	8.25
Kazakhstan	5.3	9.25
Turkey	20.3	24
Developed countries		
E.U.	1.6	0
Australia	1.8	1.5
New Zealand	1.9	1.75
U.S.A.	1.91	2.5
Canada	1.99	1.75
U.K.	2	0.75
Czech Republic	2.02	1.75
Norway	3.49	0.75
Iceland	3.74	4.5

***** Data for 2018 inflation are defined on a December to December basis, data for 2018 key interest rate are defined on a year-end basis.
Source: data from central banks' official websites.

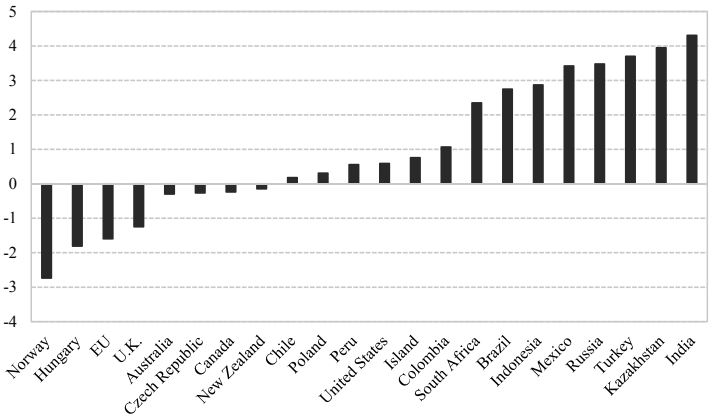


Fig. 2. Real key interest rate as of end-October 2018, percent per annum (measured on the basis of inflation rate over previous 12 months)

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

Thus, faced with old and new extra risks of inflation, as noted above, the Bank of Russia has not yet been able to move to a softer monetary policy. It is not until inflation is at its highest projected for mid-2019 that the Bank of Russian is expected to cut the key interest rate. That said, the emergence of new risks may even further set back efforts to move to a monetary policy easing.

2.1.2. Money market

The money market in 2018 continued to operate against a backdrop of banking sector liquidity structural surplus[1] that emerged as far back as in 2017 as a result of liquidity creation through spending from sovereign wealth funds as well as Bank of Russia's rescue policies applied to a few banks. It is against this background that the Bank of Russia introduced polices directed towards providing less liquidity to banks and broadening liquidity absorption. The liquidity surplus increased in 2017 from – RUB 0.7 trillion to RUB 2.6 trillion, with a RUB 4.5 trillion rise in January/first half of August 2018. The liquidity structural surplus started declining since the second half of August to reach RUB 2.7 trillion by the end of December as a result of Bank of Russia's decision to suspend until late in the year buying foreign currency in the domestic foreign exchange market in conformity with the fiscal rule in place.

In 2018, one-week deposit auctions were one of the most sought-after monetary policy instruments amid liquidity surplus in the banking sector. An average of RUB 2.6 trillion were raised in 2018, whereas the 2017 fundraising was RUB 1.0 trillion or less. The Bank of Russia also increased the frequency of deposit auctions "fine tuning" so that interest rates in the money market are close to the key interest rate.

In 2018, the central bank increased the placement of Bank of Russia coupon bonds (coupon OBRs) with 3 months to maturity. Outstanding coupon OBRs in 2018 rose from RUB 0.4 trillion to RUB 1.4 trillion, hitting highs in October 2018 (RUB 1.8 trillion). As a reminder, the Bank of Russia started issuing coupon OBRs in August 2017. According to our estimates, coupon OBRs helped absorb around one third of the amount that would have been accumulated by the banking sector if absorbing operations had not been in place.

Note that the Bank of Russia projects that the banking sector will continue to experience liquidity surplus for three years to come. Amid structural liquidity surplus in 2018 credit institutions increased their liabilities to the Bank of Russia. The 2018 year-end amount of loans, deposits and other funds raised by credit institutions were up 29.3 percent to RUB 2.6 trillion (compared to a 4-fold decline to RUB 2.0 trillion in 2017) (see *Fig. 3, Table 2*). It appears that credit institutions' liabilities to the central bank is due to the fact that liquidity surplus that is identified at the macro-level is not typical of each bank taken separately. In this context, banks that are faced with liquidity deficit show demand for central bank funding.

In 2018, loans secured with non-marketable assets (RUB 403 billion on average) prevailed in the structure of central bank's claims on the banking sector, while banks' liabilities on REPO auctions in the same period averaged as little as RUB 4.5 billion.

[1] The structural surplus is described as stable liquidity surplus at credit institutions and the necessity for the Bank of Russia to carry out liquidity-absorbing operations with the aim to maintain interest rates in the interbank lending market close to the key interest rate.

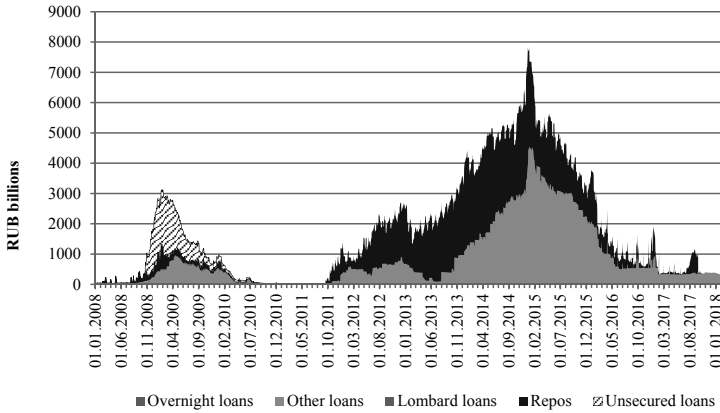


Fig. 3. Commercial banks' ruble-denominated liabilities (on key instruments) to Bank of Russia in 2008–2018

Source: Bank of Russia.

Table 2

Bank of Russia Balance Sheet 2016–2018

	January 1, 2017		January 1, 2018		December 1, 2018	
	RUB billions	**as a percent of assets / liabilities**	**RUB billions**	**as a percent of assets / liabilities**	**RUB billions**	**as a percent of assets / liabilities**
Funds placed with nonresidents and securities issued by nonresidents	18.005.1	62.1	18878.5	61.3	23242.1	61.6
Credits and deposits	4.175.1	14.4	3517. 8	11.4	3928.2	10.4
Precious metals	3.747.5	12.9	4505.2	14.6	5594.5	14.8
Securities	528.9	1.8	886.1	2.9	948.2	2.5
Other assets	1.013.4	3.5	1535.7	5.0	2316.8	6.1
Total assets	**28.974.1**	100.0	**30.815.1**	100.0	**37.702.3**	100
Cash in circulation	8.790.1	30.3	9539.4	31.0	9788.9	26.0
Balance of accounts with the Bank of Russia	9.985.5	34.5	11003.2	35.7	14698.5	39.0
of which: Russian government funds	4.662.0	16.1	4565.7	14.8	8477.6	22.5
funds of resident credit institutions	3.093.3	10.7	4812.4	15.6	4294.9	11.4
Float	2.8	0.0	0.7	0.0	1.4	0.0
Outstanding securities	-	-	356.8	1.2	1636.7	4.3
Liabilities to IMF	1.392.9	4.8	1.407.8	4.6	1537.8	4.1
Other liabilities	111.4	0.4	120.8	0.4	1653.3	4.4
Capital	8.647.85	29.8	8.386.5	27.2	8385.7	22.2
Profit for accounting FY	43.7	-	-	-	-	-
Total liabilities	**28.974. 1**	100	**30.815.1**	100.0	**37.702.3**	100

Source: Bank of Russia.

Amid structural liquidity surplus the money market interest rate in 2018 varied mostly within a lower boundary of the interest rate band. The interbank loan rate[1] increased in 2018 0.4 percentage points (from 7.1 percent per annum on average in January 2018 to 7.5 percent per annum on average in December 2018). The MIACR in April-August 2018 was at its lowest (7.0 percent) since late in 2014. The MIACR started moving upwards after the central bank decided to raise the key interest rate by 0.25 percentage points. Overall, the interbank loan rate varied during 2018 within the interest rate band set by the central bank, thus suggesting that the regulator achieved the goal of its monetary policy. The average annual MIACR on overnight bank loans denominated in Russian rubles fell to 7.1 percent per annum in 2018 from 8.9 percent per annum in 2017 (see *Fig. 4*).

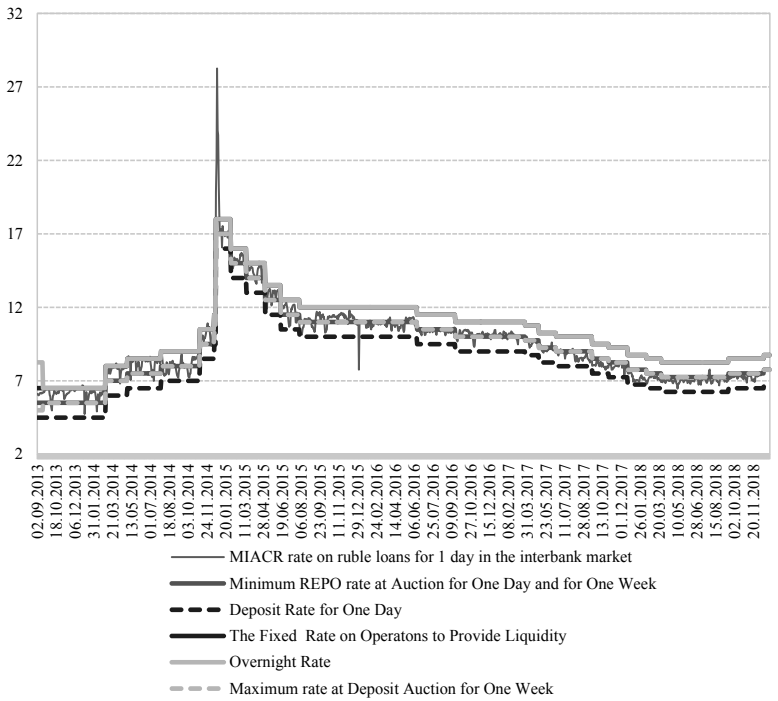


Fig. 4. Bank of Russia's interest rate band and dynamics of interbank lending market in 2013–2018

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

[1] The interbank loan rate is the monthly average MIACR (Moscow InterBank Actual Credit Rate) on overnight interbank loans denominated in Russian rubles.

The accumulation of liquidity surplus in the banking sector influenced the dynamics of the monetary base. The broad monetary base picked up 9.3 percent to RUB 16063.4 billion in 2018 (an increase of 23.7 percent to RUB 14701.5 billion in 2017). Bank of Russia bonds held by credit institutions was one of the broad monetary base components with fastest pace of growth at 2018 year-end that saw a quadruple growth to RUB 1373.9 billion. The required reserves swelled by 13.6 percent to RUB 575.3 billion, cash in circulation advanced 8.1 percent to RUB 10312.5 billion. Banks' deposits with the Bank of Russia dropped 19.8 percent to RUB 1903.5 billion, corresponding accounts slid 1.7 percent to RUB 1898.2 billion. Overall, excessive reserves[1] increased in 2018 by 11.2 percent to RUB 5175.7 billion (see *Table 3*).

Table 3

Broad monetary base dynamics of 2018
(RUB billions)

	April 01, 2017	January 07, 2017	January 07, 2017	January 01, 2018	January 01, 2019
Monetary base (broad definition)	11543.5	11596.4	12916.2	14701.5	16063.4
- cash in circulation including cash in vaults of credit institutions	8394.9	8752.7	8895.1	9539.0	10312.5
- correspondent accounts of credit institutions with the Bank of Russia	2143.9	1675.3	2225.0	1930.7	1898.2
- required reserves	510.5	509.7	536.7	506.2	575.3
- deposits of credit institutions with the Bank of Russia	494.2	658.6	1109.8	2373.2	1903.5
- Bank of Russia's bonds held by credit institutions	0	0	149.7	352.4	1373.9
For reference: excessive reserves	2638.1	2333.9	3484.5	4656.3	5175.7

Source: Bank of Russia.

Like in the 2015–2017 period, the principal sources of accumulation of the broad monetary base in January-November 2018 were changes in the balance on the general government's accounts with the central bank as well as Bank of Russia's liquidity-providing/absorbing operations in the banking sector. For instance, RUB 0.3 trillion were added to the monetary base through increasing central government's net borrowing in January-November 2018, whereas the monetary base shrank by RUB 0.2 trillion as a result of decrease in net volumes of liquidity-providing/absorbing operations. Amid structural liquidity surplus the structure of money supply creation will likely remain unchanged in 2019 as well. Note that operations that the Finance Ministry and the central bank performed in compliance with the fiscal rule were neutral for the monetary policy (see *Fig. 5*). The money the Finance Ministry uses for increasing the National Wealth Fund is brought back to the economy as a result of Bank of Russia's foreign currency purchases.

[1] Excessive reserves of the banking system comprise credit institutions' deposits and correspondent accounts with the Bank of Russia as well as Bank of Russia bonds held by credit institutions.

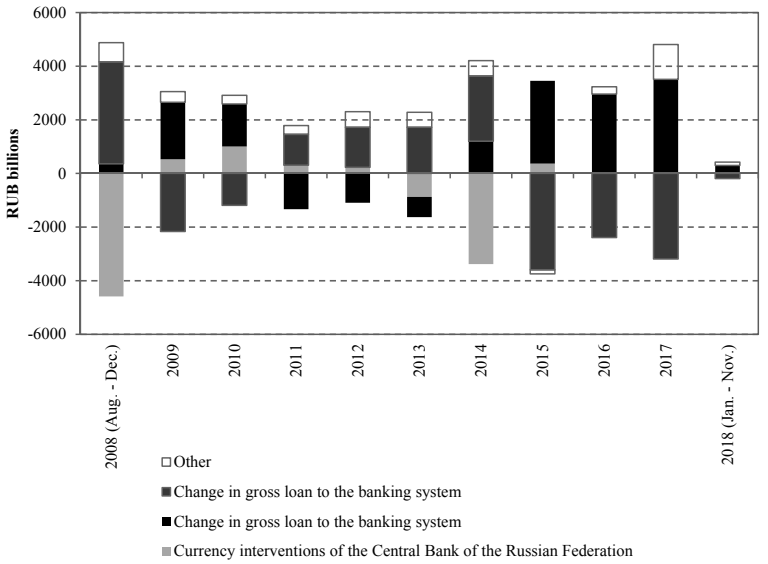


Fig. 5. Factors that influence monetary base

Source: Russia's central bank.

The dynamics of foreign currency reserves in 2018 was almost totally led by volumes of Bank of Russia's foreign currency purchases for the Finance Ministry in conformity with the fiscal rule in place. As a reminder, under the new fiscal rule in effect since early in 2018, extra federal budget revenues that come from a crude oil price that is higher than the actual price of USD 40.8 per barrel shall be converted into foreign currency to feed into the sovereign wealth fund. Such operations, as noted above, were carried out until they were suspended in the second half of August 2018 due to unstable financial markets. In January-August 2018, central bank's foreign currency purchases in the domestic foreign exchange market totaled around RUB 2.1 trillion. As a result, Bank of Russia's year-end international reserves increased USD 35.8 billion (8.3 percent) to USD 468.5 billion as of January 01, 2019 (see *Fig. 6)*. Note that USD 10.3 billion (13.4 percent) were added to the monetary gold reserves on a year to date basis in 2018 despite of their negative revaluation (-USD 10.1 billion) in January-August 2018 due to falling gold prices in global markets. As of January 01, 2019, the proportion of foreign currency reserves accounted for 81.5 percent (82.3 percent in 2017) as gold represented 18.5 percent (17.7 percent in 2017) of gross reserve assets. At present, the reserves are adequate to ensure a stable balance of payments because they cover both 16 months for imports of goods and services in Russia (16 months in 2017) and external debt payments due in 2019. An important point to note is that 2018 saw a major change in the foreign-currency reserves composition: the proportion of Yuan-denominated assets advanced

from 0.1 percent in mid-2017 to 14.7 percent in mid-2018, whereas the proportion of assets denominated in US dollars dropped from 46.3 percent in mid-2017 to 21.9 percent in mid-2018. The above change was likely led by the need to minimize potential geopolitical risks. Furthermore, the monetary authorities had to sacrifice dollar-denominated returns on investment because of problems facing China's economy in 2018. The Chinese Yuan weakened against the US dollar.

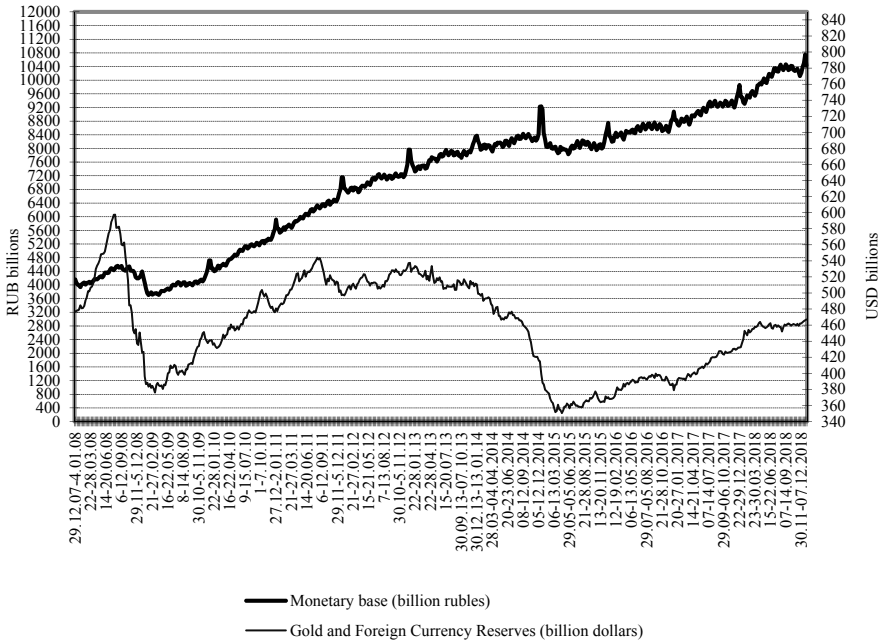


Fig. 6. Dynamics of narrow monetary base and Russia's foreign currency and gold reserves (international reserves) in 2008-2018

Source: Bank of Russia.

In 2018, the year-to-year average monthly growth in M2 and the monetary base was recorded at 11.0 percent (10.2 percent in 2017) and 29.0 percent (11.9 percent in 2017), respectively. As a result, the money multiplier (the ratio of M2 to the monetary base) stood at 2.8 (3.3 in 2016–2017). Such a sharp contraction of the money multiplier was due to faster than normal growth rates in the monetary base spurred by a 4-fold increase in volumes of Bank of Russia bonds held by credit institutions as well as increase in banks' deposits with the central bank (average monthly growth in banks' deposits with the Bank of Russia in 2018 saw a 2.5-fold average monthly growth) in order to absorb liquidity surplus in the banking sector and to maintain market interest rates within a prescribed boundary of the interest rate band. The money multiplier equals the average

for emerging economies (such as 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 5.8 from 3.1 in the 1993–2018 period, whereas in Russia it was up to 2.75 from 1.4, hitting its highest in 2015–2016.

According to preliminary estimates, the level of monetization of the Russian economy (the ratio of broad money (M2) to GDP (the M2/GDP ratio)) in the period between 1999 and 2018 tripled to 60.1 percent in 2018, almost 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/GDP ratio in 2017 stood at 66.8 percent (40.2 percent in 1999). By contrast, the M2/GDP ratio in Belarus increased during the same period by 2.3 times to 37.9 percent, by 2.9 times to 37.4 percent in Kazakhstan, and by 2.2 times to 40.5 percent in Ukraine. Developed countries had even higher GDP monetization owing to a more advanced financial system: in 2017, for example, the M2/GDP ratio in the U.K. and Switzerland reached 148.5 and 190 percent, respectively.

2.1.3. Inflation-related processes

After hitting an all-time high of 2.2 percent in January 2018, there was a gradual rise in inflation during the year (see *Table 4*). While the first half of the year saw inflation vary within a range of 2.2–2.5 percent, the second half marked an inflationary spike that was triggered by increase in prices for some groups of food products due to poor crop figures, depreciation of the Russian ruble, and expected VAT rate hike. By the end of November 2018, inflation reached 3.8 percent year-to-year (percentage change over previous 12 months) (versus 2.5 percent at 2017 year-end) (see *Fig. 7*).

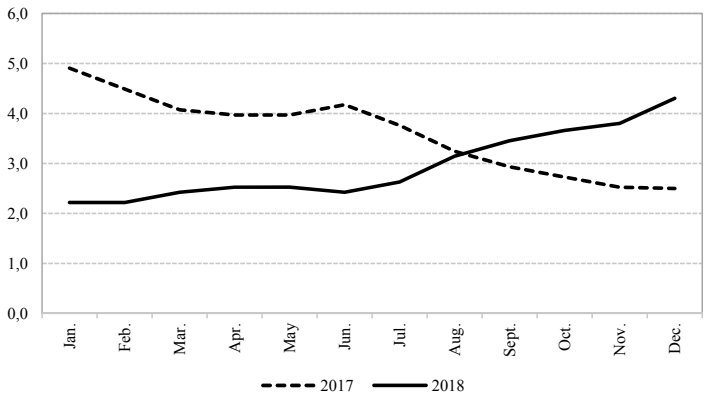


Fig. 7. CPI growth rate in 2016–2018, percentage change over past 12 months

Sources: Rosstat; own calculations.

Table 4

Annual growth rate of prices for selected consumer goods and services in 2015–2018, Dec.-to-Dec. percent change

	2016	2017	2018	2016–2018
CPI	**5.4**	**2.5**	**4.3**	12.7
Food products	**4.6**	**1.1**	**4.7**	10.7
Butter	20.5	9.6	3.6	36.8
Fish and seafood	8.6	3.8	3.7	16.9
Sunflower oil	3.4	-8.6	1.8	-3.8
Milk and dairy products	9.5	5.2	2.9	18.5
Macaroni, noodles and similar farinaceous products	4.5	-0.7	1.4	5.2
Bread and bakery products	5.9	2.7	5.2	14.4
Alcoholic beverages	6.4	2.9	1.3	10.9
Fresh fruits and vegetables	-6.8	1.2	4.9	-1.1
Cereals and legumes	6.4	-13	1.2	-6.3
Meat and poultry	1.6	-2.3	9.7	8.9
Eggs	-0.7	-14.2	25.9	7.3
Nonfood products	**6.5**	**2.8**	**4.1**	14.0
Motor gasoline	3.8	7.3	9.4	21.8
Tobacco products	17.8	8.6	10.1	40.9
Textiles	7.6	3.7	1.7	13.5
Washing and cleaning agents	6.3	0.6	3.1	10.3
Footwear	9.2	4	1.9	15.7
Textile goods	7.5	3.3	2.5	13.8
Clothing and underwear	7.3	3	2.3	13.1
Medicines	4.9	-3.4	4.6	6.0
Services	**4.9**	**4.4**	**3.9**	13.8
Early childhood educational services	9.3	5.2	3.8	19.4
Passenger transport services	6.6	6.8	4.3	18.7
Medical services	7.8	5	4.3	18.1
Educational services	4.9	7.5	8.4	22.2
Utility services	5.4	4.6	3.7	14.3
Communication services	3.7	4.7	2.4	11.2

Source: Rosstat.

There was a 4.7 percent acceleration in food prices in January-December 2018 versus 1.1 percent in 2017 (see *Fig. 8*). Note that in July-September 2018 the food sector experienced a deflation (-1 percent in July, -1.8 percent in August, -0.7 percent in September) that was driven by decline in prices of fresh fruits and vegetables on the back of good crop figures (-5.1 percent in July, -6.4 percent in August, -6.8 percent in September). Inflation acceleration in the food sector in September-December 2018 was due to a 40.3 percent price rise for eggs and 13.8 percent for sugar sand as well as gradually increasing meat and poultry prices during 2018 (9.7 percent up in January-December 2018).

Non-food prices in 2018 picked up 4.3 percent (2.5 percent in 2017). The following products saw most of the price acceleration in January-December 2018: motor gasoline (up 9.4 percent), tobacco products (up 10.1 percent), construction materials (up 4.9 percent) and brown goods and other household appliances (up 3.7 percent). Note that the surge in motor gasoline prices in April-June 2018 stemmed from high crude prices and the April slump in the Russian ruble exchange rate amid tighter anti-Russia sanctions. Overall, the 2018 appreciation of some groups of nonfood products was in a large part due to the effect of ruble exchange rate depreciation pass-through to prices. What is important to note is that, according to Bank of Russia's estimates, the effect of

exchange rate pass-through to prices in 2018 declined to around 0.1, suggesting that the 8.2 percent weakening in the ruble nominal effective exchange rate in January-December 2018 would add 0.82 percentage points to the annual inflation over the immediate 3–6 month horizon.

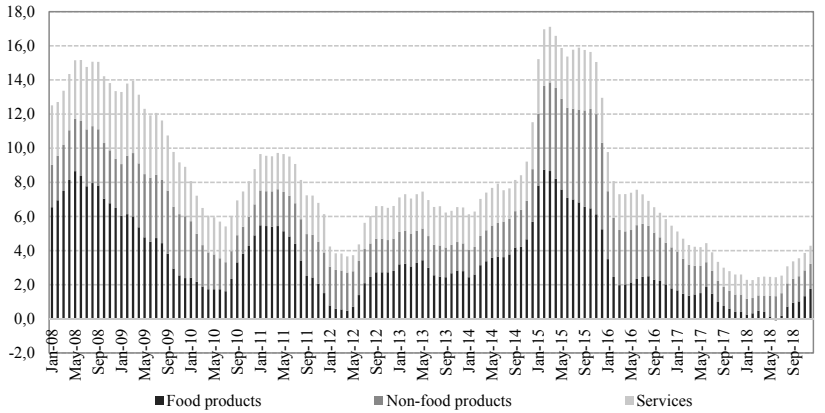


Fig. 8. Inflation structure in 2008–2018, percent change from previous year's month

Sources: Rosstat; own calculations.

Chargeable services to individuals increased 3.9 percent in 2018 (compared to a 4.4 percent rise in 2017). Overall, in January-December 2018, the highest increase in prices due to the ruble depreciation was seen for outbound tourism services (up 9.8 percent).

The 2018 year-end core inflation (an indicator excluding changes linked to seasonal and administrative factors) reached 3.7 percent (versus 2.1 percent in 2017). Note that the core inflation is on the rise since March 2018, thus suggesting that the country is faced with a steady acceleration of inflation.

Individuals' inflation expectations in 2018 followed the actual inflation trajectory. The median one-year ahead expected inflation rate reached 10.2 percent in December 2018 after April's lows (7.8 percent), according to InFOM's survey published by the Bank of Russia (see *Fig. 9*). Not only inflation expectations but also respondents' assessment of actual inflation rate (10.2 percent) remained at high levels. The onset of the 2018 reversal trend in inflation expectations and high risks of their further increase amid plans to raise early in 2019 the VAT and the motor gasoline excise tax became important factors prompting the Bank of Russia to lift the key interest rate.

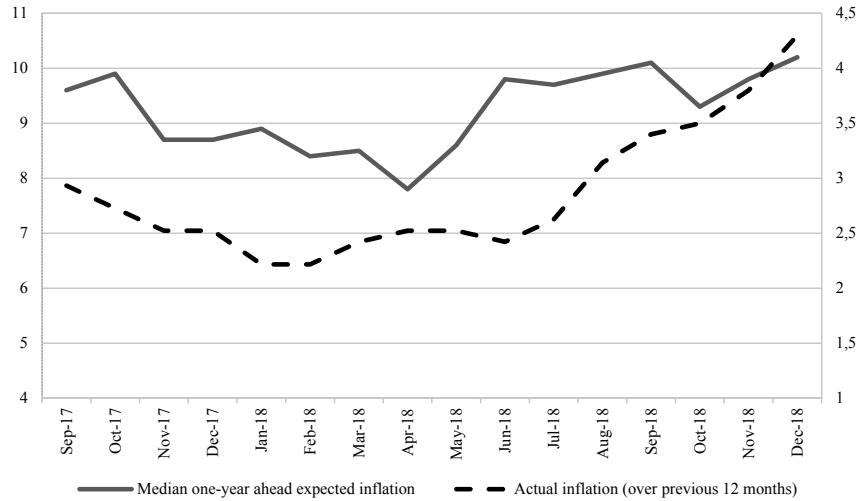


Fig. 9. Inflation and inflation expectations

Sources: Rosstat, Bank of Russia.

The ruble exchange rate dynamics remains a significant source of inflationary risks. For instance, depreciation of the Russian ruble remains a key driver of inflation at a backdrop of tighter sanction rhetoric in April and August 2018 as well as accelerated capital outflows from emerging markets due to the U.S. Fed's tighter monetary policy.

Below we finally compare Russia's consumer price growth rates with those of other countries (see *Table 5*).

Table 5

Consumer price index dynamics of various countries in 2015–2018, percent a year

	2016	2017	2018	2016–2018
Azerbaijan	15.7	12.9	2.3	33.6
Armenia	-1.1	2.6	1.8	3.3
Belarus	10.6	4.6	5.6	22.2
Kazakhstan	8.5	7.3	5.3	22.6
Kyrgyzstan	-0.5	3.7	0.5	3.7
Moldova	2.4	7.3	0.9	10.9
Russian Federation	*5.4*	*2.5*	*4.3*	*12.7*
Tajikistan	6.1	6.7	5.4	19.3
Ukraine	12.4	13.7	9.8	40.3
Germany	0.5	1.7	1.7	3.9
France	0.2	1.2	1.6	3.0
United States	1.3	2.1	1.9	5.4
The Netherlands	0.3	1.3	2.0	3.6

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

At the end of 2018, the Russian Federation ranked in the middle of the list of CIS countries in terms of consumer price growth rates. Two CIS countries – Ukraine and Belarus – posted highest rates of inflation of 9.8 and 5.6 percent, respectively (see *Table 5*). Note that while the 2016 inflation rate in Russia averaged 16 times the inflation rate in developed countries, Russia in 2017 had consumer price growth rates comparable with developed countries (2.6 percent in the United States, 2.3 percent in The Netherlands).

Thus, the Bank of Russia managed in 2015–2017 to lower drastically the inflation rate and to adopt a stepwise monetary policy easing. However, new high risks that emerged in 2018 prompted two cuts in the key interest rate by a total of 0.5 percentage points. Inflation may reach 5–5.5 percent at the end of 2019, and it is not until 2020 that inflation can be brought back down to its target rate, according to central bank's estimates. It is therefore not until the second part of 2019 that Bank of Russia will be able to cut the key interest rate.

2.1.4. Balance of payments and ruble exchange rate

In 2018, Russia posted the highest on record positive current account balance since 1992, according to BoP data for 2018. At the same time, the private sector saw substantial capital outflows that were driven by reduced foreign liabilities and increased foreign assets for banks and enterprises.

According to preliminary data on the Balance of Payments 2018 from the Bank of Russia, Russia's current account balance was recorded at USD 114.9 billion, or 2.5 times (an increase of USD 81.6 billion) the amount recorded in the preliminary data for 2017[1]. In absolute terms, the country saw its current account balance hit its highest on record since 1992. As a percentage of GDP, however, the current account balance was even higher in the period between 2001 and 2006.

The balance of trade in goods amounted to USD 194.4 billion, posting an increase of 68 percent (adding USD 79 billion in absolute terms) over the amount recorded in 2017 (USD 115.4 billion) (*Fig. 10*). The pivotal contribution came from a 25 percent rise in exports (adding USD 90 billion in absolute terms) from USD 353.5 billion in 2017 to USD 443.4 billion in 2018. The growth was mostly due to increase in the annual average price of crude oil, petroleum refined products and natural gas as well as other Russia's primary export commodities amid stable physical volumes of exports (see *Table 6, Fig. 11*).

[1] See A. Bojechkova, A. Knobel, P. Trunin. Russia's Balance of Payments 2017 // Russian Economic Developments. 2018. Vol. 25. No 2. PP. 8–11.

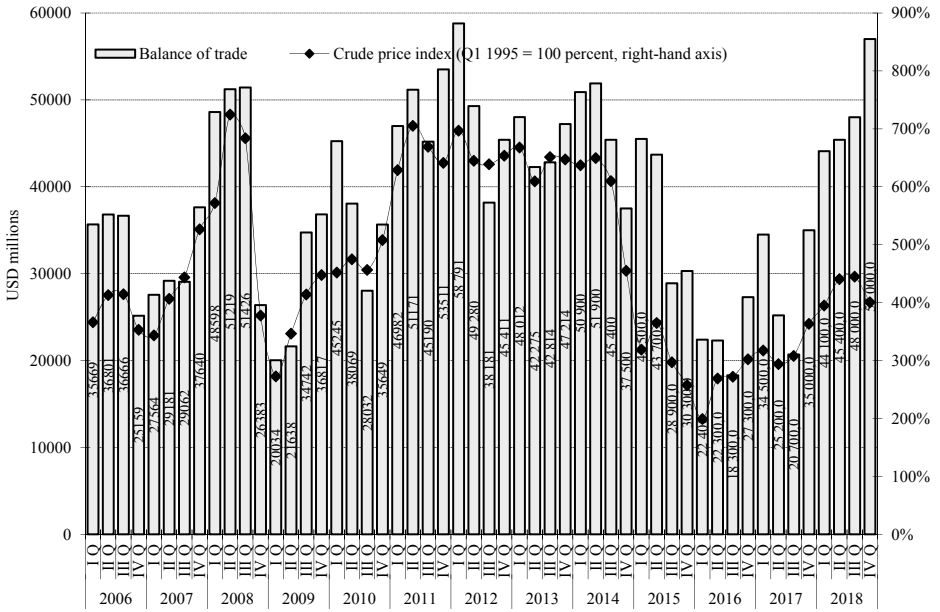


Fig. 10. Russia's balance of trade and oil price dynamics

Sources: Bank of Russia, IMF.

Table 6

Prices of Russia's principal export commodities in 2018 compared to 2017

Commodity	Commodity's share of exports, percent	Average export price in January-November 2018 (USD thousands / tonne)	Average export price in January-November 2017 (USD thousands / tonne)	Gains in prices, percent
Crude oil	29	501	365	37
Refined petroleum products	18	521	388	34
Natural gas*	11	221	180	23
Ferrous metals	5.2	506	440	15
Hard coal	3.8	85	75	14
Wheat and meslin	1.9	190	176	8
Fertilizers	1.7	237	209	14
Liquefied natural gas (LNG)**	1.2	142	131	9
Aluminum	1.2	1.757	1.646	7
Sawn timber	1.0	234	217	8
Copper	0.9	6.355	6.133	4
Fresh and frozen fish	0.7	1.822	1.587	15
Nickel	0.4	13.058	10.044	30

* – for billion cubic meters
** – for thousand cubic meters
Sources: Russia's Federal Customs Service, own calculations.

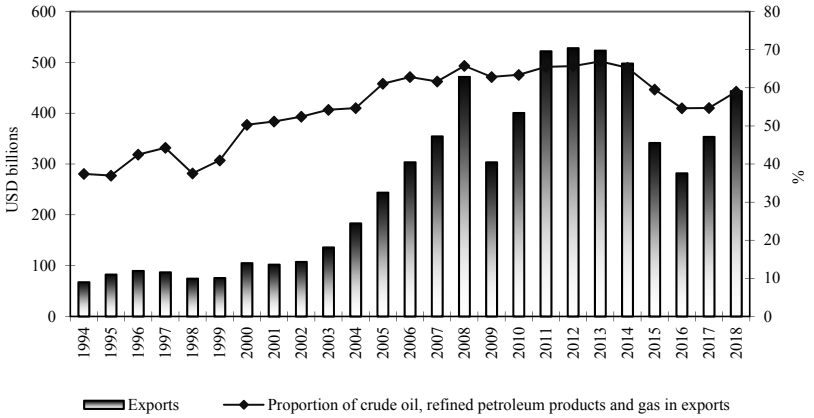


Fig. 11. Dynamics of exports of goods and proportion of fuel and energy sector products in 1994–2018

Source: Bank of Russia.

The growth in the balance of trade in goods was also due stagnant imports with a growth of 4.6 percent (the growth in absolute terms was USD 11 billion) to USD 249 billion in 2018 from USD 238 billion in 2017. However, the second half of the year saw imports drop 2.3 percent (or USD 3 billion) compared to H2 2017. The decline was in most part due to a weakening ruble: according to data from the Bank of Russia, the index for the ruble's real effective exchange rate against foreign currencies lost 7.7 percent in 2018 compared to 2017 – a substantial decline indicating a relative appreciation of imports[1].

Russia's balance of trade in services in 2018 amounted to -USD 30.2 billion, or 2.9 percent in absolute terms less than the amount (-USD 31.1 billion) recorded in 2017. In 2018, exports of services increased from 2017 (mainly due to inbound tourism to Russia and transport services) and imports of services rose (due in large part to travels, transport and other business services). Furthermore, exports saw a bigger rise in both relative and absolute terms that first of all was due to the FIFA World Cup 2018 hosted by Russia. Exports saw an annual rise of 13 percent from USD 57.7 billion to USD 65 billion as imports were up 7.5 percent from USD 88.8 billion to USD 95.5 billion.

The investment income balance and the *compensation of employees balance* underwent minor changes in 2018. The former was up USD 0.9 billion (from -USD 39.8 billion to -USD 38.9 billion) as the latter increased USD 0.5 billion (from -USD 2.3 billion to -USD 1.8 billion).

[1] For more details on the exchange rate influence on trade see A. Knobel, A. Firanchuk, Russia's foreign trade in January-August 2017 // Economic Development of Russia. 2017. Vol. 24. No. 11, pp. 12–18.

Thus, the key factor that governs the current account balance in the Russian economy still remains the same – the balance of trade in services and the balance of trade in goods which depends largely on, *firstly*, prices of hydrocarbons (energy commodities) and other Russia's primary export commodities and, *secondly*, the nominal exchange rate of the Russian ruble.

Russia's current account surplus increased alongside the rise in the financial account deficit which in 2018 was 6 times (USD 76.8 billion) the amount recorded in 2017 (USD 12.6 billion). Banks and enterprises in 2018 saw net capital outflows reach USD 67.5 billion, while in 2017 they were USD 25.2 billion (see *Fig. 2*). While in 2017 capital outflows in the private sector were almost entirely linked to banks' operations, the contribution of banks and enterprises in 2018 was comparable: USD 30.9 billion (USD 23.3 billion in 2017) and USD 36.6 billion (USD 1.9 billion in 2017), respectively.

Capital outflows in the banking sector were driven on the one hand by a USD 7.0 billion growth in foreign assets of banks (2017 saw foreign assets drop USD 4.4 billion) and on the other hand by a USD 23.9 billion reduction of foreign liabilities (foreign liabilities in 2017 were reduced by USD 27.7 billion).

Net capital outflows at enterprises were triggered mainly by a USD 30.3 billion increase in their foreign assets (an increase of USD 18.2 billion in 2017). Enterprises raised them mainly in the form of foreign direct investment (up USD 25.8 billion in 2018 from USD 35.9 billion in 2017) and other assets (up USD 13.0 billion in 2018 from -USD 11.7 billion in 2017).

In 2018, enterprises started reducing their foreign liabilities (a decline of USD 7.1 billion), whereas in 2017 they ramped them up by USD 14.2 billion. For instance, credits and loans were reduced as low as USD 9.6 billion (down by USD 8.5 billion in 2017) and portfolio investments were down USD 0.5 billion (USD 4.5 billion down in 2017). Their foreign direct investment were merely USD 1.9 billion versus USD 27.1 billion in 2017 as other liabilities reached USD 1.1 billion (USD 0.1 billion in 2017).

The OFZ bond (ruble-denominated Russian government bonds) market in 2018 was driven in large part by investors' expectations of tighter sanctions against Russia's sovereign debt. In 2018, non-residents reduced their holdings of OFZ bonds by USD 5.7 billion (compared to an increase of USD 13.6 billion in 2017). As a result, the proportion of non-residents in the OFZ market reached its highest (34.5 percent) in April 2018 and then dropped by early December 2018 to 24.7 percent.

In 2018, Russia reduced its foreign debt by USD 64.4 billion to USD 453.7 billion as of January 01, 2019. The central government's foreign debt was reduced by 20.7 percent to USD 44.1 billion on the back of, as noted above, outflows of nonresident OFZ bond holders. As a result of reduced foreign liabilities in the private sector, banks' foreign liabilities were reduced by 11.3 percent to USD 397.6 billion.

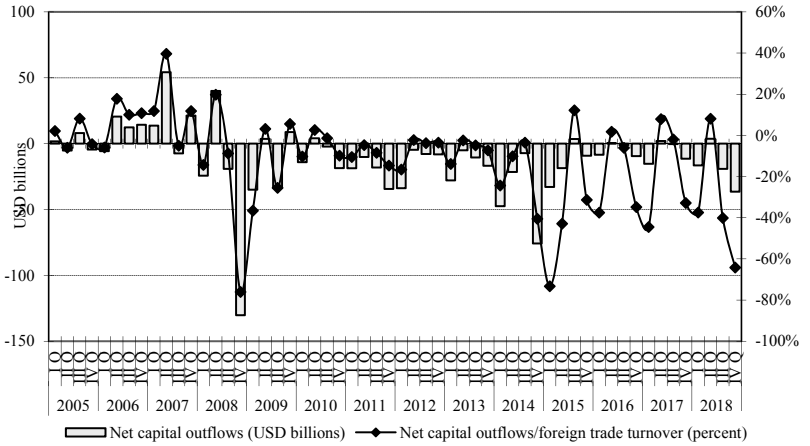


Fig. 12. Private sector's net capital outflows, 2005–2018

Sources: Bank of Russia, own calculations.

We have revised downward our capital flight estimate for 2018 year-end (*Fig. 13*) (it was estimated at USD 6.1 billion in 2017) to USD 3.3 billion[1], which reflects successful efforts of the Russian government to counteract capital outflows via illegal channels.

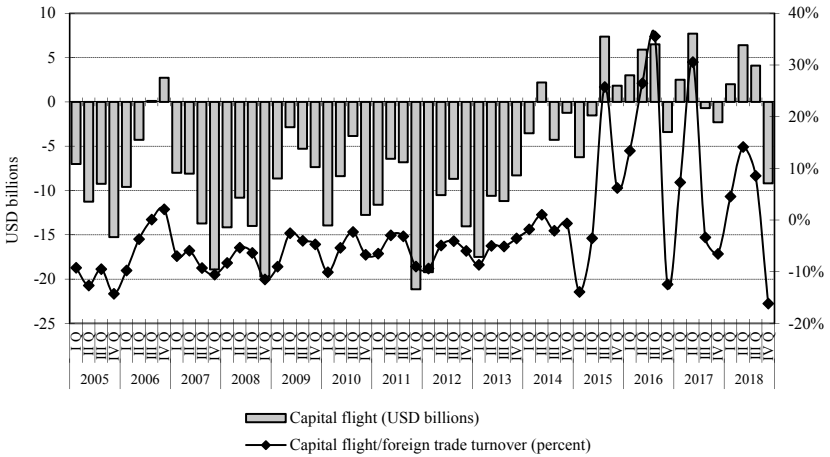


Fig. 13. Capital flight dynamics, 2005–2018

Sources: Bank of Russia; own calculations.

[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."

Substantial capital outflows from Russia in 2018 despite high prices of energy commodities led to a substantial depreciation of the Russian ruble as of 2018 year end. The ruble plummeted to its weakest in April (down 8.3 percent to 62 rubles per dollar compared to late in March) and in August (down 8.4 percent to 68.1 rubles per dollar from late July). The ruble devaluation was triggered primarily by capital outflows driven by tightened anti-Russia sanctions. In addition, the ruble in 2018 was driven by a downturn in all emerging markets as a result of the U.S. tighter monetary policy, trade wars, heightened risks of investing in emerging markets because of financial turmoil facing Argentina and Turkey.

As a result, the Russian ruble in nominal terms lost in 2018 by an average of 6.7 percent against the US dollar and 11.0 percent against the Euro; the Ruble nominal effective exchange rate against foreign currencies declined by 7.6 percent. By the end of 2018 the Ruble in real terms was traded against the currencies of U.S. trade partners at the level seen in September 2016 (see *Fig. 14*).

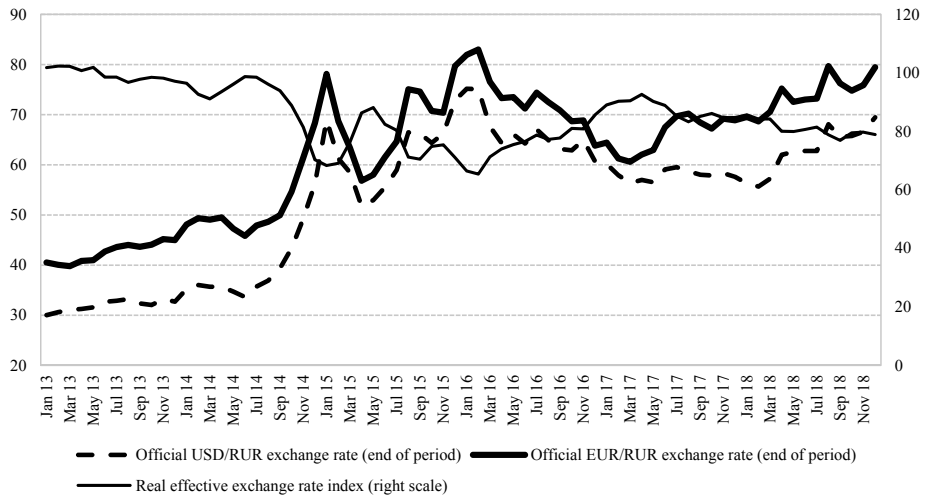


Fig. 14. Dynamics of Russian ruble exchange rate

Sources: Bank of Russia, own calculations.

The dynamics of the Russian ruble in 2018 was mostly led by Bank of Russia's foreign currency purchases in conformity with the fiscal rule in place. In 2018, the Bank of Russia spend RUB 3705.8 billion (3.6 percent of GDP) to buy foreign currency, the key factor of increasing Bank of Russia's foreign currency reserves until September 2018. The Bank of Russia adopted a decision in August 2018 to suspend its foreign currency purchases until late in September and then until late in 2018. It was not until mid-December that a decision to resume, from January 15, 2019, Bank of Russia's foreign currency purchases was announced. Until then foreign currency was purchased

in planned volumes by the Federal Treasury directly from the Bank of Russia which had no access to the domestic foreign exchange market.

In 2018, the Russian ruble exchange rate as well as national currencies of other developing countries were influenced by the U.S. Fed's tighter monetary policy. The appeal of U.S. assets increased also due to heightened foreign-policy risks that can arise from U.S. protectionist measures against some of its trade partners.

A minor appreciation of the ruble real exchange rate, stabilization in value terms of export and import volumes, thus keeping a high current account balance unchanged – that is what seems to be expected in 2019 if *global crude prices remain as they are now* (around USD 60 per barrel) and *the ruble's nominal exchange rate is at 65–70 rubles per dollar*. However, risks of further tightening in sanctions, particularly sanctions against Russia's sovereign debt, may lead to capital outflows and a highly volatile ruble's exchange rate in 2019.

2.2. Fiscal policy[1]

2.2.1. Budgets characteristics in the budgetary system of Russia

Basic parameters of the budgetary system of Russia

In 2018, fiscal revenues of the enlarged government (hereinafter BEG) according to the preliminary data released by the Federal Treasury[2] exceeded the volumes seen in the previous year by 1.9 percentage points of GDP, or by RUB 5,870 billion in absolute terms (*Table 7*). At the same time, 75 percent of the income increment of BEG was secured by the federal budget including oil revenues to RUB 3,046 billion, or by 2.2 percentage points of GDP. Non-oil and gas receipts to the consolidated budget of the Russian Federation in 2018 compared to 2017 rose by RUB 2,824 billion in absolute terms but dropped in shares of GDP by 0.3 percentage points. Expenditures of Russia's budgetary system contracted in 2018 compared to January-December 2017 by 2.6 percentage points of GDP growing in absolute terms by RUB 1,485 billion.

In 2018, fiscal revenues of the budgetary system of Russia hit maximum for the five-year period which was mainly due to the favorable price environment on the natural resources. Budget expenditures of the enlarged government in shares of GDP in 2018 on the contrary reached minimum for the five-year period, which was possible due to budgetary rule in force, which significantly limited spending of the federal budget.

As a result, consolidated budget of the Russian Federation in 2018 was executed with a surplus (2.9 percent of GDP) for the first time during the period in review.

[1] This section was written by I. Arlashkin, RANEPA; N. Barbashova, RANEPA; S. Belev, Gaidar Institute, RANEPA; A. Deryugin, RANEPA; E. Leonov, Gaidar Institute, RANEPA; I. Sokolov, Gaidar Institute, RANEPA, VAVT; T. Tischenko, RANEPA.
[2] Data for 25.02.2019.

Tablea 7

Main parameters of the budget of the enlarged government in 2014–2018

	2014		2015		2016		2017		2018		Changes in 2018 relative to 2017, para GDP
	RUB bn	% of GDP	RUB bn	% of GDP	RUB bn	% of GDP	RUB bn	% of GDP	RUB bn	% GDP	p.p. p. of GDP
Revenues, Including:	26 766	33.8	26 922	32.3	28 181	32.8	31 047	33.7	36917	35.6	1.9
- oil and gas	7434	9.4	5863	7.0	4844	5.6	5972	6.5	9018	8.7	2.2
- non-oil and gas	19 332	24.4	21 059	25.3	23 337	27.2	25 075	27.2	27 899	26.9	-0.3
Expenditures	27 612	34.9	29 741	35.7	31324	36.4	32 396	35.2	33881	32.7	-2.5
Deficit (-)/ Surplus (+)	-846	-1.1	-2 819	-3.4	-3 143	-3.6	-1 349	-1.5	3 036	2.9	4.4
Reference: GDP, RUB billion	79 200		83 387		86 010		92 089		103 627		

Sources: Federal Treasury, Rosstat.

Receipts from the main taxes to the budgetary system of Russia

According to 2018 figures, fiscal revenues of the consolidated budget moved up (*Table 8)*. Across the majority of certain components of the tax burden a positive receipts dynamics was observed.

Table 8

Receipts from the main taxes of the enlarged government of the Russian Federation in 2014–2018

	In percent of GDP					Change in 2018 against 2017 in p.p. of GDP	Growth in 2018 in prices of 2017 against 2017, %
	2014	2015	2016	2017	2018		
Revenues total	**33.7**	**31.9**	**32.1**	**32.6**	**35.0***	**2.4**	**15.8**
Corporate profit tax	3.0	3.1	3.2	3.6	4.0	0.4	19.5
PIT	3.4	3.4	3.5	3.5	3.5	0.0	7.8
Insurance contributions	6.3	6.4	6.7	6.4	6.3*	-0.1	6.1
VAT	5.0	5.1	5.4	5.6	5.8	0.2	12.3
Excises	1.4	1.3	1.6	1.7	1.5	-0.2	-4.7
NRET	3.7	3.9	3.4	4.5	5.9	1.4	42.3
Customs duties and levies	6.9	4.0	3.0	2.8	2.9	0.1	11.5

* insurance contributions and total revenues are given without double count of insurance contributions for economically inactive population, values of total revenues differ from the official data for given value.

Sources: Federal Treasury, Rosstat, own calculations.

Oil and gas revenues of the budget, which plummeted in 2016, in 2018 continued growing. The volume of customs duties and levies demonstrated an upward trend (by +0.1 percentage points of GDP against 2017, or +19.6 percent in real terms), and receipts from MET exhibited the highest growth by 1.4 percentage points of GDP (by 39.8 in real terms).

Insurance contributions and excises somewhat decreased, and receipts from VAT went up by 0.2 percentage points of GDP. Receipts form PIT since 2016 go along with GDP.

There were no serious changes in the parameters of the tax policy effective in 2018.

Oil and gas revenues. Base rate of MET-oil remained at RUB 919 per ton. In the wake of oil price growth there was an increase of oil and gas receipts (*Table 9*).

Table 9

Proceeds from export duties on energy products and MET in 2014–2018, percent of GDP

	2014	2015	2016	2017	2018
MET	3.7	3.9	3.4	4.5	5.9
Export duties of energy products:	5.8	3.3	2.3	2.1	2.9
Crude oil	3.3	1.7	1.2	1.1	1.5
Petroleum products	1.9	0.9	0.5	0.4	0.6
Natural gas	0.6	0.7	0.6	0.6	0.8

Sources: Rosstat, Bank of Russia, Federal Treasury, Federal Customs Service.

Analysis of tax and customs bases dynamics (*Fig. 15*) exhibits that in 2018 export and production of crude oil changed slightly or did not change against 2017: exports amounted to 257.5 million tons (+0.5 million tons against 2017), and extraction came to 555.8 million tons (up 9.1 million tons to 2017).

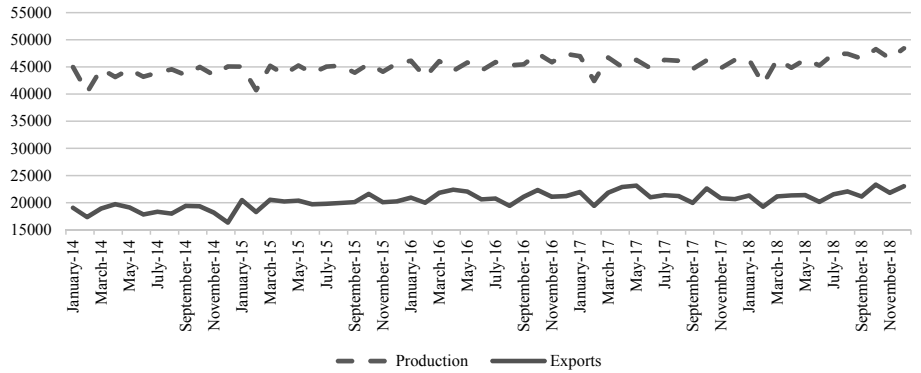


Fig. 15. Export and production of crude oil in 2014–2018, thousand tons

Source: Ministry of Energy of Russia.

Thus, Urals price growth was the main contribution to the growth of oil and gas revenues. USD exchange rate did not react to the oil price change owing to the fact that the Russian Finance Ministry abided to the budgetary rule (*Fig. 16*). As a result, actual ruble rate on MET averaged in 2018 over RUB 12,000 per ton of oil meanwhile in 2017 it averaged over RUB 7,800 per ton.

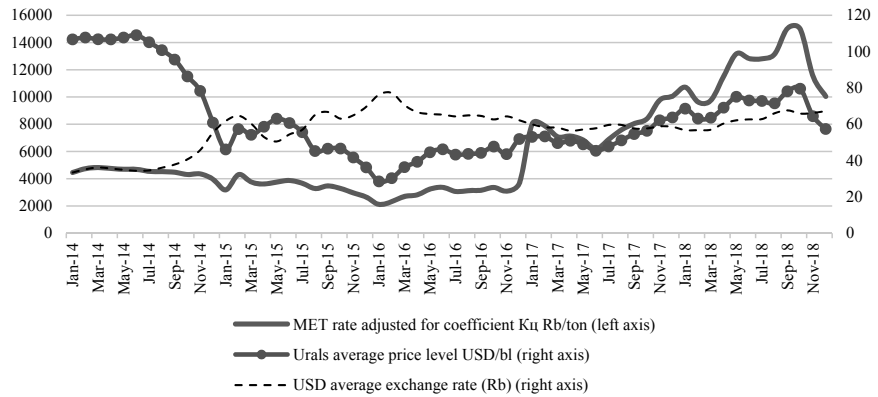


Fig. 16. Dynamics of actual tax rate on MET, Urals price and USD exchange rate in 2014–2018

Corporate income tax. In 2018, returns from the corporate income tax increased notably (ip0.4 percentage points of GDP). *Fig. 17* demonstrates significant income growth of the profit-making companies. Nevertheless, growing share of the loss-making enterprises is alarming.

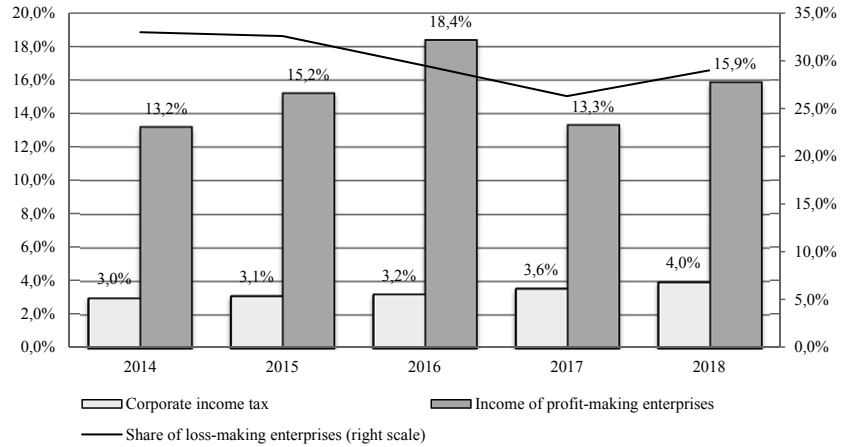


Fig. 17. Dynamics of proceeds from the corporate income tax to the budgetary system of the Russian Federation, income of profit-making enterprises (percent of GDP), share of loss-making enterprises in percent in 2014–2018

Sources: Federal Customs Service, Rosstat.

Insurance contributions and PIT. In 2018, there was no change in the rates and base of insurance contributions. Wage Fund of gross payroll relative GDP somewhat decreased. Meanwhile, returns from insurance contributions repeat the Fund's dynamic. Receipts from PIT consistently stay at the same level against GDP in recent years. This is due to the fact that the decrease of the tax base on 'wage' component was offset by the growth of other income subject to taxation along PIT.

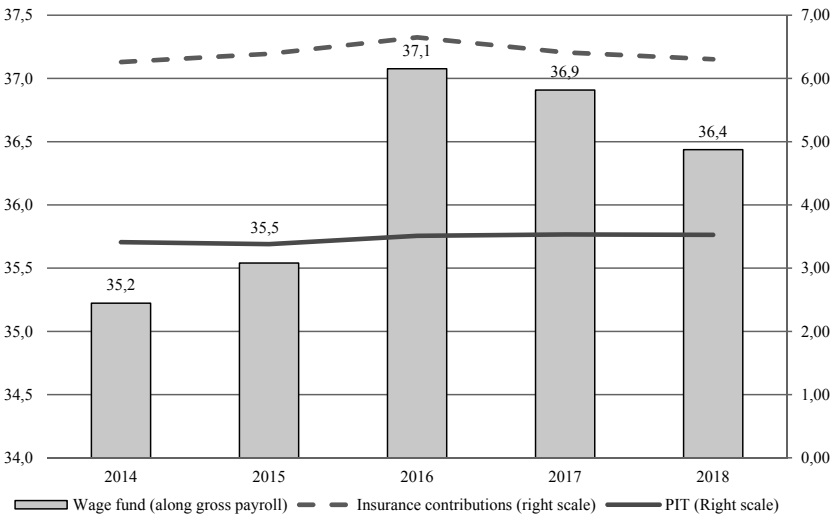


Fig. 18. Receipts from insurance contributions, PIT, and wage fund (along gross payroll) in 2013–2018, percent of GDP

Sources: Rosstat, Federal Treasury, own calculations.

VAT. Total receipts from VAT in 2018 rose by 0.2 percentage points hitting 5.8 percent of GDP. At the same time in 2018 contrary to 2017, significantly grew the share of VAT returns from imports in the increments of income amount. For example, in 2017, decisive contribution in the income growth (0.3 percentage points of GDP) was due to VAT on goods sold on the territory of the Russian Federation ("internal VAT") with insignificant VAT growth from imports (merely 0.02 percentage points of GDP), then in 2018, VAT growth from imports constituted nearly 0.2 percentage points, meanwhile income from "internal" VAT moved up merely by around 0.1 percentage points of GDP (*Table 10*).

It should be noted that in 2018, the imputed fiscal performance rose significantly strengthening upward trend which made itself felt after 2014 and reaching the highest level for the recent years. Receipts growth is due first of all to the ongoing usage of ACS

VAT-2 by customs bodies as well as to a certain decease of the shadow sector in the Russian economy.

Table 10

Dynamics of proceeds from VAT to the budgetary system of the Russian Federation, percent of GDP

	2014	2015	2016	2017	2018
Proceeds from VAT, total	5.0	5.2	5.3	5.6	5.8
VAT on goods sold on the RF territory	2.8	3.0	3.1	3.3	3.4
Vat on goods imported to the RF territory	2.3	2.2	2.2	2.3	2.4
Effective VAT rate, percent	7.5	7.8	8.0	8.6	9.7
Fiscal performance coefficient (C-efficiency), percent	41.5	43.5	44.6	47.5	53.7

Sources: Rosstat, Federal Treasury, own calculations.

Excises. In 2018, somewhat decreased returns from excises both on alcoholic beverages and tobacco products: collections from excises of these products in 2018 amounted to RUB 395 billion and RUB 583 billion, respectively.

Recent years have seen the contraction of consumption of practically all types of alcoholic beverages in volume terms. Thus, owing to the rates stability returns to the budget from excises on alcoholic beverages contracted by 0.4 percent in 2018 against 2017.

Tobacco products market has been steadily shrinking recently. When previously fiscal revenues were growing in the wake of excises rates gro9wth, then at year-end 2018 returns fell by nearly RUB 8 billion (down 1.3 percent compared to 2017). There are two reasons or this contraction:

1. Increase of the absolute volume of black market sales and correspondingly share of bootleg turnover on the falling market. For example, according to Euromonitor Int. estimates, the share of bootleg turnover moved up from 2.9 percent in 2014 to 6.5 percent in 2018.

2. Shifts in the market structure and switchover of part of consumers to electronic systems of nicotine provision (e-cigarette), which popularity and diversity grow all the more. This fact is reflected in the budget statistics: when in 2017 total collections from excises from e-cigarettes amounted to merely RUB 0.57 billion, in 2018 – already RUB 5.33 billion.

Table 11

Proceeds from excises on tobacco and alcoholic beverages, RUB billion.

	2014	2015	2016	2017	2018
Market volume of tobacco products (turnover of retail trade according to Rosstat)	553	633	701	775	n/a
Proceeds from excises on tobacco products (*less e-cigarettes)*	319	386	483	591	583
Alcoholic beverages market (retail trade turnover according to data released by Rosstat)	1871	1904	1933	1997	n/a
Proceeds from excises on alcohol	340	327	354	397	395

Sources: Rosstat, Federal Treasury, Federal Customs Service, own calculations.

Expenditures of the budgetary system of the Russian Federation

Expenditure of the budgetary system contracted in 2018 by 2.5 percentage points of GDP in comparison with 2017 level (*Table 12*).

Table 12

Budget expenditure of the enlarged government in 2014–2018, percent of GDP

	2014	2015	2016	2017	2018	Change in 2018 to 2017
Expenditure, total	**34.9**	**35.7**	**36.4**	**35.2**	**32.7**	**-2.5**
General state issues	2.1	2.2	2.2	2.1	2.1	0.0
National defense	3.1	3.8	4.4	3.1	2.7	-0.4
National security and law enforcement activities	2.8	2.5	2.3	2.2	2.0	-0.2
National economy	5.7	4.5	4.5	4.7	4.3	-0.4
Housing and utility sector	1.3	1.2	1.2	1.3	1.3	0.0
Environmental conservation	0.1	0.1	0.1	0.1	0.1	0.0
Education	3.8	3.6	3.6	3.5	3.5	0.0
Culture, cinematography	0.5	0.5	0.5	0.5	0.5	0.0
Healthcare	3.2	3.4	3.6	3.1	3.2	0.1
Social policy	11.1	12.6	12.7	13.1	11.6	-1.5
Physical fitness and sports	0.3	0.3	0.3	0.4	0.3	-0.1
Mass media	0.1	0.2	0.1	0.1	0.1	0.0
Servicing state and municipal debt	0.7	0.8	0.9	0.9	0.9	0.0

Sources: Federal Treasury, own calculations.

One should note downward trend in spending during 2018 against 2017 across the following budget lines: Social policy down 1.5 percentage points of GDP, National defense and National economy down0.4 percentage points of GDP, National security and law enforcement activities down 0.2 percentage points of GDP, physical fitness and sports down 0.1 percentage points of GDP. Only spending on Healthcare demonstrated growth 0.1 percentage point of GDP. Regarding other budget lines the volume of budget allocations in 2018 against 2017 in share of GDP remained unchanged.

The share of productive expenditures in the overall volume of the expenditure budget of the enlarged government in 2018 constituted 29.3 percent against 27.3 percent in 2017. Regarding certain lines of productive expenditures of the enlarged government budget in 2018 compared to 2017 under the general growth by 4.6 percent in nominal terms the following changes are observed:

- growth of budget allocations on fundamental research (up 27.4 percent), on applied research in the sphere of general state issues (up 2.3-fold), on applied research in the sphere of national defense (up 20.0 percent), on public road system (up 8.0 percent), on higher education (up 8.5 percent), on outpatient care (up 22.1 percent), and in-patient care (up 11.9 percent);
- reduction of budget allocations on transportation (down 3.2 percent).

National projects are the basic instruments for the implementation of the Presidential May Decree[1]. At the end of 2018, twelve national projects and a complex plan for modernization and extension of the long-distance infrastructure were developed.

[1] The Executive Order of the President of the Russian Federation of 07.05.2018 No. 204 "On National Goals and Strategical Objectives of the Russian Federation through 2024."

Intersectoral feature has become a signature plank of such national projects. For instance, national project Demography consists of five federal projects[1]. Budget allocation on these projects are distributed across various sections of functional classification forming part of the following state programs: "Social safety net," "Development of physical fitness and sports," "Provision of accessible and comfortable housing and utilities citizens of the Russian Federation," "Promotion of employment," "Development of education," "Development of healthcare," and "Economic development and innovation-driven economy." Participation of the RF subjects in the implementation of the national projects is achieved through the regional projects coordinated at the federal level. Planned volume of spending on the implementation of the national projects in 2019–2024 will amount RUB 25.7 trillion including along sources of financing: the federal budget – RUB 13.1 trillion, The RF subjects' budgets – RUB 4.9 trillion, extrabudgetary sources – RUB 7.2 trillion, state extrabudgetary funds – RUB 0.1 trillion[2]. Achievement of objectives of the national projects will depend, first of all, on the efficiency of the interdepartmental coordination and attraction of funds from the extrabudgetary sources of financing.

Deficit of the budgetary system of the Russian Federation

At the year-end 2018, the budget of the enlarged government was executed with a surplus amounting to RUB 3,036 billion, or 2.9 percent of GDP against the budget deficit registered in 2017 to the tune of 1.5 percent of GDP, or RUB 1,349 billion (*Table 13*).

Table 13

Sources of financing the budget deficit of Russia in 2014–2018

	RUB billion					Percent of GDP				
	2014	**2015**	**2016**	**2017**	**2018**	**2014**	**2015**	**2016**	**2017**	**2018**
Sources of the deficit financing, total	**845**	**2 819**	**3 143**	**1 349**	**-3 036**	**1.1**	**3.4**	**3.7**	**1.5**	**-2.9**
Financing of deficit from internal sources	**4 478**	**1 713**	**-405**	**2 555**	**1 566**	***5.7***	***2.1***	***-0.5***	***2.8***	***1.5***
Government bonds	1 016	9	524	1220	507	1.3	0.0	0.6	1.3	0.5
Loans from credit organizations	217	102	-103	-126	-15	0.3	0.1	-0.1	-0.1	0.0
Other sources	3 245	1 602	-826	1 461	1 074	4.1	1.9	-1.0	1.6	1.0
Financing of the deficit from external sources	**-147**	**-296**	**15**	**-126**	**-135**	***-0.2***	***-0.4***	***0.0***	***-0.1***	***-0.1***
Government bonds	-47	-183	110	41	-50	-0.1	-0.2	0.1	0.0	0.0
Credits from foreign countries	-25	-51	-17	-20	-15	0.0	-0.1	0.0	0.0	0.0
Other sources	-75	-63	-78	-147	-70	-0.1	-0.1	-0.1	-0.2	-0.1
Change of remaining balance	**-3 486**	**1 402**	**3 533**	**-1 080**	**-4 467**	***-4.4***	***1.7***	***4.1***	***-1.2***	***-4.3***

Sources: Federal Treasury, own calculations.

[1] "Financial assistance to families at child birth," "Promotion of women's employment- creation of conditions for pre-school education for children to three years," "Old generation," "Older generation," "Promotion of one's health," "Sports – way of lifeт».

[2] Website of the RF Government. URL: http://static.government.ru/media/files/p7nn2CS0pVhvQ98OOwAt2dzCIAietQih.pdf

In 2018 against the previous year, the amount of net borrowings[1] on the internal market significantly contracted from 1.3 percent of GDP to 0.5 percent of GDP, in particular, the volume of placed securities amounted to RUB 1,123.5 billion with the amount of redemption coming to RUB 616.0 billion (in 2017 –RUB 1,917.7 and 751.2 billion, respectively). Consolidated budgets of the RF subjects borrowed in bonds in 2018 amounting to RUB 86.9 trillion under the planned volumes coming to RUB 231.9 billion, the amount of redemption constituted RUB 86.9 trillion. Thus, the amount of regional debt on government bonds in 2018 remained unchanged and as of January 1, 2019 constituted RUB 551.4 billion (in 2017 – RUB 548.5 billion[2]), or 25 percent of the total state debt of the subjects of the Russian Federation (RUB 2,206.3 billion). Across other internal sources of the budget deficit financing it will be noted that returns from the sale of shares and other forms of participation in debt equity swap amounted to RUB 22.7 billion (in 2017 – RUB 22.8 billion), including regarding the consolidated budget of the subjects of the Russian Federation – RUB 10.0 billion (in 2017 – RUB 8.5 billion).

On the whole, the dynamics of the main parameters of the enlarged government budget in 2018 against the previous four-year period is in keeping with the policy of the budget consolidation, which ensures sustainability of the public finance in the medium-term, which, in its turn, is one of the significant factors for successful implementation of the national projects.

2.2.2. Specification of the federal budget

Basic parameters of the federal budget

In 2018, the revenue of the federal budget hit a fresh all-time high reaching 18.8 percent of GDP (RUB 19,457.9 billion), which is above their indicator for 2017 by 2.4 percentage points (*Table 14*). Growth of the gross income of the federal budget was triggered both by an increase of oil and gas components by 2.2 percentage points of GDP and by non-oil and gas proceeds by 0.2 percentage points of GDP. Furthermore, the volume of oil and gas income (8.7 percent of GDP) exceeded the original forecast values presented in the memorandum to the draft of the federal law on the federal budget for 2018-2020 by 3.1 percentage points of GDP.

The federal budget expenditures for 2018 amounted to 16.1 percent of GDP (RUB 16,664.7 billion) down 1.7 percentage points of GDP against the previous year (17.8 percent of GDP) and by 0.9 percentage points of GDP of the originally approved volume.

Budget surplus at the year-end 2018 hit 2.7 percentage points of GDP (RUB 2,793.2 billion) against 1.4 percentage points a year earlier. At the same time, non-oil and gas deficit contracted by 1.9 percentage points of GDP to -6.0 of GDP.

[1] The difference between the volume of placed securities and redeemed for the period under review.
[2] The difference of RUB 3 billion is due to the redemption of municipal securities of urban districts.

Table 14

Main parameters of the federal budget in 2014–2018, percent of GDP

	2014	2015	2016	2017	2018			Change in 2018 relative to 2017, p.p. of GDP
					Law on FB for 2018[1]	Law on FB for 2018 with amendments introduced in May[2]	Actually	
Revenues	18.3	16.4	15.7	16.4	15.7	17.4	18.8	2.4
Oil and gas	9.4	7.0	5.6	6.5	5.6	7.4	8.7	2.2
Non oil and gas	8.9	9.4	10.1	9.9	10.1	10.0	10.1	0.2
Expenditures	18.7	18.7	19.1	17.8	17.0	16.9	16.1	-1.7
Deficit (–) / surplus (+)	-0.4	-2.3	-3.4	-1.4	-1.3	0.5	2.7	4.1
Non-oil and gas deficit	-9.8	-9.3	-9.0	-7.9	-7.0	-6.9	-6.0	1.9
GDP, RUB billion	79 200	83 387	86 010	92 089	97 462	98 234	103 627[3]	
Urals USD per barrel	97.6	51.2	41.9	53.0	43.8	61.4	70.0	

Sources: Federal Treasury,[4] PRosstat, own calculations.

The share of oil and gas revenues on the overall amount of income in 2018 increased to 46.3 percent against 39.6 percent in 2017, however this dynamic can not attest to an increase of the dependence of the budget system sustainability on the oil and gas revenues because the growth of spending is limited by the budget rules and all additional oil and gas revenues are directed to the NWF. For instance, according to data released by the Finance Ministry of Russia additional oil and gas revenues obtained in 2018 due to the excess of the actual oil price[5] over the base one[6] are estimated in the volume of RUB 4,261.4 billion. Thus, the difference between the volume of fiscal revenues less additional oil and gas revenues (RUB 15,196.5 billion) and the nominal volume of the federal budget expenditures (provisional expected deficit) constitutes RUB 1,468.2 billion, or -1.4 percent of GDP[7].

Main sources of revenue

Parameters of the federal budget revenue part execution for 2018 on volumes and structure are presented in *Table 15*. The amount of collections from the oil and gas component went up by 2.2 percentage points of GDP due to the growth receipts from MET by 1.4 percentage points of GDP and to the export customs duties by 0.8 percentage points of GDP which was owing to the increase of Urals price growth (oil price at the year-end 2017 averaged USD 53.03 bbl against USD 70.01 bbl in 2018) and USD ruble exchange rate (RUB 58.3 per USD in 2017 against RUB 62.7 in 2018). Growth of oil and gas revenues was affected by a change in the computed interest rate on MET in terms of combustible natural gas with increasing Kgp coefficient for

[1] Federal Law of 05.12.2017 No. 362-FZ.
[2] Federal Law of 3.06.2018 No. 193-FZ.
[3] Estimates of Rosstat as of 11.02.2019
[4] According to data released by the Federal Treasury as of 07.02.2019.
[5] USD 70.01 bbl.
[6] USD 40.8 bbl.
[7] Projected budget deficit exhibits that under the base oil price at USD 40.8 bbl the federal budget is not balanced by 1.4 percent of GDP.

organizations – owners of the United gas supply system in Q4 2018 (from 1.4022 to 2.055). The share of MET in the total volume of oil and gas revenues demonstrates a sustainable upward trend from 38.3 percent in 2014 to 66.6 percent in 2018 by means of reducing the share of proceeds from export duties (resulting from tax maneuver effective in the oil and gas sector).

Table 15

Proceeds of main taxes to the federal budget in 2014–2018

	Percent of GDP					Change in 2018 against 2017, p.p. of GDP
	2014	2015	2016	2017	2018	
Revenues, total	**18.3**	**16.4**	**15.7**	**16.4**	**18.8**	**2.4**
Oil and gas revenues	**9.4**	**7.0**	**5.6**	**6.5**	**8.7**	**2.2**
Of which:						
MET	3.6	3.7	3.3	4.4	5.8	1.4
Export duties	5.8	3.3	2.3	2.1	2.9	0.8
Non-oil and gas revenues	**8.9**	**9.4**	**10.1**	**9.9**	**10.1**	**0.2**
Of which:						
Corporate income tax	0.5	0.6	0.6	0.8	1.0	0.2
VAT on goods sold on the territory of the Russian Federation	2.8	2.9	3.1	3.3	3.4	0.1
VAT on goods imported into the territory of the Russian Federation	2.2	2.1	2.2	2.2	2.4	0.2
Excises on goods produced on the RF territory	0.7	0.6	0.7	1.0	0.8	-0.2
Excises on goods imported into the RF territory	0.1	0.1	0.1	0.1	0.1	0.0
Import duties	0.8	0.7	0.7	0.6	0.6	0.0
Other revenues	1.8	2.4	2.7	1.9	1.8	-0.1

Sources: Federal Treasury, own calculations.

The volume of non-oil and gas revenues of the federal budget in 2018 against the previous year rose across all fiscal revenues except internal excises, which contracted by 0.2 percentage points of GDP mainly due to a decrease of proceeds from excises on ethyl alcohol, gasoline, and tobacco products. Regarding other non-oil and gas revenues growth is noted in 2018 against the previous year: by 0.2 percentage points of GDP on the corporate income tax and import VAT, and by 0.1 percentage point of GDP on internal VAT. Returns from the corporate income tax transferred to the budget using corresponding rates increased by 0/1 percentage point of GDP, or by 29.8 percent in nominal terms. On the whole, non-oil and gas fiscal revenues are rather stable in recent years which confirms conclusions about the adaptation of the Russian economy to the impact of external negative factors.

The amount of non-tax revenues contracted in 2018 relative 2017 by 0.1 percentage points of GDP. However, regarding certain lines the following upward trend is noted in nominal terms:

- revenues in terms of income proceeding from the share in authorized (contributed) capital of partnerships and business companies, or dividends from shares owned by the Russian Federation, growth by 24.3 percent;
- revenues from placement of budget funds up 2.5-fold.

Federal budget expenditures

The federal budget expenditures in 2018 amounted to 16.1 percent of GDP, down 1.7 percentage points against 2017 with the growth by RUB 244.4 billion in absolute terms, or by 1.5 percent (*Table 16*).

Table 16

Federal budget expenditures in 2017–2018

	2017			2018			Change in 2018 relative to 2017	
	RUB bn	in % of GDP	Cash execution, %	RUB bn	in % of GDP	Cash execution, %	RUB bn	p.p. of GDP
Expenditures total, including:	**16 420.3**	**17.8**	**96.5**	**16 664.7**	**16.1**	**95.5**	**244.4**	**-1.7**
General state issues	1 162.4	1.3	93.1	1 235.8	1.2	88.9	73.4	-0.1
National defense	2 852.3	3.1	93.2	2 826.3	2.7	92.3	-26.0	-0.4
National security and law enforcement	1 918.0	2.1	97.8	1 971.0	1.9	96.2	53.0	-0.2
National economy	2 460.0	2.7	95.3	2 401.8	2.3	93.5	-58.2	-0.4
Housing and utility sector	119.5	0.1	95.6	148.4	0.1	88.1	28.9	0.0
Environmental conservation	92.3	0.1	99.2	116.0	0.1	98.8	23.7	0.0
Education	615.0	0.7	98.7	722.6	0.7	95.9	107.6	0.0
Culture and cinematography	89.7	0.1	91.1	94.5	0.1	84.3	4.8	0.0
Healthcare	439.8	0.5	97.3	537.3	0.5	96.3	97.5	0.0
Social policy	4 992.0	5.4	99.2	4 582.1	4.5	99.4	-409.9	-0.9
Physical fitness and sports	96.1	0.1	93.8	63.9	0.1	86.8	-32.2	0.0
Healthcare	83.2	0.1	99.9	88.4	0.1	99.9	5.2	0.0
Social policy	709.1	0.8	97.1	781.0	0.8	99.0	71.9	0.0
Interbudgetary transfers	790.7	0.8	95.3	1 095.4	1.1	99.7	304.7	0.3

Sources: Federal Treasury, own calculations.

Contraction in shares of GDP in 2018 relative 2017 is noted across the following lines:

- “Social policy” down 0.9 percentage points of GDP due to the decrease of budget allocations on “pension provision” from 3.9 percent of GDP to 3.0 percent of GDP;
- “National economy” down 0.4 percentage points of GDP including decrease of spending on the items “transportation” and “other issues in the sphere of national economy;”
- “National defense” down 0.4 percentage points of GDP through a decrease of spending on the item “Armed forces of the Russian Federation down 0.3 percentage points of GDP;
- “National security and law enforcement” and “General state issues” down 0.2 and 0.1 percentage points of GDP, respectively.

Growth of the federal budget allocations in 2018 compared to 2017 was solely on the line “Interbudgetary transfers” by 0.3 percentage points of GDP mainly owing to the increase of budget allocations on the item “other subsidies.”

On the whole, the federal budget structure regarding productive and non-productive expenditures has not changed significantly. The share of productive expenditures in the overall volume of expenditures moved up from 16.8 percent in 2017 to 18.4 percent registered in 2018 and has not changed in shares of GDP (3.0 percent of GDP).

Regarding cash execution of the federal budget in 2017-2018 against the approved annual parameters one can note that for 2017 the share of execution hit 96.5 percent of the annual budget of the annual budget breakdown, meanwhile, for twelve months of 2018 cash execution constituted 95.5 percent.[1] As during the previous year, the maximum volume of implemented budget allocations over 99.0 percent is registered in 2018 across budget lines "Social policy," and Mass media. Underdogs regarding cash execution of the federal budget in 2018 (below 90 percent) were budget lines "General state issues," "Housing and utility sector," "Culture and cinematography," and "Physical fitness and sports."

Analysis of the implementation of budget allocations across executive performers of state programs (*Table 17*) at the year-end 2017-2018 revealed somewhat improvement with the implementation of state program "Implementation of state national policy" (75.7 percent against 66.3 percent) and decrease of cash execution across all other state programs presented in the table.

Table 17

State programs with the lowest percent of expenditure execution in 2017–2018

No.	Program	Executive body[2]	Execution, %	
			2017	2018
1	Implementation of state national policy	Federal agency for national affairs	66.3	75.7
2	Development of pharmaceutical and medical industry for 2013–2020	Ministry for industry and trade	81.6	62.9
3	Space activity of Russia for 2013-2020	Federal space agency	82.8	74.4
4	Reproduction and use of natural resources	Ministry of natural resources and environmental protection	91.2	88.5
5	Development of culture and tourism for 2013–2020	Ministry of culture	91.3	82.8

Sources: Federal Treasury, own calculations.

Deficit and debt at the federal level

At year-end 2018, cash flow from the sources of financing the budget deficit demonstrated the following dynamics (*Table 18*):

- the amount of borrowing on the internal market has contracted to RUB 1,036.6 billion against RUB 1,756.4 billion registered in 2017. However, the volume of repayment decreased from RUB 632.9 billion in 2017 to RUB 529.0 billion;
- volume of receipted obtained from the sale of shares and other forms of equity participation in the state ownership – RUB 12.8 billion (in 2017 – RUB 14.3 billion);
- purchase/sale of precious metals and precious stones register negative balance (receipts in 2018 – RUB 6.2 billion, purchases – RUB 8.5 billion in 2017 – 7.6 and 6.0 billion, respectively);
- receipts from the repayment of the budget loans extended for the partial coverage of the deficit of the RF subjects' budgets constituted RUB 69.9 billion. According to the

[1] According to real-time data. According to final data, cash execution can increase.
[2] Executive performer is indicated in the passport of SP not taking into consideration changes in the structure of the Federal bodies of executive power.

operative records budget loans in the line were not extended (in 2017, there was a negative balance regarding extension/repayment of budget loans amounting to RUB -20.3 billion);

- the amount of placement of state bonds in the external market also decreased from RUB 405.5 billion in 2017 to RUB 120.2 billion 9in 2018 with the repayment volume at RUB 194.6 billion in 2018 against RUB 364.7 billion in 2017.

Table 18

Sources of financing of the federal budget deficit in 2014–2018

	RUB billion					Percent of GDP				
	2014	**2015**	**2016**	**2017**	**2018**	**2014**	**2015**	**2016**	**2017**	**2018**
Sources of financing deficit, total	**334**	**1 961**	**2 956**	**1 331**	**-2 793**	**0.4**	**2.4**	**3.4**	**1.4**	**-2.7**
Financing of deficit from internal sources	***4 076***	***1 242***	***-684***	***2 091***	***1 386***	***5.1***	***1.5***	***-0.8***	***2.3***	***1.3***
State securities	1 025	15	492	1 123	507	1.3	0.0	0.6	1.2	0.5
Other sources	3 051	1 227	-1 176	968	879	3.9	1.5	-1.4	1.1	0.8
Financing of deficit from external sources	***-147***	***-296***	***43***	***-126***	***-161***	***-0.2***	***-0.4***	***0.0***	***-0.1***	***-0.2***
State securities	-47	-183	110	41	-74	-0.1	-0.2	0.1	0.0	-0.1
Credits from foreign countries	-25	-51	-17	-20	-17	0.0	-0.1	0.0	0.0	0.0
Other sources	-74	-63	-50	-147	-70	-0.1	-0.1	-0.1	-0.2	-0.1
Change in remaining balance	***-3 595***	***1 015***	***3 597***	***-634***	***-4 018***	***-4.5***	***1.3***	***4.2***	***-0.8***	***-3.8***

Sources: Federal Treasury, own calculations.

As of December 31, 2018, the state debt amounted to RUB 12,581 billion (12.1 percent of GDP against 12.6 percent in 2017), including internal debt amounting to RUB 9,170 billion (increase by RUB 500 billion), external – USD 49.1 billion (reduction by USD 0.7 billion).

National Wealth Fund (NWF) at the year-end of the reporting period amounted to RUB 4,036.0 billion (up RUB 283.1 billion), or 3.9 percent of GDP. The exchange rate difference obtained from the NWF funds revaluation constituted RUB 489.7 billion. During 2018, the following transactions with the NWF funds took place:

- decrease by RUB 5.1 billion for co-financing of pension savings of insured individuals who paid additional insurance contributions for the savings pension;

- decrease by RUB 1,108.2 billion to secure balancing (deficit payments) the Pension fund budget of the Russian Federation;

- returns of RUB 906.7 billion from additional oil and gas revenues of the federal budget in 2017[1].

Main funds of the NWF in ruble terms amounting to RUB 2,355.5 billion are deposited on the accounts of the Bank of Russia in foreign currency. Total funds of the NWF invested in securities of Russian issuers for the implementation of self-funding infrastructure projects constitute RUB 446.4 billion, and in senior shares of credit organizations – RUB 279.0 billion.

Regarding dynamics of the federal budget deficit, state debt, and sovereign funds (RF and NWF through 2018) in shares of GDP in 2014-2018 (*Fig. 19*) one should note that

[1] In keeping with the order of the Finance Ministry of Russia of June 9, 2018 No. 955 "On the use of additional oil and gas revenues in the federal budget obtained in 2017".

the most difficult situation with the budget sustainability was registered in 2016 when there occurred significant nearly twofold contraction of the sovereign funds and the budget deficit rose to 3.4 percent of GDP. At the same time, the positive balance of the federal budget execution in 2018 did not significantly affect on the state debt and sovereign reserves registered in the NWF, and in shares of GDP. Dynamics of the primary deficit in 2014–2018 correlates with dynamics of the budget deficit, with the maximum negative value -2.7 percent of GDP in 2016 and maximum positive value 3.5 percent of GDP registered in 2018.

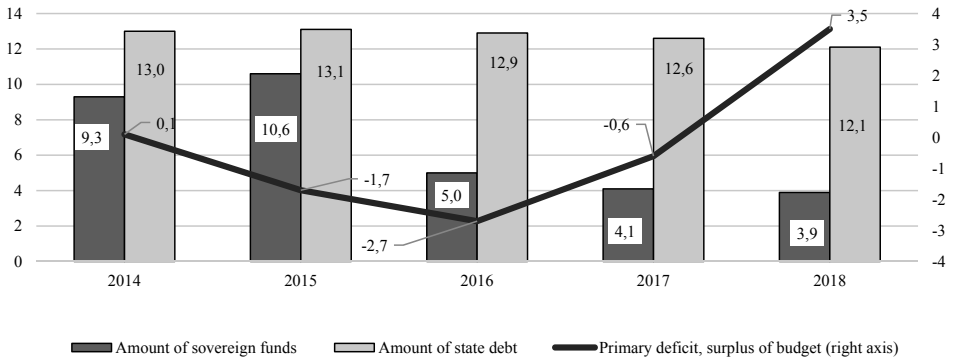


Fig. 19. Dynamics of the federal budget deficit, state debt, and sovereign funds (RF, NWF through 2018) in 2014-2018, percent of GDP

Sources: Federal Treasury, own calculations.

Summarizing dynamics and structure of the main parameters of the federal budget in 2018 both against five-year period and against the previous year one should note the development of a positive trend along fiscal revenues as well as maintaining expenditures, state debt, and amount of the NWF at the acceptable for the ensuring financial sustainability level.

2.2.3. Interbudgetary relations and subnational finances

Analysis of main parameters of the consolidated budgets of the RF subjects

Primary trends in the relations between various levels of power are reflected in the structure of revenues and expenditures of the consolidated budgets of the subjects of the Russian Federation. *Fig. 20* provides data reflecting the share of tax and non-tax revenues and final expenditures of the consolidated budgets of the RF subjects in the overall amount of tax and non-tax revenues and final expenditures of the RF consolidated budget and state extrabudgetary funds.

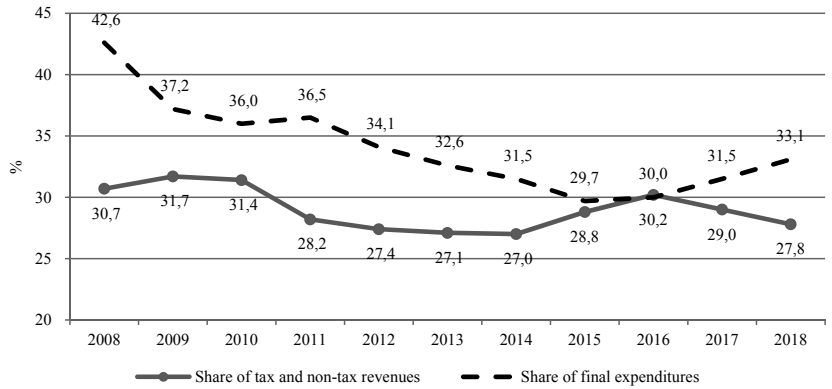


Fig. 20. Share of tax and non-tax revenues and expenditures of budgets of the budgetary system of the Russian Federation in 2008–2018

Sources: Federal Treasury, own calculations.

Fig. 20 demonstrates that in 2014–2016 there was a certain decentralization of tax and non-tax revenues. However, later on trends changed: 2017 saw increased centralization of fiscal revenues at the federal level with simultaneous growth of regional spending obligations. Share of tax and non-tax revenues of the consolidated regional budgets in tax and non-tax revenues decreased from 30 percent in 2016 to 29 percent in 2017, and correspondingly the share of final expenditures in the budgetary system expenses for the same years increased from 30.0 percent to 31.5 percent. In 2018, this trend remained: the share of regional and local budgets in tax and non-tax revenues fell to 27.8 percent, and their share in final expenditure moved up to 33.1 percent. Thus, imbalance between the level of decentralization of revenues and expenditures of the regional budgets in 2018 continued growing.

Let's analyze in more detail the revenues part of subnational budgets. Dynamics of the main components of revenues of the consolidated budgets of The RF subjects is given in *Table 19*. The right side of the table demonstrates revenues in real terms (adjusted for inflation)[1].

As is seen from *Table 19*, the dynamics of the real regional revenues exhibit upward trend since 2016. Revenues of the consolidated budgets of the RF subjects demonstrate growth in 2018 vis-à-vis 2017 by 10.5 percent in real terms. This is the most significant increment of regional revenues for the period since 2014. At the same time, the real tax revenues rose approximately to the same extent as the total amount of fiscal revenues (by 10.2 percent), and the real non-tax revenues contracted somewhat (by 2.5 percent). One should note a significant growth of the real amount of interbudgetary transfers by 17.4 percent, which is the highest increment registered for the period under review. The

[1] According to data released by Rosstat consumer price index in 2018 constituted 4.3 percent.

corporate income tax (increment of returns in real term constituted 17.8 percent) exhibits the best dynamics in the framework of tax revenues. Tax returns into the consolidated budgets of The RF subjects have also risen in real terms across such taxes as PIT (up 7.8 percent), property taxes (up 7.2 percent), taxes of aggregate income (up 11.6 percent). In the meantime, there is a small reduction of proceeds from excises (down 0.8 percent in real terms in comparison with 2017). However, in the wake of a slight share of excises in the structure of consolidated regional budgets this reduction is not reflected in the total income dynamics. To note, in 2017 the real returns from excises were also contracting compared to 2016.

Table 19

Revenues of the consolidated budgets of The RF subjects in 2014–2018

	In nominal terms, RUB billion.					Real increase, %			
	2014	2015	2016	2017	2018	2015/ 2014	2016/ 2015	2017/ 2016	2018/ 2017
Revenues, total	**8 906**	**9 308**	**9 924**	**10 758**	**12 392**	**-7.4**	**1.2**	**5.8**	**10.5**
Tax and non-tax revenues	**7 177**	**7 625**	**8 289**	**8 986**	**10 222**	**-5.9**	**3.2**	**5.8**	**9.1**
Including tax revenues:	*6 493*	*6 925*	*7 574*	*8205*	9 429	*-5.5*	*3.8*	*5.7*	*10.2*
Corporate income tax	1 964	2 108	2 279	2528	3 105	-5.0	2.6	8.2	17.8
PIT	2 693	2 808	3 019	3252	3 654	-7.7	2.0	5.1	7.8
Excises	480	487	662	612	632	-10.2	29.1	-9.8	-0.8
Taxes on aggregate income	315	348	388	447	520	-2.3	6.0	12.2	11.6
Property taxes	957	1 069	1 117	1 250	1 397	-1.2	-0.8	9.2	7.2
Non-tax revenues	*685*	*700*	*715*	*781*	*794*	*-9.4*	*-3.0*	*6.5*	*-2.5*
Transfers from other budgets	**1 671**	**1 617**	**1 578**	**1 703**	**2 085**	**-14.3**	**-7.4**	**5.3**	**17.4**
Other revenues	**58**	**66**	**56**	**69**	**85**	**2.0**	**-19.2**	**18.7**	**18.2**

Sources: Federal Treasury, own calculations.

Let us analyze in more detail the situation with returns of tax and non-tax revenues across regions (*Table 20*).

Table 20

Classification of regions along growth rates of main types of tax and non-tax revenues of the consolidated budgets of the RF subjects in 2017–2018

	Change in main types of tax and non-tax revenues of consolidated budgets of the RF subjects to the previous year											
	Growth by more than 25%		Growth from 10 to 25%		Growth less than 10%		Decrease less than 10%		Decrease from 10 to 25%		Decrease by more than 25%	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
In real terms												
Tax and non-tax revenues, total	5	**4**	16	**46**	48	**33**	13	**2**	3	**0**	0	**0**
Corporate income tax	18	**26**	29	**29**	18	**13**	9	**9**	5	**5**	6	**3**
PIT	1	**3**	9	**50**	69	**31**	5	**0**	1	**0**	0	**0**
In real terms												
Tax and non-tax revenues, total	3	**2**	12	**25**	48	**54**	18	**3**	4	**1**	0	**0**
Corporate income tax	18	**16**	22	**26**	24	**22**	8	**10**	7	**8**	6	**3**
PIT	0	**2**	1	**11**	72	**68**	11	**4**	1	**0**	0	**0**

Sources: Federal Treasury, own calculations.

Comparison of change in the amount of main types of regional and local budgets revenue sources leads to the following conclusion. Since 2016, the revenue vector on average across Russia changed its course from recession to growth. In 2017–2018, dynamics of revenues of the consolidated budgets of the RF subjects continued its upward trend. The number of "fast growing" regions (revenue growth rate in real terms over 25 percent) decreased from 3 to 2. In 2017 the highest tax and non-tax revenues growth rates were demonstrated by Republic of Crimea, Republic of Kalmykia, and Nenets autonomous district. In 2018 the leaders were Khanty-Mansi autonomous district, and Tyumen region.

To note, on the whole growth rates of tax and non-tax revenues of the regional and local budgets in 2018 were above the corresponding rates demonstrated in 2017. In 2017 the number of regions with revenues growth in real terms from 10 to 25 percent came to 12. In 2018, this number increased to 25. The most numerous remains the group of regions with the real revenues growth to 10 percent (48 subjects in 2017, and 54 subjects in 2018).

Compared to 2017, fell the number of regions where the real volume of tax and non-tax revenues of the consolidated budgets was decreasing against to the previous year. In 2017, the number of such regions constituted 16 (reduction of revenues in nominal terms) and 22 (reduction in real terms). In 2018, decrease of nominal revenues is observed in two subjects (Republic of Crimea[1] and Republic of Mariy El), and in real terms in four subjects (in addition to mentioned above Chukotka autonomous district and Ryazan region).

The corporate income tax hit the regional budgets in 2018 ahead of schedule. The number of subjects which registered the increase of returns on this tax in real terms grew over the year by more than 25 percent constituted 16 in 2018 (in 2017 there were 18 such subjects). Front runners regarding revenues growth are Khanty-Mansi autonomous district (158 percent), Republic of Karelia (94 percent), and Republic of Sakha (68 percent). All these three subjects in the previous year faced contraction of the real returns on the corporate income tax (Khanty-Mansi autonomous district – by 33 percent, Republic of Sakha – by 34 percent, and Republic Karelia – by 8 percent), i.e. for them to a considerable extent 2018 growth is an offset one. Following the results of the last two years, persistently high increments of the corporate income tax returns were demonstrated by Vologda region: 32 percent in 2017 and 61 percent in 2018. Among the regions with the highest growth rates on this tax also are Tyumen region (64 percent in real terms), and Republic of Bashkortostan (56 percent in real terms). Decrease of the real returns from the corporate income tax was observed in 21 regions – just as much as in 2017. The situation with the highest decrease of tax returns can be called a "mirror-like" one regarding the situation with the maximum growth of tax returns. Regions that were the front-runners in tax returns growth in 2017 registered the highest tax returns decrease in 2018. For example, the highest decrease of the real tax returns on the corporate income tax in 2018 was observed in Republic of Crimea (67 percent), which

[1] Republic of Crimea in 2017 demonstrated the highest growth rates of proper revenues.

was the front-runner on tax returns growth on this type of tax in 2017 (214 percent). The same situation is observed in Republic Mariy El (in 2018 down 42 percent with growth at 59 percent in 2017), and Republic Tyva (in 2017 up 66.1 percent, and in 2018 down 36 percent). To note that Sakhalin region registered returns on the corporate income tax both in 2017 (43 percent in real terms) and in 2018 (19 percent).

Average growth rates of returns from PIT in 2018 into the consolidated regional budgets outstrip indicators of 2017: when in 2017 solely one region boasted of the growth of returns on this tax by more than 10 percent in real terms (Lipetsk region – 23 percent) then in 2018 there were 14 such regions. Front runners were Republic of Khakassia (73 percent in real terms), Republic of Dagestan (25 percent), and Tyumen region (22 percent). Decrease of proceeds from PIT in real terms in 2018 took place solely in 4 regions (Lipetsk region – contraction by 3 percent< Krasnodar territory – by 2 percent, Republic of Mordovia and Vladimir region – less than 1 percent). In 2017 there 12 such subjects.

Let us analyze changes in the expenditure part of the consolidated budgets of the RF subjects in 2018 (*Table 21*).

Table 21

Expenditures of the consolidated budgets of the RF subjects

	% to total		% of GDP		Change	
					In nominal terms, %	p.p. of GDP
	2017	2018	2017	2018		
General state issues	6.1	6.3	0.71	0.72	14.05	0.01
National security and law enforcement	1.1	1.2	0.13	0.13	19.14	0.01
National economy, including:	21.2	20.8	2.48	2.38	7.87	-0.10
Agriculture and fisheries	2.5	2.3	0.29	0.26	1.01	-0.03
Transport	5.2	4.7	0.61	0.54	-0.07	-0.07
Public road system (road funds)	8.8	8.9	1.03	1.02	11.12	-0.01
Other issues in the sphere of national economy	4.7	4.9	0.55	0.56	14.19	0.01
Housing and utility sector	10.4	10.2	1.22	1.17	7.60	-0.05
Environmental conservation	0.3	0.3	0.03	0.04	48.65	0.01
Education, including:	24.9	25.4	2.92	2.91	12.10	-0.01
Housing and utility sector	6.7	7.1	0.78	0.81	16.53	0.03
Environmental conservation	12.2	12.2	1.43	1.40	10.34	-0.03
Education, including:	1.9	1.9	0.22	0.21	9.35	-0.01
Housing and utility sector	4.2	4.2	0.49	0.49	11.41	0.00
Culture, cinematography	3.8	3.7	0.45	0.43	7.56	-0.02
Healthcare	7.8	8.0	0.92	0.92	12.22	0.00
Social policy	20.4	20.3	2.40	2.33	9.40	-0.07
Physical fitness and sports	2.3	2.4	0.28	0.27	11.47	0.00
Mass media	0.4	0.4	0.05	0.05	9.12	0.00
Servicing state and municipal debt	1.2	0.9	0.15	0.11	-16.83	-0.04
Expenditure, total	**100.0**	**100.0**	**11.74**	**11.47**	**9.92**	**-0.27**

Sources: Federal Treasury, own calculations.

From *Table 21* it follows that the functional structure of the regional expenditure in 2018 changed slightly compared to the previous year. All structural changes were in the range of 1 percentage point. Among major structural changes, one should note decrease of spending on national economy by 0.4 percentage points (mainly due to transportation), reduction of spending on servicing state and municipal debt by

0.3 percentage points, as well as growth of expenses on education by 0.5 percentage points. Major contribution in the increment of educational expenses was due to preschool education.

Virtually all functional components of the regional expenses moved up in nominal terms in 2018 except spending on servicing state and municipal debt (contraction by 16.8 percent) and transportation (reduction by 0.1 percent). In real terms, expenses also fell on agriculture, housing and utility sector, culture and social policy. To note, spending on agriculture was falling relative to the previous year also in 2017 both in nominal and real terms.

One should note significant growth of certain types of expenditure in social sphere: education (first of all preschool) and healthcare. Expenses on environmental conservation increased two-fold, however the share of this type of spending remains insignificant (0.3 percent in the overall volume of expenditure and 0.04 percentage points of GDP). The overall share of expenditure of the consolidated budgets of the RF subjects in GDP in 2018 decreased by 0.27 percentage points in comparison with 2017.

Let us analyze dynamics of the main parameters of the consolidated budgets of the RF subjects in shares of GDP (*Table 22*).

Table 22

Dynamics of revenues and expenditures of the consolidated budget of the RF subjects, percent of GDP

	2014	2015	2016	2017	2018
Revenues	**11.24**	**11.16**	**11.54**	**11.68**	**11.96**
including:					
Corporate income tax	2.48	2.53	2.65	2.74	3.00
PIT	3.40	3.37	3.51	3.53	3.53
Transfers from Federal budget	2.11	1.94	1.83	1.85	2.01
Expenditures	**11.81**	**11.37**	**11.55**	**11.74**	**11.47**
Deficit (-) / Surplus (+)	**-0.57**	**-0.21**	**-0.01**	**-0.06**	**0.49**

Sources: Federal Treasury, own calculations.

Table 22 demonstrates that in the course of three years both revenues of the subnational budgets as a whole and proceeds from PIT and the corporate income tax were growing in shares of GDP. During 2014-2016, transfers from the federal budget were contracting. In 2017 they somewhat increased and in 2018 continued growing. Expenditures of the subnational budgets increased in 2016–2017, but somewhat decreased in 2018.

Financial assistance from the federal budget

Total volume of interbudgetary transfers from the federal budget distributed between regions significantly increased in 2018[1] compared to 2017 both in nominal terms (+21.0 percent) and in shares of GDP (+1.4 percentage points of GDP (*Table 23*). The increment was, first of all, due to growing subsidies on securing balancing (+2.2 percentage points of GDP) offsetting partial reduction of subsidies for the fiscal

[1] Data for 2018 is preliminary because it is put together on the basis of monthly reports of budget execution as of January 1, 2019, and not on the annual reports.

equalization (-0.5 percentage points of GDP). The volume of other interbudgetary transfers has grown notably (+0.8 percentage points of GDP). Within other types of transfers subsidies have undergone the highest reduction (-0.9 percentage points of GDP), where subsidies on the development of national economy contracted by more than 21 percent in comparison with 2017. For instance, in 2018 the share of subsidies (undesignated financial assistance) moved up by 5.7 percentage points in comparison with 2017 and exceeded 50 percent.

Table 23

Transfers to the budgets of the subjects of the Russian Federation from the federal budget

	2016		2017		2018		Increment in 2018 to 2017	
	RUB bn	% to total	RUB bn	% to total	RUB bn	% to total	nominal, %	p.p. of GDP
Transfers to regions, total	**1 567.8**	**100.0**	**1 690.1**	**100.0**	**2 044.8**	**100.0**	**21.0**	**1.4**
Subsidies	**656.2**	**41.9**	**759.0**	**44.9**	**1 035.5**	**50.6**	**36.4**	**1.8**
Including:								
Grants for budget equalization	513.7	32.8	614.5	36.4	644.5	31.5	4.9	-0.5
Grants for ensuring budgets' balance	131.7	8.4	133.8	7.9	380.4	18.6	184.2	2.2
Subsidies	**356.5**	**22.7**	**419.8**	**24.8**	**381.8**	**18.7**	**-9.0**	**-0.9**
Including:								
Subsidies for development of national economy	231.9	14.8	242.4	14.3	190.0	9.3	-21.6	-0.8
Subventions	**334.3**	**21.3**	**326.1**	**19.3**	**331.7**	**16.2**	**1.7**	**-0.3**
Other interbudgetary transfers	**220.8**	**14.1**	**185.1**	**11.0**	**295.8**	**14.5**	**59.8**	**0.8**

Sources: Federal Treasury, Rosstat, own calculations.

The volume of subventions contracted (0.3 percentage points of GDP), which demonstrated a small decrease of dependence of the subnational budgets regarding execution of delegated powers. This trend is characteristic of several recent years. At the same time, the number of subventions[1] compared to 2017 increased by two and constitutes 32. Nine subventions are for Republic of Crimea and the city of Sebastopol, besides two of them duplicate those which are given to other subjects of the Russian Federation.

The amount of subsidies granted in 2018 constituted 74. The same amount of subsidies were granted in 2017. The state program "Development of the Federative Relations and Creation of Conditions for Effective and Responsible Management of Regional and Municipal Finances" (hereinafter – SP "Development of the Federative Relations…") envisages a reduction of the number of subsidies in 2018 down to 57. Thus, the process of consolidation and optimization of the number of subsidies was halted.

[1] The number of transfers is determined by the number of unique items of expenditure (13-16 code positions in the classification of budget expenditure), envisaged in the report on the federal budget execution.

The volume of other interbudgetary transfers has significantly increased both in nominal terms (+59.8 percent) and in shares of GDP (+0.8 percentage points of GDP). Their number moved up: when in 2017 the federal budget granted regions 77 other types of interbudgetary transfers then in 2018 – already 93. Because other interbudgetary transfers are distributed on a less transparent and formalized basis than the subsidies (which volume has decreased), one should consider that the structure of provision of targeted financial assistance to the regions has deteriorated.

In the meantime, the share of non-targeted assistance has increased, which allowed to over fulfill the targeted value of the corresponding indicator of SP "Development of Federative Relations…": the share of subsidies in the interbudgetary transfers granted to regions constituted 50.6 percent under the planned one of 48 percent. However, if we consider that grants provided for partial compensation of additional expenses for raising wages of the budget sphere employees in essence are rather subsidies than grants, then the share of grants (less indicated ones) will constitute solely 45.7 percent.

It should be noted that the growth of the share of grants in mainly ensured by the growth of grants on support of measures for budget balancing, which contrary to equalization transfers are distributed on a less transparent and formalized basis.

When analyzing granting by the federal canter of transfers to the regions it is important to analyze the effect of the federal assistance on the income differences of the subjects of the Russian Federation, assessing the leveling features of the financial assistance from the federal budget (*Table 24*).

Table 24

Coefficient of variation of income of the consolidated regional budgets (per capita inclusive of index of budget expenditure)

Year	Tax revenues	Tax revenues and equalization transfers	Tax revenues, subsidies, subsidies
2014	0.590	0.512	0.499
2015	0.661	0.603	0.560
2016	0.556	0.421	0.373
2017	0.558	0.413	0.377
2018	0.593	0.433	0.381

Sources: Federal Treasury, Finance Ministry of Russia, own calculations.

As seen from *Table 24*, in 2018 compared to the previous year the differentiation of tax revenues of the subnational budgets increased quite a bit. Consequently, differentiation of the subnational budgets increased following the equalization and after provision of grants and subsidies, however equalization effect from provision of these types of transfers has remained. For instance, after the equalization the differentiation decreased by 27 percent (in 2017 – by 26 percent), and after the provision of grants and subsidies – by 36 percent (in 2017 – by 32 percent).

Regional deficit and debt

Income growth and curbing of spending growth of the regional consolidated budgets in 2018 positively affected their balancing: for the first time over last eleven years surplus of the consolidated budgets of the RF subjects was registered, the amount of which hit all-time maximum – RUB 0.5 trillion.

Regional data reveals increased balancing of the consolidated budgets of the majority of the RF subjects. The number of subjects with the budget deficit in 2018 decreased by more than 3-fold compared to 2017 and came to 15 (*Table 25*).

Table 25

Execution (deficit/surplus) of the consolidated budgets of the RF subjects in 2014–2018

Year	Number of RF subjects which executed budget with	
	deficit	surplus
2014	74	11
2015	76	9
2016	56	29
2017	47	38
2018	15	70

Sources: Federal Treasury, own calculations.

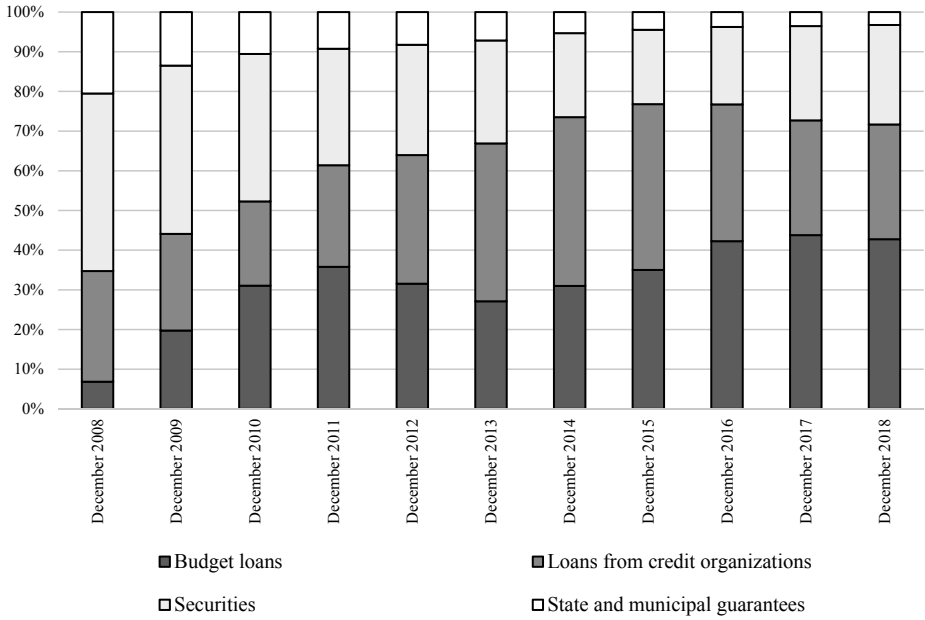
Improved parameters of fiscal balance of the majority of the regions positively affected the dynamic of their state debt, which at year-end 2018 decreased from RUB 2.32 to 2.21 trillion.

As against the volume of tax and non-tax revenues of the budgets of the RF subjects for 2018 it contracted over the year from 30.5 to 25.3 percent, going back to the level of late 2011.

As of January 1, 2018 there were solely two RF subjects with the correlation of state debt to tax and non-tax revenues exceeds 100 percent – Kostroma region (115.2 percent), and Republic of Mordovia (236.9 percent). Meanwhile a year earlier there were seven such regions.

Despite a general positive dynamics of the regional state debt the picture across the federal districts differs significantly. If in North-Western and North-Caucasus federal districts the reduction of nominal volume of the state debt in 2018 were demonstrated by all regions, then in the Far-Eastern federal district there were only 50 percent of such regions.

The structure of state regional debt over the year stayed practically unchanged: budget loans still prevail, which share constituted by the year-end 42.6 percent falling relative to late 2017 by 1 percent (*Fig. 21*). The share of loans issued by the credit organizations remained at 28.8 percent, halting decline which procrastinated from late 2013, and the share of the state securities over the year moved up by 1.3 percent hitting 25.0 percent. Securities were the sole debt regional instrument which volume over the year increased in nominal terms.



Sources: Finance Ministry of Russia, own calculations.

Fig. 21. Structure of state debt of the RF subjects in 2008–2018

Section 3. Financial markets and financial institutions

3.1. Fundamental characteristics of Russia's equity market[1]

In 2018, the Russian stock market held up its reputation as one of the most volatile markets in the world. In 2018, Russian companies' stocks turned out to be instruments with highest returns, outperforming 36 world's largest stock exchange markets, in contrast to 2017, when Russian stocks were at the bottom of the list of stocks with lowest returns. In 2018, the MOEX Russia Index (formerly the MICEX Index) picked up 12.3 percent, whereas the RTS Index lost 7.4 percent. In 2018, the MOEX Russia Index found itself in a small group of stock indices of Brazil, India and Argentina that managed to stay within a range of positive returns (see *Fig. 1*). While being composed of the same companies, the two of Russia's indices differ in that the dollar-denominated RTS Index offers bigger returns than the ruble-denominated MOEX Russia Index. Therefore, when the Russian ruble depreciates the ruble-denominated returns on investment in the stocks composing the MOEX Russia Index are higher than the dollar-denominated returns on the RTS Index portfolio.

In other words, higher returns on the MOEX Russia Index in 2018 were in large part driven by a 17.1 percent ruble depreciation during the year (see *Fig. 2*). It is no accident that in 2018 other emerging market economies – Brazil, India and Argentina – with positive returns on index portfolios were also at the top of the list of countries faced with devaluation of the national currency. The national currency depreciation in 2018 at the majority of emerging market economies was led by unfavorable trends in global trade and capital drain from this the global market segment driven by a U.S. Fed's key rate hike and gradual taper of quantitative easing in the United State and in Europe. The depreciation of the Russian ruble continued because of uncertainties about anti-Russia sanctions.

[1] Sections 3.1–3.6 are written by A. Abramov, RANEPA; M. Chernova, RANEPA.

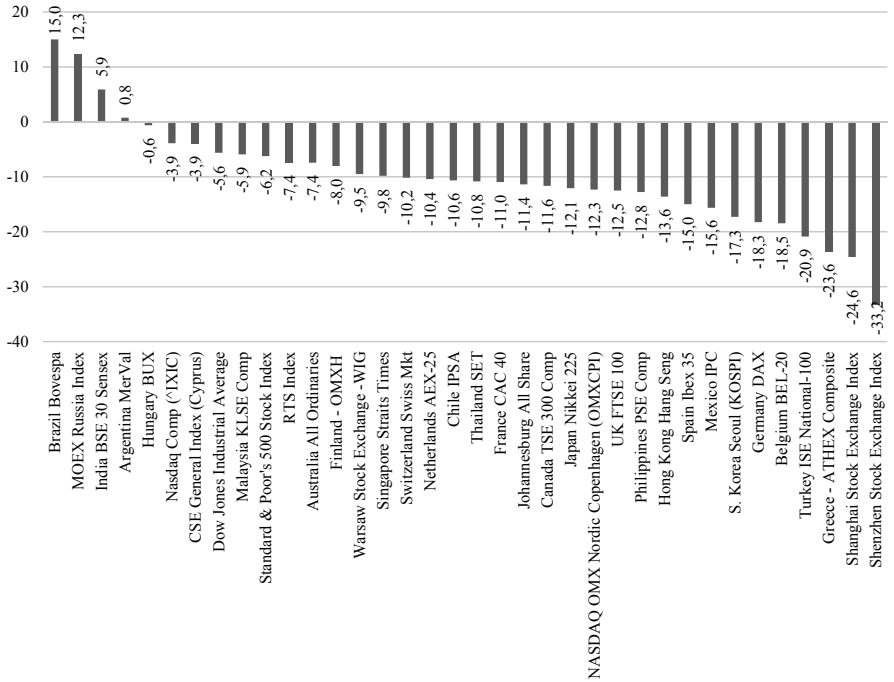


Fig. 1. Investment returns on 36 world's stock indices on largest stock exchanges in 2018, percent per annum

Source: own calculations using data from The Wall Street Journal.

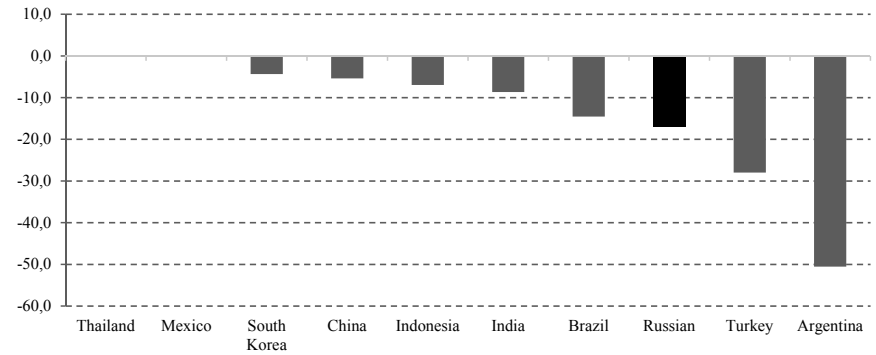


Fig. 2. Changes in value of national currency against U.S. dollar in 10 countries, 2018, percent

Source: own calculations using data from Bloomberg.

In the 2008–2018 period – 11 years from the 2008 global crisis – the MOEX Russia Index, with returns of 14.4 percent per annum, had come to rank 4th out of 36 global stock indices in terms of the geometric average (effective) annual return, whereas the RTS Index was only 25th with returns of 5.4 percent (see *Fig. 3*). Here too a relatively high level of the ruble-denominated returns on the MOEX Russia Index was in large part due to considerable depreciation of the Russian ruble within the time horizon under review.

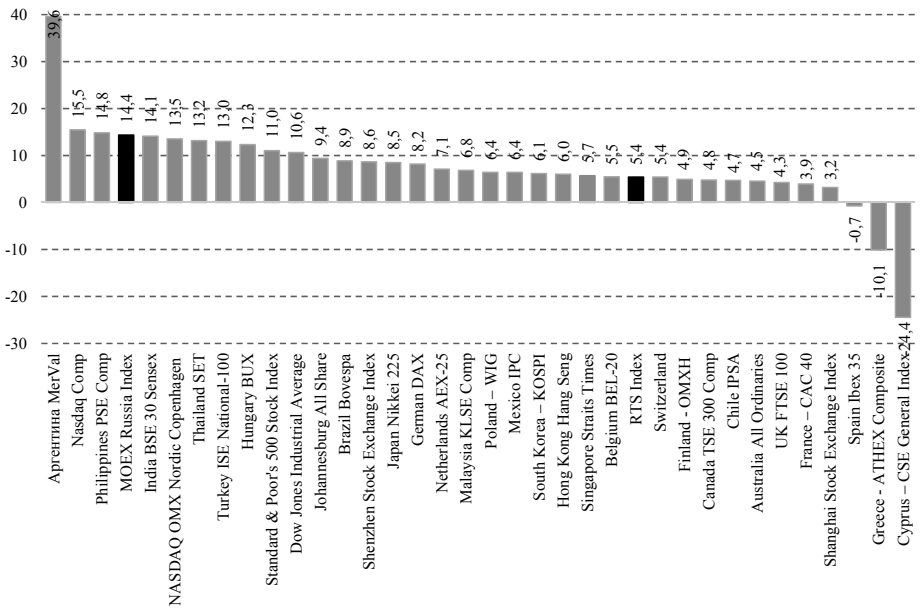


Fig. 3. Geometric average (effective) returns on 36 world's stock indices of largest stock exchanges, 2008–2018, percent per annum

Source: own calculations using data from The Wall Street Journal.

The stocks of the majority of Russian companies did not recover within 11 years from the 2008 crisis to their pre-crisis levels in dollar terms. The pace of recovery was slow due to structural problems facing the Russian economy, including its reliance on external prices of primary commodities. This can be easily witnessed when comparing the recovery of Russia's equity market from the 1997–98 cyclic crisis and from the 2008 structural crisis. Formally, both crises followed a similar scenario: stock indices collapsed amid falling crude prices, the Russian ruble tumbled and there was speculative capital drain, and then stock indices started recovering amid rising crude prices, the ruble exchange rate stabilized at a new level, and foreign portfolio investment recovered. While stock indices recovered at a relatively rapid pace from the crisis late in the 1990s,

the RTS Index has not yet recovered since 2008. The problem lies in that crude prices have not yet recovered to pre-crisis levels for objective reasons that are evident today, and by one count they are not expected to recover in the offing[1]. A stable growth in the domestic equity market is conditioned by a successful structural economic reform and major improvements in the investment climate, which is not happening yet.

It took the ruble-denominated MICEX Index just eight months to recover from the 1998 collapse, which was largely due to a 5-fold devaluation of the Russian ruble (see *Fig. 4*). The RTS Index recovered within nearly five years, or 58 months, as crude prices bounced back. It was not until H2 2003 that the Russian equity market saw full recovery coincidently with the upgrading of Russia's sovereign ratings by Moody's on October 8, 2003, later confirmed by similar upgrading by Fitch on November 17, 2004 and by S&P on January 31, 2005. The upgrading of Russia's investment ratings encouraged further foreign portfolio investment and fundraising.

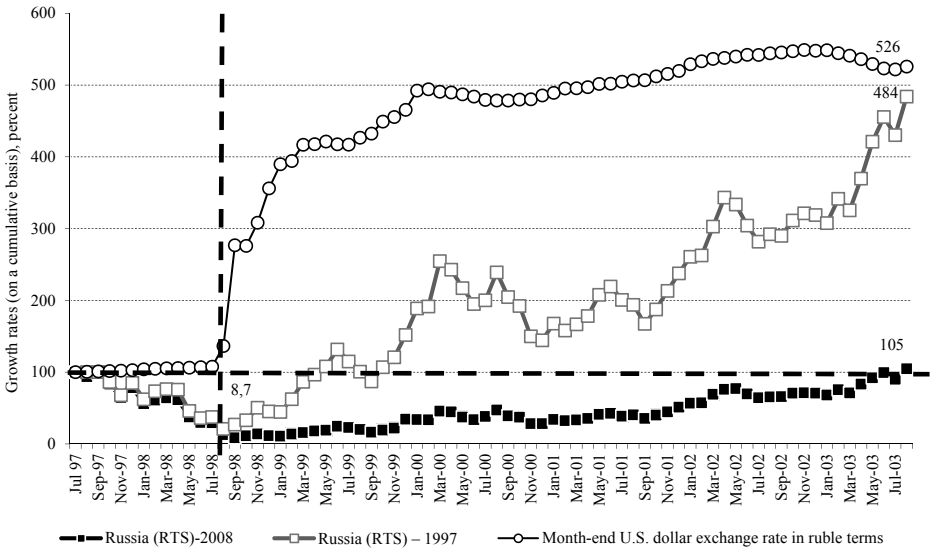


Fig. 4. Growth rates of U.S. dollar exchange rate, RTS Index and MICEX Index, 1997–2003 (July 1997 = 100 percent)

Source: own calculations using data from the Moscow Exchange and Bank of Russia.

[1] Crude prices will stay at a moderate price level for a long period of time, exhibiting "a new crude reality", said RANEPA Rector Vladimir Mau, (Mau V. Recall the 1980s. Vedomosti, February 16, 2016). The International Energy Agency (IEA) assumes that crude oil may be traded at USD 50–70 a barrel until 2040 given the growth factor of shale crude production and the upturn in the electric vehicle industry. (IEA. World Energy Outlook 2017, synopsis, Russian version, p. 9).

As of January 2019, it took the MOEX Russia Index 7.5 years, or 92 months, to recover after May 2008; within almost 11 years, or 128 months, the RTS Index reached merely 49.5 percent of its pre-crisis peak level (see *Fig. 5*). The slow climb in both indices was driven by slow recovery of crude prices, including no visible progress in undertaking a structural reform. Furthermore, unlike in the 1997–1998 crisis scenario, slow recovery since 2008 of the ruble-denominated MOEX Russia Index was due to a more moderate depreciation of the Russian ruble in recent decade, in contrast to the shock devaluation late in the 1990s. The ruble exchange rate weakened by 2.7 times in the period between May 2008 and January 2019, compared to the 5-fold devaluation late in the 1990s.

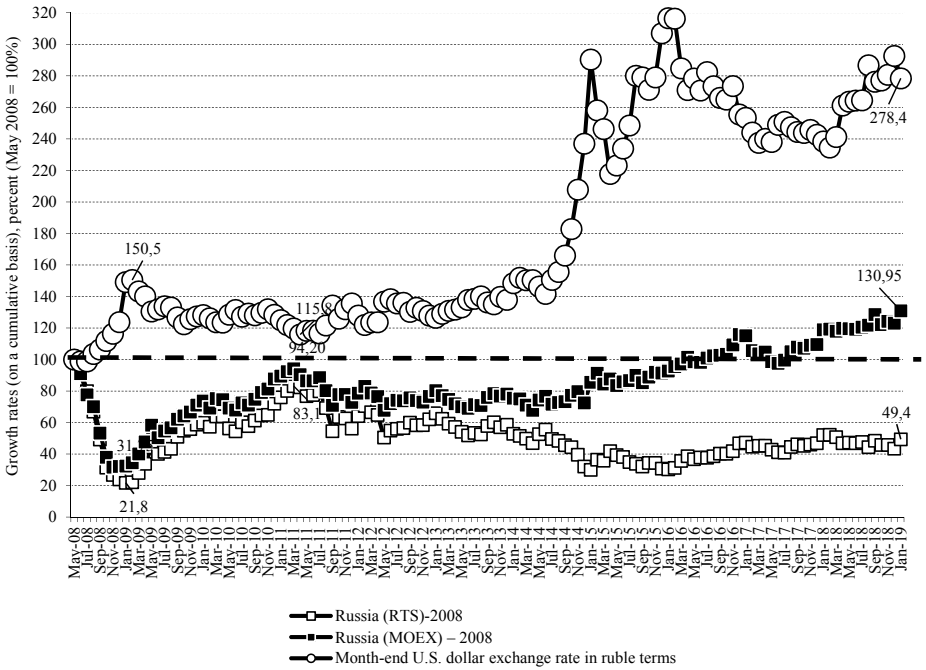


Fig. 5. Growth rates of U.S. dollar exchange rate, RTS Index and MICEX Index from May 2008 to January 2019 (May 2008 = 100 percent)

Source: own calculations using data from the Bank of Russia and Moscow Exchange.

As shown in *Fig. 6,* it took crude prices three years, or 36 months, to recover completely from the 1997–1998 crisis, given the price fall to 31.1 percent of the pre-crisis peak level seen in December 1996. As of January 2019, the Brent crude price remained at merely 44.4 percent of its highest level, USD 133.90 per barrel, that was recorded, in July 2008, or 126 months ago.

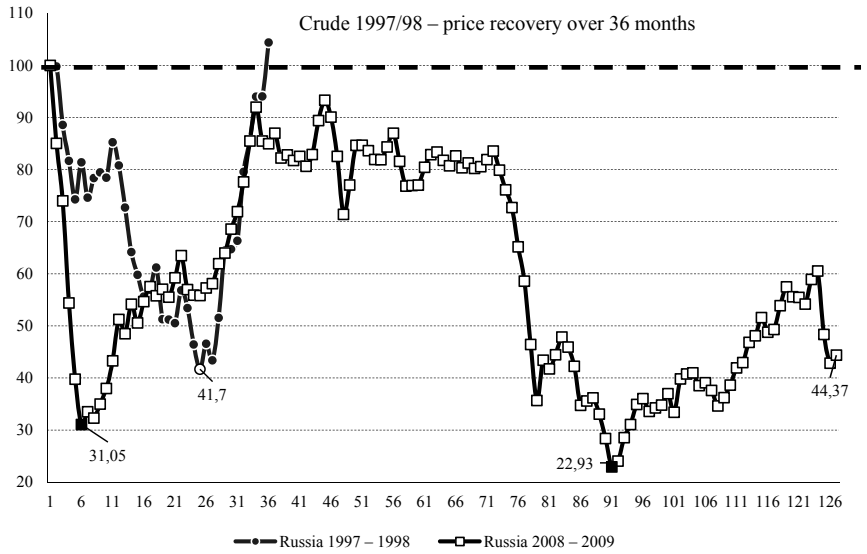


Fig. 6. Growth rates of Brent crude price after financial crises in Russia (price peak =100 percent) as of January 2019

Source: own calculations using data from IFS, IMF and International Energy Agency (IEA).

The recovery of BRICS countries' stock indices is shown in *Fig. 7* and in *Table 1*. BRICS countries MSCI indices denominated in U.S. dollars have been used as indicators for comparing results for various countries. Changes in the Russian stock market have been assessed using the dollar-denominated RTS Index, including a similar index that includes the dividend yield on the Russian stocks composing the index.

As of January 2019, there were two BRICS countries – Russia and Brazil – where dollar-denominated stock indices had not recovered from the 2008 crisis. Three BRICS nations saw their indices hit pre-crisis highs within 128 days since May 2008, but the RTS Index and the MSCI Brazil Index recovered to as low as 49.4% and 47.0%, respectively, with the former having faster recovery pace than the latter, reaching (in January 2019) a total return, including the dividend yield on stocks, that accounted for 74.8 percent of the value seen in May 2008. This is an indirect evidence that Russia and Brazil, both being reliant on fuel and energy export prices, are faced with structural issues to a much greater extent than the other BRICS nations.

It took the dollar-denominated MSCI India, South Africa and China indices 22, 28 and 82 months, respectively, to recover to their pre-crisis level since May 2008. These markets, however, did not exhibit stable growth after the recovery: in January 2019, the MSCI India, China and South Africa indices stood at merely 109.7, 107.8 and 98.6 percent, respectively, of what they were in May 2008.

Table 1

BRICS stock indices recovery after 2008 crisis, as of January 2019

Indices	Index recovery period since May 2008, months	Recovered	Index current value, % (May 2008 = 100%)
RTS	128	No	49.4
RTS – total returns	128	No	74.8
MSCI Brazil	128	No	47.0
MSCI South Africa	28	Yes	98.6
MSCI India	22	Yes	109.7
MSCI China	82	Yes	107.8

Source: own calculations using data from the Moscow Exchange and Bloomberg.

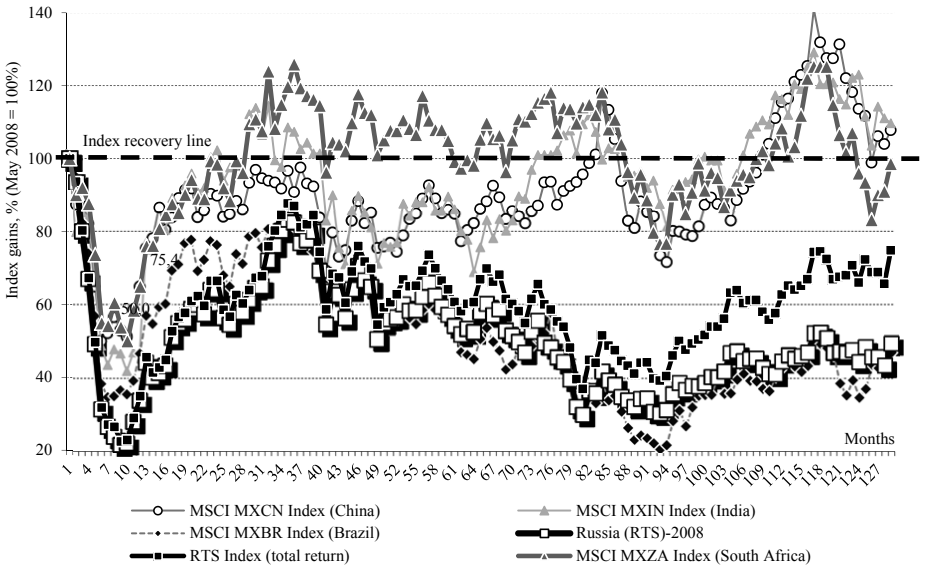


Fig. 7. Depth and duration of 2008 financial crisis effect on stock indices of BRICS countries, in U.S. dollars, as of January 2019 (peak in May 2008 = 100 percent)

Source: own calculations using data from the Moscow Exchange and Bloomberg.

The recovery of BRICS stock markets in the 2010s differs notably from the recovery from the 1997–1998 crisis (see *Fig. 8* and *Table 2*), when it took the RTS Index just 73 months to recover, outpacing the recovery of the MSCI South Africa, Brazil and China indices. For Russia, the 1998 crisis was a cyclic crisis, while the 2008 crisis was a structural crisis. Devaluation of the Russian ruble and the subsequent relatively swift recovery of crude prices had triggered a long-term rise in stock prices in dollar terms. For China, in contrast, the 1997 stock crisis reflected in many ways structural problems piled up in China's equity market. That is why it took the MSCI China index a longer

time to recover amid major reforms in China's financial sector, including opening up mainland China for foreign portfolio investors and enhancing the effectiveness of domestic financial intermediaries.

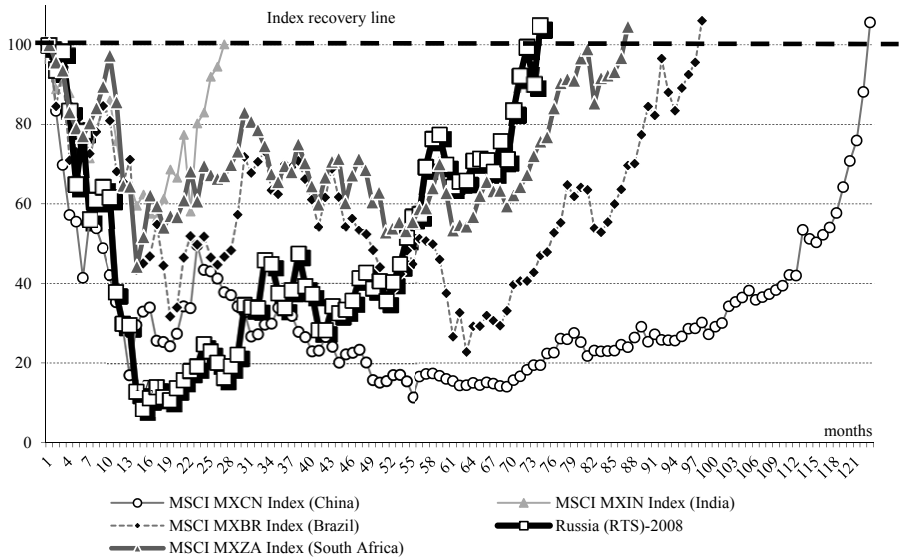


Fig. 8. Depth and duration of BRICS stock indices recovery, in U.S. dollars, after 1997–1998 crisis (pre-crisis peak level = 100 percent)

Source: own calculations using data from the Moscow Exchange and Bloomberg.

Table 2

BRICS stock indices recovery, in U.S. dollars, after 1997–1998 crisis

	RTS	MSCI Brazil	MSCI South Africa	MSCI India	MSCI China
Index recovery duration since 1997 pre-crisis peak level, months	73	97	86	26	122

Source: own calculations using data from the Moscow Exchange and Bloomberg.

The downturn in the U.S. equity market spurred by the Great Depression (1929–1933), as well as the collapse of Japan's stocks after 1989 are the longest living crises in the history of equity markets. It took the Dow Jones Industrial Average (DJIA) 303 months, or 25.3 years, to recover from the Great Depression (see *Fig. 9* and *Table 3*). Japan's NIKKEI-225 index topped in 2015 the DJIA's abysmal record. NIKKEI-225 stood unrecovered as of January 2019, for more than 29 years, or 349 months, which is now at merely 53.4 percent of its 1989 monthly peak. Crises that are followed by long periods of stock price recovery are unique and generally spurred by not only deep

structural economic problems but also problems coupled with blunders in economic and monetary policies.

Markets that were hit by mid-term financial crises triggered by structural economic disproportions, such as the 1989 downturn in South Korea and the 2000 downturn in the U.S. stock market of innovative companies, used to see their index recovery being guided by a W-shaped trajectory (see *Fig. 9*). The above crises lasted for 183 and 177 months, respectively. Both of the above stock indices are now higher than their highest pre-crisis levels.

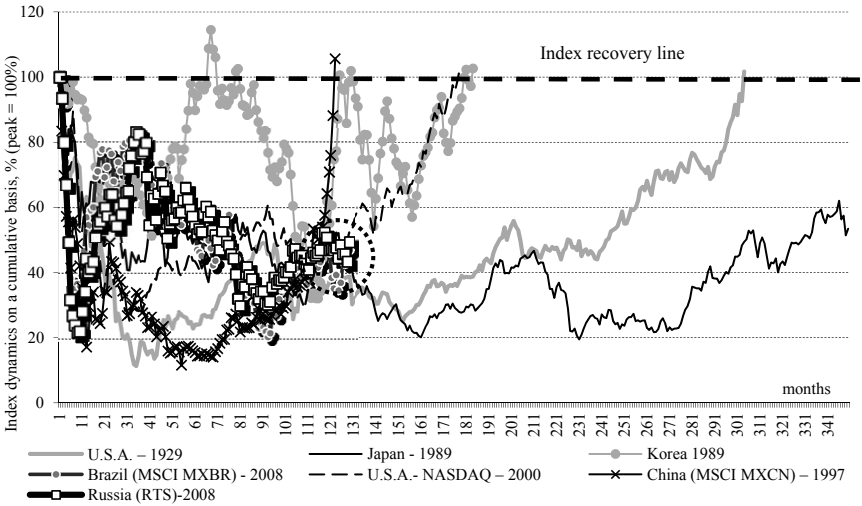


Fig. 9. Depth and duration of stock indices recovery during longest-lasting crises in 20th and 21st centuries, as of January 2019 (pre-crisis peak level = 100 percent)

Source: own calculations using data from the Moscow Exchange and Bloomberg.

Table 3

Longest lasting periods of stock indices recovery from crises in 20th and 21st centuries

Country (index – year of crisis onset)	Index recovery period since peak, months	Recovered	Unrecovered index current value, percent (peak = 100 percent)
Japan (Nikkei – 1989)	349	No	53.4
U.S.A. (DJIA – 1929)	303	Yes	
South Korea (KOSPI – 1989)	183	Yes	
U.S.A. (NASDAQ – 2000)	177	Yes	
Russia (RTS USD – 2008)	128	No	49.4
Brazil (MSCI USD – 2008)	128	No	47.0
China (MSCI-Shanghai (USD) – 1997)	122	Yes	
China (MSCI-Shanghai (USD) – 2008)	82	Yes	
U.S.A. (DJIA – 1907)	64	Yes	

Source: own calculations using data from the Moscow Exchange and Bloomberg.

Against a backdrop of the above crises, the still ongoing (128 months) recovery of Russia's RTS Index and Brazil's MSCI index to 49.4 and 47.0 percent, respectively, has not yet reached beyond time horizons that are typical of mid-term crises. As shown in *Fig. 8*, the ongoing recovery of the RTS and MSCI indices is guided by the trajectory of long-term rather than mid-term crisis, that is what's normally typical of equity markets in countries facing structural problems coupled with unaddressed challenges in economic and monetary policies.

The Russian stock market remains one of the most volatile markets in the word. As shown in *Fig. 10,*[1] Russia's RTS Index (35.4 percent) lagged only behind the indices of Argentina, Brazil, Turkey and Greece in terms of investment risk (as measured as the average standard deviation), out of 30 world's largest stock indices within 11 years from January 2008 to December 2018. The RTS Index, with -7.0 percent per annum of geometric average (effective) return on investment, outperformed only five countries over the same period, namely Greece, Spain, Italy, Turkey and Vietnam. Thus, the RTS Index exhibited the highest investment risk and lowest returns in the world, deteriorating substantially its investment appeal.

The Russian stock market's high volatility and low returns in 2008–2018 were due to not only the volatile ruble exchange rate, adverse external economic and geopolitical factors, but also poor key performance figures of largest publicly traded companies. In particular, this was reflected in the fact that securities issuers, financial intermediaries and investors in the domestic market paid not enough attention to companies' key performance indicators, focusing more on exogenous factors (the U.S. monetary policy salient features, energy and commodity prices, foreign investors' optimism, value of financial resources in the global market, etc.) to make investment decisions[2]. As of December 31, 2018, the ratio of price to net earnings per share (P/E ratio)[3] for the companies composing the RTS Index turned out to be the lowest (4.8) out of 29 stock indices of selected countries, as shown in *Fig. 11*. The P/E ratio in other major emerging market economies was 22.7 for India's Nifty 50 index; 20.4 for China's Shenzhen Stock Exchange Index; 19.5 for Brazil's IBOVESPA index and 14.8 for the Johannesburg Stock Exchange index in South Africa.

[1] Quantitative parameters of the indices are presented in *Tables 4* and *5*.

[2] For more details on the effect of exogenous factors on investment cash flows in emerging capital markets see, for example, Koepke, Robin. 2014. Fed Policy Expectations and Portfolio Flows to Emerging Markets. Working Paper, Institute of International Finance, Washington, DC; International Monetary Fund. 2017. Global Financial Stability Report: Is Growth at Risk? Washington, DC, October, pp.19–21.

[3] This financial ratio describes a relative size of companies' capitalization, that is, the period of years within which the size of net earnings per share offsets the market value of the share.

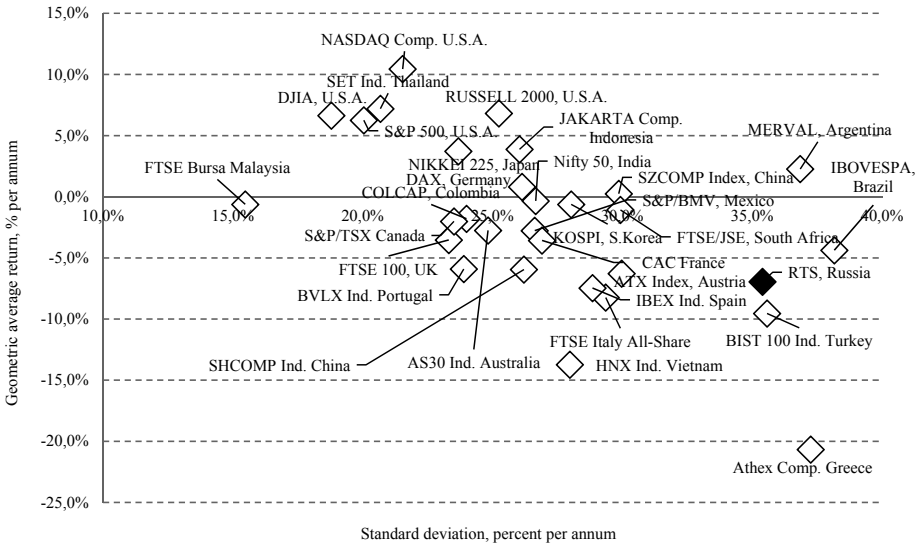


Fig. 10. Parameters for average annual returns and risk on 30 stock indices of selected countries, from January 2008 to December 2018, in U.S. dollars, percent per annum

Source: own calculations using data from the Moscow Exchange and Bloomberg.

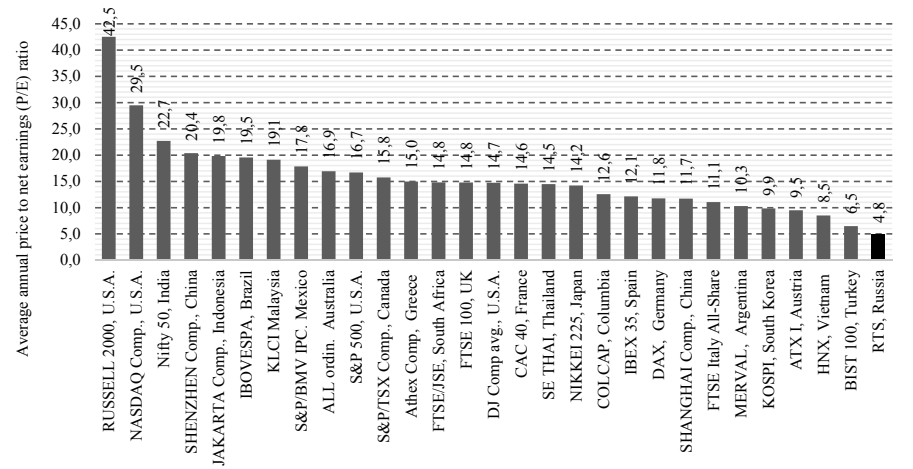


Fig. 11. Ratio of price to net earnings per share (P/E ratio) as of December 31, 2018 for 29 stock indices of selected countries, in U.S. dollars

Source: own calculations using data from the Moscow Exchange and Bloomberg.

Fig. 12 shows the P/E ratio for the RTS Index in 2008–2018 versus other largest emerging market economies. During the pre-crisis period the P/E ratio for the RTS Index posted consistently low values, suggesting that there is a pervasive problem of undervalued stocks of Russian companies regardless of whatever favorable external factors and geopolitical risks were seen in 2014–2018. The figure shows that the P/E ratio's linear trend line for the RTS Index is parallel to X axis, suggesting that the trend for the P/E ratio is constant.

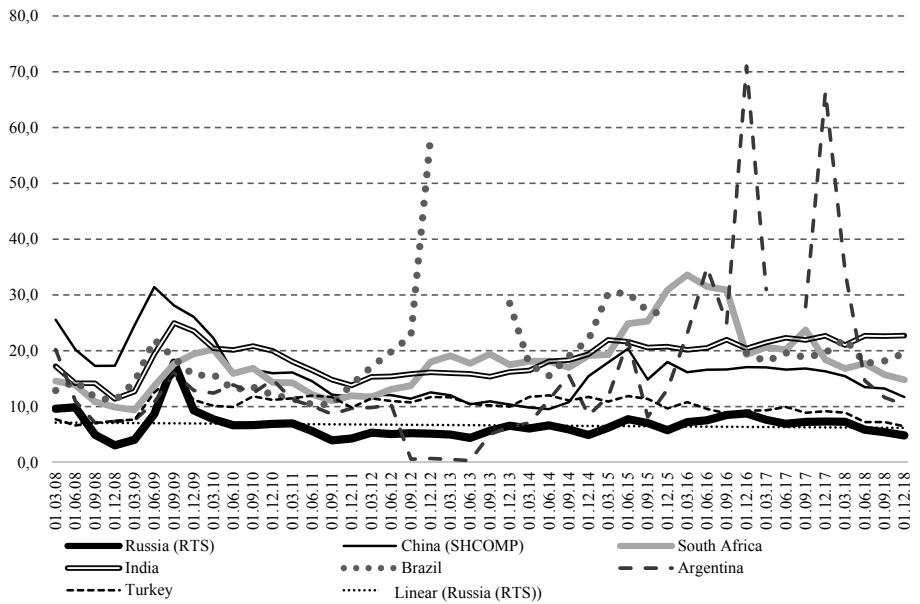


Fig. 12. Ratio of price to net earnings per share (P/E ratio) for stock indices of 7 largest emerging market economies, from March 1, 2008 to December 31, 2018, in U.S. dollars

Source: own calculations using data from the Moscow Exchange and Bloomberg.

As shown in *Fig. 13*, the ratio of price to book value per share (P/BV ratio)[1] of the companies composing the RTS Index turned out to be one of the lowest (0.8), surpassing only that of Greece's equity market, out of 29 stock indices of selected countries. The P/E ratio for other major emerging market economies was as follows: 2.9 for India's Nifty 50 index; 1.9 for China's Shenzhen Stock Exchange Index and Brazil's

[1] The P/BV ratio also represents a relative capitalization of companies. Expressed *as per share value*, it shows the ratio of company's market capitalization to the book value of its stockholders' equity, including the charter capital, reserves and retained earnings.

IBOVESPA index; 1.7 for the Johannesburg Stock Exchange index in South Africa. The low P/E ratio for the RTS Index reflects somehow sector-specific features of the companies composing the index, that is, the index is composed mostly of stocks of industries with high capital/labor ratio and, accordingly, low P/BV ratio.

Fig. 14 shows the P/BV ratio for the RTS Index in 2008–2018 versus other largest emerging market economies. The P/BV ratio was consistently low after the 2008 crisis, suggesting that there is a pervasive problem facing Russian stocks. In the figure, the P/BV ratio's linear trend line for the RTS Index reflects a downtrend for the ratio: the P/BV ratio for the RTS Index fell from 1.0 (as of December 31, 2010) to 0.8 (as of December 31, 2008).

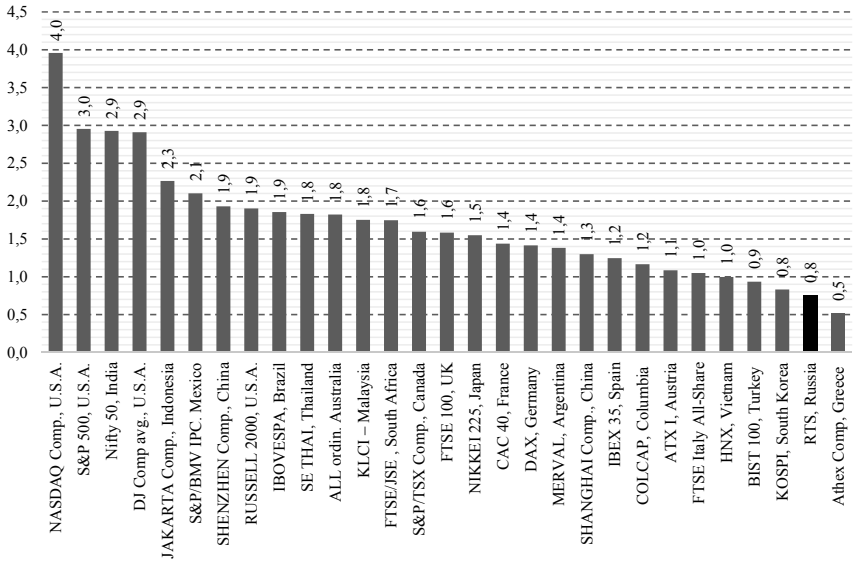


Fig. 13. Ratio of price to book value per share (P/BV ratio) for 29 stock indices of selected countries, as of December 31, 2018, in U.S. dollars

Source: own calculations using data from the Moscow Exchange and Bloomberg.

Russian issuers exhibited an overly conservative behavior in terms of applying raised money following the 2008 crisis, compared to their counterparts in other mature and emerging market economies. The conservative approach on the one hand reflected a positive trend towards maintaining companies' financial soundness in hard times in the light of financial markets volatility and geopolitical risks, and on the other hand was necessary amid restrictions imposed by anti-Russia sanctions targeting fundraising by Russian largest companies in global markets and a high key interest rate in the domestic

market. A complex investment climate remained a factor that dampened demand for money, making it difficult for businesses to take long-term investment decisions.

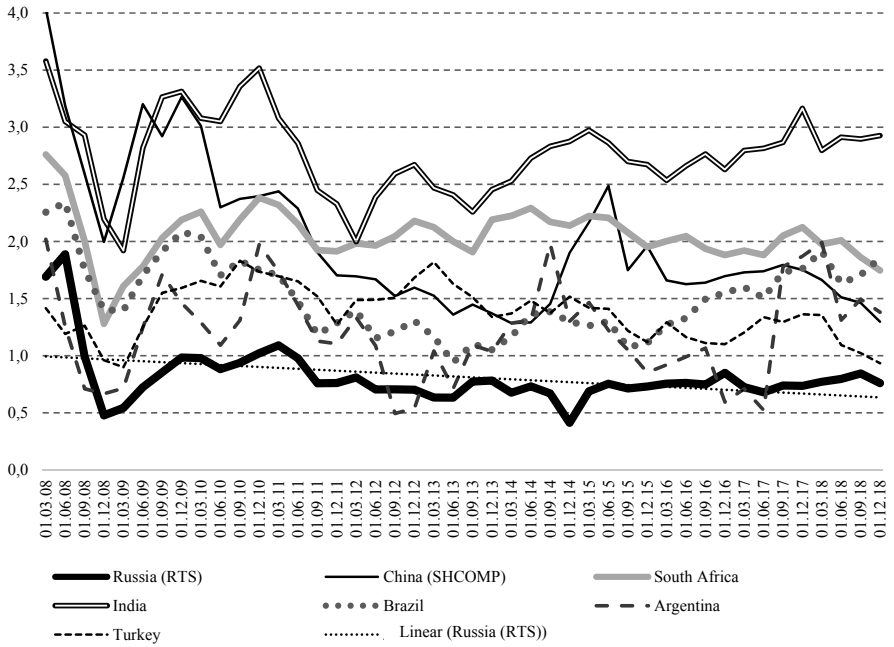


Fig. 14. Ratio of price to book value per share (P/BV ratio) for stock indices of 7 largest emerging market economies, from March 1, 2008 to December 31, 2018, in U.S. dollars

Source: own calculations using data from the Moscow Exchange and Bloomberg.

Russian issuers exhibited an overly conservative behavior in terms of applying raised money following the 2008 crisis, compared to their counterparts in other mature and emerging market economies. The conservative approach on the one hand reflected a positive trend towards maintaining companies' financial soundness in hard times in the light of financial markets volatility and geopolitical risks, and on the other hand was necessary amid restrictions imposed by anti-Russia sanctions targeting fundraising by Russian largest companies in global markets and a high key interest rate in the domestic market. A complex investment climate remained a factor that dampened demand for money, making it difficult for businesses to take long-term investment decisions.

As shown in *Fig. 15,* the 2018-year-end ratio of net debt to earnings before interest, taxes, depreciation and amortization (D/EBITDA ratio)[1] for companies composing the RTS Index turned out to be (0.9) higher than that of Argentina, the U.K., South Africa and Japan out of 29 stock indices of selected countries. The D/EBITDA ratio for the other four major emerging market economies was 2.7 for India's Nifty 50 index; 2.6 for China's Shenzhen Stock Exchange Index; 2.4 for Brazil's IBOVESPA index and 0.3 for the Johannesburg Stock Exchange index in South Africa.

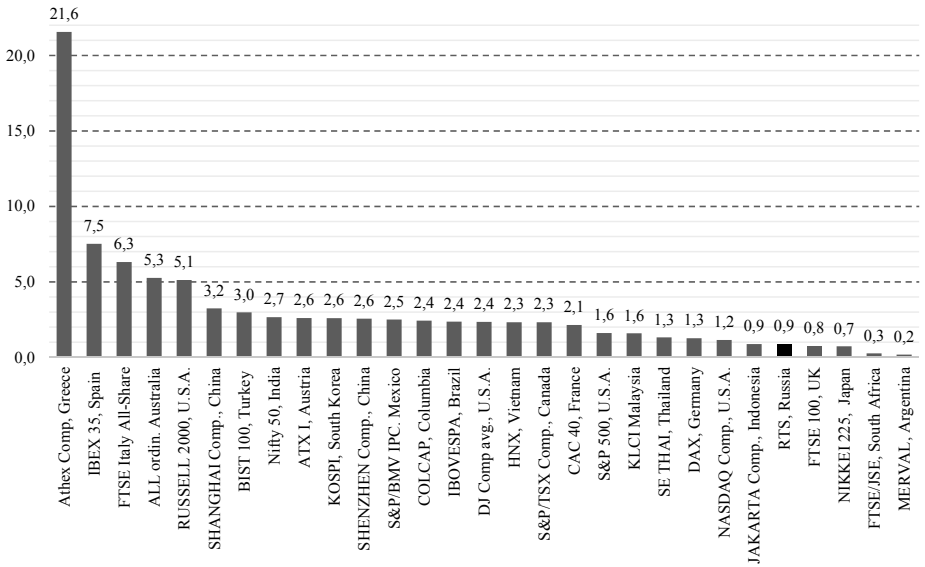


Fig. 15. Ratio of net debt to operational earnings (D/EBITDA ratio) on 29 stock indices of selected countries as of December 31, 2018, in U.S. dollars.

Source: own calculations using data from the Moscow Exchange and Bloomberg.

Fig. 16 shows the dynamics of D/EBITDA ratio for the RTS Index in 2008–2018. The ratio for Russia stood at an average of 0.72 for the period under review, rarely reaching beyond 1.0, lagging consistently behind most of other nations. The ratio's trend line was nearly parallel to X axis.

[1] The D/EBITDA ratio represents the ratio of companies' debt burden to their operating earnings before interest, taxes, depreciation and amortization, thus reflecting companies' ability to cover their debt by the amount of income generated and available annually.

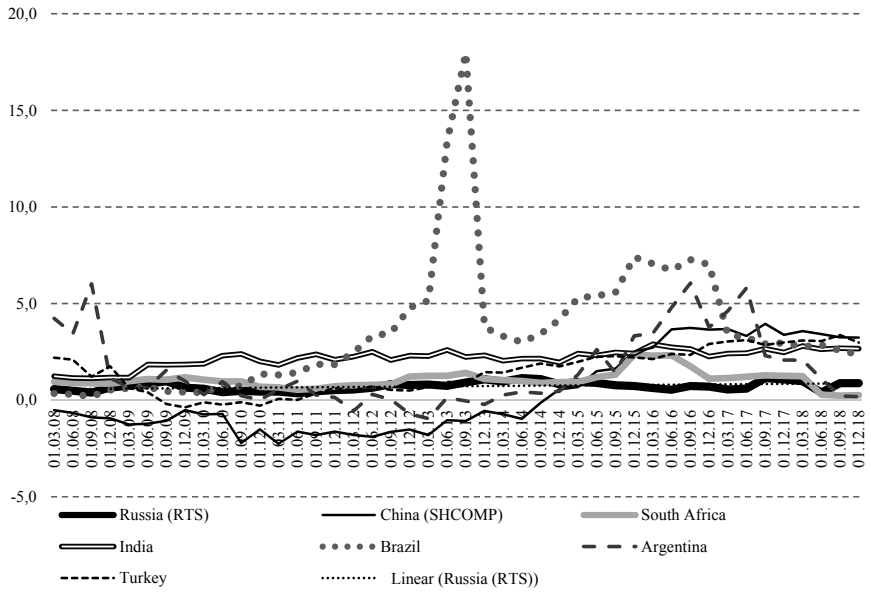


Fig. 16. Ratio of net debt to operational earnings (D/EBITDA ratio) for stock indices of 7 largest emerging market economies, from March 1, 2008 to December 31, 2018, in U.S. dollars

Source: own calculations using data from the Moscow Exchange and Bloomberg.

Substantial rise in the dividend yield on Russian stocks marked a positive trend in the domestic equity market after the 2008 crisis. This reflected, on the one hand, that publicly traded companies strove to maintain capitalization amid lower than prior to the 2008 crisis oil prices, stagnant economic growth and foreign investment drain led by anti-Russia sanctions and, on the other hand, they had substantial spare money that for some reasons was not used for financing investment projects. The increase in the dividend yield of largest companies wholly or partially owned by the government was in no small part due to the Finance Ministry's policy including a target level of dividend payouts equal to not less than 50 percent of their net earnings.

In 2008, as shown in *Fig. 17*, the dividend yield on the RTS Index portfolio represented 6.0 percent of the stock value, surpassing considerably the dividend yield of the other 28 markets of both developed and developing countries.

From January 2010 to December 2018, the dividend yield on the RTS Index increased from 1.6 percent to 6.0 percent (see *Fig. 18*). In terms of growth pace, the dividend yield on the RTS Index was the most dynamic in the world for the period under review.

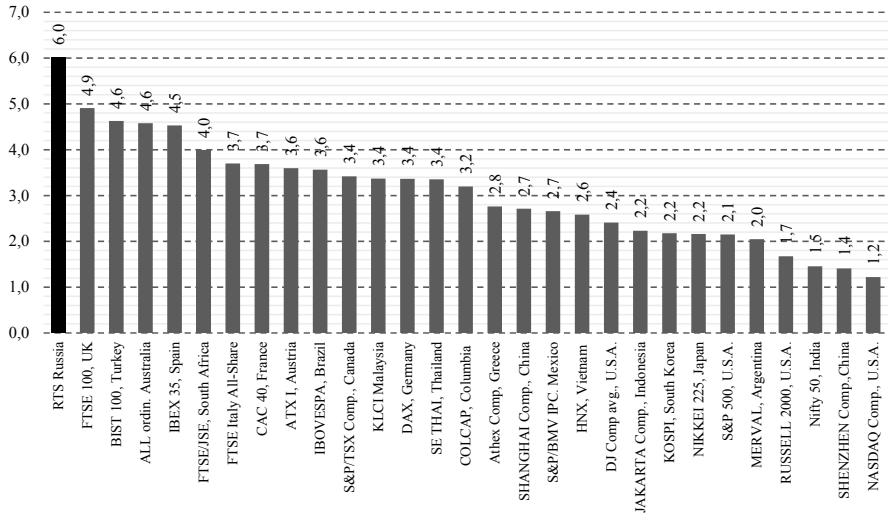


Fig. 17. Dividend yield on 29 stock indices of selected countries as of December 31, 2018, in U.S. dollars

Source: own calculations using data from the Moscow Exchange and Bloomberg.

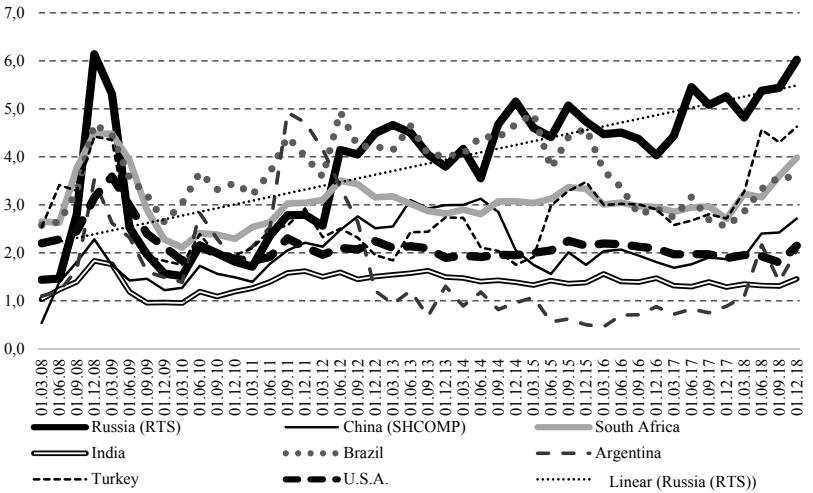


Fig. 18. Dividend yield on stock indices of 7 largest emerging market economies and U.S. stock indices, from March 1, 2008 to December 31, 2018, percent per annum

Source: own calculations using data from the Moscow Exchange and Bloomberg.

Table 4

Return and risk parameters on stocks in largest emerging market economies in 2008–2018, percent

Index, country		RTS, Russia	SHENZHEN SE Comp., China	SHANGHAI SE Comp., China	Nifty 50, India	IBOVESPA, Brazil	JAKARTA Comp., Indonesia	BIST 100, Turkey	MERVAL, Argentina	SE THAI, Thailand	S&P/BMV IPC. Mexico	COLCAP, Columbia	FTSE Bursa Malaysia KLCI	HNX, Vietnam	FTSE/JSE ALL SHR., South Africa
2008–2018	Risk	35.4	29.9	26.2	26.7	38.2	26.0	35.6	36.8	20.7	26.6	24.0	15.5	28.0	29.9
	Return	-7.0	0.2	-6.0	-0.3	-4.4	3.9	-9.6	2.3	7.2	-2.8	-1.9	-0.6	-13.7	-1.1
2013–2018	Risk	28.3	27.4	23.5	18.4	32.6	19.3	31.8	39.2	15.8	21.0	21.1	13.6	17.7	22.9
	Return	-2.8	3.7	0.7	3.4	-2.6	-0.5	-8.8	3.9	1.2	-4.9	-8.2	-2.9	5.3	-2.0

Note. Returns and standard deviations have been calculated using daily index data in dollar terms for the periods under review.
Source: own calculations using data from the Moscow Exchange and Bloomberg.

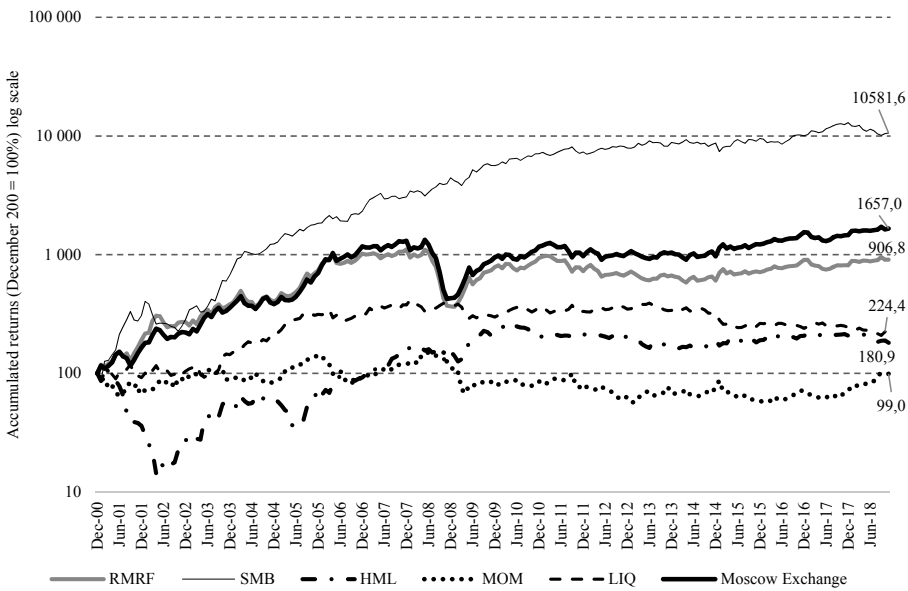
Table 5

Return and risk parameters of stock indices in mature equity markets in 2008–2018, percent

Index, country		RTS, Russia	S&P 500, U.S.A.	NASDAQ Comp., U.S.A.	DJ Comp avg., U.S.A.	RUSSELL 2000, U.S.A.	NIKKEI 225, Japan	DAX, Germany	FTSE 100, the U.K.	S&P/TSX Comp., Canada	FTSE Italy All-Share	PSI All-Share, Portugal	Athex Comp, Greece	CAC 40, France	ALL ORDIN. Australia	ATX I, Austria	KOSPI, South Korea	IBEX 35, Spain
2008–2018	Risk	35.4	20.0	21.5	18.8	25.2	23.7	26.1	23.3	23.5	29.4	23.9	37.2	26.9	24.8	30.0	28.0	28.8
	Return	-7.0	6.3	10.4	6.6	6.8	3.7	0.8	-3.5	-2.0	-8.2	-5.9	-20.7	-3.6	-2.8	-6.3	-0.6	-7.5
2013–2018	Risk	28.3	12.6	15.0	12.1	15.9	19.5	17.6	15.5	14.4	21.7	18.0	32.7	17.2	16.5	18.3	16.2	19.6
	Return	-2.8	6.6	9.0	6.5	5.7	4.9	2.5	-0.7	-0.9	0.6	0.6	-4.6	1.7	-1.3	0.9	0.2	-0.5

Note. Returns and standard deviations have been calculated using daily data in dollar terms for the periods under review
Source: own calculations using data from the Moscow Exchange and Bloomberg.

Stock index dynamics often depends on movements of stock prices of various groups of publicly traded companies that are characterized by a given concept of growth governed by companies' specific key business characteristics. For example, small and medium-sized enterprises (SME) that go public for the first time, undervalued large companies, joint-stock companies with higher liquid stocks can generate a higher than the average rate of return in the market. Key features of returns on the stocks of companies with differing key characteristics are used by major institutional investors in the process of factor investing.



Note. RMRF (the market factor) is a stock's market risk premium calculated as the difference between market-portfolio returns and the risk-free asset returns. The returns on a portfolio of the stocks available in the market, where stocks are weighted by the stock issuers' market cap (with a 15 percent of maximum weight limit), is used as the market portfolio. SMB (the size factor) is calculated as the difference between the average weighted returns on the portfolio of small-cap stocks and the average weighted returns of large-cap stocks. Companies are broken down, on a quarterly basis, into "small" and "big" companies, with a market capitalization threshold equal to the median. HML (the value factor) is calculated as the difference between average weighted returns on portfolios of value stocks and growth stocks. The stocks are broken down, on a quarterly basis, into growth stocks and value stocks by the Book-to-Market ratio. MOM (the momentum factor) is calculated as the difference between the returns on portfolios with high and low accumulated returns over previous 11 months. The stocks are distributed at monthly intervals among portfolios of stocks with low and high returns using thresholds of 30 and 70 percent of the quantile, respectively. LIQ (the liquidity factor) is calculated as the difference between the average weighted returns on portfolios of low-liquidity stocks and high-liquidity stocks.

Fig. 19. Accumulated returns on factor-based strategies of investing in Russian companies' stocks, from December 2000 to November 2018

Source: own calculations using data from CAPM-ru Constructor, RANEPA Institute of Applied Economic Studies (IAES) https://ipei.ranepa.ru/capm-ru

We have calculated accumulated returns on factor-based strategies of investing in stocks of various groups of Russian publicly traded companies in the period between December 2000 and November 2018, as shown in *Fig. 19*. Only small-cap stocks showed higher than the MOEX Russia Index returns amongst most commonly employed strategies of investing in factors, such as value, size, liquidity and momentum,

in the global equity market. During the time horizon under review the value of investing RUB 100,000 in December 2000 would be RUB 1.66 million for the MOEX index portfolio and RUB 10.59 million for portfolios of factor of companies' size. All the other factor-based strategies, including investment in the broad RMRF stock index, portfolios including the effect of value, liquidity and momentum, offered much lower than the MOEX Russia Index returns.

The above data suggest that the Russian stock market shows prerequisites that are favorable in terms of returns for investing in SMEs in the stock market. However, other factor-based investing strategies are still not working well due to problems of disclosing information about undervalued large companies, slim investment demand for their stocks, liquidity problems facing the exchange-traded stock market and other factors that dampen domestic and foreign investment in Russia's equity market.

The problem of high risks facing moderate investments returns resided not only with investment in stocks, but also with the bonds issued by Russian largest companies. In the 2008–2018 period, as shown in *Fig. 20* and in *Table 6*, the return and risk parameters in dollar terms were much worse for ruble-denominated corporate bonds in Russia than for the other 13 corporate bond indices of selected countries. During that period of time, the average returns on the IFX-Cbonds (IFX-Cbonds Russian Corporate Bond Index) portfolio stood at 0.09 percent per annum with a standard deviation (risk indicator) of 16.42 percent, thus showing the lowest return parameters and the highest risk parameters among the 13 corporate bonds indices. The returns on similar corporate bonds indices in India, China (CVFBTRID Index) and South Korea stood at 8.68, 7.40 and 3.13 percent per annum, respectively, and the risk parameters were 4.89, 3.46 and 8.71 percent per annum, respectively. Furthermore, within a shorter time interval – between 2013 and 2018 – the IFX-Cbonds index lagged behind all the above corporate bonds indices in terms of return-risk parameters (see *Table 6*).

Low returns coupled with high risks of investing in the IFX-Cbonds portfolio dampen long-term foreign and domestic investment in the bonds. Only short-term investments using speculative strategies, such as the carry trade, offer acceptable returns to foreign investors.

Another problem facing the domestic equity market is a stagnant low liquidity in the stock and bond exchange-traded market segment[1] (see *Fig. 21*). Respective transactions are significant because they underlie the calculation of the market value of Russian stocks and bonds and key stock indices. Overall volume of such transactions dropped from 44.8 percent of GDP in 2007 to 14.3 percent of GDP in 2018 as a result of the 2008 crisis and the subsequent drain of foreign (portfolio) investment since 2012. The factors that triggered the investment drain are examined in Section 3.6.3.

[1] Auction transactions and trading by negotiated mode (NTM) at the Moscow Exchange.

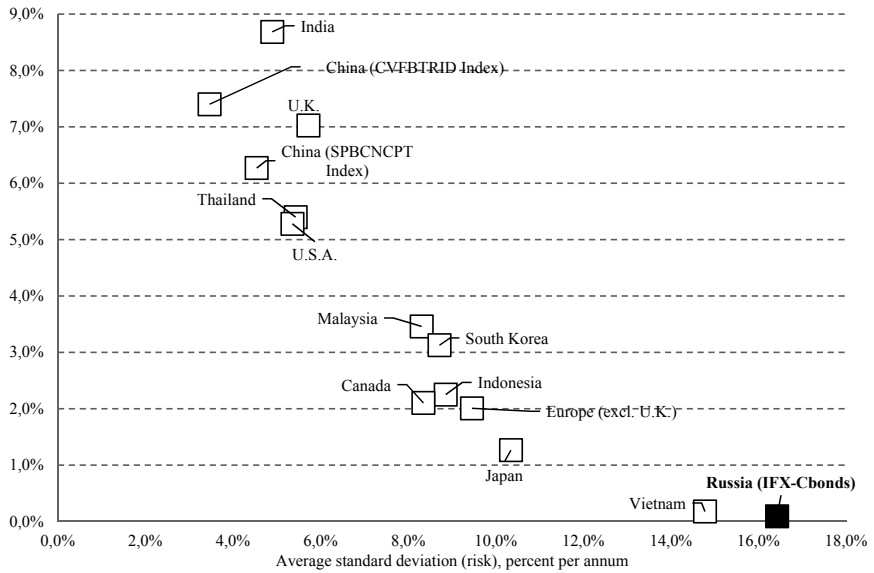


Fig. 20. Average annual returns and risk parameters on 14 corporate bonds indices of selected countries, 2008–2018, in U.S. dollars, percent per annum

Source: own calculations using data from CBonds.ru and Bloomberg.

Table 6

Return and risk parameters on 14 corporate bond indices of selected countries in 2008–2018, in U.S. dollars, percent per annum

Index, Country		IFX-Cbonds, Russia	ChinaBond Corporate Bond Total, China	SPBCNCPT Index, China	Clearing Corp of India Broad T, India	IBPA INDOBeX Corporate Total R, Indonesia	SPBTHCPT, Thailand	SPBMYCPT, Malaysia	Vietnam Bond Index - Composite, Vietnam	LUACTRUU Index, U.S.A.	SPBJPCPT, Japan	Morningstar UK Eurobond Corpor, the U.K.	Global Agg, Canada	KOBI Credit Bond Index Total R, South Korea	Pan-European Aggregate, Europe (exl.UK)
2008-2018	Risk	16.4	3.5	4.5	4.9	8.9	5.4	8.3	14.8	5.4	10.3	5.7	8.3	8.7	9.5
	Return	0.1	7.4	6.3	8.7	2.2	5.4	3.5	0.2	5.3	1.3	7.0	2.1	3.1	2.0
2013-2018	Risk	19.5	3.7	4.5	4.5	8.9	5.2	8.6	5.0	4.2	9.3	5.5	6.7	8.7	7.9
	Return	-2.6	2.5	1.8	4.9	2.2	1.7	-0.4	-0.2	1.4	-2.0	2.7	-0.9	1.4	0.1

Note. Returns and standard deviations have been calculated using daily data for the periods under review.

Source: own calculations using data from the Moscow Exchange and Bloomberg.

The drain was not offset in a timely manner through accelerated development of domestic institutional investors. In 2018, however, there was a marginal rise in liquidity that was seen mostly in the equity market and driven by heightened interest of domestic

private investors in exchange-traded transactions involving stocks amid moderate rates on bank deposits.

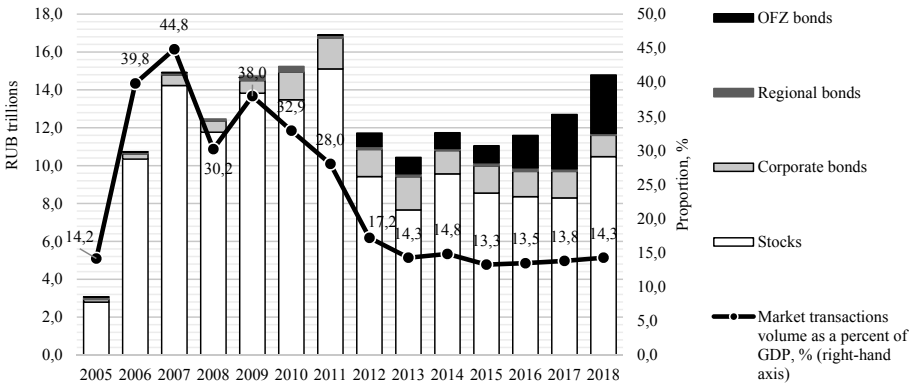


Fig. 21. Trading volumes of exchange-traded and negotiated transactions involving securities on Moscow Exchange, 2005–2018

Source: own calculations using data from the Moscow Exchange.

In terms of volumes of exchange-traded transactions involving stocks, the Moscow Exchange in 2018 ranked only 27th out of 81 world's stock exchanges, according to data from the World Federation of Exchanges (WFE). In terms of volumes of exchange-traded transactions involving bonds, the Moscow Exchange in 2018 ranked 9th out of 54 world's stock exchanges. In addition, what needs to be considered is that bond markets of the majority of developed countries are historically, for the most part, OTC markets.

Russia's financial market is characterized by the money market's dominance over the equity market. The equity market represents merely 4 percent, whereas the money market makes up 47 percent of the overall trading volume on the Moscow Exchange. The money market operates basically through repo transactions whereby banks, other organizations and private persons raise funds (mostly short-term funds) on a daily basis that are used for speculative transactions in the financial market[1]. Furthermore, banks use repo transactions as a source of short-term funding for a wide range of bank operations, including purchase of bonds and lending operations. There is no other

[1] In October 2018, according to data from the Bank of Russia, overnight and "one week or less" fundraising through exchange-traded ruble and foreign-currency repo transactions accounted for nearly 60% of the overall transactions, while other transactions had maturities of up three months (Bank of Russia. Financial Stability Review Q2–Q3 2018, No. 2(13), p. 24). In our view, the average maturity in the repo market can be defined by dividing the number of calendar days a year by the number of days calculated by dividing the annual volume of repo transactions by the average annual value of all open positions in the market: dividing 365 days by the fraction of RUB 309 trillion / RUB 2.2 trillion. The result is 2.6 days.

trading venue in the world, except in Russia, where repo transactions are executed on a such large scale and through a such high-tech trading process. Repos are attractive for many participants in that they allow for investing spare financial resources *collateralized* by other assets as an alternative to short-term deposits at a higher interest rate because there is no requirement for provisioning commitments.

The data presented in *Fig. 22* reflect the evolution of Russia's repo market as a key driver of growth in the equity market through short-term funding of exchange-traded transactions involving stocks and bonds. As shown in the figure, the repo market's intermittent growth is attributed to the fact that every few years the market experienced substantial changes in sources of cash liquidity that is used for short-term lending.

Until the 2008 crisis, amid a stable ruble exchange rate, liquidity was generated in the money market through carry trade strategies[1] from external sources of fundraising, which nearly led to a full-on banking crisis in the Russian market and bankruptcy of largest investment companies in the fall of 2008. From September 2008 to August 2011 – at the peak of the crisis and during a subsequent market recovery – the monetary authorities maintained the adequate level of the banking system liquidity through target sources of centrally-controlled funds, employing high rate of refinancing in order to restrict the use of such funds for crediting. The fact that Russian businesses were shut out of refinancing in global markets since the onset of the 2011 Eurozone debt and exchange crisis and foreign (portfolio) investment drain from Russia forced Russia's monetary authorities to change refinancing of the banking system by switching to refinancing through direct repo transactions and the Bank of Russia. From 2016 till now, financial market liquidity is maintained basically through accumulation of assets provided by the federal budget and the Reserve Fund on accounts of state-funded entities and bank accounts. Another source of generating excessive cash liquidity for businesses and banks was liquidity formation amid a relatively comfortable economic/business environment of 2017–2018, when the crude price was on the rise as companies' ruble-denominated costs were on the slide due to ruble depreciation and less investments in foreign assets because of sanctions and specific features of the business cycle of fuel and energy companies, metallurgical sector and some other Russian industries. The upturn in the repo market was also encouraged by technological developments which helped Russian largest companies with direct access to the MOEX equity market.

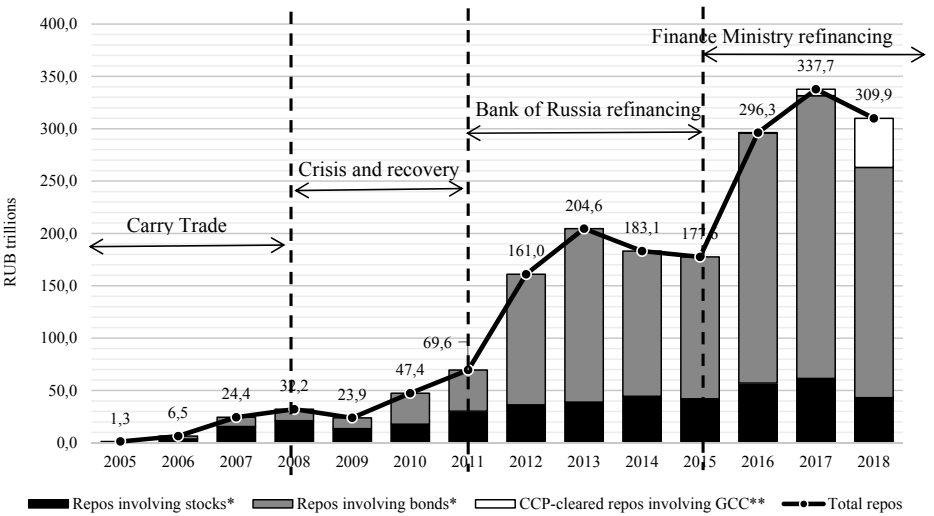
The above processes led to a 260.0-fold increase in the overall volume of repo transactions on the Moscow Exchange, from RUB 1.3 trillion in 2005 to RUB 337.7 trillion in 2017. Later, however, the money market volume dropped 8.2 percent to RUB 309.9 trillion in 2018. The today's repo market contraction is likely driven by

[1] The Bank of Russia defines carry trade as a strategy of borrowing at low interest rates and then investing the borrowed money in financial assets that offer higher returns. Foreign-exchange and equity market participants employ the strategy to make money from the positive difference between interest rates on borrowing and on investing in various currencies or with various maturities (Financial Review: Monetary Policy Terms. Information and Analsysis Materials of the Bank of Russia. No. 4, Q4 2016, pp. 36–37).

banks' slim demand for short-term fundraising because of the bailout of a few ailing big banks in H2 2017 and improved cash liquidity in the banking system as a whole. In November 2017, the Bank of Russia discontinued foreign-currency repo transactions with 28-day and 1-year maturities. The marginal decline in the number of exchange-traded repo transactions involving stocks can be attributed to the fact that brokers moved some of the foregoing transactions to the OTC market in order to reduce their costs.

An important trend in the MOEX repo market in 2017–2018 was an increase in the market segment involving transactions with settlements using a general collateral certificate (GCC). The GCC introduction coupled with granting largest nonfinancial companies with excessive cash liquidity direct access to this market segment turned this instrument into a source of cheaper short-term resources for financial companies in the market, replacing more expensive mechanisms, including repo transactions involving stocks, that can tackle this problem.

Thus, the problem of undervalued Russian companies' stocks and bonds and slow recovery of the equity market in the post-crisis decade was in large part due to the problems accumulated in the Russian economy, an unstable financial system and insufficient level of development of domestic institutional investors.



* Includes repos: direct repos with the Bank of Russia, inter-dealer repos and CCP (National Clearing Center) cleared repos (excluding repos involving GCC in the equity market);
** Transactions involving stocks, bonds and securities baskets.

Fig. 22. Volumes of repo transactions involving stocks, ruble-denominated bonds and general collateral certificate (GCC) on Moscow Exchange, 2005–2018

Source: own calculations using data from the Moscow Exchange.

3.2. Stock market

No visible positive changes in the number of listed companies and in attracting new issuers to the exchange were seen in 2018. In terms of the number of listed companies, the Moscow Exchange moved up to 40th place in 2018 from 39th place in 2017 out of 78 world's stock exchanges, according to WFE's statistics. Since 2018, the Moscow Exchange no longer participates in WFE's annual rankings in terms of the number of new IPOs and completed IPOs/SPOs. In 2017, the Moscow Exchange ranked only 39th out of 62 stock exchanges in terms of the number of new companies. Not a single IPO/SPO took place on the Moscow Exchange in 2018.

The number of listed companies on the Moscow Exchange in 2012 hit its highest (293) after the merger of the RTS stock exchange with the MICEX stock exchange. The 2013–2018 period saw a firm trend towards decrease in the number of listed companies (see *Fig. 23*). In 2018, there were 229 companies listed on the Moscow Exchange, a further decrease of 2.1 percent from a year earlier.

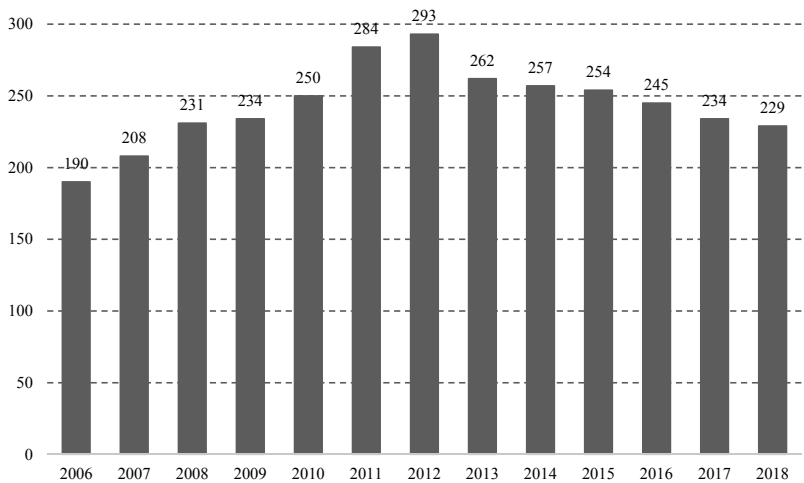


Fig. 23. Number of MOEX-listed companies in 2006–2018[1]

Source: own calculations using data from NAUFOR's compendium "Russian Equity market in 2015. Events and Facts, p. 8 for 2006–2008" and data for 2009–2017 from the World Federation of Exchanges.

Amendments to the Civil Code of the Russian Federation that came into force on September 1, 2014 and amendments to the Federal Act of "On Joint-Stock Companies"

[1] The data for 2006–2011 are presented according to data from the MICEX listing, the data for 2012–2018 are presented according to the listing of PAO Moscow Exchange.

of February 26, 1995, introducing a new article (Article 7.1)[1], whereby companies seeking the publicly traded company status must enter into a listing agreement with the stock exchange before they submit official new legal status documents to the single state register of legal entities, failed to resolve the problem of decreasing number of national stock issuers eligible for listing on the stock exchange.

In July 2017, a Growth Sector was established on the Moscow Exchange with the assistance of MSP Corporation (a federal state corporation for SME promotion), the Industrial Development Fund (IDF), the Russian Direct Investment Fund (RDIF), the Russian Export Center (REC), the Ministry of Economic Development, the Ministry of Industry and Trade and the Bank of Russia. The Growth Sector is intended to encourage SMEs to raise capital via the Stock Exchange. However, the establishment of the Growth Sector was not enough to reverse negative trends in the listing.

The limited number of companies listed on the Moscow Exchange was indication of high level of their concentration in the overall capitalization of issuers (see *Fig. 24* and *Table 7*). In 2018, 10 biggest PAOs accounted for 66.8 percent, while top-20 companies represented 80.6 percent of the overall capitalization. The above figures increased considerably – 60.2 percent and 76.0 percent, respectively – from what they were in 2017. Five largest Russian publicly traded companies (PAOs) – PAO Gazprom, PAO NK Rosneft, PAO Sberbank and PAO LUKOIL and PAO NOVATEK – have in recent years been engaged in a tight race for leadership in terms of capitalization size. In 2018, Sberbank of Russia took the lead in the capitalization size for the second year in a row.

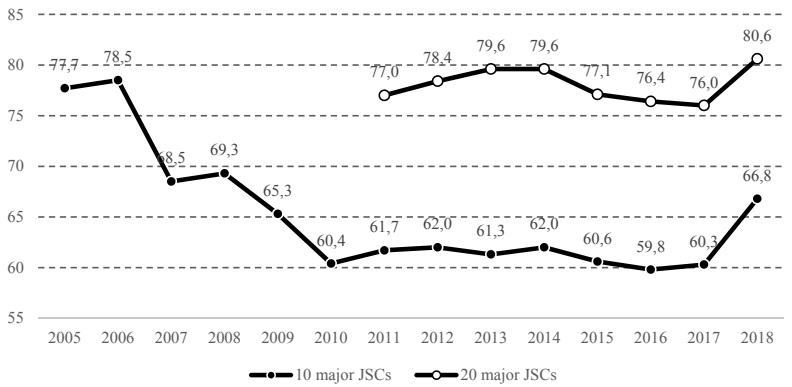


Fig. 24. Proportion of largest joint-stock companies in domestic stock market capitalization, percent

Source: own calculations using data from the Moscow Exchange.

[1] Under Federal Act No. 210-FZ of June 29, 2015.

Table 7

Capitalization of 10 largest Russian publicly traded companies (PAO) in 2016–2018

	2016			2017			2018		
	Issuer	**Capitalization, RUB billion**	**Proportion, percent**	**Issuer**	**Capitalization, RUB billion**	**Proportion, percent**	**Issuer**	**Capitalization, RUB billion**	**Proportion, percent**
1	PAO NK Rosneft	4.240	11.2	PAO Sberbank	4.859	13.5	PAO Sberbank	4.535	11.4
2	PAO Sberbank	3.710	9.8	PAO Gazprom	3.074	8.6	PAO LUKOIL	4.017	10.1
3	PAO Gazprom	3.635	9.6	PAO NK Rosneft	3.072	8.6	PAO Gazprom	3.739	9.4
4	PAO LUKOIL	2.916	7.7	PAO LUKOIL	2.823	7.9	PAO NK Rosneft	3.629	9.1
5	OAO NOVATEK	2.379	6.3	PAO NOVATEK	2.048	5.7	PAO NOVATEK	3.431	8.6
6	PAO Nornickel	1.589	4.2	PAO Nornickel	1.701	4.7	PAO Nornickel	2.059	5.2
7	OAO Sugrutneftegaz	1.105	2.9	PAO Gazprom Neft	1.162	3.2	PAO Gazprom Neft	1.639	4.1
8	PAO Magnit	1.031	2.7	PAO Tatneft	1.035	2.9	PAO Tatneft	1.588	4.0
9	PAO Gazprom Neft	1.024	2.7	OAO Sugrutneftegaz	991	2.8	OAO Sugrutneftegaz	959	2.4
10	VTB Bank (PAO)	960	2.5	PAO NLMK	885	2.5	PAO NLMK	944	2.4
	All issuers' market capitalization on Moscow Exchange	**37.748**	**100.0**	**All issuers' market capitalization on Moscow Exchange**	**35.896**	**100.0**	**All issuers' market capitalization on Moscow Exchange**	**39.716**	**100.0**
	Top-10 issuers' market cap	**22.591**	**59.8**	**Top-10 issuers' market cap**	**21.650**	**60.3**	**Top-10 issuers' market cap**	**26.541**	**66.8**

Source: own calculations using data from the World Federation of Exchanges and the Moscow Exchange.

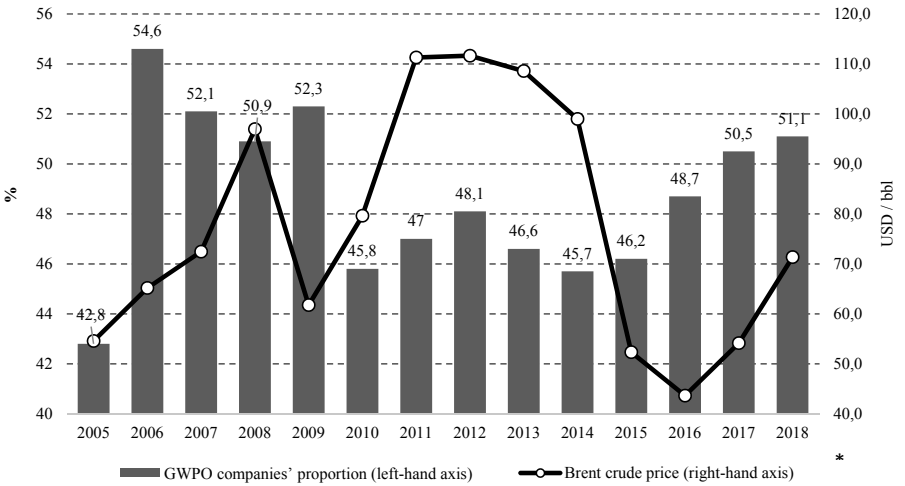
Another noticeable trend of 2014–2018 was an increase in the capitalization of companies wholly or partially owned by the government (GWPO companies)[1] from 45.7 percent in 2014 to 51.1 percent in 2018 (see *Fig. 25*). The trend was linked to accelerated growth in the capitalization of fuel and energy companies' (most of which are wholly or partially owned by the government) stocks as crude prices in 2017–2018 were on the recovery-driven rise following the collapse of 2015–2016, as well as favorable terms of trade for Gazprom's natural gas in the European market. In addition, there were contributing factors, such as growth in the appeal of Sberbank of Russia's stock for foreign investors, the acquisition of privately-owned TNK-BP by state-run NK Rosneft in 2013, the transition of PAO Bashneft (in 2014) and PAO Magnit (in 2018) from privately-owned company to GWPO company[2].

The Moscow Exchange has so far retained its leadership as a principal venue for pricing and settlements for the given financial instruments in the competition with global stock exchanges for the market of Russian largest issuers. After the merger of the two stock exchanges late in 2011, the proportion of the Moscow Exchange in the overall

[1] A company wholly or partially owned by the government (GWPO company) constitutes an entity in which the government holds a 100% equity stake, a majority equity stake or at least a substantial minority equity stake (equity interest) that is not less than 10%.

[2] More details on GWPO companies' contribution to capitalization can be found in Radygin et al. Thirty years after privatization: The scale and effectiveness of Russia's public sector / A.D. Radygin, P.M. Entov, A.E. Abramov, M.I. Chernova, G.N. Malginov – M.: Delo Publishing House RANEPA, 2019.

volume of trading in equity instruments increased from 41.2 percent in 2012 to 60.3 percent in January 2019 (see *Fig. 26*). In contrast, the proportion of the principal rival – the London Stock Exchange – during the same period of time dropped from 48.8 to 26.8 percent, while the proportion of the remainder of foreign stock exchanges picked up from 10.0 to 12.9 percent. The decline in the proportion of foreign trading venues was largely attributed to the decline in the appeal of stocks and Russian stocks depositary receipts for foreign investors due to, among other things, anti-Russia sanctions.



* The 2018 data for GWPO companies' proportion in capitalization are preliminary data.

Fig. 25. Proportion of government wholly or partially-owned companies in domestic stock market capitalization and Brent crude price per barrel, 2005–2018

Source: own calculations using data from companies wholly or partially owned by the government, data source: RANEPA IAES https://ipei.ranepa.ru/kgu

In 2018, the stock market was nearly frozen by sanctions for RUSAL EN+ GROUP PLC, a holding company registered under the jurisdiction of Jersey Island, that raised USD 1.5 billion through IPO on the London Stock Exchange (LSE) in 2017, as well as RUSAL's stock on the Hong Kong Stock Exchange. The markets for these instruments began to recover gradually late in the year as the problems with the U.S. Treasury were tackled.

PAO Megafon's stock depositary receipts were delisted from the London Stock Exchange (LSE) in October 5, 2018. MTS's representatives said in February 2019 the company might decide to voluntarily delist its stock from the New York Stock Exchange

(NYSE), some analysts attributed this to risks induced by sanctions[1]. PAO TMK said early in 2018 it might decide to voluntarily delist its stock from the London Stock Exchange (LSE).

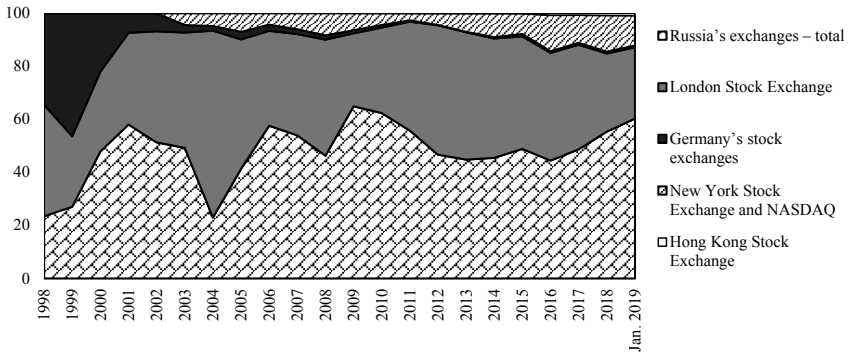


Fig. 26. Proportion of stock exchanges in trading volumes of Russian joint-stock companies' equity instruments, from 1998 to January 2019,[2] percent

Source: own calculations using data from stock exchanges.

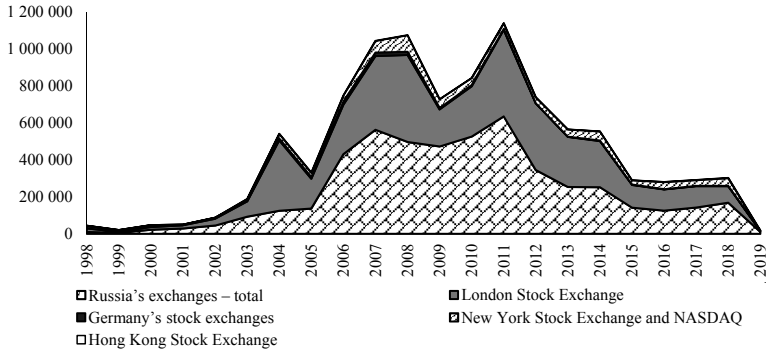


Fig. 27. Trading volumes of Russian joint-stock companies' equity securities on selected stock exchanges, from 1998 to January 2019, USD millions[3]

Source: own calculations using data from stock exchanges.

[1] BCS Express. Investor's breakfast. MTS's voluntary delisting from NYSE not to be ruled out. Experts' opinion. February 11, 2019, URL: https://bcs-express.ru/novosti-i-analitika/zavtrak-investora-mts-ne-iskliuchaet-delisting-c-nyse-chto-dumaiut-eksperty

[2] The data includes solely exchange-traded transactions in the auction market, excluding the rest of the stock trading modes employed on the Moscow Exchange.

[3] The data includes solely exchange-traded transactions in the auction market, excluding the rest of the stock trading modes employed on the Moscow Exchange.

A recent years' serious problem that is typical of trading in Russian equity instruments on various trading venues worldwide lies in drastic contraction in volumes of exchange-traded transactions, which contributes to increase in the liquidity risk premium required by investors in these companies. As shown in *Fig. 27*, overall volumes of exchange-traded transactions involving the given equity securities on all the selected stock exchanges dropped from USD 1.1 trillion in 2011 to USD 0.3 trillion in 2018, including on Russia's stock exchanges – from USD 0.6 trillion to USD 0.2 trillion.

The problem of low liquidity of the exchange-traded stock market is facing not only the Moscow Exchange but also organized markets of most countries. As shown in *Table 8,* it was not until 2018 that the world's overall volumes of transactions involving stocks recovered completely to 109.1 percent of the pre-crisis 2007 level. It's been 11 years now, but the volumes of exchange-traded transactions on stock exchanges, such as the NASDAQ and NYSE, London Stock Exchange, Euronext, German Stock Exchange, Australia's and Canada's stock exchanges, NASDAQ OMX Nordic Exchange, have not yet reached the 2007 level. The liquidity crunch that took place after the 2008 crisis was due to the crackdown on market makers[1] and bank risk-bearing operations,[2] slow portfolio turnover for major institutional investors at a backdrop of growing appeal of asset management index-based strategies[3], institutional investors' countermeasures against high-frequency trading practices[4].

The Russian exchange-traded stock market is characterized by greater liquidity crunch; in 2018, the volume of exchange-traded stocks on the Moscow Exchange constituted as little as 30.6 percent of the 2008 pre-crisis peak. However, the 2017–2018 period saw a positive factor, such as increase in the given proportion mainly due to influx of domestic private investors, which offset in part an adverse effect of factors, such as foreign (portfolio) investment drain and the freeze on local pension savings (funds).

Unlike stock indices, capitalization depends on not only stock price movements but also the number of issuers listed on national stock exchanges. As shown in *Table 9,* the capitalization of Russian companies was in slow recovery from the 2008 crisis. 2018 saw the size of capitalization of Russian issuers lagging further behind the 2007 level: in 2018 it accounted for merely 38.0 percent of the 2007 value, whereas it came to reach 41.5 percent a year earlier. Capitalization in dollar terms was down 8.3 percent from

[1] More information on the impact of post-crisis regulation on market participants' risk appetite and liquidity of various financial instruments can be found in, for example, PricewaterhouseCoopers. Global financial markets liquidity study. August 2015.
[2] More details on this can be found in, for example, the IMF Financial Stability Reports of October 2012 and October 2015.
[3] According to data from the Investment Company Institute (ICI), the 2016 portfolio average turnover of U.S. equity mutual funds stood at only 34%, with an average of 57% between 1984 and 2016. (Investment Company Fact Book, 2017. ICI, 57th Edition, p. 38).
[4] *Lewis M.* Flash Boys: A Wallstreet Revolt / *Michael Lewis*; Transl. from English into Russian – M.: Alpina Publisher, 2015, p. 51.

USD 623.4 billion in 2017 to USD 571.7 billion in 2018. Considering the fact that the RTS Index lost only 7.4 percent during the same period, a further loss of 0.9 percent was driven by factors, such as the delisting of some joint-stock companies and faster decline in dollar terms in the capitalization of their stocks that do not compose the RTS Index.

Table 8

Value of exchange-traded transactions involving stocks on largest stock exchanges in 2007–2018 (2007 = 100 percent)[1]

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
U.S.A. (NYSE and NASDAQ)	100	120.1	72.6	71.0	71.7	54.2	54.3	65.5	69.9	66.2	60.3	84.3
China (two exchanges)	100	63.0	128.9	132.8	106.9	81.8	124.9	198.0	674.2	314.4	274.5	225.2
Japan	100	87.3	61.2	63.2	66.3	57.5	103.9	86.8	88.3	89.6	92.7	100.4
U.K.	100	89.0	62.9	63.5	65.7	50.8	51.7	64.1	60.2	52.9	53.9	59.0
Euronext	100	84.7	42.7	44.5	47.1	34.8	36.7	43.1	45.8	39.0	42.9	48.6
Germany	100	95.5	45.1	48.4	52.3	37.9	39.7	43.7	46.3	38.9	44.1	54.1
Hong Kong	100	77.3	70.1	74.1	71.5	54.7	65.5	75.3	105.2	66.8	96.9	115.8
Canada	100	105.3	75.5	83.0	93.5	82.3	83.2	85.4	71.9	71.3	75.5	87.8
Australia	100	77.5	57.9	77.1	86.8	67.9	63.9	58.6	58.0	59.7	60.2	62.3
Russia	100	89.0	77.3	75.5	95.2	55.8	44.0	46.0	25.8	23.6	26.4	30.6
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	59.5
Total for WFE members	100	103.1	77.7	83.2	89.0	69.8	77.2	87.5	90.7	95.7	92.7	109.1

Source: own calculations using data from the World Federation of Exchanges and Moscow Exchange.

In 2018, the Moscow Exchange ranked 22nd out of 76 stock exchanges in terms of issuer's market capitalization, whereas it ranked 22nd out of 78 world's stock exchanges in 2017, according to WFE's statistics.

Table 9

U.S. dollar market cap of stocks on largest stock exchanges in 2007–2018 (2007 = 100 percent)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
U.S.A. (NYSE and NASDAQ)	100	58.3	76.7	87.9	79.5	94.9	122.2	133.9	127.5	139.1	163.3	154.8
China (Shanghai SE)	100	38.6	73.2	73.5	63.8	68.9	67.6	106.4	123.1	111.1	137.8	106.1
Japan	100	71.9	76.3	88.4	76.8	80.3	104.9	101.1	113.0	116.9	143.7	122.3
U.K.	100	48.6	89.8	93.9	84.9	88.3	115.1	104.3	100.8	90.9	115.8	94.6
Euronext	100	49.8	68.0	69.4	57.9	67.1	84.9	78.6	78.3	82.7	104.0	88.3
Germany	100	52.8	61.4	67.9	56.3	70.6	92.0	82.6	81.5	82.3	107.5	83.4
Hong Kong	100	50.1	86.8	102.1	85.1	106.7	116.8	121.8	120.0	120.3	163.9	143.9
Canada	100	47.3	76.7	99.3	87.4	94.2	96.7	95.8	72.8	93.4	108.3	88.6
Australia	100	52.7	97.2	112.0	92.3	106.8	105.2	99.3	91.4	101.4	116.2	97.3
Russia	100	26.4	57.3	91.7	72.9	71.8	69.3	34.4	26.2	42.3	41.5	38.0
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	106.5

Source: own calculations using data from the World Federation of Exchanges and Moscow Exchange.

[1] Including transactions involving securities of issuers on given stock exchanges.

In July 2018, the Moscow Exchange reduced considerably the volume of its publicly disclosed information – as defined in Bank of Russia Regulation No. 437-P 'On Conducting Organized Trading' of October 17, 2014, as amended by Bank of Russia Ordinance *No. 4622-U* of November 27, 2017[1] – and discontinued the release of data sheets on volumes of NTM (negotiated trading mode) transactions, two-sided CCP-cleared repo transactions, inter-dealer repos and some other trading modes for various categories of financial instruments. This somehow hampers analysis of the relationship between exchange-traded transactions and the money market trading volume in stocks and bonds. Additionally, the Moscow Exchange discontinued the release of data sheets on transactions involving financial instruments by stock market participant, thus making impossible an independent market competition analysis based on the Herfindahl-Hirschman index. The decision to disclose less information on exchange-traded transactions is a negative sign that might indicate deterioration of the Moscow Exchange's performance and transparency. That said, it is unclear what underlies the Bank of Russia's decision to issue Regulation No. 4622-U of November 27, 2017, thus making information about competition on the exchange unavailable to the public.

As shown in *Fig. 28,* exchange-traded transactions accounted for merely 17.8 percent, repo transactions constituted 81.6 percent and NTM transactions represented 0.6 percent of the overall exchange-traded transactions involving stocks in 2018. The economic rationale for repo transactions involving stocks lies in using broker customers' assets for short-term crediting against stocks or money of short sales[2] or margin trading[3]. Repo transactions increase liquidity in the equity market segment by raising extra funds and placing credit risks on a wide range of brokers' customers who may not always understand how the market runs. The use of almost free assets for repo transactions constitutes the principal source of brokers' revenues representing 27 percent of what they earn, with broker commissions and other fees making up as little as 16 percent of their earnings[4].

That said, allowing brokers to dispose customer's money and stocks through special broker's accounts and similar settlement depository securities accounts leads sometimes to uncertainty about whether customers are going to be refunded if their broker ceases

[1] This information is available on the Moscow Exchange official website: URL: https://www.moex.com/ru/markets/stock/month-reports.aspx Under the Bank of Russia Regulation, overall information or information broken down by type of traded instruments and trading modes is to be defined by the stock exchange, meaning that the decision to reduce, since July 01, 2018, the list containing this information was based on the exchange's sole discretion in compliance with the provisions set forth in Bank of Russia Ordinance No. 4622-U of November 27, 2017.

[2] Short sale of securities in hope of reaping a profit when the market value of the securities goes down.

[3] Purchase of securities with borrowed money in hope of reaping a profit when the market value of the securities goes up.

[4] Bank of Russia. Brokers. Analytical Review. 2017 and Q1 2018. Available at URL: http://www.cbr.ru/finmarkets/files/supervision/broker_18-01.pdf

to operate or the broker's personnel are found to be involved in fraudulent activities[1]. There are legal uncertainties that elevate risks to investors, particularly when it comes to unpredictable increase in equity market volatility.

Models designed to determine an optimum relationship between volumes of exchange-traded transactions and repo transactions in the stock market are not currently available. Regrettably, the Bank of Russia no longer releases its dedicated reviews on the repo market and respective risks. However, as shown in *Fig. 28,* the decrease in the proportion of exchange-traded transactions in the overall market trading volume from 69.5 percent in 2005 to 17.8 percent in 2018 with a concomitant increase in the volume of repo transactions from 18.5 percent to 81.6 percent gives evidence of considerable increase in volumes of fundraising in the stock market and, accordingly, credit risks to market participants. 2018 saw a positive trend towards a marginal rise in the proportion of exchange-traded transactions from 11.7 percent in 2017 to 17.8 percent in 2018.

As shown in *Fig. 29,* the previous years' trend towards stable increase – from RUB 4.0 trillion in 2005 to RUB 70.7 trillion in 2017 – in the overall trading volume for exchange-traded stocks was in part affected in 2018, when the trading volume dropped 17.0 percent to RUB 58.9 trillion from the previous year's level. Furthermore, volumes of exchange-traded transactions changed in a static manner: market volumes of transactions were on a gradual slide up until 2017 following the decline early in the 2010s – from RUB 15.7 trillion in 2011 to RUB 9.4 trillion in 2012 – that was driven by foreign (portfolio) investment drain. It was not until 2018 that they picked up 26.5 percent from RUB 8.3 trillion in 2017 to RUB 10.5 trillion.

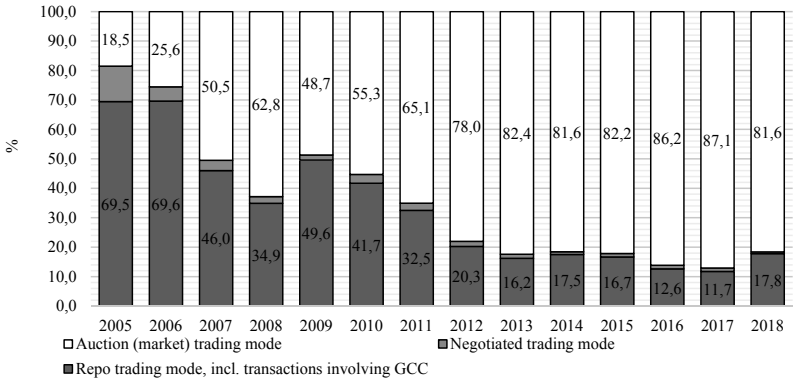


Fig. 28. Breakdown of transactions involving stocks on primary MOEX market, 2005–2018, percent

Source: own calculations using data from the Moscow Exchange.

[1] Similar cases were previously seen regarding the customers of Eltra Investment Company (in 2016) and Energocapital Investment Company (in 2018).

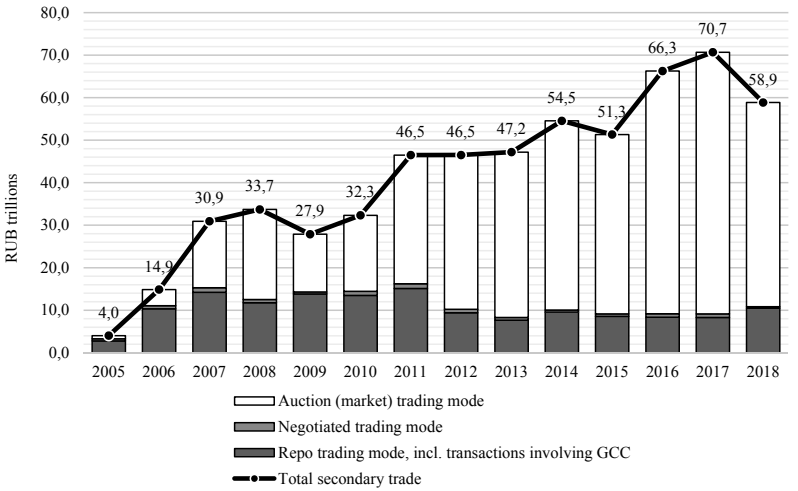


Fig. 29. Volumes of transactions involving stocks in MOEX primary market, 2005–2018, RUB trillion

Source: own calculations using data from the Moscow Exchange.

In contrast, the volume of repo transactions involving stocks surged from RUB 0.7 trillion in 2005 to RUB 61.5 trillion in 2017, however, slid down 22.0 percent in 2018 to RUB 48.0 trillion from the previous year's level. The market of repos involving stocks declined in 2018 after exchange-traded repo transactions involving customers' assets were partially redirected into the OTC market in order to reduce brokers' transaction costs.

It still remains to be seen how to assess an increase in the activity of individuals and non-residents engaged in exchange-traded transactions involving stocks. The Moscow Exchange does not provide information on the matter on a regular basis. One may assume, according to the available information, that the proportion of individuals engaged in (exchange-traded and NTM) transactions involving stocks picked up from 29.6 percent in 2017 (according to data from The National Association of Stock Market Participants (NAUFOR))[1], to 35 percent in 2018 (according to data from the Moscow Exchange)[2]. On top of that, the 2018 level is similar to that reported by NAUFOR in 2016.

[1] NAUFOR. Russia's Stock Market: 2017. Events and Facts. Available at: URL: https://naufor.ru/download/pdf/factbook/ru/RFR2017.pdf.

[2] The Moscow Exchange press release dd. February 4, 2019. Available at: URL: https://www.moex.com/n22490/?nt=106.

Fig. 30 presents data on the structure of transactions involving stocks by investor category[1] that are calculated regarding the overall volume of transactions involving stocks, including repo transactions that are disclosed by the Moscow Exchange. The data show that the proportion of individuals engaged in the stock market increased from 9.2 percent in January 2018 to 11.4 percent in January 2019. In contrast, the proportion of non-residents in the trading volumes contracted from 40.4 percent to 33.6 percent during the same period. The foregoing reflects a trend towards partial replacement of foreign (portfolio) investment drain by the influx of money from domestic private investors seeking a sort of alternative in the stock market to slim returns on bank deposits. While this is an overall positive trend, full engagement of individuals in investing in the equity market is contingent upon unfreezing the pension savings framework, engendering conditions for the development of corporate and individual retirement plans/schemes, promoting collective investment. Otherwise, it is unlikely that the trend will continue and the pre-crisis level of individuals' engagement in stock market transactions will be reached.

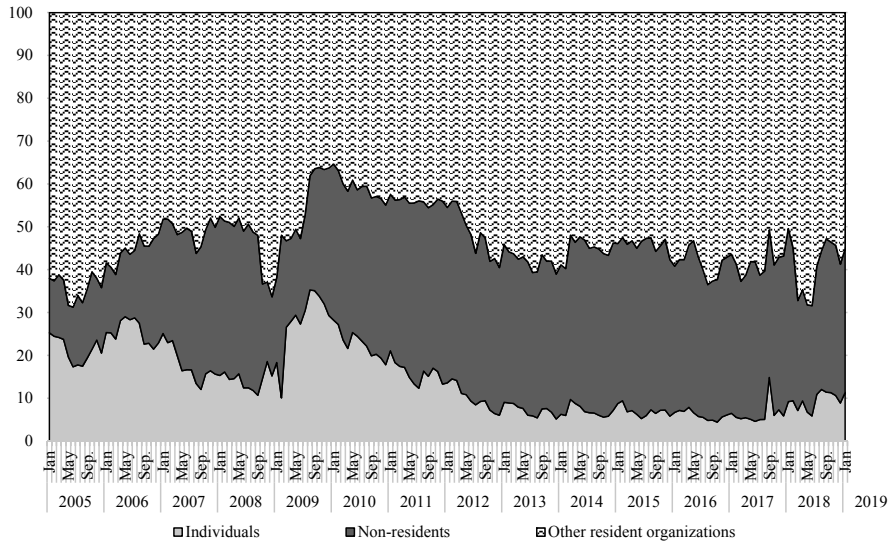


Fig. 30. Breakdown of investors engaged in exchange-traded transactions involving stocks on Moscow Exchange from January 2005 to January 2019, percent

Source: own calculations using data from the Moscow Exchange.

[1] Since July 01, 2018, according to the reduction of the contents of information disclosed by the Moscow Exchange, the proportion of non-residents, private investors and other resident organizations is calculated using solely volumes of exchange-traded transactions and CCP-cleared repo transactions open to any counterparties. Up until that time, transaction volumes covered a broader spectrum of transactions executed by various exchange trading modes.

The equity market's influence on investment and economic growth is basically exerted by way of allowing publicly traded companies to raise funds through IPO and various companies to exercise merger/acquisition transactions.

It follows from the data shown in *Table 10* that the Russian stock market's influence on investment and the economy weakened considerably in recent five years. In 2014–2018, companies raised as little as USD 8.8 billion through IPOs/SPOs, without a single IPO on the Moscow Exchange in 2018. During the previous 5-year period, Russian companies raised USD 37.8 billion through IPOs/SPOs in 2009–2013, that is, 4.3 times the amount raised in recent 5 years.

Nearly a similar context was observed regarding the volume of closed merger/acquisition transactions, totaling USD 223.6 billion in 2014–2018 versus USD 433.9 billion in 2009–2013, that is, 48.5 percent less than the amount recorded during the previous 5 years.

In 2016, equity issuances accounted for merely 0.1 percent of overall sources of fixed investment, suggesting that Russian companies continued to spend the bulk of their fundraising in the domestic stock market and corporate bond market on debt refinancing/redemption, merger/acquisition funding and other purposes that have little to do with fixed investment. Rosstat discontinued since 2017 disclosing the given information, most likely because these funds are thought to be irrelevant.

Table 10

Parameters of Russian companies equity market, USD billions

	Capitalization	Secondary market, including foreign stock exchanges	IPO/SPO, equity offerings	Increase in equity through IPOs			Volume of closed merger/acquisition transactions
				USD billions	The same as a percent of capitalization	The same as a percent of IPO/SPO volume	
000	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	1057	914	17	3.2	0.3	18.8	61.9
2007	1503	1687	33	3.6	0.2	10.9	127.7
2008	397	1983	1.9	2.1	0.5	110.5*	117.0
2009	861	1156	1.7	2.0	0.2	117.6*	55.7
2010	1379	1431	6.3	2.4	0.2	37.9	55.1
2011	1096	2222	11.3	2.6	0.2	23.1	94.3
2012	1079	1931	9.5	3.1	0.3	32.6	72.7
2013	1041	1801	9.0	3.1	0.3	34.4	156.1
2014	517	1739	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	1154	2.1	0.7	0.1	32.0**	41.7
2017	623	1363	4.4	n/a	n/a	n/a	31.4
2018	572	998	0	0	0	0	34.9

* The value is more than 100 percent because a part of fixed investment could be exercised through private offerings of stocks;

** The amount of fundraising through IPOs by Rosneft and FH Otkrytie on the Moscow Exchange in 2016.

Source: own calculations using data from Rosstat, Bank of Russia, Moscow Exchange and Merger.ru (an information analysis resource)

Therefore, the stock market still makes a moderate contribution to companies' fixed asset formation and economy's growth. The domestic equity market's potential in terms of addressing the key problems facing the Russian economy is yet to be fully tapped. The equity markets' contribution is not reflected in the Russian government's documents on national projects until 2024[1], which is a serious oversight on the part of financial market regulator and its infrastructure organizations.

3.3. Bond market

3.3.1. Characteristics of bond market

In 2018, the value of bonded loans in Russia continued to climb to RUB 21.8 trillion, posting an increase of 10.3 percent from 2017 (see *Fig. 31*). Bank of Russia's short-term bonds (BoRB) designed to manage the banking system liquidity came to play a prominent part, there were RUB 1.4 trillion of outstanding BoRB in 2018. Corporate bonds, including OTC issuances, increased 4.5 percent in value from RUB 11.4 trillion to RUB 11.9 trillion during the year; federal loan bonds (OFZ, GSO (government savings bonds), etc.) were up 3.9 percent from RUB 7.2 trillion to RUB 7.7 trillion. The 2018 volume of outstanding regional bonds remained almost unchanged from 2017 (RUB 0.7 trillion). While there was high demand for cash to finance federal budget expenditures, Russia's Finance Ministry in 2018 pursued a moderate policy towards raising the internal public debt, which was in large part due to a lack of sufficient demand for federal bonds in the domestic market as non-residents pulled out of the market over fears of further sanctions.

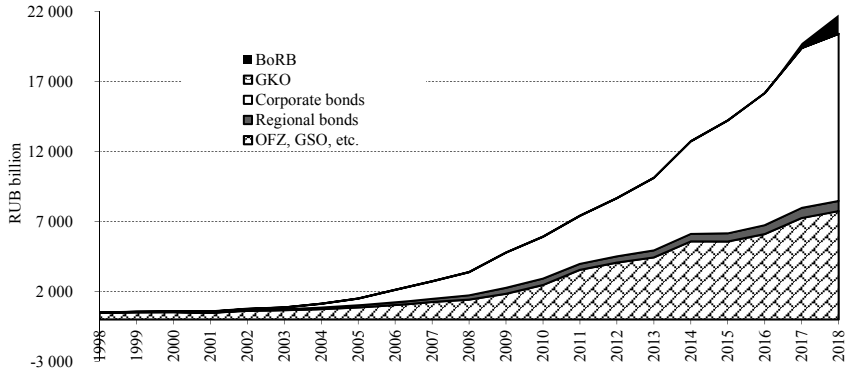


Fig. 31. Outstanding ruble-denominated bond volumes, from 1998 to 2018, RUB billion

Source: own calculations using data from Russia's Finance Ministry and Cbonds.ru

[1] Available at: URL: http://static.government.ru/media/files/p7nn2CS0pVhvQ98OOwAt2dzCIAietQih.pdf

Corporate bond issuances declined considerably in volume terms in 2018 (see *Fig. 31*). The volume of corporate bond issuances contracted from RUB 2.9 trillion in 2017 to RUB 1.6 trillion in 2018, or 43.7 percent. The decline in the volume of corporate bond placements in the domestic market was mainly due to uncertain economic policy, rising interest rates on loans, restricted access of Russian companies to global capital markets because of extended sanctions, the freeze on state pension savings and a shift towards investment of non-government pension savings in government securities. According to data from the Bank of Russia, the proportion of federal government bonds in the portfolio of non-government pension funds increased from 24.3 percent as of December 2017 to 37.7 percent in September 2018[1].

The volume of federal bond issuances dropped 41.5 percent from RUB 1.8 trillion in 2017 to RUB 1.0 trillion in 2018. The volume of regional bond issuances fell 59.9 percent from RUB 210.9 billion to RUB 84.6 billion during the same period. In contrast, the volume of short-term BoRB issuances increased by 14 times from RUB 0.5 trillion to RUB 7.0 billion during the same period of time (see *Fig. 32*). The downturn in the primary OFZ bond market and the ruble-denominated corporate bond market was spurred by negative expectations of new sanctions (in April 2018) restricting global investors from buying Russia's government securities and bonds of some major Russian companies, as well as a weakening Russian ruble and risks of accelerating inflation. Therefore, the yield rate on ruble-denominated bonds increased considerably in 2018.

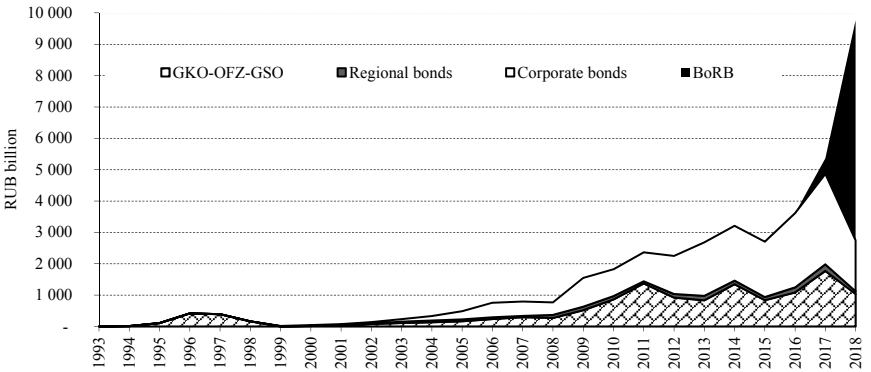


Fig. 32. Ruble-denominated bond placement volume in 1993–2018

Source: own calculations using data from Russia's Finance Ministry and Moscow Exchange.

The secondary exchange-traded market saw a 19.0 percent decline in volumes of transactions involving corporate bonds from RUB 159.3 trillion in 2017 to RUB 129.1 trillion in 2018 (see *Fig. 34*). Volumes of exchange-traded and NTM

[1] Usov I. Pension funds fleeing real sector. Kommersant, November 30, 2018.

transactions involving OFZ bonds picked up 4.9 percent from RUB 6.6 trillion to RUB 6.9 trillion.

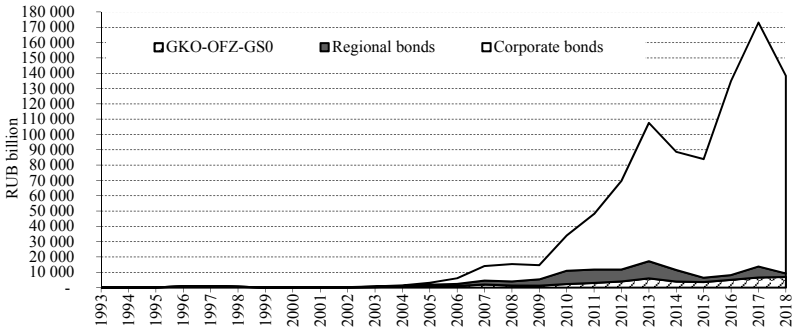


Fig. 33. Trading volumes of exchange-traded ruble-denominated bonds, including money market, 1993–2018

Source: own calculations using data from Russia's Finance Ministry and Moscow Exchange.

The money market plays an even more dominant part in overall transactions in the bond market than in the stock market. In 2018, the proportion of repo transactions in the value of exchange-traded transactions involving bonds reached 96.1 percent versus 96.0 percent in 2017 (see *Fig. 34*). The proportion of exchange-traded transactions involving bonds in 2018 stood at merely 2.3 percent versus the previous year's 2.5 percent. For reference purposes, the proportion of repo transactions and exchange-traded transactions in 2005 was 28.0 percent and 12.8 percent, respectively; the remainder of NTM transactions represented 59.2 percent. Low liquidity of exchange-traded transactions involving corporate bonds makes it difficult to employ the market value and the fair value in pricing of these instruments, thus posing accounting risks to financial organizations.

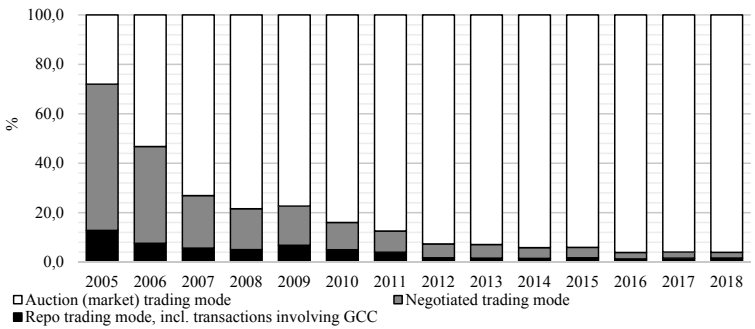


Fig. 34. Breakdown of transactions involving bonds on Moscow Exchange, 2005–2018, percent

Source: own calculations using data from the Moscow Exchange.

There were small volumes of exchange-traded transactions involving bonds; on top of that, the transactions were down 13.0 percent from RUB 6.9 trillion in 2017 to RUB 6.0 trillion in 2018 (see *Fig. 35*). The money market – repos involving bonds – was dominant in terms of volume and saw a fast growth pace. Its volume was up from RUB 0.7 trillion in 2005 to RUB 61.5 trillion in 2017, that is, a 87.9-fold increase; exchange-traded transactions involving bonds rose from RUB 0.3 trillion to RUB 4.4 trillion, or a 14.7-fold rise, during the same period. The market was driven by excessive cash liquidity generated by various factors (carry trade, refinancing through direct repos, refinancing by the Finance Ministry) at various stages of market evolution[1]. That said, the period of buoyant growth in the money market (2012–2018) was, in many ways, concomitant with the period of slow economic growth in the country, that is, the increase in cash liquidity in the financial system as a growth driver for the repo market was largely led by downturn in businesses' investment activity and by businesses' accumulation of various types of cash reserves.

Volumes of repo transactions involving bonds fell 30.0 percent from RUB 61.5 trillion in 2017 to RUB 48.0 trillion in 2018 due to the bailout of some major banks that used to employ the repo mechanism for funding their operations (FH Otkrytie, Binbank, Rostbank and Promsvyazbank), Bank of Russia's winding down foreign-currency repo transactions, and slim demand for this bank funding instrument against a backdrop of rising key interest rate and in the presence of other, cheaper, sources of funding available.

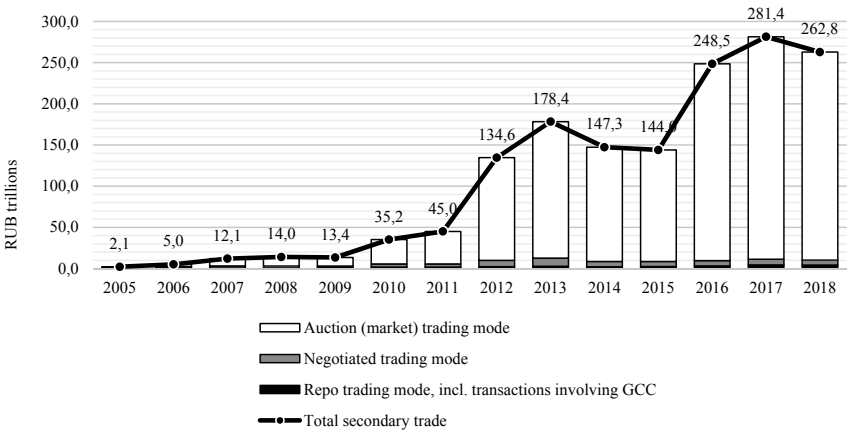
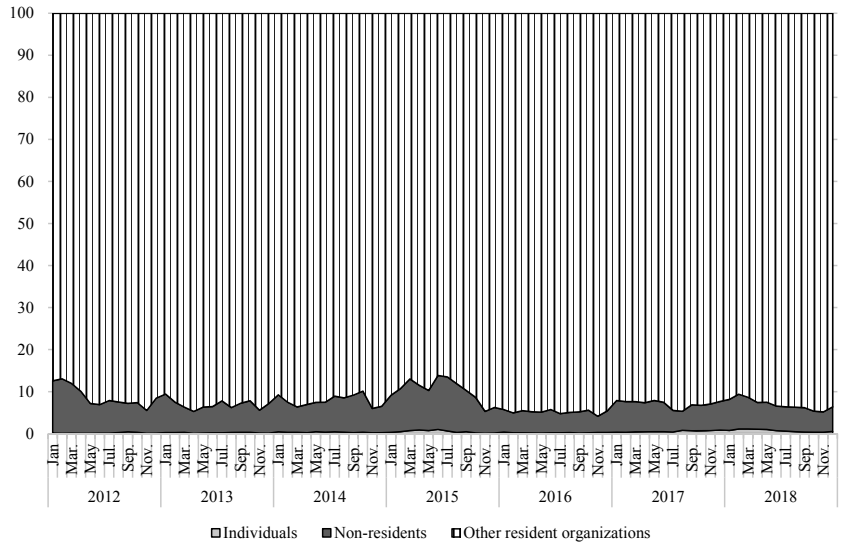


Fig. 35. Value of transactions involving bonds on Moscow Exchange, 2005–2018, RUB trillion

S*ource*: own calculations using data from the Moscow Exchange.

[1] More details are provided in the notes to *Fig. 22*.

As shown in *Fig. 36*, non-residents and domestic private investors make a relatively moderate contribution to exchange-traded transactions involving all categories of bonds (including in the money market). Furthermore, the proportion in the overall value of exchange-traded transactions involving bonds decreased from 0.7 percent in 2017 to 0.4 percent in 2018 for individuals and from 6.3 percent in 2017 to 5.9 percent in 2018 for non-residents. There is an exception to the rules – federal loan bonds (OFZ bonds) made up around a quarter of non-residents' investment[1].



Note. Due to changes in the contents of exchange-traded transactions information disclosed by the Moscow Exchange, the proportions of trading participants presented in the diagram are calculated since July 2018 by total of exchange-traded transactions and CCP-cleared transactions open to any counterparties.

Fig. 36. Breakdown of investors engaged in exchange-traded transactions involving bonds on Moscow Exchange, from January 2005 to January 2019, percent

Source: own calculations using data from the Moscow Exchange.

However, the above figures for bonds are largely incorrect when including repo transaction volumes, to which individuals and non-residents make a very moderate contribution. Perhaps, calculations that exclude the money market can count more on official figures showing that the proportion of individuals engaged in (exchange-traded and NTM) transactions involving bonds was up from 4.0 percent in 2017 (according to

[1] More details are provided in *Fig. 45*.

data from NAUFOR)[1] to 7.0 percent in 2018 (according to data from the Moscow Exchange)[2]. In 2017, OFZ-n bond placements for individuals took place. Some regions and companies also started offering their bonds to individuals. However, qualitative assessments have so far been moderate enough. More measures are needed in order to engage more individuals in the domestic market of debt funding instruments.

3.3.2. Nongovernment bond market

As of March 1, 2019, 412 corporate bonds of 181 bond issuers were listed on the Moscow Exchange. Like the stock market, this exchange-traded market segment is a highly concentrated market. As shown in *Fig. 37* and in *Table 11,* the primary corporate bond market is a highly concentrated market. In 2018, 10 and 20 largest bond issuers accounted for 58.5 percent and 78.8 percent, respectively, of the overall volume of all corporate bond issuances. The above figures are very close to those for the stock market – 66.8 percent and 80.6 percent, respectively, (see *Fig. 24*) – however, there is a big difference in the list of issuers.

The proportion of top-10 and top-20 corporate bond issuers saw a marginal decline in 10 years after the crisis – from 66.5 percent and 83.4 percent, respectively, in 2009 to 58.5 percent and 78.8 percent, respectively, in 2018.

High level of concentration of corporate bond issuers suggests that the MOEX market has not yet become a mechanism to facilitate public offering for a wide range of companies, including SMEs.

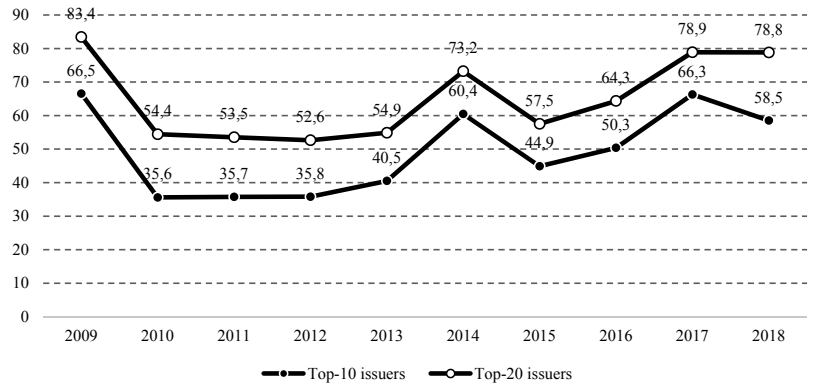


Fig. 37. Proportion of 10 and 20 largest issuers in ruble-denominated corporate bond issuances, percent

[1] NAUFOR. Russia's Stock Market: 2017. Events and Facts. Available at: URL: https://naufor.ru/download/pdf/factbook/ru/RFR2017.pdf

[2] The Moscow Exchange Press Release of February 4, 2019. Available at: URL: https://www.moex.com/n22490/?nt=106

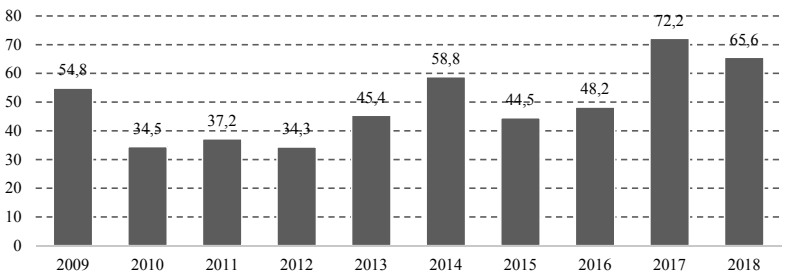
Table 11

Ten largest corporate bond issuers and their proportion in overall value of corporate bond issuances

	Issuers	2016			Issuers	2017			Issuers	2018	
		RUB billion	percent			RUB billion	percent			RUB billion	percent
1	PAO NK Rosneft	650	26.7	1	PAO NK Rosneft	1 051	36.8	1	PAO Sberbank	301	17.9
2	OAO Russian Railways	100	4.1	2	VEB.RF State Corporation for Development	126	4.4	2	OOO DOM.RF Ipotechny Agent	137	8.2
3	AO Otkrytie Holding	90	3.7	3	Peresvet Bank (AO)	125	4.4	3	OAO Russian Railways	85	5.1
4	PAO Transneft	77	3.2	4	Ipotechny Agent Fabrika ITSB	109	3.8	4	AO Russian Agricultural Bank	78	4.7
5	PAO ANK Bashneft	55	2.3	5	PAO Transneft	107	3.8	5	OOO Zhiloi Microraion	76	4.6
6	Vnesheconombank	55	2.2	6	OOO O1 Group Finance	88	3.1	6	PAO NK Rosneft	70	4.2
7	PAO Sberbank	51	2.1	7	OAO Russian Railways	85	3.0	7	Gazprombank (AO)	67	4.0
8	PAO Gazprom Neft	50	2.1	8	PAO Gazprom Neft	70	2.5	8	VTB Bank (PAO)	59	3.5
9	OOO Digital Invest	50	2.1	9	Gazprombank (AO)	65	2.3	9	AO DOM.RF	55	3.3
10	OOO Region Invest	50	2.1	10	AO Otkrytie Holding	65	2.3	10	Russian Highways State Company (Avtodor)	52	3.1
	Capitalization of all corporate bond issuances	**2439**	**100**		**Capitalization of all corporate bond issuances**	2 852	**100**		**Capitalization of all corporate bond issuances**	1 674	**100**
	Capitalization of top-10 corporate bond issuers	**1228**	**50.3**		**Capitalization of top-10 corporate bond issuers**	**1890**	**66.3**		**Capitalization of top-10 corporate bond issuers**	**979**	**58.5**

Source: own calculations using data from CBonds.

The proportion of largest companies wholly or partially owned by the government (GWPO companies) in top-20 corporate bond issuances increased in recent decade from 54.8 percent to 65.6 percent in 2018 (see *Fig. 38*). Furthermore, the proportion of GWPO companies in 2018 dropped marginally from the 2017's 72.2 percent because of the decline in NK Rosneft's corporate borrowings. The foregoing data give evidence that the exchange-traded corporate bond market is broadly used for reallocating credit resources in the market in favor of largest state-run companies.



Note. The data on GWPO companies' proportion in 2018 are preliminary data.

Fig. 38. Proportion of largest GWPO companies in top-20 ruble-denominated corporate bond issuances, percent

Source: own calculations using data from Cbonds.ru.

Markets for underwriting and advisory services are faced with weak competition when it comes to corporate and regional bond placement, as evidenced by the Herfindahl-Hirschman index (HHI) (see *Fig. 39*). Since 2009, a highly competitive market of investment-banking services covering transactions involving corporate bonds had become a moderately concentrated market, with the monthly HHI varying within 800–1800. In 2018, the HHI for the market segment of services covering corporate bonds stood at 1206. Since 2011, the market of services covering regional bond issuances varied within a range of a moderate market and a highly concentrated market. In 2018, the market fit the definition of highly concentrated market (HHI=2534). Both indices increased from 2017, suggesting that the above services are increasingly monopolized in the market.

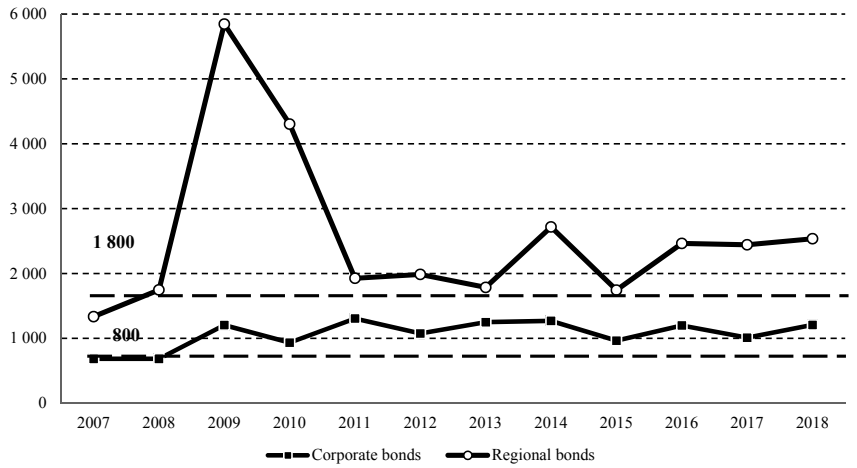


Fig. 39. Herfindahl-Hirschman index: bond issuance services for ruble-denominated corporate and regional bonds, 2007–2018

Source: own calculations using data from rankings of bond placement organizers available on CBonds.ru for 2007–2018.

2018 was the worst year in terms of investment banks' bond placement yield in Russia in recent 16 years, according to data from Refiniti agency. Banks' fee revenues stood at around USD 170 million, one-half of what they were a year earlier[1].

It was not until 2016 that Russian companies started returning actively back to the Eurobond market since sector-specific sanctions were imposed in July 2014. Russian companies raised USD 12.7 billion in 2016, USD 20.5 billion in 2017 and USD 10.9 billion in 2018 through Eurobonds, 4.8 percent less than what they raised a year earlier. In 2018, Russian companies' foreign borrowing plans were disrupted amid

[1] Gaidaev V. Commissions lack capital. Kommersant, January 15, 2019.

expectations of U.S. sanctions (since April 2018) aiming to restrict fundraising by Russia and Russian largest state-run companies and banks. The foregoing affected global investors' behavior although the sanctions had not yet been enacted in the United States.

In 2018, ruble-denominated corporate bonds were worth USD 190.9 billion, Eurobonds stood at USD 109.4 billion versus previous year's USD 195.9 billion and USD 132.5 billion, respectively (see *Fig. 40*). However, Russian companies' Eurobonds lost 39.8 percent in value – from USD 181.8 billion in 2013 to USD 109.4 billion in 2016 – after the increase in geopolitical risks since 2014. Russian domestic corporate bonds appreciated 17.0 percent in dollar terms, from USD 163.1 billion to USD 190.9 billion during the same period of time.

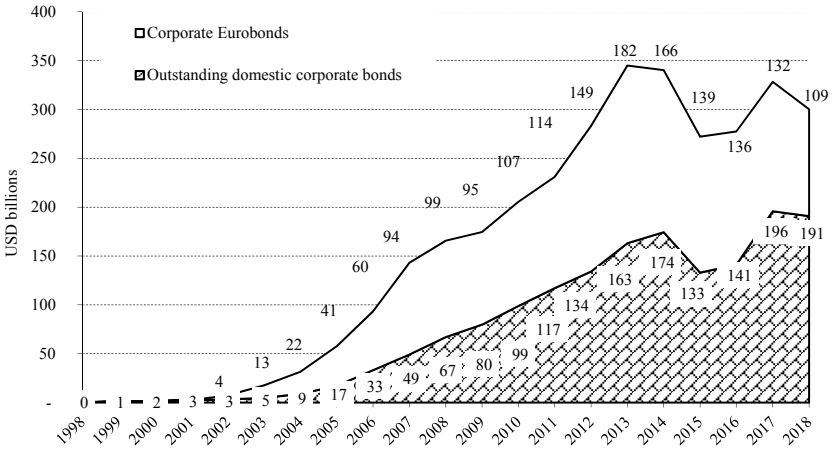


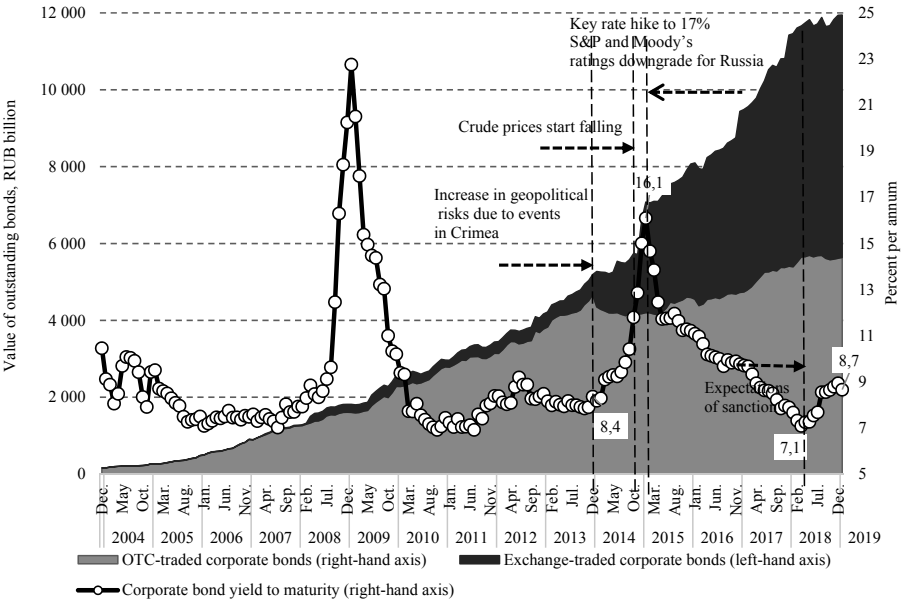
Fig. 40. Volumes of outstanding Russian corporate bonds, USD billions

Source: own calculations using data from CBonds.ru and Moscow Exchange.

Amendments to Russia's securities act came into force on October 16, 2018, whereby companies can issue so-called structural bonds with payments being subject to pre-agreed events and terms.

The average yield to maturity on ruble-denominated corporate bonds composing the IFX-Cbonds portfolio increased from 7.1 percent per annum in February 2018 to 8.7 percent per annum in December 2018 under the influence of the geopolitical risk factor and extension of sanctions in August 2018 (see *Fig. 41*).

That said, the growth in the corporate bond market since 2014 was driven by increase in OTC-traded bonds that are not quoted on the exchange. The proportion of exchange-traded ruble-denominated corporate bonds in their overall capitalization dropped to 47.2 percent in 2018 versus 50.1 percent in 2016.



* IFX-Cbonds portfolio yield to maturity (YTM).

Fig. 41. Value of outstanding ruble-denominated corporate bonds and IFX-Cbonds portfolio's yield to maturity, from December 2003 to January 2019

Source: own calculations using data from CBonds.ru

The domestic corporate bond market experienced two shocks in the period between July 2003 and December 2018, as shown in *Fig. 42*. The first shock occurred in February 2009, when the FX-Cbonds portfolio's effective yield increased to 24.8 percent per annum and the portfolio duration subsequently dropped to 0.8-year. The second shock took place late in December 2014, when the IFX-Cbonds portfolio's average yield reached 17.0 percent per annum, with a 0.7-year decline in the portfolio duration. The 2014 shock was spurred largely by sector-specific sanctions imposed in July 2014 and plummeting crude prices since September 2014.

The domestic bond market was largely stabilized since H2 2015 through monetary authorities' efforts. The IFX-Cbonds portfolio's effective yield slid to 7.24 percent per annum, while the portfolio duration was up 2.82 years, early in April 2018. The above parameters outperformed substantially those seen on December 30, 2013, when the portfolio's yield stood at 8.39 percent per annum, with a 1.99-year duration. However, from April to December 2018, interest rates on corporate debt resumed their growth, and the given indicator for corporate bond yield was up to 8.9 percent as of end-December 2018. In addition, the debt duration increased up to 3.14 years.

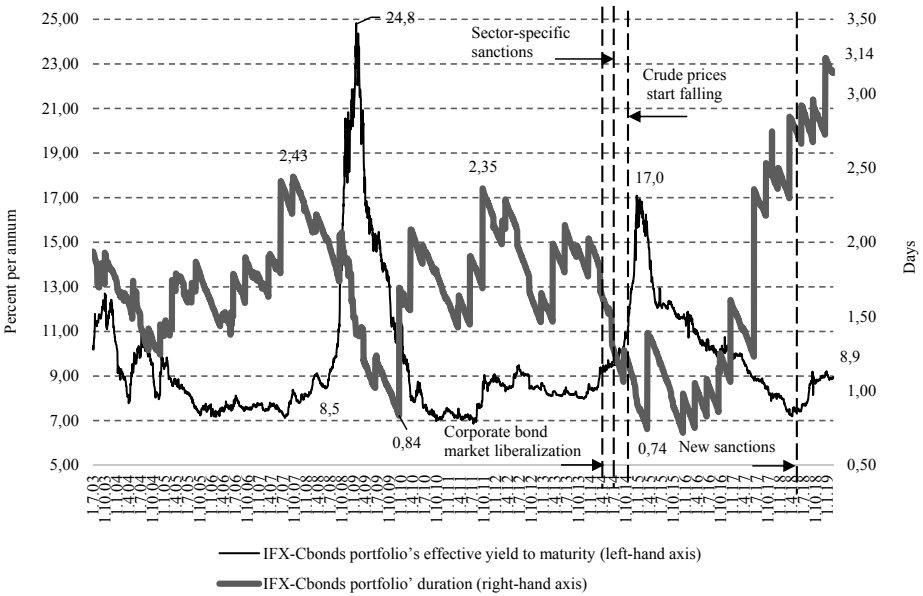


Fig. 42. Effective yield to maturity and duration of IFX-Cbonds portfolio, from July 01, 2003 to February 15, 2019

Source: own calculations using data from the Moscow Exchange, Bloomberg and CBonds.ru

Therefore, a relatively stable domestic bond market in 2018 was faced with alarming trends towards slim demand for corporate and government bond placement, non-residents' exit from the OFZ bond market in particular, rise in borrowing costs, high risk parameters amid a moderate yield rate, compared to indices of other countries.

An important criterion for the corporate bond market performance measurement is to what extent it contributes to facilitating investment in real sector companies and in the banking system. Rosstat published information, based on a business survey of corporate bond issuers, about how Russian companies invest their bonded debt in fixed capital formation. According to data from Rosstat, it appears that companies spent only a small amount of their bonded debt on fixed capital formation in the period between 2000 and 2015.

In 2015, fixed investment stood at USD 2.6 billion, or merely 6.6 percent of the total funds raised (USD 26 billion) through bonds (see *Table 12*). The above statistics lead to a conclusion that the corporate bond market had no significant influence on fixed investment and economy's growth. As noted above, corporate bonds are, in fact, a too short-term source of funding, so companies tend to use them for working capital formation and for debt refinancing.

In 2016, Rosstat stopped releasing data on the contribution of bonds as a source of fixed capital formation, which is likely a proof of the fact that the equity market has an insignificant effect on the investment size. This, however, does not rules out the problem of properly spending funds raised through corporate bonds to finance real investment and fixed investment. In dollar terms, the volume of ruble-denominated corporate bond issuances in 2018 was USD 26 billion, the smallest volume after the 2008 crisis, when bond issuances reached USD 16 billion.

Table 12

Parameters of domestic ruble-denominated corporate bond market (USD billion)

	Outstanding bonds volume	Secondary market, including repos	Bond placements	Fixed investment through bond issuance		
				USD billion	as a percent of capitalization	as a percent of total bond issuance value
2000	2	0.2	1.1			
2001	3	1	0.8			
2002	3	2	2	0.1	3.0	6.7
2003	5	8	3	0.1	2.1	3.8
2004	9	15	5	0.1	1.1	2.0
2005	17	44	9	0.3	1.8	3.3
2006	33	135	17	0.1	0.3	0.6
2007	49	371	18	0.2	0.4	1.1
2008	67	457	16	0.2	0.3	1.2
2009	80	293	29	0.1	0.1	0.3
2010	99	757	28	0.03	0.03	0.1
2011	117	1237	31	0.014	0.01	0.05
2012	134	1866	39	0.14	0.1	0.4
2013	163	2839	54	0.05	0.03	0.1
2014	174	2032	46	0.2	0.1	0.4
2015	133	1277	29	2.6	1.9	6.6
2016	141	1895	35	n/a	n/a	n/a
2017	196	2732	49	n/a	n/a	n/a
2018	191	2064	26	n/a	n/a	n/a

Source: own calculations using data from the Moscow Exchange, CBonds.ru, the Bank of Russia and Rosstat.

Therefore, the domestic corporate bond market remained stable in 2018 although it lost somehow its previous years' momentum. The issuance volume of both ruble-denominated corporate bonds and Eurobonds decreased, and borrowing costs surged about 1.6 percent point. Growth prospects for this equity market segment are largely linked to the extent to which local sources for growth through institutional investment and private savings will be created as well as foreign investment drain will be reined in down the road.

3.3.3. Government bond market

In 2018, like in 2017, the volume of the Finance Ministry's borrowings through government securities outpaced the volume of redeemed bonds, which made these debt instruments a real source of fiscal deficit financing. Net borrowings nearly halved from RUB 1270 billion in 2017 to RUB 670 billion in 2018.

The evolution of the OFZ bond structure was largely determined by the Finance Ministry's debt policy priorities and by various categories of investors. A study of Lu Y.,

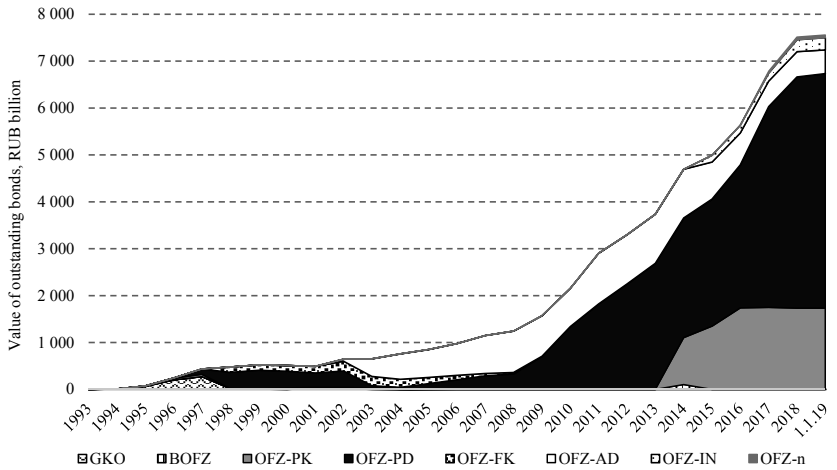
Yakovlev D. (2017)[1] defines three stages in the OFZ bond market evolution: the period until the 2008 crisis, the period from 2009 to mid-2011 and the period after mid-2011. In the period until the 2008 financial crisis, the government ran a budget surplus and therefore was not interested all that much in growth in the OFZ bond market. In that context, key sources of demand for government bonds were pension savings and banks' funds that were broadly raised using the carry trade strategy. The proportion of non-residents remained low, including basically speculative funds. Accordingly, the majority of government bond issuances were represented by OFZ-AD bonds with their parameters suitable for pension funds and OFZ-PD bonds that are rather targeted to market investors because the value of all coupons is constant and known to be as such beforehand until maturity. Less marketable OFZ-FK bonds that were used for local debt novation after the default on GKO gradually lost their relevance. In 2008, OFZ-AD, OFZ-PD and OFZ-FK bonds accounted for 70.9 percent, 26.4 percent and 2.7 percent, respectively, of government securities (see *Fig. 43*).

From 2009 until mid-2011, the Finance Ministry was interested in raising funds for fiscal deficit financing through OFZ-PD bonds that were targeted to banks with excessive liquidity. In addition, a small premium to the market of 5–10 basis point was offered when new bonds were placed[2]. Non-residents' demand for OFZ bonds was restricted due to uncertainty about the key rate. By 2011, the proportion of OFZ-AD bonds dropped to 62.8 percent, whereas the proportion of OFZ-PD bonds increased to 62.8 percent.

Since mid-2011 till now, the OFZ bond market underwent many significant changes that contributed to increasing the significance of the government securities markets and had an effect on the market structure. Key changes took place when non-residents became principal providers of liquidity in the OFZ bond market since early in 2012[3]. Non-residents' elevated demand for OFZ-PD and OFZ-PK bonds (since 2015) led to further contraction of the proportion of OFZ-AD bonds. The contraction was also spurred by a pension savings freeze (2014–2020) that trimmed pension funds' demand for OFZ-AD bonds. The decline in the proportion of OFZ-AD bonds was also good for the Finance Ministry: in 2016, the Ministry replaced OFZ-AD bonds with a nominal value of RUB 63.7 billion by OFZ-PD bonds with a nominal value of RUB 56.4 billion, thus bringing in a considerable amount of revenues to the federal budget. At the same time, inflation-indexed OFZ-IN bonds were introduced in the market in 2015 and were in high demand on the part of domestic institutional investors, and OFZ-n bonds with a focus on individuals were introduced on April 26, 2017. As a result, as of January 01, 2019, federal loan bonds with constant coupon income (OFZ-PD bonds) and variable coupon federal loan bonds (OFZ-PK bonds) made up the majority – 66.2 percent and 22.9 percent, respectively – of OFZ bond issues. Debt amortization

[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] Ibid., p. 10.
[3] Ibid., p. 14.

federal loan bonds (OFZ-AD bonds), inflation-indexed federal loan bonds (OFZ-IN bonds) and OFZ-n bonds for individuals accounted for 6.7 percent, 3.4 percent and 0.7 percent, respectively.



Note. The following are the abbreviations that are used hereinafter:
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 – inflation-indexed federal loan bonds;
OFZ-PD – constant coupon federal loan bonds;
OFZ-PK – variable coupon federal loan bonds linked to the Ruble Overnight Index Average (RUONIA);
OFZ-n – federal loan bonds for individuals ("people's bonds").

Fig. 43. Volume of outstanding GKO-OFZ bonds, from 1993 to March 2018, RUB billion

Source: own calculations using data from Russia's Finance Ministry.

An important event was growth in OFZ-n bonds (also known as "people's" bonds) that reached RUB 56.6 billion from April 2017 to January 2019. According to the Finance Ministry, the bonds are meant to be an instrument to engage individuals in the financial market. Bond sales agents are banks, namely Sberbank of Russia and VTB. Furthermore, the Finance Ministry weighs the possibility of covering sellers' costs from the budget so that individuals pay no fees when buying the bonds[1]. Elevated inflationary expectations late in 2018 prompted the Finance Ministry to increase issues of inflation-indexed OFZ-IN bonds.

[1] Goryacheva V. Resident's collateral. Kommersant, March 4, 2019.

A key issue facing the OFZ bonds investment appeal is whether the portfolio' yield to maturity can outpace the inflation rate. Positive changes, such as decline in inflation and stabilized ruble exchange rate, allowed the OFZ Cbonds-GBI portfolio to bring back a positive real yield in March 2016 to December 2018.

In December 2018, the OFZ Cbonds-GBI portfolio' yield to maturity stood at 8.53 percent per annum, with a 4.3 percent CPI annual inflation. However, due to a 101.0 percent upsurge of inflation in January 2019 relative to December 2018, the annualized CPI was temporarily up to 12.8 percent,[1] with a 8.10 percent yield on OFZ bonds (see *Fig. 44*).

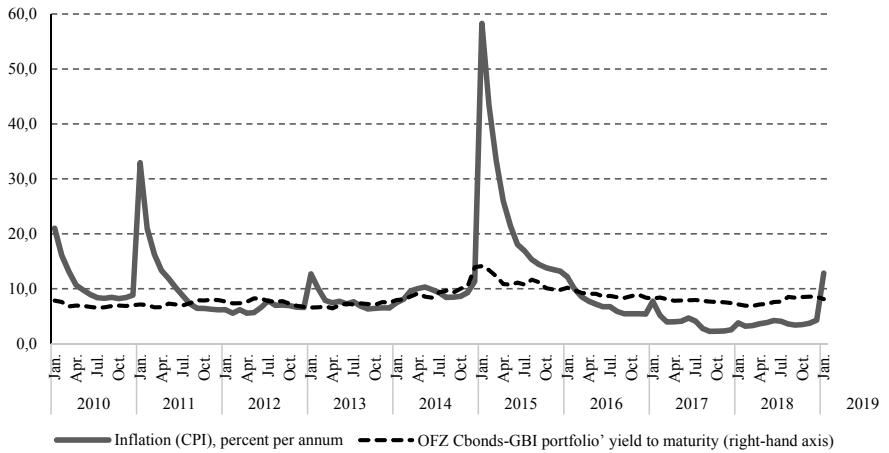


Fig. 44. Inflation and OFZ Cbonds-GBI portfolio's yield to maturity, from January 11, 2010 to January 31, 2019

Source: own calculations using data from Rosstat and CBonds.ru

Despite a complex geopolitical and macroeconomic environment, the government securities market continued to gain momentum and started playing a more important part in financing the fiscal deficit. The Russian government and the Bank of Russia managed to stabilize the foreign exchange market and the financial market over the past 3.5 years. In early 2019, the yield parameters for the OFZ bond market and the Russian Eurobond market complied more or less with the late-2013 parameters.

The opening of nominee accounts (with the central depository) for foreign clearance and settlement organizations in February 2013 encouraged an influx of foreign

[1] In contrast to a regular indicator for inflation, the annualized indicator, as calculated by the linking method on a month-to-month basis, describes the expected rate of inflation for the current year if the inflation rate that was reached in the final fiscal month of the year (in January 2019, for this case) continues. The actual rate of inflation stood at 5.0% year-on-year in January 2019, according to data from Rosstat.

investments into the internal sovereign debt market. The proportion of non-residents in the secondary OFZ bond market increased from 6.5 percent in July 2012 to 28.1 percent in May 2013 (see *Fig. 45*)[1].

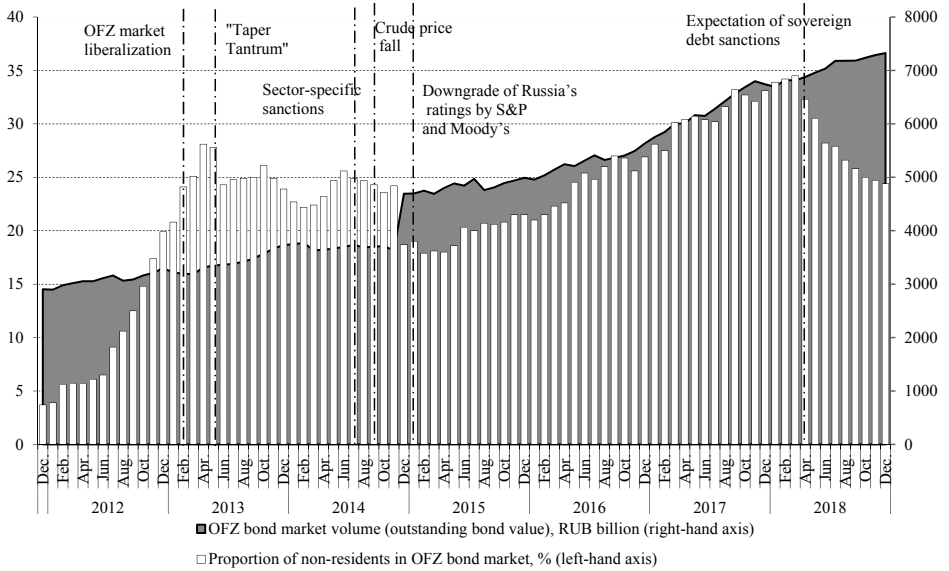


Fig. 45. Proportion of non-residents in OFZ bond market, from February 2012 to December 2018

Source: own calculations using data from the Bank of Russia and Moscow Exchange.

The proportion of non-residents saw a marginal decline since May 2013 to 24.9 percent in December 2013, driven by developments in the global financial market that were related to capital drain from emerging market economies after the U.S. Federal Reserve announced it was raising the key interest rate. A spate of events took place in 2014 to January 2015 that had an adverse effect on the Russian financial market: elevated geopolitical risks due to events in Crimea, the imposition of sector-specific sanctions in July 2014, the crude market collapse since September 2014, devaluation of the Russian ruble, the downgrade of Russia's sovereign rating by S&P on January 25, 2015 and by Moody's on February 20, 2015 and on January 26, 2015. As a result, the proportion of non-residents engaged in transactions involving OFZ bonds

[1] Based on expert evaluation, one cannot rule out the fact that prior to the OFZ bond market liberalization in February 2013 the actual proportion of OFZ bonds held by non-residents was bigger than 6.5%, as was officially reported. The problem lies in that prior to opening Clearstream and Euroclear correspondent securities accounts with the National Settlement Depository, the depository accounting system that was in place at that time did not allow for disclosing information about non-residents' investment in OFZ bonds through banks' depositories that provided foreign investment services.

dropped to 18.7 percent in January 2015. Russia's monetary authorities introduced measures to stabilize the financial and foreign exchange markets, which helped bring non-residents back to the domestic OFZ bond market. As a result, the proportion of non-residents in March 2018 increased to 34.5 percent. However, non-residents started pulling out of the OFZ bond market after statements were made about possible sanctions in April 2018 that were supposed to restrict buying of Russian government bonds. As of December 2018, the proportion of non-residents dropped to 24.7 percent[1]. In addition, as noted above, the expected restriction on purchasing Russian government securities by foreign investors had not been enacted as yet.

In this context, further prospects of growth in the domestic OFZ bond market will rely largely on successful resolution of the problem of luring domestic institutional investors and, in part, individuals to the OFZ spot market.

3.3.4. Market for units/shares held by exchange-traded funds

Attempts have been made since 2003 on the Moscow Exchange to launch an exchange-traded market for trading in units/shares held by exchange-traded funds that is similar to the successful foreign organized market for Exchange-Traded Funds (ETFs)[2]. Over the past 16 years, however, this MOEX market segment has not acquired any significance as yet, with merely RUB 12.7 billion of the 2018 overall volume of trading in units held by exchange-traded funds, which is 0.004 percent of the overall volume of trading in stocks and bonds (see *Fig. 46*). The downturn of this market segment after 2014 was due to common liquidity problems facing the exchange-traded market as well as Bank of Russia's tighter supervision over manipulations of stock-exchange quotations for units held by closed-end funds. Only 14 out of 105 ETFs eligible for listing on the exchange in 2008 were traded in December 2008, including two exchange-traded unit funds. In addition, according to recent available data from the Bank of Russia, the overall number of closed-end funds stood at 1109 and the number of open-end and interval funds was 357, as of June 30, 2018[3]. Unsuccessful attempts to establish the exchange-traded market for units held by ETFs, particularly closed-end funds with an overall net asset value of RUB 2.8 trillion, poses a material risk to their investors because the secondary market is the only possible way for closed-end funds' investors to early pull out their money.

The key difference between the MOEX exchange-traded collective-investment market project and more successful similar projects on the New York Stock Exchange, Nasdaq Stock Market, Euronext, London Stock Exchange and many other exchanges lies in attempting to include units held by classic open-end and closed-end funds in the

[1] Bank of Russia. Financial Stability Review in Q2-3 2018, No. 2(13).

[2] The market for units/shares held by ETFs became the principal market in terms of volumes of traded financial instruments on a few global stock exchanges, including, for example, NASDAQ.

[3] Bank of Russia. Review of Key Indicators of Unit Investment Funds and Joint-stock Investment Funds. Information and analytics. Q2 2018. Available at URL: https://www.cbr.ru/Content/ Document/ File/62919/review_paif_18Q2.pdf

basket of exchange-traded instruments, whereas in other countries, listed units/shares held by exchange-traded funds are governed by special regulations that cover specific risks of listing such financial instruments[1]. The same applies to special types of investment funds, such as exchange traded funds (ETFs) and real estate investment trusts (REITs). It was not until 2018 that exchange traded funds (ETFs) governed by Russian laws and regulations kicked off for the first time as part of pilot projects of asset managers, such as Sberbank Asset Management and Alfa Capital[2]. No legal framework has so far been established in Russia for funds, such as REITs, which sets back in many ways the development of a modern market for units/shares held by closed-end funds.

The Moscow Exchange runs since 2015 a market for trading in units/shares held by Ireland-registered ETFs managed by FinEx Investment Management LLP, and Luxembourg ETFs managed by Fuchs Asset Management. The exchange-traded market for trading in the above financial instruments somewhat outperforms volumes of transactions involving units held by exchange-traded funds, however, in 2018 this exchange-traded market segment also experienced a hard downturn, and the question of establishing a liquid exchange-traded market for trading in these instruments remains open (see *Fig. 46*).

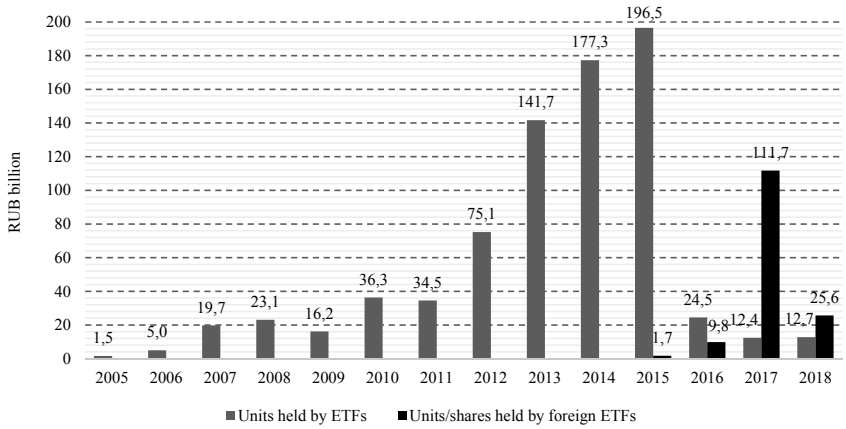


Fig. 46. Volumes of exchange-traded transactions involving units held by exchange-traded funds and units/shares held by foreign exchange-traded funds on Moscow Exchange, 2005–2018, RUB billion

Source: own calculations using data from the Moscow Exchange.

[1] More details can be found in Part 1, Economics of Investment Funds /A.E. Abramov, K.S. Akshantseva, M.I. Chernova, D.A. Loginova, D.V. Novikov, A.D. Radygin, Y.V. Sivai: under general editorship of A.D. Radygin. – M.: Delo Publishing House RANEPA, 2015.
[2] Gaidayev V. Foreign currency move to ETFs. Kommersant, November 15, 2018.

3.4. FORTS market

The recent years' negative trend towards decline in the FORTS market volume was reversed in 2018. The volume of exchange-traded futures increased 6.1 percent from RUB 77.6 trillion in 2017 to RUB 82.4 trillion in 2018; the volume of options contracts remained nearly unchanged (RUB 6.9 trillion) over the same period of time. In 2017, the futures market fell 29.1 percent, while the options market rose 18.9 percent year-on-year. The growth in the futures market in 2018 was spurred by a 312 percent increase in volumes of market contracts involving equity instruments and by a 28.5 percent rise in volumes of commodity futures. Trading in Light Sweet Crude Oil futures and in US500 index futures kicked off on the Moscow Exchange in 2018. However, trading volumes in 2018 did not reach the 2016 peak volumes. The growth in this financial market segment was hampered by a lack of major domestic institutional investors as well as because foreign portfolio investors pulled out of Russian investment assets.

The FORTS market in 2018 was driven, first of all, by the introduction of new financial instruments, such as oil, gold and S&P500 index futures. In addition, there was growing demand for index futures as a hedging tool suited for market participants amid uncertainties arising from anticipation of sanctions that triggered foreign capital drain. Excessive volatility in global financial and commodity markets also contributed to higher demand for commodity and index futures. While there was significant increase in interest-rate risks in financial markets in 2018, no noticeable progress was achieved – nor was it achieved in previous years – in the sector of interest rate futures and options. Key headwinds to their development include a lack of reliable indicators for interbank market rates as well as major investors that would be prepared to take on interest rate risks. Despite the fact that many financial organizations and nonfinancial entities are in heavy need for hedging their contracts against interest rate rise, none of the market participants is prepared to buy the risks.

In the futures market, the proportion of transactions involving index instruments increased insignificantly from 21.1 percent in 2017 to 21.9 percent in December 2018 (see *Fig. 47*). Some months saw the proportion of such contracts in the overall FORTS market transaction volume soar when the domestic equity market was faced with elevated downturn risks due to sanctions. For example, the proportion reached 30.5 percent in February and 26.2 percent in October. The same period of time saw the proportion of commodity futures rise from 26.6 percent to 31.3 percent, foreign currency futures drop from 47.4 percent to 42.6 percent, and futures on some securities fall from 5.0 percent to 4.2 percent.

No major changes in terms of transaction volume took place in the MOEX options market during the year. The proportion of commodity options picked up from 3.0 percent to 7.2 percent, the proportion of FX options increased from 23.1 percent to 39.1 percent (see *Fig. 48*). FX options constitute a high-risk speculative instrument that was much of a replacement for market participants' fading interest in forex broker services because of tighter regulatory burden on their profession. However, the proportion of index options contracts dropped from 68.5 percent to 53.0 percent.

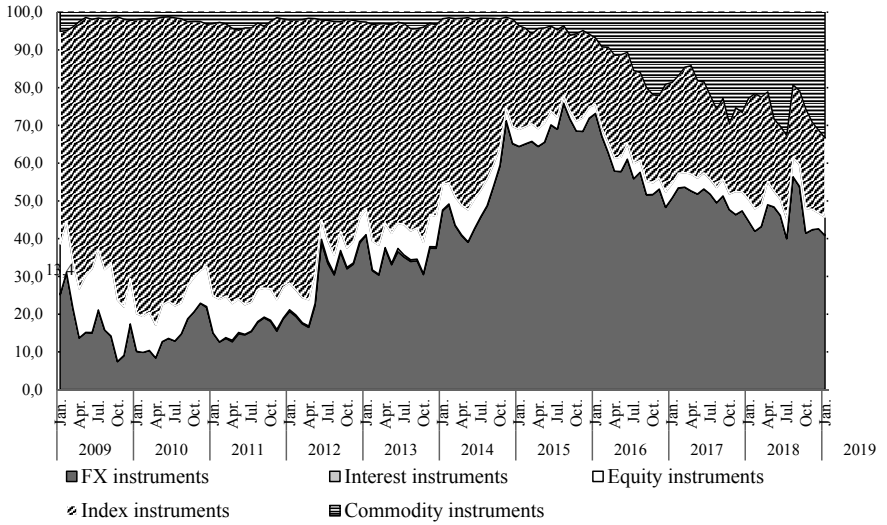


Fig. 47. Structure of MOEX futures market, from January 2009 to January 2019, as a percent of transactions value

Source: own calculations using data from the Moscow Exchange.

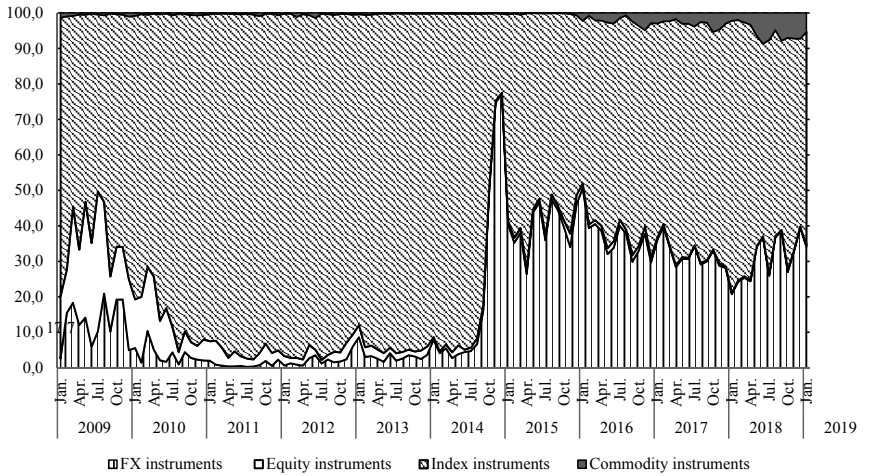


Fig. 48. Structure of MOEX options market, from January 2009 to March 2018, as a percent of transactions value

Source: own calculations using data from the Moscow Exchange.

3.5. Financial intermediaries and infrastructure

The number of professional equity market participants, including their professional licenses, continued to decline in 2018 (see *Fig. 49* and *Table 13*). The number of broker licenses decreased by 13.8 percent from 384 in 2017 to 331 in 2018, the number of dealer licenses fell 13.7 percent from 424 to 366, and the number of trust management licenses was down 17.2 percent from 279 to 231.

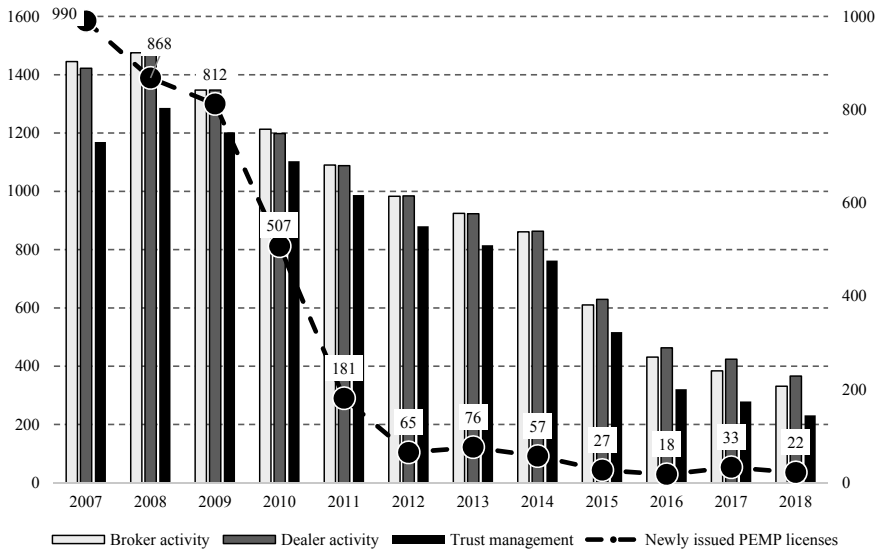


Fig. 49. Number of broker, dealer, trust management licenses (left-hand axis) and number of professional equity market participant licenses (right-hand axis) in 2007–2018

Source: own calculations using data from NAUFOR and the Bank of Russia.

The decrease in the number of PEMP licenses after the 2008 crisis was in large part triggered by the overall trend towards slowdown of the Russian economy and decline in the contribution to the economy by the equity market as a tool to facilitate and reallocate market investments. A reform of financial market regulation was undertaken, whereby a mega-regulator introduced – the Bank of Russia vested with powers, as of September 1, 2013, to exercise key functions, such as regulation and oversight over all the financial market segments. While the reform did not contribute much to a major *crackdown on* unreliable financial intermediaries in the equity market, it got the ball rolling. It follows from *Table 13* that in five years (2014–2018) since the mega-regulator

was introduced, the total number of cancelled broker licenses was 593 versus 551 licenses cancelled within 5 years between 2009 and 2013, that is, there was an increase of as little as 7.6 percent. At that time, the total number of cancelled dealer licenses increased 1.8 percent from 547 to 557, securities trust management licenses were up 24.0 percent from 471 to 584, with a 10.5 percent increase in the total number of the above three types of professional licenses from 1569 to 1734. The fact that most of the cancellations of the professional equity market participant (PEMP) license was initiated by license holders that quit the business suggests that the introduction of the mega-regulator ensured to a greater extent the consistency of reduction in the number of license holders.

Table 13

Number of broker, dealer, trust management licenses and number of newly issued professional equity market participant (PEMP) licenses in 2007–2018

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Broker licenses	1445	1475	1347	1213	1090	983	924	861	610	431	384	331
Dealer licenses	1422	1470	1347	1198	1088	984	923	863	629	463	424	366
Securities trust management licenses	1169	1286	1202	1103	987	880	815	762	517	321	279	231
New PEMP licenses issued (right-hand axis)*	990**	868	812	507	181	65	76	57	27	18	33	22

* Includes 4 types of activity, namely broker, dealer, securities trust management and depositary activities.
** According to data for 2006 from Russia's Federal Financial Markets Service (FFMS).
Source: own calculations using data from NAUFOR and the Bank of Russia.

A more serious problem is not so much cancellation of old PEMP licenses, most of which are cancelled by license holders, but a dramatic reduction in the number of new license issuances to financial organizations entering the market. According to available data, the introduction of mega-regulator led to a drastic reduction in market entries of new companies prepared to compete with existing market participants. The foregoing reveals the weakness of new market regulatory system that hampers competition through heavy administrative constraints to the entrance of new participants focusing on cutting edge fintech technologies. While 1641 various types of new licenses to conduct professional activities in securities market were issued in 2009–2013, as little as 157 (10.5 times less) licenses were issued in 2014–2018 since the mega-regulator was introduced.

Given a bounded inflow of new high-tech market players into the equity market, the broker services market remained a heavily concentrated market faced with competition constraints. The proportion of five largest brokers in the overall number of individual customers increased from 38.6 percent in 2008 to 57.2 percent in 2018, as the proportion of top-10 brokers rose from 49.9 percent to 70.5 percent (see *Table 14*).

During the same period of time, top-5 brokers saw an increase from 46.9 percent to 71.6 percent and top-10 brokers saw a rise from 62.9 percent to 90.2 percent in the

number of active customers (individuals who close at least a single transaction a month). In 2018, the proportion of top-5 and top-10 brokers in individual investment accounts was 84.6 percent and 94.4 percent, respectively.

Table 14

Proportion of 5 and 10 largest brokers in number of customer accounts, percent

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1. Proportion in total number of broker's customers, percent												
Top-5 brokers	41.6	38.6	63.4	59.3	60.8	62.2	62.3	61.0	58.8	59.1	58.3	57.2
Top-10 brokers	51.0	49.9	75.8	73.7	75.8	78.5	78.2	76.3	72.3	71.4	68.6	70.5
2. Proportion in number of active customers, percent												
Top-5 brokers	41.9	46.9	63.0	63.8	65.2	66.8	69.1	66.0	67.6	65.9	76.7	71.6
Top-10 brokers	57.9	62.9	80.1	81.7	83.2	84.1	85.8	80.0	79.9	76.5	88.5	90.2
3. Proportion in total number of personal investment accounts (PIA), percent												
Top-5 brokers									84.2	82.3	84.0	84.6
Top-10 brokers									91.2	92.2	95.9	94.4

Source: own calculations using data from the Moscow Exchange.

Unfortunately, the Moscow Exchange does not disclose (since July 1, 2018) data – citing Bank of Russia Regulation No. 4622-U of November 27, 2017 – that it used to disclosed since 2005. The data are suitable for measuring the proportion of every trading participant in the total volume of exchange-traded transactions involving stocks and bonds. Now that the data are no longer disclosed, it impossible to assess the level of competition between brokers in the stock-exchanged equity and bond markets. The measures that restrict disclosure of public information on competition indicators for trading participants can be considered as a negative signal about trading efficiency for private investors.

Given heavy concentration of broker business in largest banks and non-bank financial companies, the competitive struggle between such companies increased considerably in 2017–2018. In 2017, Tinkoff Bank launched a new innovative product for its customers engaged in the financial market. The product is a software application whereby private investors can easily obtain information and decide to buy stocks of Russian and foreign companies. The introduction of the product tilted drastically the balance of power between largest brokers (see *Fig. 50*). The partnership between Tinkoff Bank – which held no broker license until May 2018 – and BKS Broker allowed the latter to take the lead in terms of the number of customers in the market as of January 2018 and to leave multi-year leaders, such as Sberbank of Russia and VTB, trailing behind. At the same time, it took Tinkoff Bank, as a broker license holder, as little as few months to jump into top-3 companies in terms of the number of customers, while it took major brokers years to do the same. The foregoing developments prompted Sberbank of Russia and a few other market participants to double down on their efforts to acquire new customers. Sberbank, in particular, expanded considerably its branch network for private investors in the equity market. Without going into analyzing the quality of services, note that the above case is a good illustration of strong effect of "from-the-bottom" innovations on the competition and the performance of financial intermediaries. It was this effect that triggered the 2018 increase in the number of new individuals in the equity market.

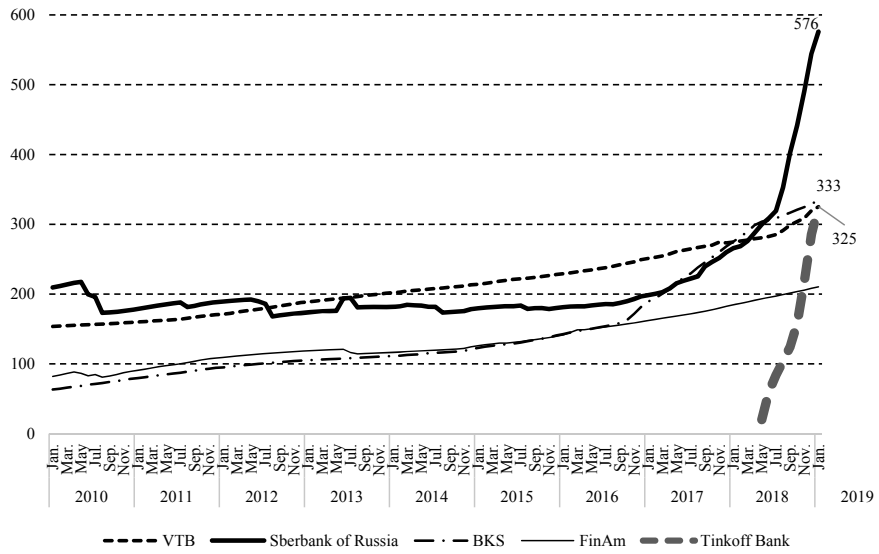


Fig. 50. Number of top-5 brokers' customer accounts

Source: own calculations using data from the Moscow Exchange.

In 2011, the MICEX stock exchange completed a merger deal with the RTS stock exchange, which had a positive impact on the Russian equity market. The deal simplified trading in the equity and FORTES markets. The merger helped concentrate all the liquidity on trading participants' accounts that is needed for transactions in the government securities market and the corporate securities market, as well as the FORTES market and the FX market within unified settlement and trading systems. The diversification of the unified stock exchange as to servicing transactions involving various cash and investment assets improved its financial soundness against a backdrop of overall decline in trading volumes on global stock exchanges and investors pulling out of risk-bearing assets.

Apart from positive changes, the RTS-MICEX merger had ambiguous effects on the domestic financial market. First and foremost, there is no more competition between the two stock exchanges, which used to be a strong driver for trading for the benefit of domestic investors and financial intermediaries.

The Moscow Exchange has an advantage over its global rivals because of diversification of its market segments. This type of business model, however, poses more risks, such as decline in market incentives to promote less marginal market segments, which currently can be witnessed in a smaller equity market's contribution to the overall trading turnover. The Moscow Exchange's structure underwent changes that were driven by factors, such as high exposure to risks and low returns on Russian securities, elevated volatility of the ruble exchange rate and financial assets, still high

level of banking system refinancing, the freeze on pension savings, and scarce sources of domestic savings. The capital market saw its proportion in the overall volume of exchange-traded transactions shrink from 13.2 percent in 2010 to 4.1 percent in January 2019 (see *Table 15*).

Table 15

Moscow Exchange structure, percent

	2010	2011	2012	2013	2014	2015	2016	2017	2018	Jan.19
Equity market	**13.2**	**10.3**	**6.5**	**5.2**	**3.6**	**3.0**	**2.8**	**4.0**	**4.7**	**4.1**
of which:										
Equities, Russian depositary receipts (RDR) and units	8.0	6.6	3.1	1.9	1.8	1.4	1.1	1.0	1.3	1.3
Bonds	5.2	3.7	3.4	3.3	1.9	1.6	1.7	3.0	3.5	2.9
Secondary trading	3.4	2.9	2.8	2.7	1.5	1.2	1.1	1.2	1.2	1.0
Equity market	1.8	0.8	0.6	0.6	0.3	0.4	0.6	1.7	2.3	1.9
Foreign exchange and money market	**72.0**	**70.6**	**80.0**	**84.3**	**85.6**	**83.3**	**83.6**	**86.5**	**84.8**	**85.7**
of which:										
Money market	33.9	41.3	48.3	50.7	45.7	38.0	44.8	47.3	44.3	46.7
Repos	31.5	38.3	45.8	44.8	32.0	26.4	34.8	38.3	36.0	37.8
Lending market	2.4	3.1	2.5	2.8	3.7	4.8	4.4	4.2	6.3	4.1
FX market	38.1	29.3	31.6	33.7	39.9	45.4	38.8	39.2	40.5	39.0
Spots	18.0	15.8	16.6	12.4	13.6	15.1	12.6	8.8	10.1	9.5
Swaps	20.1	13.4	15.0	21.3	26.3	30.3	26.2	30.3	30.4	29.5
FORTS market	**14.8**	**19.1**	**13.5**	**10.5**	**10.7**	**13.7**	**13.6**	**9.5**	**10.4**	**10.0**
Derivatives	**0.0**	**0.0**	**0.0**	**0.0003**	**0.0002**	**0.001**	**0.002**	**0.01**	**0.1**	**0.2**
Commodity market	**0.001**	**0.003**	**0.006**	**0.005**	**0.003**	**0.02**	**0.02**	**0.01**	**0.02**	**0.03**
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: own calculations using data from the Moscow Exchange.

In contrast, the proportion of the FX market and the money market increased from 72.0 percent in 2010 to 85.7 percent in January 2019. In addition, the period under review saw the proportion of the FX market and the money market rise from 38.1 percent to 39.0 percent and from 33.9 percent to 46.7 percent, respectively. An unstable ruble exchange rate and granting private customers of brokers and banks access to the FX market contributed to the growth in the FX market segment. The growth in the money market segment was driven by cash liquidity in banks and accelerated growth in CCP-cleared repo transactions. From January 2010 to January 2019, the proportion of transactions involving derivatives in total trading volume fell from 14.8 percent in 2010 to 10.0 percent in 2018. However, no success has yet been achieved in launching a liquid interest rate derivatives market.

The merger of the two stock exchanges helped establish a central depository on the basis of the MICEX Clearing House, National Depository Center (NDC) and Depository Clearing Company (DCC) settlement depositories. The central depository status was granted to ZAO National Settlement Depository (NSD), a Russian non-bank financial institution, under executive order No. 12-2761/PZ-I issued on November 6, 2012 by Russia's Federal Financial Markets Service (FFMS). The value of securities safekept at the NSD appreciated by 14.2 percent from RUB 39.4 trillion in 2017 to RUB 45.0 trillion in 2018.

The National Clearing Center (NCC) is another Moscow Exchange's subsidiary. The NCC provides clearing services in the equity market since November 2011 and in the

FORTS market since December 2012. The Bank of Russia recognized ZAO National Clearing Center as the sole qualified central counterparty in October 2013. The NCC's mission is to provide market participants with integrated clearing services in various financial market segments, including a unified collateral and unified positions of participants when providing them with services on all the MOEX exchange-traded markets and OTC markets.

Table 16 presents drastic changes in the structure of PAO Moscow Exchange. Following the merger in 2011, the Bank of Russia and some other government related entities owned collectively a 59.0 percent equity interest in the Moscow Exchange, with the remainder (41.0 percent) held by Russian trading participants and other residents. In 2018, non-residents increased their interest to 56.4 percent, while government related entities held an equity stake of 43.4 percent. That said, the main problem with the MOEX ownership structure is a lack of private Russian financial intermediaries that are major contributors to the turnover of transactions involving financial instruments on the Moscow Exchange.

Table 16

Shareholders breakdown on Russian stock exchanges before and after merger

	Prior to merger as of 2011		After merger as of February 1, 2012	2013	2014	2015	2016	2017	2018
	OAO RTS	ZAO MICEX							
Government – total	0.0	64.0	59.0	64.5	51.0	53.4	44.3	43.1	43.4
of which:									
Bank of Russia	0.0	28.6	24.3	24.7	12.1	11.8	11.8	11.8	11.8
Sberbank of Russia	10*	7.5	10.4	9.8	10.0	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	8.4
Non-residents	0.0	0.0	0.0	14.9	25.9	36.0	52.3	56.5	56.4
Residents – private persons	90.0	36.0	41.0	20.6	23.2	10.6	3.4	0.4	0.2
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

* ZAO IK Troika Dialog acquired by Sberbank of Russia.

Source: own calculations using open source data. The data for an equity interest held by the Bank of Russia, Sberbank of Russia and Vnesheconombank were provided in recent years' Moscow Exchange reports; the data for an equity interest held by the government and non-residents in 2013–2017 were provided by Bloomberg; the data on an interest held by OAO RTS market participants were provided in RTS's reports.

According to the data presented in *Table 17,* what's typically unique for the Moscow Exchange is that the largest national stock exchange is distinguished from world's largest stock exchanges by lacking private financial organizations in its ownership structure. Private entities' (referred to as 'Others' in the Table below) equity stake in the Moscow Exchange is next to none, whereas the state holds the biggest interest, compared to the stock exchanges presented in the Table. Such a unique MOEX ownership structure poses competition risks to not only the Moscow Exchange, but also private financial intermediaries that cannot influence MOEX strategic issues and infrastructure as well as the size of transaction costs.

Table 17

World's stock exchanges ownership structure in 2017, percent

Country	Exchange	Government	Non-residents	Others
Australia	ASX LTD	2.4	56.8	40.8
Argentina	BOLSA Y MERCADOS ARGENTINOS	0.0	74.3	25.7
Brazil	B3 SA-BRASIL BOLSA BALCAO	1.3	75.2	23.6
U.K.	LONDON STOCK EXCHANGE GROUP	1.3	62.9	35.9
Germany	DEUTSCHE BOERSE AG	0.1	93.2	6.7
Hong Kong	HONG KONG EXCHANGES & CLEAR	21.8	72.8	5.5
Greece	HELLENIC EXCHANGES - ATHENS	0.0	86.4	13.6
India	BSE LTD	16.8	63.7	19.5
Canada	TMX GROUP LTD	0.1	30.1	69.8
Kenya	NAIROBI SECURITIES EXCHANGE	0.0	93.8	93.8
Columbia	BOLSA DE VALORES DE COLOMBIA	0.0	61.3	38.7
Malaysia	BURSA MALAYSIA BHD	28.0	65.6	6.4
Mexico	BOLSA MEXICANA DE VALORES SA	0.0	98.6	1.4
UAE	DUBAI FINANCUAL MARKET PJSC	0.0	1.6	98.4
Pakistan	PAKISTAN STOCK EXCHANGE LTD	0.0	0.0	100.0
Poland	WARSAW STOCK EXCHANGE	0.0	33.4	66.6
Russia	**Moscow Exchange**	**43.1**	**56.5**	**0.4**
Romania	BURSA DE VALORI BUCURESTI SA	0.0	73.8	26.2
Singapore	SINGAPORE EXCHANGE LTD	1.3	38.8	59.9
U.S.A.	CME GROUP INC	1.0	17.5	81.5
U.S.A.	NASDAQ INC	0.7	43.4	55.9
Philippines	PHILIPPINE STOCK EXCHANGE IN	0.0	11.3	88.7
Chilie	BOLSADA COMERCIO DE SANTIAG	0.0	35.3	64.7
South Africa	JSE LTD	0.0	65.8	34.2
Jamaica	JAMAICA STOCK EXCHANG LTD	0.0	0.0	100.0
Japan	JAPAN EXCHANGE GROUP INC	10.5	50.7	38.8

Source: own calculations using data from Bloomberg.

The Moscow Exchange has in recent years been seeking to maintain a high level of dividend yield on its stocks in order to keep them attractive for foreign investors. The 2017 dividend payout ratio stood at 83 percent, the highest ratio among Russian publicly traded companies. However, high dividend payouts dampen companies' investment resources, which may take its toll on their market capitalization. This phenomenon was witnessed with the MOEX's stocks, which for the first time since November 2018 started showing a negative accumulated returns, compared with the MOEX Russia Index (see *Fig. 51*).

Therefore, financial intermediaries and the infrastructure in the domestic market started to encounter more issues of constraints to the market growth, difficulties caused by long-run foreign investment drain. They achieved certain success in acquiring private investors in past years. However, more serious institutional changes in the market, including changes aimed at enhancing the competition as a growth factor, may be needed to consolidate the success.

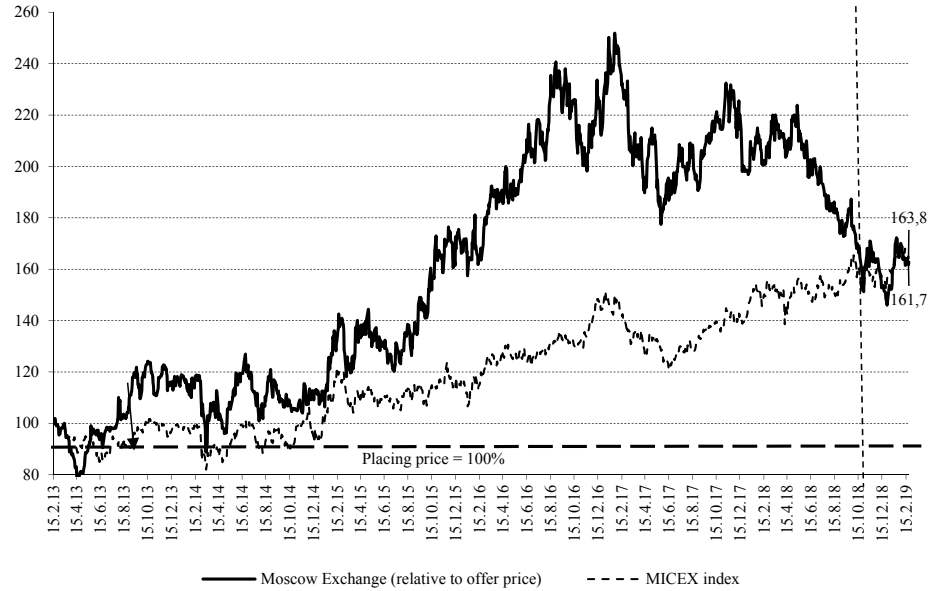


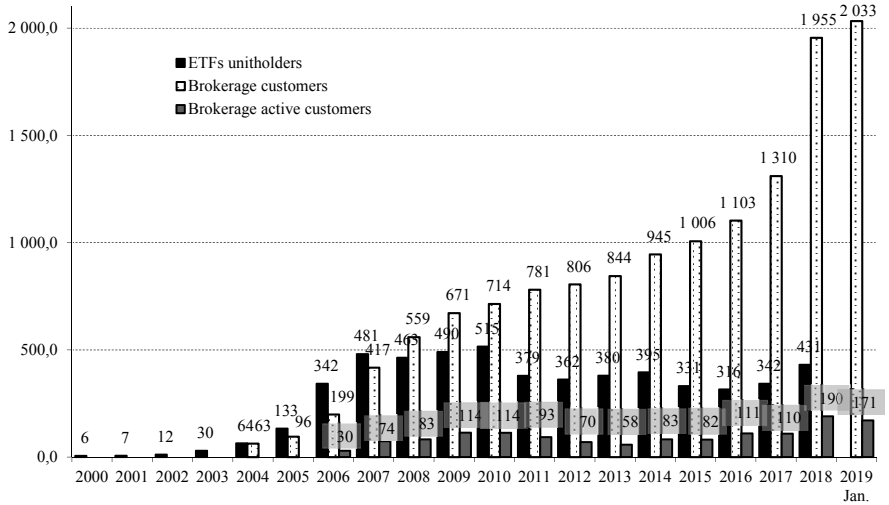
Fig. 51. MOEX stock price and MOEX Russia Index,
from February 15, 2013 to February 22, 2019
(February 15, 2013 = 100 percent)

Source: own calculations using data from the Moscow Exchange and FinAm.

3.6. Investors

3.6.1. Private investors

Fig. 52 presents data on the number of investor individual accounts opened with brokers and on the number of personal accounts in ETF unitholder registers. From December 2017 to January 2019, the overall number of brokers' retail customer accounts on the Moscow Exchange increased 56.2 percent from 1.3 million to 2.03 million. The increase was due to not only decline in the appeal of bank deposits but also the aforementioned competition between brokers for new customers. During the same period of time the number of active customer accounts with exchange-traded brokers increased 55.5 percent from 110,000 to 171,000. According to our estimates, the number of market retail investors in ETFs rose 26.0 percent from 342,000 in 2017 to 431,000 in 2018.



Note. The 2018 data on the number of market unitholders are estimated data; no data for January 2019 are available.

Fig. 52. Number of market retail customers in management companies and brokers

Source: own calculations using data from the Moscow Exchange and Expert Rating Agency.

The adoption of breakthrough amendments to the legislation made it the most prominent event in five years in the private savings sector, whereby substantial personal income tax incentives came into force since January 1, 2013 that cover income from securities held for at least three years, as well as tax incentives in force since January 1, 2015 that cover individuals' contributions to so-called personal investment accounts (PIA)[1]. Under Federal Act No. 420-FZ of December 28, 2013 "On Amendments to Article 27.5-3 of the Federal Law "On Securities Market" and to Parts 1 and 2 of the Tax Code of the Russian Federation", returns on investment in newly acquired securities shall be exempted from taxation, provided that an individual holds them within at least three years. The cap for tax incentive is set at RUB 3 million for each year in which securities (units) are held. The personal income tax incentive is not applied to incomes from dividends on shares and coupon yield payments on bonds, except where a person holds such securities indirectly through an open-end fund. The said tax incentive is therefore most beneficial for open-end ETFs unitholders investing for a longer term. Furthermore, under the Market Securities Federal Act and the Tax Code of the Russian Federation, individuals shall be entitled since January 01, 2015 to

[1] The status of these accounts is similar to the following two investment mechanisms that are commonly employed in many countries: individual retirement accounts (IRAs) in the United States, Poland, South Korea, Canada, etc, as well as individual savings accounts (ISAs) in the U.K. Given the short term of savings on IISs, this product resembles mostly ISAs rather than IRAs.

open PIAs with brokers and trust managers that are eligible for personal income tax incentives. Such accounts can be topped up to 400,000 rubles annually. Market participants' efforts in 2018 to increase the deductable amount to RUB 1 million failed.

There were 656,600 PIAs as of end-January 2019 versus 25,900 as of end-May 2015 (see *Fig. 53*), according to data from the Moscow Exchange.

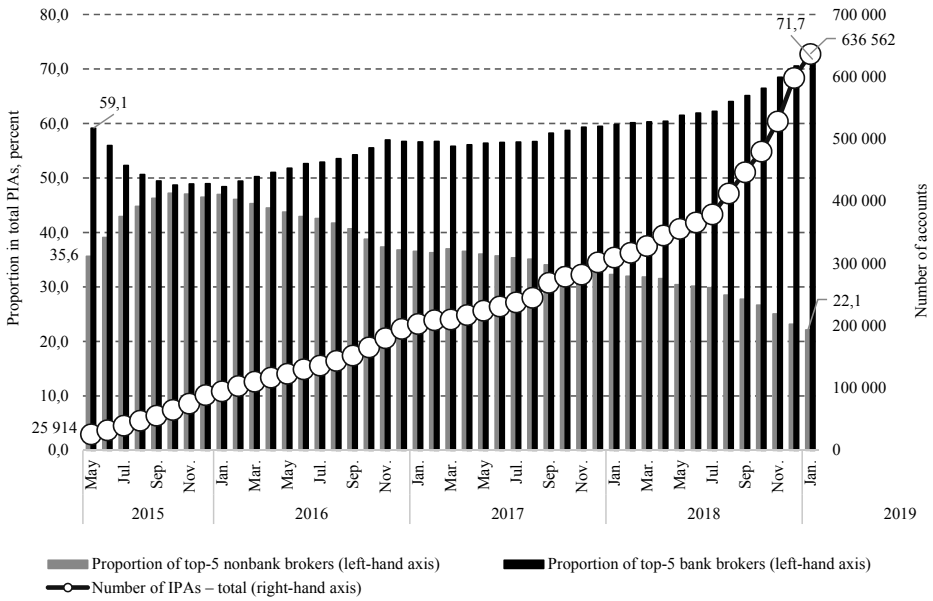


Fig. 53. Number of personal investment accounts, from May 2015 to January 2019

Source: own calculations using data from the Moscow Exchange.

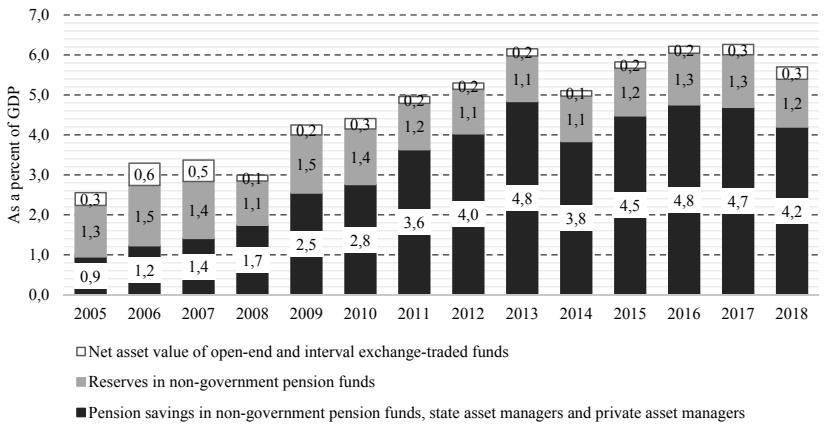
According to data from NAUFOR, in 2018 individuals deposited RUB 80 billion on broker PIAs and trust (management) PIAs, 2.8 times the previous year's amount (RUB 28 billion)[1]. Account holders transferred their assets to 45.5 percent PIAs in 2018 versus 28 percent in 2017. The foregoing suggests that financial intermediaries – administrators of such accounts – had changed their strategy from increasing total number of opened accounts to acquiring customers' tangible assets on the accounts. The proportion of customers' investment in stocks through these accounts contracted from 38 percent in 2017 to 28 percent in 2018. The proportion of corporate bonds increased from 7 percent to 11 percent, while the proportion of OFZ bonds remained at about 20 percent. Exchange-traded units held by local ETFs and foreign ETFs accounted for merely 2–3 percent of broker PIAs.

[1] Sarycheva M. Individuals bring money into the market. Kommersant, March 1, 2019.

Thus, the individuals' market trading experience and the PIA practice show that individuals are prepared to be more actively engaged in the equity market. However, inadequate development of collective investments and the pension savings freeze make it impossible to harness in full the potential of domestic savings. As a result, individuals focus most on short-term and speculative transactions in the domestic equity market, thus posing substantial risks to the given category of investors. Financial intermediaries' business models should be reformed and new standards of their performance introduced and competition in the financial services market increased in order to guide private investors towards longer-term investment strategies.

3.6.2. Domestic institutional investors

Domestic savings were not yet enough to make up for non-residents' slim demand for financial instruments of Russian issuers. In 2018, as shown in *Fig. 54*, domestic institutional investors, such as non-government pension funds, asset managers and exchange-traded funds, saw their assets continue to grow at slower pace. The principal constraints to the growth, in our view, were as follows: pension savings were kept "frozen", there were delays in drafting a supplementary pension legislation, and individuals had no confidence in the collective investment mechanisms in place. As a result, the total value of pension savings, pension reserves and the net asset value of assets held by open-end and interval funds fell from 6.1 percent of GDP in 2013 to 5.7 percent in 2018.



Note. The value of pension savings and pension reserves for 2018 is presented for the first nine months of the year.

Fig. 54. Size of pension savings, pension reserves and net asset value of assets held by open-end and interval ETFs, in 2005–2018, percent of GDP

Source: own calculations using data from Rosstat, the Bank of Russia, Investfunds.ru and Russia's National Pension Fund.

In 2018, non-government pension funds (NGPF) doubled down on their efforts to increase investment (pension savings) in government securities. The proportion of OFZ bonds in NGPF's portfolios increased from 24.3 percent to 37.5 percent from 2017[1]. The above change was caused not only by the fact that the risk-bearing yield on OFZ bonds often outperformed returns on stocks and corporate bonds, but also by "soft power" derived from monetary authorities' efforts to partially replace non-resident investment drain in the OFZ financing source structure. In particular, NGPFs increased their demand for government securities because of the need to pass Bank of Russia's stress tests.

As shown in *Fig. 55*, the August 2015–October 2018 period saw steady investment inflow into open-end and interval exchange-traded funds, with new investors brining in a total of RUB 184.4 billion of capital. The net asset value of open-end and interval exchange-traded funds during that period of time increased by 3.1 times, from RUB 104.4 billion to RUB 320.1 billion. The upturn in the retail ETF industry took place despite a lack of modern system designed to sell units via unit supermarkets and marketplace; regulator's mistakes that affected drastically the contents of publicly available ETFs financial statements; slow development of collective investment analytics; increase in the burden of administrative costs on the industry. Investors started exiting open-end and interval funds from November 2018 to January 2019, in contrast to steady investment inflows during the preceding 3.5 years.

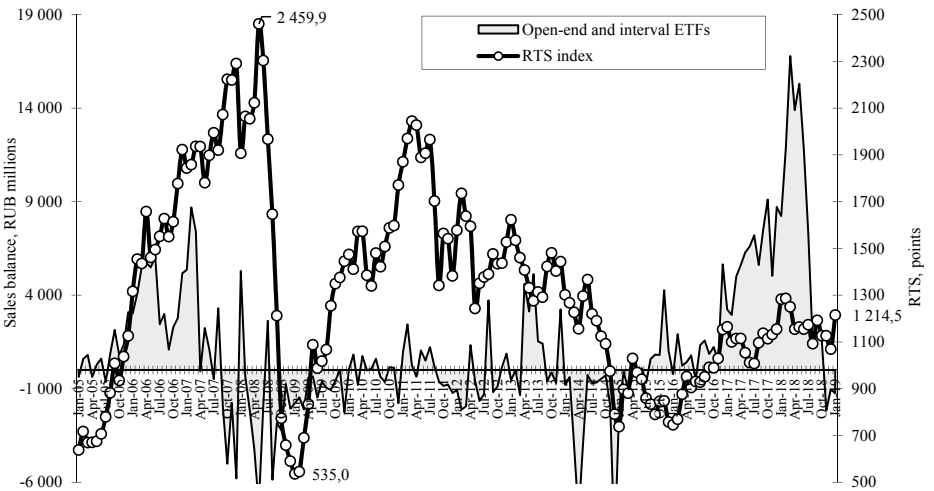


Fig. 55. Private investment cash flows into open-end and interval exchange-traded funds (RUB millions) and RTS Index, from January 2005 to January 2019.

[1] Bank of Russia. Financial Stability Review, Q2-3 2018, No. 2(13).

In *Fig. 56,* the size of accumulated cash flows into foreign (Russia-EMEA-Equity) funds as well as open-end and interval equity funds from December 2004 to December 2018 is used to compare the contribution of foreign and domestic collective investors to Russian stocks. The size of cash flows into foreign and local equity funds was roughly the same until the end of 2007, which ensured a balanced growth in this equity market segment in Russia. From 2007 until mid-2011, however, foreign investment funds saw new inflows continue rapidly to reach USD 14 billion despite temporary ups and downs during the 2008 crisis acute phase, whereas after the onset of the 2008 crisis Russian investors in equity funds were deeply frustrated by the domestic collective investment market and pulled out mostly of equity funds up until May 2017. Things changed since 2017, when foreign equity funds saw intense outflows, whereas local open-end and interval equity ETFs saw inflows.

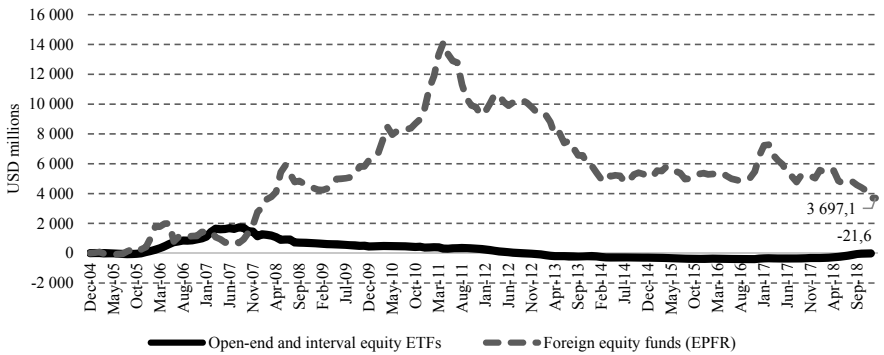


Fig. 56. Cumulative cash inflows into foreign (Russia-EMEA-Equity) funds and open-end and interval equity ETFs, from December 2004 to December 2018, USD millions (December 2004 = 0)

Source: own calculations using data from Investfunds.ru, NAUFOR and Emerging Portfolio Fund Research (EPFR Global).

Thus, given the record of private investment cash flows into foreign (Russia-EMEA-Equity) funds and into local equity funds, the objective of replacing foreign portfolio investment by domestic private savings and collective investment appears to be viable enough as long as an up-to-date ETF regulatory system is in place and administrative and other constraints to ETF promotion are eliminated. In order to make this happen, the regulator should pay as much attention to the collective investment promotion as it does now to individual pension savings projects and the marketplace.

3.6.3. Foreign portfolio investors

Foreign portfolio investors tend to behave in a similar manner in many emerging markets. Their decisions to enter or exit such funds are rather led by common cyclical

pattern and a country's weight in global stock indices than salient features of various countries' economies and issuers[1].

It follows from the data presented in *Fig. 57* that the Russian stock market encountered massive pullouts on the part of foreign funds since mid-2011, according to data from the Emerging Portfolio Fund Research (EPFR). A comparison with stocks of five largest emerging market economies – Brazil, India, China, South Korea and Indonesia – reveals that almost all of them encountered the same issue in nearly the same period of time. This means that the exit of foreign funds from Russia since 2011 was among other things led by common problems that face all the emerging market economies, such as the onset of foreign-exchange and debt crisis in Europe and the appearance of signs of the U.S. economy recovery from recent recession, which encouraged global investors to redirect their portfolio investment from emerging markets economies towards the U.S. and other advanced economies. In Russia, however, this factor was amplified by local problems, such as the adoption of a guided economic development model that was supported at that time by centralized sources of bank funding, coincident with economic deceleration and the exhausted positive effect in the equity market that was driven by a temporary stock price rebound after the 2008 crisis.

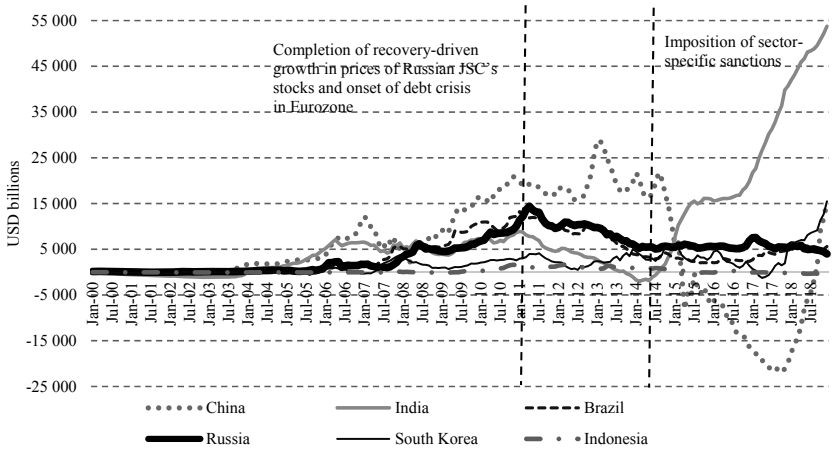


Fig. 57. Accumulated cash flows into foreign investment funds investing in stocks of selected emerging market countries, 2000–2018

Source: own calculations using data from EPFR.

[1] More details on investment strategies of these funds in Russia are provided in Abramov A. Differences in the behavior of domestic and foreign private investors in Russia's equity market. Russian Economic Developments, No. 11, 2014

The appeal of the Russian financial market for foreign investors depends largely on the country's investment climate. Russia achieved a substantial progress in the World Economic Forum's World Competitiveness Ranking (WCR). Russia moved up from 67th place in 2013 to 43rd place in 2018 (see *Fig. 58*). Russia ranked second only to China, leaving the rest of the BRICS states – Brazil, South Africa and India – trailing behind.

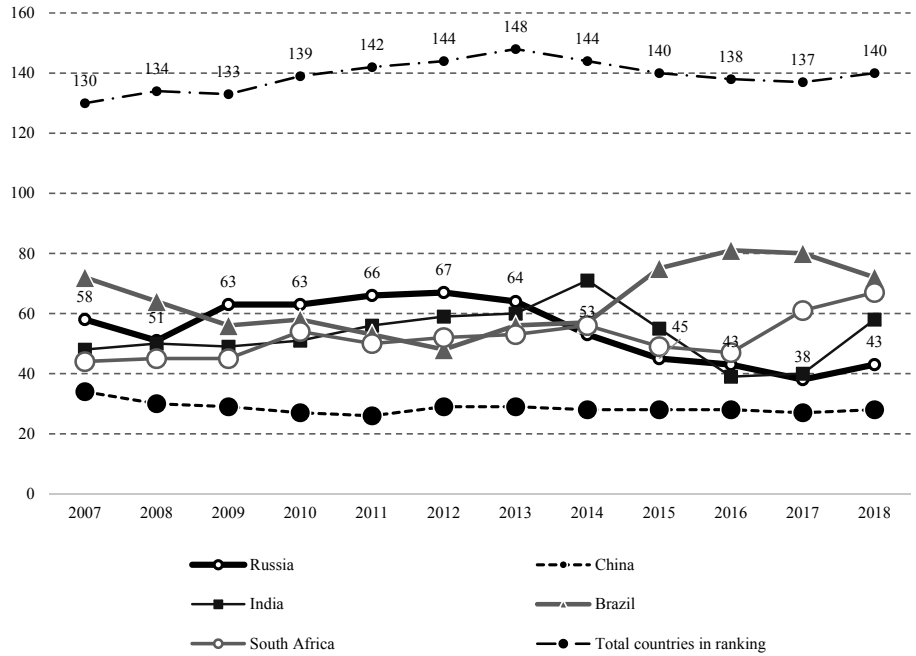


Fig. 58. BRICS countries overall global competitiveness index, according to World Economic Forum's World Competitiveness Rankings 2007–2018

Source: own calculations using data from recent year's Global Competitiveness Report published by The World Economic Forum.

In our previous Russian financial market reviews we selected a few criteria for assessing the investment climate in Russia that dampened U.S. conservative investment in Russian stocks and bonds in the mid-2000s[1]. Calpers, one of the biggest U.S. pension funds that published until 2006 a list of criteria and indicators suitable for making investment decisions in a given emerging market, was used as an example. The list

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

includes judicial independence, application of international auditing and reporting standards, degree of protection of minority shareholders' interests, financing through local equity market, soundness of banks and the effectiveness of stock exchange regulation. Unfortunately, the World Economic Forum has changed substantially its ranking method since 2018, which now makes it difficult to compare the recent WCR with previous year's rankings. We have sorted out only three – judicial independence, strength of auditing and reporting standards and soundness of banks – out of the six investment climate indicators.

One can state that Russia improved the three investment climate quality rankings when compared with the 2013 rankings (see *Table 18* and *Fig. 59*). For example, Russia moved up from 119th place in 2013 to 92nd place in 2018 in terms of judicial independence, from 107th place to 89th place in terms of strength of auditing and reporting standards and from 124th place to 114th place in terms of soundness of the banking system. Overall, the three rankings presented in *Fig. 59* lead to the conclusion that Russia came closer in terms of investment climate to the other major emerging market economies (the BRICS nations).

Table 18

Most challenging issues facing Russia's investment climate, according to World Economic Forum's World Competitiveness Ranking

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Judicial independence												
Russia	106	109	116	115	123	122	119	109	108	95	90	92
China	82	69	62	62	63	66	57	60	67	56	46	45
India	26	43	37	41	51	45	40	50	64	54	53	41
Brazil	89	68	78	76	71	71	65	76	92	79	59	79
South Africa	23	30	38	44	35	27	22	24	24	16	36	48
Strength of auditing and reporting standards												
Russia	95	108	119	116	120	123	107	106	102	103	100	89
China	102	86	72	61	61	72	80	82	80	68	71	75
India	27	30	27	45	51	44	52	102	95	64	69	63
Brazil	63	60	70	64	49	42	31	41	70	72	58	65
South Africa	6	4	2	1	1	1	1	1	1	1	30	55
Soundness of banks												
Russia	108	107	123	129	129	132	124	118	115	121	121	114
China	128	108	66	60	64	71	72	63	78	79	82	90
India	46	51	25	25	32	38	49	101	100	75	78	83
Brazil	36	24	10	14	16	14	12	13	27	38	26	22
South Africa	16	15	6	6	2	2	3	6	8	2	37	62

Source: own calculations using data from recent year's Global Competitiveness Report published by The World Economic Forum.

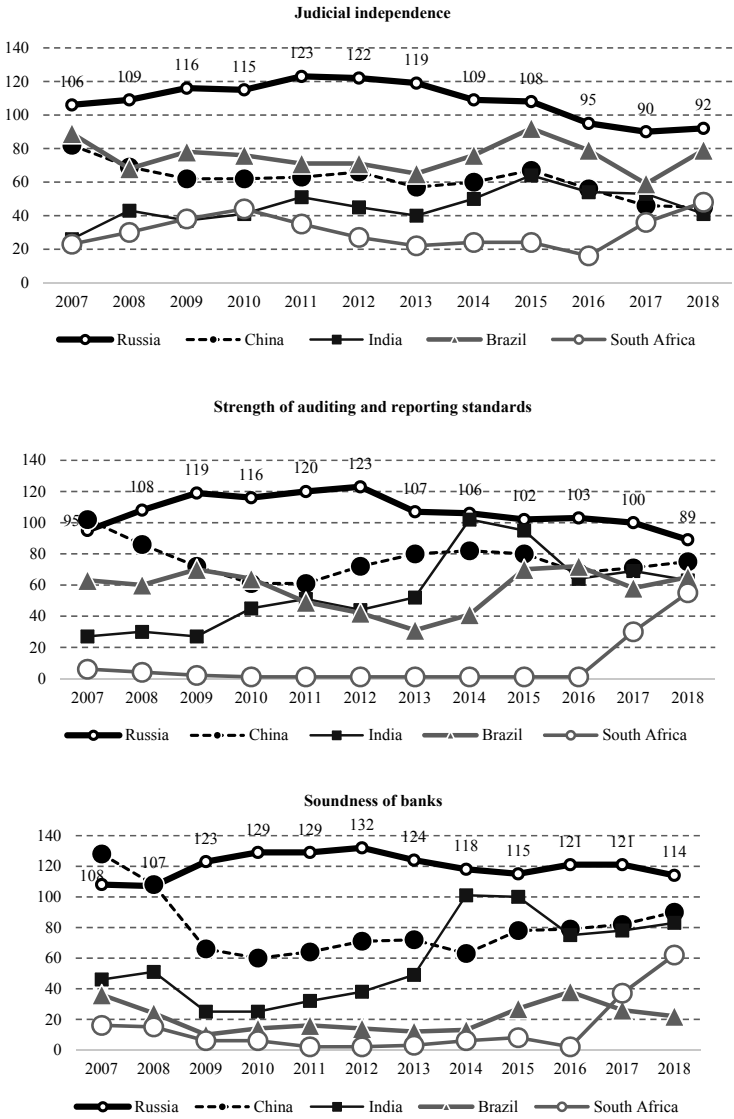


Fig. 59. WEF global competitiveness ranking of BRICS countries on selected criteria that are relevant for conservative portfolio investors' decisions

Source: own calculations using data from recent year's Global Competitiveness Report published by The World Economic Forum.

3.7. Risks facing Russia's financial market

Finally, the following is a list of most substantial risks that will face the Russian equity market in the medium term.

The biggest risk to safety of Russia's ruble-denominated savings arises from regular devaluation of the national currency. The ruble depreciation tends to follow the same pattern. Falling crude prices and capital drain lead to a sudden devaluation of the ruble, which is followed by a period (from 7 to 8 years) of stable and even stronger ruble (see *Fig. 60*). However, the problem lies in that abrupt devaluation reduces the value of ruble-denominated savings that cannot increase even amid a stable ruble.

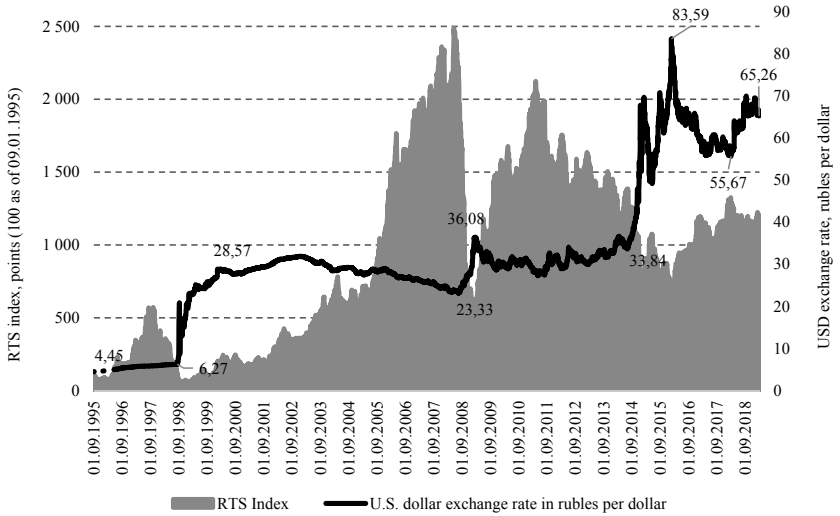


Fig. 60. RTS Index and ruble exchange rate, from September 1, 1995 to March 1, 2019

Source: own calculations using data from the Bank of Russia and Moscow Exchange.

Devaluation of the ruble is engendered by structural disproportions of the Russian economy, making the ruble reliant on external economic conditions and foreign portfolio investors' behavior.

The financial market now faces a volatile ruble driven by crude prices and the amount of foreign currency purchased for the Finance Ministry's reserve funds. As of March 1, 209, the ruble was traded at 65.26 rubles per dollar after hitting its lowest of 83.59 rubles per dollar on January 22, 2016. Risks of adverse external economic conditions to the ruble exchange rate will continue to be a concern in the medium term, because it would take long, even under the best-case economic development scenario, for structural changes to be implemented in the economy.

Prices of Russian stocks are heavily reliant on crude prices. The Coefficient of Determination (R^2) between absolute monthly RTS Index and Brent crude prices from September 1995 to February 2019 (see *Fig. 61*) stood at 0.8, suggesting that there is very close relationship between these values. Crude prices have a strong effect on the ruble's exchange rate too.

One cannot reasonably expect a rise in crude prices in the offing, the oil market demand and supply are volatile. Therefore, cyclical price movements in the oil market will highly likely occur in the medium term, which is going to be a significant source of volatility in the Russian equity market.

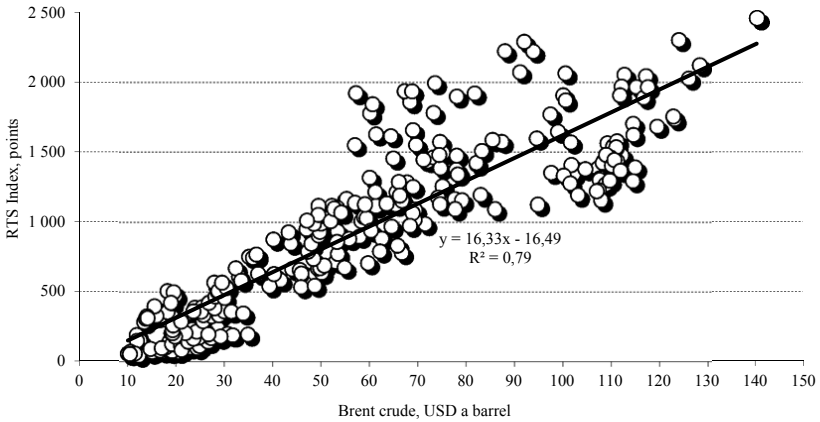


Fig. 61. RTS Index reliance on Brent crude price, from September 1995 to February 2019

Source: own calculations using data from FinAm and Moscow Exchange.

Sanctions continue to pose substantial risks to the financial market, although they have a limited effect on market participants' behavior so far. Sanctions can basically influence the financial market through borrowing restriction on Russian companies, appreciation of borrowing costs, and foreign investment outflows from the stock market. Available assessments of the impact of sanctions on the financial market differ considerably from each other, most of which, however, are measured as a percentage of the expected GDP slowdown. There are few papers that make analysis of the impact of sanctions on the financial market. For instance, the overall net capital outflow induced by sanctions was estimated at USD 58 billion in 2014 and USD 160–170 billion in 2014–2017, according to E. Gurvich and I. Prilepskiy[1]. Russian Finance Minister

[1] Gurvich E., Prilepskiy I. The impact of financial sanctions on Russia's economy. Voprosy Ekonomiki, No. 1, January 2016, p.33.

A. Siluanov said in late 2014 that Russia's loss from sanctions was estimated at around USD 40 billion a year[1].

In this context, sanctions and today's expectations of tougher sanctions crimp the borrowing capacity of Russian major companies and the state in global markets and, accordingly, the business investment activity, taking its toll on economy's growth.

Increasing risks of impending recession in global financial markets constitute one of the key risks that face Russia's equity market.

Two most commonly employed anticipatory indicators for impending recession are presented in *Fig. 62* and *63*. Where the yield spread between yields on 10-year and 2-year government bonds of developed countries approaches zero, it is generally an indication of impending recession, because the yield on longer-term bonds is generally higher in a growing economy, mirroring expectations of higher rates in the offing (see *Fig. 62*). Where the yield to maturity on 10-year government bonds starts approaching the yield on 2-year bonds, it generally indicates an elevation of bond investors' expectations of a recession, that is, inflation and interest rates will fall. The aforementioned spreads show mixed positions today, as shown in *Fig. 62*. The spreads in the U.S.A. and Japan show an all-time low in 2008–2018, while the spreads in Germany and the U.K. are far from their lowest, which suggests that a global recession is unlikely in coming months.

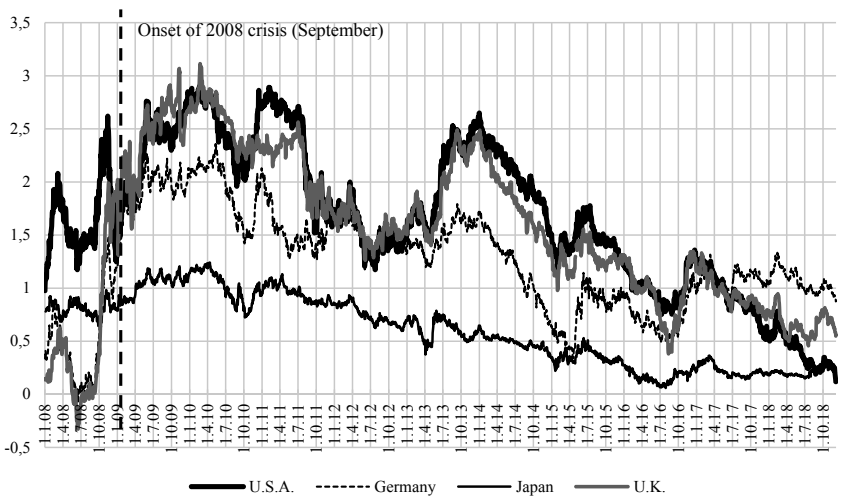


Fig. 62. Yield spreads on 1-year and 2-year government bonds in U.S., Germany, U.K. and Japan in 2008–2018, percent point

Source: own calculations using data from the Moscow Exchange and Bloomberg.

[1] Volkova O. Countersanctions against sanctions: Which is the worst? RBC Daily, March 21, 2016, p.4.

The S&P CoreLogic Case-Shiller 10-City Composite Home Price NSA Index and the S&P CoreLogic Case-Shiller 20-City Composite Home Price NSA Index had proved themselves to be one of the most important indicators that anticipated the 2008 Great Recession. The decline in these indices in June 2006 was followed by the onset of problems in the U.S. market of non-collateralized mortgage securities that led to bankruptcy of largest financial entities (see *Fig. 63*). So far, no substantial decline in the indices was seen as of December 2018, as shown in the diagram. In September (FY 18), the S&P CoreLogic Case-Shiller 10-City Composite Home Price NSA Index stood at 227.6 and the S&P CoreLogic Case-Shiller 20-City Composite Home Price NSA Index was 213.9. Both indices saw a marginal fall three months later, reaching 226.6 and 213.0, respectively, as of December 2018. That is, the indices started moving downwards, but it remains to be seen whether the decline will be steady and rapid.

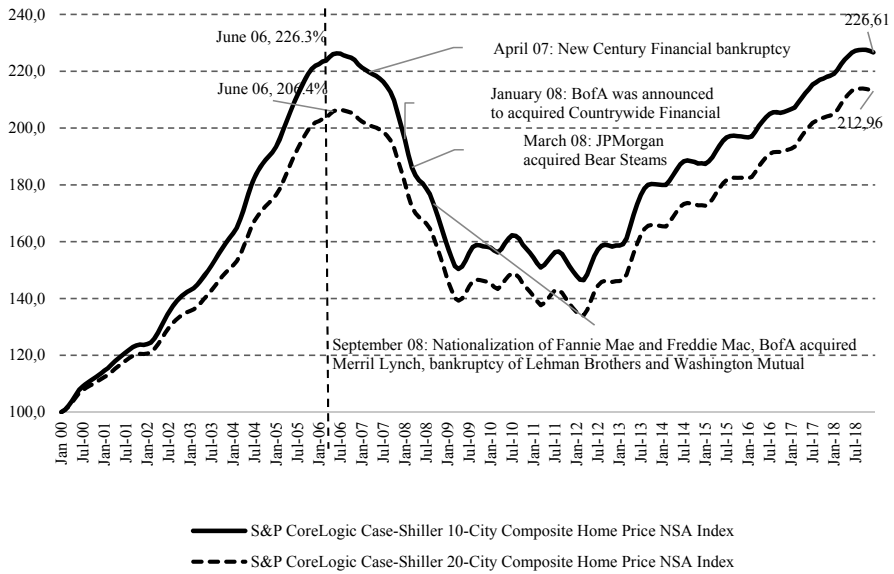


Fig. 63. S&P CoreLogic Case-Shiller 10-City Composite Home Price NSA Index and S&P CoreLogic Case-Shiller 20-City Composite Home Price NSA Index in the U.S., from January 2000 to December 2018, percent point

Source: own calculations using data from the Moscow Exchange and S&P.

Thus, despite risks of impending recession, both indicators show that a recession is unlikely in H1 2019. The U.S. Treasury Secretary said on January 29, 2019 he sees no

indications of a recession on the horizon[1]. Investors' positive expectations of the U.S. – China trade talks in March 2019, as well as positive Q1'19 financial statements of largest U.S. companies remain the factors that prop up global markets.

3.8. Municipal and sub-federal debt market[2]

3.8.1. Market development dynamics

According to the 2018 year-end data, the regional consolidated budgets and local government off-budget funds' budgets ran a surplus of RUB 512.9 billion or 0.49 percent of GDP (*Table 19*).

To compare, 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 in 2017.

In 2018, the budgets of subjects of the Russian Federation ran a surplus of RUB 491.5 billion, urban districts' budgets ran a deficit of RUB 0.8 billion, federal-status cities' inner-city municipalities' budgets ran a surplus of RUB 0.4 billion, municipal areas' budgets ran a surplus of RUB 16.0 billion, urban and rural settlements' budgets ran a surplus of RUB 3.5 billion, local government off-budget funds' budgets ran a surplus of RUB 2.7 billion

As a comparison, 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 20*).

Table 19

Ratio of surplus (deficit) of the consolidated regional and regions' budgets to budget expenditure in 2007–2018, percent

Year	Regional consolidated budget*	Regions' budgets
2018	3.7	4.7
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] Davidson K. There Are No Indications of Recession on Horizon, Says Treasury Secretary Steven Mnuchin. The Wall Street Journal – online, Jan. 29, 2019.
[2] This section was written by Artem Shadrin, Russia's Ministry of Economic Development, Gaidar Institute.

Table 20

Ratio of surplus (deficit) of territorial budgets to budget expenditure in 2007–2018, percent

Year	Inner-city municipalities budgets in federal-status cities	Urban districts' budgets	Municipal areas' budgets	Urban and rural settlements' budgets
2018	-1.2	0.04	1.0	1.0
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, 2019, the consolidated budget (including local government off-budget funds) of 16 subjects of the Russian Federation and the city of Baikonur ran a deficit (59 regions and the city of Baikonur in 2017). The overall deficit amounted to RUB 64.0 billion, or 2.8 percent of the revenue side (RUB 194.8 billion in 2017, or 2.4 percent of the revenue side of budgets that ran a deficit).

The median budget deficit value stood at 0.8 percent relative to a given budget revenue. The highest ratio of budget deficit to budget revenue was recorded in the Republic of Mordovia – 14.2 percent, Khabarovsk Territory – 7.0 percent, and Sakhalin region – 5.0 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 District accounted for around 8.9 percent or more than RUB 17.3 billion

Moscow region accounted for nearly half – 46 percent of the total regions' consolidated budget deficit or RUB 31.1 billion, Khabarovsk Territory accounted for 16 percent or RUB 10.3 billion, Sakhalin region accounted for 13.3 percent or RUB 8.5 billion, and the Republic of Mordovia accounted for 11.0 percent or RUB 7.0 billion (*Table 21*).

Table 21

Execution of consolidated budgets of subjects of the Russian Federation in 2018

	Budget revenues, rubles in billions	Budget deficit (surplus), rubles in billions	Deficit (surplus) to revenues ratio, percent	Borrowing to revenues ratio, percent	Net borrowing to revenues ratio, percent	Redemption costs to revenues ratio, percent	Net borrowings to deficit (surplus), percent
1	2	3	4	5	6	7	8
Central Federal District							
Belgorod Region	130.6	-7.7	-5.9	5.7	-2.3	8.0	38.7
Bryansk Region	79.7	-2.2	-2.8	6.5	-1.9	8.4	67.3
Vladimir Region	87.4	-1.0	-1.1	2.9	-0.7	3.6	60.8
Voronezh Region	161.4	-12.1	-7.5	31.7	-1.8	33.4	23.6
Ivanovo Region	57.6	-2.6	-4.6	31.3	-1.2	32.5	25.9
Tver Region	87.5	-6.0	-6.8	24.1	-0.9	24.9	12.8

Cont'd

1	2	3	4	5	6	7	8
Kaluga Region	97.6	-11.6	-11.9	2.0	-1.2	3.3	10.4
Kostroma Region	43.3	-1.2	-2.8	48.8	-1.8	50.5	62.5
Kursk Region	78.5	-1.3	-1.6	27.2	0.4	26.7	-24.8
Lipetsk Region	88.4	-5.9	-6.7	5.2	-1.1	6.3	16.4
Moscow Region	773.5	31.1	4.0	6.5	4.2	2.3	105.0
Orel Region	48.0	-0.2	-0.4	50.4	-0.2	50.6	42.8
Ryazan Region	76.5	-1.9	-2.5	10.1	-1.5	11.7	61.5
Smolensk Region	60.2	-2.5	-4.2	47.8	0.1	47.7	-1.6
Tambov Region	64.2	0.6	1.0	20.2	1.7	18.5	171.0
Tula Region	108.8	-3.1	-2.9	7.9	0.3	7.6	-11.8
Yaroslavl Region	93.4	2.1	2.2	57.9	1.7	56.2	75.2
City of Moscow	2 614.6	-58.4	-2.2	0.0	-0.2	0.2	7.5
City of Baikonur	4.1	0.0	0.5	0.0	0.0	0.0	0.0
Total	**4 755.3**	**-84.0**	**-1.8**	**7.2**	**0.4**	**6.8**	**-21.5**
North-West Federal District							
Republic of Karelia	66.0	-4.2	-6.3	25.9	-5.9	31.9	94.2
Republic of Komi	113.6	-11.1	-9.8	19.1	-8.3	27.4	85.3
Arkhangelsk Region	114.9	-3.2	-2.8	67.1	-4.5	71.6	160.9
Vologda Region	104.3	-15.0	-14.4	13.8	-2.8	16.6	19.5
Kaliningrad Region	137.0	-2.4	-1.7	19.2	0.1	19.1	-4.2
Leningrad Region	188.6	-14.7	-7.8	0.1	-0.1	0.1	0.7
Murmansk Region	98.3	0.3	0.3	47.7	-0.1	47.8	-30.4
Novgorod Region	44.6	-0.6	-1.4	22.3	0.4	21.9	-26.5
Pskov Region	43.4	-0.4	-0.8	42.6	0.2	42.4	-29.3
St. Petersburg	669.8	-10.1	-1.5	0.0	-0.7	0.7	47.0
Nenets Autonomous District	24.6	-1.8	-7.4	17.5	-5.4	22.9	72.4
Total	**1 605.0**	**-63.1**	**-3.9**	**14.7**	**-1.7**	**16.4**	**43.4**
Southern Federal District							
Republic of Kalmykia	18.4	0.1	0.5	48.4	0.6	47.8	117.2
Krasnodar Territory	377.8	-16.4	-4.3	19.7	-0.8	20.5	18.8
Astrakhan Region	67.3	-7.2	-10.7	14.7	-8.3	23.0	77.3
Volgograd Region	149.0	-2.0	-1.3	15.4	-0.9	16.3	69.1
Rostov Region	263.2	-8.0	-3.0	2.3	-3.4	5.8	112.7
City of Sevastopol	44.1	-3.8	-8.7	0.0	0.0	0.0	0.0
Republic of Crimea	196.1	0.0	0.0	0.0	-0.2	0.2	-3 187.2
Republic of Adygea (Adygea)	28.4	-0.3	-1.0	5.5	0.1	5.4	-8.3
Total	**1 144.3**	**-37.6**	**-3.3**	**10.8**	**-1.7**	**12.5**	**51.4**
North-Caucasus Federal District							
Republic of Dagestan	148.6	-12.3	-8.2	6.6	-0.5	7.1	6.3
Kabardino-Balkar Republic	44.4	-2.0	-4.5	92.3	-4.2	96.5	93.3
Republic of Northern Ossetia-Alania	40.9	-0.5	-1.3	13.3	-0.5	13.8	37.1
Republic of Ingushetia	29.7	-0.4	-1.3	6.7	-0.4	7.1	29.9
Stavropol Territory	157.7	-6.9	-4.4	27.2	-2.0	29.2	45.9
Karachay-Cherkess Republic	31.1	-0.1	-0.3	23.8	-0.4	24.2	125.4
Chechen Republic	96.3	-0.4	-0.4	0.0	-0.2	0.2	53.7
Total	**548.7**	**-22.5**	**-4.1**	**19.8**	**-1.2**	**21.0**	**28.5**
Volga Federal District							
Republic of Bashkortostan	289.0	-24.6	-8.5	0.5	-1.0	1.5	12.0

Cont'd

1	2	3	4	5	6	7	8
Republic of Mariy-El	38.4	-0.4	-1.2	13.9	-0.4	14.4	37.2
Republic of Mordovia	49.7	7.0	14.2	52.4	13.7	38.7	96.7
Republic of Tatarstan (Tatarstan)	366.6	-5.6	-1.5	1.3	-0.1	1.4	5.4
Udmurt Republic	104.1	-1.8	-1.7	57.3	-1.9	59.3	111.2
Republic of Chuvashia – Chuvashia	72.2	-2.0	-2.7	11.5	-1.6	13.1	58.4
Nizhniy Novgorod Region	232.1	-9.3	-4.0	35.2	-0.1	35.2	1.4
Kirov Region	80.7	-1.6	-2.0	40.5	-1.1	41.6	55.7
Samara Region	234.5	-16.5	-7.1	15.1	-3.9	19.0	55.1
Orenburg Region	134.0	-12.4	-9.2	11.3	-2.0	13.3	22.0
Penza Region	79.6	-0.2	-0.2	19.9	0.6	19.4	-239.5
Perm Territory	189.2	-3.8	-2.0	13.3	0.1	13.2	-6.8
Saratov Region	138.0	-5.4	-3.9	17.7	-1.3	19.1	34.3
Ulyanovsk Region	79.5	-0.7	-0.8	26.9	0.2	26.7	-24.3
Total	**2 087.7**	**-77.3**	**-3.7**	**17.1**	**-0.6**	**17.8**	**17.6**
Urals Federal District							
Kurgan Region	56.7	0.3	0.5	11.9	0.8	11.0	153.6
Sverdlovsk Region	355.7	-10.0	-2.8	21.4	-0.8	22.3	28.7
Tyumen Region	246.7	-36.9	-15.0	0.0	0.0	0.0	0.0
Chelyabinsk Region	249.1	-13.0	-5.2	3.9	-0.2	4.1	4.3
Hanty-Mansiysky Autonomous District – Yugra	358.9	-41.1	-11.4	0.9	-1.0	1.9	8.9
Yamal-Nenets Autonomous District	250.3	-46.0	-18.4	0.0	-3.2	3.2	17.6
Total	**1 517.4**	**-146.7**	**-9.7**	**6.3**	**-1.0**	**7.3**	**10.0**
Siberia Federal District							
Republic of Tyva	36.4	-0.8	-2.3	10.8	-0.8	11.6	34.7
Altai Territory	149.6	-8.8	-5.9	0.0	-0.1	0.1	0.9
Krasnoyarsk Territory	326.1	1.1	0.4	17.3	1.3	16.0	358.7
Irkutsk Region	233.1	-13.8	-5.9	4.4	-2.5	6.9	42.9
Kemerovo Region	238.2	-36.0	-15.1	2.8	-9.3	12.1	61.2
Novosibirsk Region	215.9	-7.0	-3.2	41.3	-0.7	42.0	20.7
Omsk Region	126.4	-2.6	-2.1	88.8	-2.1	90.8	100.4
Tomsk Region	90.5	0.4	0.4	44.5	0.6	44.0	130.6
Republic of Altai	25.0	0.2	0.8	3.6	-0.3	3.9	-31.8
Republic of Khakassia	49.4	-2.5	-5.1	10.0	-5.4	15.4	106.0
Total	**1 490.7**	**-69.8**	**-4.7**	**21.8**	**-2.0**	**23.8**	**43.6**
Far East Federal District							
Republic of Buryatia	80.4	0.3	0.3	45.3	0.9	44.4	264.0
Republic of Sakha (Yakutia)	275.7	-12.5	-4.5	10.8	0.0	10.9	0.8
Primorsky Territory	171.2	-17.0	-9.9	3.7	-0.5	4.2	5.2
Khabarovsk Territory	146.6	10.3	7.0	33.9	6.1	27.8	86.5
Amur Region	78.8	-0.6	-0.7	10.0	-0.3	10.3	45.1
Kamchatka Territory	96.9	-1.6	-1.7	3.1	-0.9	4.0	54.2
Magadan Region	42.3	1.1	2.7	59.5	2.6	56.9	97.2
Sakhalin Region	168.5	8.5	5.0	0.0	0.0	0.0	0.0
Jewish Autonomous Region	14.5	0.5	3.4	23.0	0.8	22.2	23.7
Chukotka Autonomous District	37.9	-0.4	-1.1	0.0	-1.2	1.2	108.1

Cont'd

1	2	3	4	5	6	7	8
Zabaikalsky Territory	87.4	-0.4	-0.5	23.3	-0.6	23.8	114.7
Total	**1 200.2**	**-11.9**	**-1.0**	**15.2**	**0.6**	**14.5**	**-65.4**
Total Russian Federation	***14 349.4***	***-512.9***	***-3.6***	***12.3***	***-0.6***	***12.9***	***16.8***

Source: own calculations based on the data released by the Federal Treasury.

In 2018, the consolidated budgets of 69 subjects of the Russian Federation ran a surplus (compared to 36 regions in 2017). These regions ran an overall budget surplus of RUB 576.9 billion, or 1.9 percent of their budgets' revenue side (RUB 133.3 billion, or 4.8 percent of the budget revenue side, in 2017). The median budget surplus value stood at 3.1 percent relative to the budget revenue side.

The biggest ratio of surplus to the consolidated budget revenues was recorded in Yamal-Nenets AO – 18.4 percent, Kemerovo region – 15.1 percent, Tyumen region – 15.0 percent and Vologda region – 14.4 percent.

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 Territory – 13.2 percent, and Yamal-Nenets AO – 11.2 percent.

In 2018, Moscow accounted for 10.1 of the total surplus of the regional budgets or RUB 58.4 billion, Yamal Nenets AO – 8.0 percent or RUB 46.0 billion, Khanty-Mansi AO – 7.1 percent or RUB 41.1 percent, Tyumen region – 6.4 percent or RUB 36.9 billion, and Kemerovo region – 6.3 percent or 36.0 billion.

3.8.2. Borrowing structure

According to the data released by the Russian Finance Ministry, the debt accumulated by the subjects of the Russian Federation in 2018 contracted by RUB 109.1 billion to RUB 2.206,3 billion as the debt accumulated by municipalities rose by RUB 3.9 billion to RUB 371.9 billion (*Table 22).*

Table 22

Volume and structure of debt of the subjects of the Russian Federation and debt of municipalities as of January 2018 and 2019

Type of debt instruments	State ebt volume of RF subject, RUB million			Municipalities debt volume, RUB million		
	2018	2019	increase/decrease 2018 to 2017, percent	2018	2019	increase/decrease 2018 to 2017, percent
Government securities	548 519.6	551 363.6	0.5	21 068.9	18 123.9	-14.0
Loans issued by credit institutions, foreign banks and international financial organizations	666 961.2	636 015.2	-4.6	241 222.1	256 539.0	6.3
Public budget loans from other budgets of the budgetary system of the Russian Federation	1 010 337.7	939 977.0	-7.0	90 429.9	86 464.1	-4.4
Government guarantees	81 535.6	71 504.9	-12.3	15 253.2	10 730.9	-29.6
Other debt instruments	8 050.3	7 452.7	-7.4	6.1	5.5	-9.8
Total	**2 315 404.5**	**2 206 313.3**	**-4.7**	**367 980.1**	**371 863.4**	**1.1**

Source: own calculations based on the data released by the Federal Treasury.

Regions and municipalities borrowed in 2018 a total of RUB 1,769.8 billion. The top-ranked borrowers were Omsk Region – RUB 112.2 billion, Novosibirsk Region – RUB 89.2 billion, Nizhny Novgorod Region – RUB 81.6 billion, Arkhangelsk region – RUB 77.1 billion, Sverdlovsk Region – RUB 76.3 billion, and Krasnodar Territory – RUB 74.5 billion.

Securities issues accounted for 4.9 percent of the total consolidated regional budgets, loans from higher-level budgets (budget loans) constituted 31.6 percent thereof, loans from commercial banks amounted to 63.5 percent thereof.

Total net debt of the consolidated regional budget was negative and constituted – RUB 86.4 billion (RUB 10.4 billion in 2017). The highest ratio of net debt to budget revenues was recorded in the Republic of Mordovia – 13.7 percent, and Moscow region – 4.2 percent.

Largest net borrowers were: Moscow region – RUB 32.6 billion, Khabarovsk Territory – RUB 8.9 billion, and the Republic of Mordovia – RUB 6.8 billion.

Table 23

Regional and local budgets net borrowing, as percent of GDP

Год	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Net borrowing by sub-federal and local governments Including:	0.17	0.29	0.74	0.51	0.21	0.33	0.61	0.53	0.33	0.10	-0.01	-0.08
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	-0.07
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	-0.01

Source: own calculations based on the data released by the Federal Treasury.

Regions had their accumulated debt reduced to the maximum extent by repaying more for outstanding debt instruments compared to new fundraising, were: Kemerovo region – by RUB 22.1 billion, Samara region – by RUB 9.1 billion, and Rostov region – by 9.0 billion.

3.8.3. Domestic bond issues

Twenty one subjects of the Russian Federation and 2 municipalities had their bond prospectus registered in 2017 (as compared with 34 regions and 3 municipalities which issued bonds in 2017). The following regions had their bond prospectus registered with Russia's Ministry of Finance in 2017: St. Petersburg, Krasnoyarsk, Krasnodar, Kamchatka and Khabarovsk Territories, Udmurt Republic, Republic of Sakha (Yakutia) and Karelia, Sverdlovsk region, Magadan region, Samara region, Orenburg region, Tomsk region, Novosibirsk region, Lipetsk region, Yaroslavl region, Nizhny Novgorod region, Irkutsk region, Moscow region, Kirov region, city of Novosibirsk and city of Tomsk.

In 2018, the amount of placed bonds was RUB 86.9 billion, which was a decrease in comparison with 2017 (RUB 215.3 billion) by 2.5-fold in nominal terms. Thus, sub-

federal and municipal bond issues saw a YoY reduction from 0.23 percent to 0.08 percent of GDP (*Table 24*).

Table 24

Amount of issued sub-federal and municipal bonds, as percent of GDP

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Issue	0.26	0.43	0.41	0.25	0.10	0.19	0.23	0.16	0.12	0.19	0.23	0.08
Погашение	0.18	0.26	0.16	0.18	0.21	0.13	0.12	0.17	0.13	0.15	0.13	0.08
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: Krasnoyarsk Territory – RUB 240 billion or 27.6 percent of total domestic bond issue, Republic of Sakha (Yakutia) – RUB 11.5 billion or 13.2 percent, Krasnodarsky Territory and Nizhniy Novgorod region – RUB 10.0 billion each or 11.5 percent each.

Hence, the top-4 issuers accounted for 363.8 percent of the total regional and municipal bonds placed (*Table 25).*

Table 25

Sub-federal and municipal bond placement in 2018

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 District			
Lipetsk region	3 000.0	3.5	65.4
Yaroslavl region	3 000.0	3.5	5.6
North-West Federal District			
Nenets Autonomous District	1 374.1	1.6	31.9
South Federal District			
Krasnodar Territory	10 000.0	11.5	13.4
Volga Federal District			
Nizhniy Novgorod region	10 000.0	11.5	12.3
Samara region	8 000.0	9.2	22.6
Urals Federal District			
Sverdlovsk region	5 000.0	5.8	6.6
Siberia Federal District			
Krasnoyarsk Territory	24 000.0	27.6	42.6
Novosibirsk region	5 000.0	5.8	5.6
Tomsk region	998.3	1.1	2.5
Far East Federal District			
Republic of Sakha (Yakutia)	11 500.0	13.2	38.5
Khabarovsk Territory	4 073.9	4.7	8.2
Kamchatka Territory	1 000	1.2	33.8
Russian Federation – Total	**86 946.4**	**100.0**	**4.9**

Source: own calculations based on the data released by Russia's Federal Treasury.

The highest level of securitization was observed in Lipetsk region – 65.4 percent, and Krasnoyarsk Territory – 42.6 percent.

In 2018, the amount of bonds issued by subjects of the Russian Federation and municipalities exceeded by merely RUB 23.5 million the amount of redeemed securities, while in 2017 – RUB 97.0 billion (*Table 26*).

Table 26

Net borrowing in the domestic market for sub-federal and municipal bonds, rubles billion

	Consolidated regional budget	Regional budgets	Municipal budgets
2018			
Net borrowings	0.02	2.96	-2.94
Attracted funds	86.95	86.84	0.11
Principal repayment	86.92	83.88	3.04
2017			
Net borrowings	97.03	91.43	5.60
Attracted funds	215.33	205.21	10.12
Principal repayment	118.30	113.77	4.53
2016			
Net borrowings	31.98	26.70	5.29
Attracted funds	160.51	153.66	6.85
Principal repayment	128.52	126.96	1.56
2015			
Net borrowings	-5.81	-7.11	1.29
Attracted funds	98.45	94.25	4.21
Principal repayment	104.27	101.36	2.92
2014			
Net borrowings	-9.24	-7.41	-1.83
Attracted funds	111.49	110.09	1.40
Principal repayment	120.73	117.50	3.23
2013			
Net borrowings	77.61	75.45	2.16
Attracted funds	154.64	149.64	5.00
Principal repayment	77.03	74.19	2.84
2012			
Net borrowings	38.17	36.80	1.38
Attracted funds	119.85	115.95	3.90
Principal repayment	81.68	79.16	2.52
2011			
Net borrowings	-58.20	-57.11	-1.09
Attracted funds	55.05	53.37	1.69
Principal repayment	113.25	110.48	2.77
2010			
Net borrowings	29.77	28.61	1.16
Attracted funds	111.11	105.85	5.25
Principal repayment	81,33	77,24	-4,09

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 2018 (*Table 27*).

Table 27

Sub-federal and municipal bonds prospectus registration in 2007–2018

Issuer	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1	2	3	4	5	6	7	8	9	10	11	12	13
Subjects of the Federation												
Krasnoyarsk Territory	*	*	*	*	*	*	*	*	*	*	*	*
Nizhniy Novgorod Region	*	*	*	*	*	*	*	*	*	*	*	*
St. Petersburg	*	*		*	*	*	*	*	*	*	*	*
Tomsk Region	*	*		*	*	*	*	*	*	*	*	*
Republic of Sakha (Yakutia)	*	*		*	*	*	*	*	*	*	*	*
Yaroslavl Region	*	*		*	*	*	*	*	*	*	*	*
Samara Region	*	*	*		*	*	*	*	*	*	*	*

Cont'd

1	2	3	4	5	6	7	8	9	10	11	12	13
Belgorod Region		*				*	*	*	*	*	*	*
Orenburg Region						*	*	*	*	*	*	*
Republic of Karelia	*	*	*	*	*	*	*	*		*	*	*
Novosibirsk Region	*						*	*		*	*	*
Sverdlovsk Region				*	*	*		*		*	*	*
Irkutsk Region	*	*	*			*			*	*	*	*
Moscow Region	*	*								*	*	*
Krasnodar Territory	*			*		*			*		*	*
Magadan Region							*	*			*	*
Lipetsk region	*	*				*	*	*			*	*
Republic of Udmurtia	*	*		*	*	*	*	*	*	*		*
Khabarovsk Territory												*
Kirov Region												*
Kamchatka Territory												*
Komi Republic		*		*	*		*	*	*	*	*	
Khanty-Mansi AD			*				*	*		*	*	
Omsk Region							*	*		*	*	
Yamal-Nenets AD										*	*	
Tambov Region										*	*	
Volgograd Region.	*	*	*	*	*	*	*	*	*		*	
Republic of Chuvashia	*	*	*		*	*	*	*			*	
Mariy-El Republic						*	*	*			*	
Kemerovo Region							*				*	
Ivanovo Region	*				*						*	
Ulyanovsk Region	*	*									*	
Nenets AO											*	
Kursk region											*	
Kaliningrad region											*	
Saratov region											*	
Oryol region											*	
Karachay-Cherkess Republic											*	
The Republic of Mordovia							*	*	*	*		
Republic of Khakassia				*		*	*	*	*	*		
Stavropol Territory		*			*	*	*	*		*		
Tyumen Region										*		
Tver Region	*	*	*	*	*	*	*	*				
Voronezh Region	*					*	*	*				
Smolensk Region							*	*				
Leningrad Region							*	*				
Republic of Bashkortostan	*				*	*	*	*	*			
Tula Region						*	*	*	*			
Kostroma Region.	*				*		*					
City of Moscow		*	*	*			*					
Kaluga Region	*	*			*	*						
Vologda Region					*	*						
Ryazan Region				*		*						
Republic of Buryatia					*							
Murmansk Region				*								
Penza Region	*	*										
Kurgan Region		*										
Republic of Kalmykia	*											
Republic of Kabardino-Balkaria												
Briansk region												

Cont'd

1	2	3	4	5	6	7	8	9	10	11	12	13
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	*	*	*	*	*	*						
City of Kazan	*		*	*	*							
City of Krasnodar				*	*							
City of Ufa				*								
City of Elekrostal, Moscow region	*		*									
Smolensk			*									
Lipetsk	*	*										
Magadan	*	*										
Bratsk		*										
Novorossiysk		*										
Yekaterinburg	*											
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 Briansk	*											
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 Shumerlia, 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.

3.9. Russia's banking sector[1]

3.9.1. Dynamics of the number of credit organizations

As of January 1, 2019, the Russian banking system numbered 484 credit organizations. A year earlier then number stood at 542. During the year the number decreased by 58 organizations. Six years ago at the beginning of 2013, the number of credit organizations exceeded one thousand (1094).

The Bank of Russia policy aimed at clearing the banking sector has triggered a reduction of the number of banks in operation. Over this period, the Bank of Russia withdrew more than 400 banking licenses. From late 2014 the policy aimed at withdrawing from the market those credit organizations which do not satisfy the requirements of the regulator coincided with the deterioration of the situation in the Russian economy and the imposition of international sanctions on major Russian banks. Correspondingly, already from 2014 the rate of banking license revocation has increased. When in 2013, around 4–5 banks on average per month lost their licenses then in 2014 the rate of banking license revocation increased to 7 lending organizations per month, and during the time of peak manifestations of crisis in the Russian economy and financial system seen in 2015–2016 on average 8 credit organizations per month lost the right to continue their banking activity. The number of revoked banking licenses peaked in 2016: the number of revoked licenses during that year hit 97. Moreover, 2016 saw the peak on the aggregate amount of the bank assets of the banks which lost their banking licenses: RUB 1.7 trillion or 2.0 percent of the overall volume of the banking sector assets.

At the same time, the regulator withdrew small banks from the market. For example, even when the number of revoked licensed peaked in 2015–2016, the average size of bank assets did not exceed RUB 19 billion at the moment of license revocation.

In 2017, when looking at the dynamics of banking license revocation one can assume that the situation in the banking sector was improving. The Bank of Russia phased down only of fifty-one lending organizations during the year – half of what was seen in 2016 (*Table 28*). Average assets of a bank with revoked license in 2017 went up notably (RUB 19.1 billion against RUB 11.9 billion a year earlier). However, total assets of banks which lost licenses contracted to RUB 974 billion or 1.2 percent of the overall volume of banking sector assets.

Table 28

Отзывы банковских лицензий в 2013–2018 гг.

	2013	2014	2015	2016	2017	2018
Number of banks with revokes licenses.	29	86	93	97	51	60
Average volume of assets of banks with revoked license, RUB bn.	10.5	5.1	11.9	11.9	19.1	7.4
Total amount of assets of banks with revoked licenses, RUB bn.	304.8	441.2	1108.4	1159.1	974.0	445.3

[1] This section was written by M. Khromov, Gaidar Institute, RANEPA.

Decline of the number of revoked licenses registered in 2017 most likely was due to other circumstances mainly to the burden of the system of deposit insurance. Already from mid-2015, payments to depositors of banks that lost licenses was financed mainly from the Bank of Russia credit line allocated to the Deposit Insurance Agency.

In 2018, the Bank of Russia somewhat increased the rate of banking licenses revocation. During the year, already 60 banking licenses were withdrawn. At the same time, the size of a bank loosing in 2018 the right to exercise the banking activity dropped to RUB 7.4 billion. Total volume of assets of such banks came to RUB 445 billion or 0.52 percent of the overall volume of assets of the banking sector (*Fig. 64*).

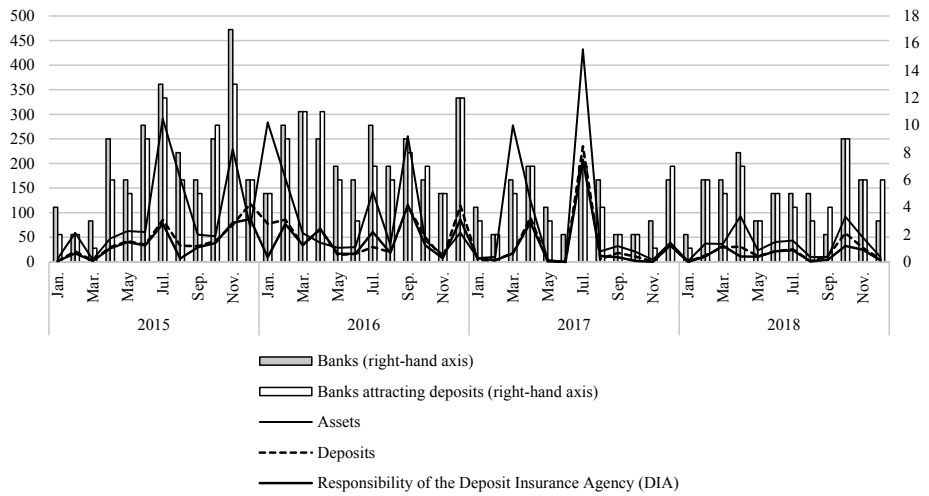


Fig. 64. Main indicators of the banks whose licenses were withdrawn

Source: Bank of Russia

Another type of regulation – bank resolution procedures – practically were not exercised in 2018. Following the bank resolution procedures applied towards a number of large banks in 2017 (Bank Otkrytie FC, Binbank, and Promsvyazbank) the Bank of Russia took some time off and in 2018 this mechanism of regulation was applied solely once regarding Asia-Pacific Bank.

Thus, in 2018, the Bank of Russia paid attention to smaller banks. This is attested to by the average amount of assets of the lending organizations which lost licenses last year. Lack of new cases of the bank resolution procedures demonstrates adequate state of the large banks.

3.9.2. Banking sector financial performance

Bank profit in 2018 notably improved against 2017. Growth of net interest profit and the yield of regular bank operations was a positive factor. In 2018 as a whole, balance–

1.5 percent, and the return of equity profit of Russia's banking sector amounted to RUB 1,345 billion, return on assets (ROA) (ROE) came to 15.8 percent in annual terms.

Compared to 2017, banking income went up by RUB 600 billion. The banking sector profitability has also moved up notably. A year earlier, ROA stood at 1.0 percent, and ROE at 9.4 percent.

The structure of the main profit components in the banking sector in 2018 is presented in *Table 29*.

Table 29

Main profit components in banking sector, RUB billion

	2016	2017	2018
Profit, total	929	785	1345
Net interest income	1624	1669	2113
Net commission income	853	886	1078
Operation with loan loss provisions	-665	-1433	-1200
Organization costs	-1456	-1447	-1686
Other net income	573	1110	1040

Source: Bank of Russia.

The structure of the banking sector financial performance compared to the same period of the previous year has undergone the following changes.

Main positive trend – growth of income from the main banking operations. Net banking interest income went up in 2018 by RUB 444 billion in comparison with 2017 or by 27.0 percent and net commission income – by RUB 192 billion (up 22 percent).

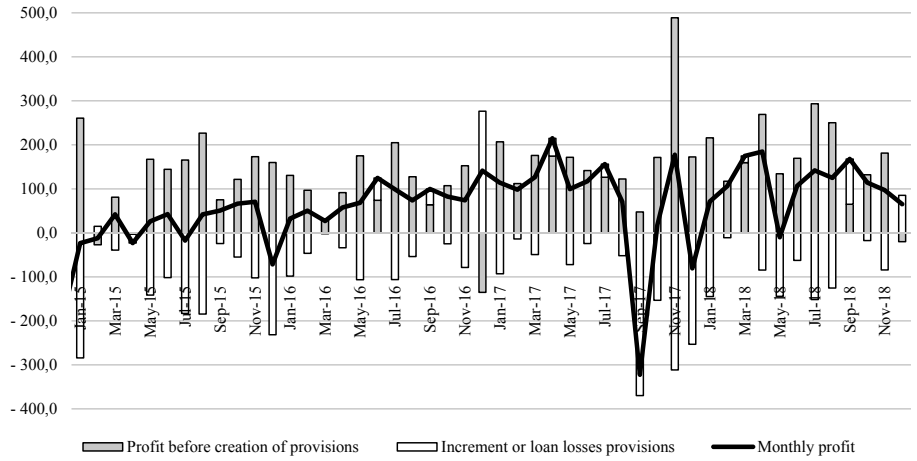


Fig. 65. Principal components of banking income, billions of roubles

Source: Bank of Russia.

Among other components of net interest income one should mention a rather dynamic growth (RUB 450 billion, nearly by 30 percent) of proceeds from retail lending which is a rather natural result of recovery growth of the retail lending portfolio (see below chapter 3.9.4).

Also notably increased fee-based income – by RUB 314 billion or by 27 percent.

Decrease of contributions for loan loss provisions, which raised banking income in 2018 by RUB 233 billion can be seen as a one-time factor. A significant volume of reserves registered in 2017 was due to the launch of the bank resolution procedures against three large private banks. This confirmed the fact that in 2017 issues related to the quality of the bank assets has rather local character. In 2018, the reserves growth against specified deposit liabilities and at the year end the ration of reserves to total bank assets somewhat decreased from 8.1 to 8.0 percent (*Fig. 65*).

3.9.3. Corporate lending

In 2018, Russian banks issued new corporate loans worth RUB 38.4 trillion up 17 percent from the previous year (*Fig. 66*). Large corporate lending segment was growing faster. This category of borrowers in 2018 received new loans to the tune of RUB 38.2 trillion. Small and medium-size business received in 2018 new loans to the tune of RUB 6.8 trillion, which exceeds the 2017 level by 11 percent. Volume of large business lending have already notably exceeded pre-crisis maximum seen in 2014 when the large business received corporate loans to the tune of RUB 30.9 trillion. At the same time, small and medium-size business lending volumes seen in 2013 amounting to RUB 8.1 trillion have not been reached yet. The share of small and medium-size corporate borrowers in the lending market decreased from 22 percent in 2013 to 15 percent at the year-end 2018.

Growing volumes of new corporate loans resulted in the increased growth of the total amount of corporate debt to bank. In 2018, the debt volume went up by RUB 2.3 trillion or by 7.8 percent. In terms of nominal volume this is comparable with the increment of the bank debt for three previous years (RUB 2.6 trillion).

At the same time, increment of loan debt concentrates in the segment of large business. Debt of small and medium-size business before banks was falling for four years in a row starting from 2014. In 2018 for the first time since 2013, the volume of small and medium-size debt did not fall but increased by 1 percent.

Thus, the bank lending market exhibits clear trend of large corporate predominance in recent years. This is owing to the quality of credit portfolio in the corresponding market segments. Lending to small and medium-size business remains a much risker business than corporate lending to large business. The share of outstanding debt of large borrowers at the year-end 2018 constituted 5.6 percent of the total volume of extended loans to the large business. The share of outstanding debt of small and medium-size business remained at 12.4 percent at the year-end 2018.

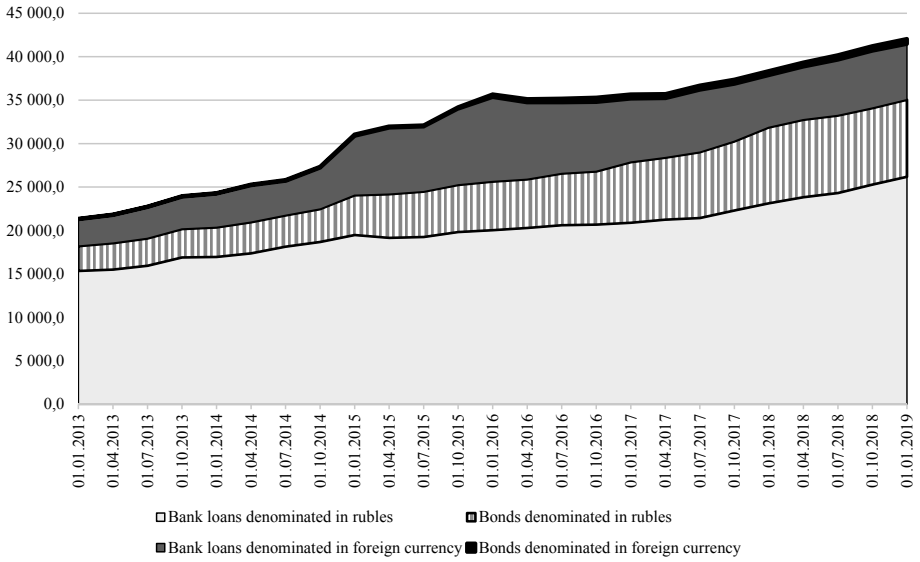


Fig. 66. Main elements of corporate debt in the domestic market, RUB billion

Source: Bank of Russia

3.9.4. Retail lending

Retail bank lending again becomes an incentive instrument for economic growth. In 2018, the retail bank lending market has been developing quite dynamically. All major segments of the lending market have been affected by it. Nominal debt indicators and loans issuance have hit new peaks. Reduction of interest rates and growth of new loans extension have determined a positive net contribution of the bank lending in the disposable household income.

During the year, retail debt on bank loans moved up by RUB 2.74 trillion, which amounts to 21.7 percent of the overall debt as of the beginning of 2018. This is a two-fold increase on the relevant period of the previous year. Then the growth of the households' loan debt to banks amounted to merely RUB 1.39 trillion or 12.3 percent of its value as of the beginning of 2017. As a result, households' overall debt volume to banks amounted to a new record-high value and was equal to RUB 15.4 trillion as of January 1, 2019.

In 2018, the retail bank lending market has also grown markedly regarding new loans extension in comparison with the previous year. During the year, banks extended new retail loans totaling RUB 12.4 trillion up 35 percent against 2017 (RUB 9.1 trillion). It is obvious that in the entire period of existence of the Russian banking market, 2018 saw

the new maximum attained as regards the volume of new loans. The previous maximum was hit precisely in 2017.

The pattern of retail loans extended to individuals keeps shifting towards residential loans. For example, in 2018, banks extended to individuals RUB 3.0 trillion worth of housing loans, a 49% increase against 2017. In 2018, the share of new housing loans amounted to 24% in the overall volume of bank loans extended to households, while in 2017 it did not exceed 22%.

Due to the fact that housing loans have a longer period of repayment as compared to other loans to individuals, their share in the total debt volume is higher than in the newly extended loans. Based on the results of 2018, housing loans accounted for 43% (RUB 6.4 trillion) of the total debt volume (RUB 14.8 trillion). A year before, this index was equal to 42%.

Based on the results of 2018, annual growth rates of the loan debt (on the relevant period of the previous year) amounted to 22.3 percent and 23.1 percent for the overall volume of loans and housing loans, respectively. Higher growth rates of the loan debt have affected all the market segments. In 2017, growth rates of retail lending were more moderate: the debt on housing loans and consumer loans rose by 15.1 percent, and 11.0 percent, respectively (*Fig. 67*).

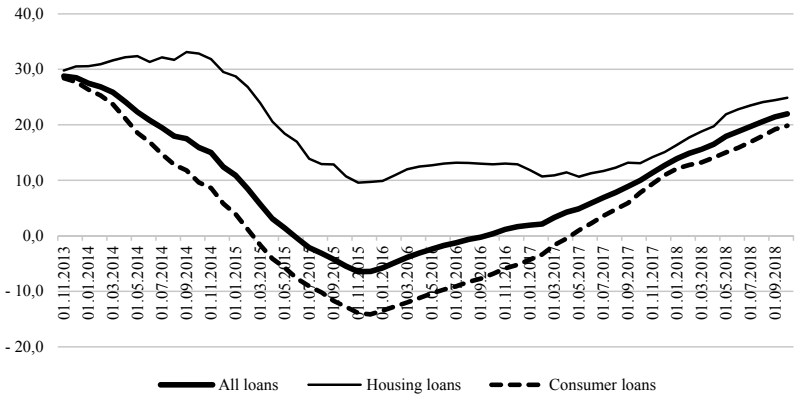


Fig. 67. Growth rates of retail bank loans, percent change compared with the corresponding date of the previous year

Sources: Bank of Russia, own calculations.

The recovery of the retail lending market is evident not only in the nominal terms, but also in terms of comparison with the value of households' cash income.

At 2018 year-end, the overall loan debt exceeded 26.7 percent of the annual amount of households' cash income. This indicator is also an all-time high. the overall loan debt exceeded 25% of the volume of households' cash income. A similar phenomenon was observed only for a few months late in 2014.

The volume of new loans relative to the volume of cash income has also exceeded the previous maximums. As in 2013 when the volume of new loans amounted to 20% of the value of cash income. At 2018 year-end, this indicator amounted to a bit over 21 percent.

In 2018, the debt growth lags slightly behind the level of 2012–2013 when the correlation between the loan debt and cash income was at the level of 5.0%–5.5%, while in 2018 this indicator exceeded 4.7% of the annual volume of households' cash income. This can be explained by the fact that a substantial reduction of interest rates on retail loans stimulates refinancing of previous loans. Consequently, loan debt growth is lagging behind the rate of extension of new loans.

A return to the positive net contribution of a bank loan to households' disposable cash income has become a key result of the loan market development in 2018. This indicator is determined as the difference between growth in households' loan debt to banks and the volume of interest payments on loans. In a situation where growth in the loan debt exceeds the value of interest payments, households receive additional funds from the banking sector, thus gaining more disposable cash resources (*Fig. 68*).

During the past three years (from 2015 to 2017), households paid more interest to banks than received new loans, less the repaid ones, from them. In such a situation, fewer financial resources became available to households and the extent of consumer spending decreased.

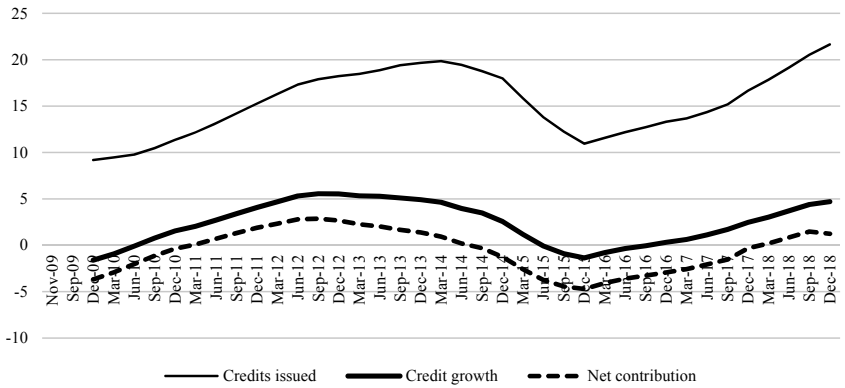


Fig. 68. Lending to households, percent change on cash income for four quarters

Sources: Bank of Russia, the Federal State Statistics Service, and own calculations.

In 2018, the bank loan has regained its role in stimulating growth in households' expenditures. Based on the results of the three quarters of 2018, the net contribution of bank lending to households' disposable cash resources could be estimated at 1.2% of their cash income. Those additional financial resources were spent by households both on underpinning ultimate consumption and investments in housing taking into account

the fact that the importance of housing loans in the overall volume of the loan market has greatly increased. In either case, it can be stated that a bank loan has a stimulating role to play in promotion of economic growth.

3.9.5. Banking passives

In 2018, retail accounts and deposits increased RUB 1,782 billion, or by 6.8 percent. Retail ruble accounts and deposits in Russian banks saw an increase of nearly Rb 2 trillion year to date. At the same time, deposits held in foreign currencies decreased in dollar terms by USD 4.8bn during the same period

The period since 2018 has seen slow pace of growth in retail bank deposits: excluding deposit outflows during the same period of 2014, 2018 saw the slowest dynamics over the entire period of monitoring (*Fig. 69*).

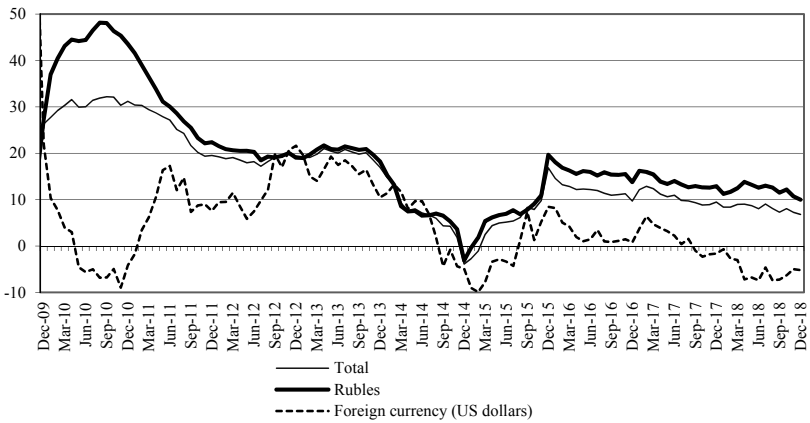


Fig. 69. Growth rates in bank deposits over 12 months, percent

Sources: Bank of Russia, own estimates.

Thus, the primary source of bank liabilities – retail accounts and deposits – has since 2018 been exhibiting an extremely sluggish dynamics. Russian households have accelerated their savings against the backdrop of active growth in credit liability to banks for maintaining an acceptable level of consumption amid stagnating real income.

Another critical component of the resource base of Russian banks – corporate accounts and deposits – increased during 2018 by RUB 2.0 trillion, or by 9.4 percent. This is a bit more against the previous year (RUB 1.7 trillion, or 8.3 percent) (*Fig. 70*).

Increased growth of corporate resources in the banking sector in 2018 was due to the growth of time deposits growth in contrast to current accounts.

For instance, in balances on corporate current and settlement accounts in banks increased by RUB 216 billion, or by 2.7% percent, practically the same was seen a year earlier (RUB 204 billion, or 2.5 percent).

Corporate fixed deposits volume increased at a higher pace – by RUB 1.788 billion, or by 13.5 percent. Meanwhile, I 2017 the increment of this component corporate resources moved up by RUB 1,406 billion, or by 11.6 percent.

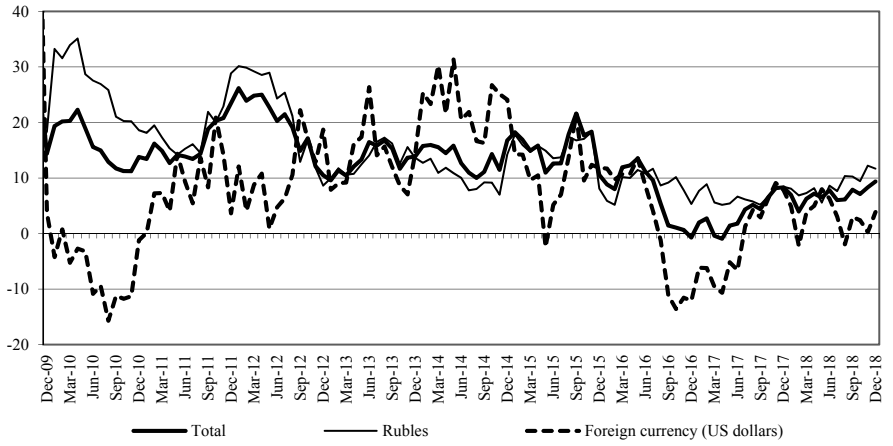


Fig. 70. Growth rates of non-bank organizations over 12 months, percent

Sources: Bank of Russia, own calculations.

Such combination in the dynamics of certain elements of corporate resources seems negative.

The recovery, since 2017, of growth in Russian corporations' term deposits with banks is indicative of a lack of sufficient number of attractive investment projects. The stagnation of current accounts is an economic activity indicator reflecting that the economy is faced with an overall unstable dynamics

An extra adverse factor for the dynamics of the resource base of Russian banks was the ongoing reduction of liabilities to non-residents. Over 2018, foreign liabilities of the Russian banking sector were reduced by nearly by RUB 733 billion, or by USD 13 billion. However, the reduction of foreign liabilities of Russian banks was overall offset by repayment of their foreign assets. During 2018, foreign assets of the banking sector contracted by nearly USD14 billion.

Therefore, in 2018 the Russian banking sector so far can count on only two principal domestic sources – households and legal entities in approximately equal proportions. In comparison with 2017, there was a small shift in favor of corporate resources.

The increase in banks' debt to the central bank (+RUB 591 billion year to date) amid structural liquidity surplus appears to be the result of regulator's efforts to rescue a few big credit institutions and can hardly become a firm basis for the provision of lending to bank customers.

Section 4. Real sector of the economy

4.1. The dynamics and pattern of economic growth[1]

4.1.1 The dynamics of the Russian economy: domestic and external demand

In 2016–2018, the economic situation was characterized by the gradual recovery of GDP positive dynamics with GDP growth rates increasing from 100.3 percent in 2016 to 101.6 percent and 102.3 percent in 2017 and 2018, respectively. The GDP real volume surpassed by 1.6 percentage point the indicator of 2014, having compensated the crisis decrease seen in 2015.

Unlike the conditions of the previous two years, the nature of development of the economy in 2017-2018 was determined by simultaneous growth in demand on the international and domestic markets. With a relatively favorable foreign economic situation and sustainable positive dynamics, in 2018 exports amounted to 119.4 percent (as per the methods of the system of national accounts (SNA)) as compared to 2014. With the speed-up of the growth rates of the volume of exports to 6.3 percent, in 2018 the contribution of net exports to GDP increased to 3.5 percent against the indicator of 2.8 percent a year before in comparable prices (10.0 percent against 5.3 percent in current prices). Growth in net exports had a considerable effect on the dynamics and pattern of formation of GDP and compensated the weakening of domestic market dynamics (*Fig. 1*).

The gradual recovery of domestic demand was a prerequisite for overcoming the recession. However, the upward trend of formation of the internal market's development resources was unstable. In 2017, a short-lived upsurge in the growth rates of imports to 117.4 percent as compared to the previous year became the factor behind the speed-up of the dynamics of the consumer and investment markets. It is noteworthy that growth in imports gave an additional impetus to growth in output of domestic goods for the internal market. In 2017, the positive dynamics of domestic demand were influenced considerably by changes in the pattern of imports on the back of advanced growth in imports of intermediary and investment-purpose goods. The recovery of the trend of the advanced growth in imports as compared to domestic demand reflected the gradual

[1] This section was written by O. Izryadnova, Gaidar Institute, RANEPA.

depletion of the potential of the rouble's depreciation and the effect of import substitution. Basically, the economy reproduced the situation which was typical of the 1999–2012 period when insufficient output volumes of domestic goods, both of intermediate and ultimate demand were made up for by import goods supplies.

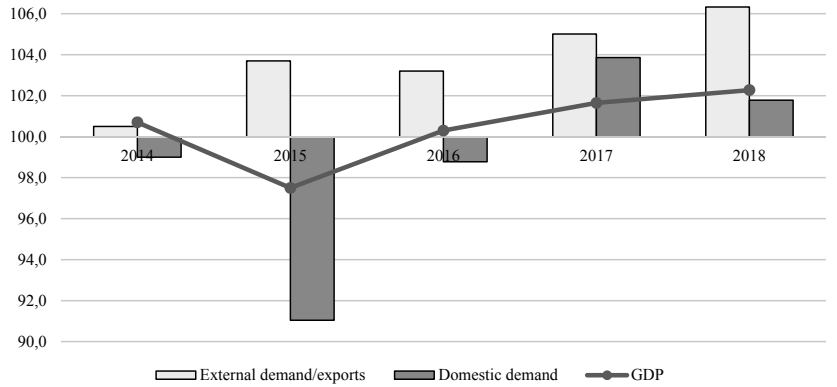


Fig. 1. GDP dynamics by the component of domestic and external demand 2014–2018, % on the previous year

Source: own calculations based on the data of the Rosstat.

In 2017–2018, growth in the share of imports of intermediate consumption goods reflected the insufficient level of the main production output. Growth in investment goods was further restrained by toughening of conditions of borrowing on the international capital market and introduction of sanctions and limitations on deliveries of individual types of technological equipment required for implementation of infrastructure projects and investment plans in mining and manufacturing industries. In 2018, with the existing dynamics and the pattern of the Russian machine-building industry, the reduction of the share of imports of investment-purpose goods had a negative effect on the processes of technological renewal and modernization of the economy (*Table 1*).

Table 1

The pattern of imports by the functional nature of utilization (as per the methods of the balance of payments), %

	Goods		
	consumer	**investment**	**intermediate**
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
2018	33.2	25.4	41.4

Source: The Rosstat.

The slowdown of the growth rates of imports to 103.8 percent as compared to the previous year and the reduction of their contribution to gross resources led to the slowdown of the domestic market dynamics. With the change in market factors, in 2018 the growth rates of expansion of the domestic market slowed down to 1.8 percent against 3.9 percent a year before (*Fig. 2*).

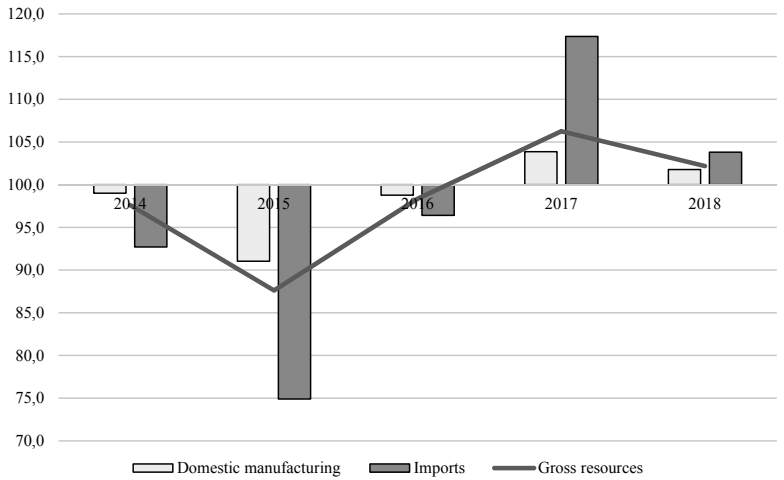


Fig. 2. The dynamics of domestic demand by the component in 2014 – 2018, % on the previous year

Source: own calculations based on the data of the Rosstat.

It is worth mentioning the specifics of formation of resources of the domestic consumer market. In 2018, the indicator of imports was equal to 88.0 percent as compared to 2014 (as per the methods of the SNA); this factor determined the domestic market's structural changes. The reduction of the consumer demand due to falling households' incomes and weakening of the national currency resulted in growth of up to 65 percent in the share of domestic goods in the retail trade, including growth of 77 percent in nonfood market's resources in 2017. In 2018, in the pattern of the retail market's commodity resources the share of domestic goods in commodity resources was equal to 64 percent (*Table 2*).

In 2018, the unit weight of goods and services for the domestic market in the overall volume of domestic manufacturing of goods and services decreased by 1.0 percentage point as compared to the previous year.

Advanced growth in exports promoted the contribution of mining industries to the dynamics of the gross value added and reflected higher mineral dependence of the Russian economy. It is to be noted that in the pattern of exports the share of high-processed goods of ultimate demand was shrinking.

Table 2

The pattern of the retail trade's commodity resources (in actual prices), %

	Commodity resources of retail trade	Including commodities		Share of import food products in commodity resources of retail trade in food products
		Domestic goods	Import goods	
2014	100	58	42	34
2015	100	62	38	28
2016	100	62	38	35
2017	100	65	35	35
2018	100	64	36	36

Source: The Rosstat.

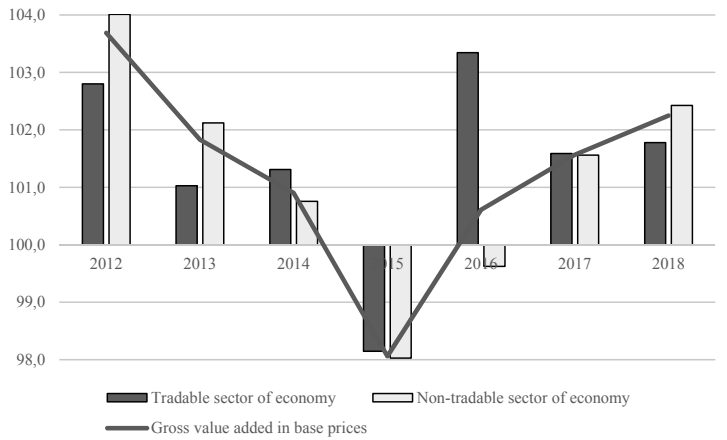


Fig. 3. The dynamics of the gross value added in the tradable and non-tradable sectors of the economy in 2016–2018, % on the previous year

Source: own calculations based of the data of the Rosstat.

In 2017–2018, recovery of the positive dynamics of the Russian economy was determined by the fact that recession was overcome virtually in all the baseline types of economic activities with simultaneous growth both in the tradable and non-tradable sectors of the economy (*Fig. 3*). However, the effect of the crisis phenomena of 2013–2017 was explicitly seen in the specifics of embarking on the trajectory of growth in 2018 in the manufacturing industries, the building industry, trade and transport. In 2018, economic growth dynamics were determined by an increase in the gross value added in the industry (2.3 percent), trade (2.2 percent), transport and storage (2.9 percent) and financial and insurance business (6.3 percent). In 2018, only the trade with the index of 94.2 percent failed to attain the level of 2014. In addition, in 2018 for the first time in the past five years the contribution of the agriculture to the gross value added decreased (*Fig. 4*).

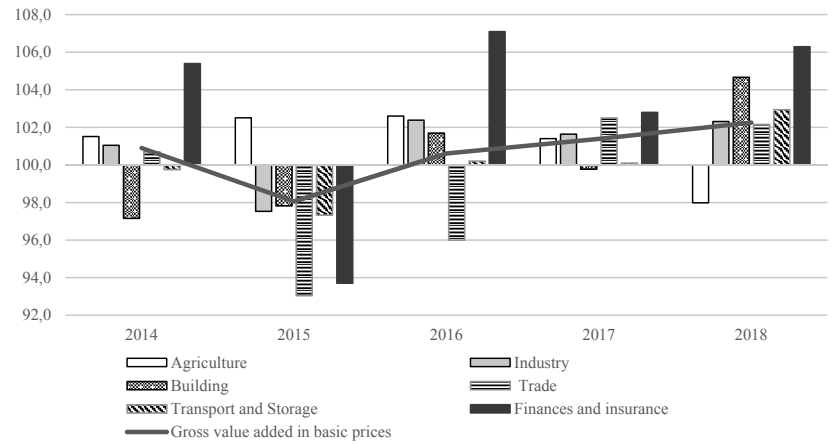


Fig. 4. The dynamics of the baseline types of economic activities in 2016–2018, % on the previous year

Source: The Rosstat.

In 2017–2018, structural changes in the industry were determined by the growing role of the primary sector of the economy and the related infrastructure. In 2018, the production of primary products increased by 4.1 percent, including crude oil (1.7 percent), natural gas (16.5 percent), metal ore (4.6 percent) and services related to production of primary products (13.7 percent) as compared to the previous year (*Fig. 5*).

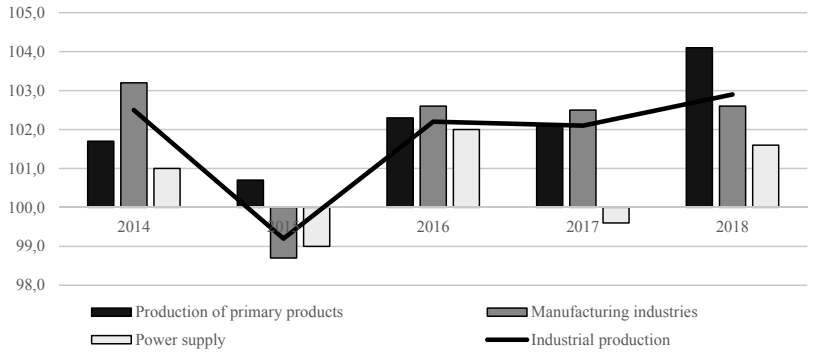


Fig. 5. The dynamics of industrial production by the type of economic activities in 2016–2018, % on the previous year

Source: The Rosstat.

In manufacturing, the indicators of 2018 were characterized by sustainable positive quarterly dynamics with the output growth rates amounting to 2.6 percent.

In 2017–2018, the structural specifics of manufacturing was determined by chemical complex growth on the back of an increase in the output of products, which were competitive both on the international and domestic markets with growth in state and private investments in development of new capacities and modernization of production. With advanced growth in the volume of exports, in the past three years the timber industry saw high dynamics of development. The production of medicines was characterized by exceedingly high growth rates and active import substitution in the period from 2015. Growth in the iron and steel industry was facilitated by the positive situation on global metal markets, as well as growth in demand in related investment and building activities (*Table 3*).

In the past two years, the market of the machine-building industry's products which is traditionally oriented to the receptive internal market saw sustainable growth dynamics. Growth in the machine-building industry was determined by growth in the number of state orders and direct subsidies, as well as recovery of demand on motor vehicles and defense products. In 2017–2018, a line of support of the machine-building industry was growth in the share of export-oriented industries. However, the existing extent of integration of Russian manufacturers into international production chains and sales and service networks abroad limited the competitive positions of Russian-made products on global markets.

On the domestic market, low demand on capital goods with prevailing crisis phenomena in the building and investment complex was still a factor of restraint.

The upward dynamics of the output of consumer products was determined by the expansion of the niches for domestic products on the internal market with the reduction of import deliveries due to depreciation of the rouble's exchange rate.

In 2017–2018, the index of production by the high-tech manufacturing type of activities entered the area of positive values.

Table 3

The indices of production by the main type of manufacturing in 2016–2017, % on the previous year

	2014	2015	2016	2017	2018
1	2	3	4	5	6
Manufacturing	103.2	98.7	102.6	102.5	102.6
Production of food products	104.9	103.1	105.6	104.2	104.9
Production of beverages	94.4	99.2	106.6	99.4	102.6
Production of tobacco articles	91.1	96.8	97.3	74.8	103.8
Production of textile articles	97.0	100.6	107.5	108.5	103.6
Production of leather and leather articles	95.9	91.8	106.7	104.2	96.3
Wood-processing and manufacturing of wood articles	96.4	95.9	108.3	103.9	110.6
Production of paper and paper articles	103.4	101.6	100.4	106.9	112.6
Printing and copying of data carriers	95.1	90.9	86.8	97.2	112.5
Production of charred coal and petrochemicals	106.1	100.9	96.8	101.1	101.8
Production of chemical agents and chemical products	102.3	105.8	110.9	105.1	102.7
Production of medicines and materials	94.6	108.5	127.5	112.7	108.2
Production of rubber and plastic articles	109.7	98.0	105.5	103.8	102.4
Production of other nonmetal mineral products	101.1	93.9	98.1	111.2	104.4

Cont'd

1	2	3	4	5	6
Metallurgical production	107.2	104.0	99.7	100.1	101.7
Manufacturing of fabricated-metal end products, except for machines and equipment	104.5	103.5	112.7	103.4	101.3
Manufacturing of computers and electronic and optical products	108.9	106.1	108.5	98.3	98.5
Manufacturing of electrical equipment	97.9	90.5	108.1	104.7	102.9
Manufacturing of machines and equipment which are not included in other groups	92.1	95.3	101.5	106.8	99.4
Manufacturing of motor transport vehicles, trailers and semitrailers	88.7	76.9	105.8	114.5	113.3
Manufacturing of other transport vehicles and equipment	116.2	105.4	108.1	106.3	97.8
Furniture making	99.8	92.8	70.9	108.8	105.5
Manufacturing of other end products	105.1	90.1	77.7	110.3	111.2
Repair and assembly of machines and equipment	94.4	94.3	98.8	92.1	98.0

Source: The Rosstat.

4.1.2. Utilization of GDP: consumer and investment demand

The specifics of 2017–2018 were the recovery of growth in ultimate consumption after two decades of its shrinkage. In 2018, with GDP growth of 2.3 percent households' ultimate consumption and investments in capital assets increased by 2.2 percent and 4.3 percent respectively as compared to the previous year (*Fig. 6*). However, in 2018 the indices of the situation on the consumer and investment markets turned out to be lower than in 2014.

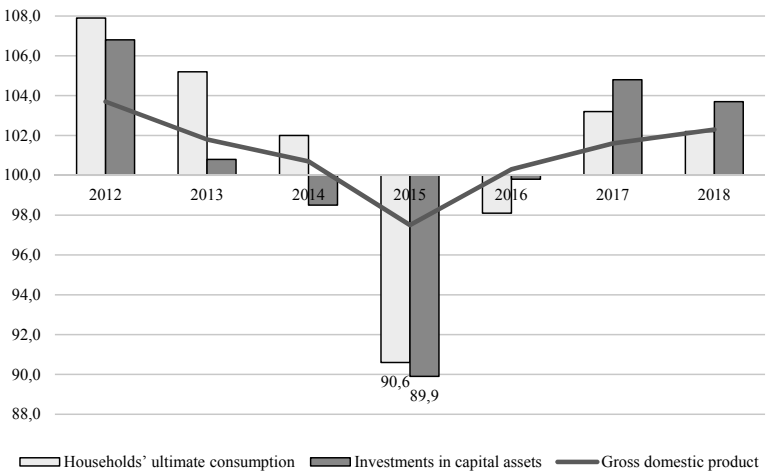


Fig. 6. The dynamics of GDP by the component of households' ultimate consumption and investments in capital assets in 2014–2018, % on the previous year

Source: The Rosstat.

It is worth mentioning that the restraint dynamics of households' cash incomes had a considerable effect on the consumer market. After the 2015 crisis, the formation of the pattern of households' cash incomes was influenced by advanced growth in labor remuneration as compared to social payments and other sources of income. The dominating factor of the model of formation of households' incomes was the expansion of the gap in the dynamics of the real size of pensions and wages. If in 2015 the average size of the accrued pensions amounted to 35.2 percent of the average amount of the accrued wages, in 2018 it fell to 30.8 percent.

In 2015, a dramatic drop in real wages and salaries hit households hard, though the effect of that processes was somewhat smoothed over by households' financial assets saved in 2010–2014. With the rates of inflation slowing down in the period from 2017, there is an explicit trend of stabilization of households' real disposable cash incomes which in 2018 were equal to 99.8 percent (with a lump-sum payment to pensioners taken into account), including 97.6 percent and 106.8 percent of the real size of granted pensions and real accrued wages and salaries, respectively, compared with the indicator of the previous year. Despite the weak dynamics of incomes in 2018, real wages exceeded by the mere 0.8 percent the indicator of 2014 with the real size of the granted pensions being reduced by 6.0 percent (*Fig. 7*).

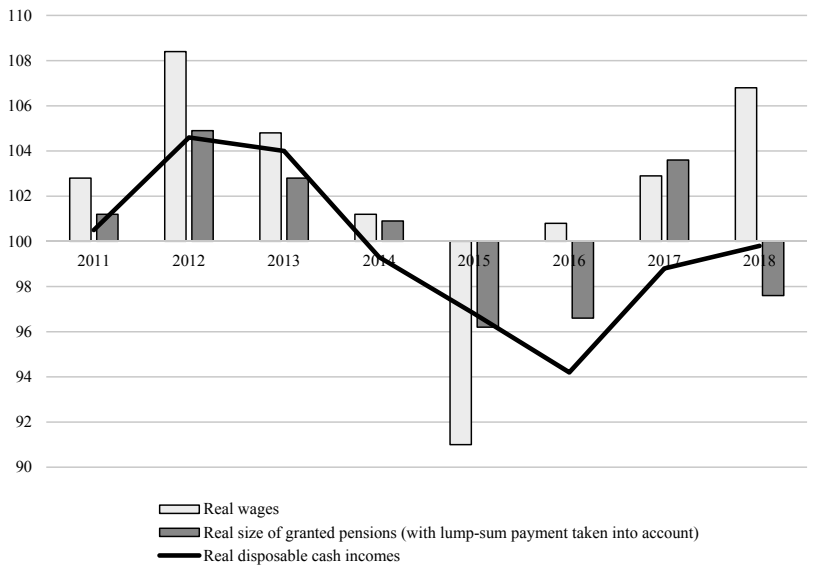


Fig. 7. The dynamics of real monthly average wages and the real size of granted pensions in 2011–2018, % on the previous year

Source: The Rosstat.

In 2018, households' disposable cash incomes in real terms amounted to RUB 57,520.9 billion; households spent RUB 56.625.2 billion on purchasing of goods and services, growth in households' savings was equal to RUB 6,371.0 billion, a 13.9 percent decrease as compared with the previous year.

With the speed-up of growth rates of nominal monthly average wages, in 2018 the share of wages in households' cash incomes rose to 66.2 percent, a 0.8 percentage point increase as compared with the relevant indicator of 2015 when the minimum growth in wages and salaries was registered during twenty years of observations. The share of social payments in households' incomes increased to 19.4 percent, with the average size of the granted pensions amounting to 30.8 percent relative to the average size of the accrued wages with the indicator of 35.2 percent in 2015. Weak dynamics of households' business and investment activities were behind the reduction of their contribution to households' cash incomes to 12.4 percent against 14.2 percent in 2014 (*Table 4*).

Table 4

The pattern of households' cash incomes in 2014–2018, % against the total

	2014	2015	2016	2017	2018
Total cash incomes	100	100	100	100	100
Wages, including shadow ones	65.8	65.6	64.6	65.4	66.2
Social payments	18.0	18.3	19.1	19.6	19.4
Revenues from entrepreneurial activities	8.4	7.9	7.8	7.6	7.5
Property related incomes	5.8	6.2	6.5	5.4	4.9
Other incomes	2.0	2.0	2.0	2.0	2.0

Source: The Rosstat.

The dynamics and the pattern of households' cash incomes were characterized by the growing social and economic differentiation and inequality in distribution of households' incomes and wages. High inequality in distribution of incomes and wages was a factor of restraint of economic growth rates. In 2018, the income concentration factor was equal to 0.410 and the R/P10% ratio of 15.3-fold. With the existing level of wages and salaries, in 2018 the number of the employed at entities with the labor remuneration below the minimum subsistence level amounted to over 2 million people (3.1 percent of the employed in the economy or 5.2 percent of workers of entities). The share of workers with a low level of wages and salaries amid the growing demographic burden on the working population had a considerable effect on the level of poverty. In 2018 (January-September), the number of the population with incomes below the minimum subsistence level amounted to 19.6 million persons (13.3 percent of the total number of the population), which factor undoubtedly affected households' consumer activities.

The existing high inequality stimulates demand on qualitative changes in the population's social security infrastructure. Minimum wages, labor benefits and social security payments were the instruments of the policy of effective support of workers in the low segment of the scale of distribution of wages, reduction of the scope of poverty and inequality, establishment of inclusive labor markets, formation of stable consumer demand and, eventually, facilitation of more sustainable economic growth.

In 2017–2018, households' consumer activities were formed amid slowdown of the rates of inflation and reduction of interest rates. As the population got adapted to those conditions of the consumer market and increased pressure of deferred demand, quarterly dynamics pointed to the consumer market's gradual recovery. A change of trend as regards households' incomes with the growing share of expenditures on purchasing of goods was accompanied by growth in demand on consumer loans. In 2018, consumer behavior was determined by upward trends of consumer prices to 104.3 percent, including prices of food products to 4.7 percent (+3.5 percentage point as compared to 2017) and non-food products to 104.1 percent (+1.3 percentage point) (*Fig. 8*).

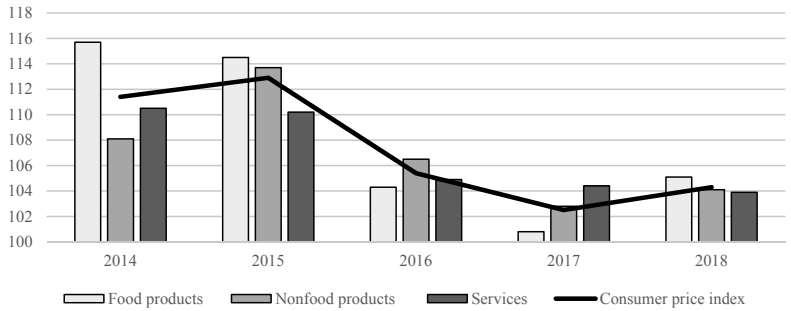


Fig. 8. The dynamics of consumer prices by the market segment in 2015-2018, on December of the previous year

Source: The Rosstat.

In 2018, there was growth in the volume of the food market (1.7 percent), nonfood market (3.4 percent), paid services to households (2.5 percent) and public catering (3.7 percent) as compared to the previous year's indicators (*Fig. 9*).

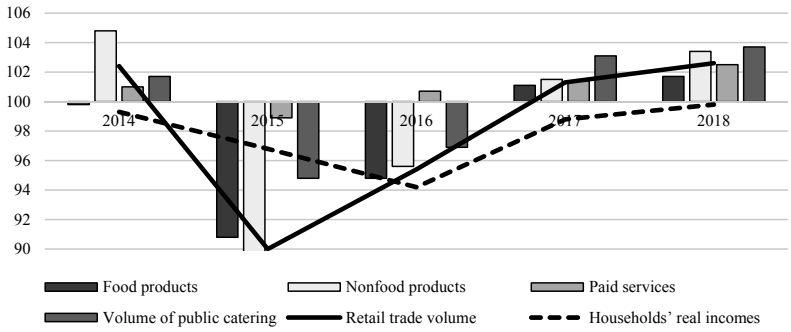


Fig. 9. The dynamics of the food market in 2015–2018, % on the previous year

Source: The Rosstat.

In H2 2017, households' saving behavior was influenced by reduction of interest rates on mortgage loans amid growing market supply of housing of a broad price range. This factor determined a somewhat increase in the share of expenditures on purchasing of the real estate and created the prerequisites for further promotion of this trend in 2018. It is to be noted that growth in households' debt load was accompanied by reduction of the share of savings and slowdown of growth in households' bank deposits, which situation under certain circumstances may create problems related to fulfillment by households of their debt obligations to banks (*Fig. 10*).

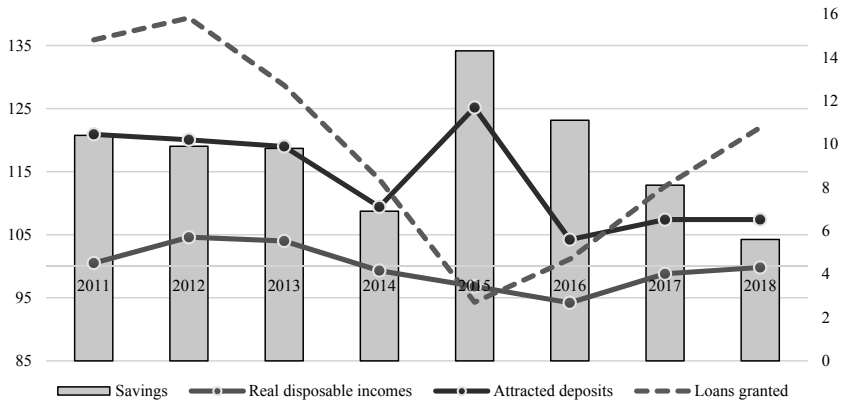


Fig. 10. The share of savings in households' incomes (%) and dynamics of deposits and loans to households in 2011–2018, % on the previous year

Source: The Rosstat.

4.1.3. Changes in the pattern of formation of GDP by the source of revenues

In 2014–2018, price changes determined the dynamics of financial results of economic activities and profitability ratios. In 2018, industries' profitability increased by 4.8 percentage point as compared to the relevant period of 2017 (*Table 5*).

Table 5

Profitability of sold goods, products, jobs and services by the type of economic activities in 2017–2018, %

	2017	2018
1	2	3
Total in economy	7,5	12,3
Agriculture, hunting and forestry	17,3	20,2
Production of minerals	25,9	33,6
Manufacturing	11,5	12,8

Cont'd

1	2	3
Power-, gas- and steam-supply and air conditioning	8,3	8,8
Building	7,2	6,1
Wholesale and retail trade	4,6	7,3
Hotels and restaurants	7,0	7,1
TTransportation and storage	9,7	8,8
Information and communications	7,0	14,6
Financial and insurance activities	0,4	11,2
Real-estate operations, leasing and rendering of services	15,5	15,9
Public administration and military security; social security	1,6	2,4
Education	5,0	4,2
Healthcare and provision of social services	10,4	10,4

Source: The Rosstat.

In 2017–2018, the level of profitability of production and the dynamics of the balanced financial result were largely determined by manufacturers' pricing policy. In 2018, manufacturers' response to the trend of revival of internal demand was the speed-up of growth rates of prices both in the industry and building. Advanced growth in prices in the mining industry and primary product refining industries led to adjustment of prices in manufacturing (*Table 6*).

Table 6

Price indices and schedules in 2014–2018, December on December

	2014	2015 .	2016	2017	2018
Consumer price index	111.4	112.9	105.4	102.5	104.3
Manufacturer price index, including:	105.9	110.7	107.4	108.4	111.7
mining	98.4	109.8	108.5	123.9	120.7
manufacturing	108.5	111.2	107.6	104.2	110.3
Agricultural producer price index	114.1	108.5	101.8	92.2	112.9
Overall index of building material prices	107.2	110.3	103.2	103.1	107.3
Index of cargo transportation tariffs	100.9	111.5	105.6	109.0	100.9

Source: The Rosstat.

In 2017–2018, the redistribution of revenues in favor of enterprises sped up. In 2018, the share of labor remuneration in GDP fell to 45.7 percent against 47.1 percent a year before (*Table 7*).

Table 7

The pattern of formation of GDP by the source of revenues in 2014–2017, % against the total, in current prices

	2014	2015	2016	2017	2018
Gross domestic product	100	100	100	100	100
Including:					
Labor remuneration of hired workers, including shadow wages and mixed incomes	47.2	46.5	47.3	47.1	45.7
Net taxes on manufacturing and imports	13.9	11.2	11.0	10.8	11.4
Gross profit in economy and gross mixed income	38.9	42.3	41.7	42.1	42.9

Source: The Rosstat.

A change in the share of labor remuneration in GDP is normally acyclic: it increases in the period of recession and decreases during the recovery as a result of changes in the paid employment and the level of wages and salaries or under the simultaneous effect of them both. In 2016–2017, a short-term trend of growth in the share of wages and

salaries was behind weak dynamics of reduction of demand on the workforce relative to a decrease in output amid the acute phase of the crisis and restrained growth in demand on workforce as compared to the dynamics of output in the period of the economic upturn. It is to be noted that the indicators of price adjustment of the cost of the workforce made it possible to regulate the quantitative parameters of modification of the rates of employment and unemployment, as well as the ratio of wages by the type of economic activities.

The well-paid types of economic activities – mining, production of petrochemicals, pipeline and air transportation and financial activities – have retained the leading positions, but the excess of nominal wages over the nationwide average indicator decreased somewhat in 2018. The lowest wages (64 percent of the nationwide average indicator) were still in the agrarian sector.

The shrinkage of internal consumer and investment demand slowed down growth in wages in building and trade with a simultaneous reduction of employment in these types of business activities.

The differentiation in the level of labor remuneration by the type of economic activities was particularly explicit as regards the form of ownership. In the economy as a whole, the nongovernment sector saw a higher level of labor remuneration as compared to state-owned entities. In 2011–2018, the narrowing of the gap in the size of accrued average wages in entities of different forms of ownership illustrates high rationality of the labor remuneration policy in the nongovernment sector by means of regulation of the number of the employed. Owing to a higher level of labor remuneration, state-owned entities were oriented at preserving employment conditions, generally, in problem regions, single-industry cities, as well as at large enterprises which were of priority to the national economy, which situation could not, but restrain restructuring processes on the labor market.

A substantial diversification of wages was registered by the level of education and the type of activities. The situation where workers with a higher education degree were paid much higher wages as compared to those with a lower level of education is typical virtually of all the types of economic activities. By the type of economic activities, type of occupation and the level of education, average wages in the industry, financial sector and R&D surpassed by large average indicators across the economy. In such socially important types of activities as education and healthcare, average wages were still below the average nationwide indicators.

The extent and nature of changes in average accrued wages are influenced by the age and gender composition of the employment. Low wages as a transition stage are of less concern to young people under the age of 30 years old in the context of motivation to promotion of their status as regards education, skills and social and financial standing In 2013–2018, the higher level of average wages by the type of occupation was observed with active age groups (25–49 year old) with the record of service of 5–20 years. With higher age and longer record of service, the dynamics of changes in average accrued wages slowed down in the economy as a whole.

Gender parameters were the factor, which had a considerable effect on the value and dynamics of the labor remuneration fund and the level of average accrued wages. The general trend of reduction of the level of employment of women in the economy was accompanied by a gradual shrinkage of the gap in labor remuneration on the basis of gender and the type of economic activities. In 2018, women accounted for 53.8 percent in the total number of workers (-0.7 percent as compared to 2013), while the ratio of women's wages to those of men was equal to 72.6 percent (+2.6 percent on 2013).

In the Russian economy, changes in macroeconomic conditions affects mainly the indicators of the dynamics of nominal and real wages, rather than the level of employment (in 2018 the rate of unemployment amounted to 4.8 percent). The reaction of the labor market to the changes in the economic situation remains rather weak because the adaptation takes place not through the layoffs of the workforce, but by means of utilization of adaptation mechanism of working hour adjustment, administrative measures and practices of informal labor relations. The indicators of the pricing adjustment of the cost of the workforces permitted to regulate the quantitative parameters of changes in the rates of employment and unemployment, as well as the level and ratio of wages by the type of economic activities. Generally, advanced growth in wages as compared to labor efficiency underpinned domestic demand, but had an unfavorable effect on the dynamics of investment activities and overweighed the positive effect of households' domestic consumption. Amid the slowdown of economic growth rates, there was a specific modification of factors of production in the economy, the gap between growth in wages and labor efficiency became larger and inequality in distribution of wages and incomes increased.

The level and dynamics of wages and the changes in the share of the workforce in GDP have both social and economic consequences. Sustainable growth in wages plays an important role in the overall demand maximization, weak growth limits households' consumption and domestic demand, while high differentiation and inequality in distribution of incomes and wages are interpreted as a factor of restraint of economic growth rates and social well-being. In the social dialogue, it is crucially important to formulate the mechanisms of modification of wages with taking into account changes in labor utilization efficiency and inflationary developments, as well as determination of minimum wages.

Wages-related costs permit to estimate employers' expenditures on utilization of workers' labor, while wages reflect the level and dynamics of workers' purchasing power and serve as indirect indicators of living standards.

The index of the average size of wages is an important component of the information on the labor market because wages are the dominating form of the gainfully employed population's income.

The correlation between nominal, median and minimum wages and the minimum subsistence level demonstrated gradual narrowing of the gap between them and since May 2018 the minimum size of wages has been set at the level of the minimum subsistence level of the working population, which situation is in harmony with global

trends of regulation of the labor remuneration. In 2017, in the Russian economy the ratio of the minimum wages to the median and average wages amounted to 27.5 percent and 20 percent, respectively. These indicators are still rather low, while in most countries the ratio of the minimum wages to median wages and average wages are in the range of 45–60% and 40–55%, respectively (*Table 8*).

Table 8

Average accrued wages, minimum wages, and the minimum subsistence level

	Rub.				%	
	Average nominal wage	Median wage	Minimum monthly wage	Minimum subsistence level	Correlation between minimum monthly wage and indicator of	
					Average wage	Minimum subsistence level
2010	20 952		4 330	6 138	20.7	70.5
2011	23 369	1 604	4 611	6 877	19.7	67.0
2012	26 629		4 611	7 048	17.3	65.4
2013	28 792	21 266	5 205	7 586	18.1	68.6
2014	32 495		5 554	8 683	17.1	64.0
2015	34 030	24 846	5 965	10 455	17.5	57.1
2016	36 709		6 204	10 598	16.9	58.5
2017	39 085	28 343	7 800	10 701	20.0	72.9
2018	43445		11 663	11 663	26.8	100.0

Source: The Rosstat.

In 2009-2014, the average annual growth rates of real wages amounted to 104.5 percent with growth registered across all the aggregate types of economic activities. On the back of a surge of the inflation rate in 2014–2015, real wages fell by 9 percent in 2015; this decrease in wages was compensated by the recovery of the growth trend in 2017–2018. In 2018, real wages rose by 6.8 percent as compared to the relevant period of the previous year.

In 2014–2018, with slowdown of economic dynamics in the Russian economy the advanced growth in real wages pointed to a lack of automatic short-term correlation between wages and labor efficiency. It is to be noted that in 2014–2017 the narrowing of the rates of changes in real wages and the dynamics of labor efficiency was a positive trend (*Table 9*).

Table 9

Labor market indicators in 2010–2017, % on the previous year

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Gross domestic product	104.5	104.3	103.7	101.8	100.7	97.5	99.8	101.5	102.3
Overall labor costs	101.3	100.5	100.4	99.5	99.8	99.0	99.8	100	n/a
Labor efficiency index	103.2	103.8	103.0	102.2	100.7	98.1	99.8	101.5	n/a
Real accrued wages of entities' workers	105.2	102.8	108.4	104.8	101.2	91.0	100.8	102.9	106.8
Average annual number of the employed	100.1	100.2	100.5	99.9	99.9	99.5	99.5	99.7	100.3

Source: The Rosstat.

As seen from the dynamics of labor efficiency in 2014–2018, with the pattern of economic growth being modified labor efficiency was growing at a higher rate in the tradable sector of the economy. Undoubtedly, the positive contribution to the overall economic dynamics was made by the agriculture. Growth in labor efficiency in the agrarian sector facilitated the redistribution of labor resources to the services sector and

determined the modification both of structural parameters of the employment and social parameters with the correlation between nominal wages of workers in the agrarian sector and wages of workers with relevant skill standards in the industry, building, trade and other services taken into account.

The industry saw mixed dynamics. With changes in the level of prices, growth in the cost of borrowings and shortage of investment resources, a decrease in labor efficiency in mining was compensated by additional attraction of the workforce; this factor permitted to underpin positive output dynamics and promote the role of this activity in formation of the gross value added. The manufacturing compensated the reduction of the average annual number of the employed by means of restructuring of production and increasing workers' labor efficiency with growth in the average earned rate; as a result it managed to reduce labor inputs.

With shrinkage of the domestic market of investment goods and services and consumer demand in 2014–2017, labor efficiency in the building industry and retail trade decreased. Despite the more dramatic slowdown of the growth rates of nominal wages in the above sectors as compared to the nationwide level, preservation of jobs became the factor of restraint of social risks on the labor market with the a high share of those types of activities in the economic pattern taken into account (*Table 10*).

Table 10

Dynamics of labor efficiency by the type of economic activities, % as compared to the previous year

	2014	2015	2016	2017
Total	100.7	97.8	99.8	101.5
Agriculture, hunting and forestry	103.3	104.5	103.5	103.8
Mining	102.8	98.3	100.3	100.4
Manufacturing	102.5	97.1	99.3	99.7
Power-, gas- and water-supply	100.2	99.8	100.5	102.2
Building	98.4	100.8	99.9	98.9
Wholesale and retail trade	98.7	93.4	94.4	101.5
Hotels and restaurants	99.8	96.2	94.3	101.7
Transportation and storage	100.4	97.8	99.0	102.2
Real-estate operations	98.6	100.2	100.2	99,6

Source: The Rosstat.

The analysis of the long-term trends of development of the Russian economy reveals weak sensitivity of the labor market to the changes in the dynamics of macroeconomic indicators. The reaction of the labor market to the crisis situation remained rather weak because adaptation took place not by means of the lay-offs of the workforce, but through the adaptation mechanisms of regulation of working hours, administrative measures and the practice of informal labor relations.

In 2018, the number of workforce amounted to 76.2 million people, including 72.5 million people gainfully employed in the economy and 3.7 million people (4.8 percent) classified as unemployed (as per the methods of the ILO). Despite the slowdown of the rates of economic dynamics in 2015–2018, the rate of unemployment fell to the historic low values. As seen from the comparative analysis of the main indicators of the labor market, with the general downward trend of the share of the able-

bodied population in the total number of the population the dynamics of the number of the workforce and the gainfully employed persons in the economy demonstrated weak growth in 2015–2018, which situation was probably related to the involvement of potential resources of the workforce from among the economically inactive population amid falling living standards (*Fig. 11*).

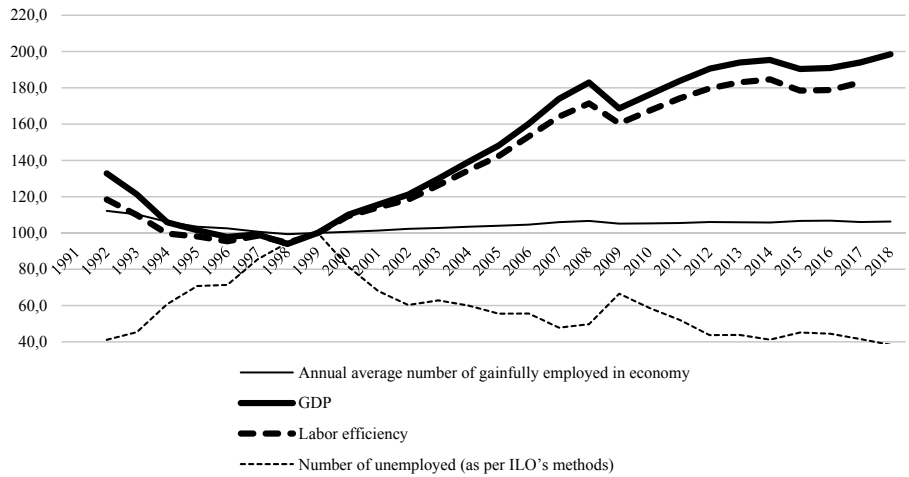


Fig. 11. The dynamics of the number of the gainfully employed in the economy, the unemployed and GDP, % on 1999

Source: The Rosstat.

In the current situation, the weak reaction of the labor market, including its component, such as the unemployment to complicated economic conditions can be explained by the policy of retention of skilled workers amid real depreciation of the workforce and expectations for revival of economic activities in future. In addition, the shortage of labor supply justified by demographic factors and the outflow of migrants whose earnings decreased dramatically due to the depreciation of the rouble had a restraining effect on growth of the rate of unemployment. Employers' need in workers declared by the state employment service remains higher than last year; as of the end of 2018 the tension coefficient per 100 declared vacant jobs amounted to 46.2 persons against 64.3 persons a year before. With high indicators of the turnover of the workforce (hiring and layoffs), the turnover of jobs (liquidation of old jobs and creation of new ones) – as a parameter of their renewal – is still rather low. It is to be noted that the level of the turnover is underpinned mostly by the liquidation of jobs at the existing enterprises, rather than creation of jobs at new ones.

In 2017–2018, nearly 11.2 percent of the number of workers was partially employed. In January-September 2018, the average number of working hours per one worker decreased by 0.5 percent as compared to the relevant index of the previous year with quite a broad range of fluctuations of this indicator across the types of economic activities. In mining, in 2018 the share of part-time workers was equal to 8.3 percent of the average payroll strength, while in manufacturing, to 20.9 percent. The investment crisis in the building industry caused the reduction both of the number of the employed and growth of 18 percent in the number of part-time workers. In the services sector, part-time employment was not quite acute because of restructuring of jobs and support of the budget-funded sector. A high level of part-time employment has an effect of the dynamics of parameters of the rate of unemployment, but at the same time is evidence of the prevailing inefficiency of employment.

In the past 25 years, structural changes in the economy have led to a substantial modification of demand on workforce. With growth in the share of the nontradable sector, the new formats of provision of state, financial, commercial and transport services were accompanied by advanced growth in the workforce engaged in those types of activities. In 2001–2017, the average annual number of the employed in the nontradable sector of the economy increased by nearly one-third and amounted to over three-fourth of the total number of gainfully employed in the economy. Highly restrained changes in healthcare and education were an alarming factor in terms of long-term goals and improvement of households' living standards.

Restructuring of employment was accompanied by the modification of demand on the workforce on the basis of its skills. In the pattern of the gainfully employed population, the share of workers with higher and secondary vocational education increased. In the period of ten years from 2006 to 2017, the share of persons with higher education in the total number of the employed in the economy increased by 6.4 percentage point, having grown at advanced rates as compared to other categories of the employed. The highest level of the employed with higher education and high skills is typical of such types of activities as education, science, finances, state administration and healthcare. These activities see growth in demand on human resources which have received special retraining or advanced training. This factor is going to play an important role in promotion of labor efficiency through more comprehensive utilization of professional skills and competences. Also, it is worth mentioning that the above listed types of activities are characterized by changes in gender parameters of the employment owing to growth in the share of persons of active and creative age (25–49 years old), as well as women with a higher level of education as compared to men.

Amid the complicated economic situation of 2015–2018, the government took a number of important decisions related to regulation and reduction of the labor market's tensions, including: raising of the size of minimum wages and the maximum size of employment benefits; equalization of the rights of the unemployed; formation within the frameworks of the state employment service of the nationwide bank of vacant jobs; changing of the level of labor remuneration in the public sector. A trend of

toughening of state control over compliance with the norms of the labor legislation, in particular, the ones aimed at restructuring of the employment, preservation and efficient utilization of workers' professional skills, introduction of nonstandard working regimes, promotion of workers' social security and upgrading of working conditions received an additional impetus.

4.2. Russian industrial sector in 2018: slowdown of exiting from stagnation of 2012–2016 (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. 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.

* * *

The year 2018 became a hard one for the Russian industrial sector. On the one hand, dynamics of indicators including a wide range of measured indicators did not

[1] This section was written by S. Tsukhlo, a researcher at the Gaidar Institute for Economic Policy.

demonstrate crisis-style features. On the other hand, slowdown of positive trends registered in the Russian industrial sector seen in 2017 disaffected enterprises. Exiting from 2012-2016 stagnation slowed down in 2018.

4.2.1. General assessment of 2018

Prolonged period of industrial business surveys conducted by the Gaidar Institute and representative range of indicators permit to resolve the first task – analyze the situation in the sector in 2018 – determine the place for the year 2018 in all the 27 years since the IET launched and carried out business surveys between 1992–2018. For this purpose, we will use aggregate indicators. The latter are usually calculated on a monthly basis on the findings obtained from monthly surveys. They became widely popular owing to promptness of the findings and shortage of data released on the Russian industrial sector. However, this approach to present surveys' findings complicates assessment of each year as a whole. That is why we analyze all consolidated indicators in a year-on-year basis.

The IEP Industrial Confidence Index[1] is the most general characteristic computed by all organizations on the basis of surveys and provides the first insight into the state of business in the sector.

The Index in 2018 remained unchanged since 2017 (*Fig. 12*). Thus, the Russian industrial sector in 2018 managed to recover from the 2012–2016 stagnation. Note that the Index gives no reasons for separating the 2015–2016 period as a stand-alone crisis period. In the Russian industrial sector, the two past years saw just the continuation of stagnation (or according to terminology adopted in 2011-2014 – "the second wave of the crisis"). However, the discussion of a possibility of "the second wave" allowed the industrial enterprises astonishingly easy to face somewhat deterioration of the situation in the sector – and what is more important – pro-crisis-like verbal intervention of early 2015. Business surveys' findings provide enough ground for calling 2015-2016 "the second wave of the crisis" or (taking into consideration weaknesses of crisis-style events) – the stagnation period. In 2017, industry launched exit from stagnation but failed to continue exiting in 2018.

[1] The Index 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;
2) Estimate of demand, difference of assessments = percent above normal + percent normal – percent below normal;
3) Estimate of finished goods inventory, 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 sing of ameliorating situation.

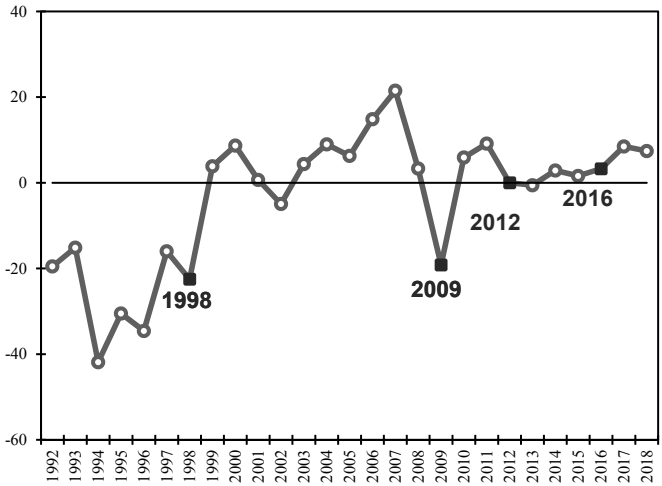


Fig. 12. IEP Industrial Confidence Index, 1992–2018, percentage points

Stabilization of the Industrial Confidence Index in 2018 was provoked by a reduction of two basic indicators out of four used in its computation, nominal growth - third and invariance – fourth.

The worsened dynamics of industrial goods demand was the key factor in 2018. According to average annual data, the balance of actual changes in sales was down 6 points and again was negative, i.e. responses about demand decline during last year were more than responses about its growth. In 2017 this indicator stood at zero and was top since 2011.

In this context, industrial enterprises opted for minimizing their excessive finished goods inventory. The balance of average annual inventory assessments was down from +7 to 0 points. Note that a small positive balance of assessments in 2017 suggested that enterprises were confident that sales could boost and fundamentally differ from the crisis surplus of finished goods inventory, which surveys registered in 1992-1996 and in 2009. Year 2015 did not see crisis surplus of finished goods inventory in industrial sector. Even on the contrary. Balance of responses regarding inventory of finished goods in crisis 2015 was below the balance of responses seen in 2014 by 3 points. In January 2015 the industrial sector registered shortage of inventory, which was very surprising for the first month of the crisis. Nominal reduction of the balance of responses seen in 2018 positively affected the change in the Industrial Confidence Index because this balance is used with a reversed sign in measuring the Index. However, such positive effect there is a fall of the Russian industrial confidence regarding the new future prospects.

Industrial enterprises' production plans in 2018 were less optimistic. The average annual balance of their expectations was down 2 points after an increase of 5 points in 2017. Note that in the first official crisis year 201, the industrial sector exhibited a

reduction of industrial optimism by less than 1 point and this indicator mainly suffered in 2016 – second year of the official crisis – coming to 5 points.

Such more negative than positive dynamics of three main indicators (demand, inventory, expectations) nevertheless did not affect the balance of major assessments of demand volumes seen in 2018, which remained at the previous year's level when the demand indicator demonstrated fundamental growth (+25 points) after standing in 2012–2016 in the range of +2…+11 points. In crisis 2015 the balance of assessments declined by a mere 1 point. Major decline of this indicator (satisfaction with demand) following the crisis of 2008–2009 was registered by surveys in 2012 and constituted 15 points.

However, the notable slowdown seen in 2018 in recovery from stagnation after the success in 2017 affected industrial enterprises' assessments of the situation that prevailed. The Industry Adaptability (Normality) Index for the Russian industrial sector posted for the first time since 2013 a decline in the average annual data (*Fig. 13*). This Index – is the second consolidated indicator measured according to the findings obtained in the course of business surveys conducted since 2015. Then, assessment of the situation by the Russian industrial sector – far from the non-crisis-like – made to turn attention to a business survey questionnaire asking industrial enterprises to measure their key performance figures using a grading scale: a "higher than normal", "normal", "lower than normal" performance. The average share of answers like "normal" shows the extent to which industrial enterprises consider their situation as acceptable, that is, the extent to which they are adapted to present economic conditions. The Industry Adaptability (Normality) Index is measured by industrial enterprises' assessments of demand, finished goods inventory, raw and other materials, number of workers, provision of capacities and financial and economic situation.

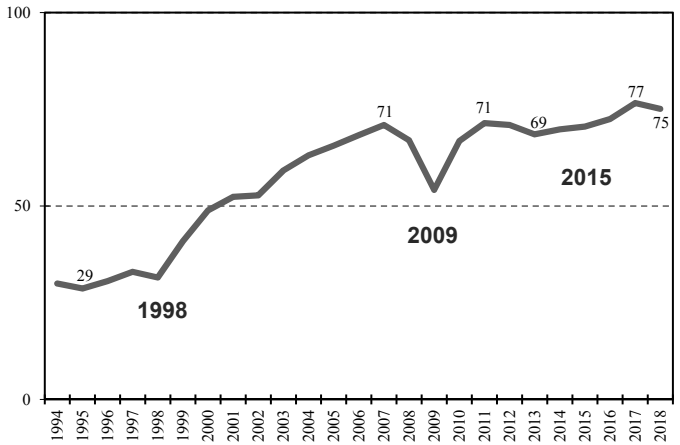


Fig. 13. Industry Adaptability ('Normality') Index, 1994–2018, percent

The Industry Adaptability Index for 2015–2016 revealed no crisis-related developments at that period in the Russian industrial sector, at least according to industrial enterprises. Furthermore, enterprises assessed the situation in the industry more positively in the 2015 crisis year than they did in 2014. The Index gained 1 point, hitting an all-time high that was previously recorded only in 2007 and in 2011. Another 1 point was added next year which set yet another all-time record. The first year of recovery from the official crisis of 2015–2016 (or recovery from the 2012–2016 stagnation) contributed to a substantial rise in the Industry Normality Index since 2011. The index already hit the absolute highest of 77 percent in the period of its computation during 1994–2018.

Five out of six initial components used for computing the Adaptability Index exhibited an increase in 2017. Solely estimates of finished goods inventory showed a reduction of "normal" responses by 3 balance points in the wake of the balance growth ("above normal" – "below normal") to +7 points. However, this combination is more positive than a negative change of inventory and their estimates by industrial enterprises because speaks about the confidence of enterprises' managers in growing demand on the output. Major contribution in reaching a record level of the Normality Index in 2017 were estimates of available industrial capacities in the industrial sector – the level of normal provision with industrial capacities moved up by around 9 points and hit an all-time high or the entire period of monitoring of this indicator in 1993-2018. This growth occurred both due to the reduction of responses "more than sufficient" and to the decreased responses "insufficient." However, even this year the industrial sector has failed to get rid of the overhang of surplus capacities – responses "more than sufficient" were as before more than responses "insufficient," i.e. their balance as positive. Negative balance (shortage of capacities) was registered by surveys only in 2007–2008 (the latest survey with this question was conducted in October 2008, in other words, before the collapse seen in November 2008). However, in 2009 the industrial sector got rid of the shortage of capacities and stays so up to date.

All-time high assessments of normality for the entire period of monitoring were registered in 2017 with three indicators – provision with industrial personnel, stocks of industrial inputs, and financial and economic situation of enterprises. Demand assessments hit solely a local maximum, the record of 2007 was not beaten.

However, the slowdown in positive processes in 2018 pushed down the Industry Adaptability (Normality) Index by means of a negative adjustment of 4 initial indicators, retention of assessment of the fifth one and under the nominal growth of assessments of the sixth indicator.

However, "normal" assessments of finished goods inventory at 2018 year-end hit the absolute highest in all the 27 years since the IEP launched the business survey. Zero balance of other inventory of finished goods estimates is a reflection of the fact that the industrial sector lost hopes for demand revival and on the whole got rid of even the minimal surplus of inventory of finished goods, which it usually maintains in the wake of confidence in the demand growth. Thus, the nominal growth of the share of normal

responses of finished goods inventory is most likely an adverse signal than a positive one in 2018.

Estimates of stock of industrial inputs in 2018 retained the record high level of normality (80 percent) attained by the Russian industrial sector even in 2016 and retaining token growth for the third year. This success is due to the sluggish economic dynamics of the recent years and historically better provision of enterprises with working capital.

However, "normal" provision of capacities in the Russian industrial sector dropped in 2018 by 5 points over the retention of a positive balance, i.e. overhang of excessive capacities. A similar situation was observed for enterprises' assessments of their manpower but under a zero balance ("over" – "less") on the whole in industry.

Enterprises' assessments of their financial and economic situation in 2018 lost 2 points, although this indicator had the lead in the Russian industrial sector in terms of the degree of enterprises' satisfaction, that is, most of the surveyed enterprises were overall satisfied with their financial and economic situation ("good" or "satisfactory") (88 percent in 2018, 90 percent in 2017). The Russian industrial sector was always less satisfied with other indicators since 2003. Industry was constantly worst of all satisfied with the demand for its products (except 2007). In 2012–2016 sales volumes were considered normal by 50–52 percent of industrial enterprises – without whatever release of the indicator in 2015–2016. In 2017, satisfaction with sales moved up to 61 percent, and in 2018 nominally decreased to 60 percent (*Fig. 14*).

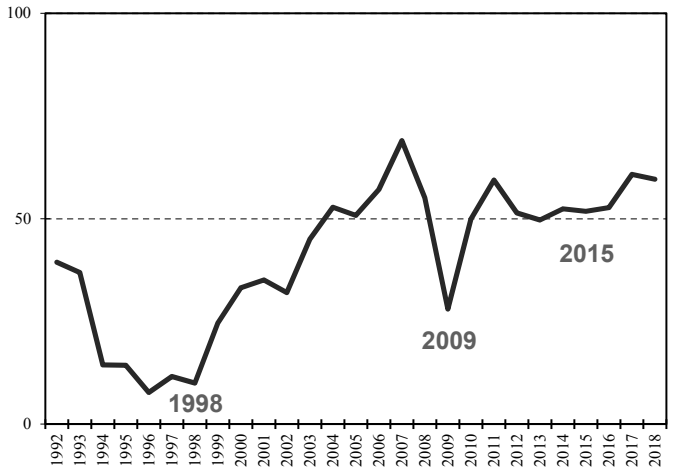


Fig. 14. "Normal" self-assessment of product demand in 1992–2018, percent

In 2018, the slowdown in recovery from the 2012–2016 stagnation affected also other projections (plans) of Russian industrial enterprises. The Industrial Prediction Index[1] lost 3 points for industry's optimistic expectations after hitting in 2017 a local high, 5 points up (see *Fig. 15*). The Industrial Prediction Index was stable in the period between 2012 and 2016, varying between +3.6 and +5.3 points, which is another evidence that the Russian industrial sector slipped into stagnation after the recovery from the 2008–2009 crisis: there was a gradual loss of optimism in 2011 followed by transition to a stagnation in 2012.

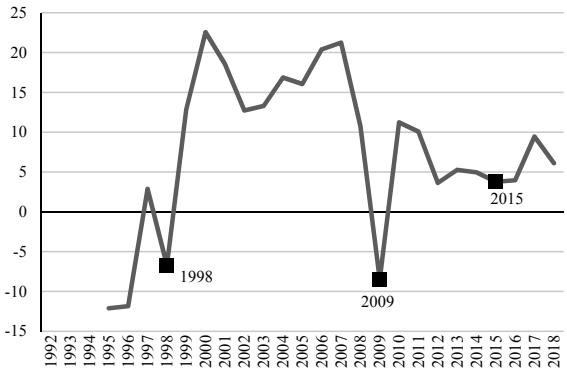


Fig. 15. Industrial Prediction Index 1995-2018, percentage points

The decline in optimism in 2018 was observed through all enterprises' projections that were used for measuring the composite Industrial Prediction Index. Sales predictions saw most of the decline, sliding 5 points down in 2018. In 2017, the balance of predictions climbed 4 points but dropped again in 2018. Adverse balance of these projections after the crisis of 2008–2009 was registered in 2015 and constituted merely -2 points, which resulted from the pro-crisis-style declarations made by officials and experts. Output projections declined in the first crisis year by less than 1 point, i.e. the industrial sector was not prone to adjust its production program. Only in 2016 – following the change in the official rhetoric – industrial enterprises could provide adequate assessment of the current situation and downgrade their projections by another 5 points to a local minimum (+11 points). However, this decline was opposite to the crisis-style collapse of 2009 when the indicator (according to the annual average data) fell to +1 point after registering +35 points in 2017.

Occupational employment projects in 2015 were far from the crisis-like but more likely to the contrary. Balance of these projections in the first crisis year was less

[1] The Industrial Prediction Index is measured as the arithmetical mean of the balances of three questions included in a survey questionnaire: demand change forecasts, output changes plans, and expected occupational employment changes. The Index can vary from -100 to +100 points.

pessimistic, i.e. industrial sector was less prone to dismiss staff in the crisis 2015 than in the previous non–crisis 2014. This can be explained by the fact that industry at the beginning of the 2015–2016 crisis, which practically did not affect it got the chance to resolve its personnel problems – to do away with the shortage of qualified personnel – in the first place, workers. Industry continued conducting the same personnel policy in 2016 when balance of its occupational employment projections change went up but remained in the red. Industrial enterprises still planned to reduce the number of employees but at a slower pace (with balance -1 point) and minimal for 2012–2016. The Russian industrial sector produced the most pessimistic projects of occupational employment change after the 2008–2009 crisis in 2013 at -5.6 points. In the 2009 crisis year for industry this indicator plummeted from +4 to -19 points.

4.2.2. Uncertainty assessment of 2018

Enterprises' projections collected in the course of business surveys are used for the evaluation of the current economic situation and the years to come. Monthly surveys cover a large number of industrial enterprises and in case of coincident of the majority of enterprises' projections one can draw conclusion that the industry has a similar (and specific one) perception of the current situation and the prospects of its near-term development. When responses of the surveyed enterprises divide equally between three types of projects "increase", "remain unchanged", and decrease" one can speak about a total uncertainty ща the economic situation – industry lacks unanimity (specificity). Totally opposite development scenarios seem equally possible for enterprises.

Direct assessment of the uncertainty during the long enough history of the IEP business surveys conducted in 1992-2018 exhibits that the popular thesis of the growing uncertainty in 2018 lacks ground. The Russian industry demonstrated a reduction of uncertainty during 2018. Moreover, in 2018 the level of uncertainty fell to an all-time low according to enterprises' projections regarding the change of three main indicators: demand, output, and occupational employment (*Fig. 16*).

Projections of the changes in occupational employment practically always had the highest degree of uncertainty. They peaked twice in the 21st century: during the 2008-2009 classical crisis years and during non-crisis style 2014. Notably, the latest upsurge of uncertainty was already stemming in 2013, and registered a downward trend in the officially crisis-style 2015. In 2016, the uncertainty of occupational employment projections plummeted to rock-bottom low for that moment.

During 1995–2018, the demand forecasting nearly always was marked by greater uncertainty than occupational employment projections. Uncertainty of these expectations hit an all-time high in the classical crisis year of 2008. It must be said that close (but lower) indices of uncertainty was obtained in 1995–1996 when the Russian industry was in deep and protracted crisis. In the officially recognized crisis year of 2015 uncertainty of demand forecasts remained at the level of the previous non-crisis 2014, which in addition turned out to be an all-time maximum. In the nest crisis year of 2015 the uncertainty of these expectations exhibited next minimum, which halted in 2016 and

in 2018 continued its downward trend by breaking the record. In other words, so high degree of uncertainty of demand forecasts as in posted in 2018 was not observed in the Russian industrial sector.

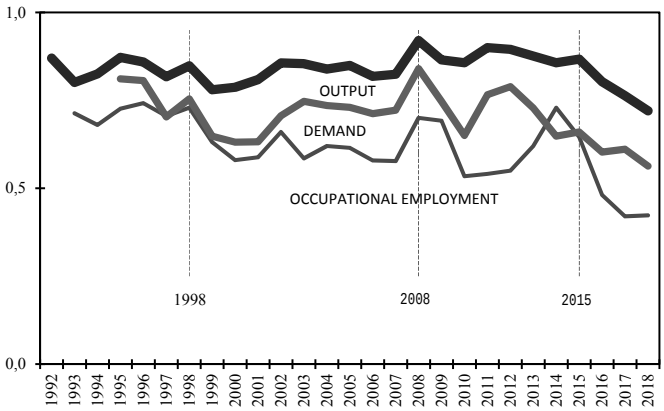


Fig. 16. Annual average assessments of the level of uncertainty of demand, output, and occupational employment forecasts, 1992–2018

Output plans tend have the highest degree of uncertainty (and correspondingly the lowest degree of certainty) of analyzed in the business surveys indicators. However, uncertainty of these expectations has approximately the same historic dynamics as the uncertainty of demand and occupational employment forecasts. Outcome of 2008 turned out to be an all-time high for the entire period of 1992–2018, i.e. both during the deep and protracted crisis of the 90s, and during the officially accepted crisis year of 2015 the Russian industrial sector boasted of more definite output plans than during the shock year of 2008. Years 2016–2018 saw industrial enterprises posting stable and most notable reduction of uncertainty – never during the previous years the industrial sector managed to demonstrate such degree of their output plans consistency, which resulted in hitting an all-time minimum of output plans uncertainty in 2018.

In the analysis of the uncertainty assessment one should bear in mind that uncertainty growth indicates solely the fact that one category of projections is predominant in the responses of enterprises without indicating the economic content of such uncertainty. In other words, technically high degree of certainty can hide predominance of any forecast scenario: growth, stagnation, and decrease. That is why the assessment of uncertainty especially in cases of clear decrease, i.e. in case of certainty increase, should be specified – forecasts of what category of change are predominant in the Russian industry.

This specification of a positive decrease of uncertainty in our case significantly reduces confidence of the first conclusions. Increase of certainty of enterprises projections seen in 2018 was due to concentration of the latter in the category “will not

change." The share of stagnation projections in 2018 hit an all-time high for all analyzed indicators (*Fig. 17*).

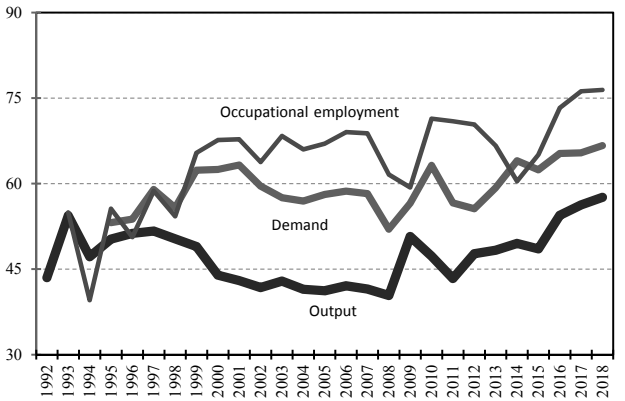


Fig. 17. Russian industry propensity for stagnation (share of stagnation projections), 1992–2018, percent of enterprises

The minimal uncertainty of occupational employment projections was defined by the share of projections "will not change" hitting 76 percent, which was registered by business surveys in 2017 and 2018. This value was an all-time high of this category of projections for all 26 years of its monitoring. Two remaining responses of a potential change in employment were divided by industrial enterprises in approximately equal parts and ensured nearly zero balance projections change.

Expectations of demand retention in 2018 were registered by 67 percent of industrial enterprises 2 points above the results registered in 2016–2017. Increase of stagnation demand forecasts in the Russian industrial sector commenced in 2012, and in 2014 the indicator hit 64 percent exceeding by 1 point the peak of 2010. The crisis year of 2015 practically did not change the share of such demand forecasts, meanwhile in 2008 these forecasts decreased by 6 points, which logically became sales reduction forecasts.

Propensity of the Russian industry to the demand stagnation exhibited significant growth at the year-end 2016 when this indicator hit 54 percent and repeated the 1993 record. In the previous stagnant years of 2012–2015, the share of projections in favor of retaining output consistently stood in the range of 48–50 percent. After 2016, stagnation projections collected merely 4 points but that was sufficient to obtain in 2018 an all-time high for the entire period of over business surveys expectations of output invariance, which stood at 58 percent.

Thus, in the enterprises' projections of their principal indicators dominate expectations of their invariance (i.e. stagnation or stability depending on the point of view). Although the balance (the share of responses "will grow" minus the share of responses "will decrease") of other development scenarios in 2018 remained positive. Propensity (readiness) of the Russian industrial sector to growth remained low and what

is the worst turned out to be less than in the previous 2017 across all indicators: demand, output, and occupational employment (*Fig. 18*).

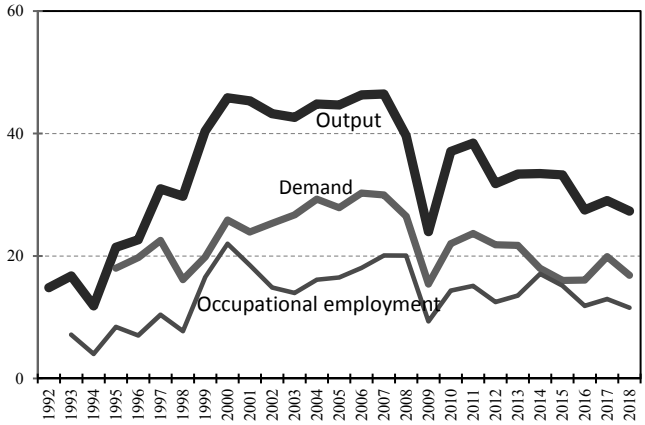


Fig. 18. Propensity of the Russian industry for growth (share of growth projections), 1992–2018, percent of enterprises

The output growth forecasts in 2018 went back to the level seen in 2016 – the second year of the official crisis. This level in addition is the worst seen since termination of the crisis of 2008–2009. Then expectations for the output growth exhibited decrease already according to the business surveys' results of 2008, although that year solely the last quarter was considered a crisis one. The Russian industrial sector defined major plunge of the hopes for the output growth in 2009 when the share of the output growth projections decreased to 24 percent. Inferior level of projections for the production output growth was registered solely in 1992–1996. In the crisis year 2015 the Russian industrial sector retained propensity for production output at the level seen during the three previous non-crisis years. However, these years fundamentally exhibited less confidence in the production output plans than in 2010–2011 when industry was exiting from the 2008–2009 recession and was expecting a return to pre-crisis years of explosive growth and demand, and output. Stagnation decreased propensity for the industrial output growth first to the average level at 33 percent (in 2012–2015) and then – to 28 percent (in 2016–2018).

Dynamics of expectations for the demand growth after the 2008–2009 crisis has a different but also less optimistic picture. In 2010–2011, expectations for the sales growth launched a recovery growth but failed to achieve the pre-crisis years' level and even did not hit the level of partially crisis-like year of 2008. Coming stagnation reduced expectation for the sales growth first to 22 percent (2012–2013) and then to 18 percent (2014), and to 16 percent (2015–2016). Attempted exit from the 2012–2016 stagnation in 2017 increased the share of projections for the sales growth to 20 percent, but the negative left by 2018 has decreased the hopes for the demand growth to 17 percent,

which were nearly the worst values for the entire period of monitoring of this indicator in 1995–2018.

4.2.3. Dynamics of main industrial indicators in 2018

In early 2018, main features of the lingering stagnation inherent from 2015–2016 crisis persisted. The January optimism seemed unstable for enterprises and did not result in projections' optimism. At the quarter-end, dynamics of major indicators demonstrated validity of pessimism and forced industry to come to terms with the continuation of stagnation.

In January 2018, the IEP business surveys of Russian industrial enterprises reported a rather high for recent years' demand growth for industrial goods. For the second month in a row, the balance of change remained at a level of +2 points. However, in February growth was slowing down and in March halted. By the way, demand forecasts for Q1 2018 exhibited low level of responses with preservation of positive processes seen in late 2017. Industrial sector learned from the 2015 statements that a rebound from the crisis bottom was to take place soon and failed attempt to rebound from the official crisis, as a result, exhibited reasonable cautiousness in its projections.

This approach justified itself. In 2018 the January surge of output growth rates already in February was replaced by extremely low index value. March data on output dynamics in Russian industrial sector demonstrated similar to February picture – weak growth which requires seasonal adjustment and expert handling of required positive results. In their output projections, Russian industrial sector exhibited in 2018 reasonable care (similar to demand projections). The balance of these plans hit multi-year highs in November 2017 and in January 2018 scaled back to the worst levels of 2017 and remained the same in February-March.

This demand and output dynamics together with their forecast determined in Q1 2018 rather logical and what is more important stable trajectory of estimates of finished goods inventory. In January 2018, amid upbeat demand the balance again was zero and then began gaining "weight" but highly slow and cautiously. In February, it moved up to +2 points, and in March – to +4. Thus, industry pessimistically assesses quick and final recovery from the crisis but preserves minimal surplus of stock of finished goods which speaks about enterprises' readiness to look for a way out of the stalemate of recent years.

Traditional new-year spike of factory-gate prices seen in 2018 turned out to be weaker than in 2017 – +16 points against +22 points registered a year earlier. In February, industrial enterprises in the same traditional way commenced to slow down their price growth – the balance fell to +11 points. However, in March, businesses were forced to raise price more intensively that look uncommon (the January price hike traditionally came to naught in the following months). In this case inflationary expectations experienced by Russian industrial sector were fueled by uncommonly high growth of costs which over three previous quarters exhibited transition from all-time low of +2 points to +27 points.

In early 2018, the Russian industrial sector was well provided with primary resources "amid projections of demand changes", in other words, possible, although not quick recovery from the slow rolling 2015–2016 crisis. The shortage of qualified staff is felt by solely 11 percent of enterprises – close to the all-time low index after the default of 1998. Currently, only 12 percent of enterprises report excessive workforce, which gives zero balance of staff headcount estimates. However, this is true of the industry as a whole and the entire territory of the country. Due to the fact that labor mobility is very low in Russia certain enterprises in certain regions can suffer from the shortage of headcount. The Russian industrial sector reports less shortage of production capacities and at the same time higher overhang of production capacities surplus. However, again according to assessments of enterprises and "due to projected demand changes." The shortage of production capacities in 2012–2017 was reported by 6–8 percent of enterprises and in Q1 2018 – 7 percent of enterprises. Sufficient provision with production capacities in 2017 reported 77 percent of enterprises which was an all-time high (1993–2017) of the Index. In Q1 2018, this index hit 73 percent with 20 percent surplus of production capacities registered in the Russian industrial sector. Thus, downbeat of investment plans has not resulted in a shortage of production capacities in the wake of prolonged recovery from the recession of 2012–2016.

In this context businesses exhibited high satisfaction with their investment plans. The investment volumes registered in Q4 2017 and Q1 2018 were seen as normal by the major part of the Russian industrial sector – 63 percent of enterprises. This is best result since 2011. Nevertheless, industrial enterprises were ready to revive their investment activity. In December-February the balance of the investment plans moved up by 16 points after a local minimum of November 2017 and again hit post-crisis maximum. However, in March the investment plans stopped gaining optimism and shed 3 points remaining nevertheless in steady "plus."

In Q2 2018, the situation in Russian industrial sector did not undergo any significant changes. Most of Russian enterprises continued to register persistently low demand, which enabled them to confidently control their finished product inventory and maintain their output growth rate at minimum. In Q2 2018, growth in selling prices hit its three-year high, although it should be said that in June prices experienced a sharp drop.

According to the business surveys carried out by the Gaidar Institute, in Q2 2018 the demand for industrial goods did not undergo any radical changes. The change pace of the index according to traditionally somewhat understated assessments of the enterprises remained in the negative hovering around zero. Thus, product sales indicated neither a crisis-style collapse nor a decisive exit from the current lengthy stagnation. Demand forecasts were hovering around zero, thus promising no breakthroughs in the summer months of 2018.

However, such a situation had become something very familiar for the industry – so much so that 60 percent of enterprises have described their current sales volumes as normal. Dissatisfaction with the volume of demand has returned to its previous, relatively low level.

In Q2 2018, industrial enterprises were able to confidently control their finished goods inventory. The share of 'within the norm' assessments amounted on average to 71 percent, which exceeds the average result of 2017 (69 percent). At the same time, the balance of the other assessments ('above the norm' and 'below the norm') has been hovering around zero since the beginning of the year. However, this apparently positive result had a negative connotation, because industrial enterprises lack any hopes that sales would increase in the near future. As indicated by the entire history of our surveys, the small excess stockpiles accumulated by industrial enterprises represent a clear sign of their positive expectations.

Viewed against the background of a zero-balance of assessments concerning their finished goods inventory, the modest, but at the same time non-crisis-like demand parameters indeed enabled industrial enterprises to maintain in Q2 2018, their production output at marginally positive growth rates. Output plans have stabilized since March at a level of optimism that should be viewed as reasonable at a time of lengthy stagnation. These plans clearly indicate that industrial enterprises are determined to overcome the current torpidity.

Over the course of Q2 2018, the pricing policy of Russian enterprises underwent a number of serious changes. In April, industrial enterprises registered the most intense price growth since February 2017 and even higher one than in January 2018. However, as early as March 2018, enterprises announced that, contrary to tradition, they were not going to hamper price growth after the similarly traditional jump of prices in January due to vigorous costs growth. The April rise in this index was also provoked by a considerable weakening of the ruble's exchange rate. In May, the growth rate of producer selling prices jumped once again. As a result, over the course of the period from March through May 2018, the balance (pace of growth) increased by 11 points, thus hitting its three-year high. However, in June 2018 the situation sharply changed – the balance of actual changes in prices literally collapsed by 15 points, thus rolling back all the growth registered in March – May.

Over the course of Q2 2018, the level of occupational employment in Russian industrial sector also experienced some significant changes. In April, industrial enterprises continued personnel recruitment in the aftermath of the habitual surge in the rate of dismissals at the beginning of a calendar year. The ongoing rise in the number of personnel had been registered for the second month in a row, although, according to the recruitment plans of enterprises, it was expected either to come to a halt or to considerably decelerate in the next few months. The same conclusions were also drawn from the relatively lackluster forecasts of demand and output, and from the fact that industrial enterprises had achieved a record-high level of personnel sufficiency 'in connection with the expected changes in demand'. At the beginning of Q2, this level of personnel sufficiency was registered by 85 percent of enterprises, more than at any time since 1996. In May, as it had been expected by enterprises, the number of industrial workers abruptly declined. However, bearing in mind that industrial enterprises registered maximum personnel sufficiency (for the entire period of observations), and

that their forecasts of demand and output were notably restrained, this circumstance should not result in an upsurge in personnel shortage in Russian industrial sector.

In the crisis conditions of 2015-2016 followed by a lengthy stagnation of 2012–2016, most of Russian industrial enterprises managed to pay their workers 'within the norm' wages. Moreover, during the reputedly crisis year 2015, the level of 'normalcy' of industrial wages (68 percent) was higher than that recorded in the non-crisis year 2014 (66 percent). In 2009, a really crisis year for Russian industrial sector, only 42 percent of enterprises considered the wages paid by them to be 'within the norm'. And in H1 2018, as much as 80 percent of enterprises believed that their workers' wages were 'within the norm'.

Early in the third quarter, the Russian industrial sector experienced the biggest decline in demand for its goods in recent years. Initial balance of the sales changes literally collapsed to the level which is commonly registered in January when the whole country is on national holidays. Seasonally adjusted data show a slump to multi-year lows. In August-September the indicator went up by 8 balance points but remained in the red – demand according to traditionally downgraded assessments continued falling however not at the same pace as before. However, producers remembering previous failed attempts of complete and final exit from the crisis of 2015–2016 took the July sales decline in good spirit and 60 percent of enterprises said that they were satisfied with their sales volumes. Demand projections showed that sales would rather decline than see any buoyancy in the short term. Since April 2018, sales have consistently been at their lowest since mid-2016. The last time Russian industrial enterprises exhibited such downbeat sentiments about sales was in April 2015.

Adverse changes in the demand dynamics did not force enterprises to reassess their finished goods inventory in July. Moreover, the balance of assessment hovered around negative zero neighborhood when 74 percent enterprises said they had a normal level of finished goods inventory. In addition, the August-September period saw a slow increase in answers about a surplus of finished goods inventory–balance moved up (deteriorated) to +5 points. The surplus, however, was modest, suggests that industrial enterprises kept their finished goods inventory well under control.

Moreover, at the beginning of Q3 negative balance of the assessment of the finished goods inventory even amid the negative estimates of the demand dynamics allowed the Russian industry to retain the output from shard adjustment. The balance of changes in the production went through adverse changes, which were not so drastic as the balance of changes in sales. The August adverse decline in the demand dynamics let the industry to adjust the real output dynamics for the better after the exceptionally bad result registered in the previous month. However, the pace of growth of real changes in production output remained negative: according to enterprises' estimates output continued contracting although not at the same pace as was seen in July. In September, industry despite a weak demand took a risk to cross over from a nominal output reduction to its nominal growth. At the same time, the enterprises' output plans fell at the end of Q3 to an 8-months low which still remained positive, i.e. the Russian

industrial sector's expectations for the output growth exceeded its expectations for the output decrease even amid around zero demand and finished goods surplus inventory forecasts.

Faced with weak demand, the Russian industrial sector had to switch in August to absolute cuts in prices at the factory gate. Usually, business surveys registered their minimum growth or cut in June when industry "put out" price hike seen at the turn of the year. However, in 2018 business surveys registered the highest growth not in January but in May when the balance of real changes literally surged to +22 points becoming a 40-months maximum. However, already in August the indicator plummeted to -3 points.

The situation with availability of credits for Russian industrial enterprises was stable in Q3 2018, with 66–69 percent enterprises saying their credit availability was normal. The overwhelming majority of borrowers said they had sufficient resources to service their outstanding loans. Furthermore, fundraising plans showed a more stable level in the period of 2017–2018 against 2015-2016 – at year-end 2017 there was no optimism and the demand reduction for loans seen in mid-2018 did not look so dramatic.

In Q4, the Russian industry was getting ready to face the VAT increase and correspondingly both to an increase in prices on its products and to purchased inputs, machinery and equipment. Growth of demand indicators let enterprises to exhibit positive output dynamics amid, however, control over finished goods inventory. Price forecasts also demonstrated definite growth will be already negative at the turn of 2019.

In October-December, demand indicators exhibited positive dynamics. Real changes in sales continued recovery after the July crash and added 5 points over the quarter. Demand forecasts moved up 6 points and hit maximum values during the year. The balance of assessments of finished goods inventory remained around zero amid definitive predominance (minimum 70 percent) of "normal" responses. This demonstrated enterprises' positive control over their stocks and minimal hopes for a sustainable demand growth even amid positive demand and output dynamics projected at the end of the year. In December, industrial enterprises reported sharp positive changes in the output dynamics. Both balances (actual and anticipated) following seasonal adjustment demonstrated growth by 15 points, which moved December values to maximum of the current year. However, the December surge of demand and output will be solely short-term front foot response of the enterprises to the planned by the authorities increased cost of products due to VAT increase.

Sure enough, enterprises' price forecasts in the wake of VAT growth, traditional January price hike and potential ruble devaluation demonstrated in December 2018 surge comparable with the result seen in December 2014. Then balance of inflationary expectations surged to +37 points and at present to +34 percent and outdid all interim maximums. Fast growth of products costs was another factor for the price growth forecasts. According to enterprises assessments, in Q3 and Q4 of the current year costs growth rates stood at +22 points. As a result, in 2018 industry faced the highest growth of product costs after 2015: +24 points against +14 seen in 2017, and +21 points in 2016. Product costs grew at a pace (balance) +34 points in 2015.

4.3. Fixed investment[1]

4.3.1. Investment resources

Macroeconomic situation in 2017–2018 was marked by the outstripping growth rates of fixed investments relative to GDP performance and final consumption of households. In 2018, amid fixed investments increase by 4.3 percent, GDP growth constituted 2.3 percent relative to the corresponding period of the previous year. However, despite the upward trend of fixed investments seen in 2017–2018, the economy has retained the impact from the acute investment crisis of 2014–2016. Vis-a-vis pre-crisis 2012 fixed investments registered in 2018 came to merely 97.3 percent and the construction work volume to 95.7 percent (*Table 11*).

Table 11

Fixed investments, final consumption of households and GDP in 2012–2018, in percent to previous year

	2012	2013	2014	2015	2016	2017	2018
Fixed investments	106.8	100.8	98.5	89.9	99.8	104.8	104.3
Final consumption of households	107.9	105.2	102.0	90.6	98.1	103.2	102.2
Gross domestic product	103.7	101.8	100.7	97.5	100.3	101.6	102.3
Index of physical volume of fixed assets	104.3	104.1	103.7	103.2	103.9	103.8	103.3*

*- preliminary data
Source: Rosstat.

Industrial output recovery growth, gradual getting over the crisis in the construction sector have positively affected financing of the investment activity.

The negative factors were price growth acceleration on the capitalized purchased amid raising by the Bank of Russia of the key rate from 7.25 percent (26.03.2018) to 7.50 percent (17.09.2018), and 7.75 percent (17.12.2018) and increase scale of capital outflow in 2018 to USD 67.5 billion against

USD 25.2 billion a year earlier in the wake of scaling back of direct foreign investments in the Russian economy in 2018 (*Table 12*).

Table 12

Financial conditions for investment activity in 2014–2018

1	2014 2	2015 3	2016 4	2017 5	2018 6
Key rate (year-end), percent	17.00	11.00	10.00	7.75	7.75
International reserves of the Russian Federation (year-end), USD billion	385.5	368.0	376.3	432.1	468.5
Private sector transactions (net lending (+) /net borrowing (-)), USD billion.	152.1	57.1	18.5	25.2	67.5
Price index, December to December of previous year, including:					
Consumer prices on goods and services	111.4	112.9	105.4	102.5	104.3
Producers' prices on industrial goods	105.9	112.4	107.5	108.4	111.7
Composite price index of capital goods,	107.2	110.3	103.2	103.1	107.8

[1] This section was written by O. Izryadnova, Gaidar Institute, RANEPA.

Cont'd

1	2	3	4	5	6
including:					
Producers of construction products	104.6	104.1	106.6	104.9	106.5
Purchase of machinery and equipment	112.3	120.1	97.8	101.1	108.9
Official Ruble USD exchange rate (year-end), RUB/ USD	56.26	72.88	60.66	57.60	69.47

Sources: Rosstat, Bank of Russia.

In the context of economy income growth seen in 2017–2018, the structure of GDP registered increase of the share of gross national savings against the previous three years. Growth of income and other mixed income in GDP amid current interest rates and inflation as a whole for the period have not significantly affected the investment decision making. The share of fixed investments in GDP in 2018 decreased to 17.0 percent against 17.4 percent in 2017, and 18.5 percent in 2012 (*Table 13*). On the contrary, similar proportions have boosted the formation of saving propensity both of business and individuals. For example, the share of attracted by the credit institutions corporate funds in 2018 amounted to 20.9 percent of GDP and household deposits to 27.5 percent of GDP. Decline of household real income has added to the decrease of household contribution in the formation of potential investment resources. The investment resources structure has changed across institutional investors: in 2017–2018 the role of non-financial corporation went up. Toughening of budget constraints resulted in the reduction of budget investment in fixed capital seen in 2018 to 2.1 percent of GDP, including from the federal budget down to 0.6 percent of GDP *(Table 13).*

Table 13

Main characteristics of principal investment sources in 2014–2018, as percent of GDP

	2014	2015	2016	2017	2018
Gross savings	28.6	29.8	28.5	29.2	33.1
Fixed investment	17.6	16.7	17.2	17.4	17.0
Gross income and other mixed revenues	38.9	42.3	41.7	42.1	42.9
Consolidated budget revenues	33.8	32.3	32.8	33.3	35.6
Budget funds for investment,	2.2	2.3	2.2	2.1	2.1
Including federal budget funds	1.2	1.4	1.2	1.1	0.6
Deposits of individuals	23.4	27.8	28.2	28.2	27.5
Corporate deposits	21.5	22.8	19.0	19.4	20.9

Source: Rosstat.

Resource potential of investment activity in 2018 was determined by the positive development of capital stock commissioning in 2016–2017. Coefficient of renewal of fixed assets has gone up amid reduction of degree of depreciation and contraction of proportion of outspent fixed assets for the whole of economy. However, this was not kept up with increased return on assets and significant change in the investment structure in fixed assets by source and by type of activity.

4.3.2. Fixed investment financing by source and by type of ownership

Financing of fixed investment in 2015–2018 was dominated by own funds of enterprises and organizations. In 2018 the share of investment from own funds of

organizations hit maximum for the twenty years monitoring period of 54.3 percent of the total fixed investment volume. Growing rate of own funds in financing sources was entailed by increase of financial performance results of enterprises and organizations for the whole of economy by 66.6 percent and rate of return to 12.1 percent against 7.2 percent in 2017.

Increased participation of Russian banks in financing investment projects in 2018 offset absolute contraction of foreign loans and investments in the structure of raised funds (*Table 14*).

Table 14

Structure of fixed investments by sources of financing in 2014–2018, in percent to total (less small businesses and informal activity)

	2014	2015	2016	2017	2018
Fixed investment, total	100	100	100	100	100
Including by sources of financing:					
Own funds	45.7	50.2	51.0	51.3	54.3
Attracted funds	54.3	49.8	49.0	48.7	45.7
Of which:					
Bank loans	10.6	8.1	10.4	11.2	10.8
Russian banks loans	8.0	6.4	7.5	5.8	6.2
Foreign banks loans	2.6	1.7	2.9	5.4	4.6
Borrowed funds from other institutions	6.4	6.7	6.0	5.4	4.0
Foreign investments	0.9	1.1	0.8	0.8	0.6
Budget funds	17.0	18.3	16.4	16.3	15.3
including:					
Federal budget funds	9.0	11.3	9.3	8.5	7.4
RF subjects budget funds	6.5	5.7	6.0	6.7	6.8
Local budget funds	1.5	1.3	1.1	1.1	1.1
Extrabudgetary funds	0.2	0.3	0.2	0.2	0.2
Funds obtained from shared construction (organizations and population)	3.5	3.2	3.0	3.3	3.0
Including funds of population	2.7	2.4	2.3	2.5	2.2
Other	15.7	12.8	12.2	11.5	11.8

Source: Rosstat.

2016–2018 saw a reduction in the share of budget funds allocated for fixed investment. In 2018, budget funds stood for 15.3 percent of the total amount of investment in the economy. Compared to 2017 significant decrease of the federal budget investment was registered compensated by investment from budgets of other levels of government.

The proportion of household funds directed on the housing cost-sharing construction in the overall investment sources has also decreased. However, despite the reduction of income and contraction of the rate of saving, the investment activity of the population was maintained by demand growth on housing and mortgage loans. For example, in 2018 banks issued to individuals RUB 3.0 trillion of housing loans up 49 percent against 2017.

In the investment strategy for 2016–2018 the state role as a subject of the investment process consisted in the active involvement in the process of formation of Russian corporate sector with an accent on creation, optimization and structural evolution of large companies. Recognition of the large business as the major subject of the national economy modernization was entailed by increased contribution of large companies with

state participation in the total volume of investment. In 2018, the ratio of investment from other sources of financing dominated by the institutional investors constituted 11.8 percent in the overall volume of investment and increased by 0.3 percentage points in comparison with the previous year.

During 2014–2018 private enterprises and enterprises with joint Russian and foreign ownership managed to raise nominal investment volumes in fixed assets, which partially offset unstable investment activity of state and municipal enterprises. In 2018, Russian private ownership enterprises accounted for 60.9 percent and of foreign and joint Russian and foreign ownership enterprises accounted for 14.4 percent of investment. Analysis of the structure of investment formation in fixed assets by all forms of ownership in 2017–2018 demonstrates retention of positive role of the private sector in the investment process amid stabilization of state and mixed Russian forms of ownership (*Table 15*).

Table 15

Fixed investment by forms of ownership in current prices, in percent to previous year

	2014	2015	2016	2017	2018
Fixed investments, total	103.4	100.0	106.1	108.7	109.8
State	89.4	99.2	109.1	103.2	105.2
federal	94.9	105.0	99.3	103.4	101.8
ownership of subjects of Federation	82.2	90.4	126.2	102.8	110.0
municipal	100.8	88.8	97.6	97.7	100.0
mixed Russian	106.3	84.3	101.3	104.2	107.6
ownership of state corporation	103.9	84.0	103.5	93.3	108.1
private	108.0	100.9	104.3	113.1	115.1
foreign and joint Russian and foreign ownership	100.	112.9	114.7	104.1	97.6

Source: Rosstat.

4.3.3. Fixed investments by type of capital stock

The feature of 2018 was the growth of construction volume by 5.3 percent relative to 2017 (*Fig. 19*). Upsurge of business activity seen in construction and investment complex did not offset the consequences of the four-ear crisis and the construction volume indicator in 2018 constituted 95.6 percent of the 2013 indicator when the first signs of stagnation were determined.

Since 2010, amid general downward trend of financing aimed at construction works and services in general volume of fixed investment steady increase of expenses rate on new technical equipment was registered. In 2017, purchase of fixed capital assets accounted for 28.2 percent of fixed investments, thereby purchases of machines, equipment and means of transport accounted for 82.7 percent of expenses directed on this type of investment activity. Average age of operating machinery and equipment decreased from 13.5 years in 2010 to 11.8 years in 2015 (start of the year). Demand for new equipment in the majority of cases is due to the reduction of economic efficiency from operation of the old types of equipment.

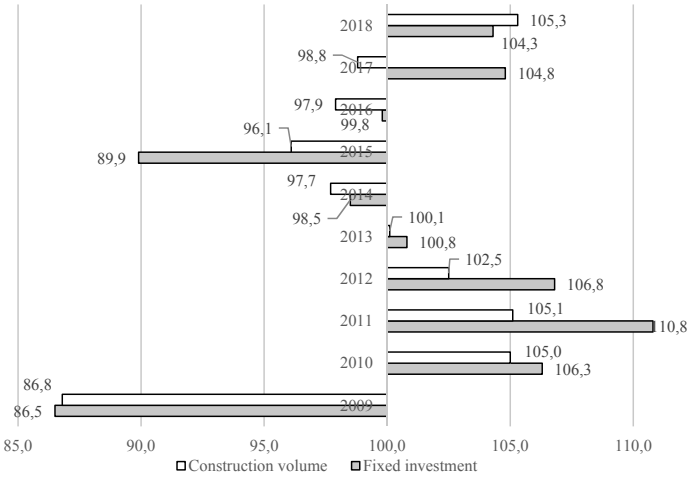


Fig. 19. Dynamics of fixed investment and construction volume in 2013–2018, in percent to previous year

Source: Rosstat.

Positive factor was seen in the increase of investment rate in information technology, computer and telecommunications equipment, which create conditions for further development of digital technologies. In the structure of investments by type of capital stock the share of investment in machinery and equipment in 2018 moved up to 34.6 percent in the context of exceptionally low for twenty years of statistical monitoring indicator of 31.5 percent in 2015–2016 (*Table 16*).

Table 16

Structure of fixed investments by type of capital stock 2013–2018, in percent to total

	2013	2014	2015	2016	2017	2018
Fixed investments, total	100	100	100	100,0	100	100
including:						
residential buildings and facilities	12.5	14.5	15.6	14.7	13.6	12.7
buildings (minus housing) and facilities, spending on land improvement	41.5	40.8	43.7	44.7	43.8	43.3
machinery, equipment, including household equipment and other facilities	38.8	36.3	31.5	31.5	33.7	34.6
intellectual property items					2.8	3.1
other	7.2	8.4	9.2	9.1	6.1	6.3

Source: Rosstat.

At year-end of 2017, simultaneous recovery of the upward production dynamics of domestic and imported capital goods took the pressure of the investment and construction sphere. In 2018, the share of capital goods in the overall imports volume decreased to 25.4 percent against 27.5 percent a year earlier, and the import of such

goods constituted 96.6 percent of the previous year indicator. Increment of domestic manufacture of machinery and equipment in 2018 stood at 12.0 percent, which allowed maintaining positive dynamics of construction and investment complex, however was obviously insufficient for growth boost especially in the segment of large enterprises and organizations. In the context of existing dynamics and structure of machine-building complex and retention of sanctions on import of certain types of equipment and machinery imbalance of the technical structure of investments becomes one of the main factors restricting investment activity rates.

Change in the performance of construction activity was followed by structural shifts in the investment use by type of capital goods. 2016–2018 saw contraction of the aggregate share of fixed investment in housing buildings and non-housing facilities. Following the peak of spending on housing construction seen in 2015 subsequent three years registered gradual contraction of investment percentage by this type of capital goods. In 2018, the ratio of investment in construction of buildings and facilities decreased to 12.7 percent of the total volume of investment in the economy against 13.6 percent in 2017, and 15.6 percent in 2015.

Share of investment in the construction of industrial buildings and facilities, structures of social and market infrastructure in 2018 decreased to 43.3 percent against 44.7 percent in 2016, which was maximum for the entire period of observation since 2000.

In 2018, commissioning of housing constituted 95.1 percent and the floor area of non-residential structures totaled 87.8 percent to the 2017 indicator and in the context of three-year trend of contraction of housing commissioning the 2018 indicator came to 88.2 percent of an all-time high of 2015. In 2018, private developers commissioned 32.5 million square meters (43.1 percent of the overall housing volume commissioned in 2018) given 33.0 million square meters (41.6 percent) in 2017, and 35.2 million square meters of the overall housing floor space (41.2 percent) in 2015 (*Fig. 20*).

State program documents determine the development of residential housing construction and the housing services as a guideline for raising quality of life and a driver for modernization of the social sphere and economy.

Commissioning of the overall living space per 1,000 persons moved up from 207 sq. m in 2000 to 513 sq. m in 2018. Average floor space of residential facilities per capita for the whole of economy constitutes 24.9 sq. m. However, improvement of the housing stock is marked by rather low indicators. Water supply is fitted to 91 percent of urban housing stock, sanitation – 89 percent, central heating – 93 percent, and hot water supply – 82 percent. In rural area water supply is not fitted in 41 percent of residential housing, sanitation – 52 percent, and gas supply – 27 percent. The housing and utility complex registers growing depreciation of capital assets and of accident rate, resource waste is high, and energy efficiency is low. In 2017, percentage of heat network requiring replacement constituted 29 percent, water supply and sanitation networks – 42.3 and 43.6 percent, respectively. Centralized water supply system is installed only in 90 percent of households. More than 2/5 of households use additional tools for water

treatment. The situation is aggravated by the lack of modern sanitation systems in a quarter of the housing stock, which negatively affects ecological characteristics of safe living.

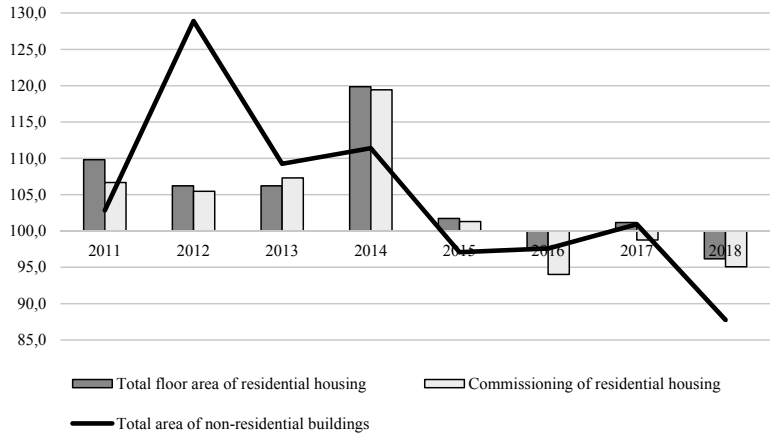


Fig. 20. Dynamics of commissioning buildings and residential housing in 2011–2018, in percent to previous year

Source: Rosstat.

The share of dilapidated and substandard housing in 2017 constituted 2.4 percent of the total housing stock. Despite the upward trend of resettlement from the dilapidated residential housing and capital repairs to blocks of flats current rates remain insufficient for the final resolution of these issues. Paramount in this case is modernization of the housing stock via private and institutional investors in the housing construction and creation of efficient regional systems for capital repairs.

Over a prolonged period of time the Russian economy is characterized by outstripping rates of residential housing commissioning from own funds. Private developers in 2018 commissioned 32.5 million sq. m (43.1 percent of total housing commissioned in 2018) against 33.0 million sq. m (41.6 percent) in 2017 and 35.2 million sq. m (41.2 percent) in 2015.

Mark-up of population participation in housing construction and upsurge of spending of real estate purchase have resulted in structural shifts in financing of construction programs and change of characteristics of commissioned residential housing. In the context of income differentials, the development of the residential housing sector was accompanied by growing social stratification and unequal size of the living space. In 2017, commissioning of single-family houses moved up by 1.3-fold in comparison with 2010. Average apartment size in blocks of flats constituted 69.0 sq. m and in single-family houses – 135.1 sq. m (*Table 17*).

Table 17

Number and average size commissioned apartments

	2011	2012	2013	2014	2015	2016	2017
	Total						
Number of apartments, thousand units	786	838	929	1124	1195	1167	1139
Average size, м^2 of total space	79.3	78.4	75.8	74.9	71.4	68.7	69.0
	By population from their own or borrowed funds						
ЧNumber of apartmentsp, thousand units	201	211	228	268	272	251	244
Среднийaverage size, м^2 of total space	132.9	134.4	134.4	135.2	129.6	126.7	135.1

Source: Rosstat.

In 2017–2018, according to estimates 13.4 percent of households resolved to improve living conditions via cost-sharing construction and purchase of other residential housing and merely 11 percent intended to improve the living conditions due to house demolition or queuing. Those households intending to purchase other housing nearly every third plans to build a single-family house for permanent residence. Mortgage, proceeds from the sale of current housing and savings remain the main source of funds for housing purchase. 2018 saw recovery of the mortgage market: banks issued 1.47 million mortgages to the tune of RUB 3 billion. Factors recently boosting mortgage development were inflation slowdown, gradual reduction of the interest rates. Non-residential housing market growth with high differentiation of asking price.

Increased accessibility of mortgage loans for individuals, credits for developers, decrease and efficient distribution of credit risks among all market participants and expansion of the resource base of mortgage lending is perceived as one of main instruments for maintaining solvent demand on the real estate market.

4.3.4. Investment activity by type of economic activity

In 2018, fixed investment dynamics for the whole of economy was mostly affected by slowdown of large enterprises business activity which account for ¾ of capital investments. In 2017 increment of large enterprises investments in fixed capital hit 4.2 percent, and in 2018 slowed down to 2.2 percent.

Investments growth in industry seen in 2017–2018 did not compensate the decline of investments in 2014–2015.

The investment activity was marked by outstripping rates of fixed investments in the mining sector. During 2013–2016 in the wake of fixed investments decline for the whole of economy by 11.7 percent growth of fixed investments in the mining sector hit 13.3 percent. Prospecting and exploring, oil-well drilling as well as liquefying and treatment of natural gas on extraction fields were drivers of fixed investments in the sector. 2017–2018 saw adjustment of fixed investments structure due to final stage of implementation of natural gas liquefying projects and registered boost of investments in hydrocarbons and metals extraction which offset contraction of investments during previous three years. Amid a decline of investments growth rates in services development in the mining sector which accounted for 27.3 percent of the total fixed investments in natural resources extraction, 2018 registered stabilization of fixed investments in this type of economic activity as a whole (*Fig. 21*).

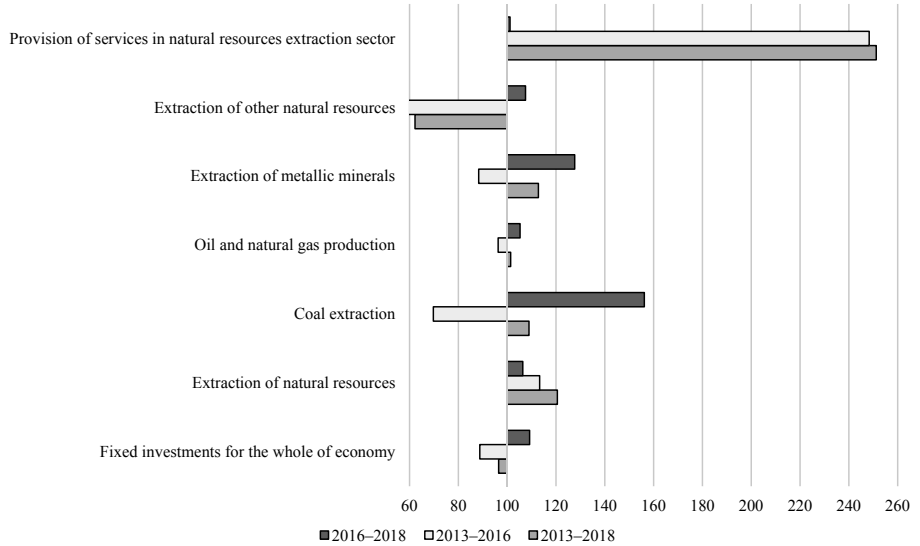


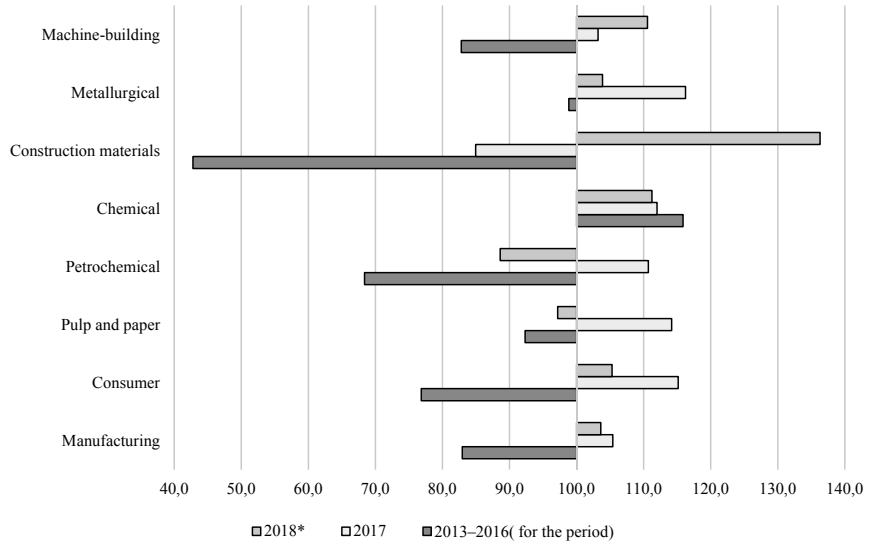
Fig. 21. Fixed investments dynamic in natural resources extraction during 2013–2018, in percent for the period

Source: Rosstat.

Structural changes in the investment activity in industry as a whole during 2014–2018 were determined by an outstripping investment upsurge in extraction of natural resources against manufacturing and generation and distribution of electric power. Despite the fact that fixed investments over last two years demonstrated recovery, these two types of economic activity have not overcome the consequences of acute investment crisis of 2013–2016. On the whole fixed investments in manufacturing sector in 2018 constituted 90.6 percent and in supply of electricity, gas and vapor around 70 percent of the 2014 indicator.

In 2018, fixed investments by large and medium sized enterprises of the processing sector moved up 3.6 percent which smoothed negative dynamic of the previous year. Renewal of positive dynamics of fixed investments in machine-building, metallurgical and chemical complexes, in production of construction and structural materials has reduced the negative effect of the investment crisis. In 2018 fixed investments upsurge in the machine-building complex came to 10.6 percent amid the outstripping growth rates of fixed investments in automobile manufacturing and special-purpose production. Investment activity in manufacture of electrooptic products and electric equipment compared to the previous year.

Amid change of business environment on the domestic market the trend towards expansion of investment activity in the pharmaceutical sector and consumer complex was observed from 2016. *(Fig. 22*).



*by large and medium sized enterprises.

Fig. 22. Fixed investments dynamic in manufacturing industry by industrial complex in 2013–2018, in percent to previous year

Source: Rosstat.

The period of 2016–2018 saw such feature as increased share of agriculture, commerce, hotel business, service provision in tourism and construction in the overall fixed investments by full circle of enterprises. These types of economic activity are determined by high rate of investments in small business in total volume, their contribution to the overall investment volume in the economy by around 1.1 percentage points. However, one should not overestimate the effect of institutional demand of small business taking into account the fact that its growth made adjustments following a sharp decline of business activity seen in 2014–2016 (*Table 18*).

Advanced growth of fixed investments in the development of transport and communication infrastructure, transportation and storage (105.2 percent to 2017), information and communication (118.1 percent) positively affected the recovery of fixed investments growth in 2018.

According to long term development strategy the social sphere becomes one of the priorities of development.

Table 18

Index of physical volume of fixed investments in 2014–2018, in percent to previous year

	By full circle of enterprises				By large and medium sized enterprises	
	2014	2015	2016	2017	2017	2018
Agriculture	92.4	87.9	112.5	109.7	101.3	104.6
Construction	103.8	77.7	103.6	110.1	96.3	120.1
Wholesale and retail trade	102.7	87.3	108.8	96.6	90.3	103.2
Hotels and catering business	110.3	78.0	94.8	89.0	74.4	119.2
Tourist agencies and organizations which provide services in the tourist sphere	77.5	89.7	380.0	81.7	195.9	220.0

Source: Rosstat.

In 2014–2018 investment activity in the social sphere as a whole corresponded budget spending on social and cultural events. The share of social sphere in GDP over last four years steadily remains at 7.2 percent, in fixed investments – 4.0 percent, and in the consolidated budget expenditures – 57.3 percent. In 2016, investments in education constituted merely 70.4 percent, healthcare – 63.2 percent, culture and sports – 57.5 percent compared to the pre-crisis indicator of 2013. Investments growth in the social sphere development seen in 2017–2018 have positively affected the performance (*Table 19*).

Table 19

Commissioning of facilities of social and cultural spheres in 2014–2018

	2014	2015	2016	2017	2018
Hospitals, thousand beds	2.7	4.3	6.1	3.9	2.9
Outpatient policlinics, thousand visits per shift	18.8	23.7	18.1	20.7	23.4
Educational organizations, thousand pupils	55.7	66.3	90.3	108.4	95.6
Pre-school educational organizations, thousand places	128.9	143.3	63.3	40.8	46.7
Higher education organizations, thousand м^2 of total educational and laboratorial facilities	84.5	222.0	220.2	109.1	95.6
Vocational organizations, thousand м^2 of total educational and laboratorial facilities	16.1	8.9	7.0	32.3	3.8
Club-type cultural institutions, thousand places	17.4	16.0	16.5	21.0	14.0

Source: Rosstat.

The need to increase spending on investment projects in healthcare is determined by a low level of amenities in outpatient clinics. The level of depreciation of capital stock in healthcare comes to 57.0 percent (amid average in the economy of 48.1 percent), and commissioning of new capital stock – 2.2 percent (4.4 percent). In 2017–2018 more than ¼ of hospitals and 1/5 of outpatient facilities required reconstruction and capital repairs.

Resolution of healthcare upgrade issues requires both increase of fixed investments and their structural change. Growth of fixed investments in healthcare system in 2018 came to 14.0 percent against last year. In line with the change in approaches to the provision of medical services commissioning of outpatient facilities went up against the contraction of commissioning of hospitals. Transition to new technologies in healthcare system the demand is increasing on modern medical equipment, technologically advanced means of transport, software and protection of intellectual property. In the healthcare organizations' costs on information and communication technologies nearly

¼ accounted for the purchase of computers and office machines and 15 percent for software.

Investments in education in 2017–2018 accounted for 1.4 percent of the overall volume of fixed investments for the whole of economy. In the current financing structure of the social sphere 2018 saw142.3 thousand new school places in comprehensive and pre-educational institutions down 14.6 thousand against the 2016 indicator. This reduces outreach to children by pre-school educational institutions and retention of the high level of general education students in second and third shifts. One should also keep in mind low material and technical provision of educational institutions with capital stock depreciation hitting 50 percent and the coefficient of renewal stays at 2.5 percent (4.2 percent for the whole of economy).

The development plans envisage by 2012 ensure 100 percent of accessibility of pre-school institutions for children owing to the creation of 100 thousand additional school places in public and private institutions. It is envisaged to create in educational institutions 6,531.3 thousand new school places. Construction of new and renovation of operating schools including by way of building infrastructure facilities will increase by 2025 the number of new school places by 100 thousand of which around 25 thousand for children living in rural areas and urban type settlements. Development and modernization of vocational and higher education institutions envisages increase of training and laboratorial spaces and qualitative improvement in their provision with modern equipment and digital technology. Reaching such ambitious target envisages significant increase of investments in this type of activity. The share of investments in the development of the facilities of cultural, sports and tourist-recreational infrastructure moved up to 2.0 percent in 2018. In the period 2014–2018 the number of facilities of physical fitness and sports went up by 5.6 percent.

Among the conditions for investment activity growth are simplification of procedures for doing business and creation of adequate infrastructure and mechanisms for attraction of investments, title guarantee, creation of small and medium businesses, decrease of institutional barriers.

4.4. The oil and gas sector[1]

The oil and gas sector is among the basic ones of the Russian economy and is playing an important role in the income generation for the state budget and Russia's trade balance. Implementation of the OPEC+ agreement regarding the production restriction has resulted in the world crude oil prices growth. In 2018, the volumes of crude oil production peaked for the entire post-Soviet period and the extraction and export of the natural gas hit all-time high. Under the first stage of tax maneuver in force in the oil industry, the refining depth and increased volumes of export of petroleum products observed before its implementation were replaced by contraction of production and export of fuel oil and by the reduction of crude oil refining and export of petroleum

[1] This section was written by Yu. Bobylev, the Gaidar Institute, IAES RANEPA.

products. Oil refining depth moved up markedly. It was decided to gradually complete tax maneuver in the oil sector and introduce the additional profits tax (windfall tax).

4.4.1. Dynamics of global oil and gas prices

Recent years were marked by the emergence of two significant factors – the development of U.S.'s shale oil-fields bolstered by advanced drilling methods and cooperative agreements to limit oil production, known as OPEC+ – that have a strong impact on the global oil market. Rapid increase in the U.S.'s shale oil production led to a crude supply glut in the global market and drastic slump in oil prices in 2015–2016 (*Table 20, Fig. 23*). 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, seeking to increase supply volumes and thus offset contraction of revenues. Subsequently, the price of Russian crude oil Urals on the world market dropped from USD107.1 per barrel registered in H1 2014 to USD 51.2 per barrel in 2015 and to USD41.9 per barrel in 2016.

Table 20

World crude oil prices in 2014–2018, USD/bbl

	2014	2015	2016	2017	2018 March	2018 June	2018 September	2018 December
Brent crude price, UK	98.9	52.4	44.0	54.4	66.5	75.2	78.9	56.5
Urals crude price, Russia	97.7	51.2	41.9	53.1	63.7	73.4	78.1	57.6
Prices on Russian gas on European market, USUSD/thousand cubic m.	314	225	157	179	212.6	212.8	233.4	246.9

Sources: OECD/IEA, World Bank, Rosstat.

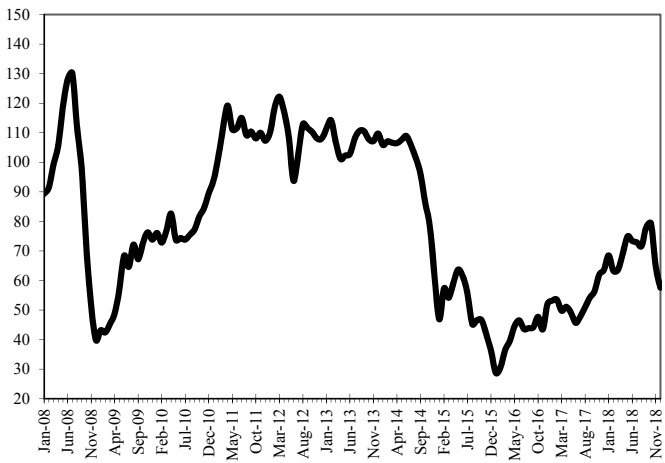


Fig. 23. Urals crude oil price in 2008–2018, USD/bbl.

Source: Rosstat.

The decline in oil prices spurred oil-producing countries into taking decisive actions on output cuts. 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+ obligated to reduce its oil production by 1.8 million barrel per day, and 11 non-OPEC countries, agree to cut output by 558,000 barrels per day, of which Russia by 300,000 barrel per day. 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. Meanwhile, some of the parties to the agreement (Venezuela, etc.), for various reasons, experienced a drastic decline in oil production. As a result, the real reduction in oil production by OPEC+ has turned out to be considerably higher target than envisaged by the agreement.

In this context, in June 2018 OPEK+ decide to raise production from early July by 1 million barrels per day compared to May with a provision for switching from the previous per-country control over the agreed output targets to a control over total crude oil output (by 1.8 million barrels per day below the level of October 2016) of the parties to the agreement. As a result, countries with spare potential had the opportunity to boost their production in H2 2018. Saudi Arabia (representing nearly 70 percent of OPEC's available capacities) and Russia were the first to do this.

Implementation of OPEC+ agreements resulted in 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, and USD 71.1 a barrel on average in 2018. The Urals price averaged USD 69.8 per barrel in 2018, in other words moved up by 66.6 percent in comparison with 2016 and by 31.5 percent against 2017.

A markedly buoyant demand also had a positive effect on the market balance and on oil prices. Global oil demand increased 1.5 million barrels per day in 2017 (or 1.6 percent year-on-year), and by 1.5 million barrels per day in 2018, or by 1.3 percent in 2018, according to the International Energy Agency estimates, OECD.

What is important to note, however, is that the effect of the OPEC+ agreements has been increasingly weakening due to the recovered growth in the U.S.'s shale oil production as well as the increase in oil production by some other non-OPEC major oil producers. Technological advancement and cost effectiveness allowed the U.S. oil industry to adapt to lower prices. As a result, there has been growth since 2017 in the U.S.'s crude oil production and in the number of U.S.-based operating oil rigs. According to data from the U.S. Energy Information Administration (EIA), the United States pumped 9.35 million barrels/d in 2017, or 0.49 million barrels/d (5.5 percent) up from 2016, and in 2018 it was 10.88 million barrels/d, rising 1.53 million barrels per day (16.4 percent) above the level seen in 201.

The oil price rise was somewhat influenced by announced U.S. sanctions against Iran effective since November 2018, which envisaged a ban on purchases of Iranian crude

oil and configured expectations of drastic oil output cut in the country. Consequently, crude oil was traded at more than USD 80 per barrel early in October. Later, however, the United States said it will temporarily (within a period of six months) allow eight countries, including big oil importers such as China, India, Japan and South Korea, to keep buying Iranian oil. That had a strong effect on market participants' expectations.

The increase in output by biggest oil-producing nations (The United States, Saudi Arabia, and Russia), relaxation of the U.S. sanctions against Iran and some other factors led to a substantial decline in oil prices during the last few months of the year. Brent crude oil dropped to USD 65 per barrel in November and slid to USD 56.5 in December.

In this context, OPEC+ members agreed on 7 December 2018 to reduce, from 2019 onwards, their crude oil production by 1.2 million barrels per day from the output seen in October 2018. The output cut agreement is supposed to stay in force until the end of June 2019 and can be updated in April 2019. Under the agreement, OPEC members will reduce their output by 800,000 barrels per day and non-OPEC major oil producers by 400,000 barrels per day, with Russia taking on 228,000 barrels per day (by 2 percent). However, the output cut commitments do not apply to Iran, Venezuela and Libya where oil production is already low, plus Iran is facing the risk of reducing further its output in case of tougher U.S. sanctions against purchases of Iranian crude. Owing to weather conditions and technological environment, Russia will reduce its oil production in Q1 2019, under the agreement, and maintain it at the same level for the next three months.

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 with a certain lag. Owing to the plunge average export price on Russian natural gas in 2018 moved up to USD 221.2 per thousand cubic meters or up 40.9 percent in comparison with 2016 and by 23.6 percent against 2017. 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.

4.4.2. Dynamics and structure of production in oil and gas sector

Volumes of crude oil output in 2018 were governed by Russia's compliance with her commitment taken within OPEC+ agreements. Owing to the possibility granted by the agreement in H2 and at 2018-end, oil output in Russia reached 556 million tons up 1.7 percent in comparison with the previous year (*Table 21, Fig. 24*). This was an all-time high since 1989 (Russia peaked its oil output in 1987 by 569.4 million tons). Extraction of gas (including natural, associated, and gas condensate) in 2018 increased to 741 billion cubic meters, which is an all-time high. Russia boasts of a significant potential in order to maintain and increase current volumes of oil and gas output. 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[1].

Table 21

Production of crude oil and natural gas and oil refining in Russia in 2010–2018

	2010	2011	2012	2013	2014	2015	2016	2017	2018
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	556.0
Extraction of natural gas, billion cubic meters	665.5	687.5	671.5	684.0	654.2	645.9	652.6	704.1	741.1
Primary crude oil refining, million tons	249.3	258.0	270.0	278.0	294.4	287.2	284.5	284.3	290.7
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	52.3
Crude oil refining depth, percent	71.1	70.8	71.5	71.7	72.4	74.4	79.1	81.0	82.1

Sources: Rosstat, Ministry of energy of the Russian Federation.

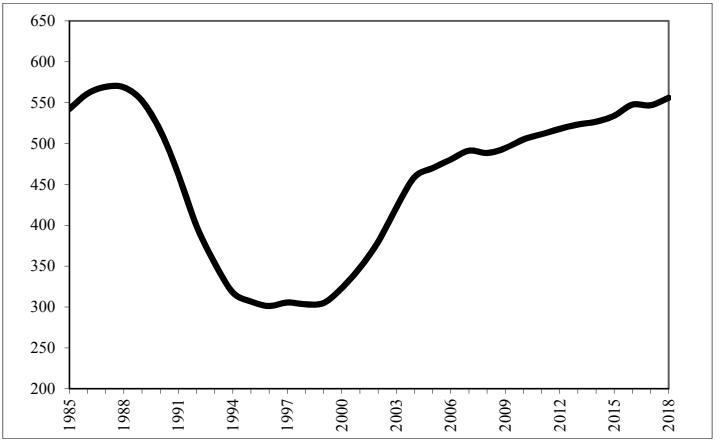


Fig. 24. Oil production, including gas condensate in 1985–2018, mn t

Sources: Rosstat, Ministry of energy of Russia.

Year 2018 demonstrates that the tax maneuver has delivered positive results from the first phase of the tax maneuver in the oil sector: a structural tax reform in this sector

[1] See Yu. Bobylev, O. Rasenko. Russia Oil Sector: main trends. Moscow, Delo Publishers, RANEPA, 2016.

envisages gradual reduction of export duties on both crude oil and petroleum products, as well as higher mineral extraction tax (MET)[1]. According to the adopted for 2015–2018 parameters of tax maneuver effective marginal export duty rate was cut from 59 percent in 2014 to 30 percent in 2017. Meanwhile, export duty rate on fuel 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.

In 2000's and H1 2010's the Russian oil sector saw growing volumes of both oil refining and exports of petroleum products owing to the increase of production and exports of fuel oil (the least valuable refining product which in Europe is used for further refining and obtaining light petroleum products). Oil refining depth was not growing at that and constituted solely 71–72 percent (while, in the leading industrial countries it came to 90–95 percent). Then tax system actually conserved technological backwardness of Russia's oil refining sector and led to marked losses for the state budget (as a result of hidden subsidizing of the oil refining sector and other EAEU member states owing to lower compared to the world oil prices as well as lower export duties on petroleum products against the oil export duties).

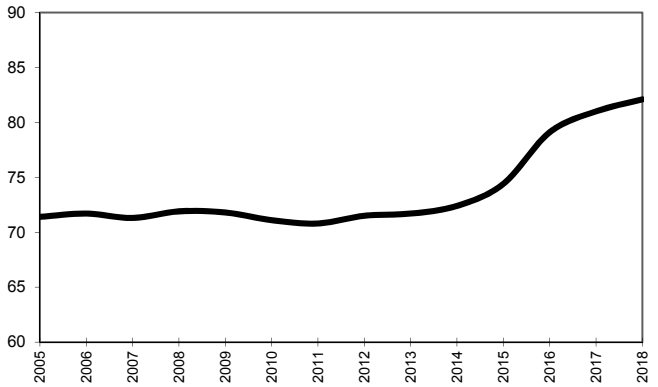
Implementation of the tax maneuver resulted in the turnaround of existing trends. Among the new trends emerged in 2015–2018, and some of them deserve to be mentioned here: firstly, oil refining depth increased notably as production of fuel oil declined, secondly, owing to the contraction of exports of fuel oil more lucrative crude oil exports moved up, thirdly, crude oil refining declined in volume terms due to the above two factors. Oil refining depth in Russia increased from 72.4 percent in 2014 to 82.1 percent in 2018 which is the all-time high (*Fig. 25*). Production of gasoline and diesel fuel went up while production of fuel oil declined by 37.2 percent. The share of refined oil in its production decreased from 55.9 percent to 52.3 percent. Petroleum products exports contracted by 8.9 percent .

Thus, thanks to the implementation of tax maneuver previously observed trends which demonstrated growth of refined oil volumes and growing exports of petroleum products due to increasing production and exports of fuel oil were replaced by trends which show contraction of production and export of fuel oil and as a result contraction of the oil refined volumes and petroleum products exports. Meanwhile, depth of the oil refining increased notably.

The structure of the oil sector is characterized by a predominance of major vertically-integrated companies and high share of state property. In 2018, five major companies (Rosneft, LUKOIL, Surgutneftegaz, Gazprom, and Tatneft) accounted for 80 percent of crude oil extraction. Recently, the market share of Rosneft grew markedly. 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 2017–2018 (*Table 22*). Small and medium-size oil producing

[1] See Yu. Bobylev. Tax Maneuver in Oil Industry. Russian Economic Developments. 2015. No. 8, pp. 45–49.

companies remains underdeveloped. 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. Meanwhile, the US experience shows that such companies are efficient in developing marginal oilfields and tight oil which sizes in Russia are rather significant.



Puc. 25. Refining depth in 2005–2018, percent

Sources: Ministry of energy of Russia, Rosstat.

Table 22

Crude oil production structure in 2016–2018

	Oil output in 2016, million t	Share in total output, percent	Oil output in 2017, million t	Share in total output, percent	Oil output in 2018, million t	Share in total output, percent
Rosneft, including Bashneft	211.1	38.6	209.3	38.3	213.1	38.3
LUKoil	83.0	15.2	81.7	14.9	82.1	14.8
Surgutneftegaz	61.8	11.3	60.5	11.1	60.9	11.0
Gazprom, including Gazprom neft	55.2	10.1	56.9	10.4	56.9	10.2
Including Gazprom	17.4	3.2	17.4	3.2	17.4	3.1
Tatneft	37.8	6.9	39.5	7.2	39.5	7.1
Bashneft	28.7	5.2	28.9	5.3	29.5	5.3
Slavneft	15.0	2.7	14.3	2.6	13.8	2.5
RussNeft	7.0	1.3	7.0	1.3	7.1	1.3
NOVATEK	8.0	1.5	7.7	1.4	8.3	1.5
PSA operators	16.0	2.9	16.5	3.0	18.7	3.4
Other producers	61.7	11.3	64.0	11.7	65.5	11.8

Sources: Ministry of Energy of RF, own calculations.

4.4.3. Dynamics and structure of oil and gas exports

In 2018, total Russia's exports of crude oil and petroleum products constituted 410.3 million tons, up 2.3 percent against the previous year. This indicator is close to an all-time high reached in 2015. The share of net exports of crude oil and petroleum products in 2018 constituted 73.8 percent (*Table 23*). It should be noted that 2015–2018 saw a notable growth of 16.5 percent of crude oil exports spurred by the "tax maneuver"

and a 8.9 percent decline in exports of petroleum products mainly owing to a fall of the fuel oil exports (*Table 24, 25*). The share of crude oil in total oil exports constituted 63 percent, and that of petroleum products – 37 percent. As a result, the share of crude oil in total oil exports up from 57.5 percent in 2014 to 63.4 percent in 2018, and the share of petroleum products down from 42.5 percent to 36.6 percent. Meanwhile, exports of diesel fuel markedly up 15.6 percent. The share of exports in diesel fuel production in 2018 made up 72.5 percent, and in gasoline production – 10.9 percent.

Table 23

Ratio of production, consumption and exports of crude oil and natural gas in 2010–2018

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Crude oil, mn t									
Production	505.1	511.4	518.0	523.3	526.7	534.0	547.6	546.8	556.0
Exports, total	250.4	244.6	239.9	236.6	223.4	244.5	254.8	252.6	260.2
Exports to - non-CIS countries	223.9	214.4	211.6	208.0	199.3	221.6	236.2	234.5	241.7
Exports to CIS countries	26.5	30.2	28.4	28.7	24.1	22.9	18.6	18.1	18.5
Net exports	249.3	243.5	239.1	235.8	222.6	241.6	254.0	252.0	259.7
Domestic consumption	125.9	140.7	142.1	137.5	141.3	122.2	138.3	147.1	146.7
Net exports as percent of production	49.4	47.6	46.2	45.1	42.3	45.2	46.4	46.1	46.7
Petroleum products, mn t									
Exports, total	132.2	130.6	138.1	151.4	164.8	171.5	156.0	148.4	150.1
Exports to non-CIS countries	126.6	120.0	121.2	141.1	155.2	163.3	148.1	137.4	139.0
Exports to CIS countries	5.6	10.6	16.9	10.3	9.6	8.3	8.0	11.0	11.0
Net exports	129.9	127.2	136.8	150.0	162.8	170.2	155.3	147.7	149.6
Crude oil and petroleum products, mn t									
Net exports of crude oil and petroleum products, mn t	379.2	370.7	375.9	385.8	385.4	411.8	409.3	399.7	409.3
Net exports of crude oil and petroleum products as percent of crude oil production	75.1	72.5	72.6	73.7	73.2	77.1	74.7	73.1	73.6
Natural gas, billion cubic meters									
Production	665.5	687.5	671.5	684.0	654.2	645.9	652.6	704.1	741.1
Exports, total	177.8	184.9	178.7	196.4	172.6	185.5	198.7	210.2	220.6
Exports to - non-CIS countries	107.4	117.0	112.6	138.0	124.6	144.7	164.7	175.9	184.0
Exports to CIS countries	70.4	67.9	66.0	58.4	48.0	40.7	34.0	34.3	36.6
Net exports	173.5	179.2	171.6	189.3	165.5	178.4	189.8	201.4	211.2
Domestic consumption	492.0	508.3	499.9	494.7	488.7	467.5	462.8	502.7	529.9
Net exports in percent to production	26.1	26.1	25.6	27.7	25.3	27.6	29.1	28.6	28.5

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 marked 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 73.6 percent 2018. This, however, is due not only to the increase in absolute volumes of exports but to a crucial contraction of internal oil consumption against the Soviet period and more efficient oil consumption and the replacement of petroleum products (fuel oil) by natural gas[1].

[1] Bobylev Yu. Development of Russia's oil sector // Voprosy ekonomiki. 2015, No. 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.

Exports of natural gas in 2018 went up 4.9 percent in comparison with the previous year and hit 220.6 billion cubic meters, which is an all-time maximum. The share of net exports in the natural gas production in 2018 constituted 28.5 percent.

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 2015-2017 notably – from 65.2 percent in 2015 (including oil and petroleum products – to 42.2 percent). Due to the increase of the world prices in 2018 and the growth of the physical volumes of oil and gas exports it moved up to 56.7 percent (including oil and petroleum products – to 45.8 percent). In spite of the price plunge oil and gas sector products constitute above one-half of Russia's exports (*Table 24*).

Table 24

Value and share of exports of oil and gas sector products in Russia's exports in 2017–2018

	Exports in 2017, billion US dollars.	In percent to total volume of Russia's exports	Exports in 2018, billion US dollars.	In percent to total volume of Russia's exports
Oil and gas sector, total	189.70	52.8	256.2	56.7
Crude oil and petroleum products	151.55	42.2	207.1	45.8
Crude oil	93.31	26.0	129.0	28.5
Petroleum products	58.24	16.2	78.1	17.3
Natural gas	38.15	10.6	49.1	10.9

Sources: Federal Customs Service, own calculations.

4.4.4. 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, owing to tumbling global prices on crude oil and petroleum products (*Table 25, Fig. 26*). In the meantime, there is still a wide gap between world and domestic oil prices due to the export duty. Along with this, 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 percent of the global price (Urals crude price on the European market), while in 2018 – 66 percent.

Table 25

Domestic prices on crude oil, petroleum products and natural gas in USD terms in 2010–2018 (average producers' prices at year-end, USD/ton)

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Crude oil	248.2	303.3	341.1	346.1	178.9	156.7	207.8	302.4	320.8
Motor gasoline	547.9	576.9	628.7	614.4	372.3	301.8	380.3	460.0	423.3
Diesel fuel	536.1	644.9	774.2	698.0	419.3	349.4	421.3	515.2	550.7
Fuel oil	246.3	274.6	275.3	235.8	128.7	49.5	129.7	166.1	186.0
Gas, USD/thousand cubic m	20.5	21.3	40.3	39.8	29.1	24.5	23.6	34.2	28.9

Source: own calculations based on data released by Rosstat.

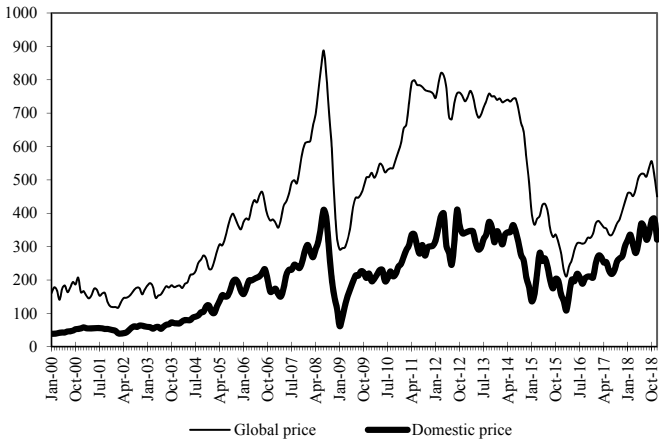


Fig. 26. Global and domestic oil prices in 2000–2018, USD/t

Sources: Rosstat, own calculations.

Upward movement of oil prices in 2017–2018 determined growth of consumer prices on motor fuel (*Table 26*) which set the pricing policy on net-back prices taking into account indirect taxes (excises, VAT) and markup. Russia regarding the share of indirect tax burden in the final motor gasoline price ranks in the middle between leading EU countries where this share is the highest and the USA where it is relatively low.[1] With lower non-tax gasoline prices and such level of tax burden the consumer prices on motor gasoline in Russia are approaching the US prices, but remain significantly lower than in other developed countries. According to our calculations in late 2018 consumer motor gasoline price in Russia came to the level of the USA 96 percent, Canada 74 percent, Japan 45 percent and regarding the average level of leading EU-5 – 41 percent (*Table 26*). Thus, effective system of export duties and the level of tax burden on petroleum products in Russia ensures lower price level on motor fuel on domestic market in comparison with the developed countries.

Table 26

Consumer prices on motor gasoline in Russia 2014–2018, RUB/liter

	2014 January	2015 January	2016 January	2017 January	2017 December	2018 January	2018 December
Regular unleaded gasoline	29.53	32.35	33.86	35.57	37.95	38.12	41.58
Premium 95 octane and plus	32.64	35.16	36.81	38.69	41.01	41.05	44.83

Source: Rosstat.

[1] See Yu. Bobylev. Gasoline prices in Russia and other countries: comparative analysis. Russian Economic Developments. 2016, No. 10, pp. 28–31.

Table 27

Level of consumer price on motor gasoline in Russia against other countries, percent

	2014 January	2018 December
USA	95.8	95.8
Canada	72.9	73.7
Japan	55.0	45.2
Germany	44.4	39.6
Great Britain	43.3	41.8
France	45.3	39.7
Italy	39.5	37.2
Spain	48.7	46.6
EU-5	44.1	40.8

Source: own calculations of data released by OECD/IEA and Rosstat.

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 prices 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 natural gas there is a gradual convergence of domestic and world gas prices. In 2018, domestic gas price (corporate consumers' price less indirect taxes) averaged 32 percent of the price of Russian gas.

4.4.5. 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 is markedly below the average world level. 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.

In future, global demand for oil will grow, which will allow Russia to retain and even to increase current volumes of crude oil exports, first of all, by increasing shipments to China and other countries of Asia. 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. 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 – gradual completion of the tax maneuver in the oil sector and the introduction of Additional Extraction Tax (windfall tax).

The Federal Law of August 3, 2018 No. 305-FZ "On Introduction of Amendments in the Article 3.1 of the Law of the Russian Federation 'On the Customs Tariff'" envisages gradual reduction of the oil export duty rate from 2019 through 2024 to the zero level. Simultaneously, the Federal Law of August 3, 2018 No. 301-FZ "On Introduction of Amendments into the Second Part of the Tax Code of the Russian Federation" envisages offsetting increase over the same period of Mineral Extraction Tax (MET) rates in oil production. Such tax system restructuring is creating incentives for further modernization of the oil refining sector, reduces subsidizing of domestic consumers, first of all, in the refining sector, cuts subsidizing by Russia of other EAEU countries, and strengthens incentives for increasing energy efficiency.

The Federal Law of July 19, 2018 No. 199-FZ "On Introduction of Amendments in Part One and Two of the Tax Code of the Russian Federation" from early 2019 changed the tax system by introducing a new special tax – windfall tax on extraction of hydrocarbon raw materials. Implementation of this tax will promote investments in oil production, including development of oilfields with higher production costs[1]. Initially, application of windfall tax is envisaged on a limited number of oilfields, and it is envisaged to widen the scope of application of this tax in the future.

4.5. Agriculture in 2018: decline or growth?[2]

4.5.1. Estimates based on initial and adjusted data

Over recent years, agriculture – if we choose to look at available data prior to their adjustment based on the results of the All-Russia Agricultural Census – has been growing at a sufficiently high rate: in 2013 – by 5.8 percent, in 2014 – by 3.5, in 2015 – by 2.6, in 2016 – by 4.8, and in 2017 – by 2.5 percent[3]. Overall, growth over the course of 5 years amounted to 20.7 percent. Based on Rosstat's current statistics, managers on both the federal and regional levels describe the development pattern of the

[1] Bobylev Yu., Rasenko O. On the introduction of tax on additional revenues in the oil sector // Russian Economic Developments. 2017. No. 10, pp. 65–68.

[2] This section was written by E. Gataulina, RANEPA; V. Uzun, RANEPA; N. Shagaida, Gaidar Institute, RANEPA; E. Shishkina, RANEPA.

[3] The Federal State Statistics Service (Rosstat) altered its published data several times. At different dates, it published data that were: (1) preliminary, (2) verified, (3) based on the first adjustment made with due regard for the results of the All-Russia Agricultural Census 2016. It has been announced that the results of the second and final adjustment will be released in May 2019. Thus, data may vary throughout the text of this overview. For the sake of accuracy, it is necessary to pay attention to the date of the data release. The data cited here were released as of October 1, 2018. After the first data adjustment, as of January 31, 2019, Rosstat released another figure: 3.1 percent.

agroindustrial complex (AIC) as a breakthrough and a leap forward[1]. We likewise mentioned this fact in our overviews released over several previous years[2]. However, in 2018, there were some problems involved in the estimation of the growth rate both for 2018 and for the previous years.

Rosstat made some serious adjustments to these statistics based on the results of the All-Russia Agricultural Census 2016 (hereinafter – ARAC 2016). The previously released agricultural production data were revised and downwardly adjusted. The most dramatic alterations had to do with the data on those agricultural products that are predominantly produced by individual households: potatoes; vegetables; melons and gourds; fruits and berries; and milk. At the same time, data on cereals output remained practically the same before and after their adjustment. The gross yield value of agricultural products also shrank: from RUB 5,654 billion to RUB 5,120, or by RUB 534 billion (*Table 28*). Meanwhile, as seen from the information sources, adjustment were made only to some statistical forms. In this connection, when analyzing the changes that occurred in 2018, one may be faced with a situation where some statistical forms are characterized by positive production growth rates, while the other forms display negative growth rates.

Table 28

Data adjustment for 2017, based on the results of ARAC 2016

	Production in 2017, thousands of tons		Preliminary data adjustment	
	before adjustment*	after adjustment**	billions of rubles/thousands of tons	percent relative to adjusted data
Gross production value volume in agriculture, billions of rubles	5,654	5,120	-534	-10.4
Grain	135,393	135,539	146	0.1
Meat and meat products	10,384	10,319	-65	-0.6
Milk and dairy products	31,184	30,185	-999	-3.3
Eggs and egg products (million)	44,891	44,829	-62	-0.1
Potatoes	29,590	21,708	-7,882	-36.3
Vegetables, melons and gourds	18,089	15,427	-2,662	-17.3
Fruits and berries (including grapes)	3,480	3,262	-218	-6.7

*data prior to adjustment, as of May 31, 2018. URL: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/enterprise/economy/

**Adjusted data: for gross production – as of January 31 2019. URL: http://www.gks.ru/free_doc/new_site/business/sx/prod_sx_rf.xls data for specific products – as of December 19, 2018. URL: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/ statistics/ enterprise/economy/#

[1]URL: https://finance.rambler.ru/economics/40999322/?utm_content=rfinance&utm_medium=read_more&utm_source=copylink. Bryansk AIC made a true breakthrough.
URL: http://xn–32-6kc4bi9i.xn--p1ai/economy/agroculture/2017/11/24/bryanskij-apk-sovershil-nastoyashhij-proryv/The agroindustrial complex of Penza Oblast achieved a colossal breakthrough.
URL: http://pnzreg.ru/news/selskoe-khozyaystvo/56749/. The AIC of Chelyabinsk Oblast made a big leap.
URL: http://svetich.info/publikacii/aktualnoe-intervyu/sergei-sushkov-nasha-zadacha-prodolzhit-.html

[2] N. I. Shagaida, V. Ya. Uzun. Growth factors in the agriculture of Russia. Russian Economy in 2016. Trends and Outlooks. Gaidar Institute for Economic Policy. Moscow, 2017; Shagaida N. I., Gataulina E. A., Yanbykh R. G., Uzun V. Ya. The year-end results of 2017 and new developments in Russia's agrarian policy. Russian Economy in 2017. Trends and Outlooks. Gaidar Institute for Economic Policy. Moscow, 2018.

An increase could be observed not only with regard to data on individual households (horticulturists - owners of vegetable gardens and orchards, or owners of country houses ('dachas'), etc.), but also those reported by agricultural organizations (AO) and peasant (farm) holdings (PFH).

Keeping records on individual household production is a difficult task for statisticians. This category of agricultural producers is by no means easily observable. They are not required to report to statistical agencies, and their production is estimated on the basis of sample data, the resulting estimates then being spread across more than 30 million individual households. Any errors, however slight, in the methodology and organization of those sample studies could result in some significant distortions in the overall picture. It is evident that the marked shifts demonstrated by the reported data after their adjustment can be explained by exactly that reason – limitations of the existing methodology and less than perfect organization of the sample studies.

It is much more difficult to explain the overstated data for AOs and PFHs, because these entities are required to submit to Rosstat, at regular intervals, reports with information concerning all aspects of their activity. True, some of them do not report, but then the actual data in current statistical records may be underestimated, and not inflated. Besides, an overwhelming majority of AOs and PFHs report to the RF Ministry of Agriculture, when they participate in government support programs targeting agricultural producers. The RF Ministry of Agriculture, through its regional agencies, and these, in their turn, though their district administrations, receive multipage annual reports containing hundreds or thousands of indices on various parameters of agriculture from each agricultural organization. Farmers submit two annual reporting forms. These forms are made use of by the RF Ministry of Agriculture, and are also available for the statistical agencies.

So the question arises – why the routine statistical follow-up yields inflated indices?[1] It should be noted that such a situation has emerged for the second time already in the history of Russian statistics, because two All-Russia agricultural censes have taken place, in 2006 and in 2016. However, the data adjustment after the second census in 2016 was much more substantial that in 2006 - it affected all types of agricultural producers, while in the first case the adjustment was made mostly with regard to individual households and individuals.

[1]As early as 2006, while analyzing the data obtained during the first agricultural census, Rosstat found that the current production volume statistics were higher than the same indices obtained during the census. The gross production index for 2007 was found to be higher by RUB 168 billion (8.7 percent). But then the error nearly entirely (to the value of RUB 167 billion, or 19.5 percent relative to the pre-census level) could be accounted for by the data on individual households. The adjustments for AOs and PFHs were negligible. The adjusted gross value added index for agriculture, hunting, and forestry demonstrated an even greater deviation: in 2007, before adjustment, it amounted to RUB 1,350 billion (Statistics Yearbook 2009), and after adjustment – to RUB 1,195 billion (Statistics Yearbook 2010), which represents a drop by 13 percent. The relative share of agriculture in GDP shrank from 4.1 percent to 3.5 percent. Russia's total GDP, when adjusted, remained practically unchanged.

Alterations in statistics based on the results of agricultural censes give rise to many methodological problems whenever it is necessary to assess the rate of growth in agriculture in general, or by type of agricultural product.

A) The methodological problems associated with the growth rate estimates for the past years. For example, according to the initial data released by the Unified Interdepartmental Information and Statistics System (EMISS), the gross production index in agriculture in 2016 amounted to RUB 5,506 billion in current prices (or RUB 5,516 billion in comparable prices for 2017). In 2017, production growth in agriculture amounted to 2.5 percent. After the data for 2017 had been adjusted, the production volume in the new statistics for 2017 (RUB 5,120 billion) turned out to be far below that in 2016. The solution for that problem was already found after the first census: then, Rosstat downsized the production volume index in agriculture not only for 2007, but also for the previous 11 years (from 1996 through 2006). The adjusted production volumes were much lower than their previous level. By way of example, *Table 29* shows the relevant data before and after adjustment resulting from the first agricultural census.

Table 29

Agricultural production: data before and after adjustment, based on the results of the Agricultural Census 2006

	Gross agricultural production in current prices, billions of rubles			Gross yield of potatoes, millions of tons		
	Before adjustment*	After adjustment	percent relative to adjusted data	Before adjustment*	After adjustment	percent relative to adjusted data
1995	203.9	203.9	0.0	39.9	39.9	0.0
1996	286.9	283.4	1.2	38.7	37.6	2.9
1997	309.2	303.2	2.0	37.0	35.1	5.3
1998	307.6	298.4	3.1	31.4	29.0	8.5
1999	607.1	586	3.6	31.3	28.0	11.8
2000	774.1	742.4	4.3	34.0	29.5	15.4
2001	960.6	918.2	4.6	35.0	29.5	18.6
2002	1,028.3	968.2	6.2	32.9	26.9	22.2
2003	1,154.9	1,076.4	7.3	36.7	29.4	25.0
2004	1,345.2	1,253.2	7.3	35.9	27.9	28.8
2005	1,494.6	1,380.9	8.2	37.3	28.1	32.6
2006	1,711.3	1,570.6	9.0	38.6	28.3	36.6
2007	2,099.6	1,931.6	8.7	36.8	27.2	35.3

*Data from Statistics Yearbooks for 2009 and the previous years.

After the first adjustment (or assessment, as Rosstat has called it), a second adjustment (assessment) will be done, and it will result in alterations in the corresponding indices for several previous years, from 2007 onwards. Although Rosstat has downsized the value volume of gross production in agriculture for 2017 from RUB 5,654 billion до RUB 5,119.9 billion, the growth rate of that index demonstrated nor only complete absence of any shrinkage, but even a certain increase relative to 2016 (from 102.4[1] to 103.1 percent[2]). This means that the value volume of gross production in agriculture for 2016 was downsized even more than that for 2017.

[1] As of May 31, 2018.
[2] As of January 31, 2019.

B) The methodological problems involved in estimating the rate of growth in the first year after the adjustment. In 2008, the procedure was accomplished painlessly, because that year was good for agriculture, and so there was a surge in production compared with the adjusted data (by 10.8 percent), accompanied by a relatively modest albeit real increase compared with the initial data (by 2.1 percent). The situation in 2018 proved to be much more complicated. After the record-high result of 2017, the main types of crop production in 2018 demonstrated a marked decline. This situation is, in fact, quite typical: 'record-high' years are very frequently followed by a year of unfavorable conditions. Russian weather conditions in 2018 were also conducive to a decline in crop yields. 'At the end of July, Head of the Ministry of Agriculture Dmitry Patrushev said that, due to the unfavorable weather conditions, a state of emergency had already been introduced in 17 regions across the country'[1].

But for the data adjustment after the census, the answer to the question as to whether, in 2018, a production decline really took place in agriculture, would have been unequivocal – there was indeed a decline, and it was significant. This is confirmed by the indices shown in *Table 30*. The main types of crop production, except sunflower seed, demonstrated a very significant decline in 2018 relative to 2017. The production index for 2018 in animal husbandry (with the exception of milk output), demonstrated growth, albeit at a low rate. Since the rate of decline in crop production is much higher than the rate of growth in animal husbandry, and the crop production component still prevails in the value volume index of total gross production in agriculture, the overall decline in agriculture has become quite obvious (by 9.4 percent).

Table 30

Production in agriculture (millions of tons)

	2017 (before adjustment, as of May 31, 2018)	2018 (preliminary data as of January 31, 2019)	2018/2017, percent
Gross production in agriculture, billions of rubles, in actual prices	5,654	5,119.8	90.6
Output of threshed primary grains and legumes (including corn)	135.4	112.9	83.4
Sugar beet	51.9	41.2	79.3
Sunflower seed	10.5	12.6	120.2
Potatoes	29.6	22.4	75.8
Vegetables, protected and open-field cultivation	16.4	13.6	83.0
Total meat production (live weight at slaughter)	14.6	14.9	101.7
Milk	31.1	30.6	98.5
Eggs, billions	44.8	44.9	100.2

Source: for crop production data, see http://www.gks.ru/free_doc/new_site/business/sx/val_1.xls; for gross production in agriculture and animal husbandry production, see http://www.gks.ru/bgd/regl/b18_02/IssWWW.exe/Stg/d010/1-04.doc

However, as seen from *Table 28*, the production volume indices for 2017 were adjusted after ARAC-2016. Evidently, by applying the adjusted data, the RF Ministry of Agriculture reported that it expected the gross production index in agriculture to

[1] URL: https://rg.ru/2018/08/08/kak-anomalnaia-pogoda-povliiaet-na-urozhaj-v-rossii-i-v-mire.html

increase by 1 percent in 2018[1]. But this growth is to result not from increased production, but from the downsized production indices for the previous year[2]: for milk – by 1 million *t*; for potatoes – by 7.8 million *t*; for vegetables, melons and gourds – by 2.7 million *t*,; and for fruits and berries – by 0.3 million *t*. A more detailed analysis of these data will become possible after the release, in 2019, of the final adjusted gross production data by product type.

So, how can the rate of development in Russia's agriculture be estimated in view of the existing adjustment system? Which data should be relied upon? If the growth rates are compared on the basis of the initial data, the result will be overestimated. If the adjusted data are applied in calculating the growth rate in the agricultural sector, the result will also be erroneous, because a high rate will persist due to the downsized indices for the previous years. Below, we discuss some alternative methodological approaches to estimating the rate of growth in agriculture:

1. To select for the comparison a period the data for which are not doubtful and are not subject to any adjustment. Such a period in the post-reform era could be either the year 1990, or the five-year period 1986–1990 (*Fig. 27*).

Based on the initial data, it has already been concluded that the gross production index in agriculture in 2017 matched its level of 1990. No such conclusion can be derived from the adjusted data;

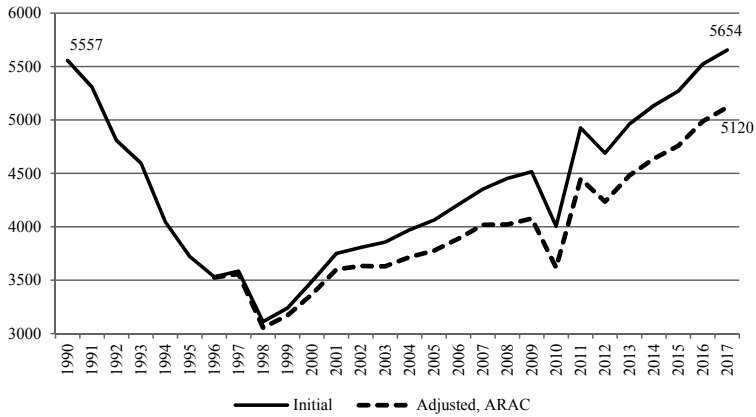
2. To compare the agriculture indices with those for the entire economy. In this connection, it is assumed that the growth rate of national GDP has been determined correctly (as demonstrated earlier, GDP is revised only slightly). On the basis of changes in the relative share in GDP of gross value added (GVA) in agriculture, the growth rate in agriculture can be calculated[3];

3. To compare the movement patterns of the by-product output growth rates and GVA in Russia's agriculture with the corresponding world indices. By doing so, it will be possible to more accurately estimate the national records and breakthroughs, setting them against the similar results achieved in other countries. For example, in the National Report on the Implementation of the Government Program of Agriculture Development in 2017 it is stated that the record of gross yield of grain, set in 1978, has been broken. However, if the grain record is to be viewed against the backdrop of world development, quite a different picture will emerge. In 1978, Russia produced 127 million *t* of grain, and in 2017 – 135 million *t*.

[1] 'However, as I have already pointed out, we will see an increase of 1 percent for the whole year. It will not be like last year's, but there will still be growth', said RF Minister of Agriculture Dmitry Patrushev at the meeting with the RF President on December 3, 2018. See http://svetich.info/news/federalnye-novosti/genby.html, December 3, 2018.

[2] In view of the announced 'breakthrough policy', this 'calculation trick' will probably become widespread: if no real breakthrough growth can be achieved, the required growth rate index will be produced by downsizing the base indices.

[3] It should be noted in this connection that the conclusion, arrived at by many researchers on the basis of non-adjusted data, that the relative share of agriculture in GDP was increasing proved to be unsubstantiated after the relevant data were adjusted.



Note. The adjusted data for 2008–2017 were calculated by downsizing the initial data: data for 2017 – by 10.6 percent, and data for each previous year – by 1.06 percentage points.

Fig. 27. The movement of the gross production index in agriculture based on initial and adjusted data, billions of rubles

Source: Rosstat's initial data, see http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1135087342078; http://www.gks.ru/wps/wcm/ connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1140096652250. For adjusted data, see http://www.gks.ru/free_doc/new_site/business/sx/tab-sel1.htm

Over the period under consideration, Russia's gross yield of grain gained 6 percent, and the corresponding world index gained 112 percent (increasing from 1,341 million *t* in 1978 to 2,849 million *t*[1] in 2016). Russia's share in world grain production over these years shrank from 9.5 to 4.7 percent. If Russia's grain yield had been increased at the same rate as the world index, her gross yield would have increased to 255 million *t*. Evidently, it is feasible to use this index as a benchmark while estimating the achievements of Russia's agriculture.

So, it should be said that, for 2018, it is difficult to estimate the changes in output and production growth rates due to the comprehensive data revision, both in retrospect – from the year of the All-Russia Agricultural Census 2016 – and thereafter, for the year 2017. However, if we apply more complex methodologies, we will see that there was indeed some growth, but it was definitely not spectacular. The same can be done with Rosstat's adjusted data: the growth observed in 2018 is produced by the significantly downsized indices – both those for 2017 and those for the previous 10 years.

[1] The World Bank's database. See https://data.worldbank.org/indicator/AG.PRD.CREL.MT

4.5.2. Prices and consumption

The shortfall in the yield of grain crops in 2018 had no negative consequences. Considering the accumulated grain reserves, Russia's grain resources in 2018 remained at a high level (*Fig. 28)*.

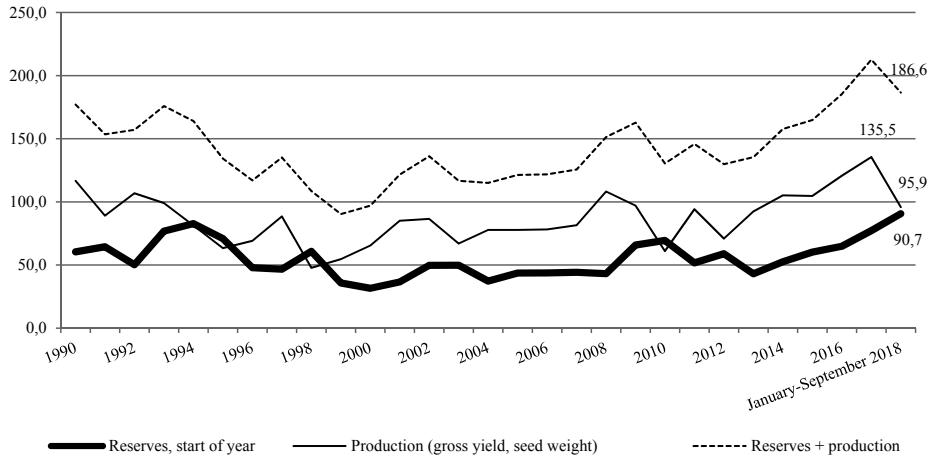
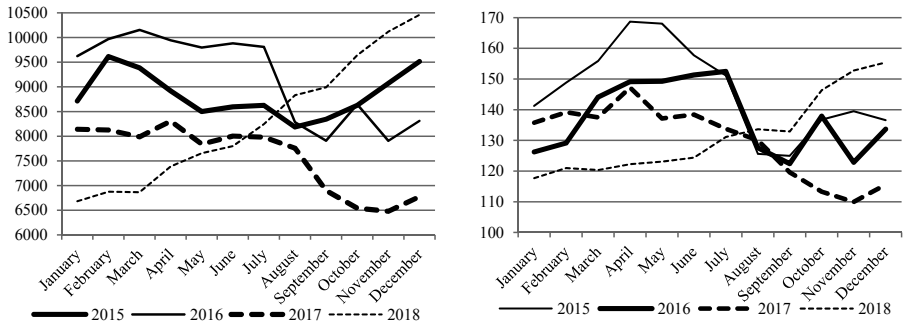


Fig. 28. Grain production and grain reserves in Russia (balance)

Source: Rosstat .

Two good harvest years in a row (2016 and 2017) resulted in a sharp decline of grain prices. At the onset of harvest in 2018, the prices were below their level of 2015–2017 both in ruble and US dollar terms. In June, they rose above the 2017 level, and demonstrated stable growth until December 2018 in ruble and US dollar terms (*Fig. 29*). At the same time, there was no grain shortage, and grain prices remained stubbornly high due to favorable export opportunities.

The shrinkage of sugar beet yield had no negative consequences, either, because over the previous two years the yield index was at the level of 51–52 million *t*, which in terms of annual average was 1.3 times higher than in 2015 (and 2–3 times higher than over the period 1995–2010). The good yields obtained in the previous years and competition with cane sugar suppliers on the international market pushed down domestic prices for beet sugar, while the export volume of sugar from Russia was very small (*Fig. 30)*.



RUB/t USD/t

Fig. 29. Selling prices of wheat set by agricultural producers

Source: Rosstat.

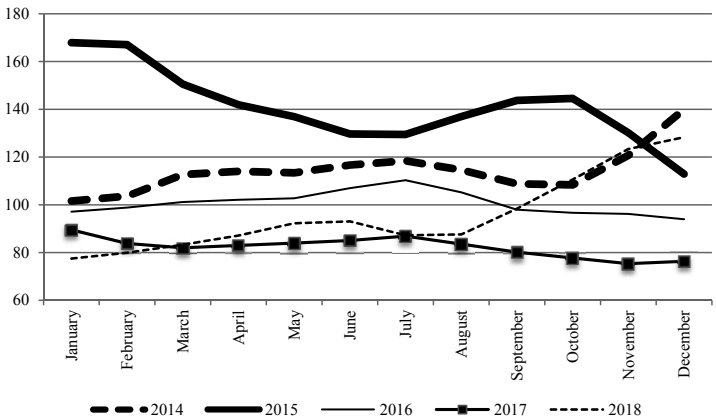


Fig. 30. Retail price index for sugar, as percentage relative to the corresponding month of previous year

Source: EMISS.

The food consumption index, calculated on the basis of retail sales of foodstuffs (household consumption data for 2018 will be released only in late October 2019), began to slowly regain its previous level in June 2017. *Fig. 31* demonstrates the movement patterns of retail sales of foodstuffs in constant prices relative to each corresponding month of 2012. However, in December 2018, the volume of retail sales of foodstuffs was below that of 2015, 2014 and 2013. When set against its 2012 level, the retail sales index in December 2018 lost 10 percent.

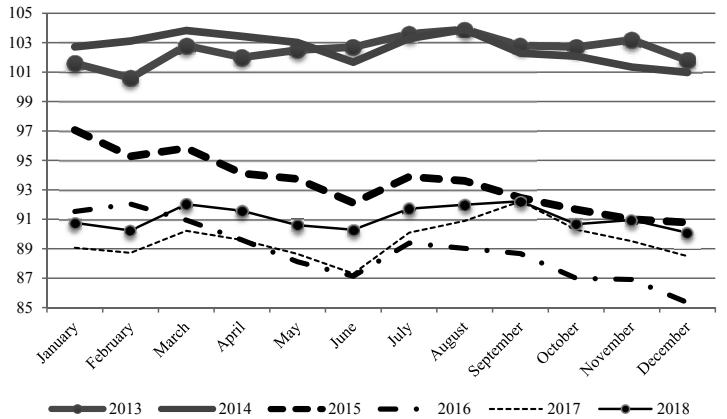


Fig. 31. Retail foodstuffs purchases in constant prices, current month relative to the corresponding month of 2012, percent

Source: Rosstat .

Demand revival resulted in growth of imports relative to the previous year (*Fig. 32*).

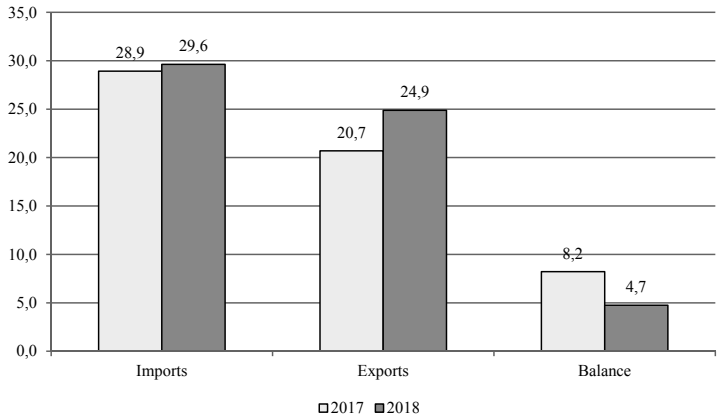


Fig. 32. Export and import of foodstuffs and agricultural raw materials (FEACN 1-24, billions of USD)

Source: RF Customs Service.

While both imports and exports were on the rise, the balance of imports and exports hit its record low of USD 4.7 billion.

4.5.3. Changes in agricultural policy

In 2017, the first phase (program-based, planned for the period 2013–2017) of the implementation of the Government Program of Agriculture Development and Regulation of Markets for Agricultural Products, Raw Materials and Foodstuffs for 2013–2020 was completed.

From 2018 onwards, the project-based phase was started, to last until December 31, 2020[1]. It is expected that the Government Program should be prolongated until 2025[2], and so its period will extend to 12 years. The first Government Program was planned for 5 years (2008–2012), the second one (in its current version) – for 8 years (2013–2020). The initially established 5-year period was adopted as the most feasible one, to ensure a sustainable agricultural policy. The program developers believed that the directions, priorities, measures and rules of government support in a medium-term perspective should not undergo any dramatic alterations, and the agricultural business community thus would be certain that all activities, investment including, could be planned with confidence. When that five-year period was over, the priorities, mechanisms and scope of funding were to be analyzed and revised, whenever necessary. During the program implementation period, no changes in its main parameters (its structure, directions, set of measures, etc.) were planned, except in case of an emergency situation, to avoid any negative effects on businesses.

However, in actual practice the Government Program became a short-term planning tool, as over the course of the year 2018 alone, the RF Government issued 4 decrees whereby it was altered in one or other way, and since its launch in 2013, a total of 12 decrees has been issued by the Government. The alterations had to do with the priorities, goals, structure, mechanisms, presentation forms, and other core components of the Government Program. At the same time, the planned prolongation of the Government Program moves it over to the category of long-term planning tools, and eliminates the procedure for analyzing the results of the medium-term period. This fact points to a lack of proper understanding, on the part of its developers, of the Government Program's meaning and goals specifically as a medium-term planning tool, the latter being legally consolidated in Article 8 of the Federal Law 'On Agriculture Development'.

Some significant changes in the structure of the Government Program were introduced by RF Government Decree No 1544 dated December 13, 2017 (the subsequent amendments being of a more detailed and targeted nature). The program developers had to be guided by the said Decree's provisions while elaborating the Government Program's new version. The Decree introduced strict 'Rules for the development, implementation and performance assessment in the course of

[1] Decree of the RF Government No 717 dated July 14, 2012 (as amended on September 6, 2018) 'On the Government Program of Agriculture Development and Regulation of Markets for Agricultural Products, Raw Materials and Foodstuffs for 2013–2020'.

[2] E. Fastova spoke of the government support of the AIC at the conference 'Russia's Agroholdings – 2018'. See http://mcx.ru/press-service/news/elena-fastova-rasskazala-o-gospodderzhke-apk-na-konferentsii-agrokholdingi-rossii-2018/-

implementation of some government programs of the Russian Federation' (hereinafter – the Rules). In particular, the Rules established the requirements to the structure, content and goals of the Government Program. Besides, they impose a ban on '*the inclusion of supplementary and substantiating materials into the set of materials to be approved by an act of the Government of the Russian Federation*'[1]. As a result, in order to comply with the Rules, the Government Program became a document of form, and not of content: it does comply with the established format, but its content offers no clues as to the reasons for elaborating one or other direction of government support, and no specific support mechanisms.

Thus, at present the Government Program documentation[2] consists of a generalized Certificate (with a brief outline of its funding scope, deadlines, goals, and directions of development) and 16 disjointed annexes with no references to any specific details, or even to the goals and directions put forth in the program certificate (the Government Program contains no explanatory notes because these are forbidden by the Rules (see above), and so it is difficult to find any substantiation for the composition and content of the Annexes. Besides, one of them was abolished. One annex contains a short list of participants in the Government Program (government departments) in addition to the RF Ministry of Agriculture. Seven annexes outline the 'development directions' that have to do with sustainable development of agricultural lands and land improvement, and these, in spite of their importance, are not the key areas of government support for agricultural producers. Another two annexes set the criteria for territories to be earmarked for accelerated development, including the Far-Eastern Federal District and the Arctic zone, which can hardly be regarded as the main regions where the goals set by the Government Program are to be achieved because of their tough climatic conditions. That annex, as well as those regions, were included in the program in order to comply with paragraph 13 of the Rules, approved by Decree of the RF Government No 1242 dated October 12, 2017 (as amended on February 23, 2018), which consolidated the list of regions earmarked for accelerated development. Probably the program developers thought that those regions were to become leaders in all spheres and sectors, agriculture including. This goal can probably be achieved – abundant budget funding can make corn grow inside the Arctic Circle[3], and that region may well get ahead of Krasnodar Krai in terms of its gross value added growth rate in agriculture.

And finally, the four remaining annexes set the rules for allocating federal budget subsidies to the budgets of RF subjects in accordance with the four key support mechanisms – the single regional subsidy, untargeted support of crop production, the subsidy per kilogram of sold milk, and compensation of interest on investment loans

[1] As a government program should be approved by a decree of the RF Government, it is subject to this requirement.
[2] The latest version, as approved by RF Government Decree No 1063 dated September 6, 2018.
[3] The gross grain and legume yield target for all categories of agricultural producers operating in those subjects of the Russian Federation where some territories are situated inside the Arctic zone set in the Government Program (Annex 15) is 2,332.400 *t* in 2018.

issued to the AIC. No funding targets are set for these measures, and there are no instructions as to which goals and directions they should correspond to. Besides, the Annexes do not fully outline the entire spectrum of government support measures designed to help the achievement of the goals set in the Government Program, and thus somewhat distort its ideas. Thus, in particular, there is no description of the mechanism employed in funding the principal support measure – preferential loans for agricultural producers, which in 2018 accounted for one-fifth of total federal expenditure allocated to the Government Program (the old interest compensation mechanism applies only to the loans taken before January 1, 2017).

The goals set by the Federal Law 'On Agriculture Development' differ from those set in the Government Program, which was adopted on the basis of that Law. At present, the Government Program declares other goals that correspond to the Rules introduced by Decree No 1242 of the RF Government. The Government Program states as follows:

Goal 1 – to ensure food security in the Russian Federation, with due regard for the economic and territorial accessibility of products of the AIC (the agricultural production index for all categories of producers (in comparable prices) in 2020 will amount to 108.6–110.8 percent relative to 2015);

Goal 2 – to produce value added in agriculture in the amount of RUB 3,890–4,050 billion in 2020;

Goal 3 – the growth rate of exports of products supplied by the AIC in 2020 should amount to 132–133.3 percent relative to 2015;

Goal 4 – the physical volume of investment in fixed assets in agriculture in 2020 should amount to 111.3–113.1 percent relative to 2015;

Goal 5 – the disposable resources of households (per household member per month) in rural areas in 2020 should amount to RUB 17,900–18,300.

Essentially, these are indicators, and not goals. However, such an approach was outlined by the authors of the Rules, which require that '*the goals of a pilot government program should be formalized as numerical targets (indicators)'*. This means that already at the level of mandatory official instructions, goals have been replaced by more narrow indicators. As a result of too faithfully obeying the letter of the law, the developers of the rules have inadvertently disobeyed its spirit. Thus, for example, the goal of 'securing sustainable development of agricultural territories, employment of rural population, improving their living standards' proclaimed in the Federal Law 'On Agriculture Development' in the end was reduced to 'achieving the target for the volume of disposable resources of households'.

The goals set in the Government Program need to be properly adjusted. Because the agriculture development goals are presented in the form of 'narrow' indicators (one for each goal), the entire structure, which must be organized so as to properly ensure their achievement (program directions – measures), thus becomes questionable from the point of view of its reasonability and performance.

The Government Program in its current version, in addition to the five goals (their number also being established in accordance with the Rules), also encompasses

10 program directions (subprograms), which correspond to 4 projects and 6 subprogram in its process-related part. The introduction of the process-related and project-related parts was the main innovation introduced in 2018 – presumably in order to significantly improve the management quality in the agricultural sector.

A 'project' is defined as 'a complex of interrelated measures designed to achieve unique results in conditions of limited timelines and resources'[1]. While a 'process' cannot be put in the 'project' category for a number of reasons – for example, a process is extended over time, it is support-oriented, and it is difficult to precisely describe specific measures because a 'process' occurs, as a rule, in the framework of functional activities of a government department. But the structure described here is something completely different. Processes involve 'measures', while 'projects' have only goals, and no measures. And nowhere in the Government Program it is stipulated which measures are designed to support a project, or the specific amount of funding to be allocated to it (only the total amount of funding to cover all the projects is determined in the 'certificate' part). But, the 'process' *Agricultural Land Improvement in Russia* is supplied with a very detailed list of capital construction sites (Annex 3), from which one can learn that, for instance, a total of RUB 12,000,000 will be spent on 'Reconstruction of the drainage network in the land improvement system *Suvorosh'* in Viazniki district (Vladimir Oblast) 2018, and RUB 1,700,000 – on the related planning and survey activities. The relative significance of components included in the current version of the Government Program is clearly blown up out of proportion. However, the Rules introduced by Decree No 1242 demand that *'a list of capital construction sites, measures (enlarged investment projects), property entities included (or to be included) in the federal targeted investment program'* should be provided, and so the relevant government department complied with the Rules by augmenting the Government Program's structure by Annex 3.

Some questions arise in relation to the placement of some of the specific program directions either in the process-related or project-related part. Thus, for example, it is not clear why 'Technological Modernization of the AIC' is defined as a project – that is, it is supposed to be finite and so, following the logic applied by its authors, it will be successfully over once its goals are achieved – namely, the renewal coefficient established for the tractor, forage and grain harvester fleet (for some reason, applied only to agricultural organizations); while at the same time 'Development of the Raw Materials Base for Supplying Light Industry with Quality Agricultural Raw Materials' is a process, although it envisages the implementation of some specific support measures in specific sectors.

On the whole, it seems that the goals set in the Government Program, once achieved, might be unsustainable. The process of technological modernization of the AIC in the Government Program is presented as a finite project, and besides it is reduced to

[1] Decree of the RF Government No 1050 dated October 15, 2016 'On the organization of project-related activities of the Government of the Russian Federation' (see assistance system Consultant Plus (electronic database)).

achieving the set targets of renewal of tractors and some types of harvesters owned by agricultural organizations. Obviously, as soon as such a 'project' is completed, it will be necessary to launch a new one because (1) machinery is constantly aging, but it is not being constantly replaced, so the renewal level is not going to last; (2) the project targets only two items (tractors and harvesters), overlooking the diversity of all existing machinery and technologies.

Since the Government Program lacks proper logic and is structured disproportionally, it is not surprising that the small-scale targeted measure 'Compensation of the Costs Incurred by Hippodromes in Their Tests of Purebred Horses' is included in the process-related part – the program direction 'General Conditions for the Functioning of the AIC's Sectors'. Also, as noted earlier, in Annexes 15 and 16 one can find detailed descriptions of the targets to be achieved, the allocation of funding by source, by year, by project and by process among the regions earmarked for 'accelerated development', while no such information is provided with regard to those regions that account for the bulk of current agricultural production.

In its present form, the Government Program fully complies with the 'Rules for the development, implementation and performance assessment in the course of implementation of some government programs of the Russian Federation' approved by Decree of the RF Government No 1242 dated October 12, 2017 (as amended on February 23, 2018). Meanwhile, its usefulness for the potential recipients – agricultural producers, rural residents, regional and municipal administrations of the AIC – is still questionable.

Funding and principal measures. The text of the Government Program[1] provides only information on general funding. Thus, in 2018 the total amount of allocations under the Government Program was RUB 298.3 billion, including federal budget allocation of RUB 241.99 billion (81.1 percent of total), consolidated budget allocations of RF subjects in the amount of RUB 44.97 billion (15.1 percent), and funding from off-budget sources in the amount of RUB 11.37 billion (3.8 percent). Thus, the bulk of support of the AIC is shouldered by the federal budget. The project-related part takes up 68 percent of total funding (RUB 202.9 billion), of which RUB 170.98 billion (84.3 percent) is allocated from the federal budget, and the rest (RUB 31.9 billion (15.7 percent)) – from the budgets of RF subjects. One can get the idea of the structure of and federal funding allocated to each of the measures outlined in the Government Program from the Federal Law 'On the Federal Budget for 2018 and the Planning Period 2019–2020' (*Table 31*).

As seen from *Table 31*, the principal form of federal support in the agricultural sector is support for investment loans, accomplished in two ways. The first way is the compensation of interest paid on loans taken before January 1, 2017. The second way is the compensation of credit institutions for their loss of income as a result of issuance of

[1] Decree of the RF Government No 717 dated July 14, 2012 (as amended on November 30, 2018) 'On the Government Program of Agriculture Development and Regulation of Markets for Agricultural Products, Raw Materials and Foodstuffs for 2013–2020'.

loans at reduced interest rates to agricultural producers and processers of agricultural products before January 1, 2017.

Table 31

The amount of federal budget funding allocated to the Government Program of Agriculture Development and Regulation of Markets for Agricultural Products, Raw Materials and Foodstuffs for 2013–2020 in 2018, billions of rubles

Program directions of the Government Program	Billions of rubles	percentage of total
Government Program, total	241.99	100.00
Departmental project *Development of AIC Sectors Ensuring Accelerated Import Substitution of Main Types of Agricultural Products, Raw Materials and Foodstuffs*, including:	58.31	24.10
Measure *Non-targeted Support of Agricultural Producers in Their Crop Production*	11.34	4.69
Measure *Increasing Productivity in Dairy Farming*	7.96	3.29
Measure *Aid in Achieving Regional Program Development Targets in AIC*	39.00	16.12
Departmental project *Promotion of Investment Activity in Agroindustrial Complex*, including:	102.00	42.15
Measure *Support of Investment Lending to AIC* – subsidies to compensate for interest payment on investment loans issued to AIC	52.22	21.58
Measure *Support of Preferential Lending to AIC Organizations* – subsidies to credit institutions designed to compensate them for their lost incomes on loans issued at reduced interest rate to agricultural producers, organizations and individual entrepreneurs involved in production, industrial processing and sale of agricultural products	49.68	20.53
Departmental project *Technological Modernization of the AIC*	10.00	4.13
Subprogram *Management of Government Program Implementation*	28.34	11.71
Subprogram *Ensuring General Conditions for Functioning of AIC Sectors*	13.86	5.73
Subprogram *Development and Improvement of Agricultural Lands in Russia*	11.43	4.72
Subprogram *Scientific and Technological Backing for Development of Sectors of Agroindustrial Complex*	1.15	0.48
Priority Project *Export-oriented AIC Production*	0.66	0.27
Subprogram *Sustainable Development of Agricultural Lands*	16.23	6.71

Source: Federal Law dated December 5, 2017 No 362-FZ (as amended on July 3, 2018 No 193-FZ).

So, as the obligations are gradually fulfilled, the relative share of interest compensation in the total lending structure will be shrinking. The main normative document whereby the compensation of credit institution for income loss is regulated has been Decree No 1528 of the RF Government dated December 29, 2016 (as amended on October 16, 2018). In 2018, the Rules were amended to make them more specific (by Decree No 1230 of the RF Government dated October 16, 2018). Among the main new provisions was the one whereby the compensation to authorized banks for their loan agreements concluded in 2019 and thereafter was reduced from 100 to 90 percent of the RF Central Bank's key rate. Besides, it now became possible to rely on loans in settlements with suppliers under letters of credit.

Another measure envisaged in the departmental project *Promotion of Investment Activity in the Agroindustrial Complex* was 'compensation of direct costs incurred during the construction and modernization of agroindustrial complex entities'. It has advantages over the mechanism of preferential investment loans in that it does not entail long-term government obligations. However, the actual amount of funding thus allocated is very small – RUB 100 million (2018), and it can be earmarked for a rather broad range of AIC entities under Decree of the RF Government No 1413 dated November 24, 2018. The list of entities to be funded is revised every year, which destabilizes the business community.

In terms of funding scope, second comes the departmental project Development of AIC Sectors Ensuring Accelerated Import Substitution of Main Types of Agricultural Products, Raw Materials and Foodstuffs, which mainly channels the current by-sector support.

Untargeted support mainly goes to the crop production sector. The payments are earmarked for the compensation of some of the costs of agricultural technologies applied in the cultivation of cereals and legumes, forage production, as well as vegetables, and calculated per hectare in accordance with the list approved by the RF Ministry of Agriculture. In fact, the allocation of support to specific types of crops makes it targeted, thus raising questions as to whether one or other type of crops indeed belongs to the WTO Green Box category. In 2018, a total of RUB 11.3 billion from the federal budget, with an additional RUB 5 billion from the Reserve Fund, was allocated to the purchases of diesel fuel in the amount of not less than 90,000 tonnes, to power the use of agricultural technologies during that year[1]. In 2018, untargeted support was provided to the total value of RUB 20.88 billion, including RUB 16.34 billion from source at the federal level, and RUB 4.5 billion from regional budgets.

The subsidies earmarked for boosting productivity in dairy farming were spent by way of compensating part of the per kilogram cost (less VAT) of cow and (or) goat milk that was sold and (or) delivered to on-site processing facilities. The name of this subsidy points to the task of promoting higher productivity in the dairy farming sector. That task is reduced in the main to applying an upward coefficient to the federal subsidies earmarked for those RF subjects where the average annual dairy cow productivity reported by farms at the end of a reporting year amounts to 5,000 kg or higher. The RF subjects likewise allocate their subsidies to agricultural producers 'on a differential basis, depending on the dairy cow productivity index for the reporting financial year relative to the corresponding index for the previous reporting financial year'[2]. At the same time, in accordance with Item 7 of the Rules that regulates the allocation and distribution of that subsidy, 'the funding is granted to agricultural producers on the basis of the following criteria:

a) the agricultural producers should actually own a herd of cows and (or) goats as of the first day of the month during which they apply to the empowered body for funding;

b) the agricultural producers should safeguard their cow herd against decline in the reporting financial year relative to the previous year'.

In other words, the purpose of subsidizing is not so much to increase productivity, as to safeguard the existing herd and keep output at the existing level. No innovations were introduced to these rules in 2018, with the exception of a more specific provision, which applied to all types of compensatory subsidies, that 'the costs are compensated less the amount of VAT' (Decree of the RF Government No 1443 dated November 30, 2018).

[1] Instruction of the RF Government No 1620-r dated August 4, 2018.

[2] Item 5 of Annex 8 'Rules for allocation and distribution of subsidies from the federal budget to the budgets of subjects of the Russian Federation aimed at increasing productivity in dairy farming'. Decree of the RF Government No 717 dated July 14, 2012 (as amended on November 30, 2018).

The funding allocated under that subsidy in 2018 amounted to RUB 10.72 billion, including RUB 2.75 billion from regional budgets. Thus, the bulk of the burden of untargeted support in the crop production and dairy farming sectors has been shouldered by the federal budget.

One of the most substantial channels of funding has been federal support allocated to the measure titled *Aid in Achieving Regional Program Development Targets in AIC,* which recently pooled several different subsidies that used to be allocated by way of targeted funding from the federal budget. These are the support of purebred animal breeding, insurance in the agricultural sector, cooperation, elite seed growing, perennial crop plantations, small-scale farming, short-term loans at reduced interest rates, etc. In order to maintain the targeted support structure across consolidated government support measures, the RF Ministry of Agriculture clearly formulated the corresponding program directions[1] and linked the allocation of support to RF subjects with their ability to meet the set targets[2]. As a result, the effect of allocated budget expenditure under this subsidy is assessed on the basis of 24 targets and multiple reporting forms.

Thus, the Ministry has accomplished a nearly impossible task – it fulfilled the order that the measures should be pooled, while at the same time maintaining their successive order. However, the governance procedures actually became more cumbersome, and thus less efficient. The targets and the amount of funding allocated to each specific measure are still being controlled by the government bodies, and besides, an additional new 'superstructure' now binds together all those measures. Overall, in 2018, the funding allocated to the single subsidy was to amount to RUB 48 billion, of which RUB 39 billion came from the federal budget, and RUB 9 billion – from the regional budget. Thus, the lion's share is once again covered by the funding from the federal level.

Among the innovations introduced in 2018 into the rules regulating the allocation of this subsidy, there was the discontinuation of financial aid to individuals cultivating their individual household land plots, that aid previously being earmarked for the payment of insurance premiums on crop production or animal husbandry insurance agreements; the addition of three more items onto the list used for allocating the single subsidy to the regions (now it consists of 19 items); the introduction of alterations to the allocation formula – now it is adjusted by the relative share and total planned area of new vineyards planted during the year of subsidy allocation in the *i*-th RF subject in the total planned area of new vineyards, and the relative share of planned insured cropped (sown) area (in arbitrary units) and insured livestock (in arbitrary units) during the year of subsidy allocation in the *i*-th RF subject in the total insured cropped (sown) area (in arbitrary units) and insured livestock (in arbitrary units)[3].

[1] Order of the RF Ministry of Agriculture No 373 dated July 27, 2017.
[2]Items 4, 9, 30 of Annex 9 'Rules for allocation and distribution of subsidies from the federal budget to the budgets of subjects of the Russian Federation aimed at promoting the achievement of targets set in the regional AIC development programs'. Decree of the RF Government No 717 dated July 14, 2012 (as amended on November 30, 2018).
[3] As amended by Decree of the RF Government No 1443 dated November 30, 2018.

Agricultural insurance covered by government support is not popular among the beneficiaries – agricultural producers. The insured cropped area is negligible. In 2016, the agricultural cropped area and perennial crop plantations covered by insurance agreements amounted to only 5 percent of the total sown area, and in 2017 – to 1.7 percent.[1] Among the reasons for such a situation, the Ministry points to 'the low level of compensation coverage, low probability of realizing insurance claims in accordance with the law, and total absence in some regions of insurance organizations which provide government-backed insurance'[2]. Evidently, these are objective reasons, and they prevent agricultural insurance from becoming more widespread. The Ministry must deal with these issues, and not simply punish the regions, and thus indirectly penalize the agricultural producers by cutting the funding for the other program directions covered by the single subsidy that are more in demand. Here, we can witness the tendency towards goal substitution – the Ministry is becoming more concerned about achieving the targets that it must report, rather than about the sector's development in the interest of agricultural producers.

One of the most important program directions supervised by the RF Ministry of Agriculture is sustainable development of agricultural territories[3]. It was previously included in the Government Program for 2013–2020 as a FTP (federal target program). The same status was granted to the program direction *Development and Improvement of Agricultural Lands in Russia*. By the Government's Decree No 1243 dated October 12, 2017, from January 1, 2018 the implementation of these FTP was discontinued before their deadlines had been reached, and now, after their status has been changed to a lower one, they both operate in the framework of the current Government Program (as amended by Decree No 1443 on November 30, 2018) as DTP (departmental target program). By the RF President's Assignment, the status of program directions for sustainable development of agricultural territories was upgraded – by June 1, 2019, a new Government Program must be approved, which would ensure the effective implementation of 'a comprehensive approach to the development of agricultural territories'[4]. Over the year 2019, the funding procedures based on program directions and the same DTP-based targets will remain unchanged.

4.5.4. Conclusions

1. The existing statistical follow-up methods make it impossible to objectively assess the ongoing processes in agriculture. Statistical methods need to be improved, and the

[1] National Report 'On the progress and results of implementation, in 2017, of the Government Program of Agriculture Development and Regulation of Markets for Agricultural Products, Raw Materials and Foodstuffs for 2013–2020'. – P. 45.
[2] Ibid.
[3] Decree of the RF Government No 450 dated June 12, 2008. Provision on the RF Ministry of Agriculture (as amended on August 16, 2018).
[4] Dmitry Patrushev delivered a report at the meeting of the RF Federation Council, addressing the issues of sustainable development of agricultural territories. See http://mcx.ru/press-service/news/dmitriy-patrushev-vystupil-s-dokladom-na-sovete-zakonodateley-rf-po-voprosam-ustoychivogo-razvitiya-/

old institution of agricultural statisticians (municipal statistics) must be reestablished; the methodology applied in statistical observations and estimations based on sample studies should be altered, and Rosstat should become a self-sufficient independent organization, no longer subordinated to the RF Ministry of Economic Development. Until this is accomplished, estimates of growth rates in agriculture should be taken with a pinch of salt, and a skeptical view of official statistics should invariably be held.

2. The production indices for 2018, in spite of the lower yields of grain and sugar beet, are not fraught with risks for consumers or agricultural producers. Gross grain yield coupled with the accumulated reserves makes it possible to boost exports without any threat to the domestic market, while the rising prices in the domestic market are compensating the producers for their losses of the past years caused by low prices. The shrinking yield of some crops like millet has already produced a surge of their prices, but given the very low consumption volume (about 1 kg of millet per person per year) and low price, no significant effect on household expenditures can be expected.

3. The slow growth of demand for foodstuffs from July 2017 onwards (after a decline from August 2014 through June 2017) continued throughout 2018. However, the demand index only rose as high as its 2016 level. It still hovers significantly below its levels of 2015, 2014 or 2013. In such a situation, the introduction of additional payments, which will affect food prices, is fraught with a high risk of shrinkage in the demand for food. So the issue of food aid still retains its importance. The estimated minimum aid would require the transfer of about RUB 89 billion to the needy families. This measure will result in a 40 percent increase in the food expenditures by the poorest households, which seems to be substantial in relative terms, but is very little in absolute terms (RUB 1,000 per family member per month). In order to identify the group of needy families, new selection criteria will need to be applied, which will take into account their living conditions. When elaborating the food aid mechanism it will be feasible not to rely exclusively on domestically produced foodstuffs, because by no means all of them – even the cheapest ones – can really compete with their low-price foreign counterparts.

4. An analysis of improvements in government management procedures based on the experience of implementing the Government Program of Agriculture Development and Regulation of Markets for Agricultural Products, Raw Materials and Foodstuffs for 2013–2020 demonstrates that instead of essentially improved management (when priority is given to the goals of beneficiaries – agricultural businesses, and agricultural development), only some purely formal and superficial alterations have been reluctantly made (willy-nilly the officials have to comply with the established rules, carry out official assignments, etc.). This trend is rather dangerous, it undermines the system performance, and it raises even more concerns because this phenomenon can be observed by no means only in agriculture.

The Government Program of Agriculture Development and Regulation of Markets for Agricultural Products, Raw Materials and Foodstuffs for 2013–2020 must once again be revised in accordance with the requirements stipulated in the Federal Law ‘On Agriculture Development’, where it is defined as ‘the core document setting the goals

and main directions of agriculture development over the medium-term period, the financial provision thereof, and the mechanisms to be employed in implementing the envisaged measures'. At the same time, in its form and content alike, the Government Program must be strongly oriented to the beneficiaries, who must receive from this core document clear informative signals for the medium-term development prospects of agricultural businesses and territories'.

4.6. The Foreign trade[1]

4.6.1. The state of the global economy

In November 2018, the Organization for Economic Development and Cooperation (OECD) presented its updated forecasts[2], according to which global economic growth would slow down from the current 3.7 percent (the OECD's estimate as of 2018) to 3.5 percent in 2019–2020. Earlier, the OECD's experts expected a 3.7 percent growth in global GDP in 2019. But growth in trade and investments slowed down on the back of the US protectionist policy. Growth in interest rates and appreciation of the US dollar exchange rate resulted in the capital outflow from developing countries and depreciation of their currencies. In the OECD zone, monetary stimulation measures are gradually scaled down. Trade conflicts between the US and China constitute a separate negative factor. According to the OECD's estimate, imposition by the US of a 25 percent duty on Chinese imports and adoption by China of similar measures may cost the global economy, US economy and Chinese economy 0.5 percent of GDP, 0.8 percent of GDP and 1 percent of GDP, respectively.

India's economy is growing at a faster rate than others. In 2018, India's GDP increased by 7.3 percent and growth of 7.4 percent is forecasted in 2019. China's economy is expected to grow by 6.6 percent and 6.2 percent in 2018 and 2019, respectively, while the Indonesian economy, by 5.2 percent in 2018 and 2019.

The OECD's experts revised downwards the forecast for Russia. If at the beginning of the year growth of 1.8 percent was expected on the basis of the results of the current year, it is now stated that Russian GDP growth of over 1.6 percent of GDP is infeasible. In 2019, this indicator will fall to 1.5 percent.

According to the opinion of the World Bank's experts[3], late in 2018 global economic activities slowed down. Due to reduction of trade and investment volumes, in 2019 global economic growth rates slowed down to 2.9 percent. The Central Bank of the Russian Federation forecasted growth of 3 percent. The forecast for 2020 is revised downwards by 0.1 p.p. to 2.8 percent of GDP, too.

After several months of decline, in June the global trade growth consolidated somewhat on the back of revival of exports from the euro zone and developing Asian

[1] This section was written by N. Volovik, the Gaidar Institute and RANEPA.
[2] The official web-site of the OECD. URL: http://www.oecd.org/economy/outlook/economic-outlook/
[3] The official web-site of the World Bank. URL: http://www.vsemirnyjbank.org/ru/news/press-release/2019/01/08/darkening-prospects-global-economy-to-slow-to-29-percent-in-2019-as-trade-investment-weaken

countries. However, the latest data show that growth was sooner of a temporary nature because the indicator of new export orders decreased in September for eight months running, having fallen slightly below the threshold value which signals a forthcoming shrinkage of the global trade. At the same time, there is less uncertainty about the US trade policy with signing of a new agreement on free trade with Mexico and Canada (the United States-Mexico-Canada Agreement – USMCA). The amendments introduced into the USMCA include tougher requirements to the rules of identification of the country of origin of goods for the automotive sector, a higher extent of access for the US to the Canadian dairy market, tougher provisions on labor and intellectual property and simplified dispute settlement rules.

In the International Monetary Fund's (IMF) report – *The Prospects of Development of the Global Economy* (PDGE)[1] – published in January 2019, it is stated that growth in investments, industrial output and global trade slowed down in H2 2018. The IMF pays attention to growth in interest rates in developing countries. Consequently, global GDP will keep growing, but at a slower rate. In 2019, growth rates of global GDP are expected to slow down to 3.5 percent, while in 2020, to 3.6 percent against growth of 3.7% in 2018. As compared to the previous report, which was released in October 2018, the forecasts for 2019 and 2020 were revised downwards by 0.2 p.p. and 0.1 p.p., respectively. According to the IMF, the main risks to the global economy are the escalation of trade war between the US and China, the risks of the Brexit without a deal with the EU and slowdown of economic growth rates in the US and China. In the US, the growth rates will fall to 2.5 percent and 1.8 percent in 2019 and 2020, respectively, against 2.9 percent in 2018. In China, they will fall to 6.2 percent in 2019–2020, against 6.6 percent in 2018. The main factor behind this slowdown will be mutual trade barriers.

In addition, global growth is weakened by the following factors:

- Problems experienced by German car-makers because of introduction of new fuel emission standards;
- The weakening of the Italian economy amid weak domestic demand and higher cost of borrowings;
- Problems in the French economy on the back of negative consequences of street protests and industrial actions;
- Economic problems of Turkey following the foreign exchange crisis last summer;
- The negative situation and the downbeat mood of investors on global financial markets.

The IMF expects GDP growth of 2 percent and 1.7 percent in 2019 and 2020, respectively, in various countries. In the current year, emerging economies' growth slowed down, too, from 4.6 percent in 2018 to 4.5 percent in 2019. In 2020, economic growth is expected to speed up to 4.9 percent. The 2019 forecast is 0.2 p.p. lower than in the October 2018 issue of the PDGE.

[1] The official web-site of the IMF. URL: https://www.imf.org/ru/Publications/WEO/Issues/2019/01/11/weo-update-january-2019

Due depreciation of prices of oil and financial conditions getting tougher, the forecast of Russia's GDP growth was revised downwards from the forecasted level of 1.8 percent in October to 1.6 percent and 1.7 percent in 2019 and 2020, respectively (*Table 32*).

Table 32

The dynamics of global GDP and global trade (growth rates, % change as compared to the previous year)

	2010	2011	2012	2013	2014	2015	2016	2017	Esti-mate	Forecast	
									2018	2019	2020
Global GDP volume	5.4	4.3	3.5	3.5	3.6	3.5	3.3	3.7	3.7	3.5	3.6
Countries with developed economies	3.1	1.7	1.2	1.4	2.1	2.3	1.7	2.3	2.3	2.0	1.7
United States	2.6	1.6	2.2	1.8	2.5	2.9	1.6	2.2	2.9	2.5	1.8
Euro zone	2.1	1.6	–0.9	-0.2	1.4	2.1	1.9	2.4	1.8	1.6	1.7
Germany	3.9	3.7	0.7	0.6	2.2	1.5	2.2	2.5	1.5	1.3	1.6
France	1.9	2.2	0.3	0.6	1.0	1.0	1.1	2.3	1.5	1.5	1.6
UK	1.7	1.6	1.4	2.0	2.9	2.3	1.8	1.7	1.4	1.5	1.6
emerging market and developing economies	7.4	6.2	5.1	4.7	4.6	4.0	4.3	4.7	4.6	4.5	4.9
Commonwealth of Independent States	4.8	4.8	3.4	2.2	1.0	-2.8	0.4	2.1	2.4	2.2	2.3
Russia	4.3	4.3	3.4	1.3	0.6	-3.7	-0.2	1.5	1.7	1.6	1.7
Without Russia	6.0	6.1	3.6	4.2	1.9	-0.5	1.9	3.6	3.9	3.7	3.7
Developing Asian countries	9.5	7.8	6.7	6.6	6.8	6.6	6.4	6.%	6.5	6.3	6.4
China	10.4	9.3	7.7	7.7	7.3	6.6	6.7	6.9	6.6	6.2	6.2
India	10.1	6.3	4.7	5.0	7.3	7.6	7.1	6.7	7.3	7.5	7.7
Latin America and Caribbean countries	6.2	4.6	2.9	2.7	1.3	0.0	-0.9	1.3	1.1	2.0	2.5
Brazil	7.5	2.7	1.0	2.5	0.1	-3.8	-3.6	1.4	1.3	2.5	2.2
Mexico	5.6	4.0	4.0	1.1	2.1	2.5	2.3	2.2	2.1	2.1	2.2
Volume of global trade in goods and services	12.6	6.1	2.9	3.0	3.3	2.6	2.2	5.2	4.0	4.0	4.0
Countries with developed economies	12.0	5.7	2.0	2.4	3.4	3.6	1.8	4.3	3.2	3.5	3.3
Emerging market and developing economies	13.7	6.8	4.6	4.4	2.9	1.3	3.0	7.1	5.4	4.8	5.2

Source: The IMF's data.

Changes in trade agreements, risks related to introduction of new import customs duties, as well as worsening of economic expectations have had a negative effect, primarily, on export-oriented countries, such as China or Germany, a leading euro-zone economy. It means that GDP annual growth rates of Russia's main trade partners are expected to slow down: from 6.9 percent in 2017 to 6.2 percent in 2019 in China and from 2.4 percent to 1.6 percent in the euro-zone.

According to the data of the World Trade Organization (WTO), within nine months of 2018, the value of global exports of goods increased by 11 percent as compared to the relevant period of the previous year[1]. Cyprus with the highest growth in exports (64

[1] Calculated on the basis of the data of the Monthly Merchandise Trade Values on 70 countries which account for 90 percent of the global trade. URL: https://www.wto.org/english/res_e/statis_e/short_term_stats_e.htm

percent) is followed by Malta (29.4 percent), Kazakhstan (28.4 percent) and the Russian Federation (27.8 percent). As a result, in the rating of the largest exporters the Russian Federation moved upwards from the 14th place (with the share of 2.1 percent in global exports) to the 13th place (with the share of 2.4 percent in global exports).

In 2018, the highest foreign trade turnover was registered in China: within 9 months it amounted to USD 3431.9 billion. From 1994 China's export surplus has always been positive; within nine months of 2018 it amounted to USD 221.4 billion.

The US is rated the second with the foreign trade turnover amounting to USD 3,180.1 billion within nine months of 2018. However, within nine months of 2018 the US foreign trade deficit was equal to USD 695.6 billion.

Germany retained the third place with its foreign trade turnover amounting to USD 2,154.7 billion in January-September 2018. Germany's external surplus is equal to USD 213.1 billion.

Global trade growth keeps falling. This is evidenced by the World Trade Outlook Indicator, WTOI[1], which fell to 96.3 points in Q1 2019 from 98.6 points in Q4 2018. This index value is the nine years' low since March 2010. It is to be reminded that the WTOI value below 100 points signals trade growth below the trend.

The weakness of the WTOI as a whole can be explained by a dramatic decrease in all its components, which are affected by growing tensions in the global trade. So, in Q1 the index of export orders fell to 95.3 points from 96.6 points in the previous quarter, the international air carriage index decreased to 96.8 points from 100 points a quarter before, the carmaking and car sales index went down to 92.5 points from 96.9 points in the previous quarter, the electronic component index declined to 88.7 points from 93.9 points and the agricultural raw material index, to 94.3 points from 97.2 points in Q4 of the previous year. The only exception is the port capacity index which turned out to be above 100 points, having fallen from the level of 101.2 points to 100.3 points, which situation can probably be explained by the front loading of ports before the tariff increase in the US and China. Taking into account the sustained slowdown of the dynamics, it is crucially important to reduce tensions in trade amid prevailing political risks and financial instability because they may provoke a more dramatic recession.

4.6.2. The Russian foreign trade situation: prices of the main commodities of the Russian exports and imports

In 2018, prices of primary products were determined by a number of factors, including interruptions in deliveries of some raw materials, growth in interest rates in the US, appreciation of the US dollar exchange rate, growing tensions in trade between large countries and pressure on financial markets in some emerging markets and developing economies (EMDEs).

[1] The WTO's official Web-site. URL: https://www.wto.org/english/news_e/news19_e/wtoi_19feb19_e.htm

In Q3 2018, prices of energy commodities appreciated by 3 percent and 40 percent as compared to Q2 and the same period of 2017, respectively, owing to substantial growth in prices of oil, coal and natural gas.

In Q3, 2018, prices of non-energy commodities fell by 7 percent relative to the previous quarter. Prices of metals depreciated by nearly 10 percent amid weak global growth and concerns over the effect of the trade dispute between the US and China on growth of the Chinese economy which accounted for 50 percent of global demand on metals. On the contrary, limitation of supplies, including the shut-down of the world's largest alumina producer[1] and ecological reduction of production in China helped underpin prices of some metals.

In Q3 2018, agricultural products depreciated by nearly 7 percent – the largest depreciation within a quarter – since Q4 2011 as compared to Q2 2018. This depreciation was driven by a number of factors, such as sufficient supplies of most oil-bearing and cereal crops (except for wheat), trade tensions which affected prices of agricultural products (particularly soya beans) and depreciation of EMDE' currencies (particularly the Brazilian real).

In 2018, the World Bank's agricultural product prices remained on average virtually unchanged as compared to 2017 (100.08 percent). The downward risks for the price forecast stem from the escalation of trade tensions. On the other side, high prices of energy commodities may put up prices of energy-intensive cereal crops, particularly, grain and oil-bearing crops. In 2019, the index of prices of agricultural products may rise by less than 2 percent, mainly, due to higher costs on energy commodities and fertilizers.

The 2018 World Bank's index of prices of energy commodities rose by 29.7 percent as compared to the previous year on the back of substantial growth in prices of its all components.

In Q3 2018, the World Bank's index of metal prices fell by 10 percent as compared to the previous quarter, despite the reduction of the LME's metal reserves, except for iron ore. The decrease was driven by the global demand shrinkage, appreciation of the US dollar and rising tensions in trade between the US and China. However, in 2018 average metal prices turned out to be higher than in 2017 owing to their appreciation early in 2018: the World Bank's Index of metal prices was equal to 106.26 percent (*Fig. 33*).

The Bloomberg Commodity Index (BCOM), which includes 22 types of primary products have been fluctuating for three years running within the range of 80 – 90 points. Having achieved on May 23, 2018 the maximum value of 91.57 points since July 2015, on December 28, 2018 the BCOM fell to the minimum level (77.59 points) since January 2016, which factor is the evidence of volatility on primary product markets.

[1] Early in October 2018, the Norsk Hydro, a Norwegian metals company suspended for an uncertain period of time the operations of the Alunorte Plant, the world's largest alumina refinery situated in Brazil.

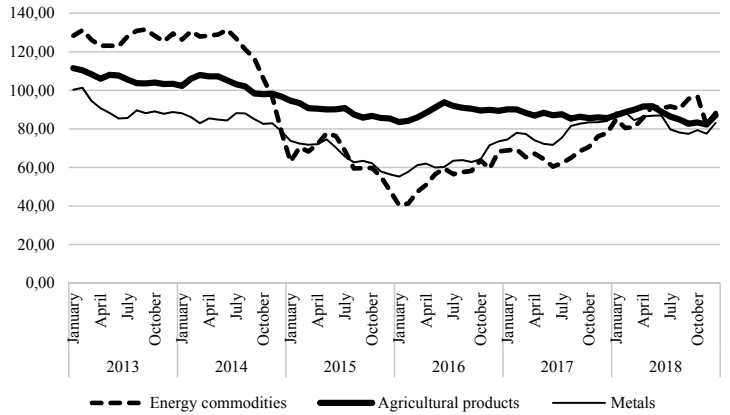


Fig. 33. The World Bank's indexes of primary product prices (the year 2010 =100 percent)

Source: URL: http://www.worldbank.org/en/research/commodity-markets#1

During the year, prices of oil were volatile: having achieved their maximum of USD 86.07 a barrel on October 4, the Brent oil prices fell to the year's minimum of USD 50.57 a barrel on December 28. The growth in oil prices partially reflects the prevalence of the loss-making production in Venezuela and concerns over the prospect of introduction by the US of new sanctions against Iran which may have a greater than expected effect on production and exports of Iranian oil. An increase in oil production by other members of the Organization of Petroleum Exporting Countries (OPEC) and the Russian Federation may make up for that reduction.

In 2018, the average price of Brent oil amounted to USD 71.07 a barrel, an increase of 30.7 percent on 2017. The average price of Urals oil appreciated by 32 percent to USD 70.01 a barrel in 2018 relative to 2017. In 2017 the average price of Urals oil was equal to USD 53.03 a barrel.

Demand on coal and natural gas happened to be higher than it was expected in Q2 2018 and Q3 2018 because the untypically hot weather in Asia and Europe spurred demand on electricity for air conditioning. Europe normally reduces utilization of coal in summer by switching over to alternative sources and hydro sources. However, weak winds and lack of water in rivers of Germany and France made the coal-fired power industry to step up its operations. Also, there were problems related to the reduction of nuclear power output in France and Germany because of the extended repairing. In 2018, prices of natural gas increased year on year by 34.4 percent and 24 percent in Europe and Japan, respectively, on the back of high demand, while in the US, by the mere 6.6 percent because supply was growing fast as the shale gas production increased.

Prices of South African coal and Australian coal appreciated by 14.7 percent and 20.9 percent, respectively, with ecological limitations on supplies underpinning prices

further. It is expected that prices will go down in 2019 because relative to 2018 demand will slow down, while supply is to get higher.

With mutual import duties introduced by the US and China coming into effect, the trend of appreciation of prices of commercial metals – this trend was observed for the past two years – broke up. In January 2018, the commercial metal market saw record-high prices. So, for the first time since July 2014 the price of copper surpassed the level of USD 7,000 per ton. Aluminum prices attained their five-year's maximum of USD 2,209 per ton. Growth of the above indices was related to the revival of the automotive industry in the US and Europe. The US sanctions against the Rusal, the world's second largest aluminum-producing company which accounted for about 7 percent of global aluminum supplies and limitations on metal trading at exchanges led to a situation where early in April prices of aluminum appreciated for a short period of time by 30 percent, but by the end of the month fell on the back of promises of possible weakening of sanctions if the company's main shareholders reduced their shares.

With the US and China introducing mutual trade barriers in July, all nonferrous metals on the global market depreciated dramatically. In July, metal prices depreciated relative to the previous month: aluminum (6.9 percent), copper (10.3 percent), lead (9.4 percent), tin (4.5 percent), nickel (8.7 percent) and zinc (14 percent). Despite the depreciation of nonferrous metal prices which was observed in the last few months of 2018, they generally appreciated within a year as compared to 2017: aluminum (7.2 percent), copper (5.8 percent), tin (0.4 percent), nickel (26 percent), zinc (1.1%), while lead depreciated by 3.2 percent (*Table 33*).

Table 33

Average annual global prices

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Oil (Brent), USD/per barrel	97.64	61.86	79.64	110.9	111.97	108.86	98.94	52.37	44.05	54.39	71.07
Natural gas (USA), USD/1 million BTU	8.86	3.95	4.39	4.00	2.75	3.72	4.37	2.61	2.49	2.96	3.16
Natural gas, market of Europe, USD/1 million BTU	13.41	8.71	8.29	10.52	11.47	11.79	10.05	6.82	4.56	5.72	7.68
Natural gas (Japan), USD/1 million BRU	12.55	8.94	10.85	14.66	16.55	15.96	16.04	10.93	7.37	8.61	10.67
Copper, USD/ per ton	6956	5149	7534	8828	7962	7332.1	6863.4	5510.5	4867.9	6169.9	6529.8
Aluminum , USD/per ton	2573	1665	2173	2401	2023.3	1846.7	1867.4	1664.7	1604.2	1967.7	2108.5
Nickel, USD/ per ton	21111	14655	21809	22910	17557	15032	16893	11863	9595.2	10409	13114

Source: calculations based on the data of the World Bank.

4.6.3. The main parameters of Russia's foreign trade

In 2018, Russia's foreign trade turnover kept recovering after the shrinkage of 2014–2016. In 2018, Russia's foreign trade turnover increased by 17.3 percent to USD 693.1 billion as compared to 2017. However, quarterly growth rates of Russia's foreign trade

turnover slowed down: if in Q1 2018 the trade turnover grew by 21.7 percent as compared to Q1 2017, in Q2 2018, Q3 2018 and Q4 2018 it increased by 20.7 percent, 16.8 percent and 10.9 percent, respectively. This happened on the back of slowdown of imports growth rates in Q2 2018 and reduction of the value of the imports to the Russian Federation in Q3 2018 and Q4 2018.

The foreign trade volume with far abroad countries increased by 18.2 percent to USD 610.2 billion, while that with the CIS countries, by 9.8 percent to USD 82.9 billion.

In 2018, Russian exports increased by 25.6 percent to USD 444 billion as compared to the relevant period of 2017, while Russian imports, by 4.6 percent to USD 249.1 billion. The existing dynamics of exports and imports facilitated substantial growth in the positive trade balance which increased by 68.9 percent to USD 194.9 billion (*Fig. 34*).

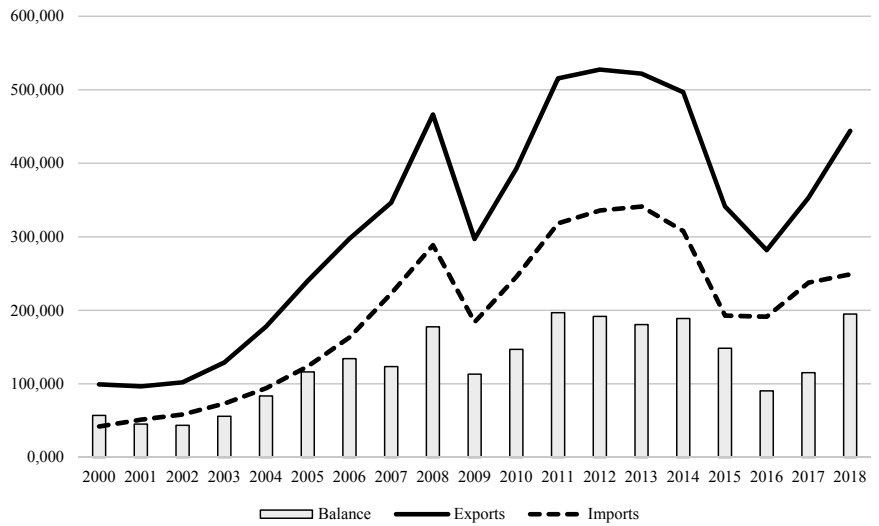


Fig. 34. The main parameters of Russia's foreign trade
(billion US dollars)

Source: The Central Bank of the Russian Federation.

The positive dynamics of Russian exports can largely be explained by the pricing factor: in Q2 the index of average export prices and the index of the volume of exports amounted to 118.5 percent and 106.5 percent, respectively, while in Q3, to 124.2 percent and 102.5 percent, respectively. Growth in the value of imports was largely determined by the pricing factor, too: in Q2 2018 the index of average import prices and the index of the volume of imports to Russia were equal to 103.7 percent and 101.1 percent, respectively, while in Q3, to 99.9 percent and 99.0 percent, respectively (*Table 34*).

Table 34

The indices of average prices and the volume of Russia's exports and imports in 2018, % change on the relevant quarter of 2017.

FEA CN code	Commodity group name	Index of average prices						Index of volume					
		Exports			Imports			Exports			Imports		
		Q1	Q2	Q3	Q1	Q2	Q3	Q1	Q2	Q3	Q1	Q2	Q3
01-24	Food products and agricultural primary products	101.3	104.1	105.6	101.7	101.8	99.3	128.2	145.3	105.8	104.1	103.2	97.2
25-27	Mineral products	119.7	127.6	135.0	120.7	118.7	120.3	103.1	101.6	106.2	91.9	94.3	83.4
27	Fuel and energy commodities	120.0	127.9	135.5	111.9	108.6	113.1	102.7	102.1	106.0	91.0	100.4	95.0
28-40	Chemical products and raw rubber	106.9	107.6	107.8	107.2	105.2	103.8	107.3	102.5	107.9	106.5	103.3	96.6
41-43	Rawhide, furs and fur articles	83.2	83.2	73.5	99.6	112.1	94.2	140.9	119.8	92.3	100.3	84.5	137.0
44-49	Wood and pulp and paper products	120.6	120.3	127.7	109.6	104.9	107.0	88.9	99.1	97.6	103.3	100.5	98.5
50-67	Textile, textile products and footwear	106.0	99.6	99.1	107.6	105.8	100.2	107.9	92.9	103.6	115.5	95.8	110.7
72-83	Metals and metal fabricated articles	115.0	114.1	111.1	109.3	108.3	104.4	113.6	116.0	107.3	116.5	94.6	93.6
84-90	Machines, equipment and transport vehicles	81.3	87.3	91.2	104.1	102.3	99.3	101.2	120.5	109.7	111.0	101.5	96.8
68-70, 91-97	Other commodities	104.1	98.1	103.3	104.1	98.5	82.4	99.8	114.4	86.0	99.3	108.6	131.5

Source: the data of the Federal Customs Service

The Pattern and Dynamics of Exports

In 2018, the value of exports increased by 25.6 percent to USD 444.0 billion as compared to 2017. Export supplies to far abroad countries and the CIS rose by 27.8 percent and 12.3 percent, respectively. In the overall volume of exports, the unit weight of far abroad countries increased to 87.3 percent against 85.8 percent in 2017 (*Table 35*).

Table 35

Dynamics of Russian exports

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Exports, billion USD	354.4	466.3	297.2	392.7	515.4	527.4	521.8	496.8	341.4	281.7	353.5	444,0
including												
Far abroad countries	294.8	397.7	252.0	333.6	436.7	443.8	443.8	428.1	292.1	241.7	303.4	387,7
Growth rates, % change on previous year												
Index of volume of exports	104.7	105.8	105.0	96.8	97.0	110.0	97.8	99.9	104.9	109.0	103.6	102,5
Index of prices	126.9	119.7	110.9	137.4	76.4	119.8	132.9	101.6	95.7	58.1	120.7	124,2

Source: The Central Bank of the Russian Federation and the RF Ministry of Economic Development.

The main factor behind high growth rates of exports is appreciation of prices of hydrocarbons. In 2018, the average contract price of crude oil, petrochemicals and

natural gas appreciated by 34.3 percent, 32.6 percent and 22.8 percent, respectively, relative to 2017.

The value of exports of Russian oil increased by 38.3 percent in 2018 as compared to 2017 with growth of 3 percent in the volume of export supplies to 260,171 million tons.

In addition, according to the data of the Federal Customs Service the volume of the Russian exports of liquefied natural gas rose by 50.4 percent to 36.7 million cubic meters as compared to 2017. The volume of exports of natural gas increased by 4.9 percent to 220.6 billion cubic meters. In 2018, the revenues from liquefied natural gas rose by 66.6 percent to USD 5.3 billion, while the revenues from sale of natural gas, by 28.8 percent to USD 49.1 billion.

As a result, in 2018 in the commodity pattern of exports the share of fuel and energy commodities increased by 4.5 p.p. as compared to the previous year. There was a decrease in shares of food products (from 5.8 percent to 5.5 percent), chemical products (from 6.7 percent to 6.1 percent), wood and pulp and paper articles (3.3 percent to 3.1 percent), metals and metal fabricated articles (from 10.4 percent to 9.9 percent) and machines, equipment and transportation vehicles (from 7.9 percent to 6.5 percent) (*Fig. 35*).

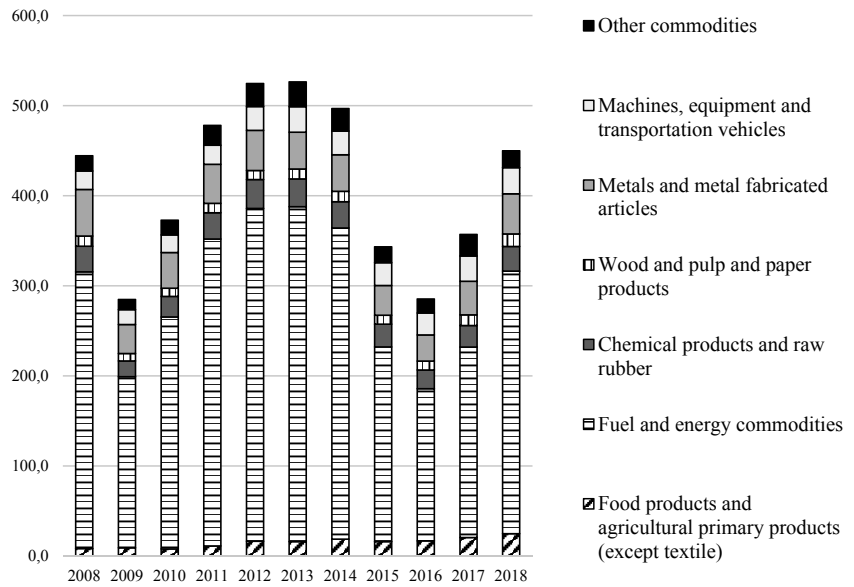


Fig. 35. The Commodity dynamics of Russian exports (billion USD)

Source: The Federal Customs Service.

According to the data of the Russian Export Center[1], in 2018 Russia's exports of non-primary and non-energy commodities amounted to USD 149.4 billion, having surpassed the historic record of 2012 (USD 143.5billion). The growth rates happened to be lower than a year before (11.6 percent). In 2017, the exports of non-primary and non-energy commodities increased by 22.5 percent mainly on the back of the effect of the low base of 2016. In 2018, growth was facilitated by expansion of the volume of supplies and appreciation of global prices. There were high growth rates of exports of nonfood agricultural products (+25 percent), timber (+18 percent), food products (+20.2 percent) and metal products (+19.4 percent).

In 2018, Russia kept stepping up exports of food products and agricultural primary products. In 2018 the volume of food exports amounted to USD 24.9 billion, a record-high level within the entire period of observations. The main drivers of growth in exports of food products were the increase in domestic production, a favorable USD/RUB exchange rate and decrease in households' purchasing power. As a result, the domestic market of most food products shrank.

Traditionally, in the pattern of the Russian exports of food products the leaders are cereals (42.1 percent in 2018). In 2018, the volume of exports of wheat and meslin rose by 33.1 percent, while the value thereof, by 45.6 percent.

The Foreign Agricultural Service of the US Agricultural Department[2] has revised upwards the forecast of Russian export wheat supplies from 35 million tons to 36.5 million tons in the 2018/19 season. The Russian Federation will remain the world's leader as regards wheat exports followed by the US (29 million ton) and Canada (24 million tons). Russian wheat dominated on the global market for several years thanks to high reserves and price advantages. From July till October, monthly shipments of wheat were higher than in the previous year, however, with winter coming they slowed down. According to the updated information of the Federal Customs Service, from the beginning of the season till December 13 Russia exported 25.4 million tons of grain, an increase of the mere 4 percent as compared to the previous season. Particularly, shipments of wheat increased by 13 percent to 21.8 million tons, while those of barley and maize decreased by 13.5 percent to 2.8 million tons and twofold to 1 million ton, respectively. So, in December exports of wheat fell to 0.5–0.7 million tons a week against 1 million tons in October – the beginning of November. The second largest position in the Russian food exports is occupied by fish and seafood (17.4 percent); in 2018 the value of their exports amounted to USD 2.9 billion, an increase of 22.6 percent as compared to the index of 2017.

The third place in the Russian food exports is retained by the supplies of animal and vegetable fats and oil (10.5 percent), which exports fell by 1.5 percent to USD 2.6 billion in 2018 relative to 2017.

[1] URL: https://www.exportcenter.ru/upload/iblock/6f1/Экспорт%20России%202018_12%20(reference).pdf

[2] Grain: World Markets and Trade. URL: https://apps.fas.usda.gov/psdonline/circulars/grain.pdf

There was growth in the exports of meat and meat by-products (28.7 percent), edible fruits and nuts (10 percent), products of the flour and cereals industry (14.1 percent), vegetable, fruits, nuts and plants products (16.5 percent) and alcoholic and non-alcoholic beverages (12.5 percent).

In 2018, the exports of the timber industry's products attained the record-high level of USD 13.9 billion. At the same time, there are some changes in the pattern of the timber industry's exports: the share of exports of unprocessed timber keeps falling; within ten years it decreased from 22 percent to 8 percent. The exports are retargeting at products with a higher added value. In 2018, the volume of exports of processed timber, glued ply wood, pulp wood and newsprint paper rose by 6.8 percent, 8.5 percent, 0.5 percent and 1.4 percent, respectively.

The exports of machines and equipment increased by 3.5 percent. This happened on the back of growth of 15.7 percent in export sales of those products to CIS countries. Exports of machines and equipment to far abroad countries fell by 2.8 percent.

The Pattern and Dynamics of Imports

In 2018 the Russian imports increased by 4.6 percent to USD 249.1 billion as compared to 2017. The value of imports from far abroad countries amounted to USD 222.5 billion, an increase of 4.6 percent as compared to the index of 2017, while that of imports from CIS countries to Russia was equal to USD 26.5 billion, an increase of 4.7 percent relative to the index of 2017. In the total volume of imports, the unit weight of far abroad countries remained at the level of the previous year (89.3 percent) (*Table 36*).

Table 36

Dynamics of Russian imports (billion USD)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Imports, billion USD	223.1	288.7	183.9	245.7	318.6	335.8	341.3	307.9	193	191.5	238.1	249.1
Including												
Far abroad countries	194.1	253.8	162.7	213.2	273.8	288.4	295.0	271.9	170.6	170.8	212.8	222.5
Growth rates , % change on previous year												
Index of volume of imports	122.4	130.1	127.1	113.5	63.3	135.4	122.2	105.1	97.8	96.6	116.7	99.0
Index of prices	106.5	105.5	107.6	117.8	99.1	101.6	109.1	97.3	102.5	99.8	106.6	99.9

Source: The Central Bank of the Russian Federation and the RF Ministry of Economic Development.

Amid the depreciation of the rouble, weakening of business activities in the industry and fading of the effect of the low base in Russia, after two years of uninterrupted growth in Q2 2018 imports of goods slowed down, while in Q3 2018 they started to shrink. If in January 2018, imports of goods to the Russian Federation increased by 20.4 percent year on year, in July they grew by the mere 0.9 percent, while in August, September and December they fell by 3.5 percent, 2.9 percent and 6.8 percent, respectively. On the one side, imports were underpinned by continuous moderate growth in domestic demand. On the other hand, they were restrained by depreciation of the rouble's real effective exchange rate which in Q2 2018 weakened by 11 percent as compared to the relevant period of 2017 (a 6.5 percent depreciation in Q3 2018). Generally, within a year the real

effective exchange rate of the rouble in the basket of foreign currencies of the main trade partners of Russia decreased by 6.9 percent in 2018.

The dynamics of imports across different types of commodities was not homogeneous. So, in 2018 the volume of imports of fresh and frozen meat decreased by 36.4 percent to 409,200 tons as compared to 2017. The volume of poultry supplies fell by 2.5 percent to 221,700 tons. Also, Russia started to import less fish, a decrease of 5 percent (407,200 tons).

Imports of citrus fruits increased the most (9.3 percent) followed by bananas and apples. Also, there was growth in imports of coffee (+5 percent), cacao beans (+2 percent) and cacao-containing products (+22.6 percent).

The share of import food products on the domestic market fell from 36 percent in 2013 to 22 percent in 2018.

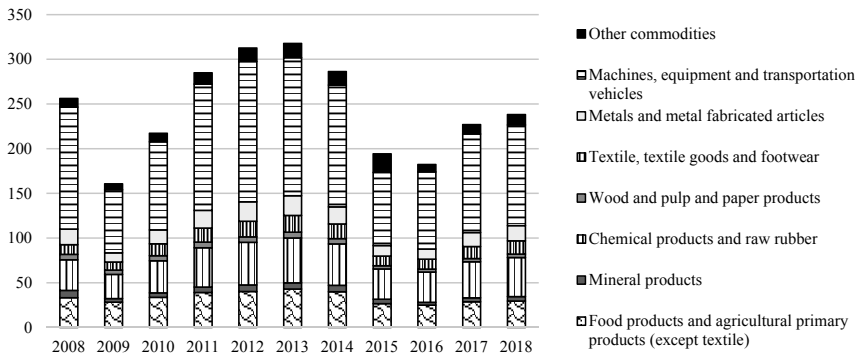


Fig. 36. The Commodity dynamics of Russian imports (January-October, billion USD).

Source: The Federal Customs Service.

In the commodity pattern of imports, machines and equipment still have the highest unit weight; in 2018 it was equal to 47.3 percent (48.6 percent in January-October 2017). In 2018, purchases of machines and equipment increased by 2.1 percent, including electrical equipment (15.5 percent) and instruments and optical device (9.6 percent) as compared to 2017.

The value of imports of chemical products increased by 8.2 percent as compared to 2017, while the volume of imports, by 1.0%. There was growth in the volume of the imports of soap and detergents (8.2 percent), raw rubber, rubber and rubber articles (6.5 percent), plastics and plastic articles (3.0 percent) and organic chemical products (0.2 percent).

The value of imports of metals and fabricated metal articles increased by 9.1 percent as compared to 2017. The volumes of imports of ferrous metals and articles made thereof

rose by 5.7 percent with import supplies of pipes and flat rolled iron and unalloyed steel products falling by 21.6 percent and 3.3 percent respectively.

4.6.4. The geographic pattern of Russia's foreign trade

In the geographic pattern of Russia's foreign trade, the role of the APEC keeps growing in the Russian foreign trade volume: in 2018 it increased up to 31 percent against 30.4 percent in 2017. It is to be noted that the share of the EU increased from 42.1 percent to 42.7 percent. The share of the CIS states keeps falling: from 12.5 percent in 2017 to 11.7 percent in 2018. It is noteworthy that the share of Russia's mutual trade turnover with its partners in the Eurasian Economic Union is shrinking: the Republic of Belarus (from 5.2 percent to 4.9 percent) and Kazakhstan (from 3 percent to 2.6 percent (*Fig. 37*).

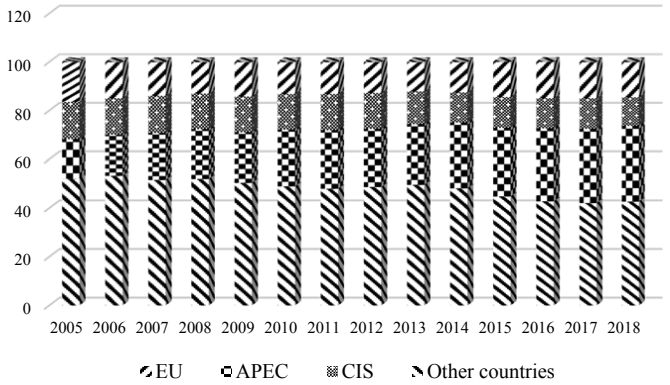


Fig. 37. The Geographic Pattern of Russian Foreign Trade (%)

Source: The Federal Customs Service of the Russian Federation.

The European Union is still the main trade partner of the Russian Federation. In 2018, Russia's trade turnover with the EU increased by 17.6 percent with growth both in the value of Russian exports (25.8%) and Russian imports (4.7 percent). It is to be noted that growth in Russian foreign trade volume was observed with all countries of the EU, except Latvia.

Russia's foreign trade volume with the APEC increased by19.8 percent. In particular, there was growth in the foreign trade volume with China (24.5 percent), Vietnam (16.4 percent), Australia (28.7 percent) and the US (7.9 percent).

Russia's foreign trade turnover with CIS states increased by 10.7 percent. Trade links with all the CIS countries recovered, except for Azerbaijan (the trade turnover with that country shrank by 5.4 percent).

China has been Russia's main trade partner since 2010; in 2018 its share in Russia's foreign trade turnover increased up to 15.7 percent (14.9 percent in 2017). It is to be noted that for the first time since 2013 the Russian Federation has had a positive trade balance of USD 3,847.5 billion (in January-October 2017 it was negative (USD 9,137.3 billion)

4.6.5. Regulation of the Russian Foreign Trade[1]

Tariff Regulation

Export customs duties

In 2018, the rates of export duties on oil and petrochemicals were calculated in compliance with the methods approved by Resolution No.276 "On Calculation of the Rates of Export Customs Duties on Crude Oil and Individual Categories of Oil-Produced Products".

The methods of calculation of export duties on oil were amended by Resolution No.1523 of December 14, 2018 of the Government of the Russian Federation "On Amendment of Some Documents of the Government of the Russian Federation". As a result, from January 1, 2019 oil export duties were reduced by 33.4 percent to USD 89 per ton. With completion of the tax maneuver in the oil industry in 2019 – 2024, oil export duties will not be set to nil with a simultaneous severance tax increase *(Table 37*).

Table 37

The rates of export duties on oil and petrochemicals in 2018 (USD per ton)

	Oil	Petrochemicals	
		Light petrochemicals	Dark petrochemicals
January 1	111.4	33.4	111.4
February 1	120.1	36.0	120.1
March 1	119.5	35.8	119.5
April 1	111.4	33.4	111.4
May 1	118.5	35.5	118.5
June 1	131.8	39.5	131.8
July 1	139.1	41.7	139.1
August 1	135.4	40.6	135.1
September 1	130.0	39.0	130.0
October 1	137.5	41.2	137.5
November 1	152.0	45.6	152.0
December 1	135.1	40.5	135.1
2019			
January 1	89.0	26.7	89.0

Source: Resolutions of the Government of the Russian Federation, the data of the RF Ministry of Economic Development.

Import customs duties

In compliance with Resolution No.13 of January 26, 2018 of the Council of the Eurasian Economic Commission "On Setting of Import Customs Duties of the Single Customs Tariff of the Eurasian Economic Union in Respect of Individual Types of Goods in Compliance with the Obligations of the Russian Federation within the

[1] In preparing this section, the data of the GARANT.RU, an information and legal Web-site, were used.

Frameworks of the WTO", import customs duties were changed in respect of linoleum, refrigerators, vehicle bodies, dump trucks and car semitrailers. As regards linoleum, the rate of 10 percent, plus euro 0.08 per 1 kg was set. Earlier, it was 10 percent, but no less than euro 0.25 per 1kg. As regards household refrigerators, household freezers and vehicle bodies (cabins) meant primarily for transportation of people, import customs duties are now equal to 15 percent. The rates on off-the-road dump trucks with maximum two shafts is equal to 5 percent (earlier – 5 percent, but minimum euro 0.5 per 1 cm^3 of the engine volume). The rate of 9 percent was set for car semitrailers with the full weight of 15 tons and overall length of minimum 13.6 mm as well as car refrigerator semitrailers with the body's interior volume of minimum 76 m^3.

To reduce the cost of production of Russian products, import customs duties on individual types of import products used in manufacturing of Russian products were reduced. It concerns import supplies of polyethylen for manufacturing of large diameter pipes which are used for building the Nord Stream-2 and the Turkish Stream. By Resolution No.14 of January 26, 2018 of the Council of the Eurasian Economic Commission "On Setting of the Import Customs Duty of the Single Customs Tariff of the Eurasian Economic Union on Polyethylen for Applying Industrial Three-Layer Anti-Corrosion Finish on Large Diameter Pipes" the zero import customs duty on polyethylen was extended for the period of nine months.

By Resolution No.65 of July 13, 2018 of the Council of the Eurasian Economic Commission "On Amendment the Unified Trade Classification of Foreign Economic Activities of the Eurasian Economic Union and Single Customs Tariff of the Eurasian Economic Union in Respect of Individual Types of Transformers for Microwave Ovens, as Well as Some Resolutions of the Supreme Eurasian Economic Council and the Council of the Eurasian Economic Commission", import customs duties were reduced in respect of some types of transformers for microwave ovens. The zero import customs duty rate on transformers for microwave ovens with power voltage of 220–240 V and output voltage of the main winding and auxiliary winding being 2.1–2.4 kV and 3.2–37 V, respectively, was temporarily set. The zero customs duty rates will be in effect till December 31, 2020 included. Earlier, the rate of 8 percent of the customs value used to be charged from the imports of the specified goods. The reduction of the import customs duty rate will make it feasible to reduce the cost of manufacturing of microwave ovens at enterprises of the Eurasian Economic Union.

By Resolution No.146 of September 7, 2018 of the Collegium of the Eurasian Economic Commission "On Setting of the Rates of Import Customs Duties of the Single Customs Tariff of the Eurasian Economic Union in Respect of Down and Fur Raw Stuff and Tanned and Dressed Fur Skins (Except for Mink Raw Stuff and Skins)", import customs duty rates on down and fur raw stuff and tanned and dressed fur skins (except for mink raw stuff and skins) were reduced from 3 percent and 5 percent to 0 percent of the customs value. The zero rates will be in effect till September 30, 2020 included. The measure in question is meant to promote production of natural fur articles in the EEU.

By Resolution No. 94 of June 5, 2018 of the Collegium of the Eurasian Economic Commission "On Setting of the Rates of Import Customs Duties of the Single Customs Tariff of the Eurasian Economic Union in Respect of Individual Types of Goods in Compliance with Obligations of the Russian Federation Within the Frameworks of the WTO and Amendment of Some Decisions of the Eurasian Economic Commission", import customs duty rates were reduced in respect of some goods. In particularly, it concerns fireworks, gunpowder and individual types of mattress frames. The duty rates were reduced by 1–2 p.p. The periods of application of zero rates of customs duties, particularly, in respect of gold, platinum, components of lock gears for manufacturing of locomotive-driven double-deck coaches and some types of grapes were specified.

By Resolution No. 99 of June 13, 2018 of the Collegium of the Eurasian Economic Commission "On Setting of the Rates of Import Customs Duties of the Single Customs Tariff of the Eurasian Economic Union in Respect of Industrial Fatty Alcohols ", import customs duties were reduced to 0 percent in respect of industrial fatty alcohols. The zero rates are applied from September 02, 2018 till August 31, 2021 included. Earlier, the rate of import duties on the specified goods was equal to 5 percent of the customs value.

By Resolution No. 98 of June 13, 2018 of the Collegium of the Eurasian Economic Commission "On Setting of the Rates of Import Customs Duties of the Single Customs Tariff of the Eurasian Economic Union in Respect of Shelled Cashew Nuts", from September 2, 2018 till August 31, 2021 included a zero rate of import customs duties is set in respect of cashew nuts. Earlier, the rate of import duties on the commodity in question was equal to 5 percent of the customs value.

By Resolution No. 737 of June 27, 2018 of the Government of the Russian Federation "On Amendment of Export Customs Duties on Goods Exported from the Russian Federation beyond the Borders of Member-States of the Agreement on the Customs Union", a zero export customs duty on wheat was extended for a year till July 1, 2019.

Within the frameworks of fulfillment of the obligations assumed by the Russian Federation when it joined the WTO, the Council of the Eurasian Economic Commission (EEC) modified the procedure for applying the rates of import duties in respect of cars and some other goods. By Resolution No. 66 of July 13, 2018 of the Council of the Eurasian Economic Commission, the procedure for applying the rates of import duties was specified in respect of individual types of goods, including military cargo planes equipped with a loading ramp and the weight of empty outfit of over 12000 kg, but maximum 13000 kg; aluminum; polyethylen for applying industrial three-layer anti-corrosion finish on large diameter pipes; and some types of machinery products. Reduced rates were introduced in respect of some items.

Duty rates were reduced in respect of rattan furniture and furniture parts made of metal and wood.

In respect of all-terrain cars with the effective engine cylinder capacity of over 4200 cubic cm, the ad val. rate of 10 percent of the customs value was introduced. It is to be noted that from September 1, 2018 till August 31, 2019 included either the duty rate of

17 percent or the rate of 12.1 percent of the customs value are applied, but no less than euro 1.14 per 1 cubic cm of the engine volume depending on which calculated amount is lower.

A similar rate is applied in respect of the specified cars with a combustion engine capacity higher than the maximum 30 minute capacity of the electric motor. The rates of duties were changed in respect of other car positions.

By Resolution No. 129 of August 21, 2018 of the Collegium of the Eurasian Economic Commission "On Setting of the Rates of Import Customs Duties of the Single Customs Tariff of the Eurasian Economic Union in Respect of Individual Types of Equipment for Fish Breeding", a zero rate of import customs duty will be applied till December 31 2019 included in respect of individual types of equipment for fish breeding. It concerns sea-floating crafts meant for fish feeding which are equipped with feeding device and supply bins with cargo capacity of minimum 155 cubic meters for fishfood storage. Also, it is round fish-breeding cages with the core diameter of 20-50m. Before amendments were introduced, imports of the specified goods were charged at the rate of 10 percent and 15 percent of the customs value, respectively.

By Resolution No.187 of November 20, 2018 of the Collegium of the Eurasian Economic Commission "On Setting of the Rates of Import Customs Duties of the Single Customs Tariff of the Eurasian Economic Union in Respect of Individual Types of Electrodes", a zero rate of import duties was introduced in respect of electrodes for metallurgical furnaces to support processers of waste and ferrous and nonferrous scrap.

Tariff quotas

By Resolution No. 1524 of December 14, 2018 of the Government of the Russian Federation "On Distribution of the Volumes of Tariff Quotas in Respect of Cattle, Pork and Poultry Meat in 2019", the volumes of tariff quotas set for 2019 for Russia in respect of pork, beef and poultry were distributed between supplier-countries with international agreements taken into account. The mechanism of distribution of tariff quotas of Costa-Rica and other countries between foreign trade participants was spelled out. From December 20, 2018 till December 31, 2019 included, the Ministry of Industry and Trade will be issuing licenses to foreign trade participants for imports of beef, pork, pork trimming and parts of poultry carcasses within the limits of tariff quota volumes.

In accordance with Resolution No.1521 of December 12, 2017 of the Government of the Russian Federation, from January 1, 2018 reduced export duties of 6.5 percent of the customs value (minimum euro 4 per 1 m^3) were introduced in respect of Yezo spruce timber, East Siberian fir and Dahurian larch. The rates are applied to exports of the specified commodities within the frameworks of the tariff quota provided that relevant licenses were issued. In case of exports beyond the quota for 2018, the export customs duty which used to be in effect before is applied (25 percent of the customs value, but no less than euro 15 per 1 m^3). From January 1, 2019, it is to be gradually increased to 80 percent in 2021. The measure in question is meant to create new timber processing capacities in the Far East.

In accordance with Resolution No.836 of July 17, 2018 of the Government of the Russian Federation "On Introduction of the Temporary Quantitative Limitation on Exports of Birch Timber Beyond the Territory of the Russian Federation to Countries which are Not Member-States of the Eurasian Economic Union", from January 1 till June 30, 2019 quantitative limitations (quotas) were introduced on exports of birch timber from Russia to countries which are not member-states of the Eurasian Economic Union. The quotas are applied to birch timber with the minimum cross-section diameter of minimum 15 cm and length of minimum 1 m. In the period of from January 1 till June 30 2019, it is allowed to export 567,000 cubic meters of round birch timber.

Non-Tariff Regulation

On November 22, 2018 the WTO issued the 18th Report on the G20's Trade Measures[1] implemented by the G20 countries in the period of May 16 – October15, 2018. Also, the Report dealt with important trends in the current global trade policy. In the period under review, there was still dramatic escalation of the protectionist rhetoric and trade tensions which factors were specified in the previous report on G20's trade measures. Though the G20 countries kept facilitating development of trade, the data pointed to substantial growth in the number of protectionist measures.

In the period under review, the G20 countries applied 40 new protectionist measures in trade, including tariff hikes, bans on imports of some products and introduction of export charges. This is equal on average to eight protectionist measures per month. In the period under review, the measures on limitation of imports affected USD 480 billion worth of the international trade per year, an increase of 500 percent on the relevant index of the previous year (from the mid-October 2017 till the mid-May 2018) and the highest one since the release of the first Report in 2012.

The initiation of anti-dumping investigations is still the most wide-spread means of legal protection of domestic markets in the G20 countries; they account for nearly three-fourth of all the measures introduced. In the period under review, the main sectors affected by the anti-dumping measures were "Iron and Steel" (HS 72) and "Articles Made of Iron and Steel" (HS 73). Aggregately, they account for over 40 percent of the initiated anti-dumping investigations. The other sectors – "Furniture, Bedding Items and Mattresses" (HS 94) and "Electric Machines and Their Components" (HS 85) – accounted for 31.9 percent and 14.6 percent, respectively.

In January-June 2018, the number of anti-dumping investigations initiated by G20 member-states increased by 23% as compared to the previous six month period (July-December 2017), that is, growth from 90 to 111 anti-dumping investigations. In H1 2018, the highest number of anti-dumping investigations were initiated by India (28 anti-dumping investigations), the US (22), Argentina (14) and Australia (11). Most anti-dumping measures are aimed against Chinese goods.

[1] The official Web-site of the World Trade Organization. URL: https://www.wto.org/english/news_e/news18_e/trdev_22nov18_e.htm

The G20 countries actively present their notifications to the WTO Committee on Sanitary and Phytosanitary Measures; they account for 67 percent of all the regular notifications starting from 1995. They are mostly notifications as regards changes in the safety standards applied to food products. In the period of May 1 – September 30, 2018, the largest number of notifications to the WTO was presented by Brazil, Canada, the US and Japan; they aggregately accounted for 47 percent of the notifications submitted by the G20 countries in that period.

Also, the G20 countries submit more often to the WTO Committee on Technical Barriers in Trade notifications as regards technical barriers imposed in trade (TBT). Aggregately, they have presented nearly a half of all the notification on TBT since 1995. The rules adopted by the G20 countries have accounted for most measures (about 80 percent) discussed at the Committee on TBT since 1995. The G20 countries submitted 276 new regular notifications on TBT measures (nearly 30 percent) out of 949 measures submitted to the Committee on TBT by all WTO member-states from May 1 till September 30, 2018. Most new notifications were received from Saudi Arabia (41 notifications), the European Union (36), the United States (35), Brazil (32) and Mexico (28). Most new regular notifications were aimed at protection of health and safety of people and the environment. Other notifications dealt with the information for consumers, marking, prevention of fraud, protection of consumers and quality requirements.

The G20 countries implemented 33 measures aimed at simplifying the trade, including removal and reduction of import tariffs and export duties. The value of the turnover of goods in respect of which those measures were aimed at was equal to USD 216 billion.

Participants in the G20 meeting which was held in Argentina on November 30 – December 1, 2018 spoke in favor of the reduction of barriers in the international trade. An important point of the final declaration of the G20 Summit in Argentina was the statement on the need of reforms to be carried out in the WTO. The document reads that the international trade and investments are important drivers of growth, efficiency, innovations, creation of new jobs and development. "We recognize the contribution to international trade systems. At present, it fails to achieve its goals and there is room for upgrading. In this context, we support the reforming of the WTO", the document states[1].

With each year, protectionism against Russian goods is gaining momentum. According to the data presented in the Register of Restrictive Measures[2], as of December 1, 2018 170 measures which limited Russian goods' access to foreign markets were identified. It is mainly anti-dumping duties which accounted for 28.2 percent of the total number of measures introduced with sanitary and phytosanitary measures (SPS – measures) and special protective duties accounting for 18.2 percent and 12.4 percent, respectively (*Table. 38).*

[1] G20 Leaders' declaration. Building consensus for fair and sustainable development. // https://g20.org/sites/default/files/buenos_aires_leaders_declaration.pdf
[2]URL: http://www.ved.gov.ru/mdb/information/database/

Table 38

The market protection measures taken by third parties in respect of Russian goods

Restrictive measures	2014	2015	2016	2017	2018
Anti-dumping duties	40	39	40	43	48
Special protective duties	9	15	17	13	21
Compensation duty	-	1	1	1	1
TBT measures	9	9	10	15	14
SPS measures	3	7	11	17	31
Quotas (including tariff quotas)	2	3	3	3	6
Excises imposed on discriminatory basis	5	4	5	7	5
Bans on imports	4	3	4	6	8
Threats of measures to be taken	5	5	5	8	7
Other non-tariff measures	25	24	29	30	29
TOTAL	102	110	125	143	170

Source: The Register of Restrictive Measures as of December 1 of the relevant year.

Within the frameworks of the policy of sanctions carried out by the European Union, Japan, Ukraine, Switzerland, Norway, Australia, Iceland, Liechtenstein, Montenegro and Albania, the above countries introduced a ban on imports of goods from Crimea and the city of Sevastopol. Also, in connection with the developments in Crimea and in the East of Ukraine, sanctions were introduced against some Russian organizations and individuals by the EU, the US, Canada, Japan, Ukraine, Switzerland, Norway, Australia, New Zealand, Iceland, Liechtenstein, Montenegro and Albania.

Measures of Domestic Market Protection

Application of protection measures in the Eurasian Economic Union is regulated by Articles 48–50 of the Agreement on the Eurasian Economic Union of May 29, 2014 (Annex No.8 to the Agreement on the Eurasian Economic Union). At present, the EEU maintains 16 domestic market protection measures *(Table. 39*).

Table 39

Domestic market protection measures which are in effect in the EEU

No.	Commodity	Type of measure	Exporter–country
AD-1	Some types of steel pipes	Anti-dumping	Ukraine
AD-8	Rolled metal products with polymer coating	Anti-dumping	China
AD-11	Cold-deformed weldless stainless steel pipes	Anti-dumping	China, Malaysia
AD-7	Steel wrought cuts for rolling mills	Anti-dumping	Ukraine
AD-15	citric acid	Anti-dumping	China
AD-14	Anticorrosion steel kitchen and tableware	Anti-dumping	China
AD-16	Steel seamless pipes used for drilling and operation of oil and gas wells	Anti-dumping	China
AD-17	Tracked bulldozers	Anti-dumping	China
AD-18	Truck tyres	Anti-dumping	China
AD-19	Steel wrought wheels	Anti-dumping	Ukraine
AD-21	Stainless steel pipes	Anti-dumping	Ukraine
AD-13	Wire rods	Anti-dumping	Ukraine
AD-20	Ferrosilicon manganese	Anti-dumping	Ukraine
AD-22	Angle iron	Anti-dumping	Ukraine
AD-3	Rolling bearings	Anti-dumping	China
AD-9	Graphitized electrodes	Anti-dumping	India

Source: URL: http://www.eurasiancommission.org/ru/act/trade/podm/mery/Pages/default.aspx

Technical Regulation

On August 3, 2018 Federal Law No.281-FZ "On Ratification of the Agreement on Marking of Goods by Identification Means in the Eurasian Economic Union" was approved. The Agreement in question was signed in Almaty on February 2, 2018. The Agreement specifies the general procedure for marking goods within the limits of the Eurasian Economic Union. The authorities as regards formation of the unified system of goods marking within the limits of the Eurasian Economic Union were distributed between the Eurasian Economic Commission and the member-states of the Eurasian Economic Union. It is envisaged to utilize unified identification marks, maintain the single register of identification means and form an integrated information system of goods marking. The mandatory stages of submission of the data on goods to the information system of goods marking were determined. The notification procedure for introducing the mandatory marking of goods both in the territory of the Eurasian Economic Union and the territory of individual member-states of the EEU was established. In case of initiation by other member-states of proposals on introduction in the territory of the EEU of mandatory markings in respect of individual goods, they can be introduced in the territory of the Russian Federation (provided that the initiative was supported by the Russian side), as well.

Bans and Limitations on Imports

On March 23, 2018, the US introduced limitations in terms of increased duties on imports of ferrous metal products (an increase of up to 25 percent) and aluminum (up to 10 percent) from Russia. In response to those unfriendly measures, by Resolution No.788 of July 6, 2018 of the Government of the Russian Federation "On Approval of the Rates of Import Customs Duties in Respect of Individual Goods Whose Country of Origin is the United States of America" the rates of import customs duties were increased in respect of individual goods whose country of origin was the US. It concerns individual types of transportation vehicles for cargo carriage, building and road equipment, oil and gas equipment, metal processing equipment, solid rock drilling equipment and fiber optics (an import duty rate increase of 25 -40 percent).

By Resolution No.1017 of August 28, 2018 of the Government of the Russian Federation "On Amendment of Resolution No.774 of July 31, 2015" the procedure for liquidation of sanctioned products was actualized. The period of counter-sanctions was extended till December 31, 2019. In this context, the procedure for liquidation of individual types of imported agricultural products, raw materials and food products whose country of origin were the US, the EU, Canada, Australia, Norway, Ukraine, Albania, Montenegro, Iceland and Liechtenstein was specified.

Limitations on Imports of Goods for Personal Use

By Resolution No.107 of December 20, 2017 of the Eurasian Economic Commission "On Individual Issues Related to Goods for Personal Use", new customs limits were set for bringing in goods in luggage and by mail or delivery service. The value, weight and

quantity of goods which could be brought for personal use into the customs territory of the Eurasian Economic Union without payment of customs duties and charges were determined. The amounts of the duties for exceeding the established limits were specified. The list of previously used goods which foreign nationals could bring in the Eurasian Economic Union for the period of their stay in the territory of the Eurasian Economic Union without paying customs duties (regardless of the value and (or) weight) and the list of the categories of goods which are not attributed to goods for personal use were released.

In 2018, one could bring in the country maximum euro 1,500 worth of goods with the weight of up to 50 kg. From January 1, 2019, the value of goods is limited to the equivalent of euro 1,000. From January 1, 2020 the limitation of the value and weight by euro 750 and 35 kg, respectively, will be applied, while from January 1, 2021 it is admissible to bring in maximum euro 500 worth of goods with weight of maximum 25 kg.

The above rules do not concern goods brought into the territory of the Eurasian Economic Union in the accompanied luggage by air. In this case, the maximum value and weight of the purchase are limited to euro 10,000 and maximum 50 kg,

Also, the limits on the value and weight of goods which are delivered by international mail and postal carriers will be gradually reduced: from January 1, 2018, the limit of euro 1,000 and 31 kg within a calendar month was introduced, while from January 1, 2019 it is to be euro 500 and 31 kg.

The value of duties for the excess of the limits is being reduced. In 2018–2019, it is necessary to pay 30 percent of the value, but minimum euro 4 per 1 kg of weight in case of excess of the value and (or) weight limit. In 2020, the duty will be equal to 15 percent of the value, but minimum euro 2 per 1 kg of the excess weight.

4.7. The use by Russia of the WTO dispute settlement mechanisms[1]

4.7.1. Trade disputes handled by the WTO that Russia has been a party to (complainant or respondent)

The Russian Federation acceded to the World Trade Organization (WTO), and so became subject to its international trade dispute settlement procedures, on August 22, 2012. The mechanism was adopted by the WTO under the Understanding on Rules and Procedures Governing the Settlement of Disputes (DSU)[2]. Thus, from August 2012 onwards, Russia has enjoyed the right to defend its trade interests by applying this

[1] This section was written by: M. Baeva, RANEPA, RFTA of the RF Ministry of Economic Development; A. Knobel, Gaidar Institute, RANEPA, RFTA of the RF Ministry of Economic Development.

[2] URL: https://www.wto.org/english/tratop_e/dispu_e/dispu_e.htm

particular instrument. The dispute settlement procedure applied by the WTO consists of five main successive stages:

1) *bilateral consultations* (within 60 days from the moment of filing a request for consultations);

2) *establishment of a panel* at the request of any of the parties to a dispute and appointment of panel experts to examine the facts of the case (within 45 days of the request to establish a panel);

3) *panel examination* (within 6–9 months after its establishment), presentation of its report to the Dispute Settlement Body (DSB), and issuance of recommendations by the DSB (approximately 60 days from the moment of report presentation by the panel);

4) *case examination by the Appellate Body (AB)*, if one of the parties chooses to appeal against the panel report (60–90 days from the moment of filing an appeal), adoption of the report by the Appellate Body of the DSB, and issuance by the DSB of its recommendation to the parties (30 days from the moment of presentation of the Appellate Body's report);

5) *control, by the DSB,* of the implementation of its recommendations (not later than 15–18 months after the adoption by the DSB of the a report presented by a panel or the AB).

As of the year-end of 2018, Russia had been involved in a total of 81 disputes handled by the WTO: in 7 disputes as a complainant, in 9 disputes as a respondent, and in 65 disputes as a third party.

In 2018, Russia filed with the DSB a complaint against the USA introducing measures concerning steel and aluminum products (DS554). Another complaint was filed in 2018 against Russia by the USA in relation to raised tariffs on some imported goods manufactured in the USA (DS566).

In 2018, one dispute that Russia was a party to (respondent) was settled (DS479) (*Table 40*).

In the role of a third party, in 2018 Russia participated in 25 disputes. Some of the disputes where Russia acted as a third party have already been settled, and in several cases Russia derived indirect benefits from the WTO dispute settlement mechanism.

Table 40

Trade disputes brought to the WTO that Russia has been a party to (complainant or respondent)

Dispute	Claim	Current stage (as of year end 2018)
As complainant		
DS474: EU – Cost Adjustment Methodologies and Certain Anti-Dumping Measures on Imports from Russia (23.12.2013[1])	The EU used 'cost adjustment' methodologies in its anti-dumping investigations and reviews for calculating dumping margins, and while doing so, rejected the cost and price information of Russian producers and exporters. The EU investigated the terms for anti-dumping measures without considering the effect of such rejection of cost and price data on the determination of dumping margins and injury caused by dumped imports.	Appointment of panel experts (22.07.2014)

[1] The date in brackets is the date on which the Request for Consultations was received.

Dispute	Claim	Current stage (as of year end 2018)
DS476: EU – Certain Measures Relating to the Energy Sector (30.04.2014)	EU Third Energy Package: producers of natural gas are not allowed to own trunk lines situated in EU territory. The operators controlled by foreign persons must undergo special certification procedure.	Examination by Appellate Body (AB) (21.09.2018)
DS493: Ukraine – Anti-Dumping Measures on Ammonium Nitrate (07.05.2015)	While conducting anti-dumping investigations on imports of ammonium nitrate originating in Russia, Ukraine rejected the information of producers on electric energy prices in Russia, using instead price information from third countries (energy cost adjustments).	Examination by AB (23.08.2018)
DS494: EU – Cost Adjustment Methodologies and Certain Anti-dumping Measures on Imports from Russia (07.05.2015)	While conducting anti-dumping investigations on imports of certain welded and seamless tubes and pipes and ammonium nitrate originating in Russia for calculation of dumping margins, the EU rejects the cost and price information of producers and exporters, using instead price information from third countries (energy cost adjustments).	Panel examination (17.12.2018)
DS521: EU – Anti-Dumping Measures on Certain Cold-Rolled Flat Steel Products from Russia (27.01.2017)	While conducting anti-dumping investigations, the EU rejects the cost and price information of Russian producers, relying instead on unsubstantiated data and incorrect calculations.	Consultations (27.01.2017)
DS525: Ukraine – Measures Relating to Trade in Goods and Services (19.05.2017)	Comprehensive request for consultations with respect to multiple restrictions, prohibitions, requirements and procedures adopted and maintained by Ukraine in respect of trade in goods and services originating in Russia.	Consultations (19.05.2017)
DS554: USA – Certain Measures on Steel and Aluminum Products (29.06.2018)	Russia claims that the USA introduced these measures in spring 2018 in violation of provisions of the GATT 1994 and the Agreement on Safeguards. In particular, the USA acted contrary to the WTO's MFN principle by granting to some countries certain advantages and treatments that were denied other countries, introduced restrictions on imports other than duties, taxes or other charges made effective through quotas, failed to properly substantiate its emergency action on imports of particular products, failed to give notice in writing to the exporters of relevant products, and failed to comply with any of the existing notification and consultation obligations.	Appointment of panel experts (21.11.2018)
As respondent		
DS462: Russia – Recycling Fee on Motor Vehicles (EU, 09.07.2013)	Russia imposed a charge ('recycling fee') on imported motor vehicles, while exempting domestic vehicles from that payment, under certain conditions. The 'recycling fee' steeply increases for certain categories of vehicles (new or second-hand ones).	Appointment of panel experts (25.11.2013)
DS463: Russia – Recycling Fee on Motor Vehicles (Japan, 24.07.2013)	Russia imposed additional charge ('recycling fee') on imported motor vehicles, while in actual practice exempting domestic vehicles from that payment, under certain conditions.	Consultations (24.07.2013)
DS475: Russia – Measures on the Importation of Live Pigs, Pork and Other Pig Products from the EU (EU, 08.04.2014)	The ban on imports of live pigs, pork and other pig products from the EU is a disproportional measure, introduced following several cases of ASF[1] in wild boar near the border with Belarus, which were promptly controlled. The EU disputes the way Russia treats the regionalization measures against the spread of ASF.	Request for measures, arbitration (03.01.2018). Control of the respondent's compliance with the DSB's recommendations (21.11.2018)
DS479: Russia – Anti-Dumping Duties on Light Commercial Vehicles from Germany and Italy (EU, 21.05.2014)	While conducting anti-dumping investigations on imports and calculating dumping margins on light commercial vehicles, Russia failed to comply with the WTO rules for the determination of the existence of dumping, failed to disclose information relevant to injury determination, incorrectly defined the domestic industry, and failed to provide all relevant information and explanations.	Respondent adopted the DSB's recommendations to bring measures in conformity (20.06.2018)
DS485: Russia – Tariff Treatment of Certain Agricultural and Manufacturing Products - (EU, 31.10.2014)	For certain goods, including paper and paperboard, Russia applied ad valorem duty rates of 15 or 10 percent, thus exceeding the ad valorem bound rate of 5 percent. In cases where the customs value is below a certain level, duties were levied in excess of the bound rates.	Respondent complied with the DSB's recommendations (08.06.2017)
DS499: Russia – Measures Affecting the Importation of Railway Equipment and Parts Thereof (Ukraine, 21.10.2015)	Russia suspended the conformity assessment certificates issued to producers of railway rolling stock, railroad switches, other railroad equipment, and parts thereof prior to entry into force of the new Technical Regulations, and rejected new applications for certificates pursuant to the new procedures.	Examination by the AB (27.08.2018)
DS512: Russia – Measures Concerning Traffic in Transit (Ukraine, 14.09.2016)	Russia adopted restrictions on international automobile and railway traffic in transit of Ukrainian exports to the Republic of Kazakhstan and the Kyrgyz Republic: the international road and railway transit of goods	Panel examination (06.06.2017)

[1] ASF is African swine fever.

Dispute	Claim	Current stage (as of year end 2018)
	from Ukraine through the territory of Russia can be carried out only from the territory of the Republic of Belarus, on certain specific conditions. Additional measures include ban of transit of goods affected by the tariffs rates higher than zero, and ban of transit of goods which are under embargo.	
DS532: Russia – Measures Concerning the Importation and Transit of Certain Ukrainian Products (Ukraine, 13.10.2017)	Russia introduced measures affecting traffic in transit of Ukrainian juice products, beer, beer-based beverages and other alcoholic beverages, confectionery products, wallpaper and similar wall coverings to third countries. Exports of these products from Ukraine to Russia were significantly restricted, and some products were banned.	Consultations (13.10.2017)
DS566: Russia – Additional Duties on Certain Products from the United States (USA, 27.08.2017)	The USA claimed that these measures are inconsistent with Articles I:1 (General Most-Favored-Nation Treatment), II:1(a), and II:1(b) (Schedules of Concessions) of the GATT 1994, because Russia failed to extend to products of the USA the treatment granted by Russia with respect to customs duties and charges of any kind imposed on or in connection with the importation of products originating in the territory of other WTO members, and accorded less favorable treatment to products originating in the USA than that provided for in Russia's schedule of concessions. In accordance with RF Government Decree No. 788 dated July 6, 2018, from August 2018 Russia raised the rates of import customs duties on forklift trucks and other trucks equipped with lifting or loading-unloading devices, graders, tamping machines, tools for cutting optical fiber, etc. The new rates amount to 25, 30 and 40 percent of customs value, depending on product type.	Appointment of panel experts (18.12.2018)

Source: Own compilation based on data published on the WTO's official website: URL: https://www.wto.org/english/tratop_e/dispu_e/dispu_by_country_e.htm

4.7.2. The progress, in 2018, of the trade disputes handled by the WTO where Russia has acted as complainant

DS476: EU – Certain Measures Relating to the Energy Sector (30.04.2014)

In late April 2014, Russia filed a request for consultations with the EU concerning the so-called EU Third Energy Package, whereby the trunk lines situated in EU territory could not be owned by producers of natural gas (the upstream pipeline networks measure). In addition, the pipeline operators controlled by foreign persons were asked to undergo a special certification procedure and to comply with some additional requirements. Russia claimed that this and some other provisions of the EU Third Energy Package were inconsistent with the obligations assumed under a covered WTO agreement with respect to basic principles of non-discrimination and access to markets.

From March 7, 2016, a panel examination started, and the panel presented its report by August 10, 2018. The panel upheld 3 out of Russia's 6 claims. The panel recognized the certification measure, as well as the capacity cap for the operation of the OPAL gas pipeline (connected to the Nord Stream) imposed by the European Commission (EC) to be inconsistent and discriminatory (however, the latter issue had already been settled between the European Commission and Gazprom). Besides, the panel ruled that the exemptions granted to infrastructure 'projects of common interest' were inconsistent with the WTO norms and rules if these were applied to natural gas supplies from countries other than Russia. The core principle of the EU Third Energy Package (the upstream pipeline networks measure), preferential treatment of liquefied natural gas

(LNG) and its suppliers, and exemptions for field pipelines, disputed by Russia in the framework of the EU Gas Directive, were left unchanged.

On September 21, 2018, the EU appealed against the panel report, and on September 26, 2018, Russia followed suit.

DS493: Ukraine – Anti-Dumping Measures on Ammonium Nitrate (Russia)

On May 7, 2015, Russia filed with the WTO a request for consultations with Ukraine in respect of the Ukrainian anti-dumping measures on ammonium nitrate imports from Russia[1].

Russia essentially complained that, while conducting anti-dumping investigations on imports of ammonium nitrate originating in Russia, Ukraine rejected the information of producers on electric energy prices in Russia, using instead price information from third countries (i.e., resorted to 'energy cost adjustments'). Besides, Russia believed that Ukraine had also violated some provisions of the Anti-Dumping Agreement.

Since the dispute could not be settled at the stage of consultations, on February 29, 2016 Russia requested the establishment of a panel, on April 22, 2016 a panel was established, and on February 2, 2017, the panel experts were appointed.

The panel presented its report on July 20, 2018. The panel recognized that Ukraine originally imposed anti-dumping duties on imports of ammonium nitrate from Russia following an anti-dumping investigation that was indeed inconsistent with the norms and rules established by the WTO. Russia essentially claimed that, in determining the cost of natural gas actually borne by the Russian producers and exporters for production of ammonium nitrate, the Ukrainian authorities failed to calculate costs on the basis of records kept by the Russian producers and exporters, and replaced these data with data on gas prices outside Russia that did not reflect the cost of production in the country of origin (so-called 'energy cost adjustments'). Russia requested the consultations on May 7, 2015, and a panel was established on February 2, 2017. The fact that the panel sided with Russia in that dispute gave rise to an important precedent for similar disputes between Russia and the EU in respect of 'energy cost adjustments' (DS474, DS494, and DS521), the panels for which have not yet entered the case examination stage. Thus, the dispute in respect of imports of ammonium nitrate initiated by Russia against Ukraine was the first dispute subject to a panel ruling. On August 23, 2018, Ukraine filed an appeal against the panel report.

DS494: EU – Cost Adjustment Methodologies and Certain Anti-Dumping Measures on Imports from Russia (Russia)

On May 7, 2015, Russia filed another complaint against the EU with respect to the 'cost adjustment' administrative procedures, methodologies or practices of the EU for the calculation of the dumping margin in anti-dumping investigations and reviews of

[1] URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds493_e.htm

anti-dumping measures in accordance with Council Regulation (EC) No 1225/2009 of November 30, 2009 on protection against dumped imports from countries not members of the European Community[1].

This request filed by Russia also concerns the continued use of these anti-dumping measures by the EU – among other things, in relation to imports of ammonium nitrate originating in the Russian Federation, including definitive anti-dumping duties imposed beyond the established five year period as a result of an expiry review of those anti-dumping measures. Because the claims are essentially similar, Russia's complaint also referred to the definitive anti-dumping measures imposed on imports of certain welded tubes and pipes of iron or non-alloy steel originating in the Russian Federation, including those extended beyond the five year period as a result of the initiation of an expiry review by the EU.

Russia believes that in the course of anti-dumping investigation by the EU with respect to imports of ammonium nitrate, as well as welded tubes and pipes, the EU failed to take all the necessary measures to ensure conformity of its laws, regulations and administrative procedures with the provisions of the WTO Agreement, because the costs of production of these products were calculated not on the basis of domestic energy inputs in the territory of Russia, but on the basis of energy prices in third countries, that is, the EU resorted to 'cost adjustment' practices, thus causing significant injury to the suppliers from Russia. As estimated by Russian experts, the measures introduced by the EU against Russia appeared to effectively nullify Russia's exports of welded tubes and pipes to the EU (having been in effect since 2008), and Russia's exports of ammonium nitrate to the EU in 2014 shrank approximately 1.5 times relative to 2012 (in 2012, their value volume amounted to approximately USD 220 million)[2]. According to data for 2014, about 30% of Russia's exports of the products at issue go to the EU, thus taking up nearly 11% of EU imports of ammonium nitrate (FEACN 310230) and welded tubes and pipes (FEACN 7305)[3].

On November 7, 2016, Russia filed with the DSB a request for the establishment of a panel, on December 16, 2016 a panel was established, and 2 years later (on December 17, 2018), outside of the recommended timeframe, the panel experts were selected, with due regard to the opinions of the parties.

DS554: USA – Certain Measures on Steel and Aluminum Products (Russia)

On June 29, 2018, Russia filed with the DSB a request for consultations with the USA concerning the protective measures on steel and aluminum products imposed in spring

[1] URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds494_e.htm
[2] Russia filed complaints with the WTO against Ukraine and the EU URL: http://www.wto.ru/2015/05/07/
[3] UN COMTRADE database, URL:/ http://comtrade.un.org/

2018. Russia claimed that the measures introduced by the USA were inconsistent with the GATT 1994 and the Agreement on Safeguards. In particular, the USA acted contrary to the WTO's principle of the MFN, because some countries were granted advantages and exemptions that were not extended to other countries; the USA introduced restrictions other than duties, taxes or other charges, made effective through quotas, on the importation of products, failed to produce reasoned conclusions and properly substantiate safeguard measures, failed to give notice in writing to the WTO in advance, and failed to afford the WTO and WTO members having a substantial interest as exporters in the products concerned an opportunity to consult with it in respect of the proposed action.

As far as the inconsistencies with the Agreement on Safeguards are concerned, the USA applied safeguard measures to imported products irrespective of their source, without first having determined that such products were being imported into its territory in such increased quantities, absolute or relative to domestic production, and under such conditions as to cause or threaten to cause serious injury to the domestic industry that produces like or directly competitive products, without first properly conducting an investigation and publishing a report that sets forth their findings and reasoned conclusions on all pertinent issues of fact and law, and it had not been properly determined that there was serious injury, or threat thereof, to a domestic industry; the USA failed to properly evaluate all relevant factors having a bearing on the situation of the domestic industry, and to demonstrate the existence of a causal link between increased imports and serious injury or the threat thereof; safeguard measures were applied beyond the extent necessary to prevent or remedy serious injury and to facilitate adjustment, the USA was applying safeguard measures without making provision for their application only for the period necessary to prevent or remedy serious injury and to facilitate adjustment, without limitation to four years, and without making provision for progressive liberalization at regular intervals, and did not endeavor to maintain a substantially equivalent level of concessions and other obligations to that existing under the GATT 1994 between them and the exporting members[1]. In 2017, the USA received 13% of Russia's steel and aluminum exports (FEACN 72, 73 и 76), while Russia's share in US imports amounted to 32%.[2] Similar disputes with the USA were initiated by China (DS544), India (DS547), the EU (DS548), Canada (DS550), Mexico (DS551), Norway (DS552), and Switzerland (DS556), and Russia participated in many of these as a third party, of which more will be said later.

On October 18, 2018, Russia filed with the DSB a request for the establishment of a panel, and on November 21 a panel was established. As of year-end 2018, the dispute undergoes the stage of panel expert selection.

[1] URL: http://www.vavt.ru/materials/site/7F7935A6
[2] UN COMTRADE database, URL: http://comtrade.un.org/

4.7.3. The progress, in 2018, of the trade disputes handled by the WTO where Russia has acted as respondent

DS475: Russia – Measures on the Importation of Live Pigs, Pork and Other Pig Products from the EU (EU)

In early April 2014, the EU filed with the WTO a request for consultations with Russia concerning the ban on importation to Russia of pork and live pigs from all the EU member states because of concerns related to some cases of African swine fever (ASF), and a temporary restriction on imports of all types of pork products from Poland and Lithuania.

On June 27, 2014, the EU filed with the DSB a request for the establishment of a panel, and it was established a month later. On August 19, 2016, the panel presented its report, where it was stated that the measures at issue were not in line with EU law and the international standards laid down by the World Organization for Animal Health (OIE), and were introduced contrary to the standards set forth by the WTO Agreement on the Application of Sanitary and Phytosanitary Measures (the SPS Agreement). Russia failed to properly base its sanitary measure on a risk assessment and did not take into account available scientific evidence underlying the EU regionalization measures. The regionalization principle allows trade with certain non-restricted areas that are recognized to be unaffected by pests of disease, in cases when the other territory of a country have been affected. Instead, Russia introduced a EU-wide ban on imports of all pork products and live pigs. The panel pointed out that the measures were discriminatory, and resulted in a disguised restriction on international trade.

On September 23, 2016, Russia appealed to the Appellate Body certain issues of law covered in the panel report and certain legal interpretations developed by the panel. On September 28, 2016, the EU likewise filed an appeal. On February 23, 2017, the Appellate Body (AB) presented its report, which was adopted by the DSB as of March 21, 2017. The AB upheld the panel's conclusion that the Russia's EU-wide ban on imports of all products of the pork industry was indeed a restriction on trade, while the conditions for Russia's accession to the WTO did not imply any limitations to the ability of the Appellate Body to review the claims presented by the EU with respect to the ban on importation. According to the RF Ministry of Economic Development, this conclusion is inconsistent with Russia's previously explained standpoint, and so gives rise to some issues that need to be settled in the framework of a bilateral discussion with the EU. In particular, from the conclusion presented by the panel it follows that the documentation for importation of pork products used by Russia and previously agreed upon with the EU, was inconsistent with the WTO Agreement, and so was not mandatory. By doing so, the AB effectively disavowed Russia's consent, consolidated by the Protocol of Russia's accession to the WTO, to the conditions of pork importation agreement that have already been used as a framework for pork supplied to the value of hundreds of millions euro, and suggested that the EU should reach a new agreement with the RF. The AB adopted a more general ruling whereby Russia was not only

allowed, but was obliged to unilaterally introduce alterations to bilateral veterinary certificates that were already previously agreed with other WTO members[1].

On the whole, the AB upheld the panel ruling, the DSB issued a recommendation that Russia should bring its administrative measures in conformity with the norms and rules of the WTO. On April 19, 2017, Russia announced its intention to implement the DSB's recommendations, within a reasonable period of time. On June 2, 2017, Russia and the EU agreed that the reasonable period of time for implementing the recommendations would amount to 8 months and 15 days from the moment of adopting the AB's report. That period expired on December 6, 2017, and by that time Russia had implemented the demands set forth by the DSB: the EU-wide ban on imports of pork, live pigs and pork product, that had been introduced in order to control the spread of ASF, was lifted, except with respect to certain administrative territories entered on a special list, and the agreed EU-Russia bilateral veterinary certificate forms were approved. In this connection, the RF Ministry of Economic Development emphasized that the food embargo introduced as a retaliatory measure in response to the EU economic sanctions was still in effect[2]. However, that measure was not among the claims covered by the dispute.

According to the EU, Russia failed to fully implement all the recommendations set forth by the DSB, and so on December 9, 2017 the EU requested that retaliatory measures be introduced in the form of suspension of mutual concessions and obligations to the value of € 1.39 billion per annum (total value volume of exports in 2013), with annual increase of 15%. Russia disagreed, and a panel meeting was scheduled for January 3, 2018. For its part, Russia on January 25, 2018 filed with the WTO a request for consultations with the EU with respect to control of its implementation of the DSB's recommendations. Thus, from November 21, 2018, the same panel that had originally been established to settle this dispute has been checking the progress of implementation by Russia of the DSB's recommendations.

DS479: Russia – Anti-Dumping Duties on Light Commercial Vehicles from Germany and Italy (EU)

On May 21, 2014 the EU filed with the WTO a complaint against Russia with respect to anti-dumping duties imposed on light commercial vehicles (LCV) imported from Germany and Italy. The panel examined the case on December 18, 2014 and January 27, 2017, and then presented its report. Within a month, both Russia and the EU appealed against the panel ruling. On March 22, 2018, the Appellate Body presented its report concerning this dispute. The Appellate Body upheld the core conclusions of the panel whereby it was recognized that Russia had failed to conduct an objective examination, based on positive evidence, and so incorrectly calculated the anti-dumping duties on imports of light commercial vehicles from Germany and Italy. The AB upheld the panel's conclusion that the EEC, in the course of its investigation, incorrectly defined

[1] URL: http://pticainfo.ru/news/?ELEMENT_ID=53214
[2] URL: https://www.rbc.ru/rbcfreenews/5a27ccc99a79474b20fce4f8

the domestic industry by taking into consideration only one producer (the applicant) and overlooking GAZ Group. The AB agreed with the panel in that the EEC had failed to properly consider in the course of its investigation the effects of the 2009 financial crisis when wrongly taking the 2009 domestic industry's profit rate as the basis to establish the domestic target price without any adjustments. The AB upheld the panel ruling and established that the EEC's acts ran contrary to Articles 3.1 and 3.2 (injury determination) of the Anti-Dumping Agreement because it had failed to properly examine whether the market would accept any additional domestic price increases. The EU failed to prove the fact of the EEC's acts being inconsistent with Articles 3.1 and 3.4 (injury determination) of the Anti-Dumping Agreement, as it was not required to examine the information about stocks. Because the body conducting an investigation has the right but is not obligated to give consideration to such data, the AB upheld this conclusion presented by the panel. The AB ruled that the EEC acted inconsistently with Article 6.9 (essential facts under consideration) of the Anti-Dumping Agreement because it failed to disclose the essential facts at issue to all related parties. On April 9, 2018, the Dispute Settlement Body of the WTO adopted the reports presented by the panel and the AB and issued recommendations to the effect that Russia should bring its administrative measures in conformity with the norms and rules of the WTO. Due to the lengthy dispute settlement procedure practiced by the WTO coupled with an absence of any requirements that the measures at issue should be suspended over the dispute settlement period, the anti-dumping measures remained in effect throughout the announced 5-year period[1].

The aggregate imports of disputed goods from Germany and Italy to Russia in 2017 lost 83% in terms of value volume relative to 2012, and the corresponding imports from Turkey lost 51%. The share of light commercial vehicles from Germany and Italy in Russia's imports of this type of goods declined from 46% in 2012 to 29% in 2017[2].

DS499: Russia – Measures Affecting the Importation of Railway Equipment and Parts Thereof (Ukraine)

On October 21, 2015, Ukraine filed with the WTO a request for consultations with Russia concerning measures whereby restrictions were imposed on imports of railway equipment and parts thereof (in particular, railway rolling stock and railway switches)[3].

Ukraine claimed that Russia was suspending the conformity assessment certificates issued to producers of railway transport infrastructure products and railway rolling stock prior to entry into force of the new Technical Regulations, and was rejecting applications for new certificates conforming with the newly introduced procedures. The claim presented by Ukraine is in the main that Russia's measures at issue accord less favorable treatment to like products originating in Ukraine than that accorded to like products of national origin and to like products originating in any other WTO member. These

[1] URL: http://www.vavt.ru/materials/site/70BCB1DC
[2] UN COMTRADE database, URL: http://comtrade.un.org/
[3] URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds499_e.htm

measures created unnecessary obstacles to international trade, and Russia did not, upon request from the Ukrainian authorities, explain the justification for adoption of the measures at issue. Ukraine believed that Russian authorities violated certain aspects of the conformity assessment procedures. Besides, the information requirements were not limited to what was necessary to assess conformity and determine the fees, and the fees were not equitable in relation to any fees chargeable for assessing the conformity of like products.

On November 10, 2016, Ukraine requested the establishment of a panel, which set out to examine the case from March 2, 2017. On July 30, 2018, the panel presented its report concerning the dispute. The panel denied Ukraine's claim that Russia's measures were of a 'systematic' nature. At the same time, the panel agreed that the legitimate regulatory distinction test is *de facto* discriminatory with respect to Ukrainian railway products, that the conformity assessment procedures were applied more strictly than necessary, and the assessment results were not properly presented to applicants[1]. In late August 2018, Ukraine appealed against the panel ruling.

DS566: Russia – Additional Duties on Certain Products from the United States (USA)

On August 27, 2018, the USA filed with the DSB a request for consultations with Russia concerning the introduction of import tariffs on some types of products manufactured in the USA. The USA argued that these measures were inconsistent with Articles I:1 (General Most-Favored-Nation Treatment), II:1(a), and II:1(b) (Schedules of Concessions) of the GATT 1994, because Russia did not impose the additional duties measure on like products originating in the territory of any other WTO member, and also appeared to be applying rates of duty to US imports greater than the rates of duty set out in Russia's schedule of concession. In accordance with RF Government Decree No. 788 dated July 6, 2018, from August 2018 onwards Russia raised the rates of import customs duties on forklift trucks and other trucks equipped with lifting or loading-unloading devices, graders, tamping machines, tools for cutting optical fiber, etc. The new customs duty rates amount to 25, 30 and 40 percent of customs value, depending on product type. According to the RF Ministry of Economic Development, Russia was acting in the framework of the Agreement on Safeguards, having introduced those measures by way of compensating for the injury resulting from the US safeguard measures against the importation of steel and aluminum products from other countries, Russia including. However, the USA noted that these were not safeguard measures, and so did not fell within the scope of the Agreement on Safeguards. Similar requests were filed by the USA against Canada (DS557), China (DS558), the EU (DS559), Mexico (DS560), and Turkey (DS561), and Russia joined those disputes as a third party. The said countries raised their customs tariffs on certain products in response to the safeguard measures introduced by the USA against steel and aluminum imports. Previously, these measures imposed by the USA had already been disputed with the

[1] URL: http://www.vavt.ru/materials/site/BE758A6F

WTO by some countries, Russia including (DS554) (see the section on those disputes where Russia had acted as a complainant)[1].

On November 22, 2018, the USA filed a request for the establishment of a panel, which was established on December 18, 2018. As of late 2018, the dispute undergoes the stage of panel expert appointment.

4.7.4. The progress, in 2018, of the trade disputes handled by the WTO where Russia has acted as third party

From the moment of its accession to the WTO, Russia has participated in 64 disputes as a third party. About 28% of these disputes have already been settled; in 36% of disputes, the main dispute settlement procedures have been completed; and in 5% of disputes, the DSB ruled in favor of the respondent (DS458, DS467, DS487). It is noteworthy that in two of those disputes where the ruling favored the respondent (the disputes with Australia concerning packaging of tobacco products and packaging), Russia sided with the respondents. Overall, Russia participated in the trade disputes initiated by the USA (13 out of 64 disputes), China and Japan (7 disputes), the EU (6 disputes), Canada and the Republic of Korea (4 disputes); and in the disputes against the USA (20 disputes), China (11 disputes), the EU (8 disputes), Australia and Canada (4 disputes each). Russia's role as a third party is usually motivated not only by a significant trade-related interest, but also – and mostly – by practical considerations related to certain specific issues and by systemic considerations that have to do with the implementation of certain norms and rules of the WTO. It sometimes so happens that formally different disputes that have been initiated by different complainants focus on one and the same measure imposed by the respondent (later, we are going to discuss some 'unique cases' among the 64 disputes where Russia acted as a third party (a total of 47 cases)). As far as the products at issue are concerned, Russia has joined, most frequently, the disputes that have to do with measures addressing metallurgy (11 out of 47 'unique cases'), agriculture and the food industry (10 cases), renewable energy sources (4 cases), the automotive and aircraft industries (2 cases each), the lumber industry and wood products (3 cases), and the chemical industry (2 cases). The disputes handled by the WTO where the Russian Federation has acted as a third party can be provisionally grouped around several themes (see *Table 41*).

Table 41

WTO disputes where Russia has been a third party

Theme	Disputes
1	2
1. Ban or restrictions on imports (environmental protection or other reasons).	DS400, DS401, DS469, DS484, DS495, DS524, DS531, DS537.
2. Safeguard investigation and measures (antidumping or countervailing measures and safeguards).	DS414, DS437, DS449, DS454, DS468, DS471, DS473, DS480, DS488, DS490, DS496, DS513, DS516, DS518, DS523, DS529, DS533, DS534, DS536, DS538, DS539, DS544, DS545, DS546, DS548, DS550, DS551, DS552, DS553, DS556, DS564

[1] http://www.vavt.ru/materials/site/BE758A6F

Cont'd

1	2
3. Restrictions on exports.	DS431, DS432, DS433, DS508, DS509, DS541
4. Intellectual property rights.	DS441, DS458, DS467, DS542.
5. Subsidies (including those related to tax exemptions and other preferential treatments).	DS502, DS456, DS472, DS487, DS497, DS489, DS510, DS511, DS522.
6. Tariffs and tariff-rate quotas.	DS492, DS517, DS557, DS558, DS559, DS560.
7. Economic sanctions.	DS526.

Source: Baeva M. A. (2015) Russian participation in the WTO trade disputes and dispute settlement // Russian Foreign Economic Journal, 3. P. 75–90.

As for the agreements covering the disputes where Russia acted as a third party (one dispute is usually covered by several agreements), their by-theme distribution is shown in *Fig. 38* (only 'unique' disputes were selected – that is, the duplication of those measures that gave rise to several disputes was removed). The majority of these disputes have to do with the GATT, the Anti-Dumping Agreement, and the Agreement on Subsidies and Countervailing Measures (ASCM). Besides, Russia's concerns also targeted inconsistencies with the Agreement Establishing the WTO and the Agreement on Safeguards.

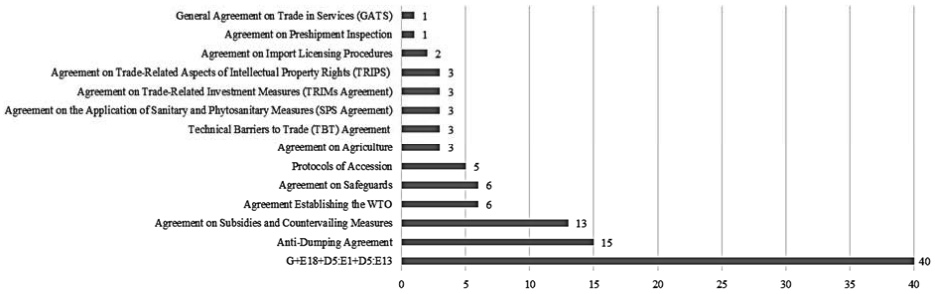


Fig. 38. The themes of disputes where Russia acted as a third party

Source: own compilation based on data published on the WTO's official website: URL: https://www.wto. org/ english/tratop_e/dispu_e/cases_e/ds462_e.htm

First of all, let us review the changes that occurred over the past year in the situation with regard to those disputes handled by the WTO where Russia participated as a third party prior to 2018.

DS437: United States – Countervailing Duty Measures on Certain Products from China

The dispute was initiated in late May 2012. China claimed that it encountered various difficulties when trying to access the results of investigations by USA that had served as the grounds for US countervailing measures against China. China cited approximately 20 such investigations conducted by the USA and targeting in the main

the products of metallurgy and the steel industry (for example, tubes and pipes, steel wheels, steel wire, etc.). China believes that the USA acted on an incorrect allegation that state-owned enterprises were 'public bodies' that were conferring countervailable subsidies through their sales of inputs to downstream producers. Besides, China pointed out that the US Department of Commerce (USDOC) initiated its investigation based on erroneous findings, in particular it failed to provide sufficient evidence that the subsidy would be specific for a given enterprise or industry. Also, the USDOC improperly calculated the alleged amount of benefit based on the prevailing market conditions in China.

From late July 2016, the panel was examining the implementation, by the respondent, of the DSB's recommendations that the measures at issue should be made properly consistent by April 1, 2016. On March 21, 2018, the panel presented its report, and in late April - early May the USA and China both appealed against the panel ruling.

DS441, DS458, DS467: Australia – Certain Measures Concerning Trademarks, Geographical Indications and Other Plain Packaging Requirements Applicable to Tobacco Products and Packaging (Dominican Republic, Cuba, Indonesia)

In 2012–2013, several countries initiated disputes against Australia with respect to its requirements that all tobacco products should be sold in plain packaging without any trademarks, or display of design and figurative features, or company logos. The complainants claimed that by doing so, Australia acted inconsistently with the norms and rules of the WTO, including those covering intellectual property rights. Russia joined the dispute on the respondent's side because of its own national anti-tobacco policies. On June 28, 2018, the panel presented its report that supported Australia, because it was not found to have violated the norms and rules of the WTO, and so the respondent was not required to resort to any acts. Among the complainants, only the Dominican Republic appealed against the ruling on August 23, 2018.

DS456: India – Certain Measures Relating to Solar Cells and Solar Modules (USA, 06.02.2013)

In early February, the USA filed a request for consultations with India concerning the measures introduced by the latter in the solar power industry. The DSB ruled that the Indian Government's decision to establish and maintain domestic content requirements provided less favorable treatment to imported solar cells and solar modules than that accorded to like products originating in India. On December 19, 2017, the USA 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.

At the DSB meeting in January 2018, the matter was referred to arbitration, because the parties had failed to enter into negotiations. On January 23, India requested the establishment of a compliance panel, and in late February the DSB agreed to refer the matter to the original panel.

The opportunities for increasing exports of the products at issue to India (their relative share in Russia's total exports of like products is currently about 5%[1]) that will arise after the restrictions on foreign imports are lifted by India are of great practical interest for Russia.

DS471: USA – Certain Methodologies and Their Application to Anti-Dumping Proceedings Involving China (China)

The dispute was initiated in late 2013. The USA used a 'zeroing' methodology in its anti-dumping investigation, whereby a weighted average export price that was above or equal to a weighted average normal value was treated as zero, thus being disregarded when determining a margin of dumping for the product as a whole, and so the margin was inflated. China claimed that the methodology was inconsistent with the Anti-Dumping Agreement in that it incorrectly determined the fact and evidence of dumping and led to incorrect calculation and levying of anti-dumping duties. The panel upheld nearly all of the claims presented by China. In May 2017, the DSB, having adopted the AB's report, recommended that the USA should make its measures properly consistent by August 22, 2018.

On 9 September 2018, China requested the authorization of the DSB to suspend concessions or other obligations pursuant to Article 22.2 of the DSU ('suspending concessions or other obligations under the covered agreements') on the grounds that the United States had failed to comply with the DSB's recommendations and rulings within the reasonable period of time. The USA informed the DSB that it objected to China's proposed level of suspension of concessions. In late September 2018, the matter was referred to arbitration.

Anti-dumping investigations and anti-dumping measures are at issue in the majority of disputes initiated by Russia, thus underlining Russia's systemic interest in such matters. In April 2017, the USA initiated an anti-dumping investigation against imports of hot-rolled bars originating in Russia. Therefore the anti-dumping investigation methodologies applied by the USA are causing concern for Russia.

DS472, DS497: Brazil – Certain Measures Concerning Taxation and Charges (EU, Japan)

In 2013 and 2015, disputes were initiated against Brazil. According to the complainants, by means of establishing certain government programs in the automotive and electronics sectors, Brazil provided preferences and support to domestic producers and exporters, which was inconsistent with one of the core principles maintained by the WTO – that of 'national treatment'. The measures at issue were the imposition of a higher tax burden on imported goods than on domestic goods, tax advantages conditioned to the use of domestic goods, and the provision of export contingent subsidies. On August 30, 2017, the panel presented its report. The complainants' claims to Brazil were upheld and the measures at issue were recognized to be inconsistent with

[1] UN COMTRADE database. URL: http://comtrade.un.org/

the WTO norms. The panel determined that the discriminatory aspects of the government programs could indeed conduce to the establishment, in Brazil, of competitive and sustainable domestic industry capable of supplying the domestic market. However, Brazil did not demonstrate that such measures were indeed necessary for capacity-building of suppliers, because imports were not taken into consideration. The panel concluded that the alternative approaches (such as non-discriminatory subsidies or lowered trade barriers for imports of digital television transmitters) suggested by the complainant were not inconsistent with the WTO norms and were more compatible with the declared goals.

In autumn 2017, Brazil and the EU appealed against the panel ruling. On December 13, 2018, the AB presented its report. The AB agreed with the panel's conclusions that the government tax incentive programs for the automotive and electronics sectors were discriminatory in some of their aspects and inconsistent with the GATT 1994 and the TRIMs Agreement. The AB concluded that none of the measures at issue in the dispute could be justified within the meaning of Article III:8 (b) of the GATT 1994 (National Treatment on Internal Taxation and Regulation). The Appellate Body reversed the panel's findings that the tax suspensions granted to registered or accredited companies under the government programs constituted financial contributions in the form of government revenue, and also reversed the panel's findings that the tax suspensions granted to registered or accredited companies under the PEC and RECAP programs constituted financial contributions in the form of export subsidies. As for the import substituting subsidies, the AB upheld the panel findings for some programs, while reversing the findings for other programs. The AB reversed the panel's conclusions that Brazil withdrew the prohibited subsidies found to exist within 90 days because the underlying reasoning was not related to the specific circumstances of this case.

This dispute is of interest to Russia from the point of view of taxation practices and the settlement of disputes arising in this connection.

DS480: EU – Anti-Dumping Measures on Biodiesel from Indonesia (Indonesia)

In June 2014, Indonesia filed a request for consultations with the EU concerning Council Regulation (EC) No 1225/2009 dated November 30, 2009, with respect to anti-dumping measures imposed by the EU in 2013 on imports of biodiesel originating in Indonesia, and the underlying investigation. In particular, the cost adjustment methodology was disputed. In late February 2018, the DSB adopted the panel's report with the recommendation that the measures at issue were to be made properly consistent. The cost adjustment practices *per se* were not recognized to be inconsistent with the norms and rules of the WTO, but the anti-dumping investigation and measures introduced by the EU against imports of biodiesel from Indonesia were indeed inconsistent in some of their aspects. On October 20, 2018, the EU adopted the measure necessary to comply with the DSB's recommendations through implementing Regulation (EU) 2018/1570 (see the similar dispute initiated by Argentina (DS473)).

Russia noted that the EU Regulation was amended simultaneously with granting to Russia, in 2002, the market-economy status. In particular, the amendments enabled the EU to adjust the costs stated in producer/exporter documents on the basis of 'information concerning other representative markets'. In Russia's opinion, such practices are inconsistent with the WTO norms. Under the Anti-Dumping Agreement, the cost data applied in an investigation must reflect the actual costs related to the production and sale of goods in the country of origin. Russia believes that the notion of 'dumping' cannot refer to the prices of production resources.

DS484: Indonesia – Measures Concerning the Importation of Chicken Meat and Chicken Products (Brazil)

In October 2014, Brazil filed a request for consultations with Indonesia concerning the restrictive administrative procedures and measures on the importation of chicken meat and chicken products to the Indonesian poultry market. Brazil complained of the non-approval, by Indonesia, of the provided health certificate; of the imposition of a non-automatic import licensing regime to chicken meat and chicken products; of the requirement of a prior recommendation from the Indonesian Ministry of Agriculture for chicken meat imports and chicken product imports, and the imposition of pre-shipment inspection requirements causing unreasonable delays and applied in a discriminatory manner, etc. On November 17, 2017, the DSB adopted the panel report and issued recommendations that Indonesia should bring the measures found to be inconsistent into conformity with its WTO obligations. The panel ruled that the measures introduced by Indonesia are inconsistent with the provisions of the covered WTO agreements, but also found that some of the respondent's claims had not been sufficiently substantiated (transit restrictions). In December 2017, Indonesia informed the DSB that it would need a reasonable period of time to properly implement its recommendations.

On July 27, 2018, Brazil and Indonesia informed the DSB of agreed procedures under Articles 21 (Surveillance of Implementation of Recommendations and Rulings) and 22 (Compensation and Suspension of Concessions) of the DSU (sequencing agreement).

Russia does not export chicken meat and chicken product to Indonesia, probably because of the restrictions on imports imposed by Indonesia, and so their removal or adjustment can result in new contracts for supplies of the products at issue. Russia's participation in this dispute was motivated by an interest in SPS and TBT measures implemented in proper conformity with the norms and rules of the WTO and the practices of settling such disputes.

DS488: USA – Anti-Dumping Measures on Certain Oil Country Tubular Goods from Korea (Republic of Korea)

In late 2014, the Republic of Korea initiated a dispute with the USA, claiming that the anti-dumping measures on oil country tubular goods and the underlying investigation by the USA were inconsistent with the WTO norms. The USA failed to make a fair comparison between the export price and the normal value by failing to

make due allowance for differences between the products produced by the constructed value (CV) profit source and those produced by respondents, based on selling prices on the markets of third countries. In November 2017, the panel presented its report, where it rejected 7 out of 8 Korea's claims, and agreed that the USA had indeed failed to use actual data of the Korean respondents to determine their constructed value (CV) profit rate, even though their actual home market and third-country market profit data were available. The panel rejected the requests with respect to consistency with the norms and provisions of the WTO of US laws on normal value and export price calculation, procedural acts, and public notification procedures. On January 12, 2018, the DSB adopted the panel report. On February 9, 2018, the USA informed the DSB of its intention to implement the DSB's recommendations and rulings and that it would need a reasonable period of time to do so. Accordingly, the reasonable period of time was set to expire on January 12, 2019.

The dispute has to do with the issues of anti-dumping investigation methodologies, and so it is of systemic importance for the Russian Federation. The relative share of products at issue in Russia's exports to the USA is 35 percent, and in total imports into the USA – 4 percent[1].

DS490, DS496: Indonesia – Safeguards on Certain Iron or Steel Products (Chinese Taipei, Viet Nam)

In 2015, disputes were initiated with Indonesia. According to the complainants, the safeguard measures on imports of certain flat-rolled product of iron or non-alloy steel were inconsistent with the WTO norms. Indonesia provided no reasoned and adequate explanation concerning investigated imports and failed to properly demonstrate how increased imports could cause or threaten to cause serious injury to the domestic industry. Indonesia failed to provide an opportunity for consultations prior to the imposition of the safeguard measure. The measures imposed by Indonesia are inconsistent with the general principle of MFN, because they are applied only to products originating in certain countries, and Indonesia excluded from the said measures 120 developing countries, Russia including. On August 18, 2017, the panel presented its report, whereby it ruled that the measures at issue did not qualify as safeguards, and recommended that they should be made consistent with the MFN. In autumn 2017, each of the parties filed an appellee's submission. The AB in its report, presented in mid-August 2018, agreed with the panel findings. The parties agreed that Indonesia would bring its measures into conformity with its obligations by March 27, 2019.

For Russia, the relevant aspects of the dispute were the practices of settling matters related to safeguards and conducting an investigation thereof. Russia's interest in such a dispute could be indirectly stirred by the anti-dumping measures introduced by Indonesia over the period from December 27, 2013 through December 26, 2018 against

[1] UN COMTRADE database, URL: http://comtrade.un.org/

imports of hot-rolled flat products of steel originating in Russia (the import duties for some companies were as high as 20 percent)[1].

DS492: EU – Measures Affecting Tariff Concessions on Certain Poultry Meat Products (China)

In April 2015, China filed a request for consultations with the EU, because the EU undertook tariff modification negotiations with Thailand and Brazil concerning certain poultry meat products, in which these two countries have a significant vested interest, while China, although it has a similar interest, was denied an opportunity for such negotiations. The tariff rate quotas were almost entirely reserved for Brazil and/or Thailand, and out-of-quota bound rates were significantly in excess of the pre-modification bound rates. In March 2017, the panel presented its report, where the complainant's claims were upheld only with regard to 2 out of 10 tariff quotas at issue. The panel found that the EU's allocation of TRQ shares among the supplying countries was inconsistent with the requirements of the GATT 1994, and upheld China's claim that its increased ability to export poultry products to the EU following the relaxation of the SPS measures in July 2008 was a 'special factor' that had to be taken into account by the EU 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). All the other claims presented by China were rejected. The DSB recommended the EU to bring its measures into conformity with the WTO norms within a reasonable period of time.

In May 2018, the EU and China informed the DSB that in the event that they were unable to reach a mutually agreed solution, or the EU failed to carry out its obligations set out in the mutually agreed solution, the reasonable period of time would be deemed to have ended on July 19, 2018. No further actions have been undertaken so far. Very likely, the respondent brought the measures at issue in conformity within the established period.

The dispute is interesting from the point of view of changes in the list of bound rates of tariffs, understanding of the negotiating procedure, etc. The EU has also introduced a tariff rate quota for Russia, but it is quite low (about 30,000 t of poultry meat products)[2].

DS495: Republic of Korea – Import Bans, and Testing and Certification Requirements for Radionuclides (Japan)

In May 2015, Japan filed a request for consultations with the Republic of Korea regarding the measures adopted by the latter subsequent to the accident at the Fukushima

[1] Overview of existing restrictions on access of Russian products to foreign markets. URL: http://www.ved.gov.ru/rus_export/partners_search/torg_exp/

[2] Overview of existing restrictions on access of Russian products to foreign markets. URL: http://www.ved.gov.ru/rus_export/partners_search/torg_exp/

Daiichi nuclear power plant: import bans on certain food products; additional testing and certification requirements regarding the presence of certain radionuclides; and a number of alleged omissions concerning transparency obligations under the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement).

On February 22, 2018, the panel presented its report, and the claims of neither of the parties were upheld in full. It was found that the Korean measures were generally consistent with the WTO norms, but that they more trade-restrictive than required to meet their health objective, and besides, it was found that Korea failed to comply with its transparency obligations with respect to the publication of all the measures. In April 2018, the parties appealed and cross-appealed the panel decisions.

Russia, in addition to the obvious interest in the procedural aspects of the dispute settlement practices in the sanitary and phytosanitary field in accordance with the norms and rules of the WTO, has also a direct interest in such matters. The reason for this interest is that, after the accident at the Fukushima Daiichi nuclear power plant in March 2011, Russia also imposed a ban on fish imports from Japan, which was lifted by the Federal Service for Veterinary and Phytosanitary Surveillance of Russia only as late as summer 2015.

DS510: USA – Certain Measures Relating to the Renewable Energy Sector (India)

On September 9, 2016, India filed with the WTO a request for consultations with the USA regarding certain measures of the USA relating to domestic content requirements and subsidies instituted by the governments of several US states[1]. These are state programs that provide performance-based incentives for the use of domestic components in the renewable energy sector, in particular a renewable energy cost recovery incentive for customers of light and power businesses for generating electricity from renewable sources, self-generation and hydropower systems, solar photovoltaic (PV) systems, and also tax incentive for ethanol production and tax credit for biodiesel blending and storage, etc. As consultations between the parties did not result in an agreement, on April 24, 2018, at the complainant's request, a panel was established, and its report is expected to be presented in Q2 2019.

In 2017, Russia joined the dispute as a third party. The outcome of the dispute, as well as of the similar dispute between the USA and India (DS456)[2], also joined by Russia, will be relevant for Russia because they offer a potential for increasing the volume of exports of the products at issue to these countries. The relative share of Russian exports of the products at issue to India in Russia's total exports shrank from approximately 8 percent in 2013 to 5 percent in 2016[3]. Besides, due to the high importance of the goal of developing alternative energy sources for Russia, it is necessary to give consideration to

[1] URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds510_e.htm
[2] URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds456_e.htm
[3] UN COMTRADE database, URL: http://comtrade.un.org/

the use of domestic content in the production process, and also to subsidize production in such a way that would not be inconsistent with the norms and rules of the WTO.

DS513: Morocco - Anti-Dumping Measures on Certain Hot-Rolled Steel from Turkey (Turkey)

In October 2016, Turkey initiated a dispute 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 Turkey[1]. Turkey has concerns about the use by the Moroccan authorities of registration/licensing requirements and their failure to issue import licenses following the imposition of provisional anti-dumping measures. Turkey believes that act to be an additional impermissible 'specific action against dumping', which is inconsistent with the provisions of the WTO. The anti-dumping investigation procedures and the imposed measures, according to the complainant, were also contrary to certain provisions of the Anti-Dumping Agreement and the GATT 1994.

The panel, however, found that the Moroccan authorities failed to conclude the investigation within the 18-month maximum time-limit set out in that provision. It also found that Morocco had acted inconsistently with Article 6.9 by failing to inform all interested parties of certain 'essential facts'. In late October 2018, the panel presented its report, where it was demonstrated that Morocco acted inconsistently with the norms of the WTO because, for example, the anti-dumping investigation was not concluded within the established period of 18 months, did not inform all the parties of its findings and 'essential facts', etc. The panel suggested that Morocco should immediately revoke the measures at issue. On November 20, 2018, Morocco appealed against the panel ruling.

Russia has a strong trade interest in this dispute because the relative share of ferrous metals exported by Russia to Morocco in Russia's total exports of such products amounted to 6 percent in 2016, and its relative share in Morocco's total imports of such products was 1 percent[2]. Such disputes concerning anti-dumping measures are interesting to Russia from both systemic and practical points of view.

DS517: China – Tariff Rate Quotas for Certain Agricultural Products (USA)

In late 2016, the USA requested consultations with China concerning China's administration of its tariff rate quotas, including those for wheat, some types of rice, and corn. The USA claimed that China acted contrary to its obligations assumed under the Protocol of Accession to the WTO, because its tariff-rate quotas (TRQ) for wheat, rice and corn were not transparent and predictable. The USA believed that China acted inconsistently with some provisions of the GATT 1994 by introducing prohibitions and restrictions on imports other than duties, taxes or other types of levies and failing to

[1] URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds513_e.htm
[2] URL: UN COMTRADE database // http://comtrade.un.org/

provide public notice of quantities permitted to be imported under each TRQ and of changes to these quantities.

On February 12, 2018, the USA requested that panel be established, and its report is expected to be presented in Q2 2019.

For Russia, the progress of this dispute is of great interest, because the relative share of the products at issue exported from Russia to China in Russia's total exports of these products shrank from 7 percent in 2012 to 0.2 percent in 2016, and that of rice – from 16 to 0.7 percent[1].

DS518: India – Certain Measures on Imports of Iron and Steel Products (Japan)

In late 2016, Japan filed with the WTO a request for consultations with India concerning certain measures imposed by India on imports of iron and steel products into India. Japan disputes the temporary safeguard measures on imports of 'hot-rolled flat products of non-alloy and other alloy steel in coils of a width of 600 mm or more'. The safeguard duty was not to be imposed on the products at issue that were imported at or above certain price listed in the notification. Japan claimed that the measures appear to be inconsistent with the GATT 1994 and the Agreement on Safeguards.

In early November 2018, the panel presented its report, whereby it upheld almost all of Japan's claims. On December 14, 2018, India appealed against the panel ruling.

The investigation results are of significant interest to Russia. After the imposition by India of the measures at issue, Russian exports of all the relevant products to India in 2016 shrank by 44 percent relative to 2015, and for one commodity item the index fell from USD 13 million to 0[2].

DS522: Canada – Measures Concerning Trade in Commercial Aircraft (Brazil)

In early 2017, Brazil filed a request for consultations with Canada with respect to measures concerning trade in commercial aircraft[3]. This a fourth dispute in a row initiated by Brazil against Canada concerning Brazilian measures affecting the aircraft industry. In this particular dispute, Brazil complains against alleged support in the form of subsidies provided by the Canadian government to Bombardier, Inc. in the framework of its C-Series aircraft program, among other things. According to Brazil, the government of the province of Quebec, which holds a 49.5 percent share in a newly-created entity supervised by Bombardier, invested CAD 1.3 billion in the Canadian aircraft manufacturer, and these measures caused nullification or impairment of benefits accruing directly or indirectly to Brazil[4]. Brazil believed that these were prohibited and actionable subsidies, inconsistent with the Agreement on Subsidies and Countervailing

[1] UN COMTRADE database, URL: http://comtrade.un.org/
[2] UN COMTRADE database, URL: http://comtrade.un.org/
[3] URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds522_e.htm
[4] URL: https://aeronautica.online/2016/12/23/brazil-vs-canada-in-wto/

Measures ('SCM Agreement'). From February 6, 2018, the procedure of panel examination was launched.

Russia already participated, in 2015, in a similar dispute between the EU and the USA with respect to subsidies in the aircraft industry (DS487, Airbus and Boeing). This industry, the permitted measures for its support, the practices of disputing those measures that are inconsistent with the norms and rules of the WTO, and the systemic aspects of such disputes, are all of great importance for Russia.

DS523: USA – Countervailing Measures on Certain Pipe and Tube Products (Turkey, 08.03.2017)

In March 2017, Turkey initiated a dispute against the USA with respect to countervailing measures imposed by the USA on certain types of pipe and tube products from Turkey[1]. Turkey claimed that the measures appeared to be inconsistent with the Agreement on Subsidies and Countervailing Measures ('SCM Agreement') and the GATT 1994. Turkey's concerns were particularly focused on the USA's determination that certain entities were 'public bodies' within the meaning of SCM Agreement Article 1 ('Definition of a Subsidy')); the determination regarding specificity within the meaning of SCM Agreement Article 2 ('Specificity'), whereby a subsidy is 'specific' if it is specific to an enterprise or industry or group of enterprises or industries, and failure to substantiate it on the basis of positive evidence; the use of facts available and application of adverse inferences in calculating subsidy rates; the 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 SCM Agreement.

On December 18, 2018, the panel report was presented. The panel rejected Turkey's claims concerning public body determinations, and the **c**laims in relation to benefit determination and likelihood-of-injury determinations (dismissing Turkey's claims concerning sunset reviews), but upheld the claims concerning 'specificity determinations' and **'r**esort to the use of facts available' by the USA. The parties have a period of about two months to appeal and cross-appeal the panel ruling.

In addition to the practices of imposing countervailing measures and conducting underlying investigation, and the practices of disputing such measures when they are inconsistent with the WTO norms, Russia is also interested in the outcome of the dispute. In 2016, Russian exports of the products at issue to the USA lost almost 60 percent relative to 2015, while the relative share of exports to the USA in Russia's exports shrank from 14 percent in 2015 to 6 percent in 2016[2].

[1] URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds523_e.htm
[2] UN COMTRADE database, URL: http://comtrade.un.org/

DS526: United Arab Emirates – Measures Relating to Trade in Goods and Services, and Trade-Related Aspects of Intellectual Property Rights (Qatar)

In July 2017, Qatar initiated a dispute with United Arab Emirates (UAE) (joined by Russia) concerning measures that individually and collectively affected trade in goods, trade in services, and trade-related aspects of intellectual property rights. Qatar claimed that these measures were inconsistent with the GATT 1994, the GATS, and the TRIPS. From September 3, 2018, the panel examination request by Qatar has been underway.

Russia's interests in the framework of this dispute focus on the practical aspects of filing a complaint in response to economic sanctions, because these issues are usually not discussed by the DSB, and for Russia at present they are very important in view of the currently introduced sanctions. Russia also filed a complaint against Ukraine concerning imposed economic sanctions (DS525). Besides, among other things, the complainant demanded that Al Jazeera TV channel should be closed, and this measure is similar to the restrictions imposed on Russia Today TV channel's broadcasting in the USA, because both these channels distribute alternative content.

Below we discuss 25 disputes (all in all, they address 15 measures because, in the framework of several formally distinctive cases, different complainants dispute one and the same measure), that were joined by Russia as a third party in 2018.

DS524: Costa Rica – Measures Concerning the Importation of Fresh Avocados from Mexico (Mexico)

On March 8, 2017, Mexico filed with the WTO a request for consultations with Costa Rica with respect to certain measures allegedly restricting or prohibiting the importation of fresh avocados for consumption from Mexico. Mexico claimed that the measures appeared to be inconsistent with some articles of the GATT 1994 and the SPS Agreement, in particular the concept of regionalization in adaptation to regional conditions, including pest- or disease-free areas. On November 22, 2018, after the parties failed to come to an agreement in the course of consultations, Mexico requested the establishment of a panel, and on December 18, 2018, the panel was established.

Russia's interest in this dispute is motivated mostly by the practical aspects of participating in disputes focused on SPS measures and the need to systematically study the relevant provisions. Russia is a respondent in a similar dispute initiated by the EU with respect to imports of pork and live pigs (DS475).

DS529: Australia – Anti-Dumping Measures on A4 Copy Paper (Indonesia)

In early September 2017, Indonesia requested consultations with Australia with respect to its refusal to use the Indonesian exporters' home market price as the normal value of raw material (lumber) and the imposition of an anti-dumping order on A4 copy paper, because it found that a particular market situation existed, and the Government of Indonesia had been implementing policies that increased the supply of timber, which allegedly resulted in lower paper prices due to lower timber prices. As the consultations

did not produce the desired result, Indonesia in mid-March 2018 requested that the DSB should establish a panel; the panel was established in late April, and it set out to examine the case on July 12, 2018.

This complaint by Indonesia resembles Russia's claims to the EU (DS474, DS494 and DS521) and Ukraine (DS493), and this was the reason for Russia to join the dispute.

DS531, DS537: Canada – Measures Governing the Sale of Wine in Grocery Stores (USA, Australia)

On September 28, 2017, the USA filed a second request for consultations with Canada with respect to the Canadian provinces of British Columbia, Ontario, Quebec, and Nova Scotia's measures governing the sale of wine in grocery stores (the first one is DS520). Among the measures at issue was the discrimination against imported wine by allowing only Canadian wine to be sold on regular grocery store shelves. The USA claimed that such measures were inconsistent with Article III:4 (National Treatment on Internal Taxation and Regulation) of the GATT 1994. In late May 2018, the USA requested the establishment of a panel, which was established on July 20, 2018.

Australia, one of the world's largest exporters of wine, including to Canada (8 percent of Canada's wine imports and 7 percent of Australia's wine exports in 2017)[1], on January 12, 2018 also requested consultations with Canada on the same issue, in its complaint increasing the number of claims concerning Canada's inconsistency with the provisions of the GATT 1994 by comparison with those presented by the USA. On August 13, 2018, Australia requested the establishment of a panel, which was established on September 26, 2018. As of late 2018, both disputes with Canada were at the stage of appointing panel experts.

As Russia does not export wine to Canada, Russia's participation in that dispute was motivated not by a significant trade-related interest, but by the unusual character of the claims and the desire to gain practical experience of dealing with such a dispute.

DS533: United States – Countervailing Measures on Softwood Lumber from Canada (Canada)

In late November 2017, Canada filed a request for consultations c USA concerning certain countervailing measures with respect to softwood lumber products from Canada. Canada claimed that the USA improperly attributed to the production of softwood lumber products certain alleged subsidies that were bestowed on the production of products that were not under investigation, including under hydro-electricity purchase agreements (renewable energy sources), improperly initiated an investigation into federal and provincial log export permitting processes, and erroneously rejected benchmarks that reflected prevailing market conditions in Canadian provinces. Canada believed that these measures were inconsistent with certain provisions of the GATT 1994 and the Agreement on Subsidies and Countervailing Measures (SCM Agreement).

[1] UN COMTRADE database, URL: http://comtrade.un.org/

In mid-March 2018, Canada filed a request for the establishment of a panel, which was established on April 9, 2018; on July 6, 2018, panel experts were appointed, and the panel began to examine the case.

Russia joined that dispute not only because of being interested in the practical aspects of a dispute concerning countervailing measures, but also because of having significant trade-related interests. The relative share of the USA in Russia's exports of softwood lumber products (FEACN 440910) in 2017 amounted to 7 percent, and their share in US imports was less than 1 percent.[1]

DS534: USA – United States – Anti-Dumping Measures Applying Differential Pricing Methodology to Softwood Lumber from Canada (Canada)

In late November 2018, Canada filed another request for consultations with the USA, this time with respect to the US anti-dumping measures applying the differential pricing methodology to softwood lumber products from Canada. Canada claimed that, in applying the weighted-average-to-transaction (W-T) calculation methodology, the USA improperly aggregated random and unrelated price variations and therefore failed to identify a pattern of export prices, and applied zeroing in its W-T calculation methodology, while zeroing in the W-T methodology did not account for all of the purported pattern transactions in calculating the margin of dumping, and so did not lead to a fair comparison of export prices. Canada believed that these measures and methodology were inconsistent with US obligations under the GATT 1994 and the Anti-Dumping Agreement.

In mid-March 2018, Canada filed a request for the establishment of a panel, on April 9, 2018 it was established, and on May 22, 2018 it began to examine the case. The panel report is expected to be circulated in H1 2019.

Similarly to the dispute between Canada and the USA concerning countervailing measures with respect to softwood lumber products (DS533), Russia's participation in this dispute was determined not only by an interest in the practical aspects of a dispute concerning countervailing measures, but also by significant trade-related interests. The relative share of the USA in Russia's exports of softwood lumber products (FEACN 440910) in 2017 amounted to 7 percent, and their share in US imports was less than 1 percent.

DS536: United States – Anti-Dumping Measures on Fish Fillets from Viet Nam – Constitution of the Panel established at the request of Viet Nam (Viet Nam)

On January 8, 2018, Viet Nam filed with the DSB a request for consultations with the USA concerning certain anti-dumping measures on fish fillets from Viet Nam and other US legal instruments, in particular the zeroing methodology applied in the underlying anti-dumping investigation. The complainant claimed that these measures were inconsistent not only with the GATT 1994 and the Anti-Dumping Agreement, but also

[1] UN COMTRADE database, URL: http://comtrade.un.org/

with the Understanding on Rules and Procedures Governing the Settlement of Disputes (DSU), the WTO Agreement, and Viet Nam's Protocol of Accession to the WTO.

Russia joined the dispute because of an interest in the practical aspects of settling disputes with the USA concerning countervailing measures. Russia likewise joined, as a third party, the dispute initiated by China against the USA with respect to zeroing methodology (DS471), where almost all of the claims presented by China were upheld by the DSB, and the USA was required to bring its measures in conformity by August 22, 2018; however, as of late 2018, the arbitrator composed by the original panel members was examining the issue of concessions or other obligations required from China.

DS538: Pakistan – Anti-Dumping Measures on Biaxially Oriented Polypropylene Film from the United Arab Emirates (UAE)

In late January 2018, the UAE filed a request for consultations with Pakistan concerning Pakistan's anti-dumping measures on imports of biaxially oriented polypropylene film from the UAE (BOPP film). The UAE claimed that the anti-dumping investigation and the following anti-dumping measures were inconsistent with the GATT 1994 and the Anti-Dumping Agreement. For example, there was insufficient accurate and adequate evidence to justify the initiation of the anti-dumping investigation, and the application filed by Pakistan should therefore have been rejected.

In mid-May 2018, the UAE filed a request with the DSB for the establishment of a panel, and it was established in late October 2018. As of late 2018, the dispute was undergoing the stage of appointment of panel experts.

Anti-dumping investigations were also initiated by Pakistan against certain Russian companies, but the corresponding measures were not imposed on Russian imports of hot-rolled steel sheets (proceedings started in early April 2009 and ended in late February 2011) and p*hthalic anhydride* (proceedings started in mid-February 2016 and ended in mid-December 2017)[1].

DS539: United States – Anti-Dumping and Countervailing Duties on Certain Products and the Use of Facts Available (Republic of Korea)

On February 14, 2018, the Republic of Korea filed with the DSB a request for consultations with the USA concerning certain anti-dumping and countervailing duty measures imposed on products from Korea, and certain laws, regulations and other measures maintained by the USA with respect to the use of facts available in anti-dumping and countervailing duty proceedings.

The Republic of Korea complained that the USA developed a practice of using adverse facts available as a rule or norm in anti-dumping and countervailing duty investigations and reviews, and claimed that Korean producers or exporters failed to cooperate to the best of their ability, and the USA failed to comply with its obligations relating to the use of facts available when making preliminary and/or final

[1] URL: http://i-tip.wto.org/goods/

determinations of dumping and/or subsidization, which has a direct consequential effect on the imposition and maintenance of anti-dumping or countervailing duties, and the level of such duties

In mid-April 2018, Korea filed a request for the establishment of a panel, which was established in late May 2018, and on December 5, 2018, the panel began to examine the case.

In April 2017, the USA initiated an anti-dumping investigation of certain Russian producers of hot-rolled steel rods[1]. Therefore the methodologies applied by the USA in the course of anti-dumping investigations are of interest to Russia, as earlier Russia has already joined some disputes with the USA initiated with respect to its anti-dumping investigation methodologies.

DS541: India – Export Related Measures (USA)

In March 2018, the USA filed a complaint against India concerning certain alleged export subsidy measures that the USA believed to be inconsistent with Articles 3.1(a) and 3.2 (Prohibition) of the Agreement on Subsidies and Countervailing Measures. The USA claimed that India provided export subsidies through its Export Oriented Units Scheme and sector specific schemes, including electronics hardware technology parks scheme, the merchandise exports from India scheme, the export promotion capital goods scheme, special economic zones, and a duty-free imports for exporters program.

On May 17, 2018, the USA filed a request for the establishment of a panel, because the dispute was not settled at the stage of consultations. On July 23, 2018, the panel began to examine the case, and its report is expected to be presented not earlier than Q2 2019.

Probably, Russia joined this dispute not so much because of its trade-related interests (Russia's total exports to India in 2017 amounted to approximately 2 percent of Russia's total exports), as its interest in the practical aspects of various export promotion schemes and their potential *disputability* in the framework of the WTO dispute settlement mechanism.

DS542: China – Certain Measures Concerning the Protection of Intellectual Property Rights (USA)

On March 23, 2018, the USA filed with the DSB a request for consultations with China concerning certain Chinese measures pertaining to the protection of intellectual property rights. The essence of the USA's claims is that China denied foreign patent holders the ability to enforce their patent rights against a Chinese joint-venture party after a technology transfer contract ended. China also imposed mandatory adverse contract terms that discriminated against and were less favorable for imported foreign technology. Therefore, China deprived foreign intellectual property rights holders of the ability to protect their intellectual property rights in China, as well as to freely negotiate market-based terms in licensing and other technology-related contracts.

[1] UN COMTRADE database, URL: http://comtrade.un.org/

On October 18, 2018, the USA filed a request for the establishment of a panel, and it was established on November 21, 2018. As of late 2018, the dispute was undergoing the stage of appointment of panel experts.

Russia's participation in this dispute can be explained not only by an interest in analyzing the outcome of the trade war between the USA and China, where Russia has also taken some part (with respect to steel and aluminum), but also by Russia's significant interest in contracts with China that have to do with technologies and the protection of intellectual property rights of Russian suppliers.

DS544, DS548, DS550, DS551, DS552, DS556, DS564: United States – Certain Measures on Steel and Aluminum Products (China, EU, Canada, Mexico, Norway, Switzerland, Turkey)

On 5 April, 2018, China; on June 1, 2018, the EU and Canada; on June 5, 2018, Mexico; on June 12, 2018, Norway; and on August 15, 2018, Turkey filed their requests for consultations with the USA concerning certain measures on steel and aluminum products imposed by the USA.

In late June 2018, Russia also filed a similar complaint with the DSB against the USA concerning the measures at issue (DS554) (see earlier).

DS545: United States – Safeguard Measure on Imports of Crystalline Silicon Photovoltaic Products (Republic of Korea)

On May 14, 2018, the Republic of Korea filed with the DSB a request for consultations with the USA concerning definitive safeguard measures imposed by the United States on imports of certain crystalline silicon photovoltaic products. Korea claimed that these measures were inconsistent with the Agreement on Safeguards and the GATT 1994, because the USA failed to provide a reasoned and adequate explanation of any unforeseen developments and the effect of the obligations incurred under the said agreements, and that these indeed resulted in the increased imports causing serious injury to the domestic industry.

In mid-August 2018, Korea filed with the DSB a request for the establishment of a panel, and it was established in late September 2018. As of late 2018, the dispute was undergoing the stage of appointment of panel experts.

Russia joined this dispute as a third party, because safeguard measures imply protection against all countries, Russia including. Besides, Russia wants to gain some experience in handling disputes with the USA with respect to safeguards, because Russia itself has initiated a similar dispute (DS554).

DS546: United States – Safeguard Measure on Imports of Large Residential Washers (Republic of Korea)

In mid-May 2018, the Republic of Korea filed with the DSB a request for consultations with the USA concerning definitive safeguard measures imposed by the United States on imports of large residential washers, which Korea believed to be

inconsistent with certain provisions of the Agreement on Safeguards and the GATT 1994. In particular, similarly to the previously discussed dispute (DS545), Korea considers that the USA failed to make a determination regarding the existence of unforeseen developments resulting in increased imports, and the effect of the obligations incurred under the GATT 1994.

In mid-August 2018, Korea filed a request for the establishment of a panel, and it was established on September 26, 2018. As of late 2018, the dispute was undergoing the stage of appointment of panel experts.

Russia joined this dispute as a third party, because safeguard measures imply protection against all countries, Russia including. Besides, Russia wants to gain some experience in handling disputes with the USA with respect to safeguards, because Russia itself has initiated a similar dispute (DS554).

DS553: Republic of Korea – Sunset Review of Anti-Dumping Duties on Stainless Steel Bars (Japan)

On June 18, 2018, Japan filed with the DSB request for consultations with the Republic of Korea concerning Korea's determination to continue the imposition of anti-dumping duties on stainless steel bars (SSB) from Japan as a conclusion in the third sunset review. Japan believed that the measures at issue were inconsistent with Korea's obligations under certain provisions of the Anti-Dumping Agreement and the GATT 1994 because, in particular but not limited to, Korea failed to properly determine, as the basis to continue the imposition of anti-dumping duties on the imports from Japan, that the expiry of the duties would be likely to lead to continuation or recurrence of injury. Korea failed to demonstrate the nexus between the expiry of the duties and a continuation or recurrence of injury, and to comply with the fundamental requirement that such determination should rest on a sufficient factual basis and reasoned and adequate conclusions.

On September 13, 2018, Japan filed a request for the establishment of a panel, and it was established in late October 2018. As of late 2018, the dispute was undergoing the stage of appointment of panel experts.

Over the period from October 27, 2008 to April 9, 2015 Korea imposed anti-dumping duties on kraft paper imports by certain Russian companies. Russia's interest in this dispute can be explained by the need to gain practical experience in measures designed to protect the domestic market.

DS557: Canada, DS558: China, DS559: EU, DS560: Mexico – Additional Duties on Certain Products from the United States (USA)

On July 16, 2018, the USA filed with the DSB requests for consultations with Canada, China, the EU, and Mexico concerning the imposition of additional duties (that is, increased duties with respect to certain products originating in the USA in response to the imposition, by the USA, of safeguard measures with respect to steel and aluminum products).

Besides, the USA also filed a complaint concerning similar measures against Russia (DS566) (see earlier). As of late 2018, the dispute was undergoing the stage of appointment of panel experts.

* * *

Russia continues to actively participate in the settlement of trade disputes handled by the WTO. In a majority of cases, Russia acts as a complainant or respondent in disputes between WTO members with the EU and Ukraine. In 2018, two new disputes with the USA were initiated. As a complainant, Russia is concerned in the main with anti-dumping investigations and anti-dumping measures, in particular in metallurgy and the chemical industry. Complaints against Russia in the framework of the WTO are filed by its members with respect to the following issues: technical barriers to trade; sanitary and phytosanitary measures; anti-dumping measures; investment measures influencing trade; tariffs; transit restrictions.

Overall, in 2012–2018, three disputes initiated against Russia underwent the main dispute settlement stages:

1. In the dispute initiated by the EU with respect to the duty rates that exceeded the ad valorem bound rate as of the moment of Russia's accession to the WTO (palm oil, refrigerators, paper and paperboard), in summer 2017 Russia adjusted all the duty rates at issue through decisions of the EEU and the EEC (DS485);

2. By the end of the reasonable period requested for the implementation of the DSB's recommendations, on December 6, 2017 Russia lifted the EU-wide ban on imports of pork, live pigs and pork products, with the exception of certain administrative territories that Russia considers to be dangerous with respect to outbreaks of African swine fever (ASF). However, as live pigs were added to the list of products that are subject to a ban on importation into the RF territory, no imports were effectively allowed. The EU claimed that Russia failed to implement all the recommendations of the DSB, and so requested the establishment of a compliance panel. The EU also requested the authorization of the DSB to suspend concessions or other obligations. EU filed a request that concessions and obligations to the value of EUR 1.39 billion per annum (an amount equivalent to total exports in 2013) with annual increase of 15 percent should be suspended. As Russia disagreed, the matter was referred to arbitration (DS475);

3. Anti-dumping measures against imports of light commercial vehicles (LCV). Russia abolished its anti-dumping duties on light commercial vehicles imported from Germany and Italy. The time-frame for implementing the DSB's recommendations coincided with the end of the period during which they were to be in effect. Due to the lengthy dispute settlement procedure practiced by the WTO coupled with an absence of any requirements that the measures at issue should be suspended over the dispute settlement period, the anti-dumping measures remained in effect throughout the announced 5-year period (DS479).

As far as the disputes initiated by Russia through the WTO are concerned, none of these has yet progressed through all the dispute settlement stages. Two disputes – one against the EU concerning the EU Third Energy Package (DS476), the other against Ukraine concerning anti-dumping measures against imports of ammonium nitrate (DS493) – undergo the stage of 'panel report under appeal'.

As a third party, Russia usually joins the disputes focused on the products of metallurgy, agriculture, the food industry, the automotive and aircraft industries, renewable energy sources, and lumber and wood products. Special focus is made on those disputes that address anti-dumping investigations and the resulting anti-dumping measures. Russia's participation as a third party can be explained not only by a strong trade-related interest, but also by the need to gain practical experience of settling a dispute, as well as a systemic interest in the procedures governed by the norms and rules of the WTO.

Russia's role as a third party is usually motivated by:

1) *significant trade-related interests* (for example, on April 10, 2015 China lifted the anti-dumping duties on imports of grain oriented flat-rolled electrical steel ('GOES') from the USA and Russia (DS414));
2) *practical experience of participating in disputes addressing specific themes* (in particular, anti-dumping, countervailing and safeguard measures, and underlying investigations);
3) *systemic interest in the implementation of norms and rules of the WTO* (in the framework of WTO Agreements. The most recent examples are the disputes initiated by the USA and Australia against Canada concerning measures governing the sale of wine in grocery stores (DS531 and DS537);
4) *sometimes Russia sides with the respondent* (as a rules, with respect to issues of human and animal health protection). Examples: the disputes initiated by Canada and Norway against the EU concerning measures prohibiting the importation and marketing of seal products (DS400 and DS401); the disputes initiated against Australia concerning trademark restrictions and other plain-packaging requirements for tobacco products (DS441, DS458 and DS467).

For Russia, it is extremely important to assume a correct standpoint and apply correct tactics in the framework of disputes handled by the WTO in order to develop mutually beneficial trade consistent with the norms and rules of the WTO, while protecting Russia's own interests. It is essential to use to good advantage the WTO's dispute settlement mechanism. Besides, another relevant aspect is Russia's reputation as a reliable and responsible trade partner and WTO member. One more highly disputable issue that has recently gained in importance is the potential reform of the WTO, and in particular its dispute settlement mechanism (for example, the appointment of the Appellate Body). Russia should follow the course of development and preservation of the WTO as the main plurilateral floor for settling international trade issues, including the WTO's dispute settlement mechanism, and further increasing the transparency of its procedures governing international trade.

4.8. Decomposition of economic growth in the Russian Federation through 2024[1]

In 2018, the growth rate of GDP in Russia (2.3 percent) represents a record high of per annum economic growth rate since 2012. This year-end result is notably above the estimates offered by a majority of international financial organizations (the IMF, World Bank, the OECD), as well as by Russian banking analysts and experts. The volume of GDP in nominal terms surged above RUB 100 trillion, to RUB 103,626.6 billion (or approximately USD 1,657 billion when recalculated at the annual average RUB-to-USD rate). Growth was also displayed by most of the basic indicators: thus, the industrial production index in 2018 gained 2.9 percent, freight turnover – 2.9 percent, retail trade turnover – 2.6 percent. Special note should be made of the movement pattern of fixed investment: according to preliminary estimates released by *Rosstat*, its annual growth index amounted to 4.3 percent. Considering the fact that, in 2017, the amount of fixed investment in constant prices increased by 4.8 percent, it can be said that over the period 2017–2018, the investment sphere indeed experienced intense growth; however, the main contribution to that growth was made either by budget-funded investments (the completion of building construction projects in preparation for the World Cup; the construction of the bridge to the Crimea; the Sabetta Airport and Seaport; and infrastructure in the city of Moscow), or investments by state-owned companies (Nord Stream 2 natural gas pipeline; Yamal LNG; etc.)

At the same time, the RF Ministry of Economic Development explains the fact of GDP growth in 2018 by the impact of 'one-time factors'[2], and is still oriented, in its forecast, to a slowdown in the economic growth rate in Russia in 2019 to 1.0–1.3 percent (depending on a particular scenario).

In order to assess the current situation in the Russian economy and the potential for achieving the established development targets, we analyzed the year-end structure of GDP growth rate for 2018. For this purpose, we applied the methodology for decomposition of GDP growth adapted to Russia's conditions[3,4], which analyses the observed GDP growth rate as a combination of the structural, foreign trade and cyclical components. The structural component is responsible for long-term GDP growth rate and is determined by the movement patterns of fundamental production factors: labor, capital, total factor productivity. The foreign trade component is shaped by the fluctuations of a country's trade conditions, and in the case of Russia, it closely

[1] This section is authored by: S. Drobyshevsky, Gaidar Institute, RANEPA; P. Pavlov, RANEPA.
[2] https://www.rbc.ru/economics/13/02/2019/5c6378929a79471f926430ef
[3] Drobyshevsky S.M., Idrisov G.I., Kaukin A.S., Pavlov P.N., Sinelnikov-Murylev S.G. Decomposition of Russian GDP growth rates in 2007–2017 and forecast for 2018–2020. // Voprosy Ekonomiki. 2018. No 9. P. 5–31.
[4] The methodology is based on decomposition of GDP across the OECD, see Giorno C., Richardson P., Roseveare D. and van den Noord P. 1995. Estimating Potential Output, Output Gaps and Structural Budget Balances. OECD Economics Department Working Papers. No. 152. OECD Publishing, Paris.

correlates with the global prices for tradable raw materials: oil, natural gas, metals, etc. The cyclical component is the sum of domestic business cycle and accidental shocks.

Because the methodology for GDP decomposition applied in our study is sensitive to the specificities of a selected estimation period, the estimates based on the observations pertaining to the last few years, which are also those most relevant for our analysis, may be not quite correct, and they are often adjusted at a later date, when the macroeconomic time series are extended[1]. So, we need to plot certain economic development scenarios for several years forward. For this study, we applied the RF Ministry of Economic Development's socioeconomic development forecast for the period until 2024, which was included in the package of documents attached to the draft Federal Law 'On the federal budget for 2019 and the planning period 2020–2021'.

The forecast has been prepared in two versions (conservative and baseline). Under the baseline scenario, as said earlier, the growth rate in Russia's economy in 2019 is expected to amount to 1.3 percent relative to the previous year. However, the slowdown in economic growth will be only temporary, and later on, as a result of the successful completion of national projects in the framework of the main directions of Russia's socioeconomic development and implementation of measures designed to boost investment activity, the rate of GDP growth will follow a higher trajectory, thus creating appropriate conditions for achieving the main goals outlined in Presidential Executive Order No 204 dated May 7, 2018 'On National Goals and Strategic Objectives of the Russian Federation through to 2024'. Thus, in 2020, Russia's GDP will gain 2 percent relative to the previous year, and then from 2021 onwards it will increase at a rate above 3 percent, rising in 2024 to the level of 3.3 percent.

The conservative scenario of Russia's economic development is geared to the conditions of a significant slowdown in the global economic growth rate triggered by China hard landing, and a resulting shrinkage of the demand for energy carriers and other raw materials, followed by a plunge of world prices for these types of goods. In particular, it is predicted that by 2024, world oil prices will decline to USD 45.9 per barrel vs. USD 53.5 per barrel under the baseline scenario. As the forecast's authors have emphasized, the current macroeconomic policy followed by the government ensures that the domestic economy's parameters only rather weakly depend on the volatility of oil prices; however, if the conservative scenario should materialize, the source of negative effects for Russia's economy will become the low foreign demand for domestic exports.

For each of these scenarios, we did a scenario-based decomposition of the GDP growth rate for the period 2007–2024. *Fig. 39* shows the movement patterns of the structural, foreign trade and cyclical components under the RF Ministry of Economic Development's baseline scenario only, because the variance of values pertaining to the two scenarios is low, and the addition of the second scenario values does not fundamentally influence the final results of our analysis.

[1] Turner, D. et al. (2016). An investigation into improving the real-time reliability of OECD output gap estimates. OECD Economics Department Working Papers, No. 1294, OECD Publishing, Paris.

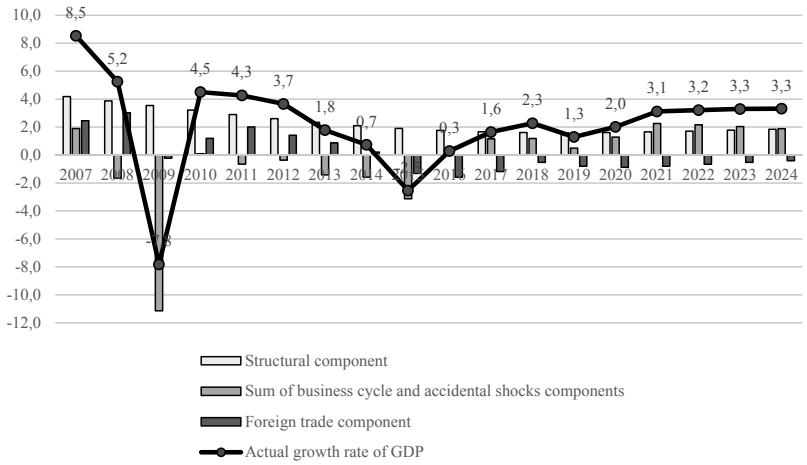


Fig. 39. Decomposition of the GDP rate growth over the period 2007–2024 (baseline scenario)

Sources: Rosstat; RF Ministry of Economic Development; own calculations.

As demonstrated by the graphs in *Fig. 39*, the biggest input in the growth rate of GDP in 2018 was made by its structural component, which we estimate to be gaining 1.6–1.8 pp. per annum, and which remains sufficiently stable throughout the entire period from 2016 through 2024. According to our estimations, the total factor productivity (TFP) was at its record low in 2015–2016, and then in 2018, the TFP index of Russia's economy roughly corresponded to its 2013 level (the year of a noticeable slowdown in the national economy, even in face of persistently high oil prices). Even under the baseline scenario of the Russian economy's development, the TFP index is not going to climb, by 2024, above its 2008–2009 level. The inputs of investment growth and fixed capital growth to the structural component's growth rate are almost totally offset by the decline in economically active population.

In spite of the rise, in 2018, of the average annual price of Urals to USD 69.6 per barrel from USD 53 per barrel in в 2017, oil prices are still staying below their multiyear average of the previous periods, and the input of the foreign trade component in the growth the of GDP in 2018 was negative (-0.5 pp.); however, the scale of the negative input of the foreign trade component over the course of last year was noticeably lower than in 2015–2017. It should also be noted in this connection that the cyclical component in 2018 remained at the same level as in 2017 (approximately 1.2 pp.), which is indicative of a persistent trend towards smooth cyclical economic growth.

Thus, the results of GDP growth rate decomposition demonstrate that in 2018, its growth was produced not by the combined inputs of one-time internal factors (as this must have translated into the acceleration of the cyclical component – or, due to the

methodology's shortcomings, that of the TFP index), but rather by the improving situation in global commodity markets. The movement patterns of the structural and cyclical components of GDP are rather smooth and compatible with the hypothesis of a slow but sustainable elimination, across the economy, of the consequences of the 2014–2015 crisis, and its adaptation to the conditions shaped by the imposed economic sanctions and the new (lower) hydrocarbon prices.

Since the RF Ministry of Economic Development, in its forecast, is oriented to a plunge in oil prices in 2019, and the current oil prices are indeed somewhat below their average annual index for 2018, the increasing negative input of the foreign trade component in the growth rate of GDP appears to be quite logical; however, for the rate of economic growth to plunge to the level of 1.0–1.3 percent, as seen from *Fig. 39*, a substantial slowdown of the cyclical component will be necessary (because the cyclical component of growth can be considered to be sufficiently stable, it could probably become slower only in response to some serious external and internal negative shocks), or a reversal of the current trend in the structural component's movement pattern (the TFP index, because the capital and labor force movement patterns are largely driven by inertia). In absence of such negative shocks on the part of its cyclical or structural components, the GDP growth rate in 2019 will remain within the range of 1.7–2.0 percent.

For the purpose of our analysis of the current situation in the Russian economy relative to its potential growth pattern, we estimated the output gap for GDP (*Fig. 40*). The output gap is understood as the difference between the actual GDP (projections for 2019–2024) in constant prices from structural GDP, i.e. the hypothetical GDP value calculated on the basis of its structural growth rate data derived by means of decomposing the GDP growth rate. So, the output gap increases (and shifts to positive zone) if the current rate of GDP growth (including its foreign trade and cyclical components) is higher than the structural rate of growth; and vice versa, it shrinks and moves to negative zone if the current rate of GDP growth in response to the negative inputs of its foreign trade and/or cyclical components plunges below the structural rate of growth.

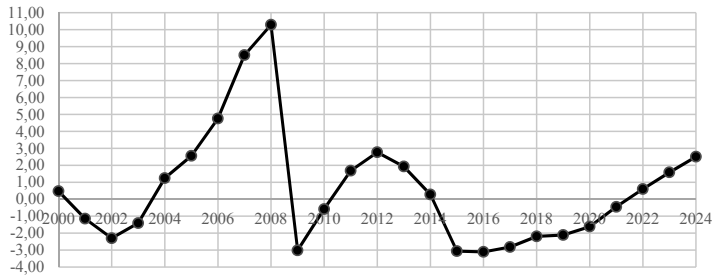


Fig. 40. The output gap in 2000–2024 (as percentage of GDP, baseline scenario)

Source: own calculations.

As seen from *Fig. 40*, from 2015 onwards the Russian economy has been demonstrating a negative output gap (in spite of a slowdown in the structural growth rate), and the output index of the national economy is approximately 2.0–3.0 percent below its potential value. In such a situation, the government policy appears to be quite logical, and primarily the budgetary policy, which aims at increasing budget-funded investments and promoting the investment activity of state-owned companies subordinated to development institutions and companies with controlling state stakes.

In accordance with the RF Ministry of Economic Development's baseline scenario, the negative output gap is expected to completely disappear in 2021–2022 – that is, during the first few years after the Russian economy has achieved its desired rate of growth not lower than 3.0 percent per annum. In 2022–2024, the output gap is to become positive, and then to promptly increase to 2.5–3.0 percent, which is comparable with the situation in 2011–2013 when the Russian economy began to rapidly lose its external and internal competitive capacity due to the quickly depleting growth factors and the increasing domestic production costs. However, the output gap will become totally different in nature: in 2011–2013, the economy overheating was caused by high prices for oil and other Russian exports, whereas in 2022–2024, in face of a moderate external situation, growth in the economy above the fundamentally substantiated values may occur only in response to positive phase of the business cycle. The latter is extremely sensitive to any increases in labor costs resulting from the unemployment rate decline below its natural level, deficit of investment resources in the domestic financial market (in conditions of externally imposed financial sanctions), low consumer activity, and so on. In other words, over the period 2022–2024 the Russian economy will be faced with a situation where, even if the growth rate is relatively low (below 3.5 percent per annum), any additional stimuli or accidental acceleration of economic growth (as a result of an unforeseen positive shock) may promptly translate into a noticeable 'overheating' and, consequently, into a sharp slowdown in the cyclical component growth rate and a threat of a new plunge of the growth rate of GDP below 3.0 percent.

The risk of rapid overheating of the economy can be avoided, and sustainable economic development with the growth rate of GDP not lower than 3.5–4.0 percent per annum ensured only through increasing the growth rate of the structural component. It is obvious that over the next 3 to 5 years, the long-term demographic trends will impose strong constraints on the labor market input in the structural growth rate, and it is unlikely that alongside the continuing financial and economic sanctions the growth rate of fixed investment may rise above its target index set in the baseline scenario of the RF Ministry of Economic Development and the indices applied in our calculations (6.5–8.0 percent per annum). So, the main factor capable of invigorating the structural component of economic growth rate in the Russian Federation over the period under consideration can only be the growth of total factor productivity, including a radical increase in the efficiency of government expenditure and the performance of state-owned companies, as well as the use of state-of-the-art technologies in boosting private entrepreneurial initiatives.

Section 5. Social sphere

5.1. The households' income, poverty and income inequality[1]

In 2018 real accrued wages and salaries of corporate employees increased in Q1 by 10.2%, by 7.6% in Q2, by 6.3 in Q3 and by 4.1% in Q4 against the same period of the previous year (*Fig. 1*). At the same time, real disposable cash incomes of households grew in Q1 and Q2, 2018, by 2.3 и 1.3% respectively against the same period of 2017 while in Q3 and Q4 they decreased by 1.6 and 1.1% against the same period of 2017[2]. Real allotted pensions increased in Q1-2, 2018, by 2.3–0.4% against the same period of 2017 and decreased by 0.5% in Q4.

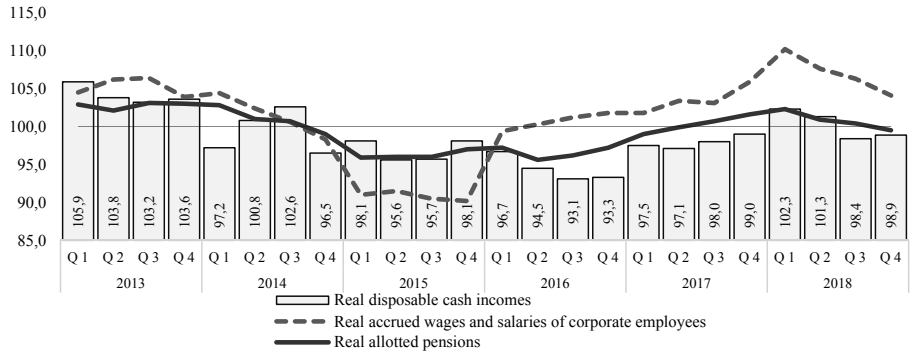


Fig. 1. Dynamics of real disposable cash income of households, real accrued wages and salaries and real allotted pensions in 2013–2018, % against relevant quarter of the previous year

Source: Rosstat.

[1] Sections 5.1–5.6 were written by: A. Burdiak, E. Grishina, M. Eliseeva, V. Lyashok, T. Maleva, N. Mkrtchyan, E. Seredkina, Y. Florinskaya, R.Khasanova all from RANEPA.

[2] In Section 5.1 real disposable cash incomes of households for 2017 and 2018 do not include a lump-sum amount of RUB 5000 paid to pensioners in January of 2017.

On the whole, incomes of households and pensions amounted respectively to 100.1 and 100.8% in real terms in 2018 against 2017 and decreased respectively by 10.8 and 5.2% against 2013 (*Fig. 2*). However, real accrued wages and salaries of corporate employees increased by 6.8% in 2018 against 2017and by 2.0% against 2013.

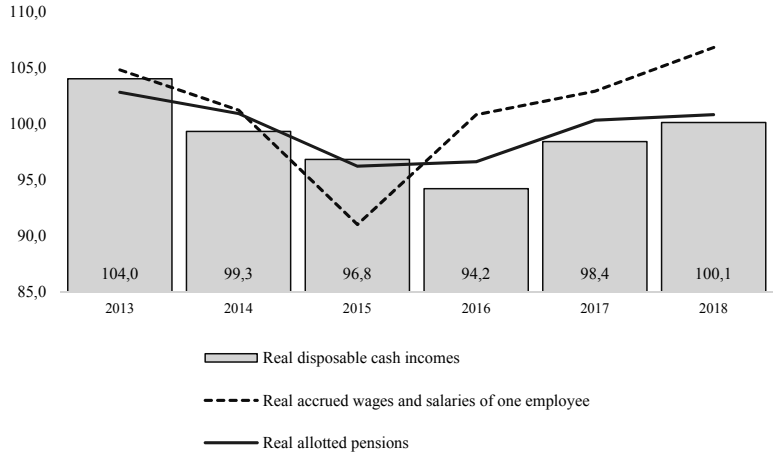


Fig. 2. Dynamics of real disposable cash income of households, real accrued wages and salaries and real allotted pensions in 2013–2018, % against previous year

Source: Rosstat.

A gap in the dynamics of real accrued wages and salaries of corporate employees and real incomes of households can be explained by re-allocation between observable and unobservable payroll fund in favor of the observable one, probable reduction of real accrued wages and salaries in unobservable sector and reduction of enterprneirial and property income in real terms.

Cash incomes of households amounted to 286–310% of subsistence minimum for all households in Q1-Q3, average wages and salaries of corporate employees amounted to 370–394% of subsistence minimum for working population and average allotted pensions were 155–161% of subsistence minimum for pensioners (*Fig. 3*).

Cash incomes of households increased in H1 2018 with regard to subsistence minimum (SM hereunder) compared to the same period of 2015–2017, however, remained below level of 2013–2014. However, they decreased in Q3 against SM compared to 2013–2016.

Average pensions increased in January – September 2018 against SM compared to 2015–2017 but remained below level of 2013–2014.

At the same time, average wages and salaries of corporate employees increased in January – September 2018 against SM of the same period of 2013–2017.

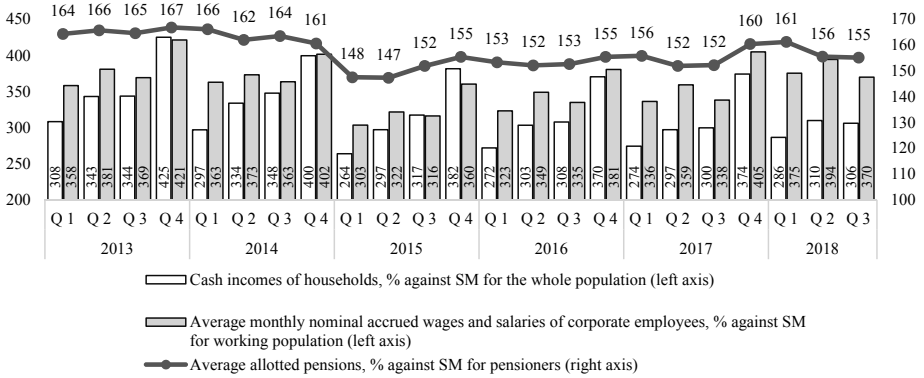


Fig. 3. Cash incomes of households, average monthly nominal accrued wages and average allotted pensions in 2013–2018, % against subsistence minimum

Source: Rosstat.

Shares of labor remuneration including off-the-book wages and social payments increased in the structure of cash incomes of households in 2018 compared to 2015–2017 while share of property and entrepreneurship incomes reduced (*Fig. 4*).

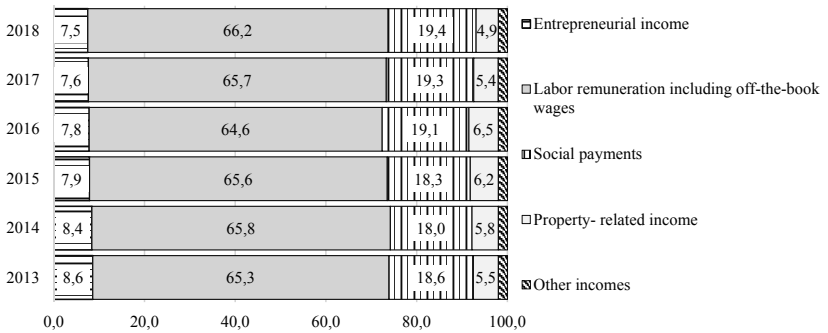


Fig. 4. Structure of cash incomes of households in 2013–2018, %

Source: Rosstat.

The share of cash income spent on goods and services constituted to 76.9% in 2018, which was above the level observed in 2013–2017 (*Fig. 5*). The share of cash income allocated towards savings amounted to 5.5% in 2018, which was minimal since 2009. The decline of this share resulted, inter alia, from growth of retail loan indebtedness.

According to RF Central Bank data, retail loan indebtedness increased by 22.8% in 2018 compared to just 13.2% in 2017.

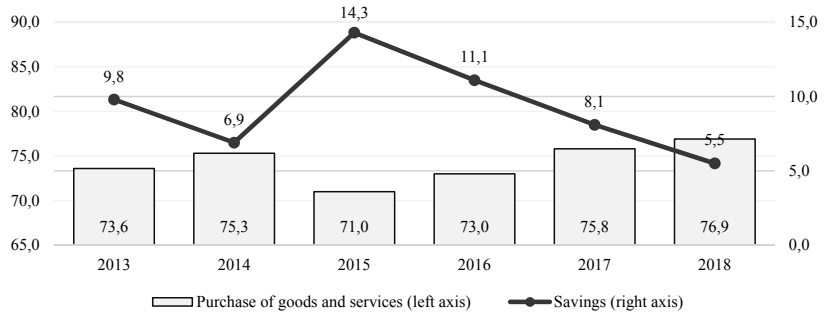


Fig. 5. Share of cash income of households spent on goods and services and allocated towards savings in 2013–2018, %

Source: Rosstat.

Thus, in 2018, in conditions of extremely low growth of cash income population applied for loans to maintain consumer standards.

Findings released by Rosstat survey on consumer expectations demonstrated that proportion of people who considered situation for purchasing major goods as favorable, increased in H1 2018 compared to the same period in 2015–2017, whereas those who thought that this situation was not favorable, decreased, on the opposite (*Fig. 6*).

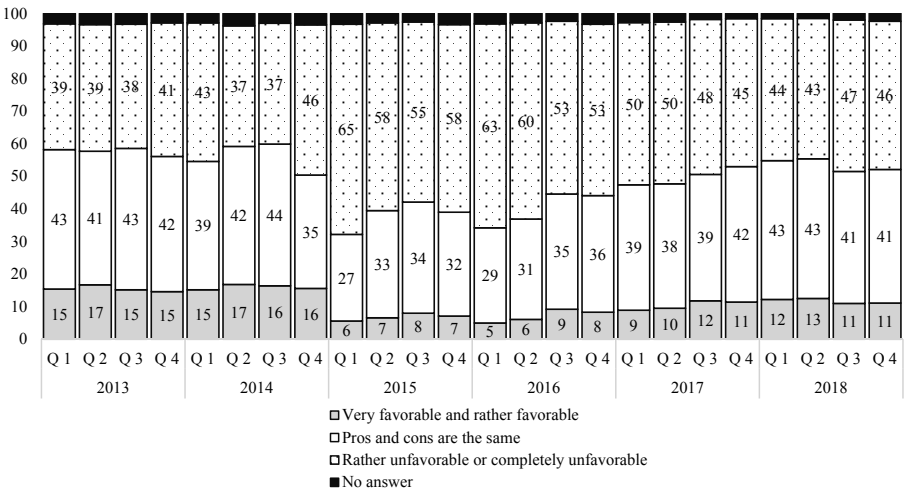


Fig. 6. Popular opinion on favorable period for major purchases in 2013–2018, %

Source: Rosstat.

Moreover, the share of households considering favorable situation for making savings increased in H1 2018 compared to the same period in 2015–2017 while the number of those who thought the opposite, reduced (*Fig. 7*).

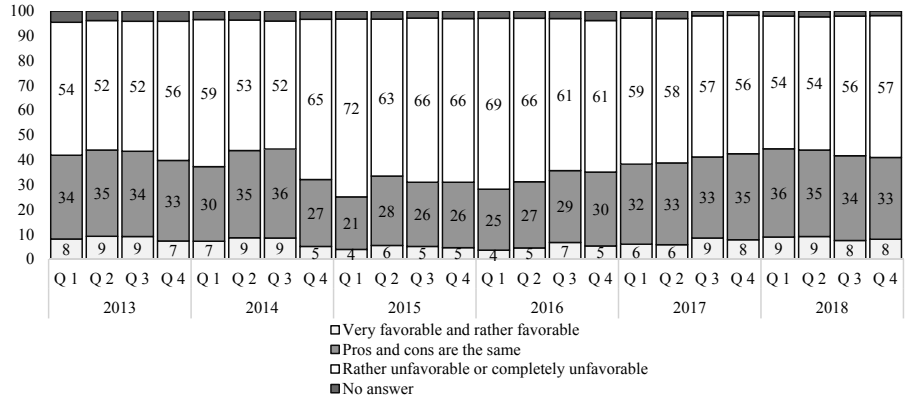


Fig. 7. Popular perceptions on favorable situation for making savings in 2013–2018, %

Source: Rosstat.

The share of households possessing cash income below subsistence minimum amounted to 12.9% in Q3 and reduced against the same period of 2017, however, remained higher than in 2013–2016 (*Fig. 8*).

On the whole, level of absolute monetary poverty of households amounted to 13.3% in January – September 2018, which was lower than in cthe same period of 2015–2017, however, higher than in 2013–2014.

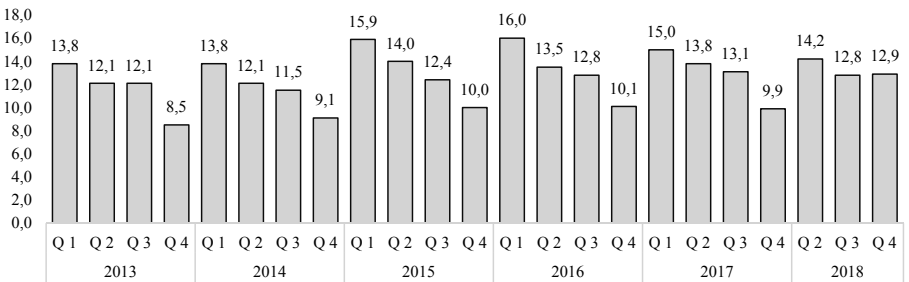


Fig. 8. Share of households possessing cash incomes lower than subsistence minimum across Russian Federation in 2013–2018, %

Source: Rosstat.

In 2018, share of subjectively poor households evaluating their financial situation as "bad" or "very bad" amounted to 23–26% and reduced compared to 2015–2016 (*Fig. 9*).

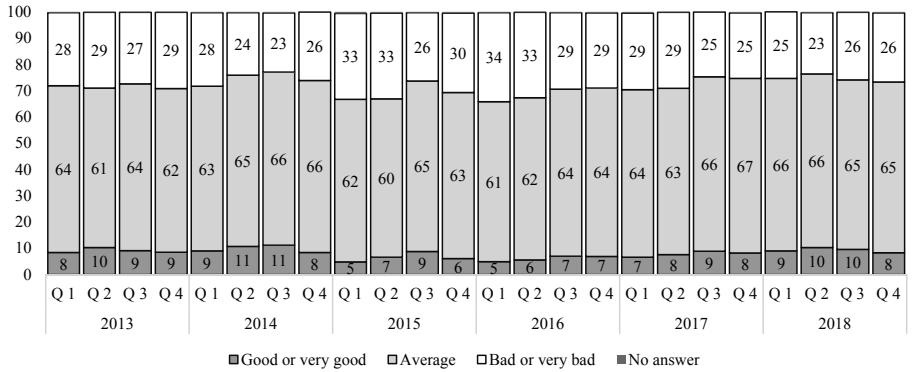


Fig. 9. Popular perceptions on current financial situation in 2013–2018, %

Source: Rosstat.

R/P ratio and Jinny ratio prove that level of income inequality has not changed in 2018 against 2017 and remained lower than in 2013–2016 (*Fig. 10*).

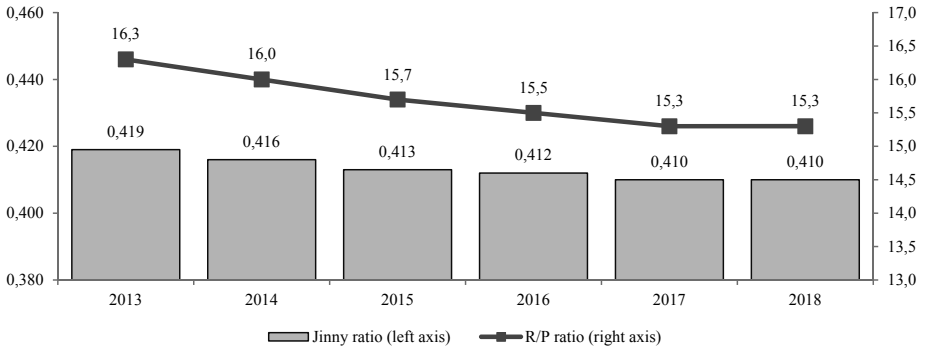


Fig. 10. Jinny ratio and R/P ration, 2013–2018

Source: Rosstat.

5.2. Retail trading and consumer prices

The turnover of retail trading amounted to RUB 31.5 trillion in 2018 in monetary terms. However, traffic of goods increased by 2.6% against 2017 including growth of food products, drinks and tobacco by 1.7% and non-grocery goods by 3.4%. Thus, it is obvious that growth of goods' traffic commenced in 2017, is going on. Moreover,

according to results of 2018, growth of retail trading turnover can be compared with indicators of 2014, i.e. one may speak about rollback to pre-crisis figures. Again, one can mention that role of food products including drinks and tobacco has significantly increased in 2018 against 2014 when growth of commodities turnover was secured primary at the expense of non-grocery goods (*Fig. 11*).

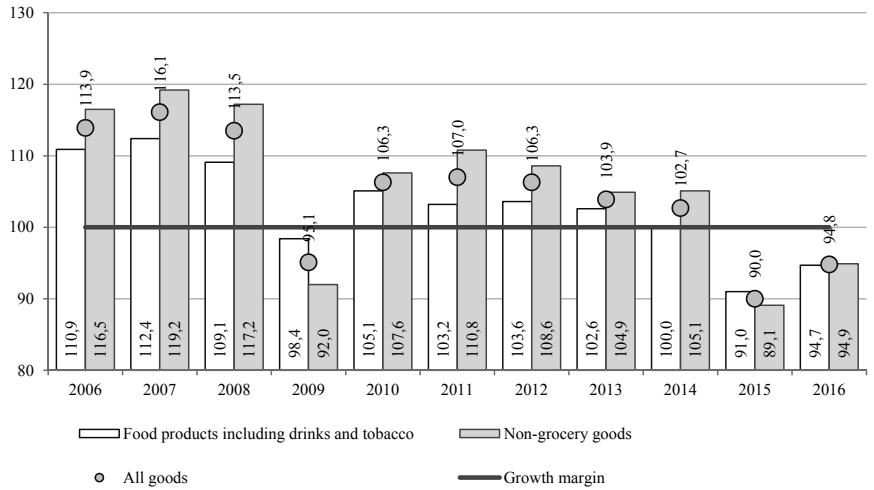


Fig. 11. Dynamics of retail trading turnover in comparable prices, % against previous year

Source: Rosstat.

If comparison concerned two-year period, when increase of retail trading turnover demonstrated negative value, i.e. 2015 and 2016, one can state that turnover grew by 3.8% within two years in comparable prices against 2016 including growth of food products, drinks and tobacco by 2.2% and non-grocery goods by 5.4%. However, turnover of retail trading basically reduced by 1.6% even against the pre-crisis 2015 and by 3.2% for food products including drinks and tobacco, although it remained stable for non-grocery goods.

Making a comparison against pre-crisis 2014, it is obvious that indices of that year have not been achieved and turnover of retail trading reduced by 0.4% in comparable prices, which can, however, be explained by reduction of turnover for food products by 2.7%. At the same time, turnover of non-grocery goods increased by 1.9%. In 2019, it may be expected that turnover of retail trading will get around pre-crisis values or even exceed them.

Fig. 12 shows monthly dynamics of retail trading with regard to respective period of the previous year in comparable prices. It is evident that turnover of retail trading grew during previous year. However, turnover of food products, drinks and tobacco declined

from June to September and decline of non-grocery goods started in October and by January 2019 its index was below food products.

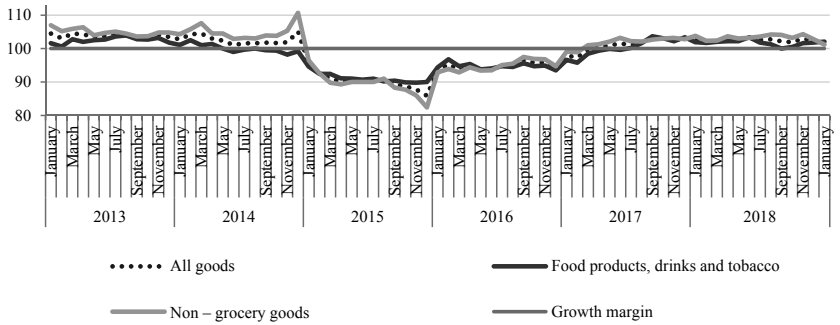


Fig. 12. Monthly dynamics of the retail trading turnover including its components in comparable prices, % against respective month of the previous year

Source: Rosstat.

The turnover of retail trading amounted to RUB 2.5 trillion in monetary terms in January of 2019 or 101.6% in comparable prices against January of the previous year. Growth of food products, drinks and tobacco accounted for 102.1% in January 2019 compared to 100% in September 2018. Growth of non-grocery products reduced to 1.2% in January, though it was still positive.

Turnover of retail trading and their both components was positive in comparable prices with regard to January 2019, i.e. the index exceeded 100% for eleven month in a row.

Turnover of retail trading increased by 2.4% against January 2015. It happened, first of all, due to 4.1% growth of non-grocery segment, although growth of food products including drinks and tobacco was also going on. Thus, January 2019 was the first month since December 2016 when the index of retail trading turnover including their both components, were positive.

However, turnover of retail trading reduced almost by a quarter for food products, drinks and tobacco as well as for non-grocery goods in January of this year against December 2018. This fact can be easily explained by peak in consumption on the eve of New year festivities, which goes sharply down afterwards.

The structure of the retail trading turnover changes insignificantly over time: non-grocery goods constitute slightly more than half since the beginning of 2013 and, consequently, slightly less for food products, drinks and tobacco. In January 2019, the ratio was 51.7% (RUB 1.3 trillion in monetary terms) and 48.3% (RUB 1.2 trillion) respectively. On the whole, the 2018 turnover of non-grocery goods amounted to 52.4% (RUB 16.5 trillion) and 47.6% (RUB 15 trillion) for food products, drinks and tobacco.

Index of consumer prices constituted 105% in February 2019 against respective period of the previous year including 105.5% for food products, 104.5% for non-grocery goods and 105% for services. Thus, prices increased for every component of the turnover of retail trading in a year terms (*Fig. 13*).

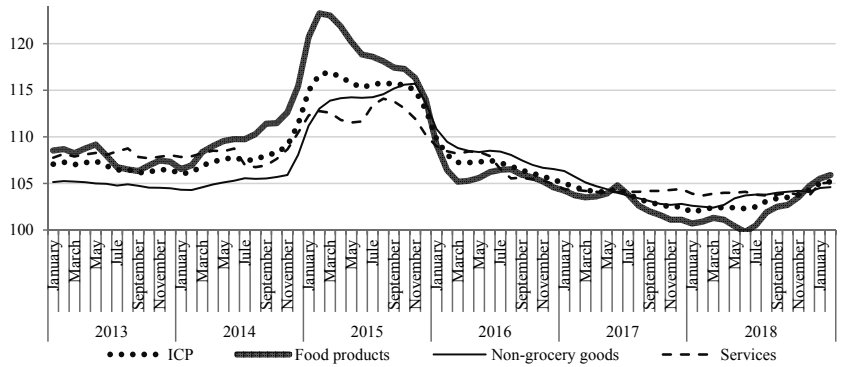


Fig. 13. Overall index of consumer prices (IPC), price indices for food products, non-grocery goods and services, % against respective month of the previous year

Source: Rosstat.

Food products that experienced the largest increase in prices by February 2018 in a year terms were granulated sugar, i.e. by 30.2%. Chicken eggs were in the second place although their price increased much less, i.e. by 20.5%. Meat and poultry increased by10.8% and horticulture products by 9.1%. Other categories of food products experienced the rise within 1.5–6.7%.

Prices reduced for several categories of food products this February compared to the previous month, January. Prices reduced for chicken eggs (-5%), granulated sugar (-1.1%), meat and poultry (-0.6%), sunflower oil (-0.3%). Horticulture produce experienced the largest increase in prices (4.9%). It is related, first of all, to rise in prices for tomatoes by 16.6%, cucumbers by 14.8%, white cabbage by 8.4%, yellow onion by 5%. Prices for other categories of products increased by 0.5–1.6%.

The largest increase in prices in the category of non-grocery goods concerned tobacco in a year terms, i.e. 9.9% and car petrol, i.e. 9.6%. Construction materials, medical supplies, electric goods and other home appliances, washing and cleaning products, knitwear, shoes, clothes and underwear, textile have also become more expensive, i.e. by 1.8–5.8%. Only TV and radio goods d reduced in prices (-1.1%).

5.3. Loans and savings of households

The year 2018 was a record year for mortgage credits. The total number of 1.47 mn mortgage credits for the amount of RUB 3 trillion was granted in 2018 exceeding 2017 in quantity by 35.4% and in volume by 49%. Growth of mortgage was contributed,

firstly, by accumulated unrealised demand of the Russian families in residential property in the previous years, and, secondly, by gradual reduction of rates to the historical minimum 9.41% on loans granted in September-October and to 9.56%[1] in general for 2018, and, thirdly, by prospects of the VAT growth and switch to escrow accounts for financing new construction in 2019. Mortgage loans constitute 99.7% among residential loans in quantity and 99.8% in volume, proving that current residential loans in the Russian Federation are represented by mortgage loans almost completely.

Role of residential lending is increasing in loans issued to households. In 2017, such loands constituted 22% of the volume of banking loans granted to households, larger than within all previous years under observation while the share of residential mortgage lended loans achieved 24.2% following results of 2018 (*Fig. 14*). Households indebtedness to banks was secured by 43% of mortgage (dwelling) in 2017 and by 43.3% at the end of 2018. Auto loans constitute almost the tenth of loans banking portfolio. As compared with 2017, the volume of auto loans increased from RUB 713 to 817 billion and their share decreased from 10.3 to 9.7% of the total households loan debt.

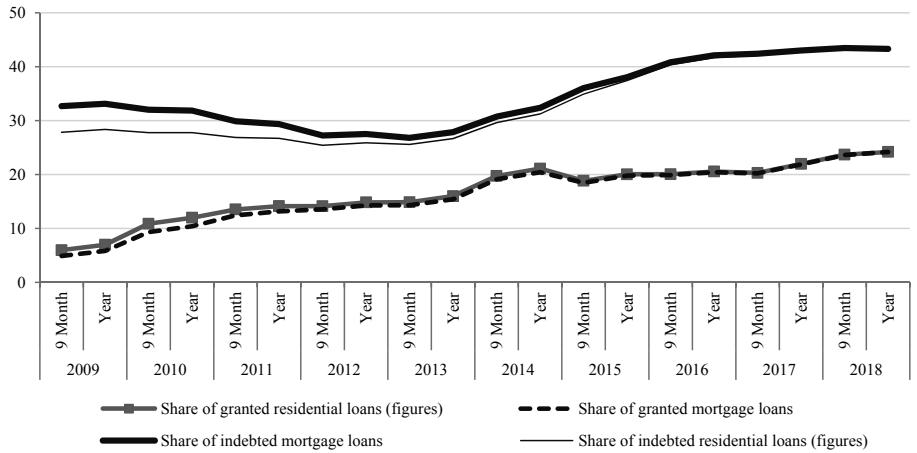


Fig. 14. Role of residential mortgage lending in issuing loans to households and in the amount of individuals' debt on loans to banks,%

Source: own calculations using data released by Bank of Russia.

Dynamics of mortgage and non-mortgage lending of households differs significantly and this is absolutely predictable as there are different rates, terms, lending conditions in these sectors of lending. The most important factor that they have different sensitivity against economic situation. Indebtedness of households on all loans decreased by 6% as

[1] Annual weighted average rate.

a result of recession in granting consumer non-residential loans by 14% in 2015 despite growth of residential lending by 13% (*Fig. 15*). In 2016, decline in non-residential lending extended for another 5%, however, residential lending grew by 13% per year, remainin the overal driver of consumer loans.

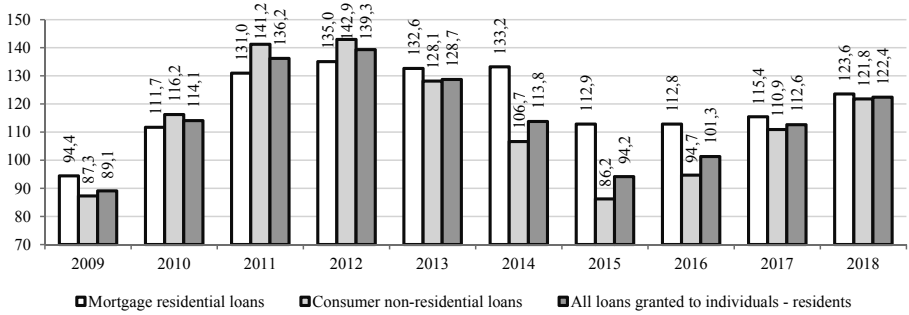


Fig. 15. Growth of households' indebtedness on residential and non-residential loans, % against previous year

Source: own calculations using data released by Bank of Russia.

Non-residential lending actively increased in 2017 though at lower pace than mortgage, and in 2018 growth of individual indebtedness on non-residential loans constituted 21.8% against previous year having almost catching up with growth rates of residentil lending, i.e. 23.6%. it should be noted that growth on auto loans was lower in 2018, 14.6% against 2017. A deeper retrospective shows that increased rate of nominal indebtedness of households on loans reached 35–40% in 2011–2013, however, at that time non-residential lending developed faster than mortgage in contrast with the recent years.

In 2018, banks issued a record amount of RUB12.5 trillion to individuals (*Fig. 16*) while a year ago in 2017 individuals lended RUB 9.2 trillion. Amount of loans issued in 2017 reached the level of 2013 in nominal terms, however, the pre-crisis level was reached only now against annual households incomes: amount of credit loans issued in 2018 equaled to 21.6% of the annual households incomes (previous maximum constituted 19.7% in 2013.). Practically every loan to individuals is issued in the national currency nowadays.

Total loans debt of households reached RUB 14.9 trillion based on the 2018 results (*Fig. 17*). The amount of RUB 757.6 billion, i.e. 5.1% of this debt represented loan arrears as on January 1, 2019. Loan arrears on mortgage reduced to 1.1% of the total debt of households by the end of 2018 compared to 1.7% in the middle of the 2016 crisis. Mortgage crediting was and still is the most performing loan issued to households.

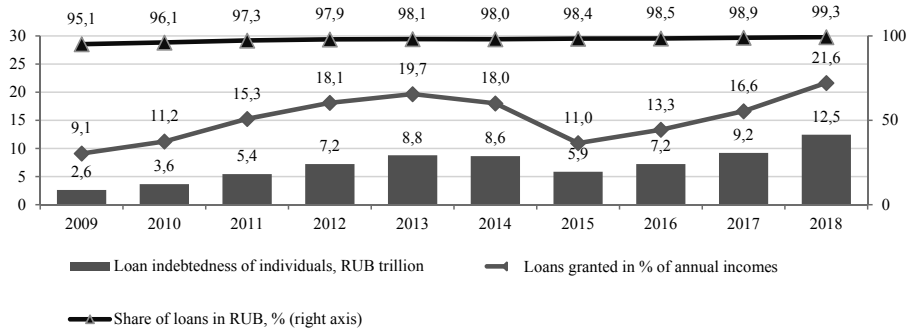


Fig. 16. Amount of loans granted to individuals

Source: own calculations using data released by Bank of Russia.

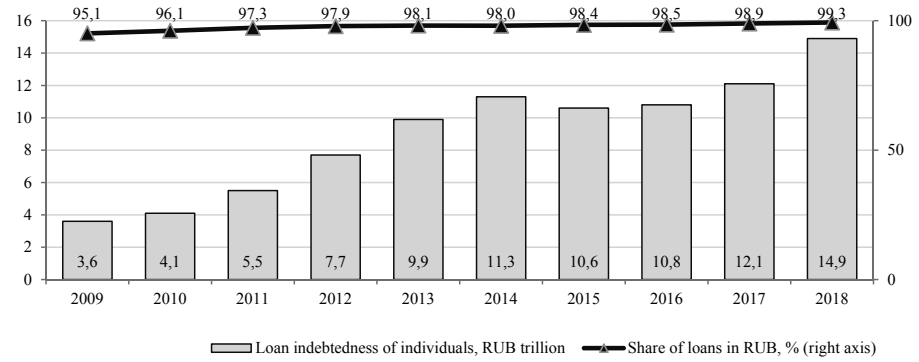


Fig. 17. Loan indebtedness of individuals at the year end

Source: own calculations using data released by Bank of Russia.

Households banking deposits have also increased in nominal terms in 2018. Amount of individual deposits reached RUB 28.6 trillion including 6.2 trillion or 21.8% of these financial means in foreign currency and precious metals (*Fig. 18*). Share of foreign currency deposits reached its maximum at the end of 2015, i.e. 29.7% of total deposits.

Thus, growth of deposits as well as of households debts on loans was observed in recent years in nominal terms. Which indicator grew faster: deposits or debts? In 2010, amount of deposits exceeded loan debts by 2.41. (*Fig. 19*). Then, crediting grew more intensively and the said proportion reduced to 1.65 in 2014. Further dynamics turned to saving behaviour by households: by 2016, this proportion increased and reached 2.26 times. Crediting grew faster than deposits in the last two years and proportion of savings

vs credits reduced. According to results of 2018, amount of deposits constituted 192% of individuals' loan debts corresponding to 2011–2012.

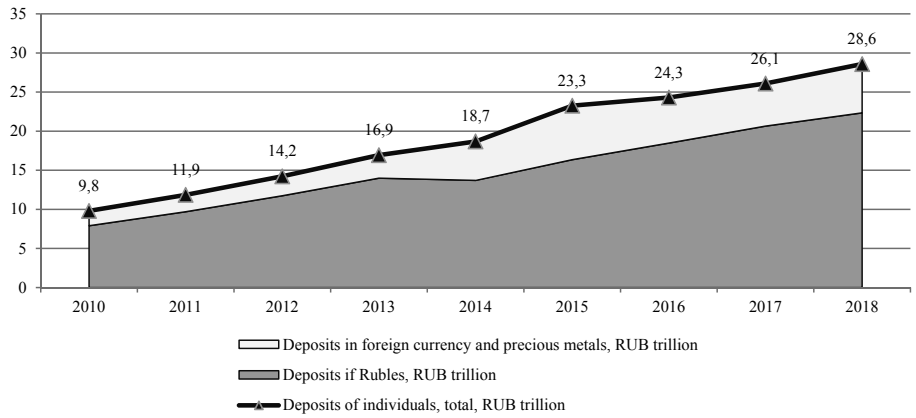


Fig. 18. Amount of individual deposits at the end of the year, RUB, trillion

Source: own calculations using data released by Bank of Russia.

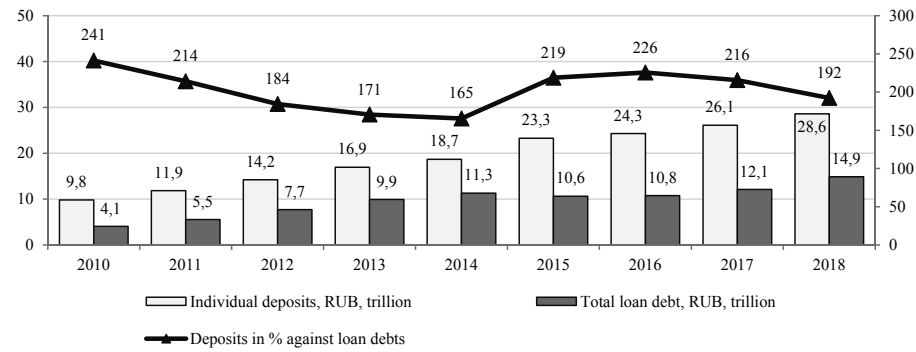


Fig. 19. Proportion of individual deposits vs households loan debt at the end of the year

Source: own calculations using data released by Bank of Russia.

Deposits grew against cash incomes during years under consideration. Deposits constituted 47% by the end of 2017 compared to 47% of the annual income of households and by the end of 2018 deposits reached practically half of the income, i.e. 49.7%. It signifies that deposits grew faster than incomes, which, in their turn, demonstrated decline or stagnation in the recent years in real terms (*Fig. 20*).

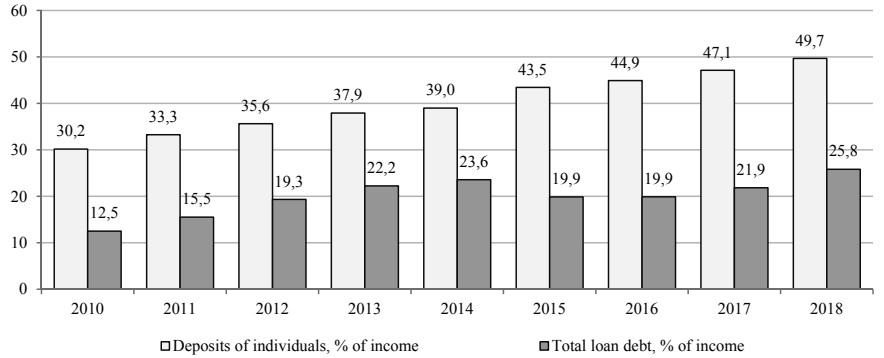


Fig. 20. Individual deposits and loan debts, % of cash households' annual income

Source: own calculations using data released by Bank of Russia and Rosstat.

Households loan debt increased against cash incomes. According to results of 2018, it was equivalent to 26% of the annual amount of households cash incomes, thus, exceeding pre-crisis margin. In 2017, it constituted 22% and was lower than in 2013–2014. Thus, new correlated records of loan debt and deposits were achieved in 2018 against stagnating incomes. Loan debt of individuals amount now to almost quarter of annual households deposits. At year-end, deposits of individuals exceed cumulative loan debt twice and correspond in fact to half of annual income of Russian households.

5.4. Dynamics of labor market

Significant reduction of labor force by 0.5 mn. people marked 2017 and had an essential impact on many other labor market indicators, however, this reduction practically stopped in 2018 (*Fig. 21)*. Number of economically active population constituted 74.9 mn.people in 2018 excluding Crimea, being only 0.1 mn. less than in 2017. However, number of working age people was declining but labor force participation rate significantly increased: by 0.5 pp in the first three quarters of 2018 among working age people and by 0.6 pp among over working age people[1]. Occasional engagement to labor market allows to moderate negative demographic trends for a long period of time and maintain the size of labor force at almost the same level. Although number of working age people was reducing since 2006 and has already reduced by eight mn.people, size of labor force is maintained at 75–76 mn.people. As a result, Russia is significantly outperforming most of the developed countries by level of engagement of principal working age population, i.e. 25–54 years old: this index accounted for 90.9% in Russia in 2018 compared to average 82.1% in the OECD countries[2].

[1] Data for a full year were not published yet as of this publication.
[2] Source: OECD-stat. URL: https://stats.oecd.org/#

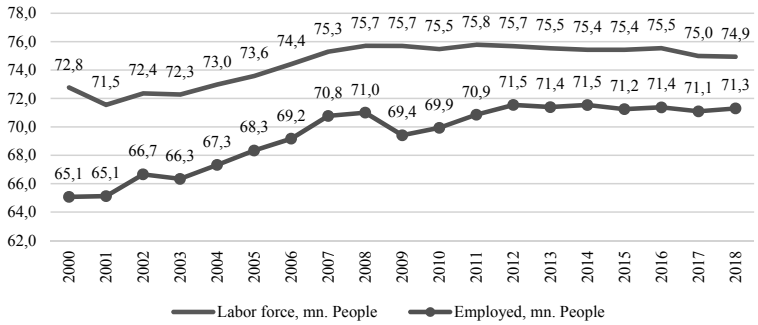


Fig. 21. Size of labor force and employed (excluding Crimea)

Source: Rosstat.

At the same time, number of employed people has even grown in 2018 by 0.2 mn. people. Such spheres as healthcare, extraction of mineral resources, administrative activity and other accompanying additional services experienced the largest growth. Rosstat include various services required for support of principal activity of enterprises in the latter type of economic activity: renting and leasing, travel and human resources agencies, etc. It is not feasible to define which activities experience the largest growth. Reduction was observed in construction, electric energy, process industries and public administration. Thus, share of different services is increasing in the structure of engagement against reduction of industrial share.

Unemployment reached its historical minimum in 2018: 4.8% (*Fig. 22*). Number of unemployed constituted average 3.7 mn. people over a year, lower by 0.3 mn. than in 2017. Russia is below majority of OECD countries according to this index while average index for these countries was 5.9%.

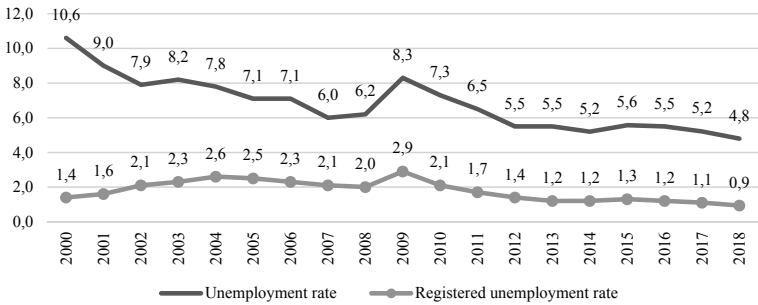


Fig. 22. Unemployment rates according to ILO methodology and registered unemployment, %

Source: Rosstat.

Reduction of unemployment rate and growth of engagement prove gradual economic growth resulted in the growth of labor force deficit. Other factors prove it as well. Firstly, according to surveys of industrial enterprises, the load on available labor force remains high[1], i.e. at the level of 2011–2014. Secondly, number of vacancies is growing in public employment agencies against reduction of unemployed people addressing them. In 2018, average load of unemployed people in the employment agencies was 53.8 people per 100 published vacancies presenting again a historical minimum according to this index. Thirdly, private employment agencies noted changes in the proportion of those looking for a job and vacancies. According to data of Headhunter, there were 5.7 active resume per one opened vacancy in 2018 at an average while in 2017 this number was by 15% higher[2].

However, part-time employment is increasing (*Fig. 23*) but its structure has slightly changed within the period that Rosstat provided data for: 2013–2018. The share of forced part-time employment slightly decreased to 3% in 2018 after achieving its peak of 3.3% of the average staff count in 2016[3]. Nevertheless, share of employees taking unpaid leaves is growing. On a par, 8% of all employees at large and medium enterprises took such leaves in 2018, which was by 1.4 pp higher than in 2013.

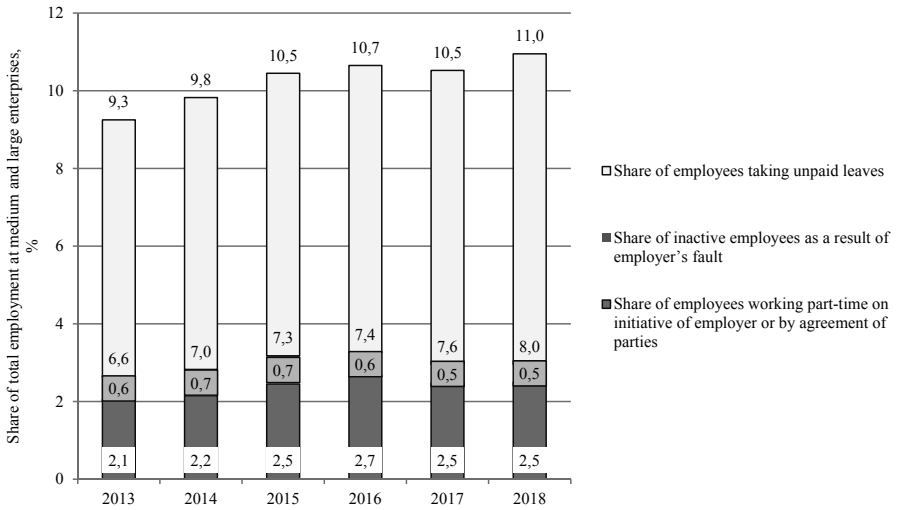


Fig. 23. Part-time employment at large and medium enterprises, % of total staff count at medium and large enterprises

Source: Rosstat.

[1] S.P. Aukutsionek et al. REB statistical data series//Russian Economic Barometer – 2018. – №. 2 (68).
[2] Source: https://stats.hh.ru/
[3] Forced part-time employment means that people worked part time on the initiative of employer or due to agreement of parties or were inactive due to employer's fault.

Unpaid leaves were most relevant for processing industries with 17.5% of all employees experiencing them in Q4 of the previous year, and also in construction (16.5%), hotel and restaurant business (14,5%). Although, such leaves are voluntory for the employee, one can suggest that in most of the cases, especially in the abovementioned industries, unpaid leave was forced on employees and imposed by employer. It also highlights the issues that enterprises operating in these industries face. Herewith, wages of employees taking such a leave are indicated in the statistical accounting of the organization based on their wages in the previous periods. It allows enterprises to maintain their wages and salaries fund unchanged in their statistical accounting.

In Q4 2017 and Q1 2018, growth of salaries and wages significantly accelerated (*Fig. 24*). As a result, average real salaries and wages increased by 6.8% in 2018 and for the first time exceeded level of 2014. Although decline of salaries and wages was rather short during the latest economic crisis, further growth was minimal and that is why average wages were below level of 2014 for a long period of time. Growth acceleration was associated by and large with two factors: on one hand, increase of minimum monthly wage (MMW), on the other hand, implementation of May 2012 Presidential Executive Orders striving to raise wages of public-sector employees in certain categories to target indicators stipulated by the Order.

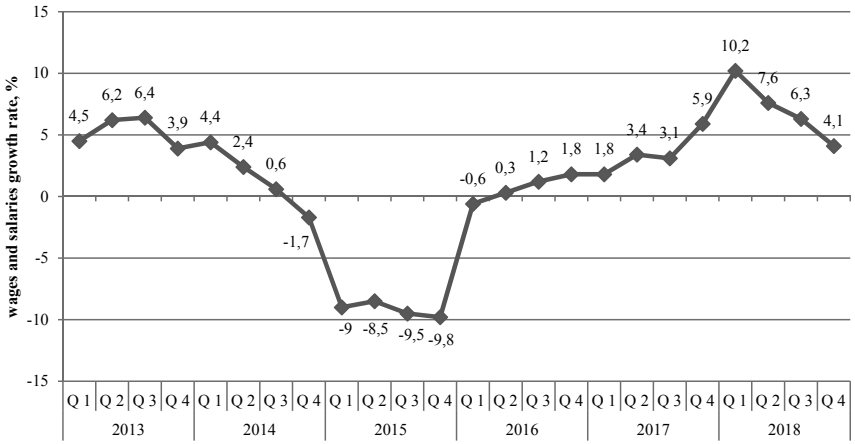


Fig. 24. Growth rate of real salaries and wages vs respective index of the previous year, %

Source: Rosstat.

Growth of MMW was caused not only by growth of its rate from RUB 7.800 to 11.163 on the federal level but also by reversion of legal framework, when this rate requires regional salary coefficients for employees working in the regions of Russia Far

North and neighbor territories. Thus, the largest growth of MMW was observed in northern regions, Siberia and Far East, Chukotka, Arkhangelsk region, Tyva, Khakassia, Primorsky region, Mountain Altay.

Implementation of May 2012 Presidential Executive Orders led to essential growth of salaries and wages predominantly in the public-sector areas: wages increased in healthcare by 23.7% in nominal terms, education by 14.2%, culture activities by18.9%. Growth was significantly lower in other areas, especially, in the extraction of natural resources (5.9%), public administration (6.1%), trade (6.3%).

Thus, labor market demonstrated reversion to pre-crisis tendencies in 2018: maintainance of employment volume practically unchanged as a result of growth of households economic activity and reduction of unemployment. Informal economy was growing while number of employed at large amd medium enterprises reduced. The most important changes in the labor market related to growth acceleration of salaries and wages in H1 2018, however, both factors of growth, i.e. increase of MMW and wages in public sector were initiated by state authorities, were artificial and not related with acceleration of economic growth or internal changes. Therefore, it is not surprising that swift growth of salaries was limited and signs of stagnation were visible by Q3. By December, growth of salaries and wages has pracically stopped along with acceleration of inflation.

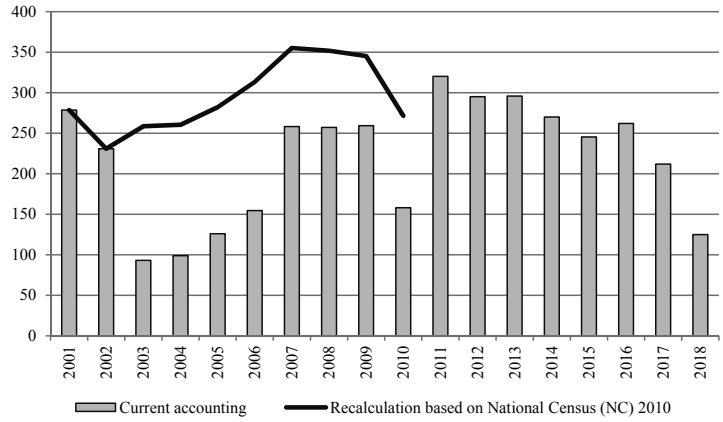
Pension reform and its short term impact on labor market shall not be overlooked. Transition period started in 2019 with increase of pension age. Men and women born in 1959 and 1964 whose pension age will be increased by six months, will be primarily affected by pension reform in its first year. This means that some people in these cohorts who intended to leave labor market at the onset of retirement age will be forced to remain for at least another six months. At the same time, according to Rosstat, only 34.7% stopped working in 2016 reaching retirement age, while majority worked much longer, on average, about five years more. According to our estimates, raising the retirement age will force 150–200 thousand people to remain in the labor market. This is relatively little; thus, number of people older than working age employed in the labor market increased by 400 thousand within 3 quarters of 2018. Thus, an additional influx of older population into labor market will correspond to the natural trend of growth in economic activity among senior population, at least during first years of reform.

5.5. Migration

5.5.1. Long-term migration

In 2018, number of international migrants arriving to Russia has slightly decreased compared to the previous year, however, number of departures significantly increased. As a result, net migration was far much lower than in 2017 and constituted 124.9 thousand people. This is the lowest index of Russia's migration gain in the current decade. Last time Rosstat registered migration gain below 150 thousand people in 2003–2005 (*Fig. 25*) and it was associated with a considerable underestimation of international

migration in Russia[1]. Measures on improvement of current accounting of international migrants taken by Rosstat in 2007and 2011 have practically liquidated main reasons of their underestimation and therefore, there is no reason to think that migration gain can be capitally corrected according to results of the forthcoming 2020 census.



Note: NC – National Census

Fig. 25. Migration gain in Russia, 2001–2018, thousand people

Source: Rosstat.

Data of the current accounting of the population turnover and migration show that migration compensated losses resulted from natural population decline only by 57.2% in 2018. In this decade, such a situation developed for the first time. Even in 2010, when natural decline was 241.4 thousand people, i.e. was higher than in 2018, migration compensated for these losses by 65.5%. Thus, after a long break, there was a population decline again in Russia in 2018.

Reduction of migration gain in the population of Russia affected exchange with almost all countries in 2018 (*Table 1*) and this is especially evident when compared with the beginning of the decade. Compared with the average annual data for 2012–2013, migration gain in the population of Russia has slightly increased only with Belarus (by 3.6%) and a slight decline (4.6%) was observed only in migration from Tajikistan. Migration growth with Kazakhstan fell by almost one third, with Azerbaijan and Armenia by more than half, Ukraine, Moldova and Kyrgyzstan by 60%. This reduction can be partially explained as a consequence of rising influx in 2014–2016 and the following growth of departures with certain lag against reversion of arrivals to pre-crisis level of 2012–2013 and only in case of Ukraine.

[1] Later on data were recalculated taking consideration results of 2010 census.

Table 1

Migration gain/decline in population of Russia based on international migration in 2012–2018, thousand people

	2012	2013	2014	2015	2016	2017	2018
International migration – total	294.9	295.9	280.3	245.9	261.9	211.9	124.9
With CIS countries, including:	268.4	274.9	270.2	237.8	255.3	203.4	129.1
Azerbaijan	18.1	17.2	12.4	10.7	10.4	8.6	8.7
Armenia	32	32.2	24	20.6	12	14	14.4
Belarus	10.2	3.7	6.8	4.9	2.1	11.8	7.2
Kazakhstan	36.7	40.1	40.8	34.8	37.1	32.7	26.5
Kyrgyzstan	24.1	19.8	15.3	10	11	19.4	8.8
Moldova	18.6	20.6	17.6	17.4	14.4	9.6	7.7
Tajikistan	31.4	33.6	19.4	11.4	27.3	34.6	31
Turkmenistan	3.9	3.8	2.6	2.3	2.4	2.9	3
Uzbekistan	56.3	67.3	37.1	-20.4	19.7	22.2	6.8
Ukraine	37	36.4	94.4	146.1	118.8	47.7	14.8
With other countries	26.5	21	10.1	8.2	6.7	8.4	-4.2

Source: Rosstat.

At the same time, migration from Ukraine maintained net migration in Russia on a standard level, 250–280 thousand persons in 2014–2016; migration gain would be below 200 thousand persons already from 2015 if sharp increase of Ukrainian migrants did not take place.

Migration gain with Uzbekistan has not recovered since its fall in 2014; in 2018, it amounted to only 31% of the previous year. Probably, lack of interest in migration to Russia for people of this country is associated with hope of positive changes in Uzbekistan. In 2018, Tajikistan became the main migration donor to Russia.

For the first time since 2007, Rosstat recorded decline in population of Russia due to migration with foreign countries. However, it is difficult to talk about changes in migration trends based on this information: accounting of migration with these countries is not reliable in Russia; departures are underestimated compared to data provided by major receiving countries.

Reduction of migration gain of the Russian population below 200 thousand people is not relevant to the targets of demographic development if they are understood as quest for long-term stabilization and increase in population. Migration gain of 250–300 thousand people would correspond to demographic situation expected in the coming years.

Number of migration increased by 160.8 thousand people in 2018 across Russia, or 3.8% compared to corresponding period of the previous year. After a sharp increase of long-term internal migration flows recorded by statistics in 2011–2012, number of migrations has practically stabilized in Russia recently at the level of 4–4.2 million people. Pattern of migration has not changed. New centers of attraction do not appear apart from existing ones in Moscow and Saint Petersburg and in their surrounding regions, Krasnodar region, Sevastopol, Tyumen region. Migration outflow from regions of Far East and Siberian Federal region is maintained despite measures taken towards its reduction.

5.5.2. Temporary migration

Statistics recording stay of temporary migrants in Russia has not changed much over the last 3 years. Records relevant to 2018 fluctuated in fact at the level of the previous year: in the first half, they were slightly lower than in 2017, and the second half, as from autumn, demonstrated, on the contrary, slightly higher figures. However, we still observe visible reduction compared to pre-crisis indexes, moreover, even the scope of 2015–2016 has not been achieved yet. Nevertheless, annual variation of the indicator remains, it demonstrates summer growth of temporary migration, which in 2018 also captured the autumn months. The peak was achieved late September – early October with 10.2 million. As of November 1, 2018, there were 10.1 million foreigners in Russia with 9.7 and 9.2 million at the end of 2018 and 2017 respectively.

Among temporary migrants predominant number of CIS citizens has not been changed. Thus, as of November 1, 2018 there were 8.49 mn. (84% of all arrivals) and 8.2 mn. At the end of 2018. Among leasers are citizens of Ukraine, Uzbekistan and Tajikistan (*Table 2*).

Table 2

Stay of foreign migrants from CIS in Russia, per date, number of persons.

	05.11.14	05.11.15	01.11.16	01.11.17	01.11.18
Azerbaijan	610327	532321	527615	597938	660314
Armenia	514663	504971	509070	507790	507557
Belarus	498878	634861	744653	699463	656815
Kazakhstan	575400	685841	607044	545852	545592
Kyrgyzstan	552014	526502	581197	619498	654892
Moldova	586122	517692	495463	448728	361397
Tajikistan	1105500	933155	964030	1037729	1155114
Uzbekistan	2335960	1943384	1671931	1793664	1961814
Ukraine	2651109	2566377	2590568	2217642	1987752
CIS, total	9429973	8845104	8691571	8468304	8491247

Source: data provided by Federal Migration Service and RF City Directorate of Internal Affairs of the Ministry of Interior.

Impact of the economic crisis and sharp changes of migration legislation in 2015 have been overcome only partially in the recent years. Initial growth of migration from EEU countries has practically stopped with Kyrgyzstan being the only exception. Number of migrants from this country is still growing and, apparently, the growth capacity has not been exhausted yet. Temporary migration from Azerbaijan rebounded. Migration from Tajikistan and Uzbekistan is growing, however, pre-crisis indexes have not been achieved yet. Compared to 2013, lagging behind is by 6% and 28% respectively. Significant reduction of temporary migration from Moldova is going on and the same concerned Ukraine in the last three years.

Russia did not attract more migrants from developed western countries and their number remains minimal compared to pre-crisis figures. Slight fluctuations in 2018 did not change common tendency (*Table 3*). Commercial and business trips slightly increased compared to 2017 but labor migration and official and private trips continue to reduce. On the whole, comparison with pre-crisis indexes demonstrate decline by 2.5 at an average and by 5-7 times in some countries, i.e. Spain, USA, Great Britain, etc.

Table 3

Stay of foreign citizens from certain countries of EU and USA in RF, per date, number of people

	13.11.13	01.11.15	01.11.16	01.11.17	01.11.18
EU on the whole	1177829	481567	516368	448566	462276
Germany	352335	122131	115425	111792	108591
Spain	77200	15864	15579	14337	16127
Italy	77193	30489	28244	24388	25761
Great Britain	174061	38637	29142	23944	23020
Finland	108312	46513	99065	73715	64819
France	65559	35968	29268	26963	30010
USA	220086	50638	52840	44370	46988

Source: data provided by RF Federal Migration Service and Central Department of Migration, Ministry of Interior.

At the end of December, 2018 there were 3.76 mn. labor migrants in Russia with 3.64 of them being citizens of CIS countries (97%), 125 thousand from foreign countries. Compared to 2017, the number of labor migrants increased by 4% and reached 3.61 mn. by the end of 2017. Number of labor migrants who officially designated their purpose of visit as "employment" has not changed much in recent years. Inside this category, there is a slight growth of labor migration from all CIS countries with the exception of Ukraine and Moldova; migrants from these two countries reorient more than ever to work in Europe.

Share of legalized labor migrants has not practically changed against previous year while earlier it showed gradual growth after sharp reduction in 2015. It does not benefit recent changes in migration policies and practices or depletion of capacity of those migrants who are in principle ready for legalization in the current situation on the Russian labor market. By the end of the year, about 75% of labor migrants had valid documents for work in Russia, i.e. patent or work permit or had the right to work without such documents being citizens of the EAEU member countries.

Statistics of new documents required for work in Russia does not show growth likewise compared to 2017, although figures are higher than the data for 2016 (*Table 4*). Moreover, the two times lag behind the peak values in document processing in 2014 has not been overcome yet.

Table 4

Work permits required for migrants to work in the Russian Federation

		2014 г.	2015 г.	2016 г.	2017 г.	2018 г.
Work permits for foreign citizens (FC)*		1334899	177175	133215	139595	120666
Including:	Work permits for qualified specialists (QS)*	158644	22099	14775	17333	19360
	Work permits for highly qualified specialists (HQS)	34225	41829	25469	21363	25845
Patents**		2379374	1779796	1492203	1658119	1649121
Total		**3714273**	**1956971**	**1625418**	**1797714**	**1769787**

* – issued since January 1, 2015 to FC from visa countries

** – issued since January 1, 2015 to FC from non-visa countries authorizing employment with individuals as well as with legal entities

Labor migrants participate more actively in regional budgetary replenishment. Thus, amount of patents exceeded RUB 57 billion in 2018 against RUB 51 billion in 2017. In

fact, these payments were made by migrants from Uzbekistan and Tajikistan reaching 88% of issued patents vs 86% in 2017. Year by, there are less Ukrainian citizens applying for patents, i.e. 7.9% in 2017 and 6.5% in 2018.

Results of 2018 in the area of labor migration prove conservation of all existed issues. New economic stimuli for mass attraction of more qualified migrants to Russia or at least expansion of donor countries did not appear. Migrants from developed western countries or such CIS countries as Ukraine and Moldova choose employment in Russia less often. At the same time, mechanisms required for legalization of labor migrants are stuck and do not allow to bring those who already take part in the Russian labor market out of shade.

5.6. Demographic situation

According to preliminary data provided by Rosstat, expected life expectancy accounted for 72.84 years old (67.66 for men and 77.87 for women), cumulative birth-rate equaled 1.97 per one woman in reproductive age.

Natural decline in population constituted 218.4 thousand people in 2018 in Russia[1] exceeding similar index of 2017 by 62.5%, i.e. 84 thousand people. Overall tendency of the natural increase/decline was similar to previous years (*Fig. 26*). However, monthly decline in population was more meaningful in 2018. In 2016–2017, increase was observed in summer months while in 2018 it was marked only in August.

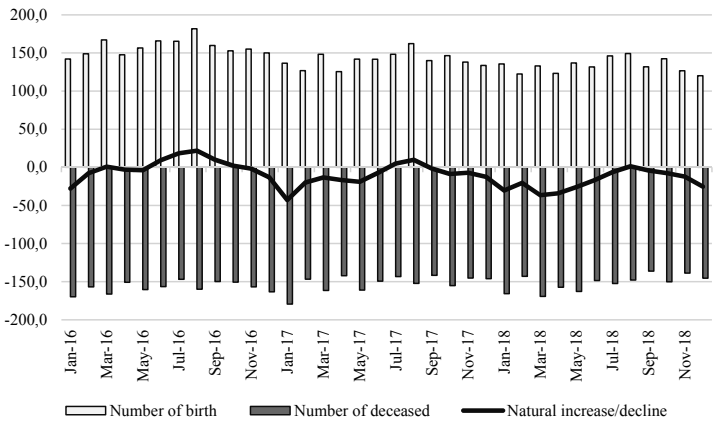


Fig. 26. Number of birth and natural increase/decline, 2016–2018, thousand people

Sources: EMISS, Rosstat operative information.

[1] Here and below: data for October-December 2018 downloaded from Unique state registration database. Data for January – December may be corrected.

Decline in population was observed in most of the regions of the Russian Federation. However, there are regions demonstrating increase (*Fig. 27*). Republic of Dagestan, Republic of Chechnya, Tyumen region, Khanty-Mansi Autonomous okrug, Moscow demonstrated largest increase. Nizhegorodskaya region, Rostov region, Voronezh region, Kemerovo region, and Tula region demonstrated the most notable decline.

Fig. 27. Natural increase/decline of population, January-December 2018

Source: Rosstat.

Two divergent factors influence on natural decline of population in this period, that is, progressing and evident reduction of birth-rate as well as insignificant reduction of mortality rate. Number of people born in 2018 constituted 1599.3 thousand people and this is by 5.4% (90.5 thousand people) less than during similar period of the previous year. Birth peak intensity fell on August (*Fig. 28*) with 149.2 thousand people born. Minimal index was observed in December: 120.1 thousand people.

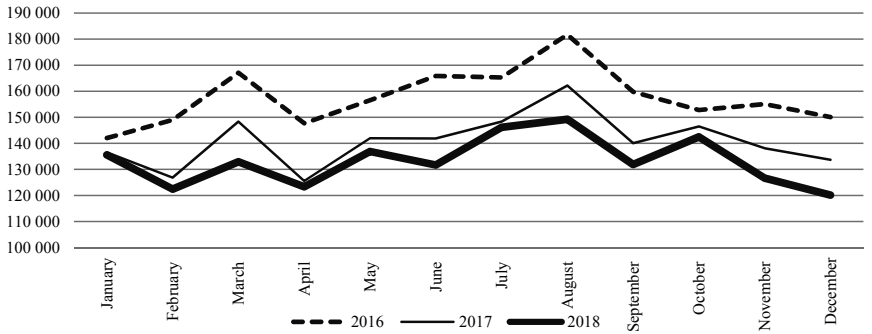


Fig. 28. Number of people born in January-December 2016–2018, thousand people

Sources: EMISS, Rosstat.

Reduction of the overal birth-rate is still going on. In 2018, it equaled 10.9‰. This is below similar 11.5‰ indicator for 2017 by 5.2%. Practically all regions of Russia demonstrate reduction of this rate with the exception of Republics of Kalmykia, North Ossetia-Alanya. Maximum fall of this rate is observed in Magadan region by 12%, Komi Republic by 11%, Nenets Autonomous region by 10.5%, Stavropol region by 9.5%, Kostroma region, Smolensk region, Sevastopol by 9%.

According to overal birth-rate, the following regions were leaders in 2018: Tyva Republic (20.4 ‰), Republic of Dagestan (15.5 ‰), Republic of Ingushetia (15.8%), Altai region (15.2 ‰), Republic of Chechnya (20.2 ‰) (*Fig. 28*). Penza region (8.6‰), Republic of Mordovia (8.3‰), Tula region (8.3‰), Smolensk region (8.3‰), Tambov region (8 ‰), Leningrad region (7.7‰) faced the worst situation.

Number of deceased in 2018[1] constituted 1.817.7 thousand people, which is by 6.6 thousand higher than in the same period of 2017 and by 0.4% less compared to 2016. Total mortality rate equaled 12.4‰.

The highest mortality rate was recorded in March 2018, i.e. 169.000 people, while minimum absolute mortality rate, 136.000 people, was registered in September. In March-May and July, 2018 absolute number of deceased was higher than similar indexes of 2017. The lowest absolute mortality rate was in September compared to the same periods of 2016–2017 (*Fig. 29*).

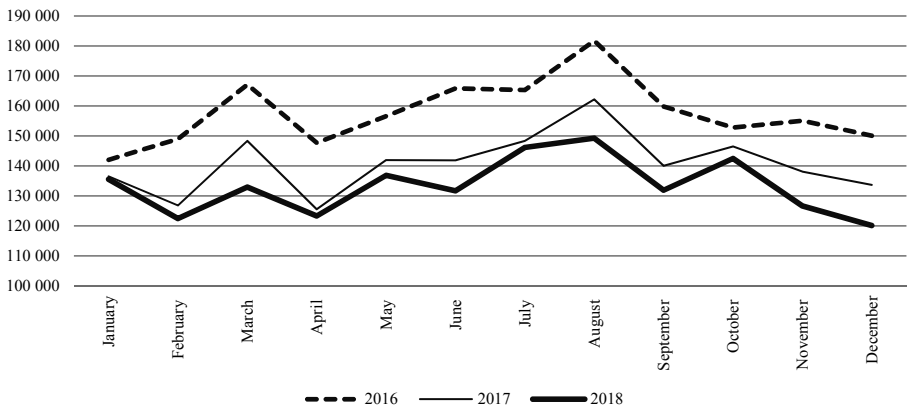


Fig. 29. Number of deceased by months, January-December 2016–2018, people

Sources: EMISS, Rosstat.

According to Rosstat operative data, the gap between minimum and maximum indicators of the total mortality rate in regions of Russia was 14 ppm in 2018. Pskov and Tver regions demonstrated the highest rate of 16.8‰ while Republic of Ingushetia had

[1] Here and below: data for October-December 2018 downloaded from Unique state registration database. Data for January – December may be corrected.

the lowest rate of 3‰. Mortality rate is traditionally high in the regions where share of senior age is high, that is, Pskov, Novgorod, Tver, Tula, Vladimir, Ivanovo regions. Regions characterized by a younger age structure traditionally demonstrate the lowest figures: Republic of Ingushetia, Republic of Chechnya, Yamal-Nenets Autonomous okrug, Republic of Dagestan, Khanty-Mansi autonomous okrug.

Growth of total mortality rate from 0.6 to 22% is observed in 32 regions compared to the same period of 2017 while in 14 regions it remained at the level of 2017 and decreased in other regions. Chukotka Autonomous okrug (22%), Nenets Autonomous okrug (5.9%), Zabaikalsky region (5.2%), Sakhalin region (5%) demonstrated maximum growth of the total mortality rate (*Fig. 30*).

Republic of Chechnya (8.7%), Kabardino-Balkar Republic (8.2%), Republic of Ingushetia (6.2%), Republic of Dagestan (5.9%), Republic of Karachaevo-Cherkassia (4.3%), Yamal-Nenets Autonomous okrug (4%) demonstrated maxim reduction of this index.

Fig. 30. Change of total mortality rate per regions, January - December 2018 compared to January - December 2017, %.

Source: Rosstat.

Total mortality rate allows to expediently, though roughly, estimate mortality tendencies. As intensity of mortality significantly depends on age pattern and gender, the total mortality rate is subjected to strong influence of the population age pattern. However, data on mortality with a breakdown per age and gender are published according to annual statistical results and they have not been presented yet for 2018.

Infant mortality rate is an important index of mortality and at the same time of a life quality, i.e. number of deceased children aged below one year old per 1000 live born children. Rosstat publish information on infant mortality based not only on annual data but also on a monthly basis in the FSSS (Federal State Statistics Service) operative statistics. However, a careful approach should be implemented for analysis of monthly

indicators, especially, in case of regions. As this indicator is characterized by low figures, any slight monthly fluctuation will have its impact on the level of this indicator.

Infant mortality rate is going down. In 2018, this rate equaled 5.1 cases per 1000 live born children. This indicator is 5.7% lower than the same one in 2017. Regional gap of the infant mortality rate increased. In 2018, it constituted 9.6‰. In 2017, this indicator equaled 8.2‰. Growth of regional gap between minimum and maximum indicator provided for increase of maximum (11.1‰) as well as for reduction of the minimum (1.7‰). The highest infant mortality rate among children below one year old was evidenced in Chukotka Autonomous okrug (11.1‰), Tyva Republic (9.4‰), Jewish Autonomous region (9.5‰), Republic of Dagestan (8.3‰), Altai region (7.5‰) (*Fig. 31*). The following regions demonstrating minimum infant mortality rate in the period under consideration: Nenets Autonomous okrug (1.7‰), Sevastopol (2.8‰), Sakhalin region (2.8‰), Khanty-Mansi Autonomous okrug (2.8‰), Yaroslavl and Leningrad regions (3.2 ‰).

Fig. 31. Infant mortality rate, 2018, per 1000 live born children

Source: Rosstat.

Blood circulation deceases still prevailed in the cause-of-death-structure in Russia in 2018 (46.3%). Then, in descending order: neoplasms (15.9%), other groups of causes (11.7%), external causes (7.2%), diseases of nervous system (6.2%), diseases of digestive system (5.1%), diseases of respiratory system (3.3%), diseases of endocrine system, eating disorder and metabolic disturbance (2.3%), infections and parasitic diseases (1.7%).

Total mortality rate in 2018 remained at rate of 2017. If mortality rate indicators demonstrate reduction of death resulted from external causes by 5.5%, diseases of

respiratory system by 1.5%, blood circulation diseases by 1.9%, neoplasms by 0.1%, infections and parasitic diseases by 0.9%, mortality rate resulted from diseases of nervous system (by 12.3%), endocrine system, eating disorder and metabolic disturbance (by 8.4%), digestive system (by 1.6%), other groups of causes (by 0.7%) increased on the contrary compared to the same period of 2017.

Thus, at present, Russia experience transition period on the way to a challenging demographic stage, which is characterized by new demographic risks and natural decline of population. Data for 2018 confirm this fact. There is an ongoing evidenced reduction of birth-rate associated with a small cohort of women in reproductive age. High mortality rate indicators demonstrate another component providing for natural decline in population.

5.7. The main developments in the education system in 2018[1]

In 2018, the main developments in the education system can be divided into the two unequal phases: one before the President's May 2018 Decree and the other after it. Before May 2018, the main attention was focused on teachers' salaries; the "struggle" to raise them to the average pay in a relevant region was already waged for six years running. Average salaries of higher-education teaching personnel attract less attention though by 2000 their value was to be equal to 200 percent of the average salary in a relevant subject of the Russian Federation where the higher educational institution was situated. From May 2018, the main focus in education was switched over to development of the "Education" national project and the volume of budget funding to be allocated on the specified goals. In addition, in the higher education system serious debates started on the issue of state accreditation of higher educational establishments.

5.7.1. Dynamics of average salaries of teachers

Before the presidential elections, the average salary of teachers used to grow. It is noteworthy that unlike previous years it was published on a monthly basis[2] till March 2018 (*Fig. 32*).

In principle, early in 2018 dynamics of the average salary of teachers were not much different from the changes seen in the previous years, but the very fact of publications of the data on a monthly basis pointed to the exceptional importance of this issue. After growth in H1, the average salary of teachers used to fall in Q3 of all those years and grew again in Q4, decreased somewhat in Q1 and started to grow again in Q2. In 2018, not even the minimum reduction of this indicator was registered in Q1. According to the data the Monitoring of Effectiveness of School Education carried out by the CCEE IAES RANEPA, early in 2018 the share of teachers who were dissatisfied with their salaries eventually fell to 60 percent (40 percent of teachers were satisfied with their salaries) against nearly two-thirds of dissatisfied teachers a year before. However, in the general

[1] This section was written by T.Klyachko, CCEE (Center for Continuing Education Economics) IAES, RANEPA.
[2] In previous years, the data were published on a quarterly basis.

education system the issue of teachers' dissatisfaction with their financial situation still exists.

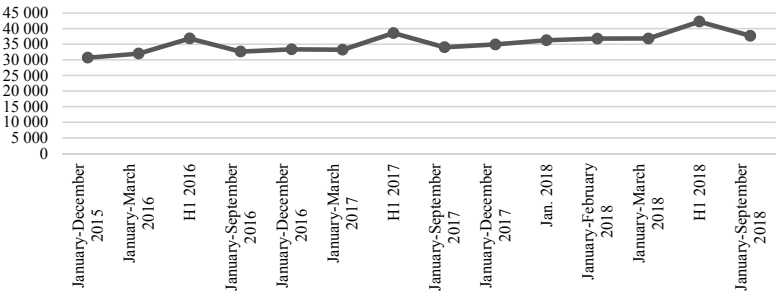


Fig. 32. Dynamics of average salaries of teachers in 2015 – January-September 2018.

Source: The Rosstat.

For nine months of 2018, teachers' average salaries in Russia amounted to 100.9% of the average pay across the national economy, having amounted to RUB 37,697. It is noteworthy that it was much higher – over RUB 63,539 (170.1 percent of the average salary in the Russian economy) – at schools which were at federal ownership, while at schools of subjects of the Russian Federation it was equal to RUB 62,039 (166.1 percent). On the contrary, the average salary of teachers at municipal schools was below the average pay across the national economy and amounted only to 85.7 percent of its level. This factor was behind the drive which emerged in 2017 to transfer municipal schools to the jurisdiction of subjects of the Russian Federation (that is, to "return the state" in the education system) on grounds that the measure in question would facilitate a substantial increase in teachers' salaries. According to proponents of this idea, up to 20 percent of subsidies for remuneration of teachers and payment of educational costs which are transferred from regional budgets to municipal ones fail to reach schools. All the assurances by financial experts that budget funds allocated for such subsidies are of a targeted nature, so they cannot be utilized outside the general education system are utterly dismissed. It seems the problem consists in the fact that municipal authorities do not always see to it that the allocated funds get to a school strictly in conformity with a per-capita norm, they seek to ensure stability (sustainability) of the municipal system as a whole and not prosperity growth of individual good schools[1]. At the same time, the abovementioned differentiation of teachers' salaries which took place in the past few

[1] For example, municipal authorities seek to preserve small schools within a walking distance from houses where school students live, rather than assign them the status of a branch of a big school. This can be explained by a drive to ensure a greater diversification of schools on one side and preservation of jobs at schools to prevent growth in the rate of unemployment amid narrow regional labor markets, on the other side.

years has spurred the governmentalization of schools to reduce accumulated tensions in the system. The fact that there are fewer regional schools and, consequently, teachers' average salaries at such schools can be much higher than in numerous municipal schools is not taken into account: probably, in the teachers community there is an opinion that if schools become a direct responsibility of regional authorities, the latter will have to increase budget expenditures on general education. At the same time, the issue whether a school is going to be municipal or regional is not of a great interest to teachers who are mainly after pay-rises and reduction of differentiation of their salaries. Also, it is noteworthy that there is a perception that if teachers' salaries are increased to the average salary in the region, teachers will not work for 1.5 salaries and/or earn extra money. This can be achieved only through a ban on work for more than one salary, but it is estimated that schools will need then additionally over 230,900 teachers, while expenditures on teachers' salaries are to be increased in such a case by at least RUB 136 billion a year. The specified measures do not necessarily guarantee that teachers will not be making extra money on the side, for example, as private tutors.

The struggle for teachers' pay-rises has pushed aside from the public focus the issues of quality of school training and teachers' professionalism, the standard of training of graduates of teacher training colleges and relevancy of pedagogical programs. It is noteworthy that some interest was taken to the substance of education only after the federal list of textbooks was reduced by one-third and it was declared that the procedure for expert review thereof had been modified. However, no serious discussions of the procedure for selection of school textbooks and their role in the modern educational process in a situation where study materials are available to students in the Internet took place.

5.7.2. The "education" national project

From May 2018, the main focus in the education system was switched over to development of the "Education" national project, as well as the volume of budget funding to be allocated for the specified goals. In addition, working groups were asked to develop measures to implement the goals and tasks set in Presidential Executive Order No. 204 of May 7, 2018 "On National Goals and Strategic Tasks in Development of the Russian Federation in the Period till 2024". Ultimately, the "Education" national project included 10 federal projects:

1. Modern School;
2. Success of Each Child;
3. Support of Families with Children;
4. Digital Educational Environment;
5. Teacher of the Future;
6. Young Professionals (Promotion of Competitiveness of Vocational Education);
7. New Opportunities to Everyone;
8. Social Activity;
9. Export of Education;

10. Social Elevators for Everyone.

Within the framework of the national project, it is expected to promote competitiveness of Russian general and vocational education, including higher education, facilitate early development of children and success of each kid through development of extended childhood education and radically increase the scope of coverage of the working population with vocational training. In addition, it is proposed to develop the digital educational environment, eliminate the shortage of places at kindergartens (nurseries) and schools and upgrade qualifications of Russian teachers who have to work in new conditions. Implementation of the "Education" national project is mainly regarded by the government as a budget maneuver in favor of the education system.

Within the "Modern School" federal project, it is planned to modernize facilities of 16,000 schools in rural areas and small towns by 2024 to carry out digital and humanitarian profile educational programs. It will require regional budgets' additional expenditures to maintain such facilities and modernize them in the course of upgrading digital and humanitarian profile programs. Implementation of the national project to such an extent suggests a relevant increase in current expenditures of regional budgets (that is, beyond the frameworks of this project), which situation is highly unlikely given the existing economic conditions. Consequently, the effectiveness of budget expenditures within the frameworks of this federal project will gradually decline (as school facilities upgraded in 2019–2020 become obsolete).

The "Success of Each Child" federal project suggests quick expansion of the system of extended childhood education (ECE). It is to be noted that the Federation actually creates conditions for implementation of extended learning activities for children and the youth (up to 18 years old). Facilities of the "Kvantorium" technological park and the "Sirius" educational centers will be upgraded and higher educational institutions will participate more actively in the ECE. At the same time, maintenance of the ECE in subjects of the Russian Federation is mainly funded from regional and municipal budgets whose capacities are rather limited. However, this system is available on the permanent basis to kids from low-income families in rural areas and small towns.

As regards the "Support of Families with Children" federal project, it is planned to develop the infrastructure of pre-school facilities to increase the number of nursery groups for children of 1.5–3 years old and cover them with relevant services. In addition, within the framework of this project it is planned to set up the system of psychological and pedagogical support of parents (legal representatives) at the stage of early development of children, as well as persons who are willing to adopt children left without a parental care. It is noteworthy that the burden related to funding current pre-school education activities owing to growth in the number of nurseries (nursery groups) will increase gradually on regional and municipal budgets as early as the stage of implementation of this project.

The "Digital Educational Environment" federal project suggests establishment of the target-oriented model of educational environment which is to be introduced stepwise in

all the subjects of the Russian Federation. It is to be noted that the information content and functionality of open and generally accessible information resources will be gradually upgraded at educational establishments. Another line is promotion of the Internet data traffic speed at schools and other regional educational establishments. Within the framework of this project, upgrading of information resources can be carried out in future within the frameworks of federal projects and, consequently, be financed out of the federal budget. However, though costs related to implementation of this process are expected to decrease, expenditures related to promotion of the Internet data traffic speed will be ultimately funded by regional budgets unless it is specified from the very beginning that such expenditures remain the responsibility of the federal authorities.

The "Teacher of the Future" federal project is aimed at radical promotion of skills of Russian teachers. It is largely related to the wide-spread idea of late that the quality of education depends to a great extent on professionalism of teachers and to a lesser extent, on the size of classrooms and costs per student. This project can be successful in principle because the Federation takes considerable budget expenditures on implementation of extended vocational education programs which are currently funded by regional budgets. The main problem consists in maintaining advanced training programs, ensuring the quality of extended vocational education institutions (EVE) which are entrusted with carrying out such programs, as well as arranging such training. It would be more efficient to organize retraining of school teacher teams, rather than individual teachers and school managers. At the same time, it is necessary to switch over to a new format of advanced training programs where a teacher undergoes an advance training course not once in three years as it is envisaged by the Law "On Education in the Russian Federation", but selects (together with his/her colleagues) a definite programs every year. Within the framework of this project, it would be expedient to expand substantially advanced training programs for school teachers and teacher-training colleges on the base of federal, research and backbone universities, rather than the existing regional extended vocational education institutions which find themselves in a serious need of upgrading their activities. This project may require more budget funds than it was originally planned. However, the federal project in question suggests that by means of inter-budget transfers the Federation will transfer funds on advanced training programs for teachers to regions. It means that such programs will be carried out on the base of regional institutes for development of education, that is, in an outdated and inefficient mode.

The "Young Professionals (Promotion of Competitiveness of Vocational Education)" project is meant to promote growth in the standard of Russian vocational education to the level of the world's best examples. However, in principle, this project as regards secondary vocational education deals with training of labor force within the framework of the WorldSkills international project and this factor substantially diminishes its effectiveness provided that at present the flow to the system of secondary vocational education in Russia after finishing of the 9th form is directed mainly to training programs

for mid-ranking specialists. At the same time, the system of secondary vocational education (training of mid-ranking specialists) will enter in the near future the risk zone as regards funding because the number of trainees is rapidly growing, while no additional budget funding is allocated due to limitation of capacities of regional budgets that finance it. In addition, if Russia is going to switch over actively to innovation-based development in the mid-term prospect, it is necessary to modify the main lines of training in the secondary vocational education in favor of new profession lines. This objective will require both retraining of teachers and foremen of vocational training and active replacement of obsolete facilities of secondary vocational education establishments because training is based on mastering of practical skills. So, additional federal budget expenditures above the planned ones may be required.

Global competitiveness growth of the Russian higher education system should be facilitated through implementation of the 5/100 program for 30 Russian universities, but with more realistic success criteria set for Russian higher educational institutions on the international arena: y 2024 each leading university which has received state support is to achieve among other things the following results:

- Enter for at least two years in succession the top 1000 list of international university ratings (actually it was a failure of the 5/100 project in its previous format);
- Enter for at least two years in succession the top 200 list of minimum one subject or sectorial international rating;
- Install at least 10 online courses on international online education platforms with the total number of minimum 5000 listeners from at least five countries;
- Ensure that the share of the academic staff at the age of up to 35 years old is equal minimum to 20 percent of the entire academic staff.

So, such guidelines should facilitate sustainable outputs of activities of leading universities which are included in this federal project.

According to our own calculations, the volume of funding to support Russia's leading universities will amount to about RUB 500 million a year per university (for six years). It is noteworthy that the share of budget expenditures on the university component of this federal project does not exceed 3.5%–4% a year of the total federal budget expenditures on higher education in 2018. So, judging by financial parameters the project in question can be implemented without risks to the federal budget.

The "New Opportunities to Everyone" federal project is aimed at promotion of continuing education (vocational training and extended education). Unfortunately, effectiveness of this project will be rather low because it fails to solve important issues of increasing human capital by means of permanent renewal of workers' competence and creation of conditions for engagement in continuing education of pensioners who will be able then to extend their working careers after receiving new expertise and skills. The projects provides for the possibility of recognition of the results of informal education (including self education), but leaves the issue of service record unresolved, thus preventing creation of motivation for self education with workers and eventually promotion of human capital in Russia.

The "Social Activity" federal project is primarily meant to promote the volunteer movement, that is, the youth's activity (a component of the youth policy). According to the available information, it is expected to allocate RUB 8.32 billion from the federal budget or on average RUB 1.39 billion a year, which sum is equal to 28.1 percent of federal budget expenditures on the youth policy in 2018 (as per the budget list as of August 1, 2018). On one side, it looks like a substantial increase in federal budget expenditures on the specified goal, while on the other side in 2018 federal budget expenditures on the youth policy fell by RUB 2.6 billion (as per the updated budget list as of August 1, 2018) as compared to 2017, while regional budget expenditures increased by RUB 5.3 billion. In other words, the burden on regions is growing as regards this line, too, so the prospects of effective implementation of the youth policy in the long-term prospect seem quite doubtful because the general burden on consolidated budgets of subjects of the Russian Federation is to increase dramatically in 2019–2024 and beyond.

The "Export of Education" federal project is solely funded from the federal budget: it is planned to allocate within six years RUB 107,493 billion on this project (on average about RUB 18 billion a year). The funds will be spent mainly on establishment and modernization of campuses of higher educational institutions. Growth in Russian human capital within the framework of this project is related to employment of foreign graduates of higher educational institutions in Russia. At the same time, the planned parameters of the specified employment – minimum 5 percent of the turnout of foreign graduates, that is, minimum 5,500 persons a year – seem insignificant to have a serious effect on the Russian labor market. However, what is meant here is the lower limit of the employed foreigners with a higher education degree received in Russia. Nevertheless, the target indicator set in the federal project will not motivate relevant institutions to facilitate actively employment in Russia of foreign graduates of Russian higher educational institutions or with Russian companies operating abroad.

The "Social Elevators for Everyone" federal project is aimed at promotion of professional and career growth through participation of people in various (probably, professional) contests (in 2024 it is planned to carry out 35 contests involving at least 1.7 million participants). The content and nature of such contests should be specified as the project unfolds; the project is funded entirely from the federal budget.

According to the calculations, the volume of funding allocated on the "Education" national project is explicitly insufficient enough to upgrade substantially the existing situation both in general education and vocational training (*Table 5*).

This situation can be explained by the fact that in accordance with the demographic forecast and growth in coverage of children of pre-school age with pre-school education the number of such children at pre-school institutions will be growing in the near future, so, additional funding is required to maintain that system at the level which it attained in 2017. A similar situation can be found in secondary vocational training where more and more students after finishing the 9th form go to in the past few years (as per the

forecast the number of students of vocational training institutions may increase more than 1.5 times over (from 2.1 million persons to 3.2 million persons) by 2024.

Table 5

Dynamics of budget expenditures on education in 2019–2024, billion rubles

	2019	2020	2021	2022	2023	2024
GDP	104974.9	111669.0	118446.1	125385.7	132469.5	139728.7
Expenditures on education without expenditures on national project	3779.1	4020.1	4264.1	4513.9	4768.9	5030.2
Expenditures on national project	110.10	131.50	141.80	120.30	119.80	124.20
Total expenditures on education	3889.20	4151.58	4405.86	4634.18	4888.70	5154.43
Share of expenditures on education in GDP, %	3.70	3.72	3.72	3.70	3.69	3.69

Source: own calculations.

According to calculations, with economic growth rates of maximum 2.5 percent a year maintained up to 2024, expenditures on educations in shares of GDP funded at the level of 2018 (that is, 3.6 percent) and the existing pattern of budget expenditures across education preserved, budget expenditures per kid in the pre-school education system will amount on average in nominal terms to RUB 118,300 (RUB 86,400 in real terms) in 2024 against RUB 107,500 in 2018; in general education – RUB 152,700 (RUB 111,500 in real terms) against RUB 115,500 in 2018; in secondary vocational education expenditures per student will be equal to RUB 101,200 (or RUB 73,900 in real terms) against RUB 108,600 in 2018, while in higher education expenditures grow in nominal terms up to RUB 431,100 in 2024 (RUB 314,700 in real terms) against RUB 288,300 in 2018.

So, firstly, despite implementation of the national project the education system will find itself in quite a complicated financial situation and, unfortunately, be unable to develop properly. In other words, all the innovations (digital educational environment, upgrading of teachers' skills in the vocational training system, establishment of technological parks and educational centers for support of gifted children and teenagers) will not be able to promote further the general standard of quality of the Russian education system. It is noteworthy that human capital will virtually stop growing in Russia (though some local breakthroughs are feasible).

Secondly, the analysis shows that there are substantial risks related to implementation of the "Education" national project in its present format, particularly, to regional budgets because only direct expenditures of regional budgets of subjects of the Russian Federation on implementation of the project – 6 percent of the total volume of expenditures – were taken into account. However, federal projects which are included in the "Education" national project do not take into account those expenditures which arise at the regional level as auxiliary ones. For example, in the "Modern School" federal project the building of new schools and liquidation of the third shift will require more teachers and maintenance personnel and, consequently, higher regional budget expenditures on labor remuneration. In addition, expenditures will grow on educational materials, maintenance and modernization of school buildings and other facilities as it was mentioned above. Consequently, it is necessary to increase substantially budget expenditures not only on project activities, but also ongoing operations in education. It

is believed that only an increase of at least to 4.4–4.6 percent of GDP (that is, up to the average level across the OECD countries) will permit to change for the better the situation in education and facilitate Russia's competitiveness on the international education market.

5.7.3. Accreditation of higher educational institutions

State accreditation of higher educational institutions has been an issue for not a single year. It aggravated with cancellation of accreditation and subsequent withdrawal of the license from the European University of St. Petersburg in 2017 (in 2018 the license was granted the university again, but the building in the center of St. Petersburg was never returned). In 2018, the Moscow Higher School of Social and Economic Sciences (renowned "Shaninka") failed to receive accreditation which situation prompted rectors to raise the issue of relevancy of the very procedure for receiving accreditation and composition of expert councils which conduct it. The Rosobrnadzor (Federal Education and Science Supervision Agency) is prepared to introduce some changes, but mainly of technical nature: better selection of experts and a larger volume of documents which can be transferred remotely. In a situation where federal state educational standards (FSES) are virtually aimed exclusively at developing of competences and the quantity thereof, practically nothing can be modified in state accreditation aimed at verifying implementation by higher educational institutions of FSES 3+ (FSES 3++). To change the approach to accreditation of higher educational institutions, it is necessary first to change the approach to FSES.

Actually, amid rapid development of new technologies and constantly growing information flows the drive to replace concrete knowledge by general competences is quite justified: it seems that concrete knowledge becomes outdated very soon. It is important for a person to study to learn, know how to search for the needed information, work in a team and develop excellent communication skills, project thinking, project work skills and other. Consequently, the results of education should represent not the list of concrete knowledge and skills, but a set of various competences a young specialist is expected to have (holder of a bachelor's degree or a master's degree) depending on the line of training or area of expertise. In different countries, such an approach is based on the fact that modern knowledge of subjects is developed and fixed in courses and programs, that is, there is a certain agreed upon general core base which each graduate of a higher educational institution is expected to learn. But this core base is actually supplemented with competences which students should have to use knowledge effectively. This is a kind of adjustment to rapidly changing requirements of the labor market.

Setting of competences proper in FSES without the consensus core base on each subject does not permit to achieve coordinated results of education, both fundamental and applied. Consequently, in this case, FSES fail to facilitate quality of higher education as regards at least its lower limit. In addition, FSES make it unfeasible to

compare the results of training at various higher educational institutions, though such a practice would be very important both to employers and graduates.

It means that approaches to development of FSES in higher education in Russia are in an urgent need of modification. The first step in the right direction would be a reduction of the number of training lines in Bachelor's programs to 20–25 (at present their number is twice as high and cannot be planned).

Accordingly, the state accreditation of higher educational institutions should primarily deal with examination of students' progress in learning the core base agreed upon by higher educational institutions.

In addition, in Russia the accreditation system in higher education is rather controversial. This can be explained by the fact that in the Russian system of higher education there are a few other mechanisms which assess effectiveness of higher educational institutions: the Monitoring of Effectiveness of Higher Educational Institutions (since 2012) and the admission quota distribution competition which should logically take into account the quality of educational services rendered by higher educational institutions, capacity of their academic personnel and the state of facilities and information base for receipt of state assignment and relevant budget funding.

However, there were notorious cases where not only accreditation, but also the license was withdrawn from a higher educational institution recognized effective by the Monitoring of Effectiveness of Higher Educational Institutions (see above). As the same time, higher educational institutions which were recognized ineffective could have state accreditation. It is to be noted that the Rosobrnadzor started to look into that situation only after receipt of the monitoring results.

Under the terms of the admission quota distribution competition, a participating higher educational institution is required to have a state accreditation to receive budget-funded places (state assignment) and budget funding. But a higher educational institution which has received admission quotas can be canceled the state accreditation within the same year.

In addition, one and the same higher educational institution can receive accreditation in respect of some programs and be denied it in respect of others. It is to be noted that unless one educational program (line/vocation) in the enlarged group of lines of training (EGLT) fails to be accredited, the entire line/vocation included in EGLT is not accredited, either.

At the same time, the quality of training at Russian leading higher educational institutions is determined by the entire range of factors which go far beyond the limits of traditional accreditation requirements. They are related to a certain extent to educational research skills of the academic staff of higher educational institutions. In such a case, special requirements need to be set to the academic and research personnel of such higher educational institutions (for example, the number of foreign professors who conduct training courses on a regular basis, the number of publications in rating journals, the rate of participation of academic and research personnel in international

conferences and seminars, the number of foreign students, the number of online courses on educational platforms and other).

An external (independent) assessment of higher educational institutions compared to state accreditation could be the one based on the national rating (ratings)[1] of higher educational institutions; also it is worthwhile to take into account the listing of a higher educational institution in internationally recognized institutional and subject ratings, as well as ratings of different branches of knowledge.

It is noteworthy that in carrying out accreditation the authorized bodies of executive authorities should be entrusted with responsibilities to ensure networking between different entities of the accreditation system, legal regulation and information support of expert teams.

At present, accreditation of higher educational institutions in the Russian Federation should be based on the following two principles: reputation of a higher educational institution and risk-oriented management. The risk-oriented management proceeds from the practice of the Rosobrnadzor which performs supervising functions and forms a "credit" history of higher educational institutions.

With this approach used, one can single out three groups of higher educational institutions:

1. The leading higher educational institutions are characterized by the following two parameters: a) They are entitled to set their own standards, b) they have a good "credit" history;
2. A group of higher educational institutions which have a "good" credit history;
3. A group of higher educational institutions with a "poor" credit history.

Accordingly, the first group (leading higher educational institutions) receives accreditation with no fixed term. However, this group is required to maintain full information openness.

The second group of higher educational institutions receives accreditation for the term of 12 years and then is accredited in accordance with a simplified procedure which is to be developed.

The third group of higher educational institutions is accredited in conformity with the standard procedure (once in six years).

Also, the national rating of higher educational institutions is to be developed (or it is feasible to utilize the "Three Missions of the University" rating developed by the Lomonosov Moscow State University). The movement within the framework of that rating – upgrading of positions within a period of several years may constitute grounds for a transfer of the higher educational institution to another group (a higher one, but such a transfer should be accompanied by the accreditation procedure). At the same time, in case of a sharp upturn or downturn in the rating, for example, within a year, the Rosobrnadzor has to carry out an inspection (accreditation). Also, a gradual (steady) downturn in the rating (for a few years) should prompt the Rosobrnadzor to subject that higher educational institution to scrutiny (accreditation).

[1] Such ratings should be prepared by independent institutions with international participation.

Accreditation is to be carried out by renowned experts: they sign the conclusion on the accreditation due diligence. A group of such experts may include internationally renowned scholars. These experts (each expert) are allocated a budget to form a team of experts to carry out a due diligence under their guidance (teams may be different in carrying out accreditation of various higher educational institutions).

The accreditation procedure is based on a different approach to FSES: in each standard a core base (see above) is identified and progress in achieving it checked; simultaneously the development of definite (specified) competences (skills to do teamwork, search for the needed information, command of foreign languages and other) is examined. To check the progress in learning the core base, an open (permanently renewed) fund of evaluation tools is formed to carry out an independent evaluation of students' knowledge.

The above approach fits better international standards and norms established in this sector. Accreditation is aimed sooner at evaluating the progress both in achievement of the educational result and development of the university in compliance with new requirements set by the external environment, rather than formalizing the ultimate educational result.

5.8. The housing market in Russia's cities[1]

The preliminary results of the Russian economy's development in 2018 appear to be rather controversial. On the one hand, the growth rate of GDP gained 2.3 percent; on the other, the consumer inflation index increased significantly, to 4.3 percent, from its record low of the entire period since the onset of market reforms (2.5 percent), achieved in 2017. The movement pattern of personal disposable income, which is a much more significant factor determining the situation in the real estate market, was quite volatile throughout the course of last year, with multiple trend reversals. In spite of the positive results of the first two quarters, probably achieved thanks to the current electoral cycle, in the end the personal disposable income index stayed roughly at the same level as in 2017.

The RF Central Bank twice reduced its key rate over the course of H1 2018, to 7.25 percent per annum in early autumn. However, over the next few months it was once again hiked twice, and so returned to its level of late 2017 (7.75 percent). The tricky movement pattern of the key rate pushed down the interest rates on bank loans and notably improved the position of borrowers.

According to *Rosstat* data, the overall volume of housing mortgage lending (HML) in 2018 increased approximately 1.5 times (to RUB 3,012.7 billion) relative to 2017 (RUB 2,021.4 billion)[2]. The average weighted interest rate on housing mortgage loans

[1] This section was written G.Malginov, Gaidar Institute, RANEPA; S.Sternik, Financial University under the Government of the Russian Federation; Moscow Association of Realtors.

[2] 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 account for more than 99 percent of the total housing lending market.

issued from the year-beginning decreased by approximately 1 percentage point and amounted to 9.56 percent (in 2017 – 10.64 percent; in 2016 – 12.48 percent).

In 2018, as follows from the report released by DOM.RF (JSC Russia Housing and Urban Development Corporation)[1] jointly with research company Frank RG, a total of 1.5 million loans were issued (including refinancing of previously issued loans). The plunge of the *average weighted* interest rate on housing mortgage loans (in the *primary and secondary housing markets*) to its historic low was the main factor responsible for the increasing HML volume. It attracted more new borrowers to the market, who took housing mortgage loans to the total value of RUB 2.67 trillion. However, the reduced interest rates benefited not only the new borrowers, but also some 'old' ones who could now refinance their housing mortgage loans, and thus reduce their monthly redemption payments (by 15 percent on average). The initial interest rate for such borrowers amounted on average to 12.5 percent, and after the refinancing of their loans, it shrank to 9.5 percent per annum. In 2018, their housing mortgage loans were refinanced by approximately 165,000 families (or 11 percent of the total number of housing mortgage borrowers). The average amount of a housing mortgage loan in 2018 was approximately RUB 2 million (in 2017 – RUB 1.86 million). The aggregate housing mortgage portfolio of the RF banking sector increased to RUB 6.7 trillion, having gained more than a quarter in its value over the course of that year. The relative share of housing mortgage deals in the primary housing market in 2018 was 56 percent, and that in the secondary housing market – 49 percent.

It was due to the record-high growth of the housing mortgage lending volume that stagnation in the housing market gave way to growth of prices across both its segments.

5.8.1. The behavior of housing market prices

The main indices describing the movement patterns of prices in the secondary housing market across Russia's cities can be seen in *Table 6*[2].

The study sample consists of 25 cities and one region (Moscow Oblast, for which by-town average data were collected), including 18 capitals of RF subjects, with the total population of about 40.4 million[3].

[1] The new corporate name adopted in March 2018 by the Agency for Housing Mortgage Lending (AHML), on the basis of which, in 2015, the Integrated Housing Development Institution was created, with the AHML and the Russian Housing Development Foundation becoming its subsidiaries.

[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-nedvijimosti-gorodo/); the sources of primary market data are listed in the Note to *Table* 2.
Data processing and interpretation was done in accordance with the guidelines described in: (1) Sternik, G. M., Sternik, S. G. Real Estate Market Analysis for Professionals: Monograph. Moscow, Ekonomika, 2009; and (2) Sternik, G. M., Sternik, S. G. Methodology of Housing Market Modeling and Forecasting: Monograh. Moscow: RG-Press, 2018.

[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. The Housing Market in Russia's Cities in 2017 // *Russian Economy in 2017. Trends and Outlooks*. Moscow, IEP. 2017, pp. 362–382), it does not include

Table 6

Prices on the secondary housing market in Russian cities in 2016–2018

City (region)	Average per unit supply price, thousands of rubles per m²			Price index in December 2018 relative to December 2017		Price index in December 2018 relative to December 2017	
				in nominal terms	in real terms (IGS)	in nominal terms	in real terms (IGS)
	December 2016	December 2017	December 2018				
Moscow	212.0	210.2	222.0	0.992	0.968	1.056	1.012
St. Petersburg	106.0	107.4	114.0	1.013	0.988	1.061	1.017
Vladivostok	93.8	95.9	109.6	1.022	0.997	1.143	1.096
Novy Urengoy (Tyumen Oblast)	89.9	89.2	93.5	0.992	0.968	1.048	1.005
Moscow Oblast	81.9	81.0	81.7	0.989	0.965	1.009	0.967
Khabarovsk	73.8	82.2	82.8	1.114	1.087	1.007	0.965
Surgut (Tyumen Oblast)	69.0	69.8	75.5	1.012	0.987	1.082	1.037
Kazan	68.4	68.9	79.2	1.007	0.982	1.149	1.102
Yekaterinburg	68.1	67.3	71.0	0.988	0.964	1.055	1.012
Samara	62.1	59.6	60.4	0.960	0.937	1.013	0.971
Tyumen	59.3	59.3	63.2	1.000	0.976	1.066	1.022
Novosibirsk	58.4	58.5	63.4	1.002	0.978	1.084	1.039
Irkutsk	52.0	56.4	61.0	1.085	1.059	1.082	1.037
Krasnoyarsk	51.3	52.6	56.2	1.025	1.000	1.068	1.024
Yaroslavl	51.3	48.6	51.6	0.947	0.924	1.062	1.018
Perm	49.8	49.3	53.3	0.990	0.966	1.081	1.036
Kemerovo	45.7	44.3	43.9	0.969	0.946	0.991	0.950
Voronezh	44.4	43.6	46.3	0.982	0.958	1.062	1.018
Omsk	44.3	43.2	45.6	0.975	0.951	1.056	1.012
Barnaul	44.0	44.0	45.4	1.000	0.976	1.032	0.989
Tobolsk (Tyumen Oblast)	42.6	49.3	43.3	1.157	1.129	0.878	0.842
Togliatti (Samara Oblast)	41.2	39.3	40.1	0.954	0.931	1.020	0.978
Syzran (Samara Oblast)	39.0	36.7	35.7	0.941	0.918	0.973	0.933
Stavropol	38.9	39.5	42.9	1.015	0.990	1.086	1.041
Pervouralsk (Sverdlovsk Oblast)	36.8	36.1	36.3	0.981	0.957	1.006	0.965
Shakhty (Rostov Oblast)	34.6	33.8	33.7	0.977	0.953	0.997	0.956

If this index is to be applied as a classification criterion, the sample appears to be as follows:

– the city of Moscow (approximately 12.5 million);

– Moscow Oblast (total urban population of more than 6.1 million) and the city of St. Petersburg (5.35 million) (approximately 11.5 million in total);

– 8 cities (other than Moscow and St. Petersburg) with the population of more than 1 million (Novosibirsk, Yekaterinburg, Kazan, Omsk, Samara, Krasnoyarsk, Perm, Voronezh) (9.85 million in total);

Nizhny Novgorod, Chelyabinsk, Ulyanovsk and Ryazan, but has been augmented by Khabarovsk and Novy Urengoy.

– 8 cities with the population between 500,000 and 1 million (Tyumen, Togliatti, Barnaul, Irkutsk, Khabarovsk, Yaroslavl, Vladivostok, Kemerovo) (more than 5.1 million in total);

– 3 cities with the population between 200,000 and 500,000 (Stavropol, Surgut, Shakhty) (more than 1.0 million in total);

– 4 cities with the population of less than 200,000 (Syzran, Pervouralsk, Novy Urengoy, Tobolsk) (more than 0.4 million in total).

The year 2018 was marked, practically everywhere, by rising prices in the secondary housing market. The highest growth indices (14–15 percent) were observed in Kazan and Vladivostok. In Stavropol, Novosibirsk, Irkutsk, Surgut, and Perm prices gained more than 8 percent. In Moscow and St. Petersburg, where growth amounted to 5–6 percent, it was within the average range – as it was also in Krasnoyarsk, Tyumen, Voronezh, Yaroslavl, Omsk, Yekaterinburg, and (with some reservations) in Novy Urengoy (where prices increased by slightly less than 5 percent).

A significantly lower growth index (within the range of 1–2 percent) was noted in Samara and Togliatti. In Moscow Oblast, Khabarovsk, Pervouralsk, Shakhty, and Kemerovo prices varied within a range of -1 percent to +1 percent, while the obvious 'outsiders' were Syzran and Tobolsk, where prices declined in absolute terms. In all the cities except Khabarovsk, Irkutsk and Tobolsk, prices were following a higher movement pattern relative to 2017, including those situations where decline gave way to growth, and where the rate of decline was becoming slower.

At the same time, in the majority of cities included in the sample, housing prices increased in real terms (IGS index)[1]. In Kazan, their growth surged above 10 percent; in Vladivostok, it was 9.5 percent; in Stavropol, Novosibirsk, Irkutsk, Surgut, and Perm it was above 3.5–4 percent, and in the group of cities in the 'average range', the growth index was up to 2.4 percent, including Moscow with its growth index of 1.2 percent. In all the other cities across our sample, including Moscow Oblast, housing prices declined in real terms.

Data on primary housing market prices are available for 12 cities and Moscow Oblast (*Table 7*).

Similarly to the situation in the secondary market, the primary housing market was demonstrating continuing growth almost in every city. The exceptions were Rostov-on-Don and Yaroslavl. An absolute leader was Kazan, where housing prices gained about 16 percent. Growth by more than 9.5–12 percent was observed in Moscow, Stavropol, Novosibirsk, Surgut, and Tyumen. In Samara, St. Petersburg and Tobolsk the prices were increasing at a significantly slower pace. Moscow Oblast and Yekaterinburg demonstrated price stability. Besides, lower movement patterns (relative to 2017) were noted in Rostov-on-Don, Yaroslavl, and Tobolsk.

[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.

Table 7

Prices on the primary housing market in Russian cities in 2016–2018

City (region)	Mean unit asking price, thousands of rubles per m²			Price index in December 2017 relative to December 2016		Price index in December 2017 relative to December 2016	
				in nominal terms	in real terms (IGS)	in nominal terms	in real terms (IGS)
	December 2016	December 2017	December 2017				
Moscow	176.7	179.9	202.0	1.018	0.993	1.123	1.077
St. Petersburg	101.7	100.6	106.0	0.989	0.965	1.054	1.011
Moscow Oblast	81.9	85.1	85.2	1.039	1.014	1.001	0.960
Kazan	66.7	69.1	79.9	1.036	1.011	1.156	1.108
Yekaterinburg	63.1	63.3	63.3	1.003	0.979	1.000	0.959
Surgut (Tyumen Oblast)	61.0	63.2	69.5	1.036	1.011	1.100	1.055
Novosibirsk	58.8	59.9	66.3	1.019	0.994	1.107	1.061
Tyumen	53.4	56.6	62.1	1.060	1.034	1.097	1.052
Samara	53.3	46.3	49.8	0.869	0.847	1.076	1.032
Rostov-on-Don	51.3	52.0	50.6	1.014	0.989	0.973	0.933
Yaroslavl	49.8	50.6	49.7	1.016	0.991	0.982	0.942
Tobolsk (Tyumen Oblast)	46.3	49.3	50.2	1.065	1.039	1.018	0.976
Stavropol	35.9	36.3	40.7	1.011	0.986	1.121	1.075

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; and for Stavropol – LLC 'Small Enterprises Development Center 'Ilekta'.

The housing price index in real terms (IGS index) increased in 2016 in the majority of cities across our sample, with the exception of Tobolsk, Yekaterinburg, Yaroslavl, Rostov-on-Don, and Moscow Oblast. The highest growth occurred in Kazan (about 11 percent), and in Moscow and Stavropol it was above 7.5 percent. In Novosibirsk, Surgut, Tyumen, Samara, and St. Petersburg the IGS index gained somewhat less (from 1 percent to 6 percent).

Thus, after their plunge in 2015–2016 followed by stabilization in 2017, the supply prices in the secondary and primary housing markets across Russia's cities mainly entered the phase of growth, which was more typical of the secondary housing segment, and this trend also influenced the activity of market subjects.

In this connection, special mention should be made of the city of Moscow where, in 2018, some trends in the housing market began to be influenced by the housing fund renovation program.

Some of the potential buyers in the primary housing market, who had been selected as beneficiaries of resettlement plans under the housing fund renovation program, in 2018 abstained from buying in expectation of receiving, at the expense of city budgets, new bigger apartments of a higher quality to replace those currently occupied by their families. Later on, the apartments thus received can be used in many ways, with a possibility of even better market options. In this connection, the prices for apartments in

5-storey walkups earmarked for demolition jumped 20 percent on average. Following this trend, the prices for apartments in the surrounding 5-storey walkups not entered on the housing renovation programs also began to rise relative to those particular housing segments and micro-districts.

As demonstrated by the year-end results of 2018, according to data released by *Rosreestr* in respect of Moscow's secondary housing market, the total number of closed apartment purchase deals was 156,431, which represents a jump by 26.3 percent relative to the previous year. Thus, for the first time after three straight years of relative stability, and in spite of certain fluctuations, the secondary market managed to come close to its level in the record year 2014, when the total index of titles to property registered on the basis of apartment purchase and sale (or exchange) contracts amounted to 162,038 (vs. 113,769 in 2015; 126,045 in 2016; and 123,894 in 2017) (*Fig. 33*).

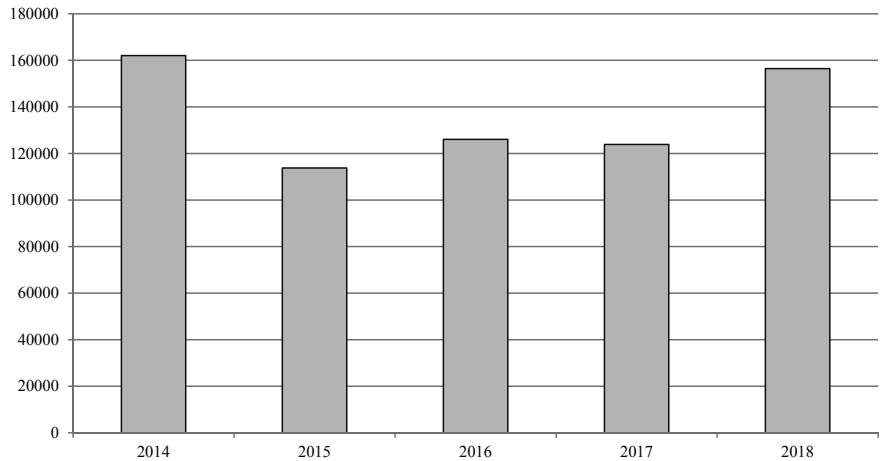


Fig. 33. The movement pattern of apartment purchase deals in Moscow's secondary housing market in 2014–2018, units

Source: *Rosreestr* Administration for the city of Moscow.

5.8.2. The construction, commissioning, and market supply of new housing units

Over the course of 2018, the total volume of housing stock put into operation amounted to 75.3 million m², which is 4.9 less than in 2017; so, decline in the housing construction sector continued for a third year in a row, and its movement pattern was more negative than that of the general economic indicators (*Table 8*).

Table 8

The rate of commissioning of residential buildings across Russia in 1999–2018

Year	Total area, millions of square meters	Growth rate, percent	
		relative to previous year	relative to previous year
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
2018	75.3	95.1	248.5

Source: Russian Statistics Yearbook. 2010: Statistics Yearbook / Rosstat, Moscow, 2010, p. 477; Russian Statistics Yearbook. 2016: Statistics Yearbook / Rosstat, Moscow, 2016, p. 427; Regions of Russia. Socio-economic Indicators. 2016: Statistics Yearbook / Rosstat, Moscow, 2016, p. 828; Regions of Russia. Socio-economic Indicators. 2018: Statistics Yearbook / Rosstat, Moscow, 2016, p. 774; On Housing Construction in 2018, www.gks.ru; own calculations.

In this connection, the situation in the housing construction sector no longer resembles that observed in 2009–2010 when, after a two-year-long period of decline, the volume of housing stock put into operation once again began to follow an upward trajectory, and this trend continued through the year 2015. Meanwhile, when taken in absolute terms, that index is still above both its pre-crisis record high of 2008 and its 2013 level. Its quarterly movement pattern, after displaying an upward trend in Q1, stabilized at a level of about 90 percent relative to the corresponding period of 2017.

A less bright situation has been observed with regard to developer projects involving multi-apartment residential buildings. The volume of housing stock put into operation in this segment[1] has also been on decline for a third year in a row, at an accelerated rate. After the record high achieved in 2015 (50.1 million m²), the rate of decline relative to the previous year amounted in 2016 to 3.4 percent, in 2017 to 4.5 percent, and in 2018 to 7.3 percent. This downward trend can be explained by the shrinking number of new projects launched in 2015–2016 in response to an unstable economic situation and a drop in consumer demand.

The building construction project implementation period is becoming more protracted. According to data collected by Metrium Group, among the developer companies on the Top 100 list, only 14 companies never moved the project completion

[1] In *Rosstat*'s official reports there is no such index. However, it can be calculated as the difference between the total volume of housing stock put into operation and the number of housing units put into operation at the expense of consumers (their own funds and consumer loans).

deadline for at least one of its residential buildings. And the relative share of residential complexes completed and put into operation before or not later than their planned deadlines declined to 40.1 percent in 2018 vs. 46.7 percent in 2017 (in 2016 – 58.9 percent)[1].

In 2018, developer companies put into operation a total of 232,200 one-family homes with total area of 32.5 million m², which is 1.6 percent less than in 2017; in other words, the movement pattern of the corresponding index for one-family homes was better 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 43.1 percent, which roughly corresponds to its level observed over the period 2010–2014.

Positive movement patterns in the housing construction sector were observed in less than half of the Russian Federation's subjects, but in the majority of regions the total volume of housing stock put into operation was in excess of 1 million m².

Table 9

The commissioning of residential housing in Russia's regions 2018 (ranked in descending order)

Region	Housing stock put into operation, percent relative to 2017
St. Petersburg	111.7
Krasnoyarsk Krai	108.0
Chelyabinsk Oblast	106.9
Moscowвa	103.6
Nizhny Novgorod Oblast	103.3
Leningrad Oblast	100.7
Rostov Oblast	100.6
Novosibirsk Oblast	100.6
Saratov Oblast	100.3
Voronezh Oblast	100.2
Republic of Tatarstan	100.1
Samara Oblast	99.7
Moscow Oblast	96.8
Sverdlovsk Oblast	96.8
Belgorod Oblast	93.5
Republic of Bashkortostan	93.0
Krasnodar Krai	92.9
Perm Krai	91.8
Tyumen Oblast (with autonomous districts)	84.9

Source: On Housing Construction in 2018 (in Russian), www.gks.ru.

As follows from *Table 9*, the movement pattern displayed by the index of the total volume of housing stock put into operation, which considerably exceeded Russia's average (by more than 3 percent), was noted in St. Petersburg, Krasnoyarsk Krai, Chelyabinsk Oblast, Nizhny Novgorod Oblast, and in the city of Moscow. Another 6 regions demonstrated positive movement patterns of that index, but its actual value was less than 1 percent. At the same time, shrinking volumes of housing stock put into operation were seen in 8 regions, including Belgorod Oblast, the Republic of Bashkortostan, Krasnodar Krai, Perm Krai, and Tyumen Oblast (with autonomous districts), where the plunge of that index amounted to 6–15 percent.

[1] https://erzrf.ru.

Moscow Oblast demonstrated a decline that was less deep than the corresponding Russia's average (3.2 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). The city of Moscow was in the group of leaders with respect to the growth rate of that index (3.6 percent); however, by its total volume of housing stock put into operation in absolute terms, which was above 3.5 million m², it still fell behind the city of St. Petersburg (about 4.0 million m²), where the rate of housing stock put into operation was highest (11.7 percent). The group of top five regions was also joined by Krasnodar Krai (about 4.4 million m²) and Leningrad Oblast (more than 2.6 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 16.4 percent, of which the greater part was taken up by Moscow Oblast (11.7 percent), and the city of Moscow accounted for 4.7 percent. The aggregate relative share of the entire region in and around Russia's capital (including Moscow Oblast) increased relative to its 2017 level (15.8 percent), thus practically returning to its level in 2010 (16.6 percent), whereas over the period 2013–2017 it never rose above 16 percent.

If we look only at the number of multi-apartment residential buildings put into operation according to *Rosstat*'s data for 2018, the Top 10 regions were Moscow Oblast, the cities of St. Petersburg and Moscow, Krasnodar Krai, Leningrad Oblast, the Republic of Tatarstan, Sverdlovsk Oblast, Novosibirsk Oblast, Rostov Oblast, and Samara Oblast. Out of these ten regions, growth in the volume of completed multi-apartment residential construction projects was noted only in the city of Moscow, the city of St. Petersburg, and Rostov Oblast; its decline in Moscow Oblast, Leningrad Oblast, and Samara Oblast amounted to 8–10 percent.

The new financing mechanism employed in housing construction projects has been making its first steps in Russia. By December 2018, a total of 77 ongoing projects including 183 residential properties under construction with a total floor area of more than 1.5 million m² had been funded through escrow accounts[1]. In terms of number of projects, the leader by the scale of implementation of such projects is the Republic of Bashkortostan (about 24 projects), and in terms of total floor area to be put into operation – Moscow Oblast (more than 320,000 m²). As of year-end of 2018, seven banks were operating escrow accounts. According to data released by the Unified Information System for Housing Construction (UISHC), the highest number of projects relying on the new mechanism are funded through Sberbank, VTB, and DOM.RF Bank, the latter having been created on the basis of the bank *Russian Capital* after the transfer

[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.

of its 100-percent stake to the charter capital of the AHML at the very end of the year 2017[1].

As for the mechanism of attracting private funds of individuals through their participation in shared construction projects (SCP), which had already become a sort of tradition over the last one-and-a-half decades, in the course of the year 2018, according to data released by the Bank of Russia, the total number of housing mortgage loans issued under shared construction schemes was 368,340 units, which is 18 percent above the corresponding index for 2017 (312,164 units).

At the same time, towards the year end, there began to appear some signs that housing mortgage loans were becoming less affordable for participants in shared construction projects. The interest rates on housing mortgage loans secured by shared construction agreements at the year end 2018 increased to 9.39 percent per annum. In December, the number of actually issued HMLs secured by SCPs plunged by 7.7 percent relative to December 2017, while in November that index had gained 5 percent, and in October – 10.8 percent. Such was the effect of the RF Central Bank's decision, adopted in December, to raise its key rate to 7.75 percent per annum. As a rule, the interest rates on HMLs secured by SCPs are higher than the key rate by 1.5–2 percentage points.

In 2018, the housing construction market continued to demonstrate its consolidation.

While the total volume of ongoing construction projects increased by 10.7 million m² relative to the year-end of 2017, 38 percent of that growth index was accounted for by the top five companies (including 27 percent by PIK Group, which demonstrated growth in absolute terms by 2.9 million m²).

As of December 2018, about 20 million m² of floor area (more than 15 percent of the total volume of current housing construction projects across Russia) was being produced by the top 10 developer companies in terms of total volume of housing stock put into operation and their geographic spread. They operate in the main in the European part of this country (the Central, Southwestern, and Southern Federal Okrugs) and in the Urals, where more than 90 percent of all the projects are to be implemented.

Depending on the region where they operate, each of these top 10 developer companies generates up to 30–40 percent of the annual total volume of housing stock put into operation: about 30 percent in the regions near Moscow and St. Petersburg, not more than 10 percent in the other regions situated in European Russia, and about 5 percent regions situated in the Siberian and Far-Eastern Federal Okrugs. As far as the structure of regional markets is concerned, if we consider all their participants, their concentration in the majority of regions is either on a low or moderate level: the

[1] In this connection it should be reminded that several years ago, this bank experienced some serious problems, and so was restructured by the State Corporation *Deposit Insurance Agency* (DIA). The Law on the federal budget for 2017–2019 established the government's right to receive as part of the RF treasury all the ordinary and preferred shares issued by that bank and held and (or) purchased by the DIA to the total value of up to RUB 92 billion, to replace the property contributions by the state due under the federal budget laws for 2008–2010 and 2014–2016, to valuate these shares at their balance sheet value (the buying price paid by the DIA), and to transfer them to the charter capital of the AHML.

aggregate share taken up by the 5 major market players does not exceed 50 percent in more than 30 regions, and does not exceed 70 percent in 60 regions. A high market concentration has been observed mostly in those regions where the climatic conditions make it difficult to implement construction projects.

The market consolidation index of the city of Moscow, while staying at a high level, changed only slightly over the course of last year, which is a sign of market maturity. The obvious leader here, in terms of housing construction volume, is PIK Group; since 2016, it has been occupying the topmost position in the primary market of 'Old Moscow' with its market share of 20 percent, and it also accounted for 34 percent of aggregate growth in the housing construction sector in 2018.

As demonstrated by the results of an analytical study conducted by Metrium Group, the Top 20 developer companies operating in the territory within the previously established city borders (Old Moscow) have been building only 150 residential multi-unit and apartment complexes. The total floor area of these complexes amounts to 8.81 million m², or 67.5 percent of the total housing volume at the year end, including also those apartments that are not legally treated as residential premises, but are frequently viewed as an integral component of residential development projects that can be offered on the market, in hopes that resident registration will eventually be permitted there, and so the total volume of housing stock put into operation will be increased.

The five leaders in terms of volume of housing stock put into operation in Old Moscow are as follows:

– PIK Group (1.94 million m², 1st place by housing construction volume in the city of Moscow);

– MR Group (884,730 m², 5th place in the city of Moscow);

– DONSTROY (831,770 m², 4th place in the city of Moscow);

– Capital Group (623,980 m², 14th place in the city of Moscow);

– Etalon Group (471,390 m², 8th place in the city of Moscow)[1].

With regard to these achievements, Metrium Group's analysts note that since 2016, PIK Group has confidently retained its leading position in Old Moscow's primary market.

In 2018, the leader of the Russian housing construction market began to sell units in 8 new residential complexes, thus increasing the total number of new street addresses in its portfolio to 23. These are, in the main, large-scale projects totaling hundreds of thousands of square meters each. And the total floor area of buildings currently put on the market by PIK Group has nearly doubled relative to 2016. MR Group, according to Metrium Group's analysts, managed to come second in the ranking thanks to the launch,

[1] In brackets, we specify the ranking of each company by the volume of its housing stock under construction (to be put on the market) in New Moscow, meaning apartments at any stage of their creation after the issuance of a construction permit.[2] The system 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.

over the course of last year, of 8 residential multi-unit and apartment complexes with total area of 383,600 m². A year earlier, that developer company had come third. Now the third place is occupied by DONSTROY, with its 13 residential multi-unit and apartment complexes under construction. In 2018, the developer company's portfolio was augmented by four new construction projects.

The rankings of Moscow developer companies are still largely determined by the scale of their activity in the territories that were transferred to the city of Moscow a few years ago. However, this factor has been gradually dwindling as a growth driver.

According to data released by the Single Register of Developer Companies (SRDC) on its website, today in New Moscow there are 47 ongoing housing construction projects involving a total of 509 residential properties. The total floor area of these properties (5.33 million m²) amounts to 28 percent of the total housing construction volume in the city of Moscow; 95 percent of all the construction sites are situated in New Moscow Administrative Okrug, the remaining 5 percent – in Troitsky Administrative Okrug. At present, New Moscow obviously suffers from a shortage of social and transport infrastructure, as well as quality jobs, while no housing deficit can be expected in the foreseeable future. The currently issued construction permits (for a total of 18 million m²) amply provide for the next decade, at the rate of 1.5–2 million m² of new housing units to be put into operation every year. So, as Head of the Department for the development of new territories of Moscow Vladimir Zhidkin said at the X Real Estate Financial Forum in February 2019, the city government has no new housing construction plans for the next 5 years concerning these territories, instead giving priority to the development of urban environment, construction of non-residential commercial properties, and creation of new infrastructure entities.

According to Sergey Lobzhanidze, director of the analytical platform bnMAP.pro (an innovative IT product developed by BEST-Novostroy), the apartments situated in New Moscow are currently being sold at a higher rate even than in Old Moscow, because the former are more affordable, and because of the rapid development of Moscow's metropolitan underground network. Over the course of last year, 22 percent of all apartment purchase deals in the new comfort-class housing segment across the Moscow region took place in the territory of New Moscow. If housing prices should slightly increase, some of the demand may overflow to Moscow Oblast, because the average buyer is still constrained by budget considerations.

As time goes on, the housing fund renovation program approved on August 1, 2017 will be gaining in importance. It lists 5,172 residential buildings, with the prospects for resettlement of dwellers of more than 350,000 apartments. The list of street addresses of 318 startup construction sites was adopted, with a potential for building properties with total area of 4.6 million m² in all Moscow's okrugs. The list is by no means complete as yet.

As seen from data released by the Department of urban planning policy of Moscow, in 2018, a total of 98 residential buildings were being constructed in Moscow under the renovation program, with total area of about 1.2 million m²; of these, 40 new residential

properties with total area of about 500,000 m² have already been put into operation. The resettlement of residents from 51 buildings has been started; two of these buildings have been completely vacated, and five have been demolished; the residents moved to 33 newly erected residential buildings in seven okrugs of Moscow: Eastern, North-Eastern, Western, South-Western, Southern, Northern, and South-Eastern.

The prospects of the housing construction sector for the nearest future appear to be controversial.

At year end 2018, according to data released by the Unified Information System for Housing Construction (UISHC)[1] operated by DOM.RF, the projects involving the construction of multi-unit residential buildings with total area of 126.5 million m² were underway in Russia, which is more than the corresponding year-end indices for 2017 (115.8 million m²) and 2016 (111.0 million m²). This movement pattern points to a reviving activity of developer companies, and makes it possible to expect an increase in the volume of housing stock to be put into operation in two or three years, which in its turn can produce a situation where supply will exceed demand, thus creating downward pressure on housing prices. The bulk of *current housing construction projects* launched by developer companies is taken up by multi-unit residential buildings. They account for 97.2 percent of all housing units under construction, while 'apartments' account for 2.4 percent, and linked houses – for only 0.4 percent[2].

The top five regions by the volume of ongoing housing construction projects are, not unexpectedly, the 'two capitals' and their environs (the cities of Moscow and St. Petersburg; Moscow Oblast; and Leningrad Oblast), and Krasnodar Krai. The highest volume of current housing construction projects being implemented by developer companies is noted in the city of Moscow – 17.8 million m² (14.1 percent of the total floor area of housing units). Second comes Moscow Oblast, where this index amounts to 15.7 million m² (12.4 percent of the total current housing construction volume)[3].

At the same time, at the meeting of the Presidium of the Public Council under the RF Ministry of Construction and Housing Utilities on December 19, 2018, Minister Vladimir Yakushev himself publicly spoke of the impossibility to achieve the ***target*** *'of increasing the annual housing construction volume to not more than 120 million m² per annum'* (to 2024)[4], set in the Presidential Executive Order as one of indicators that the **national goal** of *'improving the housing conditions of not less than 5 million families per annum'*.

[1] The system 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.

[2] Apartments are understood in this context as housing units situated in non-residential buildings (without the right to resident registration). Linked houses are structured like townhouses, whereby each home has a separate street entrance, but they share a common wall in the basement or foundation.

[3] URL: https://erzrf.ru.

[4] This index, applied by *Rosstat* in its official documents and reports, describes the volume of housing stock put into operation, and not the volume of ongoing housing construction projects.

According to the certificate of the national project *Housing and Urban Environment*, the volume of housing stock put into operation last year was to amount to 86 million m², but in reality only the prediction of reaching the level of 75.3 million m² came true. As seen by the period-end results of the first two months of 2019, the volume of housing stock put into operation shrank by 9.4 percent relative to the corresponding period of the previous year.

Given all these conditions, the situation in the housing construction sector will largely depend on the smooth functioning of the financing mechanisms applied there.

The market response to the December raise of the RF Central Bank's key rate (from 7.5 percent to 7.75 percent) has not yet reached its full force, so one can expect some further growth of the interest rates on housing mortgage loans. The regulator predicts that inflation will peak in H1 2019 and at the year's end will amount to 5.0–5.5 percent, and then, as early as H1 2020, it will slide back to 4 percent. Thereafter, the Bank of Russia will base its key rate decisions on the effects of the increases of the key rate in September and December 2018, with the aim of pushing back annual inflation to its target in 2020. At the same time, the Bank of Russia's cautious approach can be interpreted as its reluctance to significantly raise the key rate, and so it can be expected that the interest rates on housing mortgage loans will not be increasing at a very fast rate over the course of 2019.

A certain role in this connection can be played by the social support measures set forth by the government (subsidies to families with children covering the cost of their mortgage payments, mortgage payment holiday). However, it must be well understood that as the instrument of HML exhausts its growth potential, it is banks and developer companies that will truly benefit from these measures (because for them this is profitable business), and not the population.

Besides, the effects of the switchover to escrow accounts are not yet clearly visible. Suffice to quote, in this connection, the estimates from the already mentioned joint report by DOM.RF and Frank RG. Head of Sberbank Herman Gref believes that this may hit hard the housing mortgage system, and the rising interest rates will push down demand. And Chairman of the State Duma's Committee on Natural Resources, Property and Land Nikolai Nikolaev, on the contrary, expects that after the switchover to escrow account the interest rates will decline because 'the money in this case does not flow elsewhere, but it placed on an escrow account with the same bank', and 'the bank will earn its own from the use of these monies, not only by receiving interest on housing mortgage loans, but also by 'reusing' these monies'.

5.8.3. Institutional changes in the shared construction system and their impact on the housing market

Active reforming of the shared construction system through significant adjustments to the basic version of Federal Law No 214 has been underway for several years already[1]. However, the package amendments introduced in 2018 surpass in their scale everything that has been done over the course of the three previous years.

Firstly, the list of permitted methods of attracting private funds of individuals no longer includes that of the issuance, by the owner or holder by right of lease of a land plot for which a permit was obtained in the established procedure for the construction therein of a multi-unit residential building, of bonds of a special type – housing certificates, whereby the right of their owners to receive from the issuer of those bonds a housing unit in accordance with RF legislation on securities is secured.

The well-known source of funding (from the past experience of the Soviet period) – housing cooperatives – is allowed to be used only by those housing construction cooperatives (HCC) that implement their projects on land plots received by them by right of use on a non-reimbursable basis for a limited period of time from lands in municipal or state ownership, including under the provisions stipulated in the 2008 Law 'On Promoting Housing Construction Development', or those set up in accordance with the 2002 Law 'On Insolvency (Bankruptcy)', with the exception of housing saving cooperatives.

Federal Law No 214 regulates the relations arising from a developer company's liabilities to the participants in shared construction projects (SCP), and the transfer of its property (including the title thereto) and liabilities to the unitary non-profit organization (foundation) set up in accordance with Federal Law No 218-FZ dated July 29, 2017 'On the Public Legal Company for the Protection of Rights of Citizens – Participants in Shared Construction Projects in Case of Insolvency (Bankruptcy) of Developer Companies, and on the Introduction of Alterations into Some Legislative Acts of the Russian Federation'[2], with due regard for the specificities stipulated in that Law, as well as the laws regulating shared construction and bankruptcy issues. The new organization was granted the status of a developer company.

Secondly, one of the important qualification requirements to a developer company has been made easier to meet. The threshold for the total floor area of multi-unit residential buildings erected with the participation of a given developer company (over a period of not less than 3 years) has been reduced by half (from 10,000 m² to 5,000 m²).

[1] See the IEP's annual overviews *Russian Economy in 2016. Trends and Outlooks (Issue 38)*. Moscow, IEP. 2017, pp. 328-330; and *Russian Economy in 2017. Trends and Outlooks*. Moscow, IEP. 2017, pp. 376–379.

[2] Public legal company 'Fund for the protection of rights of citizens – participants in shared construction projects' was created in the autumn of 2017. Simultaneously, the Rules for making corporate decisions concerning the financing of measures designed to ensure the completion of abandoned building construction projects and to exercise control of the use of funds received as part of such financing were adopted.

At the same time, it is now explicitly prohibited for a developer company to engage in activities involving the attraction of funds from participants in shared construction projects for the construction (or creation) of properties simultaneously under several urban development plans targeting one and the same land plot, or under several approved territory planning projects.

Thirdly, there are some changes in the requirements to a developer company that must be met in order to obtain the right to attract funds from participants in shared construction projects, with respect to financial security and control.

The requirement that a developer company, as of the date of filing a project declaration to a relevant empowered body of executive authority of a RF subject, must have money in the amount of not less that 10 percent of the planned construction project's total costs on an account opened with an empowered bank, has been augmented by the provision whereby it was allowed to provide, as of the said date, a credit agreement with the said bank envisaging the issuance by the latter of a targeted loan for the construction (or creation) of a multi-unit residential building and (or) other property entity that incorporates entities to be built in the framework of a shared construction project, in the amount of not less than 40 percent of the planned construction project's total costs.

One exception was introduced with respect to the rule stipulating that the obligations of a developer company unrelated to the attraction of monies from the participants in a shared construction project or to the construction (or creation) of multi-unit residential buildings and (or) other real estate properties covered by one or several construction permits should not exceed 1 percent of the construction project costs. The rule does not apply to the obligation of a developer company to correct the deficiencies of real estate property created under a shared construction agreement in accordance with the quality guarantees stipulated therein.

Another exception was introduced with respect to the norm whereby a developer company with the status of a legal entity must not be subject to a court ruling ordering the enforcement of one of the procedures applicable in the framework of a proceeding in bankruptcy as established by the 'core' 2002 law, concerning the cases envisaged therein.

Now, a developer company must comply with the financial sustainability norms[1].

The amount of permitted arrears of taxes, levies and other mandatory payments to the budgetary system for the previous calendar year (with a few exceptions) owed by a developer company with the status of a legal entity has been defined more specifically in coordination with the law on bankruptcy.

The developer companies that do not meet these requirements have no right to attract funding from any participants in shared construction projects involving the construction (or creation) of multi-unit residential buildings, and not only from individuals, as it was established previously.

[1] The norms established by RF Government Decree No 1683 dated December 26, 2018.

If a developer company uses the monies of participants in shared construction projects involving the construction (or creation) of one or several multi-unit residential buildings and (or) other real estate properties covered by one or several construction permits, that developer company must hold a separate settlement account for each of these construction permits. The bank account contract(s) must include a clause whereby the client agrees to disclose to the authorized bank the same information as it is required to disclose, in accordance with the law, to the empowered body of executive authority of a RF subject and to the Public Legal Company 'Fund for the Protection of Rights of Citizens – Participants in Shared Construction Projects'. The banking operations of money withdrawal from the bank account (or bank accounts) of a developer company are executed by an authorized bank in accordance with the requirements stipulated in the law on shared construction (Article 18.2). The number of settlement accounts held by one and the same developer company should not exceed the number of construction permits.

A developer company has been granted the right to terminate the bank account contract concluded with an authorized bank. If such is the case, the developer company, as well as the technical customer and general contractor operating under the building construction contracts that they are party to, are obliged to open accounts with another authorized bank and to transfer all the monies to the new bank account.

A developer company, not later than one workday after the date of opening a new bank account, should duly notify the bank that the other bank account had been opened with, and all the other parties mentioned earlier. After receiving from the developer company such a notification, the authorized bank is not allowed to execute any banking transactions on its settlement account, with the exception of those transactions that had been ordered prior to or on the same day as it receives the order whereby it is required to transfer all the monies to the new settlement account opened by the developer company. The information concerning a closed or opened settlement account by a developer company, as well as the settlement account number, the name of the authorized bank and its identification details (Taxpayer Identification Number (TIN), Primary State Registration Number (PSRN)) should be submitted by the developer company to the Unified Information System for Housing Construction (UISHC) not later than one workday after the date of opening or closing a settlement account by a developer company.

The period for submitting, by a developer company, of its intermediate accounting (financial) reports after the end of the relevant intermediate reporting period, has been extended from 5 to 30 calendar days.

Fourthly, the requirements to information disclosure by a developer company have been toughened.

Now, information disclosure should take place on the UISHC's website (previously, it was to be disclosed on the developer company's official website). The information to be disclosed is posted to the UISHC's website within 5 workdays after receiving, from an empowered body of executive authority of a RF subject, a resolution whereby the

developer company and the project declaration are deemed to be in conformity with the established requirements, and certain information items are to be disclosed on a monthly or quarterly basis. Any alterations to the information and documents to be disclosed should be posted to the UISHC's website within 3 workdays from the date of introducing such alterations.

The list of information items to be disclosed has been augmented by the following items:

– an urban development plan for the land plot;

– a map of the planned development of a land plot prepared in conformity with the urban development plan for the land plot, outlining the building structure, entrances and passages around it, public servitudes, and property entities belonging to the category of archeological heritage;

– documents containing information concerning the calculated amount of funds owned by the developer company and its conformity with the established financial sustainability norms;

– information concerning the initiation of one of the procedures applicable in the framework of a proceeding in bankruptcy as established by the 'core' 2002 law;

– announcement of the start of building construction or reconstruction work on a capital construction site, as established by urban development legislation;

– information concerning the opening (or closure) of a settlement account by a developer company, including the relevant account number, the authorized bank's name and identification details (TIN, PSRN);

– other information, as stipulated in the law.

Certain information items should be provided by a developer company for each of the multi-unit residential buildings and (or) other real estate properties constructed (or created) at the expense of the participants in shared construction projects.

The payment of the contract price under a shared construction project after its state registration may now be effected only by means of bank transfer.

The norms whereby the fulfillment of obligations under a contract should be secured by a pledge do not apply to those cases when, in the framework of a shared construction project, a developer company places the monies received from its participants for the construction (or creation) of multi-unit residential buildings and (or) other real estate properties on escrow accounts.

Fifthly, as far as the requirements to a developer company's corporate governance and participants are concerned, the period during which the post of the director or chief accountant of a developer company cannot be occupied by an individual who, in accordance with the law on bankruptcy, has been brought to subsidiary responsibility under the obligations assumed by a legal entity and (or) responsibility in the form of recovery of damages by a legal entity, has been extended. Not less than 5 years should pass from the date of execution of the said obligation in accordance with a court ruling (previously – 3 years).

A similar timeframe adjustment has been introduced with respect to the individuals who had been performing the functions of a single executive body of a legal entity until submitting a project declaration to an empowered body of executive authority of a RF subject and were deemed to be bankrupt by an arbitration court.

The cap on the permitted stake in a developer company's capital has been reduced from 25 to 5 percent for individuals who may occupy the post of that company's director or chief accountant. A similar alteration has been introduced with respect to persons who for 3 years prior to submitting a project declaration have been owning, directly or indirectly (through third parties), a stake in the capital of a developer company that was deemed to be insolvent (bankrupt) by an arbitration court.

Sixthly, the norms regulating the escrow account mechanism have been fundamentally revised (Article 15.4 and 15.5).

Under a general rule, when a developer company attracts funding from individuals participating in the construction (or creation) of multi-unit residential buildings (or) other real estate properties through escrow accounts, all the participants in a shared construction project should make their contract price payments to escrow accounts opened with an authorized bank.

If the construction (or creation) of a multi-unit residential building and (or) other real estate property by a developer company is funded by a targeted loan, the participants in a shared construction project make their contract price payments to escrow accounts opened with the authorized bank that has issued that particular targeted loan. The same norm applies to the situation when a developer company has concluded a loan refinancing (recrediting) agreement.

The contract for participation in a shared construction project must stipulate all the conditions envisaged in the law, as well as the obligation of a participant in a shared construction project (the deponent) to pay the contract price in full before the multi-unit residential building and (or) other real estate property has been put into operation by depositing money, in the amount and within the timeframe established by the contract (the deposit), to an escrow account opened with an authorized bank (escrow agent), and to provide information concerning the said bank (its name, brand name, location and address, email address, telephone number).

The obligations of a participant in a shared construction project to pay the contract price is deemed to be fulfilled from the moment of crediting the said amount to the escrow account opened with an authorized bank.

An empowered body of executive authority of a RF subject issues to a developer company a resolution concerning conformity of the latter and the project declaration submitted by it with the established requirements, or refuses to issue such a resolution if the requirements are not met. If an insured event occurs for the authorized bank that an escrow account has been opened with, in accordance with the provisions of the 2003 Federal Law on insurance of individual accounts, the developer company and the participants in a shared construction project must conclude an escrow account agreement with another authorized bank.

As far as the use of escrow accounts is concerned, the new provisions are as follows.

The application for opening an escrow account and the corresponding agreement may, in accordance with the banking rule, be filled and signed with a simple electronic signature through a remote banking system of an authorized bank, if the latter can be applied in the bank's dealing with its clients.

Funds are deposited on an escrow account after the registration of a shared construction contract, and the option period for earnest money thus kept cannot be more than 6 months after the multi-unit residential building and (or) other real estate property specified in a project declaration has been put into operation; previously, there was no such provision.

No interest is charged to earnest money on an escrow account, while this was envisaged in the previous norm that was in effect for nearly two years.

The procedure for a transfer of money by bank to a developer company has been altered. While previously this was done under an act of money transfer or some other document, in the new version the grounds for money transfer should be a permit for putting into operation a multi-unit residential building and (or) other real estate property and a statement from *Rosreestr* in confirmation of state registration of a title to property, or the fact of posting such information to the UISHC's website. Besides, a developer company now has the option of transferring funds to its pledged collateral account with an authorized bank, and transfers the possession right thereto as collateral, if this is stipulated in the credit agreement (or loan agreement) concluded by the developer company.

In addition to the grounds for termination of an escrow account contract when the account has been opened for settlements under a shared construction contract as stipulated in the RF Civil Code, the former can be terminated on the following grounds:

– in an event of its cancellation;

– if one party unilaterally terminated the contract.

If an escrow account contract is terminated on such grounds, the earnest money funds, upon the receipt by the authorized bank of information concerning the striking-off of the entry of state registration of a shared construction contract from *Rosreestr*, should be returned to the participant in a shared construction project or transferred to the pledged collateral account, the rights to which are pledged to the bank or another credit institution that had lent money to the participant in a shared construction project, for the latter to pay the contract price under a shared construction contract, if such a clause is included in the contract between the participant and the lender.

An escrow account contract must contain information concerning the deponent's bank account, where the funds are to be transferred if the bank does not receive the client's instruction that the money should be disbursed or transferred if the said contract has been terminated for the aforesaid reasons.

Seventhly, many new provisions have to do with the use of funds by a developer company.

The list of possible uses has been augmented by the following items:

– payments by way of purchasing land plots, fees for switching over to another type of permitted use of funds, fees for lifting the ban on construction and reconstruction of buildings or structures situated on such land plots, imposed in accordance with the 2001 Federal Law on putting into force the Land Code of the Russian Federation (previously – land rent only);

– money transfer to an account with another authorized bank, opened in an event of termination of a bank account contract;

– depositing of temporary free funds on an account with the same authorized bank where the developer company holds a settlement account; this is done because the deposited money and the interest charged to it must be returned to the same settlement account held by the developer company where the money was originally placed;

– payment for the upkeep of residential and (or) non-residential premises, garage units, including utilities, in a multi-unit residential building and (or) other real estate property created at the expense of participants in a shared construction project, from the date of receiving the permit for putting the said property entity into operation, if the title to the said premises has not been registered.

The following transactions cannot be executed through the settlement account of a developer company:

– transactions involving the fulfillment of obligations of third parties;

– transactions involving the fulfillment of a developer company's own obligations to third parties not associated with the use of funds received from participants in shared construction projects involving the construction (or creation) of multi-unit residential building and (or) other real estate properties;

– issuance of loans;

– purchase of securities;

– transactions involving the creation of business companies and non-profit organizations, participation in charter capital of economic societies, equity owned by other business companies and non-profit organizations, with the exception of transactions involving the creation (or participation in charter capital) of those economic societies – developer companies in relation to which the developer company is (or becomes) a core company;

– payments related to the securities issued (or released) by the developer company, with the exception of payments related to shares in the developer company.

A developer company is not allowed to engage in other activities, except the activities involving the attraction of funds from participants in shared construction projects involving the construction (or creation) of multi-unit residential building and (or) other real estate properties covered by one or several construction permits. After receiving a permit for putting into operation a multi-unit residential building and (or) other real estate property and until making an entry thereof in the state cadastre register, a developer company may conclude shared construction contracts with respect to real estate properties in the framework of shared construction projects that are not subject to any other similar contract.

The list of economic transactions that a developer company is not allowed to execute has been augmented by some exceptions, in particular the attraction of targeted loans to fund its building construction activity, and targeted loans granted by the company's founders (or participants), targeted loans issued to another developer company affiliated to the core developer company, the creation (or participation in charter capital) of other economic societies – developer companies affiliated to the developer companies, the latter thus being (or becoming) their core company. The list of documents necessary for the execution of banking transactions on the settlement account held by a developer company is to be approved by the RF Government in coordination with the RF Central Bank. An authorized bank executes the banking orders of a developer company not later that on the next workday after receiving such orders, or for the purposes of an additional audit of the documents submitted by a developer company the bank may suspend the execution of such banking order for a period of not more than 3 workdays. After the expiry of the suspension period, the authorized bank executes the said banking order not later than on the next workday, or in the cases defined in a separate list, the bank denies the transaction.

In the event of receiving banking orders concerning the execution of such transactions on the settlement account held by a developer company, the authorized bank suspends the transaction. In the event of denial, the bank notifies thereof the empowered body of executive authority of a RF subject and the Public Legal Company 'Fund for the Protection of Rights of Citizens – Participants in Shared Construction Projects' on the day that the transaction was denied. The notification must contain the identification details of the developer company, the details of the transaction that was denied, and the substantiation for such denial.

No cash withdrawal from or cash deposit in the settlement account of a developer company is allowed, with the exception of wages and salaries, on condition that the transfer of all the taxes and insurance contributions charged to these amounts is simultaneously executed, and also when the cash amounts withdrawn for the said purpose from the settlement account of a developer company are redeposited therein.

A denial or suspension of a transaction in the settlement account of a developer company in the established procedure cannot serve as the grounds for enforcing measures of civil responsibility on the authorized bank.

For several expenditure items and types of transactions, the procedures of compliance with the existing norms and caps on advance payments were introduced.

Eighthly, the following new provisions were introduced with respect to project declaration.

The empowered body of executive authority of a RF subject is obliged not only to issue, but also to prepare a resolution stating that the developer company and its project declaration are in conformity with the established requirements, or to refuse to issue such resolution, within not more than 30 days from the date of receiving the application.

An additional reason for refusing to issue a resolution can be the developer company's failure, as of the date of submitting a project declaration by the developer

company and (or) its core company or subsidiary, to meet the deadline for putting into operation the multi-unit residential building and (or) other real estate property erected at the expense of participants in the shared construction project specified in the project declaration, with a delay of three or more months[1].

Ninthly, the list of required information has been augmented by the following details concerning a developer company's founders (or participants) and beneficiary owners:

– information on the individuals, including their full names, who can indirectly (through controlled persons), on their own or jointly with other persons, dispose of not less than 5 percent of votes secures by voting shares (or stakes) in the charter capital of a developer company (hereinafter – beneficiary owners);

– identification details of the founder (participant) and beneficiary owner (for individuals – their Insurance Number of Individual Ledger Account (SNILS) in the compulsory pension insurance system; TIN (if applicable)); and for a legal entity – its PSRN and TIN);

– the size of the stake held by the founder (participant), and the shares controlled by the beneficiary owner, in the charter capital of a developer company;

– a statement of the circumstances (grounds) that substantiate the status of a beneficiary owner.

Tenthly, as far as government control (supervision) is concerned, it is to be exercised by the empowered body of executive authority of a RF subject (also referred to as a controlling body) of the territory where a given building construction site is situated, in the procedure introduced at the regional level with due regard for the requirements established by the RF Government; the coordination of appointment of the head of a controlling body, and their dismissal from that post, is to be exercised by the empowered federal body of executive authority in the procedure established by the RF Government.

In order to further protect the rights of citizens participating in shared construction projects, the norm has been introduced whereby the person, including beneficiary owners, who has the actual ability to influence the acts of a developer company, including the ability to instruct the person performing the functions of a single executive, or to instruct a member of collegial managerial bodies of a developer company, should bear subsidiary responsibility to the developer company for the losses incurred through their fault by the citizens participating in shared construction projects, although in the original version of the document, responsibility was grounded in solidarity.

Besides, numerous detailed norms have been introduced concerning the functions of the Unified Information System for Housing Construction (UISHC). In particular, the Single Register of Developer Companies (SRDC) has been made its integral part, and the information entered into it is open, accessible and must be posted to the UISHC's website, with the exception of data deemed to be restricted in accordance with RF legislation.

[1] This period starts on the date of state registration of the shared construction contract between a developer company and the first participant in the shared construction project.

A separate Article (23.4) regulates the interaction between the empowered body, the body responsible for registration of titles, the controlling bodies, the Public Legal Company 'Fund for the Protection of Rights of Citizens – Participants in Shared Construction Projects', authorized banks and developer companies through the information resources posted to the UISHC's website, including by means granting these entities access to the user personal accounts which are serviced by a system operator in the established procedure, and also by means of electronic documents.

The bulk of amendments to the law on shared construction projects made in 2018, just as a year earlier, these are designed to strengthen the regulation of the activities of developer companies. The issue of economic legislation instability in that sphere continues to be a problem, one example being the reinstatement of the right to operate under several construction permits.

After the significant alterations introduced into prevailing legislation concerning the financing procedures in the framework of multi-unit residential building construction over the period 2017–2018, it can be expected that not only the market share taken up by biggest developer companies will continue to increase[1], but also that the institutional rent will shift from those developer companies to authorized banks (who are, *de facto*, the principal beneficiaries of that process). The mechanism of that shift of the institutional rent to the banking sector has not yet fully evolved, and it is going to further transform alongside the ongoing changes in regulation, including the practical experience of applying the new requirements. In this connection, considering the general logic of these transformations, it can be said that the most significant changes will be taking place along the following lines:

- The placement of the participants' funds on the accounts with authorized banks creates for the latter an increased volume of liabilities (and in contrast to other types of deposits, no interest is charged to the residuals on escrow accounts, and so the developer companies are deprived of a most attractive source of direct financing from participants in shared construction projects), while at the same time strengthening the position of authorized banks in the building construction market, and also potentially increasing property concentration (as an asset class) in the balance sheets of biggest banks;
- In their striving to minimize their risks associated with property value fluctuations, as well as a potential bankruptcy of developer companies, authorized banks will be increasing their penchant for 'financially sustainable' and 'reliable' developer companies. In this connection, it can be expected that some additional requirements

[1] According to expert estimations, approximately 10 percent of developer companies failed to comply with the requirement to open a special account with an authorized bank; according to data available at erzrf.ru, as of October 15, 2018 that requirement had not been met by 143 developer companies in the city of Moscow, Moscow Oblast, and St. Petersburg. URL: https://erzrf.ru/news/uzhe-143-zastroyshchikam-zapreshcheno-privlekat-sredstva-dolshchikov-po-ddu?search= percentD0 percent95 percentD1 percent89 percentD0 percentB5

to developer companies will be added by banks to the already existing criteria established by the law;

- The withdrawal from the market of those developer companies that will be unable, for a variety of reasons, to meet the new criteria and to deal with market redistribution in favor of those market players that have long-standing relations with authorized banks[1]. It can be expected in this connection that not only small developer companies will go bankrupt, but also that the activity in the merger and takeover market will intensify in favor of stronger players (including the participation in this process of the banking investment departments of authorized banks).

On the whole, the business stratification process in the multi-unit residential building construction market has dramatically intensified over recent years. This is the natural outcome of the concentration of business activity in the hands of big developer companies and big banks and their increasing institutional power, which has made it possible to move the existing institutional barriers from the level of municipalities (land allocation and land use permits, access to infrastructure) to that of 'dividing lines' between the businesses that have been gaining prominence in the building construction sector.

All these alterations in the legal field have been publicly explained as being caused by social factors and the strong need to increase the reliability and transparency of the financing system applied in the multi-unit residential building construction sector, especially in view of the spectacular failures to fulfill their obligations and bankruptcies of some major developer companies (SU-155, Urban Group, and some others). At the same time, such requirements are fraught with future risks for those banks and developer companies that have been left outside of the transformed system. The economic indices achieved in recent years will decline, and the market shares and profits lost by them will be redistributed in favor of the banks and developer companies in the 'prime group'. The social and other risks faced by the clients of banks and businesses that are thus 'falling behind' may also significantly increase later on also in the other market segments.

It is also noteworthy that a special place in the ranking of those authorized banks that rely in their dealings with developer companies on the formal criteria set forth by the RF Government belongs to banking group DOM.RF (reorganized from *Russian Capital*), which until now could not boast of being ranked as one of Russia's top banks by Russian rating agencies. The other topmost ratings among Russian banks are enjoyed by biggest systemic, predominantly state-owned banks (and first of all, Sberbank and VTB). However, in this connection some questions have been raised about rating

[1] The governments of three regions (the cities of Moscow and St. Petersburg, and Leningrad Oblast) practically simultaneously took advantage of the new amendments to legislation on shared construction by submitting to *Rosreestr* the lists of developer companies that had been banned from using the funds of participants in shared construction projects. A total of 95 developer companies operating in the three regions with the highest housing construction volume indices were deprived of their right to register with *Rosreestr* their shared construction contracts.

agencies being affiliated with their 'beneficiary' banks, and also about their compliance with the international standards (some banks, which have a positive ranking inside Russian, were ranked negatively by international agencies).

It seems that the processes of market consolidation in the multi-unit residential building construction segment will be only gaining in intensity over the next few years (both as a result of bankruptcy of some developer companies and in response to the strengthening trend towards more mergers and takeovers across the building construction sector). It is still difficult to properly assess the consequences of market consolidation for the population, banks, building construction companies, and the shadow market due to the multi-vector trends that have been shaping the market, and also because this process is still undergoing its early phase (according to a variety of estimations, it may further evolve over the next 3–5 years with the direct participation of the state). At the same time, the concept of institutional rent and institutional constraints in a multi-level economy helps to organize a more comprehensive monitoring of this process, and thus to timely identify the risks associated with the ongoing large-scale consolidation and to properly structure the analysis of these processes in order to elaborate appropriate decisions for maintaining stability across the sector and to achieve its priority development targets (including the proclaimed targets for the volume of housing stock to be put into operation, and for its sufficiency and affordability for the population).

The main changes and effects associated with this process will be structured along the following main directions, each of which will need to be further monitored:

- Economic ones, associated with the potential for a faster growth of the housing construction volume sustained by support granted to the building construction sector's leaders, potential reduction of costs due to economies of scale (including by means of typization, or even 'commoditization' of mass housing projects, which will be more convenient for banks to assess as large-scale housing portfolios). On the other hand, there are also factors associated with the risks of housing construction market transformations, obvious or hidden market monopolization, bankruptcy of small developer companies and the resulting increased burden on the labor market (this is especially painful for small towns and economically depressed regions, which are of little interest for big developer companies).
- Social ones, associated with the reduced risks of fraudulent dealings with citizens (project participants) as a result of channeling all the money through bank transfers and placing the funds in sustainable banks; and on the other hand, with higher risks for the clients of banks that operate outside of the system of authorized banks, and shrinkage of the shadow labor market in the building construction sector.
- Technological ones, associated with greater opportunities for big consolidated market players in the building construction sector to develop and implement innovative products (including the skills necessary for the development and implementation of generic housing projects suitable for entire micro-districts, and housing renovation programs in the form of 'migration waves').

- Financial ones, associated with the possible toughening of control of money transfers by banks and gradual withdrawal of individual savings from the shadow market turnover, and the resulting expansion of taxable base, as well as increasing sustainability of the budgetary system. The implementation, by banking institutions, of new instruments in their monitoring of the building construction sector (the methodology for estimating the sustainability of developer companies and the resulting ranking of developer companies, improvement of large-scale assessment techniques, etc.)[1].

5.8.4. The forecast for Moscow's housing market for 2019

While getting down to discussing the housing market forecast for the city of Moscow, let us look first at the results of the previous annual forecast, which was prepared during the period when the current political and economic situation was already evolving.

A retrospective verification of the predicted 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 predicted values (*Fig. 34*). Over the period of December 2015 and the year 2016, the actual and plotted prices were practically identical.

For 2017, it was predicted 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 predicted values was 1–2 percent in the secondary market, and 5–7 percent in the primary market. Thus, the forecast for 2017 calculated relative to price of oil at USD 40 per barrel (decline of prices by 3–5 percent) was not realized, as it turned out to be too pessimistic, because in H2 the prices became stable. There was a consensus among experts 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.

Given the actual year-end indices for 2017 and the onset of growth in the Russian economy alongside declining real disposable income, our forecast for 2018 was that prices in Moscow's housing market might fluctuate in the interval +/-1.5–2.0 percent, thus pointing to ongoing stagnation with an uncertain time horizon.

[1] A.A. Blokhin, S.G. Sternik, G.V. Teleshev. Transformation of the institutional rent of developers of multi-family housing into institutional rent of credit organizations. In: Property Relations in the Russian Federation, No 1 (208), 2019, p. 6-17. (In Russian).

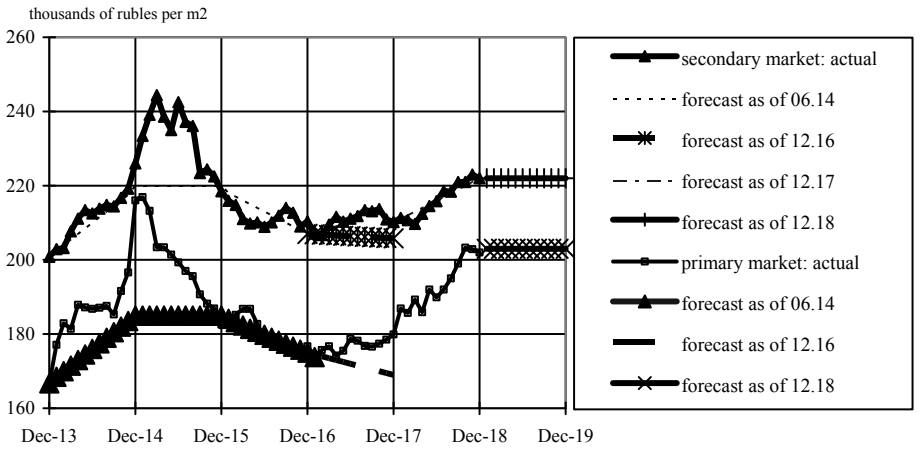


Fig. 34. A comparison of the movement patterns of actual and predicted prices in Moscow's housing market in 2013–2017, and a forecast for 2019

Source: for data: Analytical Committee, Moscow Realtor Association; for forecasts: LLC Sterniks Consulting.

The graph in *Fig. 34* demonstrates that the actual movement pattern of prices over the course of 2018 was close to the forecast.

The situation in the housing market was shaped by the following main factors.

The agreement of the world's major oil producers (OPEC+), also joined by Russia, resulted in rising oil prices since the year-end of 2017, which translated in RF federal budget surplus, and a relative stability of the key rate alongside declining interest rates on housing mortgage loans. Thus it became possible for the government to fulfill all its social obligations, which during the electoral cycle were augmented by some other measures, and so the downward movement of real disposable income was halted. As a result, housing prices became stabilized in those cities where they had been on decline, and they began to increase in those cities where they had been stagnating.

The start of the year 2019 saw a slight plunge of global oil prices, but it is unlikely that later on they will demonstrate any significant changes. According to the RF Ministry of Economic Development's forecast, the rate of GDP growth will become slower. The situation with regard to real disposable income, which is now far from its baseline 2013 level, is uncertain.

The drivers behind the housing price growth observed over the course of last year (stabilization of real disposable income due to the electoral cycle effects coupled with rising oil prices, declining interest rates on housing mortgage loans) have disappeared. Government support of the housing market (i.e., subsidies to help repay housing mortgage loans) will yield only some moderate effects.

A more in-depth reform aiming towards heavier centralized market management, for which an institutional and normative-legal base is being actively created, in principle may translate into a more active market under the scenario envisaged in the framework of the national project *Housing and Urban Environment until 2024*, but this is not going to happen very soon. So, for the next 2–3 years, it appears feasible to predict that both the market and prices are going to stagnate.

However, in an event of a shock triggered by economic sanctions (which is a non-zero probability) – for example, if Russia's systemic state-owned banks should be cut off from the US dollar system and so on, the ruble's exchange rate may sharply fall even if price of oil remains high, followed by a surge of inflation and a return to the market's partial dollarization; then, with a certain lag, the market will follow the movement pattern of inflation and the ruble's depreciation. At the same time, as demonstrated by the history of Russia's domestic housing market since the early 1990s, the by-segment movement pattern of inflation on that market, depending on a particular segment (secondary or primary), may strongly deviate from that of the CPI, both upwardly and downwardly.

Section 6. Institutional change

6.1. The public sector and privatization policy[1]

6.1.1. Societies and organizations in federal ownership: quantitative dynamics

From 2016, statistical data began to be published in the framework of the System of Public Property Management Efficiency Estimates. It was approved by Decree of the RF Government No 72 dated January 29, 2015, and introduced by way of replacing the public sector monitoring data, collected and released by the Federal State Statistics Service (*Rosstat*) since the early 2000s in accordance with the provisions stipulated in RF Government Decree No 1 dated January 4, 1999 (as amended on December 30, 2002). Among other things, the System contains data on the number of federal state unitary enterprises (FSUEs) and joint-stock companies (JSCs) with RF stakes in their capital. Previously, such data were usually published as part of government privatization programs (from 2011 – for three-year period, and prior to 2011 – for one-year period). In the current *Forecast Plan (Program) of Federal Property Privatization and the Main Directions of Federal Property Privatization for 2017–2019*, relevant data are available only as of early 2016 (*Table 1*), and so in order to describe the processes taking place over the period 2016–2018, one must rely on data in the System of Public Property Management Efficiency Estimates[2].

[1]This section was written by G. Malginov, Gaidar Institute, RANEPA; A. Radygin, Gaidar Institute, RANEPA.

[2] This section estimates the movement pattern, in nominal terms, of societies and organizations in federal ownership for the corresponding years. For available estimates of the public sector's input in the national economy, see Abramov, A., Aksenov, I., Radygin, A., Chernova, M. Modern Approaches to Measuring the State Sector: Methodoology and Empirics // Economic Policy, 2018, V. 13, No 1 (February), pp. 36–69; 2018, V. 13, No 2 (April), pp. 28–47; and for public sector indices, see https://ipei.ranepa.ru/laifr, https://ipei.ranepa.ru/kgu

Table 1

The societies and organizations in federal ownership, entered in the Federal Property Register and the System of Public Property Management Efficiency Estimates in 2010–2018

Date	Economic societies with federal stakes, units		Other holders of ownership rights to registered federal property entities, units		
	Stake (share) in capital	special right to participate in company's management ('golden share') without holding any stake[a]	FSUEs	FTEs	FSIs
As of January 1, 2010	3,066/2,950[b]		3,517[b]		
As of January 1, 2013	2,356/2,337[b]	1,800/1,795[b]	72	20,458	
As of January 1, 2016	1,557/1704[b]	88/64[c]	1,488/1,247[b]	48	16,194
As of April 7, 2016[c]	1,683/1,620[d]		1,236	48	16,726
As of July 1, 2016	1,571	82	1,378	47	16,990
As of January 1, 2017	1,356/1,416[e]	81	1,245/1,108[e]	48	16,846
As of July 1, 2017	1,247	1,058	53	16,244	
As of January 1, 2018	1,189/1,130[e]	77	984/862[e]	50	15,985
As of July 1, 2018	1,060	77	868	50	15,520
As of December 1, 2018	1,068	60	1,016/705[f]	43	13,424

[a] – the special right is not entered in the Register as a separate registered item, however it is mentioned in various materials published by the RF Federal Agency for State Property Management (*Rosimushchestvo*) and in the context of data on state stakes in joint-stock capital;
[b] – the number of JSCs and FSUEs as stated in the privatization programs for 2010–2013, 2014–2016, and 2017–2019 (in the latter, the data based on OKVED Codes (All-Russia Classifier of Economic Activities) refer to companies with shares (or stakes) in federal ownership);
[c] – according to *Rosimushchestvo's* data for 2015;
[d] – the numerator is the total number of legal entities, including CJSCs and LLCs; the denominator is the number of stakes and shares; from data published in *Rosimushchestvo*'s reports it follows that the difference between the two figures equals the number of JSCs with a 'golden share' without any stake).
[e] – based on data published in the 2017 Report and 2018 Report on the implementation of the Forecast Plan (Program) of Federal Property Privatization and the Main Directions of Federal Property Privatization for 2017–2019;
[f] – the denominator is the number of FSUEs entered in the Federal Property Register as of December 4, 2018, according to the report delivered by former head of Rosimushchestvo Dmitry Pristanskov at parliamentary hearings at the State Duma concerning amendments to legislation regulating the activities of unitary enterprises.
Source: Forecast Plan (Program) of Federal Property Privatization and the Main Directions of Federal Property Privatization for 2011–2013; Forecast Plan (Program) of Federal Property Privatization and the Main Directions of Federal Property Privatization for 2014–2016; www.economy.gov.ru, April 23, 2013; the RF Federal Agency for State Property Management (*Rosimushchestvo*)'s Annual Report for 2015; Forecast Plan (Program) of Federal Property Privatization and the Main Directions of Federal Property Privatization for 2017–2019; statistical data from the System of Public Property Management Efficiency Estimates, www.gks.ru, March 20,2016, September 5, 2016; March 20,2017, September 5, 2017; March 20, 2018, September 5, 2018; 2017 Report on the implementation of the Forecast Plan (Program) of Federal Property Privatization and the Main Directions of Federal Property Privatization for 2017–2019; 2018 Report on the implementation of the Forecast Plan (Program) of Federal Property Privatization and the Main Directions of Federal Property Privatization for 2017–2019; materials of *Rosimushchestvo*'s meetings on issues of improving the approaches to federal property management (December 2018), www.rosim.ru, December 6, 2018.

As of July 1, 2018, the Russian Federation held stakes in 1,060 JSCs, was property owner of 868 FSUEs, 50 federal treasury enterprises (FTE), and 15,520 federal state institutions (FSI). If we compare these numbers with the corresponding data for the previous year, it can be noted that the total number of enterprises in each category demonstrated a decline: FSUEs – by 190 units (or 18 percent), JSCs with state stakes – by 187 units (or 15 percent), FSIs – by 724 units (or 4.5 percent). The number of FTEs shrank by 5.7 percent, but when viewed in absolute terms (3 units), this becomes incomparable with the rate of decline in the number of functioning economic entities with other organizational legal forms in federal ownership. The same is true with respect to JSCs with a special right to participate in company's management ('golden share') – their number shrank by 1.3 percent (or by 1 unit). Meanwhile, in H1 2018, the total number of FTEs and JSCs with a 'golden share' remained unchanged.

The movement patterns displayed by the entities belonging to the main organizational legal forms over that shorter period of time appeared to be as follows. The number of unitary enterprises lost 11.8 percent, that of economic societies – 10.8 percent, and that of state institutions – 2.9 percent. It is also noteworthy that by early 2018, the number of FSUEs (operated by right of economic jurisdiction) for the first time dropped below 1,000 units, and by mid-2018, the same threshold was passed by the total number of unitary enterprises owned at the federal level, including treasury enterprises.

According to data published by *Rosimushchestvo*, over several months of 2018, the number of economic societies with federal stakes shrank by 4.5 percent, while that of FSUEs increased by nearly 18 percent. The estimated changes in the number of FTEs (by 14 percent) and FSIs (by 16 percent) are not quite exact, because the data applied in the comparison were taken from different sources as of year-end (*Rosimushchestvo*) and beginning of year (*Rosstat*).

Some important information concerning the operation of economic societies with state participation could be derived from the year-end reports on the management of federal stakes in OJSCs and the use of the Russian Federation's special right to participate in an OJSC 's management ('golden share').

According to data provided by the Federal State Information System *FGIAS ESUGI* (Register of Assets Held by the Russian Federation) as of August 1, 2018, the Federal Property Register contained information on 1,134 JSCs with federal stakes, including 77 JSCs where the State held the special right to participate in a company's management granted by 'golden share[1].

However, among these 1,134 companies, *Rosimushchestvo* could fully exercise its shareholder rights only in a total of 443 JSCs (or 39.1 percent of all JSCs vs. 40.8 percent in summer 2017; and vs. 52.1 percent in summer 2012), that is, last year's changes were in line with the steady downward trend (from 2014 onwards) in the relative share of

[1] Summary statement based on the Year-end 2017 Report on the Management of Federal Stakes in OJSCs and the Use of the Russian Federation's Special Right to Participate in an OJSC's Management ('Golden Share').

those companies where *Rosimushchestvo* was not restricted in exercising its shareholder rights[1].

The composition of the remaining group of entities (691 organizations) was as follows:

– economic societies with state stakes amounting to less than 2 percent of their charter capital, where, in accordance with Item 1 of Article 53 of Federal Law No 208-FZ dated December 26, 1995, 'On Joint-stock Companies', no proposals put forth by shareholders can be entered on the agenda of a general shareholder meeting) (296 units, or 26.1 percent of all JSCs);

– economic societies where the ownership rights to state stakes are delegated to other federal bodies of executive authority (FBEAs) and state corporations (for example, the RF Ministry of Defense, State Corporation *Rostec*, *Rosatom*, or JSCs operated under a trust management agreement) (266 JSCs, or 23.4 percent of all JSCs)[2];

– economic societies undergoing bankruptcy procedures (in the phase of a bankruptcy proceeding) (104 JSCs, or 9.2 percent of all JSCs);

– economic societies undergoing a liquidation procedure (16 JSCs, or 1.4 percent of all JSCs);

– economic societies currently with no stakes *de facto* in the ownership by the Russian Federation (for example, if an entity has been privatized, or transferred as a contribution to the charter capital of a vertically integrated structure (hereinafter – VIS), or is undergoing the procedure of transfer into federal ownership) (9 JSCs, or 0.8 percent of all JSCs).

Table 2 shows how, in recent years, the relative shares of JSCs where *Rosimushchestvo* is restricted in its shareholder rights have been changing, with the reasons for such restrictions.

[1]The absence of restrictions on *Rosimushchestvo*'s ability to exercise its shareholder rights does not mean that the Agency indeed has nothing to do with the management of relevant companies run by sectoral FBEAs, the latter getting involved in that process on the basis of general principles and depending on the actual distribution of powers, as determined in the Provision on the Management of Federal Stakes in OJSC and the Use of the Russian Federation's Special Right to Participate in an OJSC's Management ('Golden Share') (approved by Decree of the RF Government dated December 3, 2004, No 738).

[2] It does not seem to be quite correct to place in one and the same group those JSCs where the ownership rights to state stakes are delegated to federal bodies of executive authority (FBEAs) other than *Rosimushchestvo*, state corporations, and companies operated under a trust management agreement, because one of the basic features of a state corporation (SC) as a legal entity (defined by RF legislation as a non-profit organization) is the right of ownership to its property, and, generally speaking, that right should also be exercised with regard to those state stakes that have been transferred to other entities as property contributions to their charter capital.

Table 2

The movement and structure, in 2012–2018, of the group of joint-stock companies with federal stakes in regard to which *Rosimushchestvo* is restricted in exercising its shareholder rights, based on reasons for such restrictions

Total		State stake is less than 2 percent[a]		Shareholder rights transferred to other subjects[c]		Proceeding in bankruptcy		Liquidation procedure		No stakes owned by RF	
units	percent of all JSCs	units	percent of all JSCs	units	percent of all JSCs	units	percent of all JSCs	units	percent of all JSCs	units	percent of all JSCs
As of August 1, 2012											
1258	47.9	434	16.5	387	14.75	156	5.95	55	2.1	226	8.6
As of August 1, 2013											
988	42.3	465/134[b]	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 1, 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 1, 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 1, 2017											
769	59.25	276/60[b]	21.25	306	23.6	135	10.4	36[d]	2.8	16	1.2
As of August 1, 2018											
691	60.9	296/49[b]	26.1	266	23.4	104	9.2	16	1.4	9	0.8

[a] – in accordance with Item 1 of Article 53 of Federal Law No 208-FZ dated December 26, 1995 'On Joint-stock Companies', no proposals put forth by shareholders can be entered on the agenda of a general shareholder meeting;

[b] – the denominator is the number of JSCs where the Russian Federation simultaneously exercises the special right to participate in their management ('golden share');

[c] – operated by other bodies of executive authority, by state corporations, or by other companies under a trust management agreement;

[d] – including JSCs undergoing a reorganization procedure;

[e] – JSCs with state stakes that are *de facto* no longer registered as federal property (previously privatized, transferred to the charter capital of a vertically integrated structure, their issues of shares have not been registered, or they no longer operate due to their liquidation or reorganization), but the entry of information thereof in the Register has not yet been properly formalized.

Source: Rosimushchestvo's Year-end Reports on the Management of Federal Stakes in OJSC and the Use of the Russian Federation's Special Right to Participate in an OJSC's Management ('Golden Share') for 2011–2017; own calculations.

First of all, it should be noted that the number of JSCs, with regard to which *Rosimushchestvo* could exercise only a limited shareholder right, declined in absolute terms relative to 2017 by more than 10 percent (or by nearly 80 units), which is compatible with the annual decline rate over the previous period.

The main factor behind this trend was the shrinkage by 13 percent (by 40 units) of the group of JSCs where the shareholder rights had been transferred to other subjects, that group topping the list a year earlier. An even deeper plunge (by 23 percent) was demonstrated by the number of JSCs undergoing a proceeding in bankruptcy or a liquidation procedure (by more than 55 percent). However, when taken in absolute terms, the shrinkage of these two groups (by 31 and 20 units respectively), similarly to the movement pattern displayed by the group of JSCs where no stakes were *de facto*

owned by the RF (by 7 units), was less pronounced than in the first group. Meanwhile, the number of JSCs where state stakes amounted to less than 2 percent increased by more than 7 percent, and so they once again became the most numerous group in the category of JSCs where *Rosimushchestvo* exercises only a limited shareholder right. This particular movement pattern has determined the increasing relative share of all JSCs with minority state stakes (up to 25 percent) in the overall structure of JSCs with state stakes. However, certain role has also been played by those priorities that governed the privatization process of those JSCs with respect to which *Rosimushchestvo* is not restricted in exercising its shareholder rights (*Table 3*).

Table 3

The movement patterns of the number and structure of JSCs relative to the size of state stakes in their capital and their inclusion in the forecast plans of federal property privatization for 2012–2018

Date	Economic societies (JSCs and LLCs) where RF is shareholder (or participant)									
	total, units	share, percent	of these, with RF stake in charter capital amounting to							
			100 percent		50–100 percent		25–50 percent		2–25 percent	
			units	percent	units	percent	units	percent	units	percent
1	2	3	4	5	6	7	8	9	10	11
As of August 1, 2012										
– JSCs in regard to which *Rosimushchestvo* is not restricted in exercising shareholder rights *	1,371/2629**	100.0	886	64.6	76	5.55	211	15.4	198	14.45
As of August 1, 2013										
– JSCs in regard to which *Rosimushchestvo* is not restricted in exercising shareholder rights *	1,345/2333**	100.0	874	65.0	83	6.15	185	13.75	203	15.1
– JSCs included in forecast plans of federal property privatization ***	975	100.0	716	73.4	41	4.2	116	11.9	102	10.5
As of July 7, 2014										
– JSCs in regard to which *Rosimushchestvo* is not restricted in exercising shareholder rights *	1147/2096**	100.0	709	61.8	66	5.8	171	14.9	201	17.5
– JSCs included in forecast plans of federal property privatization ***	842	100.0	596	70.8	36	4.3	113	13.4	97	11.5
As of August 1, 2015										
– JSCs in regard to which *Rosimushchestvo* is not restricted in exercising shareholder rights *	980/1864**	100.0	589	60.1	55	5.6	142	14.5	194	19.8
– JSCs included in forecast plans of federal property privatization ***	668	100.0	469	70.2	18	2.7	90	13.5	91	13.6
As of August 1, 2016										
– JSCs in regard to which *Rosimushchestvo* is not restricted in exercising shareholder rights *	735/1593**	100.0	469	63.8	48	6.5	91	12.4	127	17.3
– JSCs included in forecast plans of federal property privatization ***	478	100.0	336	70.3	14	2.9	56	11.7	72	15.1
As of August 1, 2017										
– JSCs in regard to which *Rosimushchestvo* is not restricted in exercising shareholder rights *	529/1298**	100.0	325	61.4	38	7.2	76	14.4	90	17.0
– JSCs included in forecast plans of federal property privatization ***	278	100.0	176	63.3	11	4.0	51	18.3	40	14.4

Cont'd

1	2	3	4	5	6	7	8	9	10	11
As of August 1, 2018										
– JSCs in regard to which *Rosimushchestvo* is not restricted in exercising shareholder rights *	443/1134**	100.0	291	65.7	25	5.65	56	12.65	71	16.0
– JSCs included in forecast plans of federal property privatization ***	232	100.0	154	66.4	9	3.9	35	15.1	34	14.6

* – less the following entities: (1) JSCs with state stakes less than 2 percent, (2) JSCs where the shareholder rights on behalf of the RF are exercised by other subjects (other bodies of executive authority, state corporations, or subjects appointed under trust management agreements); (3) JSCs undergoing bankruptcy procedures (in the phase of a bankruptcy proceeding); (4) JSCs undergoing a liquidation procedure, (5) JSCs with state stakes that are *de facto* not registered as federal property (previously privatized or transferred to the charter capital of a vertically integrated structure);
** – the denominator is the total number of JSCs, as entered in the Federal Property Register;
*** – only of those where *Rosimushchestvo* is not restricted in exercising its shareholder rights.
Source: Rosimushchestvo's Year-end Reports on the Management of Federal Stakes in OJSC and the Use of the Russian Federation's Special Right to Participate in an OJSC 's Management ('Golden Share') for 2011–2017; own calculations.

The relative shares of federal stakes of different size included in the privatization program remained basically the same as in 2015–2017 (*Table 4*)

Table 4

The percentage of JSCs included in the forecast plans of federal property privatization, relative to the total number of economic societies in regard to which *Rosimushchestvo* is not restricted in exercising its shareholder rights, by their state stake size, in 2012–2018, percent

Date	Full ownership (10 percent)	Controlling stake (50–100 percent)	Blocking stake (25–50 percent)	Minority stake (2–25 percent)
As of August 1, 2013	81.9	49.4	62.7	50.2
As of July 7, 2014	84.1	54.5	66.1	48.3
As of August 1, 2015	79.6	32.7	63.4	46.9
As of August 1, 2016	71.6	29.2	61.5	56.7
As of August 1, 2017	54.2	28.9	67.1	44.4
As of August 1, 2018	52.9	36.0	62.5	47.9

Source: Rosimushchestvo's Year-end Reports on the Management of Federal Stakes in OJSC and the Use of the Russian Federation's Special Right to Participate in an OJSC's Management ('Golden Share') for 2012–2017; own calculations.

The percentage of companies with minority state stakes included in the privatization program (approximately 48 percent), while having somewhat increased relative to 2017, nevertheless remained lower than the corresponding index for companies with 100-percent state stakes (approximately 53 percent) and blocking state stakes (61.5 percent). The percentage of the latter shrank, while that of companies with controlling state stakes increased (36 percent).

The logical outcome of these changes was the prevalence in the structure of economic societies with state stakes, by late 2018 (*Table 5*), of those with minority state stakes (less than 25 percent of charter capital). They accounted for 47.2 percent of the total number (504 units), while the relative share of JSCs in full state ownership (100 percent of charter capital) for the first time on many years declined (418 units, or 39.1 percent

of all JSCs). The relative share of blocking stakes (25 to 50 percent of charter capital) amounted to 8.25 percent (88 units), and that of majority stakes (50 to 100 of charter capital) – to only 5.45 percent (58 units).

Table 5

The movement and structure of the group of economic societies with state stakes in their capital (less those JSCs where the state holds the special right granted by 'golden share' without holding any stake) in 2010–2018

Date	Economic societies (JSCs and LLCs) where RF is shareholder (or participant)									
	total, units	share, percent	of these, with RF stake in charter capital amounting to							
			100 percent		50–100 percent		25–50 percent		less than 25 percent	
			units	percent	units	percent	units	percent	units	percent
As of January 1, 2010	2,950	100.0	1,757	59.6	138	4.7	358	12.1	697	23.6
As of January 1, 2011	2,957	100.0	1,840	62.2	136	4.6	336	11.4	645	21.8
As of January 1, 2012	2,822	100.0	1,619	57.4	112	4.0	272	9.6	819	29.0
As of January 1, 2013	2,356	100.0	1,257	53.35	106	4.5	228	9.7	765	32.45
As of January 1, 2014	2,113	100.0	1,000	47.3	95	4.5	224	10.6	794	37.6
As of January 1, 2015	1,928	100.0	861	44.7	90	4.7	203	10.5	774	40.1
As of December 31, 2015	1,704	100.0	765	44.9	93	5.45	172	10.1	674	39.55
As of December 1, 2018	1,068	100.0	418	39.1	58	5.45	88	8.25	504	47.2

Source: Forecast Plan (Program) of Federal Property Privatization and the Main Directions of Federal Property Privatization for 2011–2013; Forecast Plan (Program) of Federal Property Privatization and the Main Directions of Federal Property Privatization for 2014–2016; Forecast Plan (Program) of Federal Property Privatization and the Main Directions of Federal Property Privatization for 2017–2019; *Rosimushchestv*o's Annual Reports for 2010-2015, materials of *Rosimushchestvo*'s meetings on issues of improving the approaches to federal property management (December 2018).

The main trend that could be observed in the group of JSCs with state stakes after the switchover, in 2010, to 3-year privatization programs was the notable shrinkage in the relative share of those companies where the state could strongly influence managerial decisions due to participation in the charter capital. So, as of the end of year 2018, the state could exercise corporate control (equal to full ownership or majority stake) over less than 45 percent of all JSCs vs. more than 2/3 by early 2011, about 52 percent by early 2014, and slightly more than 50 percent by early 2016.

If we take a look at the data yielded by the System of Public Property Management Efficiency Estimates that encompass other levels, and not only the federal level, the following picture will emerge (*Table 6*).

According to data collected within the framework of the new system, by mid-2018 the total number of economic subjects belonging to the public ownership category amounted to approximately 60,400 units, which is less by approximately 2,300 units (or by 3.6 percent) than a year earlier, and by approximately 3,200 units less than the corresponding index for mid-2014[1].

[1] The last bulletin of the developments in the public sector of the RF economy covered the period January-September 2014. Here, for the purpose of a medium-term analysis, the data for H1 2014, released as of 1 July 2014, were applied.

Table 6

The number of organizations operating in the public sector of the economy on the records of *Rosimushchestvo*, its territorial branches, and the bodies responsible for the management of public property held by RF subjects in 2013-2014, and the number of economic subjects fully or partially in public ownership in 2016–2018 (as entered in State registration records), by their organizational legal form

Date	Total	FSUEs, including treasury enterprises	State institutions	Economic societies with shares (or stakes) amounting to more than 50 percent of charter capital owned by	
				state	economic societies operating in public sector
As of January 1, 2013	67003[a]	4,891	56,247	3,501	2,364
As of July 1, 2013	66,131[a]	4,589	56,100	3,201	2,241
As of January 1, 2014	64,616[a]	4,408	54,699	3,097	2,412
As of July 1, 2014	63,635[a]	4,236	54,173	2,988	2,238
As of January 1, 2016	65,587[b]	4,284	56,693/56,649[c]	3,888[d]	…
As of July 1, 2016	65,218[b]	3,982	56,893/56,856[c]	3,718[d]	…
As of January 1, 2017	64,457[b]	3,719	56,548/56,507[c]	3,532[d]	…
As of July 1, 2017	62,655[b]	3,294	55,414/55,361[c]	3,353[d]	…
As of January 1, 2018	61,734[b]	3,053	54,851/54,814[c]	3,239[d]	…
As of July 1, 2018	60,391[b]	2,763	53,933/53,899[c]	3,125[d]	…

[a] – including those organizations whose charter documents, after their State registration, do not specify property types, but less those joint-stock companies where more than of 50 percent shares (or stake) are in joint RF and foreign ownership;

[b] – including economic subjects with an organizational legal form other than unitary enterprise, state institution, or joint-stock company (production and consumer cooperatives, associations (unions), housing cooperatives, foundations, public companies, etc.);

[c] – total number of institutions created by the RF and RF subjects (less state academies of sciences and private institutions, which are listed as institutions in the new System, but must not be taken in account here);

[d] – total number of economic societies, the size of their state stake (or share) being irrelevant; data concerning the number of economic societies with controlling state stakes are available only for JSCs with federal stakes.

Source: On the Development of the Public Sector of the Economy of the Russian Federation in 2012 (pp. 7–11), in H1 2013 (pp. 7–11), in 2013 (pp. 7–11), in H1 2014 (pp. 7–11), M., *Rosstat*, 2013–2014; Statistical information on public property management efficiency estimates, www.gks.ru, March 20, 2016, September 5, 2016, March 20, 2017, September 5, 2017, March 20, 2018, September 5, 2018.

For comparable categories of economic subjects it can be noted that, relative to mid-2017, the number of unitary enterprises declined by approximately 530 units (or more than 16 percent), that of JSCs – by nearly 230 units (or 6.8 percent), and that of state institutions – by approximately 1,500 units (or 2.6 percent). At the same time, by mid-2018 the number of state institutions had become somewhat less than 4 years earlier.

As far as the changes that occurred within a shorter period of time are concerned, over H1 2018 the number of state institutions shrank by 1.7 percent, that of JSCs – by 3.5 percent, and that of unitary enterprises – by 9.5 percent. However, it should be noted with respect to the latter that, according to data released by Rosimushchestvo, the total number of state unitary enterprises, including FSUEs and enterprises owned by RF subjects, exceeded 2,900 units – that is, it shrank over the course of the year 2018 quite moderately (approximately by 4 percent). Their relative share in the total number of

unitary enterprises (about 18,500 units) is small, whereas municipal enterprises prevail (more than 15,000 units)[1].

All these facts notwithstanding, it should be borne in mind that a decline in the number of state-owned entities occurred in the main as a result of their reorganization by way of merger, and not privatization, the progress of the latter being rather slow.

6.1.2. Privatization policy

2018 was the second year of the implementation of the Forecast Plan (Program) of Federal Property Privatization and the Main Directions of Federal Property Privatization for 2017–2019, approved by Directive of the RF Government No 227-r dated February 8, 2017. This was the third 3-year privatization program developed with a view towards a longer planning period established for a forecast plan (or program) of federal property privatization (extended from one to three years) on the basis of the alterations introduced into prevailing legislation on privatization in spring 2010.

As was the case with the previous privatization program, numerous adjustments and alterations were later introduced into the new document. Since the moment of approval of the Forecast Plan (Program) of Federal Property Privatization and the Main Directions of Federal Property Privatization for 2017–2019, a total of 44 normative legal acts (NLA) pertaining to these issues were adopted, and the frequency of legislation adjustments (the introduction of 29 new NLAs) over the course of last year was almost twice as high as in 2017 (a total of 15 NLAs).

The current privatization program envisages the possibility of privatization of 7 biggest companies by special presidential and governmental decisions, with due regard for the market situation and recommendations of eminent investment consultants. In the framework of preparation for the alienation of shares in VTB Bank (PJSC) and *Sovkomflot* PJSC by the agents specifically commissioned in 2016 for handling their sale (*Renaissance Broker* LLC and *VTB Capital* respectively), proposals are being elaborated as to which methods should be applied in closing the deals. The RF Government did not make any proper decision by the year-end 2018[2].

According to data from the current report on federal budget execution as of January 1, 2019 (internal sources of deficit financing) available on the RF Federal Treasury's official website, the amount of revenue generated by the sale of shares and other forms of participation in capital held in federal ownership was RUB 12,787.5 million, which is more than twice above the budget revenue target set in the privatization program (RUB 5.6 billion per annum to be generated by privatization deals alone, less the value of shares in biggest companies).

More than half (80 percent) of that sum (RUB 10,330.8 million) was generated in the course of implementing RF Government Directives No 1430-r dated September 2, 2010

[1] www.rosim.ru, December 6, 2018.

[2] See also Radygin, A.D., Entov, R.M., Abramov, A.E., Aksenov, I.V., Malginov, G.N., Chernova, M.I. Large-scale reluctant privatization: contradictions and challenges under sanctions // *Voprosy Ekonomiki*, 2018, No 8, p. 5-38 (In Russian).

and No 1172-r dated June 9, 2016, and also in accordance with the terms stipulated in the supplementary agreement of June 23, 2016 attached to the 5-year installment buyout agreement, of October 9, 2010, between *Rosimushchestvo* and SSA *Sistema* PJSC concerning 547,312,918 shares in Sistema Shyam Teleservices Limited (now Sistema Smart Technologies Limited)[1]. owned by the Russian Federation, to the total value of USD 777 million. That deal was the only one that fell outside of the established privatization procedures. The revenue generated for the federal budget (more than RUB 10.3 billion) amounted to 1/5, and if we add the sum in excess of RUB 8.5 billion received as part of the same deal a year earlier, to about 38 percent of the total value of USD 777 million recalculated in rubles at the exchange rate as of late June 2016.

In 2018, beside that deal, another 46 stakes in JSCs were sold, and the decisions concerning the terms of their privatization were finalized with respect of 21 federal state unitary enterprises (FSUE). The number of sold stakes (or shares in charter capital) stayed at the same level as in 2016 (47 units), although at that time, more than 3/4 of sold stakes (36 units) were those put up for sale in the course of the previous year (2016). Nevertheless, the number of sold stakes in 2018 amounted to only a half of the corresponding index for the 'crisis' year 2015 (103 units), which was also the second year of the implementation of the privatization program. Meanwhile, the total value of the deals (RUB 2.86 billion)[2] lost 45 percent relative to 2017, and so moved far away from the initially established federal budget revenue target (less biggest deals) set in the privatization program (RUB 5.6 billion)[3]. The number of privatized FSUEs (18 units) somewhat increased, while plunging below the corresponding index for 2013 (26 units) (*Table 7*).

Table 7

Comparative data on the movement of the number of privatization deals involving federal state unitary enterprises and federal stakes in 2008–2017

period	Number of privatized enterprises (entities) formerly in federal ownership (data released by *Rosimushchestvo*)		
	privatized FSUEs[a], units	sold stakes in JSCs, units	sold treasury property entities, units
1	2	3	4
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[e]	40
2013	26	148[e]	22

[1]The stake in that joint Russia-India venture was received by the Russian Federation under the 2007 Intergovernmental Agreement by way of redemption of debt against previously issued loans.

[2] At the same time, in *Rosimushchestvo*'s 2018 Report on the Implementation of the Privatization Program it is stated that the total federal budget revenue from that source amounted to RUB 2.44 billion, including the deals closed in 2017.

[3] The budget target for proceeds of sale of shares were not met with respect to the revenues generated by the deal with SSA *Sistema* PJSC.

Cont'd

1	2	3	4
2011–2013	*216*	*730*[e]	*65*
2014	33	107[e]	12
2015	35[g]	103[e]	38
2016	60[g]	179[e]	282
2014–2016	*125*[g]	*389*[e]	*332*
2017	18	47[b]	77[b]
2018	21	46	174

[a] – all preparatory work is completed, and the relevant decisions concerning the terms of privatization are issued;
[b] – including those stakes (and for 2017 – also treasury property entities) that were put up for sale in the previous year;
[c] – the number of FSUEs in respect of which the decisions concerning their reorganization into JSCs were made by the RF Ministry of Defense, in addition to those cases where a similar decision was made by *Rosimushchestvo*;
[d] – according to available information concerning sales of other property entities over that period, 4 immovable military property entities were sold between October 2008 through January 2009; and there were decisions, in late 2010, concerning some other property entities to be put up for sale and the terms of their privatization, the deals being actually closed in 2011;
[e] – less sales of shares with the participation of investment consultants;
[f] – estimated value based on data on the total number of FSUEs in respect of which directives concerning the terms of their privatization in the form of reorganization into OJSCs (216 units) were issued, taken from *Rosimushchestvo*'s Report on the Implementation of the Forecast Plan (Program) of Federal Property Privatization in 2011–2013, and the year-end results of 2011 and 2013;
[g] – for several enterprises, the decisions concerning the terms of their privatization were abolished in 2015–2016 and then readopted, so the number of FSUEs with regard to which privatization decisions were made individually over the three-year period is somewhat higher than in the tabulated period-end data for 2014–2016 (125 units).
Source: Rosimushchestvo's annual report for 2008; Report on the Implementation of the Forecast Plan (Program) of Federal Property Privatization in 2009, Moscow, 2010; Report of the RF Ministry of Economic Development on the Results of Federal Property Privatization in 2010; Report of The RF Ministry of Economic Development on the Results of Federal Property Privatization in 2011; Report on the Implementation of the Forecast Plan (Program) of Federal Property Privatization in 2011–2013; 2014 Report on the Implementation of the Forecast Plan (Program) of Federal Property Privatization in 2014–2016, www.rosim.ru, February 19, 2015; 2015 Report on the Implementation of the Forecast Plan (Program) of Federal Property Privatization in 2014–2016, www.rosim.ru, February 8, 2016; 2016 Report on the Implementation of the Forecast Plan (Program) of Federal Property Privatization in 2014–2016; 2017 Report on the Implementation of the Forecast Plan (Program) of Federal Property Privatization in 2017–2019; 2018 Report on the Implementation of the Forecast Plan (Program) of Federal Property Privatization in 2017–2019.

The biggest transaction was the sale of all shares in *Stroytrans No 1* JSC (Tyumen) for RUB 432.3 million. The other four out of the five major deals closed that year were the sales of 100-percent stakes in four 4 JSCs situated in the city of Moscow (*Avtobaza MSKh* JSC ('RF Ministry of Agriculture's Vehicle Depot'), *Standard* OJSC (industrial-transport company), and two R&D organizations). Three of these 5 entities were sold through *Auction House of the Russian Federation* (*RAD* OJSC), and the other two – through *VTB Capital* and Rosimushchestvo. One of these deals was a rare example of a notable surge of the selling price above the offer price: there were 4 bidders for the

federal stake in *Avtobaza MSKh* JSC, and after seven bids the price gained 35 percent, rising to RUB 401.6 million[1].

However, the results of privatization that followed standard procedures were achieved through the efforts of *RAD* OJSC, the latter selling 28 stakes (out of the 139 stakes earmarked for sale) to the total value of RUB 2.053 billion (71.8 percent of total proceeds). While the actual number of sold stakes increased relative to 2017 (28 units vs. 17 units), the deal value shrank more than by half. The input of the other agent – VEB Capital Plc, which had been commissioned to handle the sales of 95 economic societies, was an order of magnitude less. It sold only 2 stakes to the total value of approximately RUB 211 million (in 2017, there were no sales). It is expected that the final results of bidding and of the closure of sales of stakes in 26 JSCs will become available in Q1 2019, including the stakes in 22 JSCs handled by *RAD* OJSC.

In 2018, in contrast to sold stakes (or shares) in economic societies, the sales of treasury property entities demonstrated a positive movement pattern. There were more than 1,300 bids by potential investors, which is more than 2.5 times above the corresponding index for 2017. The number of sold treasury property entities (174 units) increased nearly 2.3 times relative to 2017 (77 units), although it was still below the record high achieved in 2016 (282 units). Nevertheless, for three straight years this index was stably above that of sold stakes (or shares) in economic societies, and last year the difference between the two indices was 3.8 times. The total value of closed deals increased nearly 1.6 times (to RUB 446.5 million).

Such positive shifts could largely be achieved thanks to a more active involvement of independent sellers commissioned to handle the sale of treasury property entities. In accordance with the RF Government Directives, in addition to the already mentioned *RAD* OJSC (commissioned to sell 285 property entities, of which 39 units were actually sold to the total value of RUB 72.1 million), the sales were also handled by the Agency for Direct Investments (ADI) (commissioned to sell 73 property entities, to date it sold 20 units to the total value of RUB 70.6 million) and VEB Capital Plc. (commissioned to sell 73 property entities, and actually sold 14 units to the total value of RUB 30.8 million). Overall, these agents accomplished the sales of approximately 42 percent of all property entities earmarked for bidding, and generated 39 percent of total proceeds, while in 2017 all the sales were handled by *RAD* OJSC alone (9 units to the total value of RUB 28.60 million, that is, about 10 percent of total proceeds). It is expected that the final results of the sales of 84 property entities will become available in Q1 2019, including the 34 property entities handled by *RAD* OJSC and the ADI.

In 2018, in the framework of implementation of 23 Presidential Executive Orders and 10 decisions of the RF Government concerning the creation or expansion of vertically integrated structures (VISs), *Rosimushchestvo* set out to establish or expand 12 VISs. The 3-year privatization program launched in that sector listed a total of 38 FSUEs, shares in 62 JSCs, and 132 treasury property entities. In 2018, the relevant decisions

[1] www.rosim.ru, August 27, 2018.

concerning the terms of privatization were taken with regard to 8 FSUEs, 4 JSCs, and 41 treasury property entities.

In spite of the complete switchover to an electronic property sales mechanism and substantial non-stop IT services, the progress in the privatization process has been rather slow due to the constraints of declining investment demand coupled with frequent periods of instability in the stock market. As in the previous years, the group of federal property entities earmarked for privatization included many economic societies with low financial and economic performance indices, as well as some companies undergoing bankruptcy procedures. Thus, more than 54 percent of all announced auctions of stakes (or shares) in economic societies, and 56 percent of biddings for treasury property entities, were canceled due to the absence of any bids.

The factor that determines the lack of interest on the part of potential investors in the initial bidding for properties earmarked for privatization is the opportunity to buy those same properties through public offer at half the initial price, after the auctions had been canceled. The hopes that an increasing number of participants in bidding will translate in a more intense competition and higher prices of the property entities put up for sale have proved to be futile.

In such a situation it was only logical for the government to more closely involve independent sellers in the sales of property entities earmarked for privatization, and to rely on their higher marketing competence.

The comprehensive preparatory measures implemented by independent sellers prior to property sales make it possible to attract a large number of investors operating in a given sector, ensure a proper competition level, and achieve a higher selling price. However, the actual results of sale deals closed by independent sellers are by no means always indicative of their better performance. Thus, the success rate of sales of stakes (or shares), measured as the ratio of the number of sold stakes (or shares) to the number of biddings, were approximately the same for Rosimushchestvo and for the independent agents (38–39 percent). In the course of sales of treasury property entities by VEB Capital Plc., the number of canceled biddings was 1.5 times higher than the number of closed sale deals.

Besides, as the RF Government Directives whereby a large quantity of assets was to be transferred to independent sellers were issued only as late as Q1 2018, they launched their pre-sale preparatory measures with respect to an overwhelming majority of those assets in Q2 2018, after all the agent agreements and supplementary provisions thereto had been properly formalized.

The Federal Law on the Federal Budget for 2019–2021 No 459-FZ dated November 29, 2018, similarly to last year's budget law, offers no specific information on the amount of revenues to be generated by privatization neither in the body text, not in the annexes thereto.

At the same time, in the explanatory note attached to the draft law submitted by the government the revenues from privatization of assets in federal ownership were listed alongside government borrowings as a separate source of federal budget deficit

financing. Similarly to the draft budget law for the past year 2018, some of the supplementary materials attached to the draft law did provide data pertaining to the forecast plan (program) of federal property privatization, with a substantiated forecast of federal budget revenue to be generated by privatization; this information can also be found in the explanatory note and the calculated by-function targets for each source of federal budget deficit financing.

The amount of federal budget revenue to be generated by federal property privatization is forecast to be RUB 13.0 billion in 2019 and RUB 10.9 billion in 2020, with no projections for 2021. Its role as a source of federal budget deficit financing will be brought to a minimum: in 2019–2020, the expected privatization-generated revenue is to be less than 1 percent of total planned government borrowing. Compared with the amount of planned proceeds of federal property sales (less the proceeds of biggest deals) stated in the materials attached to the draft law on the federal budget for 2018 and planning period 2019–2020 and submitted last autumn by the RF Government (RUB 12.2 billion in 2019 and RUB 11.4 billion in 2020), the target set for 2019 appears to be somewhat higher, and that for 2020 – somewhat lower.

Judging by the results achieved in 2018 in the course of implementing the current privatization plan, the probability of achieving the planned target for privatization-generated revenue is quite high. The amount of proceeds from the sale of shares in federal ownership and other forms of participation in capital (RUB 12.8 billion) in the Report on Federal Budget Execution is either comparable with the corresponding targets for 2019–2020, or exceeds these targets.

The substantiation for the amount of federal budget revenue to be generated by privatization can be found in the *Forecast Plan (Program) of Federal Property Privatization and the Main Directions of Federal Property Privatization for 2017–2019* adopted in early 2017 by Directive of the RF Government No 227-r, where 7 biggest companies are earmarked to be privatized in the framework of individual schemes. However, as the RF Government has adopted no new decisions concerning the alienation of federal stakes in biggest companies over the period 2019–2021, no targets are set for the proceeds from the sales of such stakes in 2019 and the planning period 2020–2021.

Nevertheless, there do exist certain preconditions for the closure of two deals.

The plans for 2019 include the completion of preparatory measures for the sale of federal stake in *Kristall Production Association* JSC to *Alrosa* PJSC in order to properly maintain the existing gems cutting and polishing complex of the Russian Federation, create appropriate conditions for the development of diamond-cutting enterprises and attract investments that can be spent on their modernization and upgrading. After *Kristall Production Association* JSC had been struck off the list of strategic enterprises and joint-stock companies, the RF Government was assigned the task of ensuring proper control over its financial and economic situation until the 100 percent federal stake was to be completely alienated.

Besides, acting outside the framework of the current privatization program, the private shareholders in *Vnukovo International Airport* JSC filed a request with Rosimushchestvo by way of exercising their right stipulated in the corporate shareholder agreement signed in 2016, whereby the State was obliged to sell all the remaining shares in federal ownership at any moment within 5 years from the date of their consolidation. The closure of the privatization deal with respect to the blocking stake that is still in federal ownership (25.0525 percent) is also expected to take place in 2019.

Another point on the future privatization agenda has to do with amendments that need to be made to the 2008 law 'On the Specific Features of Alienation of Immovable Property in State or Municipal Ownership and Leased by Subjects of Small and Medium-Sized Entrepreneurship, and the Introduction of Alterations into Some Legislative Acts of the Russian Federation' (No 159-FZ) with regard to the realization, by small and medium-sized enterprises (hereinafter – MSE), of their preferential right to buy out the properties leased by them. This right consists in purchasing a property entity at a price equal to its market value and determined by an independent valuer in the procedure established by the 1998 law on valuation activity under an installment buyout plan for a period of not less than 5 years, in conformity with the norms and constraints established for MSEs.

It should be reminded that this law, adopted more than 10 years ago, granted this right with respect to leased property entities owned by RF subjects and municipalities. After the introduction of alterations in summer 2018 (by Law No 185-FZ), that norms now also apply to property entities in federal ownership, and the function of enforcing the law is assigned to Rosimushchestvo.

The law can now be applied over an unlimited period of time[1], and presently the starting point for launching an action and applying the relevant norms is the day on which an MSE files a request of realization of its preferential right to buy out the property entity leased by it. In the event of a loss of such right upon a refusal to conclude a purchase-and-sale agreement and a failure to sign it within 30 days from the date of receiving the proposal thereof and (or) the purchase-and-sale agreement[2], a MSE has been granted the right to file a request with an empowered agency, on condition that as of the date of filing such a request, the leased property entity with respect to which that MSE has previously lost the preferential right for its purchase is being held by the said MSE by right of temporary ownership and (or) temporary use under a lease agreement (or agreements).

In accordance with the 2007 Federal Law 'On Developing Small and Medium Scale Entrepreneurship in the Russian Federation', (No 209-FZ in its current version), public authorities of all levels should draw up lists of state and municipal property entities unencumbered by any rights of third parties (with the exception of the right of economic

[1] Previously, the rights granted by the law were effective during a certain period of time, and then could be extended over a next period (from July 1, 2010 to July 1, 2018).

[2] That period is suspended, if a dispute is initiated with respect to the market-based valuation of the property entity on which its buyout price is based, until the date of entry into force of a court ruling.

jurisdiction, operative management right, or ownership rights of MSE), and revise these lists every year before November 1. These lists should be made public through the mass media and be posted to the official websites of the bodies of public authority that have drawn up such lists, and (or) on the official websites designed to provide information support to MSEs.

The state and municipal property entities entered on those lists are to be held or used on a long-term basis (including at reduced lease rates) by MSEs and organizations belonging to the MSE support infrastructure, and can also be alienated, on a reimbursable basis, and transferred into the ownership of MSEs in accordance with the norms stipulated in the 2008 Law No 159-FZ and the RF Land Code.

The procedure of creating, maintaining, mandatory publication of such lists, as well as the procedure of leasing the state and municipal property entities entered on those lists (including the preferential rights and exemptions granted to MSEs registered as agricultural co-operatives engaged in socially important activities or other priority types of activity as established by state and municipal programs (or subprograms)), are to be regulated by the normative legal acts adopted by a relevant tier of public authority. The lease of land plots is regulated by civil and land legislations.

No sale of the state and municipal property entities entered on such lists is allowed, except in the form of reimbursable alienation of such property entities in order to transfer them into ownership by MSEs in accordance with the norms stipulated in Federal Law No 159-FZ (adopted in 2008) and the RF Land Code. No transfer of the right to such property entities is allowed, or collateral of that right, or its transfer as a contribution to the charter capital of any other economic subject; no transfer to third parties of the rights and obligations arising from the agreements of lease (or sublease) of such property entities, or their sublease, with the exception of sublease of such property entities to MSEs by organizations belonging to the MSE support infrastructure, and also in those cases when a property entity in question constitutes part or parts of premises, building, or structure (not more than 10 percent of its area, and not more than 20 m² of total area), the rights to which belong to the entity that transfers that property entity (in accordance with the 2006 Federal Law 'On Protection of Competition', Article 17.1, Part 1, paragraph 14).

In late 2018, Rosimushchestvo approved the list of immovable property entities (except land plots), unencumbered by rights of third parties, to be held and (or) used on a long-term basis by MSEs. It consists of 827 property entities[1].

An analysis of information released by *Rosimushchestvo*'s territorial branches by way of preparation for privatization of new property entities revealed that among the property entities included in the current privatization program there were more than 150 leased immovable property entities. After reviewing the requests submitted by MSEs concerning their desire to realize their preferential right to buy out the federal property entities currently leased by them, *Rosimushchestvo* has prepared special directives regulating the terms of their privatization, and dispatched the corresponding orders to

[1]www.rosim.ru, January 1, 2018.

its territorial branches in the localities where said property entities are situated, so that the lessors could properly realize their rights. However, no purchase-and-sale agreements between the lessors (MSEs) and *Rosimushchestvo* or its territorial branches were formalized in 2018.

As far as legal regulation of the privatization process is concerned, an important alteration was introduced into the current privatization law (adopted in 2001) in May 2018, that addressed the buyers of state and municipal property entities (Article 5).

The norm whereby the buyers could not be the legal entities (hereinafter – offshore companies) registered in a country or territory entered on the list, approved by the RF Ministry of Finance, of countries and territories that grant tax exemption regimes and (or) do not disclose information on financial transactions (offshore zones) was in effect for less than a year[1]. The amended law stipulates that this norm applies only to those legal entities in that category who do not disclose and report information on their beneficiaries, beneficiary owners and controlling persons in the procedure established by the RF Government.

The text of Article 5 no longer contains any mention of offshore companies. Therefore, it no longer refers to the 'derivative' category of legal entities controlled by an offshore company or a group of entities that includes an offshore company. In this connection, the basic norm has remained – that the privatization process cannot involve state and municipal unitary enterprises and institutions, or legal entities with stakes in their charter capital amounting to more than 25 percent that are held by the RF, RF subjects, or municipal formations, except when state or municipal property is a contribution to their charter capital.

The terms 'group of persons' and 'control', with references to the notions stipulated in the 2006 Federal Law 'On Protection of Competition' (Articles 9, 11), are replaced by 'controlling person' as understood in the 2008 Federal Law 'On the Procedure for Facilitating Foreign Investment in Legal Entities Having Strategic Importance for National Defense and State Security' (Article 5), as well as the terms 'beneficiary' and 'beneficiary owner' as understood in the 2001 Federal Law 'On Prevention of Legalization (Laundering) of Proceeds from Crime and Financing of Terrorism' (Article 3)[2].

Another alteration introduced into the current privatization law has been the expansion of the property segment to which is does not apply (Article 3). It has been augmented by property held by right of economic jurisdiction, by right of permanent use, of by right of lease, or by FSUE *Russian Post* as of the moment of its reorganization

[1]At present, the list consists of 40 countries. However, the Republic of Cyprus – the traditional source of pseudo-foreign investments for the Russian economy over the past quarter century, was removed from that list in 2012.

[2]At the meeting on February 1, 2016 that addressed privatization issues, the RF President defined, in particular, certain conditions of privatization of companies with state stakes, including the provision whereby the would-be owners of assets earmarked for privatization should belong in Russia's jurisdiction, and that is was inadmissible to allow 'grey schemes', to withdraw assets to offshore zones, and to hide the identity of stakeholders. See http://kremlin.ru/events/president/news/51249

on the basis of the Federal Law 'On the Specific Features of Reorganization of Federal State Unitary Enterprise *Russian Post*, the Fundamental Principles of Operation of Joint-stock Company *Russian Post,* and the Introduction of Alterations to Some Legislative Acts of the Russian Federation' No 171-FZ dated June 29, 2018.

The Law, which came into force on 1 October 1, 2018, regulates the reorganization of FSUE *Russian Post*, its legal successor being those newly established non-public JSCs where the entire 100-percent stake is held by the RF, and the single stakeholder is named among its governing bodies alongside the board of directors, the council and the director general (Article 8). Its powers are exercised by the federal body of executive authority performing the function of federal property management in accordance with the procedure established by the RF Government, and the scope of its competence is clearly defined (Article 9).

6.1.3. The presence of the state in the economy and the issues of management of economic subjects operating in the public sector

In 2018, some important alterations were introduced in the list of strategic enterprises and joint-stock companies.

As of early December 2018, this list was augmented by only one company (*Promsvyazbank* PJSC). Over the same period, 2 FSUEs were struck off the list of strategic organizations (of these, one will be merged with another unitary enterprise, and the property complex of the other one will be transferred, as a state contribution to the charter capital, to State Corporation *Rosatom*), as well as 5 JSCs.

Among the latter, there are three previously created big vertically integrated structures (VIS), two of them being of nationwide importance. The entire capital (less 1 share) of *Concern Granit-Electron* JSC has been transferred to the charter capital of another VIS - *Tactical Missiles Corporation* JSC by way of payment for the additional placement of shares issued as a result of its increased charter capital, and this move appears to be in line with traditional practices. However, the transfer of 92.3 percent of shares in *United Aircraft Corporation* PJSC (UAC), the 100-percent federal stake in *Roskhimzashchita* OJSC, and federal stakes in another 6 JSCs, including 2 controlling stakes and 4 blocking stakes, as a property contribution to the charter capital of State Corporation *Rostec* appears to be much more arguable.

The corporation, created in 2007, soon began to acquire certain distinct features of a conglomerate without a clearly visible relation to any sector as a result of transfers of hundreds of federal stakes in other JSCs, including those established on the basis of reorganized FSUEs that had been struck off the list of strategic organizations and specializing in a variety of different fields[1]. Over the subsequent years, that trend

[1]Gradually, sub-holding companies began to emerge inside the State Corporation (e.g., *High Precision Systems*, *Technodinamika*, *Techmash*). Some of them were created by special governmental decisions (e.g., United Engine Corporation), others emerged as separate entities before they were transferred to Rostec (e.g., Russian Helicopters). There were some precedents of a transfer of previously established

became even stronger. Suffice to say that the group of organizations transferred to *Rostec* by *Rosimushchestvo* over the course of last year included Production Corporation *UralVagonZavod* JSC and *NPO Microgen* (a reorganized unitary enterprise, previously subordinated to the RF Ministry of Health); FSUE *PO More* Shipyard in the Crimea is also being reorganized into a JSC. All these developments run contrary to the well-defined activity profiles of entities established more than 10 years ago as independent VISs (*UAC* PJSC, *Roskhimzashchita* OJSC).

Over the course of the year 2018, *Rosimushchestvo* was implementing measures designed to build other types of integrated structures. When applied with respect to *Roscosmos*, *Rosatom*, *Transneft* PJSC and *UAC* PJSC, and *GLONASS* JSC, these involved the implementation of some previously adopted major decisions (at the level of Presidential Executive Orders), mainly aimed at the enlargement of these entities. As far as other VISs are concerned (*Russian Railways* OJSC, ROSGEO JSC, *Tactical Missiles Corporation* JSC, Concern *VKO Almaz–Antey*, *United Shipbuilding Corporation* (USC)), the measures were aimed at upgrading these structures on the basis of new decisions adopted during the previous calendar year.

Among these, we should note *USC*: its charter capital has been augmented by a minority stake in *Zelenodolsk R&D Bureau* JSC situated in the Republic of Tatarstan, while a controlling stake in the latter, alongside a minority stake in *A.M. Gorky Zelenodolsk Plant JSC,* is to be transferred into the Republic's ownership, on condition that the decisions concerning the alienation of shares in these JSCs after the expiry of a five-year period should be coordinated with the RF Government; that their core activities should remain unchanged; and that over the period until 2023, investments should be attracted, including from private sources, for the purpose of comprehensive production capacity development and modernization of *Zelenodolsk R&D Bureau* JSC - in an amount not less than RUB 150 million, and *A.M. Gorky Zelenodolsk Plant JSC* – in an amount not less than RUB 300 million. In this connection, the RF Government has been assigned the task of finalizing the agreements between the Russian Federation, the Republic of Tatarstan, and the two JSCs concerning the development of the latter, making provisions in these agreements for specific measures designed to boost their R&D potential, to pool their available intellectual, industrial and financial resources in order to implement shipbuilding projects, and to ensure modernization of their production capacities through investments attracted by the region. The implementation of this project coupled with the potential interest of *Rostec* in shipbuilding assets may translate into adjustments of the government industrial policy in that sector – from support of 'national champions' towards diversification of centers and formats of government presence in the national economy.

Another major state corporation – *Vnesheconombank* – is undergoing the process of restructuring. After alterations were made in late 2018 to the 2007 law whereby its activity is regulated (No 452-FZ), its name was changed into VEB.RF.

VISs (Concern *Avtomatika*, *Vega Radio Engineering* Corporation, Concern *Sozvezdie* JSC, *Control Systems* JSC).

Within the charter capital of VEB.RF (not less than RUB 70 billion), two components were identified: the 'formed' component, and the component yet to be formed in accordance with the normative legal act of the RF Government by way of subsequent additional property contributions by the State, to be specified as follows:

– the composition of property earmarked as an additional contribution, including subsidies;

– the planned contribution cap (if necessary – distributed by year, with the description of procedure and timeframes for altering the contribution distribution procedure in those cases when the additional property contributions are not transferred in full in a given year);

– the procedure and timeframes for property contributions, and the conditions thereof, including but not limited to reducing the capital adequacy ratio to an acceptable minimum, as established in the State Corporation's financial policy memorandum, and increased by one percentage point, and to altering other financial sustainability indices of VEB.RF as envisaged in the said normative legal act of the RF Government, and the procedure for confirming compliance with the said conditions;

– the targeted use of the additional property contributions: the funding of projects implemented by VEB.RF (including the creation of reserves to cover potential losses incurred in the course of implementing those projects), the decisions concerning VEB.RF's participation in their funding having been adopted by the empowered managerial and collegial executive bodies of VEB.RF after the entry into force of the said normative legal act of the RF Government. The targeted use of the additional property contributions should not be understood as funding of the projects implemented by VEB.RF by way of implementing the nationwide, strategic or priority decisions of the RF President and the RF Government concerning the national economy, that are not compatible with the main directions, indices, constraints, or principles of investment and financial activity followed by VEB.RF;

– the requirements concerning an efficient use of the additional property contributions.

Several separate articles address the specific role of the state corporation in the functioning of development institutions, while the Accounts Chamber of the Russian Federation and other state bodies exercise control and supervision not only over the activity of VEB.RF, but also over that of those development institutions that receive support from VEB.RF, the source of that support being the federal budget.

The alterations introduced in the 2003 law on foreign trade regulation provides a framework whereby VEB.RF, with respect to exports, on the basis of the RF Government's decisions coordinates the activity of the Russian Export Center, the Russian Agency for Export Credit and Investment Insurance (EXIAR), State Specialized Russian Export-Import Bank JSC (Eximbank of Russia), and some other development institutions.

In the event of a transfer, by decision of VEB.RF Supervisory Board, of the 100 percent stake in the Russian Export Center's charter capital into federal ownership, the

sole shareholder of the Center will be the Russian Federation, while the Center's charter capital can be increased at a later date by federal contributions, if the Russian Agency for Export Credit and Investment Insurance should become less financially sustainable, and the RF Government should determine, in a procedure similar to that established for the charter capital of VEB.RF itself, the transfer of those additional property contributions.

Earlier, in late 2017, the norms were introduced whereby it became possible to create, under the state corporation's supervisory board, special committees for preliminary consideration of certain issues, including standing committees (on strategy, audit, human resources, reimbursement, and other issues), as well as collegiate bodies, appointed by the supervisory board and the chairperson. Besides, the norms regulating the procedure for approving certain types of deals by the state corporation's executive bodies were added.

Last year, the activity of biggest companies with state stakes in the corporate control market was rather slack, but it became evident that the criteria for estimating the feasibility of negotiated deals should be more transparent – both from the point of view of the interests of the State and in the contest of the participating companies' development strategies.

The purchase by VTB Bank of a 29.1-percent stake in the retail chain *Magnit* for RUB 138 billion from its former major stakeholder, which was one of the most important events of 2018, was followed by another major deal only 3 months later – the sale of a 11.8-percent stake, without disclosing the deal value, to Marathon Group, an investment company specializing in the main in pharmaceutical infrastructure.[1] The indirect presence of the State in the retail sector, in a degree that is not sufficient for actually influencing the corporate governance procedures there, has given rise to some questions – and questions also arise in connection with a shrinkage of state participation in other companies involved in those types of economic activity where the presence of the State has been traditional (in foreign countries as well).

State Corporation *Rostec* reduced its participation in *Kalashnikov Concern* to the level of a blocking stake by selling 26 percent of shares to *TransKomplektHolding* for RUB 1.5 billion. The future development of *Kalashnikov Concern*, which for a long time has been a symbol of the national firearms industry, will have to do with its current rebranding strategy and reorientation to the production of means of transport[2].

While moving on to the issues of managing joint-stock companies with state participation, we may note the strictest executive discipline visible in the organization of annual general shareholder meetings. The meetings were held by 47 out of 48 JSCs entered on the Special List approved by Directive of the Government of the Russian Federation No 91-r dated January 23, 2003, where the standpoint of the State as a shareholder on a number of the most important issues was determined at the government

[1]https://www.kommersant.ru/doc/3549909,
https://www.rbc.ru/business/24/05/2018/5b0410ca9a79476f56976cc5
[2]https://lenta.ru/news/2018/02/15/ak/

level); by all the JSCs not included in the Special List, where the RF was the sole shareholder, and 88.7 percent of those JSCs that were not included in the Special List and with state stakes amounting to more than 2 percent but less than 100 percent of their charter capital.

In accordance with the decisions of the RF Government issued with regard to annual general shareholder meeting, in the course of the corporate year 2017, a total of 190 candidates for the boards of directors (supervisory boards) of JSCs entered on the Special List were approved[1], including 189 professional attorneys (instead of 182 persons recommended by the special Commission (attached to *Rosimushchestvo*) assigned the task of selection of independent directors, representatives of the shareholder interests of the RF, and independent experts to be elected to the managerial and control bodies of joint-stock companies), 64 independent directors (out of a total of 68 recommended persons) and 143 civil servants (instead of 148 as recommended by the Commission)[2].

The overall number, in absolute terms, of state representatives in the boards of directors of JSCs entered on the Special List somewhat increased relative to 2017 thanks to the inflow of civil servants. The total number of professional directors – that is, professional attorneys and independent directors taken together - remained the same. At the same time, the trend that first appeared after the period 2014–2015 – that of an increasing relative share of civil servants and professional attorneys alongside a shrinkage of the relative share of independent directors in companies' managerial bodies – once again revealed itself *(Table 8*).

Table 8

The movement and structure of state representatives in the managerial and control bodies of JSCs entered on the Special List, in 2009–2018

Year	JSCs, units	State representatives in boards of directors (supervisory boards)								In audit commissions: independent experts, number
		total		civil servants		professional attorneys		independent directors		
		number	percent	number	percent	number	percent	number	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	65/66[d]
2017[e]	48	385	100,0	131	34.0	179	46.5	75	19.5	56
2018[f]	47/48	397/405	100,0	143	36.0	190	47.9	64	16.1	65

[a] – data are also available on the election of professional directors to the managerial bodies of 59 JSCs;

[1] Less *State Transport Leasing Company* PJSC (*STLC*, the shareholder rights belong to the RF Ministry of Transport) and *MIT Corporation* JSC (the shareholder rights belong to State Corporation *Roscosmos*); and including *FGC UES* PJSC.

[2]The final decisions concerning the appointment of candidates for the managerial and control bodies of JSCs entered on the Special List are approved by the RF Government.

[b] – including OJSC *Novorossiysk Commercial Sea Port*, where only civil servants were elected to the board of directors and the audit commission;
[c] – other data are also available concerning the by-category distribution of state representatives (presented in the denominator), which probably are preliminary estimates, although the number of professional directors (professional attorneys and independent directors) for 2014 released by *Rosimushchestvo* (287) corresponds to the total number for all the groups (presented in the denominator);
[d] – later data for a larger number of JSCs are shown in the denominator;
[e] – including *Novorossiysk Commercial Sea Port* OJSC and *FGC UES;* as of August 1, 2017, these companies had not yet established their boards of directors and audit commissions in the course of their 2017 annual general shareholder meetings, and so we applied the extraordinary general shareholder meetings data as of September 15, 2017 in accordance with RF Government Directive No 4643p-P13 dated July 3, 2017;
[f] – the total number of state representatives in boards of directors in the denominator is higher than the sum of state representatives by category (civil servants, professional attorneys, independent directors), which also corresponds to the lower number of JSCs on the Special List.
Source: Year-end Reports on the Management of Federal Stakes in OJSCs and the Use of the Russian Federation's Special Right to Participate in an OJSC's Management ('Golden Share') for 2011–2017; own calculations.

Over the period 2014–2018, in the group of companies not included in the Special List, the number of civil servants per company increased from 2.04 to 3.04, while the number of professional directors declined from 5.62 to 5.29[1] (the number of professional attorneys increased from 3.86 to 4.04, but that of independent director declined from 1.76 to 1.33).

In 2018, civil servants prevailed in the structure of audit commissions (118 persons vs. 65 independent experts, or 64.5 percent), but the number of the latter increased, once again hitting its record high of 2016. Over the last 5 years, their per company number jumped more than 1.5 times (from 0.88 in 2014 to 1.35 in 2018).

As for the structure of the managerial bodies of companies not included in the Special List (*Table 9*), it should be said that in 247 JSCs, where the states ownership of a controlling or blocking stake ensured that state representatives took up a total of 1,371 seats on the boards of directors (or supervisory boards) of JSCs,[2] more than half of them were professional directors – 782 persons, or 57 percent, while the number of civil servants was 589, or 43 percent. In 39 JSCs with the RF stakes in their charter capital amounting to less than 25 percent, 100 percent of persons representing the interests of the State on the boards of directors (or supervisory boards) were civil servants (83 board members). However, even in spite of the effects produced by that factor, the total number of civil servants participating in the boards of directors (or supervisory boards) of the JSCs off the Special List dropped relative to 2017, when their number had been 704.

[1] Data released by *Rosimushchestvo*.
[2]Less (1) those JSCs where the State does not hold a blocking stake (62 units) and (2) those JSCs where the State holds a controlling or blocking stake, but the decisions concerning the appointment of professional directors and independent experts have not been passed for various objective reasons (77 units).

Table 9

The movement and structure of state representatives in the managerial and control bodies of JSCs off the Special List, in 2009–2018

Year	JSC, units	State representatives on boards of directors (supervisory boards) (other than civil servants)						In audit commissions: independent experts, number
		total		professional attorneys		independent directors		
		number	percent	number	percent	number	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	1,109	100.0	830	74.8	279	25.2	…
2012	822	1,860/1,869*	100.0	1,350	72.6	510/519*	27.4	23**
2013	637/245***	1,715	100.0	1,092	63.7	623	36.3	335
2014	683/159***	2,094	100.0	1,382	66.0	712	34.0	498
2015	527/151***	1,660	100.0	1,267	76.3	393	23.7	330
2016	479/123***	1,535	100.0	1,346	87.7	189	12.3	353
2017	297/107***	978	100.0	864	88.3	114	11.7	325
2018	247/77***	782	100.0	703	89.9	79	10.1	332

* – data are also available on the election of 1,869 professional directors, including 519 independent directors;

** – data are also available on the election of 21 private individuals as representatives in audit commissions;

*** – the denominator is the number of those JSCs where the State holds a controlling or blocking stake, but the decisions concerning the appointment of professional directors and independent experts have not been passed for various objective reasons.

Source: Year-end Reports on the Management of Federal Stakes in OJSCs and the Use of the Russian Federation's Special Right to Participate in an OJSC's Management ('Golden Share') for 2011–2017; own calculations.

As follows from data presented in *Table 9*, in 2017, while the total number of professional directors notably shrank in absolute terms (by 1/5), the relative share of professional attorneys in that group continued to increase, and their relative share in the total number of state representatives (beside civil servants) shrank to 10 percent. The number of independent experts in audit commissions in 2018 slightly increased relative to 2017 – approximately to the same level as in 2013 and 2015.

The per company number of professional directors on boards of directors (or supervisory boards) dropped from 3.29 to 3.16 (the 2015 level), while that of independent experts sitting on audit commissions increased from 1.09 to 1.34, thus rising 1.8 times above its 2014 level.

After the extensive adjustment of the governance mechanism for JSCs with state stakes a year earlier, it underwent no noteworthy alterations in 2018.

In order to establish personal responsibility of state representatives in the executive bodies of JSCs for their failure to properly protect state interests, a draft law has been submitted to parliament whereby certain amendments to the RF Code of Administrative Offenses are suggested. The RF Government is currently considering draft laws regulating the insurance of responsibility of those members of the board of directors of a JSC with a state stake who occupy deputy positions in government agencies or who are civil servants.

As far as standardization of the governance procedures for all companies with state participation is concerned, we should make note of the following draft documents that were under consideration over the course of last year:

- the criteria of selecting candidates for membership in the single (collegiate) executive body, the board of directors (or supervisory board), and the audit commission of a JSC;
- a model program of alienation of non-core assets of a JSC off the Special List, the stake held in its capital by the RF being more than 50 percent;
- methodological recommendations for reimbursement of CEOs of state corporations, state-owned companies, and economic societies whose core activity outlined in their charter is funded from the budget, and the stake held in their capital by the RF is more than 50 percent, including those entered on the Special List;
- methodological guidelines for applying the key performance indicators for state corporations, state-owned companies, and economic societies whose core activity outlined in their charter is funded from the budget, and the stake held in their capital by the RF is more than 50 percent (at present, the wording of the guidelines as amended in 2014 is in effect).

In the framework of implementation of the norms stipulated in the new Corporate Governance Code (CGC), introduced in 2014, *Rosimushchestvo* in its capacity of a shareholder analyzed the annual reports of 12 biggest state-owned companies for the corporate year 2017, approved by their annual general shareholder meetings in 2018, from the point of view of their compliance with the principles and recommendations stipulated in the CGC.

On the basis of that analysis, as well as the information submitted by those state-owned companies at *Rosimushchestvo*'s request, it can be said that all the 12 JSCs indeed entered in their annual reports information concerning their implementation of the norms and principles stipulated in the Code.

As shown by the analysis of the reports submitted by JSCs, the overall roadmap implementation index for the provisions stipulated in the CGC as of late summer 2018 was approximately 90 percent, just as a year earlier.

The highest rate of implementation of the Code's provisions has been noted with regard to the following 3 sections:

– corporate secretary of a JSC (96 percent vs. 100 percent in 2017, 60 percent in 2016);

– shareholder rights and equal opportunities for exercising these rights (93 percent, just as a year earlier, in 2016 – 86 percent);

– risk management and internal control systems (also 93 percent).

The implementation indicators for another 4 sections of the CGC (board of directors, reimbursement of the members of a board of directors, executive bodies and other CEOs, corporate information disclosure, information policy, and significant corporate acts) were above 70 percent.

The dividend policy was shaped by the requirement to comply with the budget assignment, one of its parameters being that the amount earmarked for the payment of dividends could not be less than 50 percent of a company's year-end net profit calculated in accordance with the International Financial Reporting Standards (hereinafter – IFRS).

From 2016 onwards, the RF Government has been issuing some separate decisions whereby JSCs with federal stakes in their capital were obliged to earmark for the payment of dividends not less than 50 percent of their net profit, thus making it possible for the RF Ministry of Finance to introduce certain adjustments while preparing the draft of a federal budget law. At the same time, as before, the RF Government Directive No 774-r dated May 29, 2006 (as amended in May 2017) sets forth the norm whereby not less than 25 percent of their profit should be earmarked for the payment of dividends.

Rosimushchestvo, in the course of its year-end campaign of 2017 for the launch of annual general shareholder meetings by JSC, adopted a set of necessary and sufficient measures designed to maximize the amount of dividend-generated federal budget revenue with due regard for the current market situation, external and internal factors, relevant government decisions, and the necessity to implement long-term economic development programs. These efforts translated into a revenue level that was above the planned target set in the federal budget law. Almost the entire amount of dividends on federal stakes received at year-end 2017 was paid by the JSCs included in the Special List.

Meanwhile, by the alterations introduced into RF Government Decree No 739 dated December 3, 2004, whereby the powers of federal bodies of executive authority (FBEA) to exercise their ownership rights to property of FSUEs are regulated, the minimum amount of a transfer to the federal budget for the latter was increased from 25 to 50 percent of their disposable profit after taxes and other mandatory payments (less incomes and expenditures resulting from revaluation of their marketable securities and related to the incomes and expenditures taken into account when calculating the amount of tax on profit of organizations). The relevant decisions should be made by those FBEAs that exercise authority over those companies, irrespective of their being included in a privatization program.

Similarly to the procedure that regulates the payment of dividends by JSCs with state stakes, in those cases when a FSUE is required to file financial reporting, including consolidated reports, in accordance with the IFRS, the amount of its profits due to be transferred to the federal budget cannot be less than 50 percent of its net profit calculated on the basis of data entered in said reports. If that amount is higher than the amount of net profit calculated on the basis of data entered in the accounting (financial) reports submitted by that unitary enterprise, the amount of dividends is derived from its retained earnings. However, it must be added that the official cap on dividends for JSCs, set in May 2017, amounts to only 25 percent.

6.1.4. The budgetary effect of government property policy

In 2018, in contrast to the situation over the previous year, the movement of federal budget revenues that had to do, in one or other way, with public property was positive. There is evident growth of revenues generated both by the use of public property (renewable sources) and by privatization and the sale of property (non-renewable sources).

Tables 10 and *11* show data taken from the reports on federal budget execution, in particular the revenues generated by the use of public property and the sale of public property entities belonging only to some specified categories of tangible property[1].

[1] Here, we do not consider the federal budget revenues generated by payments for the use of natural resources (including biological water resources, revenues from the use of forest fund, and the extraction of mineral resources), compensation of the losses incurred by the agricultural production sector as a result of confiscation of agricultural land, revenues generated by financial operations (revenues from placement of budget funds (revenues from federal budget residuals and their investment: from 2006 onwards, these include the revenues from the management of the RF Stabilization Fund (and from 2009 onwards – the Reserve Fund and the National Welfare Fund)); revenues from investment of monies accumulated in the course of trading RF stocks in the auction market); interest on budget-funded domestic loans, covered by the federal budget; interest on government loans (monies received from the governments of foreign countries and foreign legal entities as interest payments on RF government loans); money transfers from legal entities (enterprises and organizations), RF subjects, municipal formations received as interest and guarantee payments on loans received by the RF from foreign governments and international financial organizations; revenues from paid services rendered to the population or monies received by way of compensation of government expenditures; transfers of the RF Central Bank's profits; certain categories of payments from state and municipal enterprises and organizations (patent duties and registration fees for official registration of software, databases, integral microcircuit topologies; and other revenues which until 2004 were part of mandatory payments of state organizations (except revenues generated by the operations of Joint Venture *Vietsovpetro* (from 2001) and transfers of part of profits generated by FSUEs (from 2002); revenues from the implementation of product share agreements (PSA); revenues from the disposal of confiscated and other property earmarked as government revenue (including property transferred to state ownership in the procedure of inheritance or gift, or treasure trove appropriation); revenues generated by lotteries; other revenues from the use of property and rights in federal ownership (revenues from the execution of rights to the results of intellectual activity (R&D and technologies) intended for military, special or dual use; revenues generated by the execution of rights to the results of scientific and technological research held by the RF; revenues generated by the exploitation and use of property relating to motor roads, motor road levies imposed on transport vehicles registered in the territories of other states; execution of the Russian Federation's exclusive right to the results of intellectual activity in the field of geodesy and cartography; fees for the use of spatial data and materials that are not subject to copyright, kept in the Federal Fund of Spatial Data; and other revenues from the use of property in the ownership of the Russian Federation); revenues generated by organizations from the permitted types of economic activity and earmarked for transfer to the federal budget; revenues from realization of government reserves of precious metals and precious stones.
By contrast with the previous years, the law on federal budget execution for 2015–2017 contains no aggregate data listed under each revenue classification code or sub-code, or listed according to the classifications of transactions in the public administration sector on revenue side (these are listed only by their classification code for each revenue administrator). Therefore, we used data from the reports on

Table 10

Federal budget revenues generated by the use of public property (renewable sources) in 2000–2018, millions of rubles

Year	Total	Dividends on shares (2000–2018) and revenues generated by other forms of participation in capital (2005–2018)	Payment for lease of land in state ownership	Revenues generated by lease of property in state ownership	Revenues from transfer of part of net profits of FSUEs after taxes and other mandatory payments	Revenues generated by Joint Venture *Vietsovpetro*
2000	23,244.5	5,676.5	–	5,880.7	–	11,687.3[a]
2001	29,241.9	6,478.0	3,916.7[b]	5,015.7[c]	209.6[d]	13,621.9
2002	36,362.4	10,402.3	3,588.1	8,073.2	910.0	13,388.8
2003	41,261.1	12,395.8	10,276.8[e]		2,387.6	16,200.9
2004	50,249.9	17,228.2	908.1[f]	12,374.5[g]	2,539.6	17,199.5
2005	56,103.2	19,291.9	1,769.2[h]	14,521.2[i]	2,445.9	18,075.0
2006	69,173.4	25,181.8	3,508.0[h]	16,809.9[i]	2,556.0	21,117.7
2007	80,331.85	43,542.7	4,841.4[h]	18,195.2[i]	3,231.7	10,520.85
2008	76,266.7	53,155.9	6,042.8[h]	14,587.7[i]	2,480.3	–
2009	31,849.6	10,114.2	6,470.5[h]	13,507.6 [i]	1,757.3	–
2010	69,728.8	45,163.8	7,451.7[h]	12,349.2[j]	4,764.1	–
2011	104,304.0	79,441.0	8,210.5[h]	11,241.25[j]	4,637.85	773.4
2012	228,964.5	212,571.5	7,660.7[k]	3,730.3[l]	5,002.0	–
2013	153,826.25	134,832.0	7,739.7[k]	4,042.7[l] +1,015.75[m]	6,196.1	–
2014	241,170.6	220,204.8	7,838.7[k]	3,961.6[l] +1,348.5[m]	7,817.0	–
2015	285,371.1	259,772.0	9,032.3[k]	5,593.8[l] +1,687.8[m]	9,285.2	–
2016	946,723.35/ 254,328.3[n]	918,969.1/ 226,574.1[n]	9,412.4[k]	5,843.25[o] +3,026.7[m]	9,471.9	–
2017	275,168.2	251,327.0	9,825.1[k]	5,318.4[o] +2,857.7[m]	5,840.0	–
2018	333,397.8	312,565.8	9,784.8[k]	1,988.6[o] +2,922.6[m]	6,136.0	–

[a] – according to data released by the RF Ministry of Property Relations, in the Law on Federal Budget Execution for 2000 this item was not specified separately; instead, the amount of payment received from state-owned enterprises was entered (RUB 9,887.1 million) (without any components being specified);
[b] – the amount of lease payments (a) for the use of agricultural land and (b) for the use of land plots in the territories of towns and settlements;
[c] – the amount of revenues from the lease of property consolidated to (a) scientific research organizations, (b) educational establishments, (c) healthcare institutions, (d) state museums, state cultural and arts institutions, (e) archival institutions, (f) the RF Ministry of Defense, (g) organizations subordinated to the RF Ministry of Railways, (h) organizations providing research-related services to the academies of sciences with the status of a state entity, and (i) other revenues from the lease of property in state ownership;
[d] – according to data released by the RF Ministry of Property Relations, in the Law on Federal Budget Execution for 2001 this item was not specified separately, this value turned out to be the same as the amount of other revenues received as part of payments transferred by state and municipal organizations;
[e] – total amount of revenues generated by the lease of property entities in public ownership (without specifying the amount of lease payments for land);
[f] – the amount of lease payments (a) for the use of land plots in the territories of towns and settlements (b) for the use of land plots in federal ownership after the delineation of titles to land plots between different tiers of government;

federal budget execution as of January 1, 2016; January 1, 2017; and January 1, 2018 (annual data), and the monthly report on federal budget execution as of January 1, 2019.

[g] – the amount of revenues from the lease of property consolidated to (a) scientific research organizations, (b) educational establishments, (c) healthcare institutions, (d) state cultural and arts institutions, (e) state archival institutions, (f) institutions of the federal postal service of the RF Ministry of Communications and Informatization, (g) organizations providing research-related services to the academies of sciences with the status of a state entity, and (h) other revenues generated by the lease of property in federal ownership;

[h] – the amount of lease payments after the delineation of titles to land plots between different tiers of government and revenues generated by the sale of right to conclude lease agreements in respect of land plots in federal ownership (with the exception of land plots held by federal autonomous institutions (2008–2011) and budget-funded institutions (2011));

[i] – the amount of revenues from the lease of property held by right of operative management by federal bodies of state authority and by the state institutions established by them, and property held by right of economic jurisdiction by FSUEs: properties transferred for operative management to organizations with the status of a state entity: (a) scientific research institutions, (b) organizations providing research-related services to the Russian Academy of Sciences and to sectoral academies of sciences, (c) educational establishments, (d) healthcare institutions, (e) federal postal service institutions of the Federal Communications Agency, (f) state cultural and arts institutions, (g) state archival institutions, and (h) other revenues generated by the lease of property held by right of operative management by federal bodies of state authority and by the state institutions established by them, and property held by right of economic jurisdiction by FSUEs[1] (for the period 2006–2009 – less revenues from the permitted types of economic activity and revenues from the use of federal properties situated outside RF territory, which are received abroad, and which were not listed as a separate revenue item in the previous years[2]);

[j] – the amount of revenues from the lease of property held by right of operative management by federal bodies of state authority and by the state institutions established by them (with the exception of federal autonomous institutions and budget-funded institutions): properties transferred for operative management to organizations with the status of a state entity: (a) scientific research institutions, (b) organizations providing research-related services to the Russian Academy of Sciences and to the 'branch' academies of sciences, (c) educational establishments, (d) healthcare institutions, (e) state cultural and arts institutions, (f) state archival institutions, (g) properties held by right of operative management by the RF Ministry of Defense its subordinated institutions (2010), (h) properties in federal ownership disposed of by the Executive Office of the RF President (2010), and (i) other revenues from the lease of property held by right of operative management by federal bodies of state authority and by the state institutions established by them (less revenues from the permitted types of economic activity and revenues from the use of federal properties situated outside RF territory, which are received abroad);

[k] – the amount of lease payments after the delineation of titles to land plots between different tiers of government and revenues generated by the sale of right to conclude lease agreements in respect of land plots in federal ownership (with the exception of land plots held by federal budget-funded institutions and autonomous institutions), and (a) lease payments received for the lease of land plots in federal ownership, situated in public motor road precincts of federal importance (2012–2018), (b) payments for

[1] For the period 2008–2009, there is no mention of FSUEs as sources of revenues generated by the lease of property consolidated to them by right of economic jurisdiction, while the revenues from the lease of property held by right of operative management by federal bodies of state authority and by the state institutions established by them do not include revenues generated by property held by autonomous institutions.

[2] According to data released by the RF Ministry of Property Relations, the revenues from the use of federal properties situated abroad (less the revenues received by the Russian partner in Joint Venture *Vietsovpetro*) amounted to RUB 315 million in 1999 and RUB 440 million in 2000. Thereafter, the major role in organizing the commercial use of federal immovable property situated abroad was assigned to FSUE *Goszagransobstvennost*.

the execution of agreements on the establishment of servitude with regard to land plots situated within public motor road precincts of federal importance for the purposes of building construction (or reconstruction), capital repairs and exploitation of road service entities, installation and exploitation of utility networks, installation and exploitation of elevated advertizing structures (2012 and 2014-2018), and (c) payments received in the framework of agreements on the establishment of servitude with regard to land plots in federal ownership (2015–2018);

[l] – the amount of revenues from the lease of property held by right of operative management by federal bodies of state authority and by the state institutions established by them (with the exception of budget-funded institutions and autonomous institutions): properties transferred for operative management to organizations with the status of a state entity: (a) scientific research institutions, (b) educational establishments, (c) healthcare institutions, (d) state cultural and arts institutions, (e) state archival institutions, (f) other revenues from the lease of property held by right of operative management by federal treasury institutions, (g) federal bodies of state authority, the Bank of Russia, and the managerial bodies of RF government extrabudgetary funds, (h) federal treasury institutions (2015 only) (less revenues from the use of federal properties situated outside RF territory, which are received abroad);

[m] – the amount of revenues from the lease of RF treasury property (with the exception of land plots);

[n] – less the revenues generated by the sale of the stake in *Rosneft* (RUB 692,395 billion) (less interim dividend payments);

[o] – for the period 2016–2018, we apply aggregate data, without identifying by-sector groups of institutions. The more general classification consist only of 2 revenue categories, distinguished depending on the recipient of revenues generated by lease of property (federal bodies of state authority, the Bank of Russia and the managerial bodies of RF government extrabudgetary funds, and federal treasury institutions).

Source: Laws on federal budget execution for the period 2000–2014; reports on federal budget execution as of January 1, 2016; January 1, 2017; and January 1, 2018 (annual data); and the monthly report on federal budget execution as of January 1, 2019, www.roskazna.ru; own calculations.

In 2018, the aggregate revenues generated by renewable sources increased by more than 21 percent relative to the previous year.

This was achieved in the main due to the receipts of dividends in the federal budget (RUB 312.6 billion), which increased by almost a quarter, and rose above the previous record high of 2015 (RUB 259.8 billion). The receipts of part of profits paid by unitary enterprises, after having shrunk in 2017 by more than 5 percent, increased once more, while still staying below their 2013 level in absolute terms (RUB 6.1 billion).

The amount of revenue generated by lease of land plots remained practically unchanged (approximately RUB 9.8 billion)[1]. At the same time, the aggregate revenues generated by lease of federal property (approximately RUB 4.9 billion) demonstrated a sharp plunge (by 40 percent). This happened as a result of shrinkage, by more than

[1]The amount of lease payments for land plots, just as a year earlier, includes lease payments received for the lease of land plots in federal ownership situated in public motor road precincts of federal importance, payments for the execution of agreements on the establishment of servitude with regard to land plots situated within the easement areas of general-use motorways of federal importance for the purposes of building construction (or reconstruction), capital repairs and exploitation of road service entities, installation, relocation, restructuring, and exploitation of utility networks, and installation and exploitation of elevated advertizing structures; and payments for the execution of agreements on the establishment of servitude with regard to land plots in federal ownership which are specified for the first time in the budget reports for 2015.

60 percent (to less than RUB 2.0 billion) of the revenues from lease of property held by right of operative management by federal bodies of state authority and by the state institutions established by them (with the exception of budget-funded institutions and autonomous institutions). The revenues generated by lease of property which is held by the RF Treasury (except land plots), on the contrary, somewhat increased (by 2.3 percent), amounting to more than RUB 2.9 billion. For the first time since they had been identified in budget reports (from 2013 onwards) as a separate entry, they began to prevail in the aggregate structure of revenues generated by lease of federal property.

As in the previous year, dividends held a dominant position in the structure of renewable federal budget revenue sources (approximately 94 percent vs. 91 percent a year earlier). The relative share of lease payments for land plots amounted to 2.9 percent; that of payments for property lease – to 1.5 percent; and that of profits transferred by FSUEs – to 1.8 percent. Their aggregate relative share declined relative to 2017.

While proceeding to an analysis of federal budget revenues generated by the privatization and sale of state property (*Table 11*), it should be noted that, from 1999 onwards, the revenues from the sale of such assets (state stakes, and over the period 2003–2007 – also land plots[1]) have been treated as a source of funding to cover budget deficit.

Table 11

Federal budget revenues generated by the privatization and sale of property (non-renewable sources) in 2000–2018, millions of rubles

Year	Total	Sale of shares in federal ownership (2000–2014) and other forms of state participation in capital (2005–2018)[a]	Sale of land plots	Sale of miscellaneous properties
2000	27,167.8	26,983.5	–	184.3[b]
2001	10,307.9	9,583.9	119.6[c]	217.5+386.5+0.4 (ITA)[d]
2002	10,448.9	8,255.9[e]	1,967.0[f]	226.0[g]
2003	94,077.6	89,758.6	3,992.3[h]	316.2+10.5[i]
2004	70,548.1	65,726.9	3,259.3[j]	197.3+1,364.6+0.04 (ITA)[k]
2005	41,254.2	34,987.6	5,285.7[l]	980.9[m]
2006	24,726.4	17,567.9	5,874.2[l]	1,284.3[n]
2007	25,429.4	19,274.3	959.6[o]	5,195.5[p]
2008	12,395.0	6,665.2+29.6	1,202.0[q]	4,498.2+0.025 (ITA)[r]
2009	4,544.1	1,952.9	1,152.5[q]	1,438.7[r]
2010	18,677.6	14,914.4	1,376.2[q]	2,387.0+0.039 (ITA)[r]
2011	136660.1	126207.5	2425.2[q]	8,027.4[r]
2012	80,978.7	43,862.9	16,443.8[q]	20,671.7+0.338 (ITA)[r]
2013	55,288.6	41,633.3	1,212.75[q]	12,442.2+0.310 (ITA)[r]
2014	41,155.35	29,724.0	1,912.6[q]	9,517.7+1.048 (ITA)[r]
2015	18,604.1	6,304.0	1,634.55[q]	10,665.5+0.062 (ITA)[r]
2016	416,470.5	406,795.2	2,112.7[q]	7,562.6+0.012 (ITA)[r]
2017	21,906.7	14,284.5	1,199.6[q]	6,421.3+1.3 (ITA)[r]
2018	28,251.3	12,787.5	1,660.6[q]	13,803.0+0.2 (ITA)[r]

[a] – treated as an internal source of funding to cover the federal budget deficit, amount to RUB 29.6 million for 2008 (as stated in the Report on Federal Budget Execution as of 1 January 2009); this is a federal budget revenue item, but it is absent in the 2008 Law of Federal Budget Execution;
[b] – revenues generated by privatization of entities in public ownership and treated as an internal source of funding to cover the federal budget deficit;

[1]Data for the period 2003–2004, including revenues generated by sale of leasing right.

[c] – revenues generated by the sale of land plots and the right to lease land plots in state ownership (with special entry concerning those land plots in which privatized enterprises are situated), treated as federal budget revenues;
[d] – the amount of revenues generated by (1) the sale of property in federal ownership, treated as an internal source of funding to cover the federal budget deficit, (2) revenues generated by (a) the sale of apartments, (b) the sale of state-owned production and non-production assets, transport vehicles, other equipment and tangible assets, and (3) revenues generated by the sale of intangible assets (ITA), treated as federal budget revenues;
[e] – including RUB 6 million generated by the sale of shares held by RF subjects;
[f] – revenues generated by the sale of land and intangible assets, their amount not specified as a separate entry, treated as federal budget revenues;
[g] – revenues generated by the sale of property in public ownership (including RUB 1.5 million generated by the sale of properties held by RF subjects), treated as an internal source of funding to cover federal budget deficit;
[h] – this figure includes revenues generated by (1) the sale of land plots in which immovable property entities are situated, which prior to their alienation were federal property, the proceeds being transferred to the federal budget, (2) the sale of other land plots, as well as the sale of the right to conclude lease agreements in respect of those land plots, (3) the sale of land plots after delineation of titles to land plots, as well as the sale of the right to conclude lease agreements with respect to those land plots, the proceeds being transferred to the federal budget; these are treated as an internal source of funding to cover the federal budget deficit;
[i] – the sum of (1) revenues generated by the sale of properties in federal ownership, treated as an internal source of funding to cover the federal budget deficit, and (2) revenues generated by the sale of intangible assets, treated as federal budget revenues;
[j] – this figure includes the revenues generated by: (1) the sale of land plots prior to delineation of public titles to land plots, in which immovable property entities are situated, which prior to their alienation were federal property, the proceeds being transferred to the federal budget, (2) the sale of other land plots, as well as the sale of the right to conclude lease agreements in respect of those land plots, (3) the sale of land plots after delineation of titles to those land plots, as well as the sale of the right to conclude lease agreements with respect to those land plots, the proceeds being transferred to the federal budget; these are treated as an internal source of funding to cover federal budget deficit;
[k] – the sum of (1) revenues generated by the sale of properties in federal ownership, treated as an internal source of funding to cover the federal budget deficit, (2) revenues generated by (a) the sale of apartments, (b) the sale of equipment, transport vehicles and other tangible assets, the proceeds being transferred to the federal budget, (c) the sale of the products of ships recycling industry, (d) the sale of property held by state unitary enterprises and state institutions, as well as the sale of military property, (e) the sale of the products of recycled armaments, military technologies and ammunition, (3) revenues generated by the sale of intangible assets (ITA); these are treated as federal budget revenues;
[l] – this figure includes the revenues generated by: (1) the sale of land plots prior to delineation of titles to land plots, in which immovable property entities are situated, which prior to their alienation were federal property, (2) the sale of land plots after delineation of titles to land plots, the proceeds being transferred to the federal budget, (3) the sale of other land plots, which prior to delineation of titles to land plots between different tiers of government were public property, and which are not earmarked for housing construction (this subdivision is true only with regard to data for 2006), treated as sources of funding to cover federal budget deficit;
[m] – revenues generated by the sale of tangible and intangible assets (less federal budget revenues generated by disposal and the sale of confiscated property and other property treated as government revenue), this figure includes revenues generated by (a) the sale of apartments, (b) the sale of property held by FSUEs, (c) the sale of property held by right of operative management by federal institutions, (d) the sale of military property, (e) the sale of the products of recycled armaments, military technologies

and ammunition, (f) the sale of other properties in federal ownership, (g) the sale of intangible assets; these are treated as federal budget revenues;

[n] – revenues generated by the sale of tangible and intangible assets (less revenues received as profit share in the framework of product share agreements (PSA) and federal budget revenue generated by the disposal and sale of heirless property, confiscated property, or other property earmarked as government revenue), this figure includes revenues generated by (a) the sale of apartments, (b) the sale of property held by FSUEs, (c) the sale of property held by right of operative management by federal institutions, (d) the sale of military property, (e) the sale of the products of recycled armaments, military equipment and ammunition, (f) the sale of other properties in federal ownership; these are treated as federal budget revenues;

[o] – revenues generated by the sale of land plots after delineation of titles to land plots formerly in federal ownership, treated as sources of funding to cover federal budget deficit;

[p] – revenues generated by the sale of tangible and intangible assets (less revenues received as profit share in the framework of product share agreements (PSA) and federal budget revenues generated by the disposal and sale of heirless property, confiscated property, or other property earmarked as government revenue, and revenues from the sale of timber confiscated from timber poachers), this figure includes revenues generated by (a) the sale of apartments, (b) the sale of property held by FSUEs, (c) the sale of property held by right of operative management by federal institutions, (d) the sale of redundant movable and immovable military properties and other properties held by federal bodies of executive authority that involve military service, and services that are equated to military service, (e) the sale of military-purpose products from the stores of federal bodies of executive authority within the framework of cooperation in the field of military technologies, (f) revenues generated by the sale of other properties in federal ownership; these are treated as federal budget revenues;

[q] – revenues generated by the sale of land plots in federal ownership (less land plots held by federal autonomous and budget-funded institutions (data for 2011–2012)), treated as federal budget revenues; prior to 2015, these also include payments for the enlargement of private land plots resulting from their redistribution, as well the redistribution of land plots in federal ownership;

[r] – revenues generated by the sale of tangible and intangible assets (less revenues received as profit share in the framework of product share agreements (PSA), and federal budget revenue generated by the disposal and sale of heirless property, confiscated property, or other property earmarked as government revenue, and revenues from the sale of timber confiscated from timber poachers) (data for 2008–2011), revenues generated by the release of tangible assets from the state reserve of special raw materials and divisible materials (in the part of revenues generated by the sale, temporary lending, and other uses thereof); and with regard to data for 2012-2016, also revenues generated by the sale of timber produced as a result of measures designed to safeguard, protect, reproduce forests in the framework of government order for the implementation of such measures without the sale of forest plantations for timber production, and timber produced as a result of use of forests situated in the lands belonging to the Forest Fund of the Russian Federation, in accordance with Articles 43–46 of the RF Forest Code; revenues generated by commodity intervention from the reserve stocks held in the federal intervention fund of agricultural products, raw materials and foodstuffs, revenues generated by the release of tangible assets from the state reserve, revenues generated by the involvement of convicts in reimbursable labor (in the part of sales of finished products), revenues generated by the sale of products requiring special storage conditions); this figure also includes revenues generated by (a) the sale of apartments, (b) the sale of property held by right of operative management by federal institutions (with the exception of autonomous institutions and budget-funded institutions (data for 2011–2018), less revenues generated by the activities of institutions situated abroad (2015–2018), (c) the sale of redundant movable and immovable military properties and other properties held by federal bodies of executive authority that involve military service, and services that are equated to military service, (d) the sale of the products of recycled armaments, military equipment and ammunition, (e) the sale of products intended for military use and entered on the list of properties held by federal bodies of executive authority in the framework

of cooperation in the field of military technologies (data for 2008 and the period 2010–2018), (f) the sale of scrapped armaments and other military hardware in the framework of the Federal Target Program of Industrial Recycling of Armaments and Military Equipment (2005–2010), (g) revenues generated by the sale of immovable property held by budget-funded and autonomous institutions (2014-2018), (h) revenues generated by the sale of other properties in federal ownership, and revenues generated by the sale of intangible assets (ITA); these are treated as federal budget revenues.
Source: Laws on federal budget execution for the period 2000–2014; reports on federal budget execution as of January 1, 2016; January 1, 2017; and January 1, 2018 (annual data); and the monthly report on federal budget execution as of January 1, 2019, Report on Federal Budget Execution as of 1 January 2016 (annual report), www.roskazna.ru; own calculations.

When taken in absolute terms, the amount of property-generated federal budget revenues from non-renewable sources in 2018 jumped by 29 percent. However, the revenues generated by the sale of shares declined by 10.5 percent (to RUB 12.8 billion). Relative to the period after 2010, this would be a record low but for the index for 2015 (RUB 6.3 billion).

At the same time, the revenues generated by the sale of land plots moved in the other direction, rising more than 38 percent and amounting to RUB 1.66 billion vs. RUB 1.2 billion a year earlier, which roughly corresponds to their level in 2015, but is still less than the corresponding indices for 2014 and 2016. Meanwhile, the amount of revenues from the sale of miscellaneous properties jumped even higher (more than twice), and their index in absolute terms (RUB 13.8 billion) is a record high of the entire period since 2012. Similarly to the results of 2015, the relative share of revenue from that particular source turned out to be highest (approximately 1/2). The sale of shares accounted for more than 45 percent (in 2017 – approximately 2/3), and the sale of land plots – for less than 6 percent (in 2017 – 5.5 percent).

The aggregate federal budget revenue generated by the privatization (or sale) and use of state property in 2018 (*Table 12*) increased nearly 22 percent relative to the previous year.

Table 12

The structure of property-generated federal budget revenues from miscellaneous sources, 2000–2018

Year	Aggregate revenue generated by privatization (or sale) and use of state property		Privatization-generated revenues (non-renewable sources)		Revenues generated by use of state property (renewable sources)	
	millions of rubles	percent of total	millions of rubles	percent of total	millions of rubles	percent of total
1	2	3	4	5	6	7
2000	50,412.3	100.0	27,167.8	53.9	23,244.5	46.1
2001	39,549.8	100.0	10,307.9	26.1	29,241.9	73.9
2002	46,811.3	100.0	10,448.9	22.3	36,362.4	77.7
2003	135,338.7	100.0	94,077.6	69.5	41,261.1	30.5
2004	120,798.0	100.0	70,548.1	58.4	50,249.9	41.6
2005	97,357.4	100.0	41,254.2	42.4	56,103.2	57.6
2006	93,899.8	100.0	24,726.4	26.3	69,173.4	73.7
2007	105,761.25	100.0	25,429.4	24.0	80,331.85	76.0
2008	88,661.7	100.0	12,395.0	14.0	76,266.7	86.0
2009	36,393.7	100.0	4,544.1	12.5	31,849.6	87.5
2010	88,406.4	100.0	18,677.6	21.1	69,728.8	78.9

Cont'd

1	2	3	4	5	6	7
2011	240,964.1	100.0	136,660.1	56.7	104,304.0	43.3
2012	309,943.2/ 469,243.2*	100.0	80,978.7/ 240,278.7*	26.1/ 51.2*	228,964.5	73.9/ 48.8*
2013	209,114.85	100.0	55,288.6	26.4	153,826.25	73.6
2014	282,325.95	100.0	41,155.35	14.6	241,170.6	85.4
2015	303,975.2	100.0	18,604.1	6.1	285,371.1	93.9
2016	1,363,193.85/ 670,798.85**	100.0	416,470.5	30.6/ 62.1**	946,723.35/ 254,328.35	69.4/ 37.9**
2017	297,074.9	100.0	21,906.7	7.4	275,168.2	92.6
2018	361,649.1	100.0	28,251.3	7.8	333,397.8	92.2

* – including the proceeds received by the RF Central Bank as a result of the sale of a stake in *Sberbank* (RUB 159.3 billion), which is probably an overestimation of the actual aggregate share of non-renewable sources, because the budget did not receive the full amount of those proceeds, but their amount less the balance sheet value of that particular asset plus the costs incurred in the deal of sale. Consequently, the share of renewable sources is, on the contrary, somewhat underestimated;

** – less the revenues generated by the sale of shares in *Rosneft* (RUB 692,395 billion) (less interim dividend payments).

Source: Laws on federal budget execution for the period 2000–2014; reports on federal budget execution as of January 1, 2016; January 1, 2017; and January 1, 2018 (annual reports); Report on Federal Budget Execution as of January 1, 2019 (monthly report), www.roskazna.ru; own calculations.

Their index in absolute terms (RUB 361.65 billion) was below only the records highs of 2012 and 2016, when the deals of sale of stakes in biggest companies (*Sberbank* and *Rosneft*) were closed[1]. Meanwhile, in 2018 there were no such deals, and the ratio of non-renewable to renewable sources in the structure of aggregate revenues generated by the privatization (or sale) and use of public property remained the same as a year earlier.

The relative share of non-renewable sources in the structure of aggregate revenues generated by the privatization (or sale) and use of public property was less than 8 percent. The revenue generated by the use of public property, having surged above 92 percent, in absolute terms hit a record high of the entire period since the early 2000s, while the revenues generated by the privatization and sale of property amounted to slightly more than a half of the corresponding index for 2013, at the same time being above the indices for 2007–2010 and 2015.

It should be noted that in the budget reports, the RF Central Bank's revenues generated by its stake in the capital of *Sberbank of Russia* PJSC are not identified as a separate entry; according to the materials attached to the drafts of federal budget laws prepared by the RF Government, these are treated as non-tax revenues.

6.1.5. The government program *federal property management*: new amendments (version) and current results

A condensed statement of the government policy in the sphere of property management in its current phase is the Government Program (GP) *Federal Property Management*, approved by RF Government Decree No 327 dated April 15, 2014, to

[1]When taken less the proceeds received by the RF Central Bank as a result of the sale of a stake in *Sberbank*, the index for 2012 moves below the aggregate federal budget revenue generated by the privatization (or sale) and use of public property in 2018.

replace the original GP with the same title that had been in effect for approximately 14 months[1].

By RF Government Decree No 367-14 dated March 30, 2018, other important alterations were introduced in the program adopted in 2014, and it was approved in its new (third) version[2].

The GP has been prolonged until 2020, while in its previous version it was to be completed in 2019, and so its second phase (2016–2020) is now extended over a period of 5 years. Below we analyze in more detail the changes in the volume of budget funding and its proportional distribution (*Table 13*).

Table 13

Budget allocations to the Government Program *Federal Property Management* in 2013–2020, millions of rubles

period	GP 2013*		GP 2014 (original version)		GP 2014 (version 2017/2018)	
	total	Including additional funding	total	Including under Subprogram *Improvement of the Efficiency of Government Property Management and Privatization*	total	Including under Subprogram *Improvement of the Efficiency of Government Property Management and Privatization*
2013	5,474.3	5,896.9	23,629.8	5,673.8	23,287.2	5,474.3
2014	5,251.4	9,666.6	22,093.5	5,436.1	22,093.5	5,436.1
2015	5,275.1	9,842.7	27,537.6	5,298.9	27,938.9	5,408.5
2016	5,469.8	11,180.5	25,261.0	5,138.9	24,854.5	4,465.8
2017	5,775.8	8,028.8	26,903.6	5,158.6	22,971.3	4,127.6
2018	6,192.0	7,869.2	29,605.5	5,531.4	22,491.1/23,047.6**	4,046.0/4,058.0
2019					22172.6/22621.5**	3991.6/4069.4
2020					22944.5**	4131.2
total	33,438.4	52,484.8	155,031.1	32,237.7	165,809.1/189,759.0**	32,949.8/37,170.8

* – only the amount of funding allocated to the Subprogram Improvement of the Efficiency of Government Property Management and Privatization. The budget allocation data for Subprogram Government Material Reserve Management are classified;

** – as approved in 2018.

Source: Government Program *Federal Property Management,* approved by RF Government Directive No 191-r dated February 16, 2013; Government Program *Federal Property Management,* approved by RF Government Decree No 327 dated April 15, 2014 (original version, as approved on March 31, 2017 and March 30, 2018).

After the amount of allocations to the implementation of the GP in its previous version was reduced by 15–24 percent in 2017–2018 relative to its original version, their

[1] Approved by RF Government Directive No 191-r dated February 16, 2013. For more details on GP 2013, see Malginov, G., Radygin. A. Public sector and privatization // Russian Economy in 2012. Trends and Outlooks (Issue 34). Moscow, IEP. 2013, p. 468–475.

[2] For an analysis of the GP as approved in spring 2017, see Malginov, G., Radygin. A. Federal property and privatization policy// Russian Economy in 2017. Trends and Outlooks. Moscow, IEP. 2018, p. 435–452.

growth in accordance with the latest version amounted to 2–2.5 percent in 2018–2019. Overall in the course of 8 years (2013–2020), the volume of financial resources allocated from the federal budget to the implementation of the GP is to amount to RUB 189.8 billion, which is by approximately RUB 24 billion, or 14.5 percent, more than the amount envisaged in the previous version of the GP for a 7-year period (2013–2019).

The allocations under the GP, as a result of its prolongation, to Subprogram 1 *Improvement of the Efficiency of Government Property Management and Privatization* will amount to more than RUB 4.2 billion. The volume of funding earmarked for the 'extra' year 2020 is less, by approximately 11 percent, than the average annual volume of allocations envisaged in the new version of the GP (relative to the corresponding allocation target set in the previous version, it will decline by 12 percent, and relative to the original version – by approximately 23 percent). Similarly to the original version, the bulk of budget allocations will go to the Subprogram *Government Material Reserve Management*. The Subprogram *Improvement of the Efficiency of Government Property Management and Privatization* will receive less than 20 percent of the total allocation target for the period 2013–2020 (and approximately 18 percent in 2019–2020).

However, it should be borne in mind that throughout the entire discourse, it is the allocation targets, and not the actual amount of budget spending, that are the focus of attention. The corresponding budget projections in the law on federal budget for 2019–2021 turned out to be approximately 30 percent less than the targets set in the GP certificate: RUB 15.8 billion in 2019, and RUB 16.1 billion in 2020. At the same time, the amount of allocations to Subprogram 1 has turned out to be somewhat higher than the targets set in its certificate: RUB 4,092.5 million in 2019, and RUB 4,155.5 million in 2020. As a result, the relative share of the Subprogram *Improvement of the Efficiency of Government Property Management and Privatization* will amount to approximately 1/4 of the total amount of funding allocated to the GP.

While the goals that were previously set in the GP have remained unchanged, in its new version the targets and indicators of the GP's progress are the average rate of decline in the number of organizations with state stakes and federal treasury property entities (as percentage) – these remained unchanged, but in the original version of the GP there was also another indicator – the dynamics of the hi-tech development of federal property management methods.

The expected results, according to the new version of the GP, are the adoption, by 2020, of a new forecast plan (program) of federal property privatization and the main directions of federal property privatization for 2020–2022 (instead of the completion, in 2019, of the current reform in the system of federal property sales), and an increase in the rate of decline in the number of federal treasury property entities from 3 percent in 2013 to 29.5 percent in 2020 (instead of 24 percent in 2019).

The total number of quantitative targets set for the Subprogram *Improvement of the Efficiency of Government Property Management and Privatization* remained the same (14); in the original version adopted in 2014 there were 16 targets, and since then, their actual content has also changed.

Among the targets aiming at optimization of the composition and structure of federal property, the indicator of the relative share of treasury property entities for which a target function was assigned has been eliminated (with respect to FSUEs, this was done in 2017).

And instead of the indicator of decline in the number of treasury property entities (with the exception of entities in RF exclusive ownership), measured as a percentage of their number in 2012, the indicator of the relative share (percentage) of federal treasury property entities involved in economic turnover in the total number of federal treasury property entities as of the end of a reporting year is now applied (less land plots, shares in the charter (or share) capital of economic societies and partnerships, other highly valuable movable property entities with initial per unit cost below RUB 500,000/200,000, and current assets (irrespective of their value), entered on records as single entities)[1].

Besides, a new indicator was introduced – the relative share (percentage) of the powers of *Rosimushchestvo* executed through the use of the Federal State Information System *FGIAS ESUGI* (Register of Assets Held by the Russian Federation). In this connection, it should be reminded that in the GP's original version adopted in 2014, there were two indicators linked to the use of *FGIAS ESUGI*: the relative share of economic societies with a 100-percent stake owned by the RF and state organization with a less-than-100-percent stake owned by the RF, whose accounting systems and tax records were fully integrated in *FGIAS ESUGI*, in the total number of organizations in the relevant category (both these indicators were eliminated in 2017).

The definition of the indicator of the amount of federal budget revenue generated by profit derived from the ownership of shares in the charter (or share) capital of economic societies and partnerships, or by dividends paid on shares in federal ownership, and actually received, relative to its target set for a given reporting year, was significantly altered so as to make it more precise. The original definition was supplied with a note that in this connection, a decision by the RF Government to the effect that dividends are not to be paid should be taken into account; now the content of that note has been expanded, and in addition to a government decision, also government directives concerning the percentage of net profit to be earmarked for the payment of dividends by each JSC, and concerning the difference between the actual amount of net profit received by a JSC and its planned target, should be taken into account.

The expected results of Subprogram 1 have largely remained the same, as far as their content is concerned. It differs from its 2017 version only in that it now lacks one specific target – a decline in the number of treasury property entities owned by the Russian Federation (less land plots). At the same time, with respect to all treasury property entities, land plots including, a general increase of the relative share of such

[1]Because this definition is obviously difficult to apply due to its complexity, in the materials published on *Rosimushchestvo*'s official website, its shorter version sometimes used: 'treasury-owned capital construction entities not involved in economic turnover'.

entities involved in economic turnover is proclaimed (without any specific figures provided).

The text of the GP was amended as follows.

The government policy priorities and goals, which have been shaped not only by the Concept of long-term socioeconomic development of Russia until 2020 (approved by RF Government Directive No 1662-r dated November 17, 2008) and the Federal Law 'On Strategic Planning in the Russian Federation', but also by presidential and governmental decisions, are now concretized, to some extent, by the following elaboration: 'including with respect to accelerated development of priority territories'.

The list of measures designed to improve the efficiency of federal property sales and to enhance the involvement of federal property entities in commercial turnover, including privatization instruments, has been shortened.

The following items were struck off the list:

– creation of mechanisms for elaborating plans and schedules regarding the sale of shares in big companies with state stakes in a medium-term perspective, prepared with due regard for the results of a preliminary analysis of their investment potential, markets, demand, investor needs, regulatory environment; and also, whenever necessary, implementation of measures designed to increase the capitalization index and investment attractiveness of the property entities to be alienated; alteration of the business model, strategy and corporate governance quality of companies, and the tariff- and tax-related and social aspects of regulation;

– implementation of a system of motivations for the key participants in a sale (the CEOs of a company earmarked for privatization and the seller);

– elaboration, with due regard for international best practices, of formal procedures of pre-sale preparation and alienation of shares in big companies with state stakes that could be attractive for investors, in accordance with RF Government decisions, in order to attract investments, and promote competition, modernization and technological development of the national economy;

– regular monitoring of the planning, preparation and closure of deals entered in the federal property roadmaps approved by the RF Government;

– better information backing of sales of federal property through regular online publications, and gradual elimination of printed announcements concerning the involvement in economic turnover of federal property entities;

– 'post-privatization' monitoring of the sold entities, and control of the fulfillment of their obligations by the new owners.

In this connection, the following goals related to optimizing the content and structure of the federal property complex are no longer to be achieved:

– creation of a system of motivations for the sellers and CEOs of companies with state stakes earmarked for privatization;

– creation of roadmaps for the pre-sale preparation and sale of big federal property entities that are attractive for investors;

– creation of a system for control and monitoring of the implementation of roadmaps for the pre-sale preparation and sale of big federal property entities that are attractive for investors;

– completion of the implementation of roadmaps for increasing the investment attractiveness of federal property entities to be alienated.

Some alterations were also made to the list of measures designed to boost performance in the sphere of federal property management.

There is no longer any mention of the requirement that the companies still with federal stakes should gradually go public through entering the organized securities market. At the same time, it is now required that professional directors and independent experts should be elected to the managerial and control bodies of biggest companies as well.

Besides, the text has been technically edited in many ways. Among the most important alterations are the use of the terms 'phase I' and 'phase II' instead of the specific dates mentioned in the previous version (2015 and 2019 versions respectively), and the equivalent use of the terms 'roadmap' and 'plan of measures'.

The new version of the GP, similarly to its predecessor, contains a number of annexes, the most interesting component of which are the numerical data (indicators). Their publication makes it possible not only to compare different versions, but also to estimate the success achieved in the program's implementation (*Tables 14–18*).

Table 14

The progress of the GP *Federal Property Management* in 2014–2017 and indicators for the period until 2020, in the part of determining target functions (relative share of assets with a determined target function)

Indicator	2014		2015		2016		2017		2018	2019	2020
	plan	fact	plan	fact	plan	fact	plan	fact			
Relative share of economic societies with shares (or stakes) in federal ownership, percent	35	61	45	68	50	65.5	100	99.8	100	100	100
Relative share of FSIs, percent	–	20.5	–	32	5	49	60	60.6	100	100	100

Source: Government Program *Federal Property Management*, approved by RF Government Decree No 327 dated April 15, 2014 (as approved on March 30, 2018); *Rosimushchestvo*'s reports for 2014–2017, www.rosim.ru.

Table 15

The progress of the GP *Federal Property Management* in 2014–2017 and indicators for the period until 2020, in the part of optimization of its content and structure

Indicator	2014		2015		2016		2017		2018	2019	2020
	plan	fact	plan	fact	plan	fact	plan	fact			
1	2	3	4	5	6	7	8	9	10	11	12
Annual decline in number of JSCs with state stakes relative to previous year, not less than, percent	15	8.8	12	12	6	20.9	5	14.6	6	7	8

Cont'd

1	2	3	4	5	6	7	8	9	10	11	12
Annual decline in number of FSUEs relative to previous year, not less than, percent	12	6.3	13	12	15	9.7	20	22.2	13	13	13
Reduction in area of treasury-owned land plots not involved in economic turnover, relative to total area of treasury-owned land plots in 2012 (except land plots withdrawn from turnover or those subject to turnover restrictions), percent	10	21.5	15	17	20	33.9	25	35	30	35	40
Relative share of treasury property entities involved in economic turnover in total number of treasury property entities as of end of reporting year (less land plots, shares, stakes (or contributions) in charter (share) capital of economic societies and partnerships, other highly valuable movable property entities with initial per unit cost below RUB 500,000/200,000, and current assets (irrespective of their value), entered on records as single entities)*, percent									18	18.5	19

* – a new indicator that appeared in the 2018 version of the GP.

Source: Government Program *Federal Property Management*, approved by RF Government Decree No 327 dated April 15, 2014 (as approved on March 30, 2018); *Rosimushchestvo*'s reports for 2014–2017, www.rosim.ru.

Table 16

The progress of the GP *Federal Property Management* in 2014–2017 and indicators for the period until 2020, in the part of public asset management instruments (in fact, only JSCs with state stakes)

Indicator	2014		2015		2016		2017		2018	2019	2020
	plan	fact	plan	fact	plan	fact	plan	fact			
1	2	3	4	5	6	7	8	9	10	11	12
Relative share of civil servants in managerial and controlling bodies of JSCs with state stakes, percent	30	29.6	30	27	30	28.7	50	495	50	50	50

Cont'd

1	2	3	4	5	6	7	8	9	10	11	12
Relative share of JSCs (those entered in the Special List, and other JSCs with controlling RF stakes) with indicators in their long-term development programs oriented to boosting labor productivity and creation and modernization of high-productivity jobs, percent*	–	–	–	–	–	–	70	71.5	80	90	95

* – a new indicator that appeared in the 2017 version of the GP.

Source: Government Program *Federal Property Management*, approved by RF Government Decree No 327 dated April 15, 2014 (as approved on March 30, 2018); *Rosimushchestvo*'s reports for 2014–2017, www.rosim.ru.

Table 17

The progress of the GP *Federal Property Management* in 2014–2017 and indicators for the period until 2020, in the part of hi-tech development of federal property management methods

Indicator	2014		2015		2016		2017		2018	2019	2020
	plan	fact	plan	fact	plan	fact	plan	fact			
Relative share of federal property entities in Federal Property Register in total number of identified property entities to be entered in Register (over current year), percent	80	100	80	80	80	80.2	80	81.5	80	90	90
Relative share of public services rendered in electronic form in total number of services rendered by *Rosimushchestvo*, percent	35	98	50	98	65	93.3	100	100	100	100	100
Relative share of powers executed by *Rosimushchestvo* through the use *FGIAS ESUGI*, percent*									45	60	75

* – a new indicator that appeared in the 2018 version of the GP.

Source: Government Program *Federal Property Management*, approved by RF Government Decree No 327 dated April 15, 2014 (as approved on March 30, 2018); *Rosimushchestvo*'s reports for 2014–2017, www.rosim.ru.

These data reliably underline the fact that after the adoption of a new version of the GP, according to the year-end results of 2017, almost all indicators were close to their target values, or had surged above those target values. One particularly illustrative example is the indicator of annual decline in the number of economic subjects with state stakes relative to the previous year. If for JSCs that movement pattern could be observed as early as 2016, in the case of FSUEs an accelerated rate was noted for the first time only since the launch of the GP. The rate of shrinkage of treasury-owned land plots not involved in economic turnover relative to the total area of treasury-owned land plots in 2012 corresponds to the planned target for 2019. In a similar fashion, the ratio of value of sold property entities in state ownership to their valuation index determined for the purpose of their sale also corresponds to its planned target for 2018. The budgetary effect

indicators rose above their planned targets: with respect to the sale of shares (or stakes) in economic societies – by 4 percent, and with respect to dividends – by more than 7 percent.

Table 18

The progress of the GP *Federal Property Management* in 2014–2017 and indicators for the period until 2020, in the part of budgetary effect

Indicator	2014		2015		2016		2017		2018	2019	2020
	plan	fact	plan	fact	plan	fact	plan	fact			
Relative share of federal budget receipts over reporting year generated by sale of shares and stakes in charter capital of economic societies, as percentage of planned amount of receipts set in RF Government directive that approved forecast plan (program) of privatization for given year (except receipts generated by sale of shares in biggest JSCs),* percent	–	–	–	–	–	–	100	104	100	100	100
Federal budget revenue received as profit derived from stakes in charter capital of economic societies and partnerships, or dividends on shares in federal ownership, as percentage of planned target for reporting year (with due regard for RF Government concerning non-payment of dividends),* percent	–	–	–	–	–	–	100	107.1	100	100	100
Ratio of value of sold property in state ownership to its valuation for purposes of sale,* percent	–	–	–	–	–	–	30	40.5	40	50	70

* – a new indicator that appeared in the 2017 version of the GP.

Source: Government Program *Federal Property Management*, approved by RF Government Decree No 327 dated April 15, 2014 (as approved on March 30, 2018); *Rosimushchestvo*'s reports for 2014–2017, www.rosim.ru.

In the new (2018) version of the GP, the content of the normative legal package to be adopted has been somewhat adjusted. While in the previous version it was intended to introduce amendments to two presidential executive orders (concerning constraints on privatization and the list of strategic organizations) and one federal law (concerning the procedures for determining heirs to property in the course of escheatment process), the new version envisages the adoption, by a government directive, of the privatization program for 2020–2022 and the amendment of the law on unitary enterprises

(concerning regulation of the sale of their property), and the issuance of a government decree on the improvement of federal property records.

* * *

Thus, in 2018, the situation in the sphere of ownership relations was shaped by the following basic trends.

The number of unitary enterprises and JSCs with state stakes in their capital, according to data from a variety of sources, was well in line with the multi-year downward trend displayed by the movement pattern of the number of economic subjects in federal ownership. A detailed analysis revealed a number of negative trends like a shrinkage in the relative share of companies where the State, in its capacity of a shareholder, could exercise full-scale corporate control, as a result of an increase in the relative share of minority stakes, and also a shrinkage in the relative share of those companies where *Rosimushchestvo* could fully exercise its shareholder rights.

There were no instances of sale of big assets (included in the current privatization program for 2017–2019) on the basis of individual government decisions. The biggest deal with significant budgetary effect was the 2-year (2017–2018) installment buyout, under an individual plan, of a stake in a Russia-India joint venture in the telecommunications sector by SSA *Sistema* PJSC. However, the total budget target for revenue generated by the sale of shares proved to be unachievable, and the same was true of the federal budget revenue target (less biggest sale value) set in the privatization program. The movement patterns of sales of stakes in JSCs in accordance with standard procedures and reorganizations of unitary enterprises into JSCs remained basically the same as in 2017.

As for the sales of treasury property entities, both the number of bids by investors and the number of actually closed deals more than doubled. In this connection, we may speak of an increasingly significant involvement of independent sellers, who for several straight years have been playing a major role in the sales of shares (or stakes) in economic societies.

The provisions of the law on privatization were made significantly more liberal: the ban, introduced in 2017, on property purchase by an offshore company now applies only to those offshore companies which do not disclose information on their beneficiaries, beneficiary owners and controlling persons in the procedure established by the RF Government.

The process of creation, by the government, of vertically integrated structures and consolidation of state corporations has continued. The decision concerning the transfer to State Corporation *Rostec* of several VISs created more than 10 years ago, previously entered on the list of strategic organization, and specializing in certain industrial sectors, can be viewed as a new development in this sphere.

As far as state representatives in the managerial bodies of companies with state stakes are concerned, their group continued to display a trend toward an increasing relative

share of civil servants and professional attorneys and a shrinking share of independent directors. The improvement of instruments to be applied in managing the economic subjects operating in the public sector was reduced in the main to elaboration of various draft documents.

In the structure of federal budget revenue generated by privatization (or sale) and use of state-owned property, just as a year earlier, renewable sources played a dominating role. In 2018, as was the case both in 2015 and in 2017, their relative share hit a record high of the entire period since the early 2000s (more than 90 percent).

Meanwhile, most of revenue growth expressed in absolute terms came from the sources associated with the activity of commercial organization with state participation (dividends and the transfer of part of their profit by unitary enterprises), while lease payments for land and other property were stagnating or shrinking, with the exception of revenues generated by the leasing of treasury property entities. The latter, from the moment of their identification as a separate entry in budget reports, began to prevail in the aggregate proceeds of federal property leasing.

Among non-renewable revenue sources, growth was displayed by revenues generated by the sale of land plots and miscellaneous properties. The revenues generated by the latter were more substantial, even surging above the shrinking revenues from the sale of shares (or stakes) in economic societies.

The tradition of annual amendment of the Government Program *Federal Property Managemen*t was continued. It was prolonged for one more year (until 2020), and the amount of funding allocated to both its subprograms was increased accordingly; however, the actual amount of these allocations is determined by laws on federal budget.

The major changes in the set of indicators for estimating the course of implementation of the Subprogram *Improvement of the Efficiency of Government Property Management and Privatization* had to do with treasury property entities; as was previously done with respect to unitary enterprises, the indicator for determining their target function was abolished, and the indicator of shrinkage of the 'non-land' component of the group of treasury property entities is now presented in a new format. The results of implementation of this Subprogram, after the alterations introduced in 2017, demonstrate that the established targets were met or exceeded by nearly all the indicators.

6.2. Megaregulatory approach to financial market regulation in abroad and in Russia[1]

6.2.1. Models of financial market regulation

One of the apparent aftermaths of the 2007–2009 global economic crisis was a lack of coordination between supervisory financial authorities. The previous general supervisory requirements had been found to be inadequate, raising a whole host of questions about its effectiveness. The 'too big to fail' issue came to the fore, while the

[1] This section was written by N. Polezhajeva RANEPA; E. Apevalova from RANEPA.

antitrust regulation of mergers and acquisitions in the financial sector was ultimately thought to be too 'soft'. Stepping up the adoption of unified ("mega") financial regulators became an alternate solution to the problem.

A megaregulatory approach underlies the reforms that were undertaken in Austria, Germany, Denmark, Iceland, Norway, Singapore, Sweden, Japan.

The idea to establish megaregulators was originated by the need to optimize supervision costs, which, however, was most typical of small countries. Later, the dominant idea was the effort to supervise financial conglomerates on a consolidated basis. Amid the global crisis, however, the rationale is to mitigate the threat of systemic risks and to reduce moral hazard risks – such risks can arise out of a bank's failure to assume full responsibility for its actions thus shifting the responsibility to the state – to a minimum in the banking sector.

The idea to adopt a megaregulatory approach in Russia was first expressed in 1999 and revisited in 2006, but to no avail[1]. The President of the Russian Federation signed on July 26, 2013 a law whereby the responsibilities – legal regulation, control and supervision over financial markets, including insurance, micro-financing, rating agencies and investment of pension savings – vested in the disbanded Federal Service for Financial Markets (FSFM) will now be the remit of the Bank of Russia instead. The FSFM ceased to be deemed to be a legal entity on September 1, 2013, and the FSFM functions were handed over by early in 2015 to a previously established single financial regulator – the Bank of Russia[2]. This suggests that an authority was established in Russia within the frameworks of cross-sectoral model of financial regulation, in which the regulatory power is fully vested in a single regulatory authority (a megaregulatory approach).

All the pros and cons of the megaregulatory model have been assessed in detail[3]. The transition to an integrated regulatory approach underlined many financial regulatory reforms in recent two decades. The 1980s saw some countries adopt the above principle, namely Singapore (in 1984), Norway (in 1986) and Denmark (in 1988), the 1990s saw five more countries do the same, and the 21st century is seeing the process gain pace. In the meantime, a few countries have thus far managed to have two regulatory models interchanged: for example, the U.K. established a megaregulator in 2000, while it is now switching back to a twin peaks model.

The second – '***twin peaks'*** – model is based on functional sharing of regulatory power between two "peaks". The former is commonly responsible for prudential supervision,

[1] See Khandruev A.. Megaregulatorbound (October 26, 2012) // Economic Policy's official website. Expert channel. URL: http://ecpol.ru/index.php

[2] See Bobkova E.S., Semenova E.V. Bank of Russia on the rise as financial market regulator (October 27, 2014). URL: http://novainfo.ru/article/2530

[3] Doroshenko M.E., Berezin E.S. Megaregulatory approach in Russia amid financial crunch: Initial lessons // MSU (Moscow State University) Publications, Series 6. Economics. 2015. No. 4. PP. 30–51. Medvedeva O.E., Makshanova T.V. The advantages and disadvantages of establishing a megaregulator in Russia's financial market // TGU (Togliatti State University) Vektor Nauki. 2013. No. 3. PP. 353–356.

while the latter is responsible for protecting rights of financial service consumers[1]. This type of model is adopted in the U.K., Australia and The Netherlands. The pros and cons of the twin peaks model are presented in *Table 19*.

Table 19

Pros and cons of twin peaks model[2]

Pros:	Cons:
- financial conglomerates are supervised on a consolidated basis; - monitoring of the financial system as a whole needs less time to be spent on identifying systemic risk threats; - a unified approach to various types of financial mediators makes regulatory arbitrage less likely; - cost optimization of supervisory processes.	- supervision efficiency losses during a transition period; - salient features of specific sectors of financial intermediation are ignored; - a bureaucratic approach to decision making, and "delayed feedback"; - cost saving can be overestimated.

The third – ***sectoral*** (vertical) – model includes more than one regulators, each of them is responsible for a particular sector. This type of model is now in place in Hong Kong, China, Mexico.

The sectoral model can usefully and efficiently regulate various financial market segments according to their salient features, however, coherence in actions of regulatory authorities is not always a success. Some European countries (Belgium, Poland, Slovakia, Czech Republic) have in recent decade opted against employing the sectoral model. The model has disadvantages, including high regulation and supervision costs.

Some authors identify a fourth – ***hybrid*** (functional) – model that assumes the presence of a single regulatory and supervisory authority to supervise more than one financial market sectors or stand-alone functional authorities (for example, a dedicated financial services consumer protection agency). This type of model, according to the authors, is in place in the United States, France, Italy, Brazil, Spain[3], however, the foregoing countries' models of financial market regulation are most often regarded as akin to the 'twin peaks' model.

According to data from the IMF, 27 (or 38.5 percent) of the 70 countries that underwent reforms in 1998–2009 undertook some form of financial regulation and supervision.

There are two principal approaches to financial market regulation. One of them focuses on alleviating the systemic risk problem, while the other focuses on business conduct in the financial market[4].

[1] See Abramov A.E., Radygin A.D., Chernova M.I. Regulation of financial markets: Models, evolution, effectiveness // Voprosy Ekonomiki. 2014. No. 2. PP. 33–49.

[2] See Khandruev A. Searching for sound mega-regulation (November 29, 2012). URL: https://bosfera.ru/bo/v-poiskah-zdravogo-megaregulirovaniya

[3] See Konstantinov A.V. Foreign countries' financial regulation in theory and in practice and its application in the Russian context // Fundamentalnye Issledovaniya. 2014. No. 9 (Part 2). P. 394; Buklemeshev O.V., Danilov Y.A. Efficient financial regulation and establishment of a megaregulator in Russia // The Journal of the New Economic Association. 2013. No. 3 (19). P. 82.

[4] See Konstantinov A.V. Foreign countries' financial regulation in theory and in practice and its application in the Russian context // Fundamentalnye Issledovaniya. 2014. No. 9 (Part 2). PP. 394–398.

We will now examine initial outputs and ways to improve a single megaregulatory model in abroad (the U.K., Germany, Japan, and Singapore) and in Russia.

6.2.2. The United Kingdom: A roundtrip from twin peaks to megaregulatory approach

The United Kingdom has one of the world's largest financial markets that serves as a benchmark to many other nations. The British history of market regulation has a relatively short period (of about 15 years) of employing a megaregulatory model which was subsequently replaced by the previously discredited 'twin peaks' model. A study of the U.K. experience enables one to indentify disadvantages of the single regulator approach that turned out to be less efficient than far from perfect regulators of the twin peaks model.

The twin peaks model prevailed in the U.K. financial market for more than three centuries until the transition to a megaregulatory approach.

The Bank of England (established in 1694) used to be a center for financial markets regulation, acting in the capacity of self-regulatory banking organization. The Bank was officially empowered by the Banking Act 1979 to perform regulatory and supervisory functions in the banking sector.

A Securities and Investment Board (SIB) was established in 1986 under the Financial Services Act 1986, whereby the SIB is to supervise, under the surveillance of Her Majesty's Treasury (the Treasury), self-regulatory organizations that regulate and control non-bank financial firms. The Bank of England and the SIB taken altogether represented the 'twin peaks' model of financial market regulation.

The effectiveness of the twin peaks model was put in doubt in the 1990s. The financial scandal surrounding the Bank of Credit and Commerce International (BCCI) and the bankruptcy of the Barings Bank highlighted the fact that the British regulatory structure was weak when it comes to supervision of international banks and internal control systems employed by regulated firms. Furthermore, the European Union required its member-states to ensure their central banks are independent.

In the end, in 1997 self-regulatory organizations operating in the financial market were integrated into the SIB renamed as the Financial Services Authority (FSA) vested with the power (which the Bank of England was stripped of) to supervise the banking sector, with the Bank of England remaining the lender of last resort. The independent status of the Bank of England was enacted by the Bank of England Act 1998. The independent single financial regulator status of the FSA was enacted by the Financial Services and the Market Act 2000[1]. For instance, a megaregulatory approach to financial market regulation was adopted instead of that of twin peaks.

The British megaregulatory approach was described as tripartite regime, including the Treasury (vested with the power to exercise overall statutory regulation and

[1] See hereinafter Bando H. Single Regulator or Twin Peaks, The Different Regulatory Approach by UK, Switzerland and Japan (May 1, 2014). 150 Years Anniversary Yearbook, 2014. PP. 74-87. URL: https://ssrn.com/abstract=2876022.

decision-making, disposal of budget funds in a crisis), the Bank of England (responsible for ensuring that the payment system is functional and the financial system is stable[1]), the FSA and a principle-based approach to regulation.

In 1997, the Treasury, the Bank of England and the FSA shared the responsibility for financial stability in the country by signing the Memorandum of Understanding 1997, but failed to identify which of them is to be responsible for monitoring systemic risks in the financial market.

Under the Financial Services and Markets Act 2000, the FSA had an exclusive right to policy-making and focused primarily on principles. The principle-based approach is distinguished by its fast-response and flexible regulation style. The FSA developed Principles for Businesses that are to be enforceable if failed to be observed.

It appeared that the FSA was performing so good that other countries (for example, Germany, Japan) started emulating the British model of financial regulation[2]. On the verge of the global financial crisis 2008, the British megaregulatory approach was often cited "as a model of an efficient and effective regulator, not only because of its streamlined model of regulation, but also because it adheres to a series of "principles of good regulation," which center on efficiency and economy the role of management, proportionality, innovation, the international character of financial services, and competition. This overlay of pragmatic business principles, in addition to the traditional goals of regulation, has been a distinguishing feature of the U.K. regulatory approach"[3].

However, the global financial crunch (2007–2009) – caused by, among other things, substandard lending in the United States and proliferated swiftly via securitized financial products, thus leading to the collapse of some well-known British banks, such as the Northern Rock Bank, the Halifax Bank of Scotland (HBOS) and the Royal Bank of Scotland (RBS) – revealed serious faults and multiple failures on the part of the British megaregulator. The delegation of the Bank of England's banking regulation and control powers to the FSA, which is not supposed to act as the lender of last resort, coupled with the inability of the Treasury, the Bank of England and the FSA to act in concert came into play.

The bankruptcy of the Northern Rock Bank was, first of all, due to excessive mortgage products and lending against a backdrop of inadequate liquidity. The government decided to allocate government funds to bailout the banking sector. The Northern Rock Bank case revealed the drawbacks of the financial stability.

The HBOS ranked one of Britain's top-4 largest banks until it collapsed in 2009, so the HBOS collapse posed a systemic risk to the national economy. The collapse also

[1] See Batsura M.S. International practice of establishing and operating the megaregulatory institution as illustrated by the United Kingdom and Germany // Finansovoye Pravo. 2015. No. 5. P. 28.

[2] See Wymeersch E. The Structure of Financial Supervision in Europe: About Single Financial Supervisors, Twin Peaks and Multiple Financial Supervisors // European Business Organization Law Review. 2007. No. 8(2). P. 237–306.

[3] Group of Thirty. The Structure of Financial Supervision. Approaches and Challenges in a Global Marketplace (2008). PP. 28, 29. URL: http://group30.org/images/uploads/publications/G30_StructureFinancialSupervision2008.pdf

suggested that the British megaregulatory approach was a weak approach. "The FSA was not so much the dog that did not bark as a dog barking up the wrong tree"[1].

The requirements of the Basel II framework (2004) – a document of the Basel Committee on Banking Supervision that contains methodological recommendations for banking regulation, with the principal aim to enhance the quality of risk management in the banking sector in order to strengthen the financial system as a whole – weakened controls on capital adequacy by allowing banks calculate their own risk-weightings, distracted supervisors from concerns about lending and asset quality. It was not until late in 2007 that FSA attempted to raise concerns on these problems.

The HBOS brought back the return on equity (ROE) to a high level through aggressive lending at more than 20 percent. In 2002, the HBOS Corporate Division posted an increase in assets, that is, a 26 percent rise in loans for borrowers. However, such a rapid growth in assets was at odds with traditional customer deposits, and the HBOS had to resort to short-term wholesale markets in order to bridge the funding gap. The HBOS failed to heed the FSA's concerns about funding strategy because it treated FSA's activities as intrusion into its own territory rather than independent management that could secure the bank against mistaken courses of action. The FSA responded by simply raising bank capital requirements by 0.5 percent in 2003. In 2009, on the heels of the global financial crisis, the HBOS could no longer increase capital in the wholesale market. A decision was made to acquire the HBOS by Lloyds TSB Bank. The 350-year old Bank ceased to exist, and the HBOS Corporate Division's credits worth GBR 25 billion were impaired[2].

The acquisition of ABN Amro by the RBS in 2007, which triggered the collapse of the latter, also showcased that the FSA was shortsighted, overlooking "metastases" of the global financial crisis. The FSA opted against interfering with the RBS' business, which was not aligned with best practices because the business "was not beyond the bounds of reasonableness", and interference in that case "would raise serious issues of unfairness"[3]. The FSA attempted to excuse itself, citing insufficient information and number of meetings with the RBS, although 551 meetings were held over 3.5 years alone, thus substantiating the fact that the FSA is a bureaucratic body in essence.

The regulator also overlooked a manipulation with the London Interbank Offered Rate (LIBOR) by the Barclays Bank while having a busy time gathering information and doing other bureaucratic activities instead of exploring thoroughly areas that are

[1] House of Lords, House of Commons. Fourth Report of Session 2012-13. «An accident waiting to happen»: The failure of HBOS (April 4, 2013). P. 28. URL: https://www.publications.parliament.uk/pa/jt201213/jtselect/jtpcbs/144/144.pdf

[2] See Schmulow A.D. Approaches to Financial System Regulation: An International Comparative Survey (January 27, 2015). CIFR Paper No. 53/2015. P. 19-20. URL: https://ssrn.com/abstract=2556545

[3] Financial Services Authority. Financial Services Authority Board Report. The failure of the Royal Bank of Scotland (December, 2011). P. 31. URL: https://www.fca.org.uk/publication/corporate/fsa-rbs.pdf

indeed exposed to risks. The FSA showed itself "a regulator asleep at the wheel", failing to weather the crisis and systemic weaknesses[1].

The Financial Services Agency described its approach to regulation, sometimes known as "light touch", in the following manner: (1) markets are overall self-regulatory markets, the market discipline is a more efficient tool to employ than regulation and oversight, (2) the ultimate responsibility for risk management rests with senior managers and a board of private firms, (3) consumers are best protected by ensuring that wholesale markets are free and transparent rather than through regulation of products and overt market interventions.

The above philosophy had ultimately led to the following results: (1) Attention focuses on overseeing particular institutions rather than on the system as a whole; (2) Attention focuses on indentifying correctly systems and processes rather than on complex business models and strategies; (3) Attention focuses on supervising how the FSA screens "approved persons" for previous misconduct[2] rather than on assessing technical skills; (4) Attention focuses on stimulating the doing-business regulation rather than on the balance between the doing-business regulation and prudential regulation. The FSA spent, albeit unintentionally, 70 percent of its time on doing-business regulation[3].

A proposition was made in 2010 to rescind the tripartite regime with the FSA and to restore the regulatory and supervisory body headed by the Bank of England. "*O*nly independent central banks have the broad macroeconomic understanding, the authority and the knowledge required to make the kind of macro-prudential judgments... And, because central banks are the lenders of last resort, the experience of the crisis has also shown that they need to be familiar with every aspect of the institutions that they may have to support. So they must also be responsible for day-to-day micro-prudential regulation as well"[4].

The Financial Services Act 2012 was put in force on April 1, 2013, whereby a twin peaks model of financial market regulation that was distinguished from the previously employed version of the model by enhanced role of the Bank of England was established in the U.K.

The above Act introduced amendments to the Bank of England Act 1998 and the Financial Services and Markets Act 2000, whereby three regulatory bodies were established, namely a Financial Policy Committee (FPC), a Prudential Regulatory

[1] See Schmulow A.D. Spec. work. PP. 22–25.

[2] Persons the FSA has approved to fulfill certain duties or "controlled functions" like, for example, account management.

[3] See Ferran E. The Break-Up of the Financial Services Authority (October 11, 2010). University of Cambridge Faculty of Law Research Paper Series No. 10/04. P. 4. URL: https://ssrn.com/abstract=1690523

[4] See HM Treasury. Speech by the Chancellor of the Exchequer, RT Hon George Osborne MP, at Mansion House. (June 16, 2010). URL: https://www.gov.uk/government/speeches/speech-by-the-chancellor-of-the-exchequer-rt-hon-george-osborne-mp-at-mansion-house

Authority (PRA) and a Financial Conduct Authority (FCA). The PRA and the FCA represent the two "peaks" sharing the FSA functions in the new regulatory model.

The FPC was established in the Bank of England as a macro-prudential regulator headed by the Governor of the Bank of England, with primary responsibility for supervising the system in order to maintain financial stability. The PRA was established as a subsidiary of the Bank of England, with primary responsibility for micro-prudential regulation, where the Chairperson is the Governor of the Bank of England and the Chief Executive is the Deputy Governor of the Bank of England. The FCA – the renamed FSA – is a regulatory autorityoutside the Bank of England with primary responsibility for conduct regulation, where the Chairperson and the Chief Executive are designated by the Treasury. The FCA is also responsible for micro-prudential supervision of the system in order to prevent non-systemic risks.

The Chief Executives of the PRA and the FCA are FPC voting members, whereas representatives of the Treasury are FPC non-voting members, however, the Treasury together with the FPC is involved in developing the financial stability strategy. The FPC is entitled to issue financial stability orders to the PRA and the FCA. The duties of the Treasury and the role of the FPC are well defined in order to avoid the problems inherent in the former tripartite regime. By controlling the FPC and the PRA, the Bank of England is responsible for macro-prudential and micro-prudential regulation. The FCA remains sole responsible for conduct regulation and for prudential regulation of areas under control (broker dealers, investment companies, etc).

The FPC, PRA and FCA have responsibilities that overlap each other. The FCA is responsible for institutions falling outside the scope of PRA regulation, being independent from the FPC and the PRA when it comes to decision-making. Furthermore, while assuming the primary responsibility for non-systemic institutions, the FCA is also responsible for institutions operating in the investment sector and for banks and investment banks[1].

The Financial Services Act 2012 introduced amendments to regulatory goals. The FSA's regulatory goals were to maintain confidence in the market, public outreach, protect consumers rights and reduce financial crimes. Under the foregoing Act, the FCA has the following goals: to protect consumers' interests, maintain competition and financial system integrity. The latter includes sustainability, stability and resiliency; non-use for financial crime; avoiding the influence of a conduct that is deemed to be equal to market abuse; proper operation of financial markets; transparency of pricing in the markets.

The new regulatory system is a judgment-based system as opposed to the previous principle-based approach to regulation. Instead of calculating risk-weightings by following a series of established principles, new regulators must ensure that problems

[1] See Ojo M. From Integrated Financial Services Supervision to the Twin Peaks Model: The Future of Financial Regulation and the Role of the Basel Capital Framework (July 20, 2016). IGI Global Publications, Forthcoming. P. 3. URL: https://ssrn.com/abstract=2812431

are addressed in advance as they think fit. This approach, however, is a subjective approach and subject to political and market pressure.

In contrast to the megaregulatory approach, the twin peaks model seeks to protect the system against potential conflicts of interests between the monitoring of financial institutions' solvency soundness and the supervision of rules of conduct and market integrity. While the prudential supervision rests with the central bank, the twin peaks model contributes to stable financial system by ensuring there is a proper coordination between the liquidity management in the banking sector (this function is inherent to a central bank) and the monitoring of credit institutions' solvency soundness (this responsibility rests with prudential oversight)[1].

Summing up, the 'twin peaks' model of financial market regulation had been in place for a long time in the U.K. until the country adopted a megaregulatory approach. The switch to the megaregulatory approach was primarily due to ill-coordinated activities undertaken by regulators, which ultimately led to a series of high-profile financial scandals. The reversion to the twin peaks model, regardless of its drawbacks, some of which had been left unattended by the new version of the model, suggests that the British megaregulatory experience has been found even more unfortunate.

In the U.K., the regulatory power over financial markets was concentrated in the FSA, not a central bank. During the global financial crisis the Bank of England, stripped of its banking regulation and supervision power, failed to exercise in a proper manner the function of lender of last resort because of ill-organized interaction between the megaregulator and the Bank of England.

The British megaregulatory model was distinguished by excessive regulation/ bureaucratism and softness. The regulatory approach was, on the one hand, an objective approach free from external influence, but, on the other hand, failed to consider details and to address problems in a prompt manner. Bureaucratism in its turn distracted supervisors from addressing fundamental challenges. Financial markets were to a great extent left to their own devices, the responsibility for risk management was shifted to market participants. The FSA supervised particular institutions rather than the system as a whole, regulated doing-business, while paid less attention to the prudential regulation.

The megaregulatory approach in the U.K., which gave plenty of rope to financial market participants, could have lasted for longer, had it not been for the 2008 crisis. It appears that the establishment of megaregulator on the basis of the Bank of England would have given the opportunity to not only weather the crisis but facilitate the financial market regulation which is immune from the majority of the above listed drawbacks. In fact, the country opted to follow the same path in adopting the twin peaks model and provided an opportunity for the Bank of England to control both regulators. Note that each model of financial market regulation has several versions, and the drawbacks of the British megaregulatory approach are not necessarily inherent to single regulators of other countries.

[1] See Ojo M. Spec. work. P. 2.

6.2.3. Germany: An independent and formally single regulator

Germany has one of the world's leading financial markets. Germany is one of a handful countries with big financial markets, employing a single financial regulator model; Germany has indeed been successful in doing this since 2002. However, the German megaregulatory approach is distinguished from the generally accepted understanding of the model.

Germany switched in 2002 from a model of financial market regulation, involving more than one regulator, to a megaregulatory approach by establishing, under the German Financial Services and Integration Act (German: *Gesetz über die integrierte Finanzdienstleistungsaufsicht*), a Federal Financial Supervisory Authority (German: *Bundesanstalt für Finanzdienstleistungsaufsicht or BaFin*).

The BaFin is primarily responsible for ensuring a stable national financial system. To accomplish this task, the megaregulator issues licenses; supervises the banking and insurance sectors, the security market and asset management; takes remedial actions against credit institutions. In the intersectoral area, the BaFin is responsible for keeping track of financial market development trends, including some of its segments; protecting depositor, investor and consumer rights in the financial service market, etc[1].

The Federal Financial Supervisory Authority was established through integration of former regulators of the Federal Banking Supervisory Office (German: *Bundesaufsichtsamt für das Kreditwesen* or *BaKred*), the Federal Insurance Supervisory Office (German: *Bundesaufsichtsamt für das Versicherungswesen* or *BaV*) and the Federal Securities Supervisory Office (German: *Bundesaufsichtsamt für den Wertpapierhandel* or *BaWe*).

The BaWe used to operate with each of the 16 German states (lands), the Deutsche Bundesbank and the BaKred. The BaKred and the BaWe shared responsibility with regard to institutions involved in banking and securities-related services. The BaKred was responsible for supervising of institutions' economic well-being, while the BaWe was responsible for monitoring operations with securities. The BaKred and the BaWe used to issue joint statements and directives. The cooperation at the state level with stock exchange regulatory authorities was maintained via the Working Committee of the States on Securities and Exchange-Related Issues (German: Länderarbeitskreis Börsenwesen)[2].

[1] See Popkova L.A. Protecting rights of financial market participants as a new function of the Bank of Russia // Bankovskoje Pravo. 2014. No. 2. P. 67; Rozhdestvenskaya T.E. Establishing megaregulatora in Russia: Goals, objectives, problems and development prospects // Bankovskoje Pravo. 2013. No. 5. PP. 10, 11.

[2] See hereinafter Brown E.F. Consolidated Financial Regulation: Six National Case Studies and the Experience of the European Union (April 20, 2015). PP. 58-63. URL: https://www.volckeralliance.org/sites/default/files/attachments/Background%20Paper%202_Consolidated%20Financial%20Regulation%20-%20Six%20National%20Case%20Studies%20and%20the%20Experience%20of%20the%20European%20Union.pdf

The BaFin megaregulator was established primarily due to changes in financial markets, where market participants started offering complex (compound) products to their customers. Some supervisory authorities failed to meet new market conditions.

Another reason for the establishment of the BaFin was criticism by many nations that considered the existing German capital market supervisory framework as inefficient; and foreign investment companies and private investors were therefore reluctant to invest in Germany's projects[1].

The establishment of the BaFin was meant to strengthen Germany's position in the international community and in the European market as well as ensure a more efficient interaction and a stable financial system across Europe. At the micro- and macro-levels, the BaFin has been more successful than its predecessors in reacting to and preventing economic crises. The BaFin seeks to enhance financial markets transparency in order to increase their reliability.

The BaFin is managed by its Executive Board, consisting of the President and five Chief Executive Directors. Each director is responsible for supervising one of the five existing directorates. The above type of structure is designed to prevent concentration of power in the BaFin.

The BaFin's power is governed by laws and regulations that previously governed the BaKred, the BaV and the BaWe.

The Securities Supervision Directorate is governed by the German Securities Trading Act (WpHG), the German Securities Acquisition and Takeover Act (WpÜG). The BaFin does not have full regulatory power because the German states continue to control particular stock exchanges.

The Insurance Directorate is governed by the German Act on the Supervision of Insurance Undertakings. The BaFin supervises public insurance undertakings with substantial economic impact that are involved in cross-border business between the German states. The German states are responsible for supervising public insurance undertakings with a smaller economic impact that operate within the states' boundaries. On top of private insurance the BaFin supervises Germany's pension system. The BaFin is entitled to approve all business requirements for insurers.

The Banking Supervision Directorate is governed by the German banking law. The Deutsche Bundesbank has always been playing an important part in controlling banks, and continues to do it in cooperation with the BaFin.

Additionally, there are eight authorities that support the BaFin in the performance of its functions, namely the Administrative Council, the Advisory Board, the Consumer Advisory Council, the Financial Stability Committee, the Insurance Advisory Council, the Securities Council, the Advisory Council and the Objections Committee. The Administrative Council comprises 17 voting members. The Council monitors the management of the BaFin and supports the BaFin in the performance of its supervisory functions. In addition, the Council is responsible for decision making on the BaFin

[1] Batsura M.S.. Foreign experience in establishing and managing a megaregulator institution: The U.K. and Germany case-studies // Finansovoye Pravo. 2015. No. 5. P. 29.

budget. Members of the Administrative Council ought to meet certain minimum standards.

The Federal Financial Supervisory Authority is funded through fees and contributions from regulated firms and does not depend on the federal budget. The Authority can charge fees for its official acts. The BaFin is also paid for banking-related actions, for example, audit, as set forth in the German banking act. If fees and contributions are insufficient to cover costs, the BaFin may share costs on a pro rata basis between financial institutions, asset managers, investment joint-stock corporations, payment institutions, insurance undertakings, credit institutions and between specific additional types of companies.

German's single financial regulator is not an all-round regulator because the Deutsche Bundesbank still has some of the banking supervisory powers. The Deutsche Bundesbank, in close cooperation with the BaFin, plays an important part in supervising banks' day-to-day operations. In 2013, the BaFin and the Deutsche Bundesbank developed a Supervision Guideline[1] as an attachment to the German Banking Act in order to delimit their duties, avoid duplication of functions, and enhance transparency. The monitoring function was handed over to the Deutsche Bundesbank, including fact finding, analysis of obtained and collected information, current and potential risk-weighting based on the information and audit findings evaluation. Despite the fact that the Deutsche Bundesbank is vested with the power to evaluate regulated entities, the ultimate decision on all regulatory and interpretation issues rests with the BaFin. When adopting decisions, the BaFin shall heed advice of the Deutsche Bundesbank[2].

With the introduction of the euro currency, the Deutsche Bundesbank was stripped of the monetary-policy control power and is now responsible for maintaining a stable eurozone. The Deutsche Bundesbank acts as banking supervisor and oversees the implementation of European Central Bank's directives in order to avoid a financial crisis.

A point to note is that following the 2008 global financial crisis, Germany considered ways of reforming the German financial market regulatory framework, including delegating the BaFin's power to the Deutsche Bundesbank, which should have made the latter a full-fledged single regulator. The German government, however, renounced the idea because the BaFin had been overall successful in weathering the crisis and its aftermaths.

The Federal Financial Supervisory Authority is an independent authority accountable to the German Finance Ministry which is politically responsible for activities undertaken by the BaFin and involved in public oversight to make sure that BaFin's administrative actions are valid and reasonable. The Federal Ministry of Finance (Germany) is entitled to adopt laws and regulations and directives binding on the BaFin, take disciplinary

[1] URL: https://www.bafin.de/SharedDocs/Veroeffentlichungen/EN/Aufsichtsrecht/Richtlinie/rl_130521_aufsichtsrichtlinie_en.html

[2] See Schmulow A.D. Approaches to Financial System Regulation: An International Comparative Survey (January 27, 2015). CIFR Paper No. 53/2015. P. 15-17. URL: https://ssrn.com/abstract=2556545

actions against megaregulator's personnel, request the megaregulator to submit information and explanations[1].

In addition, during the 2008 financial crisis, a German Federal Financial Markets Stabilization Agency (German: *Bundesanstalt für Finanzmarktstabilisierung* or *FMSA*) was established within the financial regulatory framework, with the aim to rescue German banks faced with financial difficulty. The FMSA manages the Financial Market Stabilization Fund (German: *Finanzmarktstabilisierungsfonds* or *SoFFIn*) and, since 2011, the Restructuring Fund (German: *Restrukturierungsfonds*).

Germany also has other entities that are involved in financial regulation, including, for example, six various organizations that offer deposit insurance through the private Association of German Banks (German: *Bundesverband deutscher Banken* or *BdB*). Various types of social insurance, including health insurance, are regulated by the German Federal Insurance Office (German: Bundesversicherungsamt).

The German states have financial regulatory authorities supervise stock exchange and particular types of insurance services. At present, 9 of the 16 German states have local stock exchanges. Each of the 9 German states has a local trade supervisory authority. The German states are also responsible for supervising public insurance undertakings with a smaller economic impact than that of companies regulated by the BaFin.

Thus, an independent authority acts in the capacity of single megaregulator although German's financial system relies on banks. The Deutsche Bundesbank is involved in financial market regulation.

German's megaregulatory approach is, for the most part, a formal approach.

First, the main reason why Germany adopted a megaregulatory model was that the institutional regulatory model failed to fit into a new context of integrated financial markets. However, the existing German model of financial market regulation remains essentially a sectoral model because directorates affiliated with the BaFin megaregulator continue to be highly independent.

Second, the BaFin is not an all-round single regulator of financial markets because the system has other, smaller regulators (Deutsche Bundesbank, FMSA, etc). That is why the German version of megaregulatory approach is also known as a hybrid single regulator model[2].

The fact that the BaFin directorates are located in various cities – in Bonn and in Frankfurt – does not contribute to consolidation of regulation.

A certain discrepancy between the form and the substance has, nonetheless, no effect on the regulatory efficiency. With the establishment of the BaFin, Germany

[1] See Uzdenov S.S. Revisiting the establishment of financial megaregulator in Russia // Yurist. 2013. No. 20. P. 3.

[2] See Brown E.F. Consolidated Financial Regulation: Six National Case Studies and the Experience of the European Union (April 20, 2015). PP. 58-63. URL: https://www.volckeralliance.org/sites/default/files/attachments/Background%20Paper%202_Consolidated%20Financial%20Regulation%20-%20Six%20National%20Case%20Studies%20and%20the%20Experience%20of%20the%20European%20Union.pdf

strengthened its positions in the international community. The existence of several regulators and BaFin's accountability to the Finance Ministry contributed to avoiding concentration of power in the BaFin, and a well-organized coordination between them contributed to a robust functioning of the national financial system and minimization of systemic risks.

6.2.4. Japan: a "dedicated" dependent single regulator

Japan's model of financial market regulation has been in place since 2000. The model was introduced through efforts of searching for an alternative to inefficient financial regulation on the part of Japan's Finance Ministry. However, despite good performance figures, the architecture of the existing single megaregulator remains imperfect, prone to concentration of power and political pressure.

Japan moved to a megaregulatory approach to its financial market as a result of financial reform, also known as "Japan's Big Bang", in the late 1990s. The reform was undertaken due to complaints against the Finance Ministry's financial markets regulation until 1998 (the emphasis was placed on, above all, corruption and incompetence). The Finance Ministry's failure to ensure efficient monitoring of financial institutions had triggered bankruptcy of some of the largest financial institutions ("jusen"[1], two credit cooperatives, Hyogo Bank, Kizu and Cosmo credit unions)[2].

The reform was intended to liberalize Japan's financial market and to strengthen financial stability. In view of this the Bank of Japan Act 1998 was adopted, whereby Japan's central bank was made independent from the Finance Ministry. Under the Act, the Bank of Japan was made responsible for monetary policy and was tasked to establish a Financial Supervisory Agency, the predecessor of the today's single megaregulator in Japan's financial market – The Financial Services Agency (Financial Services Agency or FSA).

Under the Financial Services Agency Act 1997, Japan's Finance Ministry was stripped of the Banking Bureau and Insurance Bureau in 1998 in order to establish a Financial Supervisory Agency. The Securities Exchange Surveillance Commission (SESC) affiliated with the Finance Ministry was also made part of the Financial Supervisory Agency. Control over the Financial System Planning Bureau was handed

[1] Non-bank financial institutions in Japan that were established in the 1970s as subsidiaries of banks that made mortgage loans. Excessive lending by jusen in the 1980s contributed to a "bubble" in Japan's real estate market. Several jusen received bailouts in the 1990s but they nevertheless ceased operations by 1996.

[2] See hereinafter: Brown E.F. Consolidated Financial Regulation: Six National Case Studies and the Experience of the European Union (April 20, 2015). PP. 64-69. URL: https://www.volckeralliance.org/sites/default/files/attachments/Background%20Paper%202_Consolidated%20Financial%20Regulation%20-%20Six%20National%20Case%20Studies%20and%20the%20Experience%20of%20the%20European%20Union.pdf

over in 2000 from the Finance Ministry to the Financial Supervisory Agency with the aim to establish the FSA.

The Financial Supervisory Agency received not only the Finance Ministry's financial supervisory power, but also the power vested in other public authorities, including supervision of farmer cooperatives in conjunction with Japan's Ministry of Agriculture, Forestry and Fishery and workers' cooperatives jointly with Japan's Ministry of Labor. Thus, the Financial Reconstruction Commission had more financial firms under control than the Finance Ministry used to have.

In addition, a Financial Reconstruction Commission (FRC) was established in Japan, that was made responsible for funding of financial institutions faced with financial difficulty, and developing mechanisms designed to solve problems facing institutions in bankruptcy. In 1998–2000, the Financial Reconstruction Commission was under the jurisdiction of FRC affiliated with the Prime Minister's Administration, however, the FRC merged with the FSA in 2001[1].

In 2000, control over the Financial System Planning Bureau was handed over from the Finance Ministry to the Financial Supervisory Agency which was renamed as the FSA.

The Financial Services Agency plays a pivotal role in maintaining financial stability of the nation and anti-crisis management, protecting consumers and establishing fair and transparent financial markets. When the FSA was vested with the planning function, it became a more modest regulator than its predecessor was. The FSA started initiating less shutdowns of financial institutions, because the Financial System Planning Bureau would have otherwise been proven inefficient.

The Financial Services Agency, headed by the Minister of State for Financial Services, is affiliated with Japan's Cabinet of Ministers Administration. The FSA comprises a Planning and Coordination Bureau, an Inspection Bureau and a Supervisory Bureau. The Planning and Coordination Bureau is headed by the Vice Commissioner for Policy Coordination, the Deputy Director-General and the Deputy Commissioner of the Planning and Coordination Bureau.

The FSA also comprises the SESC and the Certified Public Accountants and Auditing Oversight Board (CPAAOB). The SESC includes the chairperson and two commissars designated by the Prime Minister, and the CPAAOB is comprised of the chairperson and nine commissars designated by the Prime Minister[2].

The FSA's annual budget is subject to approval by the Minister of State for Financial Services and the Finance Ministry as well as the Parliament, thus making the regulator politically dependent.

The FSA is responsible for monitoring of banks, insurance undertakings, securities firms and other financial institutions.

[1] See Financial Services Agency. Pamphlet (March, 2017). P. 2. URL: http://www.fsa.go.jp/en/about/pamphlet.pdf
[2] See ibid. PP. 8, 13, 14.

The Planning and Coordination Bureau is responsible for coordinating activities undertaken by the FSA, developing a financial services policy and rules, consulting of Japan's government on laws and regulations governing financial services.

The Inspection Bureau is responsible for on-site inspections of financial institutions with a view to monitoring their compliance with the rules in place and assessing risk management.

The Supervisory Bureau is responsible for monitoring financial institutions in order to ensure security and sustainability. The Bureau includes branches of large banks, regional banks, insurance undertakings and securities firms.

The SESC is responsible primarily for capital markets integrity and investor protection. The SESC monitors securities market participants and investigates into alleged misconduct cases, such as insider trading. However, the SESC may not take direct enforcement actions and therefore should recommend the Minister of State for Financial Services and the FSA Commissar to take disciplinary actions or lodge a complaint to the prosecutor.

The Certified Public Accountants and Auditing Oversight Board (CPAAOB) operates independently from the FSA. The CPAAOB is responsible for auditing reports issued by the Institute of Certified Public Accountants (ICPA). It is also entitled to carry out on-site inspections at the ICPA and audit firms. Like the SESC, the CPAAOB may not take direct enforcement actions[1].

Japan's principal entities of financial regulation are, besides the FSA, the Finance Ministry, the Bank of Japan and the Deposit Insurance Corporation of Japan (DICJ).

The Finance Ministry, after its financial services supervisory power was handed over to the FSA, is responsible for managing the central government's budget and maintaining a stable foreign exchange market. The Finance Ministry would contribute to financial stability in times of crisis.

The Bank of Japan is responsible for monetary policy and financial stability through financial system sustainability analysis and assessment; coordination of micro-prudential activities related to on-site inspections and external monitoring; administration of polices to maintain a stable financial system (including the lender of last resort); management and monitoring of payment and settlements systems.

The Deposit Insurance Corporation of Japan is a quasi-autonomous public organization that was established in 1971. The Corporation is responsible for deposit insurance payments if a bank goes bust. Its subsidiary, the Resolution and Collection Corporation, is responsible for asset management and disposal of assets purchased from bankrupt financial institutions.

In 2012, the IMF recommended Japan to establish a financial stability committee with the aim to coordinate its entities' efforts to weight and eliminate systemic risks[2].

[1] See Financial Services Agency. Pamphlet (March, 2017). 3, 6, 9–14. URL: http://www.fsa.go.jp/en/about/pamphlet.pdf

[2] See International Monetary Fund. Japan: Financial Sector Stability Assessment Update (August, 2012). IMF Country Report No. 12/210. P.19. URL: http://www.imf.org/external/pubs/ft/scr/2012/cr12210.pdf

In the end, the following conclusions can be reached. The FSA is by far not the first megaregulator in Japan's financial market. The Finance Ministry used to employ a unified regulation approach for more than 100 years until it was replaced by the megaregulatory approach.

The modern version of Japan's megaregulatory approach derives from separation rather than integration, as in most cases, of regulatory and supervisory power in financial markets.

The financial market regulation framework in Japan is not an ideal one. Many regulatory and supervisory functions are concentrated in a handful of regulatory authorities, which, given certain conditions, may result in concentration of power and excessive regulation, as evidenced by the Finance Ministry's past experience as financial market regulator.

In addition, the FSA in Japan is not a common practice in world's major economies involving an dependent financial markets regulator. Besides the fact that the FSA is affiliated with the Cabinet of Ministers Administration, it is funded from the central government's budget. The central government is normally a major debtor in the national financial market and has a conflict of interests with regulated firms – that's why the independent status of the financial regulator is so important[1].

Overall, the FSA has demonstrated positive outputs. The establishment of the FSA has not contributed to a weaker regulatory competition due to a lack of big number of regulators prior to the establishment. The FSA, as a single regulator, is running a moderate enough policy and has a high level of competence to be able to analyze all aspects of financial conglomerate on a consolidated and functional basis.

6.2.5. Singapore: central bank is a megaregulator

Megaregulation is not the most wide-spread model of financial market regulation because it is believed to be not quite effective. The use of the central bank as a single regulator is not often found in countries with small financial markets, either. However, there is one exception, Singapore, the country with not only a large financial market, but the world's leading one whose central bank – the Monetary Authority of Singapore (MAS) – is the megaregulator of the financial market.

At present, Singapore is a leading financial center though as early as 1965 after its independence from Malaysia it was attributed to the Third World countries. Apart from its geographic situation, which permitted Singapore to fill a time span when other financial markets are closed within a day, the main and unique drivers behind Singapore's financial growth were the following: (1) the government's political will,

[1] See Bando H. Single Regulator or Twin Peaks, The Different Regulatory Approach by UK, Switzerland and Japan (May 1, 2014). 150 Years Anniversary Yearbook, 2014. P. 82–83. URL: https://ssrn.com/abstract=2876022

(2) efficient utilization by the government of the industrial policy and (3) uncompromised supremacy of the law[1].

Established in 1971, the MAS is the central bank, regulator of the market behavior and prudential regulator. The MAS is an integrated supervising authority for the country's all financial institutions: banks, insurers, capital market intermediaries, financial advisors and the stock exchange. The MAS engages in training of small investors[2].

The MAS carries out financial supervision by means of four groups[3]:

- the banking and insurance group dealing with system risks and capital requirements is made up of three banking departments, the insurance department and the department for prevention of money laundering;
- the capital market group which exercises control over the market behavior and investors[4] includes three capital market intermediaries departments, the corporate finance and consumers department, the market policy and infrastructure department and the enforcement department;
- the policy, risk and surveillance group consists of the prudential policy department, the technological risks and payments department and the macroprudential supervision department;
- the data analytics group includes three departments.

Also, the MAS's lines of activities include the monetary policy and investments, international issues and corporate development; each line of activities is dealt with by individual groups consisting of several departments.

The Singaporean approach to the financial market regulation is quite the opposite to the policy of noninterference by the state. In Singapore, the state retains a tight control over domestic finances and does its utmost to attract foreign companies to the country (quick issuing of licenses and working visas, granting of tax privileges and other).

When necessary, Singapore's financial regulator can be flexible. To develop its own asset management business, Singapore attracted assets from Hong Kong, having taken advantage of the transfer of the latter to China in 1997. To retain those assets, Singapore approved trust accounts which were of no interest to the residents of Singapore because of the local system of tax privileges.

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[1] See: Wang J.Y. The Rise of Singapore As International Financial Centre: Political Will, Industrial Policy, and Rule of Law (Feb 18, 2016). in Jiaxiang Hu, Matthias Vanhullebusch & Andrew Harding (eds.), Finance, Rule of Law and Development in Asia: Perspectives from Singapore, Hong Kong and Mainland China (leiden/Boston: Brill Academic Publishers, 2016). P 3-6. URL: https://ssrn.com/abstract=2970363

[2] See: Schmulow A.D. Approaches to Financial System Regulation: An International Comparative Survey (January 27, 2015). CIFR Paper No. 53/2015. pp. 12, 13. URL: https://ssrn.com/abstract=2556545

[3] See: MAS. Organisation Structure (September 29, 2017). URL: http://www.mas.gov.sg/About-MAS/Overview/Organisation-Chart.aspx

[4] See: Tjio H. Challenges to Singapore from the Global Financial Crisis: Actual and Suggested Legal and Regulatory Responses // Singapore Journal of Legal Studies. July 2013. p. 171.

Another example of flexibility is a gradual reduction by the government of the extent of protection of local companies in the 1990s within the frameworks of preparation to the upcoming globalization. Despite a strong discontent of local banks, the MAS initiated a five-year program to liberalize commercial banking in Singapore by permitting qualified foreign banks to open more branches and automated teller machines (ATMs). More licenses to carry out limited banking operations were issued. Also, the authorities lifted limits on foreign ownership in local banks[1].

It is generally believed that the state interference does not promote competitiveness on the financial market, but as seen from Singapore's experience the state can play an important instrumental role in development of the financial market. Though Singapore has already become an international financial center, the government keeps rendering support. For example, in 2015 the MAS declared the establishment of the Financial Centre Advisory Panel (FCAP) made up of 26 leaders in banking, insurance and asset management. The FCAP discussed the strategy of further development of Singapore's financial center, including attraction of a large number of institutional investors to the capital market, promotion of innovations in the insurance industry, smoother capital growth of start-ups and global companies, development of e-commerce in foreign currencies, upgrading of liquidity on the Asian bond market and other[2].

Singapore is famous for supremacy of the law and its strong commitment to formal procedures and requirements. As regards regulation of the financial and other markets, the government of Singapore has established a solid and comprehensive regulatory system under the auspices of the MAS and the Ministry of Finance; the system is characterized by a number of laws, including the Law on Banking, the Law on Companies, the Law on Financial Companies, the Law on Insurance, the Law on Securities and Futures Trading, the Law on Lending for Land Development Purposes and other. The MAS maintains a strict system of prudential regulation and surveillance which is sometimes regarded as overregulated, but it succeeded in safeguarding Singapore from financial crises. It is noteworthy that the MAS's check-ups and criticism play an important role. Noncompliance with the rules may result in huge penalties and even an imprisonment[3].

Singapore has gone beyond the limits of the compliance and dominating risk management systems developed for minimizing risks to institutions. Instead, Singapore put the goal of "market integrity" on the same level with the risk management objective, that is, protection of the public interest. Companies are evaluated by their proven capacity to protect the public interest. In regulation procedures, such a decision coupled

[1] See: Wang J.Y. Op. cit. pp. 10, 12–14, 16.

[2] See: MAS. Capital Markets (26.11.2016). URL: http://www.mas.gov.sg/Singapore-Financial-Centre/Overview/Capital-Markets.aspx

[3] In 2011, the Bank for Development of Singapore experienced a problem with operation of its ATMs for seven hours, of which only 1.5 hours were actually normal business hours. However, the MAS punished the bank by requesting it to allocate SGD 230 million worth of an additional capital buffer against the operational risk. The bank was required to maintain additional capital (which did not earn the bank any income) until next October. See: Schmulow A.D. Op. cit. pp. 13, 14.

with the requirement to report any suspicions (not the concrete evidence of unlawful activities) and enforcement tools in place create the effect of permanent surveillance over all the aspects of the financial market[1].

So, the establishment of a certain pattern of regulation of the financial market does not necessarily guarantee the effectiveness of regulation. As seen from the experience of Singapore, if handled proficiently, even not quite a popular model of regulation may produce good results.

The success of the MAS – Singapore's single financial market regulator – can be primarily explained by the political will and uncompromised supremacy of the law. Despite tight control and the MAS's active interference, which practices are often regarded as hazardous to the financial market, flexibility and far-sightedness of this mega regulator are praised highly and make it effective.

6.2.6. Bank of Russia as megaregulator

The Russian Financial Market: Main Stages of Regulation

Established in the early 1990s, the present-day Russian financial market is almost 30 years old. In the history of its development, it is possible to single out several stages[2].

Stage I: 1990–1998

The 1990s were the period of the radical transformation of the economy as a whole, denationalization and switchover to the market economy. After the period of complete nonexistence of the financial sector in market terms, the foreign exchange market, the stock market and the capital market were established with an initial regulatory base formed. However, inadequate starting conditions for such large-scale reforms and the economic crisis of 1998 hindered development of the financial market and affected the quality of its further formation[3].

Stage II: 1999–2008

In 1999–2002, the economy gradually recovered and a drop in output volumes gave way to growth on the back of appreciation of prices of primary products. The latter factor, along with a number of institutional factors, contributed to the establishment of a market model[4] with a broad expansion of the state as the owner and slowdown of the

[1] See: O'Brien J. Singapore Sling: How Coercion May Cure the Hangover in Financial Benchmark Governance (November 5, 2013). Edmond J. Safra Working Papers, No. 29. P. 23. URL: https://ssrn.com/abstract=2350445.

[2] See hereinafter: N. Polezhayeva. Financial Market Regulation in 2013–2016: New Entities and Requirements / N. Polezhayeva // The Russian Economy in 2016. Trends and Prospects. (Issue 38) / [V. Mau and others.; edited by S.G. Sinelnikov-Murylev (Chief Editor), A.D. Radygina]; Yegor Gaidar Institute for Economic Policy – Moscow: Gaidar Institute's Publishing House, 2017. pp. 416–418.

[3] See: K.V. Krinichansky. The State of Things and Issues of Development of the Financial Market in Russia // The Economic Theory Journal. 2013. No. 3. pp. 68–81.

[4] For more details, see: A. Abramov, A. Radygin. Russia's Financial Market Amid State Capitalism // Voprosy Ekonomiki. 2007. No. 6. pp. 28–44.

rates of implementation of market and institutional reforms in the country. Due to the visible nationalization of the economy, the financial market did not develop fast enough. The comparison of the parameters of the Russian financial market with those of leading countries' shows clearly that the Russian financial market is currently rather small.

A lack of proper attention to the need of development of market institutions resulted in emergence of multiple negative consequences, including the legal vacuum, a delay in introduction by stock markets of the best trading technologies and centralized clearing, lack of the central securities depositary, serious limitations on growth of the institute of pooled investments and other. As a result, the Russian financial market happened to be sensitive to external factors which situation was explicitly evident during the global financial crisis of 2008[1].

Stage III: 2009–2012

In the period under review, there was no qualitative upgrading of the competitive edge of the Russian financial market. Growth-related problems were partially caused by global phenomena, such as the reorientation after 2008 of foreign investment flows from emerging markets to developed countries, slowdown of economic growth rates in developing countries, high volatility and reduction of financial market liquidity. However, the Russian financial market's problems are largely related to domestic factors, such as geopolitical risks, structural economic imbalances, unfavorable investment climate, the state's growing influence in the economy, the low level of the competition on the domestic market, recurrent modification of rules of pension assets formation, lack of a concrete strategy of the financial market development, paternalism and the low level of households' financial literacy[2].

However, after the financial crisis made the issues of system risks and inadequacy of the system of regulation and supervision of financial markets more acute the reforms focused on the regulation of this sector. A plan of actions was developed to establish an international financial center in Russia. A priority line of this plan was to toughen control over system risks on financial markets through establishment of the megaregulator.

Establishment of the single regulator was justified by weak competitiveness of the Russian financial market whose development was adversely affected by insufficient networking between the regulatory authorities (Federal Financial Markets Service (FFMS), the Ministry of Finance, the Rosfinmonitoring and others), which controlled individual, often overlapping, market segments and could not receive in a timely fashion the complete and reliable information, nor assess properly the situation on the market.

[1] See: The Financial Crisis in Russia and the World / Edited by Yegor Gaidar. Moscow: Prospekt, 2009; L.L. Igonina. The Global Financial Crisis and its Effect on the Russian Financial Market // The Economic Bulletin of the Rostov State University. 2008. Vol. 6. No 4. pp. 62–69.

[2] See: A.E. Abramov. The Russian Financial Market**:** Factors of Development and Growth Barriers / A. Abramov. Science Editor Professor A.D. Radygin, D.Sc. Economics. Moscow: The Gaidar Institute Publishers, 2017. p. 7.

It is to be noted that some market segments, for example, the foreign exchange market remained beyond regulation for a long time.

The development of the financial market which was proceeding at an advanced rate compared to the legal and regulatory environment required harmonization of the financial legislation and elimination of discrepancies and gaps.

The advantages of the new system of regulation and supervision on financial markets should be the following: establishment of the single legal system, quality monitoring of financial markets, real-time identification of possible system risks and handling of a large range of issues, networking in implementation of the financial policy for development and facilitation of expansion of financial services and upgrading thereof.

Despite the advantages, megaregulation involves some risks: a small number of the results of the reform because of its large scale; escalation of the conflict of interests and consolidation of functions within the regulator which role is mainly claimed by the Central Bank of the Russian Federation; the risk of the regulator becoming an excessively authoritarian authority (including the loss of independence by self-regulating entities) and unification of regulation of different types of financial institutions based on approaches formed in respect of banks; infringement of interests of non-banking financial institutions[1]. The abovementioned factors were behind the emergence of numerous opponents of the reform in the expert and professional communities.

However, the existence of risks does not mean that they will definitely materialize. As seen from the foreign experience, there are examples both of successful megaregulators (Germany, Japan and Singapore) and inefficient ones (the UK). But it was infeasible to assess unambiguously the viability of such system of regulation on the Russian financial market before it started functioning.

Stage IV: 2013 – present day

From September 1, 2013 the Central Bank of the Russian Federation is entrusted with regulatory and supervising functions over the activities of the entire range of non-credit financial institutions from brokers-dealers to pawnbrokers[2]. The Central Bank of the

[1] See: T.E. Rozhdestvenskaya. Establishment of the Megaregulator in Russia: Purposes, Objectives, Issues and Prospects of Development // The Bankovskoe Pravo. 2013. No.5. pp. 10–17; Yu.N. Snezhko. The Formation of the Megaregulator and the Consequences for the Establishment of the International Financial Center in Russia // The Statistika i Ekonomika. 2014. No.5. pp. 90–94; A.S. Veselova, S.N. Volodin. The Central Bank of the Russian Federation as an Integrated Financial Regulator // The Stock Market: The Modern Condition, Instruments and Trends of Development. The 12th XII Interacademic Symposium. Moscow, April 14, 2015. The National Research University the Higher School of Economics, the Moscow State Institute for International Relations (University), the Plekhanov Russian University of Economics, the Financial University under the Government of the Russian Federation / Science editors N.I. Berzon and S.N. Volodin. Moscow: KURS, 2015. pp. 191–201.

[2] See: Federal Law No.251-FZ of July 23, 2013 "On Amendment of Individual Statutory Acts of the Russian Federation Subsequent to the Transfer to the Central Bank of the Russian Federation of Regulatory and Supervision Authorities over Financial Markets" // The Rossiiskaya Gazeta. July 31, 2013. No. 166; Article 76.1 of Federal Law No.86-FZ of July 10, 2002 "On the Central Bank of the Russian Federation (Bank of Russia)" // The Rossiiskaya Gazeta. July 13, 2002. No.127.

Russian Federation has become the megaregulator of financial markets, which signifies the start of the large-scale institutional reform of the country's financial sector.

According to the Constitution of the Russian Federation, the Central Bank of the Russian Federation is an independent sole regulator because it carries out its functions and duties independently from other state authorities[1]. However, some researchers believe that with the FFMS's authorities transferred to the Central Bank of the Russian Federation, the latter comes under the influence of the executive authorities because it has to get approval of its position from the Government of the Russian Federation[2].

Other experts believe that "it is impossible to combine conflicting functions and set quite the opposite objectives to one and the same body with a single management. The Central Bank of the Russian Federation should see to it that banks do not go bankrupt and risks are monitored"[3], on one side, and stimulate the economy via issue mechanisms, on the other side. The case for it is the fact that only countries with too small markets (Singapore is an exception) and domination of foreign investments select the central bank as a sole regulator.

The issue of the status of the Central Bank is debatable; the law does not include any norms that the Central Bank of the Russian Federation is a state authority. However, according to Article 7 of the Law "On the Central Bank of the Russian Federation" as regards the issues attributed to the competence of the Central Bank of the Russian Federation, the latter issues statutory acts in form of orders, resolutions and instructions which are binding upon federal authorities, authorities of the subjects of the Russian Federation, local governments, legal entities and individuals. Actually, the Central Bank of the Russian Federation is entrusted with state powers. In addition, as per the Constitutional Court's findings outlined in the Definition of December 14, 2000 the Central Bank of the Russian Federation[4] as a state body has powers of a judicial nature because implementation thereof is closely related with application of state enforcement measures[5].

[1] See Article 75 of the Constitution of the Russian Federation; Article 1 of Federal Law No. 86-FZ of July 10, 2002 "On the Central Bank of the Russian Federation (Bank of Russia)" // The Rossiiskaya Gazeta, No.127, July 13, 2002.

[2]See: E.M. Aminiova. The Modern Trends in Regulation and Supervision of Financial Markets // The Bankovskoe Pravo. 2015. No.4. pp. 26–34; P.D. Barenboim, D.V. Kravchenko. Establishment of the Megaregulator on the basis of the Bank of Russia in Terms of its Independent Constitutional Status // The Zakonodatelstvo i Ekonomika (Legislation and Economy). 2013. No. 6. pp. 5–8.

[3] O.E. Medvedeva, T.V. Makshanova. The Advantages and Disadvantages of Establishment of the Megaregulator on the Russian Financial Market // The Vektor Nauki TGU. 2013. No.3(25). p. 354.

[4] Definition No.268-O of December 14, 2000 of the Constitution Court of the Russian Federation "At the Request of the Supreme Court of the Russian Federation on Examination of the Validity of Part Three of Article 75 of the Federal Law "On the Central Bank of the Russian Federation (Bank of Russia)". URL: www.ksrf.ru

[5] See: N.A. Taraban. The Central Bank of the Russian Federation (Bank of Russia) in the System of State Authorities: The Constitutional and Legal Grounds of Organization and Operation // The Finansovoe Pravo. 2017. No 6. pp. 44–47.

Those who hold different views believe that the Central Bank of the Russian Federation is not an independent state authority. For example, V.Yu. Patenkova provides her reasons to this effect[1]. The findings on the Central Bank's political independence based on the analysis of the procedure for appointment of the Chairman of the Central Bank, his/her deputies, members of the Board of Directors, as well as members of the National Banking Council are unconvincing. With the presidential majority in the State Duma, any candidate proposed by the President of the Russian Federation will be elected the Chairman of the Central Bank of the Russian Federation.

The Central Bank's senior management believes that the Central Bank is a special public institute which is not a state body, but entrusted with powers of state authority[2].

At the present stage, the specifics of the Russian financial system can be explained by the following[3]:

a) globalization, growing internalization of securities markets, higher volumes of cross-border investment deals and tougher competition between global financial centers;

b) prevalence of credit institutions;

c) low activity of households on the financial market;

d) households' preference of credit institutions;

e) low level of confidence in non-credit financial institutions because of the violations they commit amid insufficient supervision;

f) households' high demand in bank deposits;

g) weak corporate governance in joint-stock companies due to which the Russian equity market has failed to become the source of a large-scale attraction of capital.

As a result, the Russian financial market which used to develop dynamically in 2012–2015 is still short of high positions in the context of global competition.

The World Economic Forum prepares on the annual basis the indices of countries' global competitiveness. In 2017–2018, Russia is rated the 38th out of 137 places, that is, 26 positions upwards as compared to the 2012–2013 period which preceded the establishment of the Central Bank of the Russian Federation as the megaregulator of financial markets. However, as regards one of the rating's components – the development of the financial market – Russia occupies the 107th place out of 137 places. At the same time, as compared to the results achieved in the 2012–2015 period the indicators of the "development of the financial market" component improved (see *Fig. 1* и *2*)[4].

[1] V.Yu. Patenkova. The Legal Status of the Bank of Russia // The Yurist. 2017. No. 9. pp. 38-41.

[2] See: The Legal Status and Functions of the Bank of Russia (July 08.07.2014). URL: http://www.cbr.ru/today/?PrtId=bankstatus

[3] See hereinafter: The Bank of Russia. The Main Lines of Development of the Financial Market of the Russian Federation in 2016–2018 (May 26, 2016) // URL: http://www.cbr.ru/finmarkets/files/development/onrfr_2016-18.pdf

[4] See: World economic forum. The global competitiveness report 2017–2018 // URL: http://www3.weforum.org/docs/GCR2017-2018/05FullReport/TheGlobalCompetitivenessReport2017%E2%80%932018.pdf

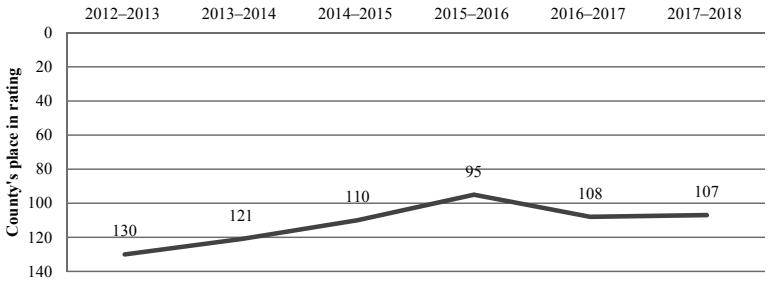

Fig. 1. Dynamics of "Development of Financial Market" component of Russia's rating of global competitiveness

Source: The World Economic Forum. The global competitiveness report 2017–2018; The Central Bank of the Russian Federation. The Main Guidelines for Development of the Financial Market of the Russian Federation in 2016–2018 (May 26, 2016).

In the international rating of favorable business conditions as regards financial markets – the rating is prepared on the annual basis by the World Bank – Russia is rated the 29th out of 190 places and the 51st as regards "the availability of loans" and "the protection of minority shareholders", respectively, as of June 2017[1].

According to the data of Z/Yen, a financial and consulting company, in September 2015 out of 84 global financial centers Moscow occupied the 78th place, while in March 2016, the 67th place out the total of 86 places. In 2014, the information agencies Dow Jones and Xinhua put Moscow on the 33rd place out of 45 international financial centers, that is, five positions downwards as compared to 2013. However, as regards "the financial market" factor, Moscow moved upwards from the 30th place to the 23rd place[2].

According to the available estimates, the present-day Russian financial market is characterized by stagnation of the earning power of Russian companies' equities and favorable conditions for investment into government and corporate bonds[3]. As regards the former, the stagnation is a result of freezing of domestic pension assets and the outflow of capital of foreign portfolio investors as their interest in financial instruments of Russian entities is limited by a lack of substantial changes in the investment climate. In its turn, the bond market growth was facilitated by the low rate of inflation and interest rates on bank deposits coupled with a considerable "money overhang" in the economy and emerging interest in government and corporate bonds, whose yield stabilization was

[1] See: The World Bank. Assessment of Business Regulation (Doing business): The rating of countries // URL: http://russian.doingbusiness.org/rankings

[2] See: The Bank of Russia. The Main Guidelines for Development of the Financial Market of the Russian Federation in 2016-2018 (May 26, 2016).

[3] See: A. Abramov. The Risks of the Russian Financial Market // The Russian Economy in 2017. Trends and Prospects / [V. Mau and others; edited by S.G. Sinelnikov-Murylev, Doctor of Economics (Chief Editor), A.D. Radygin, Doctor of Economics]; The Gaidar Institute for Economic Policy – Moscow: The Publishers of the Gaidar Institute, 2018. – pp. 145, 146.

a driver of sped-up growth in new bond issues. In the domestic market regulation, the priority lines may become the development of domestic institutional investors, formation of consistent rules as regards pension assets, upgrading of the investment climate and promotion of the competitive environment on the domestic stock market.

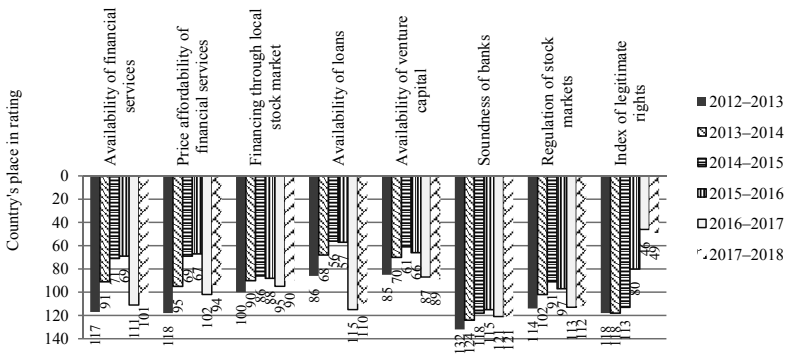

Fig. 2. Indicators of "Development of Financial Market" component of Russia's rating of global competitiveness

Source: The World Economic Forum. The global competitiveness report 2017–2018; The Central Bank of the Russian Federation. The Main Guidelines for Development of the Financial Market of the Russian Federation in 2016–2018 (May 26, 2016).

Megaregulation: practice of 2013–2018

The megaregulator started its activities amid unfavorable external conditions: financial sanctions, structural constraints of the Russian economy and negative growth rates. However, the megaregulator demonstrated a high level of activity in various lines. In particular, in 2013–2018 the Central Bank of the Russian Federation as the megaregulator achieved substantial results in the following:

1. Approval and introduction of the Corporate Governance Code[1].

The Russian Corporate Governance Code (CGC) was approved in 2014. It is a high quality document with a good pattern and content which comply with the relevant international standards of corporate governance, including the OECD Corporate Governance Guidelines and it is in no way inferior to corporate governance codes of other countries, but, on the contrary, in some cases it is even much better (Part Two of the CGC is of an advisory, rather than annotative nature; it includes a definition of the

[1] See: hereinafter: Resolution No.44-SF of March 01, 2017 of the Council of Federation of the Federal Assembly of the Russian Federation "On the Activities of the Central Bank of the Russian Federation (Bank of Russia) as Regards Regulation, Control and Supervision over Financial Markets in 2013 – 2016" //The Official Gazette of the RF, March 06, 2017, No. 10, p. 1438.

independent director and individual chapters on the scheme of remuneration and other). The CGC is aimed at promoting efficiency of management of Russian companies and ensuring their long-term and sustainable development.

As regards compliance with the CGC, the Central Bank of the Russian Federation positively estimated the average level of compliance by Russian listed companies with the CGC's principles and guidelines; in 2016 it was equal to 69 percent of all the principles, that is, 11 percent more as compared to 2015. In future, the Central Bank of the Russian Federation expects growth in compliance, though a moderate one.

Despite some discrepancies in their results, a number of other entities (the Rosimuschestvo, the Otkrytoe Pravo, Expert Council under the Government of the Russian Federation and the Working Group on Establishment of Multifunctional Centers for Provision of State and Municipal Services (MCPSMS) dealing with issues of introduction of the principles of the CGC into some Russian companies rated highly the level of compliance with the CGC's principles. In 12 joint-stock companies which are subordinate to the state, the level of compliance is equal on average to 90 percent. It is to be noted that in lots of developing and developed countries, there is an explicit problem of the corporate governance code being applied in practice[1]. In Russia, such a conflict between the regulatory requirements and the actual practice of application of the Code's norms is more acute, so one should not overestimate the effect of nonbinding norms.

2. Reformatting of individual types of financial activities, such as the operations of insurance companies, nongovernment pension funds, microfinance entities, actuaries and credit rating agencies.

As regards the insurance industry, a decision was taken on the establishment of a reinsurance company and a switchover to a new sectorial standard and chart of accounts for insurance companies. As regards nongovernment pension funds, a mechanism of state regulation thereof was developed, state insurance of pension assets was introduced and a self-regulating entity of nongovernment pension funds was established.

As regards microfinance operations, self-regulation was introduced and the regulator's authorities were expanded. In March 2016, microfinance entities (MFE) were legislatively divided into two types: microfinance companies (MFC) and microcredit companies (MCC)[2].

From January 1, 2015, Federal Law No. 293-FZ of November 2, 2013 "On Actuarial Activities in the Russian Federation" came into effect. The law was developed to

[1] See for more details: N.A. Polezhayeva. Compliance with the Corporate Governance Code in Russia: Any Improvements? // The Russian Economy in 2017. Trends and Prospects. Yegor Gaidar Institute for Economic Policy. Moscow: The Gaidar Institute's Publishers, 2018. – pp. 452–478.

[2] See: The Central Bank of the Russian Federation Told About Changes in the Activities of Microfinance Entities (March 30, 2016). URL: http://rapsinews.ru/incident_news/20160330/275725588.html#ixzz5BUwdNurp

introduce effective statutory regulation and the institute of self-regulation of actuaries as a condition for professional qualification and compliance of the legislation of the Russian Federation on actuarial activities with the international legislation.

The law defines the "actuary" as an individual who carries out in accordance with the labor contract or civil law contract actuarial activities and is a member of a self-regulating organization of actuaries. To join this organization, an individual has to pass the qualification exam which procedure is set by the Central Bank of the Russian Federation.

The Central Bank of the Russian Federation has approved the entire range of statutory instruments and standards to regulate actuaries' activities[1].

In June 2015, Law No.222-FZ of July 13, 2015 "On the Activities of Credit Rating Agencies of the Russian Federation, On Amendment of Article 76 of Federal Law "On the Central Bank of the Russian Federation (Bank of Russia) and Recognition as Null and Void of Individual Provisions of Statutory Acts of the Russian Federation" was approved.

In the Russian Federation, rating activities can be carried out by legal entities in the form of incorporation after the information on such legal entities has been entered by the Central Bank of the Russian Federation into the register of credit rating agencies. Other legal entities are not entitled to carry out such activities.

The minimum size of the own funds (capital) for the credit rating agency is set in the amount of RUB 50 million.

Credit rating agencies have to ensure:

1) independence of rating activities, including from any political and (or) economic influence;

2) prevention and identification of conflicts of interest, handling thereof and disclosure of the information on such conflicts;

3) compliance with the requirements of the effective Federal Law.

The Central Bank of the Russian Federation keeps the register of credit rating agencies, establishes the methods of determining the size of the own capital, examines the agencies' activities, sends to the agencies mandatory orders and handles claims and applications as regards activities of credit rating agencies. Also, it sets the format of reporting for such agencies and other[2].

It is to be noted that utilization of formal approaches in carrying out supervision over credit and non-credit financial institutions is still a serious disadvantage, which is

[1] See: Documents regulating actuarial activities. URL: http://www.cbr.ru/finmarket/common_inf/legals_actuarial/

[2] Federal Law No.222-FZ of July 13, 2015 "On the Activities of Credit Rating Agencies of the Russian Federation, On Amendment of Article 76 of the Federal Law on the Central Bank of the Russian Federation (Bank of Russia) and Recognition as Null and Void of Individual Provisions of Statutory Acts of the Russian Federation" // RG, No. 156, July 17, 2015.

caused, among other things, by limitation of the legal capacity of the Central Bank of the Russian Federation as regards implementation of comprehensive approaches to evaluation of risks of credit and non-credit financial institutions and their overall activities. In this context, the Central Bank of the Russian Federation plans to introduce consistently the mechanism of expert judgment on individual issues related to financial institutions' activities with control over the decision-making procedure of the Central Bank of the Russian Federation stepped up simultaneously.

Also, the Central Bank of the Russian Federation intends to develop approaches to provision of services to small supervised financial institutions which may maintain accounting of their business activities without an obligation to submit reporting provided that the Central Bank of the Russian Federation is granted the right to use directly the accounting data, including by means of cloud technologies. Also, the specified institutions will be able to use a simplified format for submitting annual reporting. Implementation of the data-centricity approach to networking between the regulator and supervised institutions as regards the receipt of the reporting data will create the basis for the regulator's future access to financial market participants' databases with the initial data required for supervisory functions to be carried out[1].

3. Establishment of the system of prudential supervision over the activities of nongovernment pension funds and work on development of the system of protection of pension assets.

Priorities in supervision over the activities of nongovernment pension funds changed from quality performance indicators to the risk-oriented oversight. The main goal of such supervision is to ensure financial stability of funds and protect interests of participants and insured persons.

A switchover to the prudential supervision system was carried out in three stages. At the first stage (2013 – April 2014), comprehensive evaluation of nongovernment pension funds' activities in mandatory pension insurance and nongovernment pension insurance was carried out. At the second stage (2014 – December 2016), measures on establishment of the prudential risk-oriented supervision on the market of mandatory pension insurance and nongovernment pension insurance were developed**.** At the third stage (from 2017), prudential risk-oriented supervision was introduced on a mandatory basis.

Introduction of the mandatory risk-oriented supervision involves a switchover of nongovernment pension funds, asset management companies and specialized depositaries to corporate governance standards based on risk evaluation, as well as a switchover of the Central Bank of the Russian Federation to risk-oriented supervision2.

[1] The Main Guidelines for Development of the Financial Market of the Russian Federation in 2016–2018. URL: http://www.consultant.ru/document/cons_doc_LAW_256439

[2] See for more details: The Plan of Measures on Introduction of Prudential Supervision in the System of Mandatory Pension Insurance in the Nongovernment Pension Insurance Scheme (June 02, 2014). URL: http://pensionreform.ru/73599

Establishment of the system of protection of pension assets includes the following:

- selection by the Central Bank of the Russian Federation and entry into the register of nongovernment pension funds on the basis of sufficiency of investment funds, organization of investment activities, risk management, in-house control and business reputation. At present, the system of protection of pension assets includes 41 nongovernment pension funds;
- approval of Law No.422-FZ of December 28, 2013 "On Protection of Pension Entitlements of Insured Persons in the Mandatory Pension Insurance System of the Russian Federation";
- establishment of the Fund for Protection of Pension Assets managed by the Deposit Insurance Agency (DIA) to ensure minimum the return of pension assets and maximum appreciation of the value thereof. The system of protection of pension assets is made up of two tiers and includes the following:
  - funds which form the mandatory pension insurance reserve of each nongovernment pension fund;
  - the fund for protection of individuals' allocations managed by Deposit Insurance Agency (DIA).

The DIA carries out record keeping of all the nongovernment pension funds included in the register of participants which form this fund. The terms for a nongovernment pension fund to become a member of the system in question are as follows:

- availability of the license;
- transformation into a joint-stock company;
- approval by the Central Bank of the Russian Federation upon completion of a relevant examination of the fund's activities;
- payment of mandatory contributions.

Those nongovernment funds which failed to be entered in the register are obligated to stop making contracts on mandatory pension insurance and transfer pension assets at their disposal to the Pension Fund[1].

At present, there is an entire range of issues related to further regulation of the sector, including facilitation of a decent level of individuals' pension provision, a retirement-age increase, solution of the issue of nonpayment by the shadow sector of the economy of pension contributions and expediency of maintaining the practice of early pensions[2].

[1] See: The System of Protection of Pension Assets. URL: http://pensiology.ru/ops/budushhim-pensioneram/formirovanie-nakopitelnoj-pensii/garantirovanie-nakoplenij/

[2] See for more details: A.V. Tsyplakov. The Pension System in 2016-2025: The Prospects of Reforming and Evaluation of Consequences (July 11, 2016). URL: http://izron.ru/articles/tendentsii-razvitiya-ekonomiki-i-menedzhmenta-sbornik-nauchnykh-trudov-po-itogam-mezhdunarodnoy-nauch/sektsiya-1-ekonomicheskaya-teoriya-spetsialnost-08-00-01/pensionnaya-sistema-v-2016-2025-gg-perspektivy-reformirovaniya-i-otsenka-posledstviy/

4. Progress in investigation of cases of manipulation practices and insider trading. As a result, within three years the number of such practices diminished[1].

According to the open access data of the Central Bank of the Russian Federation, in 2015–2017 the regulator stepped up its activities in this field. The illegal utilization of the insider information and/or risk manipulation were found in operations with securities of the PAO (Public Joint-Stock Company) Nizhmekamskneftekhim, the PAO AFK Sistema, the PAO Novorossiisky Torgovy Port, the PAO Saratovsky Neftepererabatyvauschi Zavod (Saratov Oil Refinery), the OAO Lenenergo, the OAO Mechel, the OAO NK Rosneft, OAO Rusgidro, the OAO Sberbank of Russia and other[2].

5. Promotion of Availability of Financial Products and Services.

The specifics of the Russian financial market consist in the fact that households widely use banking credit instruments and distrust non-banking segments.

In January 2015, a new financial instrument – individual investment accounts – was introduced for individuals to increase the extent of their involvement in the financial market. This instrument is meant to reduce a tax burden on individuals' operations on the financial market. As of the end of 2015, 89,600 such accounts were opened and the volume of trading with those accounts involved amounted to RUB 43.1 billion[3].

According to the data of the Moscow Stock Exchange and the NAUFOR (the National Association of Stock Market Participants), in 2018 the total amount of the attracted funds from individuals via individual investment accounts amounted to RUB 28 billion and about 700,000 new investors came to the market, that is, a three-fold increase as compared to 2016. As of February 2019, the total sum kept on individual investment accounts exceeds RUB 48 billion. In 2018, individuals bought twice as many Russian government bonds as a year before. Also, investments in companies' equities increased, but not so spectacularly as in the state debt. Over 600,000 broker's accounts were opened akin to individual investment accounts[4].

The interest in such investments can be primarily explained by a low banking interest rate on deposits and numerous cases of bank license withdrawals. Individuals have started to look for instruments which may yield a higher income.

Apart from comprehensive schemes, customized approaches to attraction of customers were developed. For example, a plan of measures (a road map) to promote accessibility of services of financial institutions to disabled persons, people with limited

[1] See: hereinafter: The interview of E.A. Shvetsov to the *Rating* Information Agency (September 9, 2016). URL: http://www.cbr.ru/press/int/press_centre/Shvetsov_Reuters_09092016/

[2] Identified cases of illegal utilization of the insider information and market manipulations. URL: http://www.cbr.ru/finmarket/inside/inside_detect/

[3] See: The Main Guidelines for Development of the Financial Market of the Russian Federation in 2016–2018. p. 20.

[4] Investment Account (IIA) in 2019: The Review of Advantages and Disadvantages. – http://dataworld.info/iis-individualnyj-investicionnyj-schet-vychet-nalog.php, February 06, 2019.

mobility and elderly people in 2017–2019 (approved by Resolution No. PM-01-59/31 of July 5, 2017 of the Central Bank of the Russian Federation) was worked out. The plan is aimed at eliminating physical accessibility problems and problems related to interfaces and digital information access, attitude of the personnel of financial institutions and comprehension of the nature of financial services and possible risks they may involve.

6. Protection of the rights of customers and investors in relations with financial market participants.

To ensure reliable protection of the rights of consumers of financial services, the Central Bank of the Russian Federation expects to establish and put into operation more effective schemes of handling the complaints of financial service consumers.

The Central Bank of the Russian Federation plans to develop and prepare on the annual basis the composite financial literacy index which includes the following:

a) research into the extent of public awareness of financial instruments, services and legitimate methods of protection of financial service consumers' rights;

b) research into households' competence (that is, practical application by households of their knowledge of financial instruments and services);

c) research into the extent of diversification of financial instruments and services used by households.

It is necessary to promote the role of the Call Center and Public Counseling Office established by the Central Bank of the Russian Federation to facilitate networking with consumers of financial services.

7. Establishment of the modern infrastructure of the financial market which meets international standards and putting into operation of the Mir national payment system and the system of transfer of financial messages of the Central Bank of the Russian Federation.

The plan of measures (a road map) prepared for development of the electronic networking of the financial market is a comprehensive set of instruments aimed at upgrading the mechanisms of electronic networking on the financial market and switching over all the market participants, their customers, federal executive authorities and the Central Bank of the Russian Federation to the e-document flow. On May 18, 2015, the Road Map was approved by A.V. Dvorkovich, Deputy Chairman of the Government of the Russian Federation. Specifically, it is planned to establish end-to-end permanent links of electronic networking with all the entities of the financial market. Such links will be built with a gradual reduction of the share of the paper document flow on the financial market and elimination and prevention of gaps in the links, as well as proper information security of financial market participants ensured.

Also, it is planned to switch over a portion of services of the Central Bank of the Russian Federation into an electronic format with the e-government infrastructure utilized (including the single web site of state and municipal services).

It is to be noted that the Central Bank of the Russian Federation is considering the issue of a gradual modification of automated processes of collection and analysis of all the types of reporting of regulated entities on the basis of the new format which permits to eliminate the excessiveness and duplication of the reporting data, upgrade authenticity and quality of the incoming information and unify the format of interdepartmental electronic data exchange. In future, the unified format may facilitate reduction of the burden on regulated entities in preparation of reporting documents for different purposes and to various agencies.

8. Work on the "deal with the regulator" instrument.

In the next three years, the Central Bank of the Russian Federation expects to establish legislatively the right of insiders and market manipulators to make a deal with the regulator. The idea is mentioned in the draft of the Main Guidelines for Development of the Financial Market in 2019–2021.

At present, the Central Bank of the Russian Federation cannot reduce or abolish in return for cooperation the penalty on market participants who are suspected of manipulating or using the insider information, In the document of the Central Bank of the Russian Federation, it is specified that a deal with the regulator can speed up "the investigation of law infringements and make it possible to bring to responsibility a larger number of persons involved". The regulator intends to expand the scope of application of expert judgments in qualifying activities on the financial market.

Investigation of each case takes up to two years because in market manipulation and insider trading foreign entities are involved, too. It often happens that the institution is not aware of the fact that its employees may engage in insider trading. The share of this business in the overall volume of the institution's business can be rather small, but the reputational damage is very high. Reduction of the reputational damage can be the case for making a deal with the regulator[1].

9. The new system of regulation of the activities of self-regulating entities on the financial market with active participation of the Central bank of the Russian Federation.

On July 13, 2015, the Federal Law on Self-Regulating Entities in the Financial Market[2] (hereinafter Federal Law on SRE in FM) was approved.

Apart from regulating the activities of 16 types of self-regulating entities ranging from brokers to agricultural consumer credit cooperatives, the Federal Law on SRE in FM includes the "framework" norms of self-regulation; the specifics of regulation of the relations which emerge with activities of the SRE are determined either by the entity's

[1] A. Astapenko. The Central Bank will Strike a Deal with Manipulators. – https://www.vedomosti.ru/finance/articles/2018/06/06/772028-tsb-manipulyatorami, 06.06.18.

[2] Federal Law No.223-FZ of July 13, 2015 "On Self-Regulating Entities on the Financial Market and Amendment of Article 2 and Article 6 of Federal Law No.157 of July 20, 2015 "On Amendment of Individual Statutory Acts of the Russian Federation"' // The Rossiiskaya Gazetta, No.157, July 20, 2015.

in-house documents or statutory act of the Central Bank of the Russian Federation as the regulator of the financial market[1].

The financial market regulator determines the extent of its own participation in the activities of self-regulating entities on the financial market. It is feasible to single out some main risks to independent self-regulating entities:

1) Expanded legislative regulation, development and introduction of standards for SRE and expansion of the authorities of the Central Bank of the Russian Federation in this field;
2) Limitation of SRE's some genuine functions (appointment of the chief executive manager of the SRE and receipt of reporting from members of the SRE);
3) Reduction of the number of SREs of the same type coupled with mandatory membership in the SRE for financial institutions established and licensing of their activities preserved.

In addition, the role of laws regulating the activities of individual types of self-regulating entities of financial institutions remains uncertain. Also, it concerns the Federal Law "On Self-Regulating Entities" of 2007[2], which is applicable to some types of SRE which are regulated by the Federal Law on SRE in FM (SRE of consumer credit cooperatives, microfinance institutions and other) because relevant amendments have not been introduced, yet[3].

6.2.7. Conclusion

In the past 20 years, megaregulation has become a comprehensive instrument of regulation of the financial market. Out of 70 countries, which carried out the reforms in 1998–2009 27 countries (38.5 percent) consolidated financial regulation and supervision one way or another.

The research into megaregulation of the financial markets of the UK, Germany, Japan and Singapore permits to draw a conclusion that one and the same model of regulation applied to different regulatory cultures and philosophies yields different results.

The German megaregulation is largely formal. The switchover to it was justified not by the failures of the previous model with a few regulators in place and a loss of

[1] Hereinafter: M.A. Polezhayeva. Self-Regulating Entities on the Financial Market / N.A. Polezhayeva // Russia's Economic Development. 2015. No.12. pp. 116–121.

[2] Federal Law No.315-FZ of December 01, 2007 "On Self-Regulating Entities" // The Legislation Bulletin of the Russian Federation, December 03, 2007, No. 49, Article 6076.

[3] For example, Article 48 (1) of Federal Law No.39-FZ of April 22, 1996 "On Securities Markets" (See: The Legislation Bulletin of the Russian Federation, No. 17, April 22, 1996, Article 1918); Article 36.26 (1) of Federal Law No. 75-FZ of May 07, 1998 "On Nongovernment Pension Funds" (See: The Legislation Bulletin of the Russian Federation, No.19, May 11, 1998, p. 2071); Article 56 (1) of Federal Law No.215-FZ of December 30, 2004 "On Housing Savings Cooperatives" (See: The Legislation Bulletin of the Russian Federation, January 03, 2005, No.1 (Part 1), p. 41) include direct references to the voluntary association in the SRE of business entities which they regulate.

confidence in it, but changes in the financial market and the criticism from the outside which factors affected foreign investors' interest. Due to a high level of independence of entities which are included in the system of the chief regulator BaFin and the existence of other smaller regulators, the German model of regulation of the financial market remains to be sectorial. The BaSin is regarded as a moderate regulator which can be explained mainly by a high level of the legal culture of the market participants.

Both the Japanese and German megaregulators are not central banks, but unlike the latter the Japanese FSA is not an independent entity; it is a part of the Administration of the Cabinet Council of Japan and financed out of the state budget. The Japanese megaregulator is prone to concentration of powers and political pressure. Despite a trend towards overregulation, the FSA is a highly competent authority which demonstrates a more restrained approach to financial market participants as compared to its predecessors and rarely closes down financial institutions.

Singapore's MAS is the only example of the central bank in the role of a megaregulator in a country with a large financial market. In Singapore, megaregulation is characterized by uncompromised supremacy of the law and comprehensive active interference by the state which carries out strict control over market participants. However, flexibility and far-sightedness of Singapore's leaders and the MAS, in particular, make this approach effective to promote the competitiveness of Singapore's financial market.

Despite the substantial differences, the German, Japanese and Singaporean regulators are quite effective and facilitate properly the development and stability of their financial markets, while the UK experience in megaregulation turned out to be highly disappointing, though the British FSA once inspired different countries to switch over to the single regulator of the financial market. The British regulator was prone to the excessive red tape and was too soft on "free-ranging" market participants. As a result, the FSA was liquidated after it failed to cope with the financial crisis, and the UK gave up the practice of megaregulation on the financial market.

The financial market in Russia is relatively young and not that developed as in the UK, Germany, Japan and Singapore. As in Germany where there is a single financial regulator, the Russian megaregulator was established as a result of a merger of previous regulators. In both cases, the integration was caused primarily by changes on the financial market, however, in case of Russia there was more criticism – though not that harsh as in the UK and Japan – in respect of the previous regulators, However, despite problems related to the switch-over to the megaregulation of the financial market, the Russian single regulator was established not as a separate authority, but on the basis of the Central Bank, which factor makes it similar to Singapore's MAS. This decision was partially justified by an insufficient level of the legal culture of financial market participants, so a tough regulator was needed for that job and the Central Bank suited that role very well because of its already proven record.

The quality of the financial market depends on multiple factors, including the country's geographical situation, history, legal culture and other. Application of a structural approach alone to the market regulation without other factors taken into account does not necessarily guarantee the proper functioning of the market and may produce negative consequences. These factors create a variety of options within the frameworks of a single model of regulation of the financial market (megaregulation) and predetermine the effectiveness in utilization of the model in different countries.

From September 1, 2013 the Central Bank of the Russian Federation was assigned the authorities to carry out regulation, control and supervision of the entire range of non-credit financial institutions from brokers to pawn-brokers[1]. It became the megaregulator of the financial market which event signified the beginning of a large-scale institutional reform of the country's financial market. In the past few years, the Central Bank of the Russian Federation has succeeded in carrying out the entire complex of relevant measures:

- removing of unscrupulous participants, primarily in the banking sector, from the market;
- complete reformatting of activities of insurance companies, nongovernment pension funds, microfinance institutions, actuaries and credit rating agencies;
- approval and introduction of the Corporate Governance Code;
- establishment of the system of prudential supervision over the activities of nongovernment pension funds and development of the system of protection of pension assets;
- promotion of protection of the rights of consumers and investors in relations with financial market participants;
- active investigation of instances of market manipulation and insider trading practices; as a result within three years the number of such practices has largely decreased;
- promotion of accessibility of financial products and services;
- facilitation of networking with financial market participants as regards development and regulation of the industry;
- establishment of the new system of regulation of the activities of self-regulating entities on the financial market.

It is worth mentioning the most important **issues** of megaregulation.

The Central Bank of the Russia Federation regulates the activities of the existing market participants, but does not facilitate the attraction of new ones. Regulation is generally meant to create such an environment which would be attractive to those who seek to create new types of business, however, it does not happen so for the time being.

[1] See: Federal Law No.251-FZ of July 23, 2013 "On Amendment of Individual Statutory Acts of the Russian Federation in the Context of Assignment to the Central Bank of the Russian Federation of Authorities on Regulation, Control and Supervision over Financial Markets" // RG. July 31, 2013. No.166; Article 76.1 of Federal Law No.86-FZ of July 10, 2002 "On the Central Bank of the Russian Federation (Bank of Russia)" // RG. July 13, 2002. No.127.

It is to be stated that measures aimed at toughening regulation and introducing new forms of supervision do not correlate with costs. Routine behavioral and prudential supervision should not be burdensome for market participants. There are no publicly available calculations of the cost of regulation and supervision.

Supervisory measures in respect of the banks are often applied to the non-banking sector. Unlike banks, non-banking institutions assume lots of risks which are not guaranteed by the state. This suggests that the main instrument ensuring protection of the rights and interests of those investors is complete disclosure of all the existing information. However, there are numerous instances where the Central Bank of the Russian Federation does not pay due attention to the reporting of mutual funds, nongovernment pension funds, brokers and trust managers. On the other side, the information is not sufficiently disclosed, while, on the other side, participants have to submit excessive reporting to the regulator.

Among the identified problems, it is would be expedient to single out the multiplicity of regulation. Let's take, for example, nongovernment pension funds. This segment of the financial market came under control of the megaregulator, however, due to the specifics of the business some aspects of supervision and development of the regulatory base are dealt with by social agencies, while political decisions are prepared by the Pension Fund. In such a situation, an excessive regulatory burden is created.

In upgrading the system of megaregulation in Russia, it is important to take into account the **lessons** which were drawn in other countries.

It is noteworthy that compliance with "the good regulation principles", such as efficiency and saving, the role of management, adequacy, innovations, global nature of financial services and competition are unable alone to create effective megaregulation without fundamental economic problems being solved. The latter is the priority, but a comfortable business environment, infrastructure, well-balanced taxation, top position in the global doing business rating, supremacy of the law and anti-corruption activities are in no way less important. The sound banking sector and the market with reliable institutional and regulatory systems are vital factors, too.

The main goal consists in overcoming the regulator's red tape which often prevents solution of fundamental issues in the banking sector. The megaregulator's practice of focusing attention on determination of systems and processes, rather than complex business-models and strategies is not often justified. Also, shifting of responsibility for risk management on financial markets onto participants is a problem of megaregulation.

6.3. Science and innovations[1]

The past year marked the start of drawing up new integrated technological development plans for the Russian science and technology. The plans were originally presented by an Executive Order of the Russian President and then evolved into a nationwide project called "The 'Science' National Project" which is in turn linked to the Strategy for Scientific and Technological Development of the Russian Federation adopted in 2016 as well as a national program called "Digital Economy of the Russian Federation."

In addition to the plans, there were some important organizational changes that led to the ultimate separation of former academic research institutes from the Russian Academy of Science (the Academy) and to the establishment of a single Ministry of Science and Higher Education with authority over institutions of higher education and research-performing organizations, while the Academy was granted the legal status of public expert organization. Other important changes include positive moves towards the development of science in institutions of higher education and more active position of regional government authorities with regard to scientific and technological development. Yet, no breakthroughs or visible changes in technological innovations took place.

Although some system-wide issues facing the Russian science were not addressed in the past year, a basis for positive changes started emerging in some research areas. Public funding continued to account for nearly 70 percent of the total funding of science in Russia – this is an unprecedentedly high level to compare with scientifically developed countries and nations with policies focused on strengthening their scientific base (e.g., BRICS nations). Although business contribution to research and development (R&D) funding remains moderate (representing less than one third of Russia's total R&D expenditure), there is a trend towards higher values in absolute terms. State budget appropriations for science are growing at an outperforming rate amid slim demand for its application in the business sector. Furthermore, R&D expenditure in the Russian business sector are largely (around 60 percent) funded by the state[2], surpassing many times R&D expenditure in developed and high-growth countries. As a result, R&D expenditure as a percentage of Russia's GDP remains low (close to 1 percent) amid rising state funding of science. Therefore, there is obvious shortage of mechanisms designed to attract the business sector to funding (co-funding) research and development, with the aim to reduce, at least, the proportion of federal funding that is used as replacement for private funding. It is characteristic that after the 2008 crisis

[1] This Section was written by Irina Dezhina, Gaidar Institute, Skolkovo Institute of Science and Technology.

[2] OECD (2018), Main Science and Technology Indicators Volume 2018 Issue 1, OECD Publishing, Paris. DOI: 10.1787/msti-v2018-1-en. P.55.

businesses in most of the developed countries became bigger contributors to raising R&D expenditure, while federal funding rose at slower pace[1]. It is not the case with Russia: business remains a scarce source of contribution to R&D.

Another problem lies in a lack of balanced age structure of researchers. Two opposite age groups developed, one represents young researchers (at the age of 39), whose number has increased considerably in recent years, and another represents older researchers (at the age of over 60). The middle-aged generation of Russian scientists (at the age of 40–59), who are considered more productive, remains a small group (at present, they account for less than one third of the country's total researchers), whose proportion is shrinking. The scientific personnel structure is considered efficient (that is, when best possible results are achieved both in terms of quantity and quality) if young and older generations represent around 20 percent each, and middle-aged researchers constitutes 60 percent[2]. The second serious issue facing human resources in science is low (both internal and external) mobility of Russian researchers – this is what affects the quality of research outputs.

Another parameter is the material base of science, with only minor changes in terms of quality in recent years. The re-equipment of scientific instruments and equipment has been underway for years; however, federal support is focused more on universities than scientific institutions. Each sector of science has elite organizations that receive more resources than other organizations. However, the elite status of these organizations is not always linked to their research outputs, but rather to formal statuses and some other factors. The re-equipment, however, is faced with the problem of efficient equipment handling, which is given much less attention. As a result, the available equipment is not used as efficiently as it might be, there are no full-fledged core facilities. Some of the up-to-date equipment is underused because it was purchased either on a non-systemic basis or for the purpose of resolving one-time tasks. There are unique units of equipment that duplicate each other. Thus, the issue of optimum utilization of scientific equipment is as much critical as the issue of re-equipment.

Another problematic aspect lies in the quality of research output. A brief record of employing policies aimed at enhancing the performance of scientific workflow in Russia shows that quantitative parameters are given the top priority. That is what accounts for a bibliometric race that has been unfolding in recent years in the country, when the key measure of efficiency and performance in science is the number of published papers rather than the interest in the content of such papers (as measured by the citation rate)

[1] Rehm J. Ten Years after the Economic Crash, R&D Funding is Better than Ever. Nature, September 13, 2018. doi: 10.1038/d41586-018-06634-4
[2] Balatsky E., Yurevitch M. Modelling academic personnel's age structure // Terra Economicus, 2018, Vol. 16, No. 3, P. 70. DOI: 10.23683/2073-6606-2018-16-3-60-76

by academic and business communities. A point to note, however, is that some universities started to improve in this aspect last year.

6.3.1. Science in institutions of higher education and in public sector

Science in institutions of higher education, as always, continues to represent a small "fragment" of the country's scientific and research complex. Institutions of higher education account for 9.1 percent of the total volume of research and for 12.1 percent of the total number of researchers in this country[1]. Nowadays, the flagship program is represented by a project called Project 5-100 which is intended to raise the ranking of not less than five Russian institutions of higher education to top 100 global rankings by 2020. There are, however, the "weakest aspects" – the volume and the quality of research – that dampen the climb.

In five years since the Program's inception, quantitative performance measures for science in institutions of higher education have been improved substantially. The number of publication in journals indexed by international data bases has risen due to, among other things, an increase in the number of indexed Russian journals, a substantial increase in the number of university researchers participating in international conferences and study tours to foreign institutes and universities. Therefore, the substantial increase in financial resources has paid off. In particular, the number of papers published by researchers of institutions of higher education participating in Project 5-100 that are indexed by Web of Science have increased 4.5 times compared to 2012, with a 4-fold rise for those indexed by Scopus[2]. Accordingly, the institutions have strengthened their position by way of upgrading their global rankings, particularly in selected fields of science (Russia, as always, continues to have strong schools of physics, mathematics and astronomy).

However, the race for publication numbers has given rise to many strategies designed to increase rapidly publication numbers. Institutions of higher education participating in Project 5-100 are the major contributors to the race. Analysis of their publication strategies[3] reveals the most commonly used strategies (as shown below in descending order of preference (usage frequency)):

- Increasing the number of publications through author affiliation (the author adds the name of higher education institution to the primary place of employment);
- Promoting intensely conferences so that their theses are indexed by Scopus;

[1] Science indicators: 2018. Statistical Book. M.: NRU HSE, 2018. PP. 44; 78; 190; 205.
[2] N. Bulgakova. Support the promotion. The Academy gets involved in higher education institutions' efforts to enhance competitiveness // Poisk, No. 44, November 2, 2018 http://www.poisknews.ru/theme/edu/39685/
[3] Poldin O., Matveyeva N., Sterligov I., Yudkevich M. 2017. Publication Activities of Russian Universities: The Effects of Project 5-100. Educational Studies, Higher School of Economics, issue 2.

- Seeking and hiring highly cited authors;
- Inviting new researches for publications;
- Having publications in predatory journals.

It is characteristic that publications in predatory journals that are purged from databases is no longer considered as most commonly used strategy.

In the end, measures of quality are still lagging far behind; the citation rate for research papers of institutions of higher education that participate in Project 5-100 is many times less than the average citation rate of reference foreign institutions of higher education, that is, institutions with a similar specialization profile and number of teaching personnel and students. There is still only a small proportion (around 15 percent, according to experts) of academic teaching personnel with research papers published in international journals.

A positive trend is that managers of some institutions of higher education have shifted their focus towards the quality of research papers. Composite measures, including not only publication numbers, were introduced for measuring the performance in research. For example, the Novosibirsk State University pays less for researcher's publications if the researcher does not work with students, and also pays less in financial bonuses for publications that constitute theses of conferences or articles published in predatory journals. Lastly, selection of conferences was introduced, that is, researchers are not recommended to visit low-profile events[1]. Similar trends can be seen in the National Research University of Higher School of Economics (NRU HSE) and in the Moscow Institute of Steel and Alloys – these universities, for example, pay no bonuses on top of the salary for papers/articles published in third- and fourth-quartile journals.

The public sector, to which former academic institutions now pertain statistically, underwent successful readjustments to meet the new requirements focused on quantitative measures, including publication numbers. Despite the recent restructuring – the integration of former academic institutions, the establishment of centers of various types, etc. – the productivity of "academic science" remained the highest across the country, suggesting that multiyear trends are sustainable enough. According to data for 2017, for instance, while the proportion of articles with Academy's affiliation made up 25.4 percent of the total number of Russian publications indexed by Scopus, the contribution to the total citation accounted for 29.1 percent, with the proportion of authors with Academy's affiliation representing as low as 19.8 percent of the total Russian authors[2].

[1] S. Ermak, P. Kuznetsov, D. Tolmachev, K. Chukavina. Stop feeding the beast // Expert, No. 20, May 14, 2018 http://expert.ru/expert/2018/20/hvatit-kormit-zverya/

[2] Avanesova A., Shamliyan T. Comparative trends in research performance of the Russian universities // Scientometrics, June 14, 2018. DOI: 10.1007/s11192-018-2807-6

It is nonetheless the policy of promoting the development of science in institutions of higher education that serves as a catalyst to not only increase publication numbers but also promote Russian scientific journals to respective databases (basically, Scopus). Russia's Ministry of Education and Science held a contest among scientific journals. One hundred winners were awarded RUB 1 million for development purposes. Around 8000 collected works of conferences were deleted at a time from the Russian Science Citation Index and will no longer be considered for calculating scientometric indicators[1].

It is characteristic that the past year was marked by the emergence of a new measure of scientific productivity – h-alpha-index. The author of the Hirsch index, Jorge *Hirsch*, proposed the h-alpha-index for measuring the number of articles in which a scientist is the principal author (the alpha-author). The alpha-author has the greatest Hirsch index of all the co-authors. The introduction of such index allows one to measure scientists' scientific contribution rather than calculate their overall citation rate[2]. The new index has restrictions; for example, the Hirsch index for experimenters using sophisticated equipment units, including those that help obtain specimen or make a complex analysis, is often greater than for core authors of a scientific idea. The above manner of identifying the alpha-author leads to incorrect results in this case.

A new paradigm of accessing scientific journals – the obligatory open access – was underway alongside the efforts made to find more accurate measures of scientific productivity. The European Union issued a resolution on Open Access publishing, after which Science Europe presented Plan S[3]. Plan S requires that, from January 01, 2020, scientific publications that result from research funded by public grants must be published in compliant Open Access journals or platforms. A preliminary set of 14 criteria for selecting journals was proposed. Most of the criteria are linked to technical requirements for open platforms on which journals are based, and only one criterion – the expert evaluation requirement for materials that are proposed for publication – is linked to the quality of publications[4]. It will cost journals a lot to be able to meet technical requirements. According to a study made[5], as little as 15 percent of open-access journals and 3 percent in social sciences now meet the proposed criteria. However, there are undefined parameters, including how non-European universities and research institutions will pay for publications released in journals included in the list.

[1] S. Belayeva. There are positive signs. Russian journals move closer to world standards // Poisk, No. 18–19, May 11, 2018 http://www.poisknews.ru/theme/infosphere/35784/

[2] J.E. Hitsch. hα: An index to quantify an individual's scientific leadership. Submitted October 3, 2018. https://arxiv.org/abs/1810.01605

[3] Plan S. Making full and immediate Open Access a reality. https://www.coalition-s.org/

[4] Brainard J. Few open-access journals meet requirements of Plan S, study says // Science, January 31, 2019. https://www.sciencemag.org/news/2019/01/few-open-access-journals-meet-requirements-plan-s-study-says?utm_medium=email&utm_source=FYI&dm_i=1ZJN,63X1U,E29D5V,NZXQM,1

[5] Brainard J. Few open-access journals meet requirements of Plan S, study says // Science, January 31, 2019. https://www.sciencemag.org/news/2019/01/few-open-access-journals-meet-requirements-plan-s-study-says?utm_medium=email&utm_source=FYI&dm_i=1ZJN,63X1U,E29D5V,NZXQM,1

The introduction of Plan S implies on the one hand a move towards not subscribing to journals. On the other hand, journals included in the list will have a good and guaranteed portfolio of research papers. The changes will have an effect on Russian authors, at least on those who participate in European scientific programs (EU Framework Programs).

The past year saw institutes of the former academic sector come under the control of the recently established Ministry of Science and Higher Education. the Federal Agency for Research-performing organizations (FASO Russia), which used to supervise academic research-performing organizations, ceased to exist under Executive Order of the President No. 215 dated May 15, 2018 concerning the structure of federal executive bodies[1]. The Ministry of Science and Higher Education has, under the above Executive Order, a wide mandate to develop and carry out scientific, research and technical and innovation policies; the Ministry now also regulates the daily workflow of both universities and the former academic sector. The Academy was granted a new status – the Federal Law on the Russian Academy of Science was amended in July to enlarge the scope of Academy's authority[2]. In addition, debates were held during the year to discuss the status and functions of the Academy. However, multiple debates, creating an "information noise", had no effect on research-performing organizations.

The Academy, according to the adopted amendments, will carry out the research and methodological management of scientific and scientific and technological activities of not only research-performing organizations but also institutions of higher education, and carry out an expertise of research outputs in organizations of all types. The Academy will also carry out state-funded research, including on behalf of the Military Industrial Complex (MIC). The Academy will submit annual progress reports to the President of Russia on the implementation of the national scientific and technological policy in the Russian Federation. Thus, the Academy becomes a qualified expert entity for a wide range of issues rather than just the basic science with which it has always been associated. Therefore, the Academy will have to face challenges that are beyond its capacity. Nevertheless, the managers of the Academy believe that the Academy possesses a strong human resource base, including around 2000 corresponding members and Academy members (academicians) and approximately 500 young professors[3]. However, this is a relatively small number of specialists who will have to carry out an expertise of tens of thousands research topics[4] underway in all research-performing

[1] http://kremlin.ru/events/president/news/57475

[2] Federal Law No. 218-FZ dated July 19, 2018, "On Amendments to the Federal Law "On the Russian Academy of Science, Reorganization of State Academies of Science and on Amendments to Certain Legislative Acts of the Russian Federation.""

[3] S. Belyaeva. President of the Russian Academy of Science Aleksandr Sergeev: Call of Duty // Poisk, No. 1–2, January 18, 2019 http://www.poisknews.ru/theme/ran/41116/

[4] In particular, in 2018, reports on 11.5K research topics of former institutions of the Academy alone were reviewed. (Source: N. Volchkova. An authorized review. The Russian Academy of Science is all set to embark upon analysis of country's scientific potential // Poisk, No. 1-2, January 18, 2019 http://www.poisknews.ru/theme/science-politic/41115/). The figure would increase by several times

organizations and institutions of higher education where R&D is funded by the state. Furthermore, the Academy will carry out an expertise of not only research topics and research and development outputs but also monitoring and performance measurement of public research-performing organizations, prepare proposals for research institutes and institutions of higher education "with the aim to integrate their scientific potential, develop scientific research and support innovation activities"[1]. The above functions were defined as the "scientific and methodological management" by the Academy. Additionally, the scope of the management can be enlarged further to cover not only all federal state-funded research and development performing institutions but also institutions where research and development is funded via regional and local budgets: Russian government's Executive Order No. 1781 dd. December 30, 2018 provided recommendations for executive bodies to adopt statutes and regulations whereby the Academy will perform scientific and methodological management of organizations that fall within the scope of its authority, except organizations that were established by the Government of Russia (Moscow State University (MSU), S. Petersburg State University (SPSU), Russian Research Center 'Kurchatov Institute', National Research Center *"Zhukovsky Institute"*, Higher School of Economics (HSE) National Research University, The Russian Presidential Academy of National Economy and Public Administration (RANEPA)). However, managers of the Academy have plans to enter into individual agreements with the above organizations on scientific and methodological management[2].

A more detailed analysis of how the Academy is going to perform its scientific and methodological function reveals that deadlines for analysis and decision-making may be quite extended because, for example, if institutions of higher education work on various research topics, then the same institution would be supervised at a time by various branches of the Academy. Thus, this would be subject to more approvals within the Academy. In so doing, the Academy's evaluation is cause for making adjustments to topics of research: if the Academy believes that funding of certain topics is undesirable, then the topics can be refined and then reapproved upon re-consideration by the Academy, or if the Academy does not reapprove these topics, then funding would be discontinued. And this despite the fact that draft forms developed for evaluation of topics allow for a formal enough expertise because they do not require detailed conclusions.

when including reports of institutions of higher education and business sector organizations on state-funded research works.

[1] C.3 of the "Rules for the Federal State-funded Institution Russian Academy of Science to perform scientific and research and methodological management of scientific and scientific and technological activities of research-performing organizations and educational organizations of higher education as well as expertise of scientific and scientific and technical outputs delivered by these organizations", endorsed by Russian Government's Executive Order No. 1781 dated December 30, 2018.

[2] N. Volchkova. An authorized review. The Russian Academy of Science is all set to embark upon analysis of country's scientific potential // Poisk, No. 1–2, January 18, 2019. URL: http://www.poisknews.ru/theme/science-politic/41115/

The above changes place an extra burden upon research-performing organizations and institutions of higher education because a unique reporting form must be used for each topic, whether it is funded or planed to be funded by the state. Since public funding accounts for 70 percent of the total funding in the country's scientific complex, the "avalanche" of reports and expertise can hardly be imagined. The existing scheme is yet far from being balanced: besides having the opportunity of making a formal evaluation, the Academy is deemed to bear no responsibility for decisions it makes – at least, no such responsibility follows from the official documents that have been available to date, except a provision on deadlines for the Academy to consider a series of issues which, however, have nothing to do with the expertise of research topics. The Russian Government issued on December 24, 2018 an Executive Order which lays down rules for cooperation between the Academy and the Ministry of Science and Higher Education, sets tight enough deadlines for the Academy to agree upon decisions on reorganization and liquidation of research-performing organizations, on making amendments to charters, on the approval by the Presidium of the Academy of nominees for heads of research-performing organizations and on the approval by the Academy President's of decisions to terminate the office of heads of research-performing organizations[1]. The Academy must make decisions within 5 working days to 30 calendar days, depending on what exactly needs approval.

New functions of the Academy are given a relatively moderate funding: around RUB 4.2 billion of budget allocations to the Academy are planned for 2019–2021(within the framework of the National Program "Scientific and Technological Development of the Russian Federation"), of which RUB 2.3–2.4 billion will cover daily operations such as, presumably, expert and monitoring activities (see *Table 20*). The Academy also expects to receive RUB 1 billion from the federal budget for its scientific and methodological management of all research-performing organizations and institutions of higher education in the country[2], which has not been denied by the state.

The Academy embarked by late in the year upon an initiative aimed at cooperation with various state departments. The Academy first of all expressed its willingness to cooperate with the Ministry of Science and Higher Education in order to raise the ranking of leading institutions of higher education in global rankings[3]. It is unclear, though, how the Academy is going to contribute to the promotion, but it will most likely

[1] Russian Government's Executive Order No. 1652 dated December 24, 2018 "On Approval of Rules for the cooperation between the Federal State-funded Institution Russian Academy of Science and the Ministry of Science and Higher Education of the Russian Federation while exercising their authority under the Federal Law "On the Russian Academy of Science, Reorganization of State Academies of Science and on Amendments to Certain Legislative Acts of the Russian Federation.""

[2] The Academy applies for RUB 1 billion to establish the framework for institutions of higher education and since promotion // RBC, November 13, 2018. URL: https://www.rbc.ru/rbcfreenews/5bead0fb9a794784ff42fea0

[3] The Academy is ready to cooperate with the Ministry of Education and Science to raise the ranking of Russian institutions of higher education in global rankings. October 28, 2018. URL: https://tass.ru/obschestvo/5730212

limit its efforts to paying a few visits to leading institutions of higher education. The initiative did not find support by institutions of higher education, as was expressed explicitly at a November 27 meeting of the Presidential Council for Science and Education[1]. The negative can be adequately explained by the ongoing "confrontation" between the parties. What is more, it is the Academy that quite often criticized institutions of higher education. In particular, President of the Academy Aleksandr Sergeev noted that universities started competing with each other in the field of science instead of training specialists, that is, what they are supposed to do as part of their core activity[2].

Table 20

Budget appropriations to Russian Academy of Science (a federal state-funded institution) in 2019–2021, RUB billion

Type of expenditure	2019	2020	2021
Total	4.2	4.2	4.3
Including operational expenses (provision of services) of public institutions	2.3	2.3	2.4
National awards in literature and arts, education, print media, science and techniques and other awards for meritorious services to the state	1.9	1.9	1.9

Source: Schedule 8 to the Explanatory Note attached to the Federal Draft Law regarding the Federal Budget for 2018 and the 2020 and 2021 Planning Period.

Late in the year, the President of Russia criticized indirectly the Academy by pointing to the fact that it is not unusual when basic research topics remain the same for decades, with no outputs delivered. "Not a single research paper with coverage in any citation database has been issued" with regard to 40 percent of research topics underway in academic institutions. In other words, it appears that either there are no outputs at all, or there are outputs that are irrelevant." However, since the Academy ceased to supervise research institutions five years ago, the responsibility for the above output is attributed not only to the legacy of the academic past but also to FASO Russia. In addition, the President criticized the fact that the 2017 performance measurement of the former academic research-performing organizations, including their division into three categories, failed to have led to any organizational and financial changes. The critique should rather be addressed to the Ministry of Science and Higher Education as the successor of FASO Russia.

Overall, managers of the Academy are in optimistic mood: according to the Academy's President, there is no other entity but the Academy that can provide an independent and nonpartisan expertise in the field of basic and applied research underway in the country. Yet, there is no solid ground for the optimism. The Academy has not carried out assessments of the time input in all of its "scientific and

[1] The verbatim records of a meeting of the Presidential Council for Science and Education. November 27, 2018. URL: http://kremlin.ru/events/president/news/59203

[2] The President of the Russian Academy of Science notes a decline in the knowledge and skills of graduates from Russian universities // RIA Novosti, May 25, 2018. URL: https://ria.ru/society/20180525/1521320822.html

methodological tasks", given the average speed of works performed in the Academy[1]. Additionally, there are no guarantees that members of the Academy can provide an expert evaluation of any research topics. No "research performance" measurement has so far been applied to Academy members and corresponding members, on top of that they enjoy some privileges for their publication activities, including, for example, the right to publish non-reviewed articles in an academic journal called "Russian Academy of Science Reports" (RASR)[2] and also they are allowed to use such articles for the purpose of grants and public assignments. Therefore, the question of how the Academy is to exercise in full the function of country's key expert in science still remains open.

6.3.2. New focus areas for national policy and national project for science

New focus areas of the national policy in the field of science were outlined in the Presidential Address to the Federal Assembly, initiating for the first time the linkage between "powerful infrastructure – talent acquisition and support to young people – research within research and educational centers"[3]. The same focus areas were recognized in an Executive Order of the President later in May[4], commissioning the Russian government to develop the 'Science' National Project, which is to achieve the following goals set forth in the Executive Order:

- To raise Russia's ranking to world's top 5 nations that perform research and development within the scope of focus areas of scientific and technological development;
- To ensure that scientific research in the Russian Federation is appealing for Russian and foreign top scientists and young high-potential researchers;
- To ramp up local R&D inputs using all sources, so that they outperform growth rates in the gross domestic product.

A few objectives were formulated to achieve the foregoing goals: to establish an advanced infrastructure for research and development, to re-equip not less than 50 percent of instruments used by leading organizations that perform research and development, to establish scientific centers of various types.

The 'Science' National Project (SNP) became part of a new state program called "Scientific and Technological Development of the Russian Federation." Despite the fact

[1] A. Mekhanik. The Academy becomes key expert in science // Expert, No. 5, January 28, 2019. URL: http://expert.ru/expert/2019/05/ran-stanovitsya-glavnyim-nauchnyim-ekspertom/
[2] V. Vdovin. Privileges offer benefits. Why does RASR publish non-reviewed articles // Poisk, No. 5, February 01, 2019. URL: http://www.poisknews.ru/theme/ran/41373/
[3] Presidential Address to the Federal Assembly. March 01, 2018. URL: http://kremlin.ru/events/president/news/56957
[4] Russian President's Executive Order No. 204 "On National Goals and Strategic Tasks of the Development of the Russian Federation until 2024", dated May 7, 2018. URL: http://kremlin.ru/acts/bank/43027

that the State Program itself will not be endorsed until April 1, 2019[1], the SNP gave rise to active debates back in late 2018. The project has the same three main objectives that were set forth in the Executive Order of the President.

The first objective is to raise Russia's ranking to world's top 5 leading nations that perform R&D in focus areas of growth (as identified in the Strategy for scientific and technological development of the country). The achievement of this objective will be measured exclusively through rankings, which may lead to false incentives. In particular, there are plans to raise the number of scientists in order to retain 4th place in international rankings regarding research personnel numbers, including plans to double publication numbers in order to move up in rankings.

The second objective is to make Russia appealing for Russian and foreign scientists as well as young researchers. However, the appeal will be measured by the number of foreign scientists working in Russian organizations regardless of the duration of their stay in the country rather than by enhancing the scientific workflow management, ensuring career tracks, inviting foreign scientists under long-term contracts (more than three years). If the duration of stay in Russia is of no importance, then "boosting" the number of foreign scientists would be no hardship. The second measure is precarious enough – there are plans to raise the number of researchers aged 39 or younger to 50.1 percent of the total number of researchers in the country – which may worsen the imbalance in the age structure of scientific personnel. It would be more appropriate for increase in the proportion of middle-aged (40–60) generation of researchers to be set as indicator, because any increase in this cohort would indicate that young individuals stay in science.

The third objective is to ramp up all R&D inputs using all available sources, in which case it would be more important to ramp up business sector's R&D inputs at outperforming growth rates, create a demand for research outputs. However, funding is expressed in a more softer manner in the SNP than even in the Strategy for Scientific and Technological Development of the Russian Federation with parallel funding as a goal. A little more than RUB 636 billion, including RUB 405 billion through state budget funding and around RUB 231 billion via extrabudgetary funding (that is, 36 percent of total inputs in the national project), are planned to be spent in 6 years (from 2019 to 2024) to implement all the activities that are to take place within the SNP framework.

The above objectives are planned to be achieved by implementing three projects: (1) to develop scientific and scientific-industrial cooperation, (2) to create an advanced infrastructure, and (3) to develop human resource potential. The state budget to extrabudgetary funding ratio for the total of three projects in 2019–2024 is presented in *Table 21*.

Known methods are expected to be applied for developing scientific and scientific-industrial cooperation: establishing various types of research and educational centers

[1] A meeting of the Presidium of the Presidential Council for Strategic Development and National Projects. December 17, 2018. URL: http://government.ru/news/35104/

(RECs). Many various types of RECs, including both scientific and scientific-industrial RECs, have been established over the past 20+ years. This time, however, RECs constitute units that are much more bigger in size.

Table 21

Funding plans for federal projects as part of 'Science' National Project, 2019–2024

Federal project	Total funding, RUB billion	State budget funding, RUB billion	Extrabudgetary funding, RUB billion	Proportion of extrabudgetary funding, percent
Development of scientific and scientific-industrial cooperation	215.0	57.3	157.7	73.3
Development of advanced infrastructure for research and development in the Russian Federation	350.0	276.6	73.4	21.0
Development of human resources in research and development	70.9	70.9	0	0

Source: 'Science' National Project's data sheet (according to data available as of February 11, 2019).

Debates on what RECs should be are still in progress, involving a broad variety of opinions. The President of the Academy believes that RECs should be established on the basis of existing research-performing organizations or educational institutions and equipped with modern equipment and managed by an international supervisory board. His opponents believe that RECs should be linked to industries and intend to address tasks facing a specific territory. Furthermore, there is no good understanding of whether RECs should constitute a legal entity, a structural unit within a legal entity, or a team comprised of persons from different organizations. Also, neither is there understanding of criteria to identify leading organizations that can be qualified for the REC status. Whether it is only standard statistical parameters (publications, patents, etc.) that should be considered, or expert evaluations should be included as well?

According to the data sheet to the Federal Project on "Development of scientific and scientific-industrial cooperation", there are plans to establish various types of RECs by 2024, including:

1. Not less than 15 world-class RECs through integration of universities and research institutes with enterprises. Such RECs can be established on a sector- or region-specific basis.
2. World-class international research centers, including a network of mathematical centers and genomic research centers – 3 genomic centers, 4 mathematical centers, 9 international centers according to the focus areas set forth in the Strategy for Scientific and Technological Development of the Russian Federation. It is a must for the above centers to attract young researchers, and key performance measures must include papers published in peer-reviewable journals.
3. Fourteen National Technological Initiative competence centers (NTI competence centers).

REC's specific features, such as the presence of world-class scientific infrastructure, partnership with real sector organizations, regional government's support, are under discussion. In particular, some experts opine that it is RECs that may come to participate

in the implementation of megascience projects. It is assumed that the key aspect in selecting organizations as the base for RECs will not be organization's type and characteristics but rather the interdepartmental nature of projects, however, if broadly interpreted, RECs must include science, education, industrial cooperation, and they altogether should promote territorial development. So far, the concept of "new REC" is therefore closest to the concept of federal university, which also provides for all types of cooperation, plus there is commitment to achieve regional goals. RECs no doubt differ from the other category of centers – world-class international centers – first of all in that the latter perform applied works.

Unlike RECs, an NTI competence center is a structural unit rather than an organization, which is established on the basis of research-performing or educational organization, whereas the NTI competence center constitutes a consortium of research-performing, educational and industrial organizations. It develops technological solutions for NTI cross-cutting technologies, and therefore a key reporting indicator for such a center would be the number of created technologies that are applied in the industry. Fourteen competence centers for cross-cutting technologies were set up back in 2018, funded by the Russian Venture Company. In fact, competence center consortiums have already started compiling a pool of projects.

According to the advanced infrastructure development project, there are plans to upgrade at least 50 percent of the instruments of leading organizations on top of the known objectives of constructing megascience units. The issue of enhancing the equipment utilization efficiency has not been raised, and focus areas are yet to be identified. For example, Russia has in recent years been lagging far behind countries that have the biggest number of high performance supercomputers. The presence of supercomputers in a country exhibits its data processing capacity. Supercomputers are employed in scientific research, aviation, healthcare, industry. Russia has two supercomputers and ranks at the bottom of the list of top 500 producers of supercomputers, whereas China (with 202 supercomputers), the United States (with 143 supercomputers) and Japan (with 35 supercomputers) rank on top of the list. Russia has no its own base of computer components needed for manufacturing supercomputers, which may further degrade the county's capacity amid sanctions because Russian supercomputers rely on US-made processors[1]. Perhaps, focus types of most expensive and unique units that need to be developed through state budget funding should be identified.

The third project focuses on supporting young people, being in line with the SNP's target. As noted above, this approach is precarious due to a threat of unbalancing the age structure of scientific personnel. Another point to note is that the SNP provides no factors that might make science appealing and relevant to young people. Furthermore, plans to increase substantially the publication feedback may discourage rather than motivate young people into science.

[1] Mamedyarov Z. America conquers the summit // Expert, No. 26, June 25, 2018. URL: http://expert.ru/expert/2018/26/amerikantsyi-pokorili-vershinu/

There are plans within the framework of the same project to continue attracting top foreign specialists and to work with the Russian-speaking scientific community. New quantitative and qualitative targets set forth in the Science SNP can produce a need to revise a few initiatives that are currently taking place. In particular, a megagrants program (grants for establishing laboratories in research institutes and institutions of higher education under the auspices of world's top scientists, including representatives of the Russian-speaking scientific community) is still underway, but its format is somewhat obsolete in the light of new objectives such as, for example, doubling the publication activity. The program's requirements for publication numbers are too soft now compared to what they were at the 2010 onset of the program, while there were no quality requirements for research outputs whatsoever. Should this program become part of the national project, then the selection criteria for projects, not to mention reporting, should be revised and updated.

Cooperation with the Russian-speaking scientific community becomes more difficult amid sanctions. On the one hand, Russian-speaking scientists do show interest in cooperating with Russia, particularly with its more organized segments – from RASA and RuSciTech[1]. In particular, they offer assistance in enhancing the quality of scientific expertise[2], developing Russian scientific journals. All these functions are important functions, and external expertise not only by Russian-speaking scientists is of great importance. There are other efforts – a few Russian universities launched interesting initiatives aimed at attracting Russian-born specialists. For example, the Siberian Federal University (SFU) has a program called Foreign Professor (funded through Project 5-100) designed to invite for a short term top foreign specialists as researchers and teachers. So far, all of the invited persons are Russian-born foreign specialists[3]. The new National Project, however, should also consider the fact that representatives of the Russian-speaking scientific community are yet not prepared to participate in projects that require them to stay long term in Russia, not to mention their returning back to Russia. For instance, according to a study of Boston Consulting Group, only 6 percent of professionals who emigrated to the Western Europe said they are ready to work in Russia[4].

On the other hand, there are external factors that may constrain the development of relationship with Russian-speaking scientific communities in foreign countries. In particular, the unfolding U.S. policy aimed at shutting off outflows of important scientific and technological information to China has an adverse effect on China's project called National "*Thousand of Talents Program*" designed to attract scientists.

[1] RASA is Russian-speaking Academic **S**cience **A**ssociation. URL: (https://www.dumaem-po-russki.org), RuSciTech is an international association of Russian-speaking science and technology professionals living outside Russia. URL: (http://ru-sci-tech.org/ru/).
[2] Building bridges // Troitsky option – science, No. 267, November 20, 2018, P.4.
[3] A project called Foreign Professor kicked off at the Siberian Federal University (SFU). June 21, 2018. URL: http://about.sfu-kras.ru/rating/5top100/news/20499
[4] Half of Russian scientists say they want to emigrate. June 27, 2018. URL: https://www.finanz.ru/novosti/aktsii/polovina-rossiyskikh-uchenykh-zayavili-o-zhelanii-emigrirovat-1027322119

The next step was focused on similar programs of other countries. At present, legislative amendments are under consideration in the United States, whereby scientists participating in China's, Russia's and Iran's talents programs (megagrants programs as well as initiatives aimed at establishing international laboratories within the framework of Project 5-100 fall under this definition in Russia) shall not be entitled to grant-based funding from the U.S. Department of Defense and possibly from grant-based programs of other federal agencies.[1] The U.S. Department of Energy enforced a requirement early in 2019 whereby scientists/researchers who are participating or have plans to participate in Russia-funded projects must report to their senior managers. Accordingly, those who continue their participation in such programs will be advised to quit such programs or otherwise resign from U.S. public laboratories. Therefore, the number of Russia-born scientists interested in cooperating with Russia and working for public organizations is likely to be reduced in the offing.

Analysis of the composition of three federal projects as an attempt to apply a comprehensive approach to address science related issues leads to a conclusion that the focus on the relationship between science and real sector is restricted by a narrow segment related to the establishment of RECs and NTI competence centers. Overall, science remains a "thing in itself", being out of touch with economic problems and led, more than ever before, by rankings.

What is also worth noting is that development projects just indirectly consider the influence factor of sanctions although they appear to be long-term. The impact of sanctions on science let alone technologies has so far been underestimated. The problem is recognized just indirectly, resulting in more frequent discussions about since as soft power and as a factor of positive influence and maintaining relations amid unfavorable geopolitical situation.

6.3.3. State budget funding of research and development

The past year saw public funding of research and development continue to increase, and the trend is expected to continue down the line. There are plans to increase substantially allocations in 2019–2021 to non-defense research and development compared to target appropriations in 2018–2020. Public funding in 2019–2021 will rise at 2–12 percent a year (see *Table 22*).

There is a positive trend towards funding of knowledge-based programs. For instance, the third most important R&D expenditure is now a program called Development of Healthcare (see *Table 23*), with a substantial increase in allocations relative to previous years' budget plans. This is a critical socio-economic area that was previously given insufficient attention as part of R&D, particularly when compared with developed countries.

[1] Y. Sharma. Panic over US scrutiny of science talent programme // University World News, October 18, 2018, no.525. URL: http://www.universityworldnews.com/article.php?story=20181018183445307

Table 22

Dynamics of allocations for non-defense research and development

Indicator	2019	2020	2021
Federal budget expenditure on non-defense R&D, total, RUB billion	408.12	442.04	452.79
Year-to-year growth, percent	+12.7	+8.3	+2.4
Growth compared to the draft law for 2018-2020, each year, percent	+16.2	+1.2	-

Source: Schedule 8 to the Explanatory Note attached to the Federal Draft Law regarding the Federal Budget for 2018 and the 2020 and 2021 Planning Period; own calculations.

At the same time, expenditure on the development of electronic and radioelectronic industry remain relatively moderate, which poorly fits into plans on digitization and competitiveness in technological areas that are relevant for the national defense. There is a somewhat alarming trend towards further concentration of resources in a few programs, suggesting feeble prospects for raising funding in other areas.

In terms of the structure of expenditure by type of research – basic and applied research – there are plans to raise allocations for basic scientific research, so that by 2021 they account for 47.7 percent of total expenditure on non-defense scientific research and development.

Table 23

Dynamics of allocations for scientific research and development to national programs with biggest funding of research and development (RUB billion)

State Program	2018	2019	2020
Scientific and Technological Development of the Russian Federation	210.8	230.7	248.3
Space industry in Russia, 2013-2020	68.1	64.4	61.4
Development of healthcare	39.8	49.1	50.8
Development of aircraft industry, 2013-2025	36.6	44.8	39.8
Proportion of four programs in total allocations for non-defense R&D, percent	*87.1*	*88.0*	*88.4*
For reference: inputs in the program for "The Development of the Electronic and Radioelectronic Industry for 2013–2025"	9.1	9.7	9.7

Source: Schedule 8 to the Explanatory Note attached to the Federal Draft Law regarding the Federal Budget for 2018 and the 2020 and 2021 Planning Period; own calculations.

This conforms the level of European countries with the most developed scientific complex (France, UK). At the same time, the proportion of grant-based funding through two public scientific foundations – The Russian Science Foundation (RSF) and The Russian Foundation for Basic Research (RFBR) – will increase at a slower rate than allocations for basic research (see *Table 24*).

At present, grant-based funding by the foregoing foundations is far less than that in developed countries, accounting for 10.5 percent of total non-defense science spending, including that it will slide by 2021 to 10.1 percent. This is fuelled by the problem of "erosion" of foundations' programs, a decrease in the proportion of programs focusing on supporting research topics that are initiated by scientists. In particular, there is an excessive bias towards supporting young scientists whose participation in scientific projects is compulsory (a fixed proportion of young scientists shall be observed).

Table 24

Changes in volume of state budget allocations for basic research

Type of expenditure	2019	2020	2021
Basic research (subsection, Functional Classification of Costs (FCC)), RUB billion	179.4	199.5	215.9
Proportion in total expenditure on non-defense R&D, percent	*44.0*	*45.1*	*47.7*
Russian Foundation for Basic Research (RFBR)	22.2	22.9	23.9
Russian Science Foundation (RSF)	20.8	21.3	21.9
Proportion of RFBR and RSF in basic research expenditure, percent	*24.0*	*22.2*	*21.2*

Sources: Schedule 10 and Schedule 13 to the Federal Draft Law regarding the Federal Budget for 2018 and the 2020 and 2021 Planning Period; own calculations.

The problem of grant-based funding lies also in heightened focus on quantitative performance measures in the form of strict requirements for the number of publications to be issued while performing grant-funded research. Plans for quantitative measures are considered during examination of applications for projects. However, such requirements make no guarantee of quality of research outputs. In this respect, there is a counter example – The European Research Council (ERC), one of the most successful funder in the EU. The ERC was established in 2007 with the aim to promote scientific research on topics that are suggested by scientists. There are no "pressing topics/themes" or lines of research contributing to responses to "grand challenges." The sole evaluation criterion for applications for projects is the quality of research, excluding grant seekers' scientometric data. The outcome is that ERC-funded research were awarded six Nobel Prizes and *Wolf Foundation* Prizes, three Fields Medals[1]. Things will possibly change in Russia too. As was noted at the most recent meeting of the Presidential Council for Science and Education, grants are yet to become catalyst to science development in Russia, and that topics for grand-funded research should be suggested by scientists[2].

6.3. 4. Regional aspects of scientific and technological development

Two objectives – "technological breakthrough"[3] and spacial development – were simultaneously announced past year[4], which can set a new vector for the scientific and technological policy in Russia's regions. Prior to the announcement, innovation clusters were created at the regional level upon initiation of the federal government, "smart specialization" was determined, the construction of "smart cities" was commenced. The focus now will shift towards accomplishing the tasks of implementing the 'Science'

[1] A. Vaganov. The principle of research bottom-up funding in the European Union // Nezavisimaya gazeta – science, May 23, 2018. URL: http://www.ng.ru/nauka/2018-05-23/10_7230_eurosouz.html
[2] The verbatim records of a meeting of the Presidential Council for Science and Education. November 27, 2018. URL: http://kremlin.ru/events/president/news/59203
[3] Putin says Russia needs technological breakthrough. TASS, April 26, 2018. URL: http://tass.ru/ekonomika/5161633
[4] Putin offers to develop a special development program for Russia. RBC, March 1, 2018. URL: https://realty.rbc.ru/news/5a97ca8a9a79475d3e2a6447

National Project, including the establishment of RECs. It is understood that the Ministry of Science and Higher Education will establish and maintain relationship with regions in order to implement the National Project[1]. Although the project is yet to be endorsed, the work is underway to develop REC establishment concepts, involving regional government administrations of Krasnoyarsk, Tomsk, Novosibirsk, Irkutsk, the Altai Krai, Yakutsk and Tyumen.

Regional policies tend to pursue three goals. The first one is to identify focus areas of technological development that are not necessarily required to fall in line with respective focus areas at the nationwide level (it cannot be ruled out that academicians further translated this very component into the concept of "smart specialization"). The second goal is to coordinate between key stakeholders the critical elements of the policy in place. The third goal is to establish links between all the elements within the regional innovation framework in order to foster the development and transfer of technologies[2].

There was much debate last year about a "smart cities" agenda as part of new focus areas of regional scientific and technological development. The Russia Digital Economy Program 2017 (DEP), followed by the Presidential Address to the Federal Assembly on March 01, 2018 and, lastly, the Executive Order of the President of May 7, 2018 concerning national objectives and development strategic tasks, raised the issue of "smart cities" to the top-priority level of the federal technological development policy. Initiatives at the regional level are therefore expected to appear. The progress in this area can in part be seen through growing number of media publications about the creation of "smart cities" or their elements in Russia's regions. It is characteristic that a 3-year-old survey of the NRU HSE[3] showed that one of the key constraints to the promotion of "smart cities" in Russia is lukewarm support by regional and federal government authorities, being the reason for lack of incentives at the municipal level. Now there is an incentive. Moreover, it is the technological aspect that will most likely dominate, whereas the "managerial" approach aimed at aligning interests of all stakeholders will appear to be the weakest aspect. At least, it is the lack of consensus that has always been a "weakness" of the Russian innovation framework. According to foreign specialists, from the technological perspective it is important to address information security issues when creating "smart cities", while from the social perspective it is important to keep in mind the issue of inclusiveness, which means that there should be no categories of people that are not

[1] The verbatim records of a meeting of the Presidential Council for Science and Education. November 27, 2018. URL: http://kremlin.ru/events/president/news/59203
[2] K. Koschatzky and H.Kroll (2007). Which Side of the Coin? The Regional Governance of Science and Innovation, Regional Studies, Vol.41.8, pp.1117-1118.
[3] It was held in 2015. Source: Boikova M., Ilyina I., Salazkin M. A "smart" model of development as a response by cities to challenges // Foresight, 2016, Vol. 10, No. 3, P. 71.

involved in the life of a "smart city" (because, for example, elder people experience difficulties when mastering online services)[1].

Another point to note is that all the subjects of the Russian Federation have raised their digitization budget expenditure, with leading regions focusing first of all on funding the creation of "smart cities", while lagging regions on the development of selected types of services for individuals[2]. However, the shortage of funds in regional budgets as well as limited number of skilled personnel for accomplishing digitization remain a serious problem. To date, revenues have been redistributed between federal/central government and subjects of the Russian Federation in favor of the government. That is exactly why regional government authorities are highly interested in being involved in implementing federal initiatives in science and technologies, because doing so can open an extra source of funding to regions. In addition, regional government authorities are limited in their capacity and in distribution of areas of responsibility: the majority of universities and research institutions are owned by the federal government. Focusing on supporting high-tech companies in this context appear to be one of the most adequate and reasonable solutions alongside any initiatives aimed at establishing relations. Such processes are already in progress in Russia's regions such as Tomsk, Irkutsk, Novosibirsk Oblasts.

There is a stand-alone initiative for regional scientific and technological development – a Novosibirsk Scientific Center's project called Akademgorodok 2.0 (Russian: "Academic Town"). Akademgorodok 2.0 is comprised of 31 subprojects, including the most resource-intensive subprojects such as the construction of a synchrotron – the Siberian *Ring Source of Photons* (SKIF) – and the establishment of two national centers for high performance computing and genetic technologies. The project Akademgorodok 2.0 is estimated at RUB 500 billion (of state budget funding)[3]. None of the 31 subprojects, except SKIF, have so far been guaranteed funding from the funds allocated to the 'Science' National Project (the megaunit is estimated at RUB 40 billion)[4]. The decision to construct SKIF was made in February a year earlier by the Presidential Council for Science and Education. Besides public funding, local government authorities are banking on funding from the private sector which might be interested in developments of scientific centers integrated in Akademgorodok.

[1] *Michinaga Kohno*: "Innopolis is an outdated model which should have been implemented 30 years ago." April 12, 2018. URL: https://realnoevremya.ru/articles/95516-intervyu-s-michinaga-kohno-ekspertom-po-umnym-gorodam

[2] T. Kostyleva. A full version of regions rated by the development of digitization "Digital Russia" has been released. November 20, 2018. URL: http://d-russia.ru/vyshla-polnaya-versiya-rejtinga-regionov-po-urovnyu-razvitiya-tsifrovizatsii-tsifrovaya-rossiya.html

[3] Half a trillion rubles. For real breakthrough // Expert, No. 40, October 1, 2018. URL: http://expert.ru/expert/2018/40/poltrilliona-rublej-za-nastoyaschij-proryiv/

[4] B. Kork. Akademgorodok. Reloading // Expert, No. 40, October 1, 2018. URL: http://expert.ru/expert/2018/40/akademgorodok-perezagruzka/

However, there is no single view of how Akademgorodok should develop, and there is a sum of projects at various stages of maturity rather than a new development model. The above as well as rapid and closed nature of the concept development are the reasons why Akademgorodok 2.0 has been heavily criticized by external and local experts[1].

6.3.5. Technological development

There were no breakthroughs in technological innovations. Overall, the level of companies' innovation activities remained low in all sectors: the proportion of industrial enterprises involved in technological innovation stood at 9.6 percent, posting a decline from the proportion seen amid sanctions in 2014[2]. There are other assessments, mostly expert ones, of the level of innovation activities, showing that the proportion of innovation-active companies stood at 15–20 percent[3]. This figure, however, is one half as high as that recorded by nations with the developed technological base.

Also, a decline to 8 percent (from 9.5 percent in 2014) was seen in the proportion of companies involved in technological innovation in the area of information and communication technologies (ICT). Moreover, there was a decline in corporate venture deals in the IT industry. Investments in 2018 were estimated at USD 151.3 million, much less than the amount (USD 246.6 million) recorded in 2017[4]. Furthermore, analysis of IT-startups engaged in deals with corporations showed that the majority of purchased startups were startups whose founders were former co-owners and senior managers of medium-sized and big IT-companies, managers of IT-units and former corporate managers. At the same time, software exports continued to advance because, among other things, flagship companies swiftly refocused to new markets[5]. The 2018 year-end exports ran at more than USD 10 billion, twice the amount registered five years ago[6]. Furthermore, exports started outpacing sales in the domestic market.

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[1] See, for example, a detailed analysis of the project's weaknesses: S. Smirnov. "We moving backwards." Humanitarian expertise of Akademgorodok 2.0 project. February 06, 2019. URL: https://tayga.info/144882

[2] Fridlyanova S. Innovations in Russia: Key measures dynamics. Express information "Science, technologies, innovation". M.: NRU HSE, September 26, 2018. URL: https://issek.hse.ru/data/2018/09/26/1153998102/NTI_N_103_26092018.pdf.pdf

[3] Butrin D. "We have managed to launch a few technologically active sectors" // Kommersant, No. 55, December 03, 2018 P. 4. URL: https://www.kommersant.ru/gallery/3814084

[4] Y. Ammosov, A. Levashov. Corporate ventures in Russia's IT industry. TAdviser study. November 19, 2018. URL: http://www.tadviser.ru/index.php/Статья:Исследование_TAdviser_«Корпоративный_венчур_в_ИТ-индустрии_России»

[5] For example, Kaspersky Lab's global sales proceeds have increased in the face of European and U.S. sanctions by virtue of refocusing on markets in CIS countries, Africa and the Middle East. Source: M. Maiorov. Hacker's nightmare. URL: https://stimul.online/articles/kompaniya/strashnyy-son-khakera/

[6] Growth program: Russian software sales abroad top all-time highs // Expert, No. 7, February 11, 2019. URL: http://expert.ru/expert/2019/07/programma-rosta-prodazhi-rossijskogo-softa-za-rubezhom-byut-rekordyi/

Overall, H1 2018 saw transactions in the venture market drop in numbers as cumulative investment rise. This could be a sign of investors increasingly opting for conservative investment in "reliable" companies, as also evidenced by changes in preferred industries, such as contraction in the proportion of biotechnologies and increase in the segments of e-commerce, logistics and transport[1].

The tools in use to encourage technological development have so far had insufficient effect on all types of companies, including big, medium-sized and small companies. According to a report of consulting firm *A.T. Kearney*, Russia has lost dynamics of its industrial development (Industry 4.0) due to, first of all, immaturity of both the institutional structure and the development of technologies and innovations[2].

Also, there are policies focusing on the promotion of cooperation between companies and research-performing organizations and institutions of higher education, and on R&D outsourcing to companies. For example, innovation development programs running since 2010 at big companies with government equity participation are supposed to have a compulsory component such as cooperation with institutions of higher education. Despite the fact that companies allocated their resources for the purpose, more often there was no cooperation, but rather a sort of co-funding of research performed by institutions of higher education whose outputs were by no means always in demand. To date, as little as 3 percent of scientific projects of institutions of higher education have been implemented to the benefit of business companies, according to data from NRU HSE's education economics monitoring 2018[3]. Therefore, there was neither visible growth in patent activities, nor any serious increase in exports of technologies, expansion of the country's segment of small and medium-sized innovative companies. Products manufactured by non-energy small and medium-sized enterprises were marketable mostly in the domestic market, as evidenced by a small proportion of exporters, particularly when compared with innovation-led developed countries (see *Table 25*).

Analysis of the performance of public support instruments showed that the highest positive effect was due to Innovation Promotion Fund's programs[4].

[1] Focus on Internet users // RBC, November 06, 2018. URL: https://www.rbc.ru/technology_and_media/06/11/2018/5bdc51819a79472f04cb2f46?from=main

[2] Readiness for the Future of Production Report 2018. WEF in Collaboration with A.T.Kearney. URL: http://www3.weforum.org/docs/FOP_Readiness_Report_2018.pdf

[3] Andruschuk. Science and business // Kommersant, August 13, 2018. URL: https://www.kommersant.ru/doc/3712714

[4] The National Report on Innovations in Russia 2017. Ministry of Economic Development, Open Government, RBC, 2018.

Table 25

Proportion of exporters of non-energy commodities in small and medium-sized enterprises

Country	Proportion of exporters in small enterprises, percent	Proportion of exporters in medium-sized enterprises, percent
Russia	10.0	9.6
France	50.7	86.5
Hungary	53.3	78.6
Germany	42.5	69.2
U.S.A.	27.5	58.7

Source: Microeconomics of exports. Rating of Russian biggest exporters. Special report. // Expert, No. 39, September 24, 2018 URL: http://expert.ru/expert/2018/39/mikroekonomika-eksporta/

The rest of the instruments, according to experts, had a minor effect in recent 5 years on the development of innovations. The weakest effect came from instruments such as innovation promotion programs for big companies with government equity participation, ROSNANO's projects as well as projects implemented as part of the National Technological Initiative road maps (see *Fig. 3*). It was the NTI that was recognized as lagging behind original technological development plans for target markets. In particular, while three years ago Russia was competing in the *AeroNet market* with the United States in the development of remotely piloted vehicles, now Russia is visibly lagging behind its competitors[1]. The development is nevertheless moving forward – 8 NTI's road maps have been approved, with 450 projects worked out, including around 10 percent projects in progress[2].

A slowdown in the development was a catalyst to the revision of approaches, resulting in three main lines of further NTI development. The first line is to establish infrastructural centers for each NTI market. The centers will be information and analytical entities specializing in indentifying new trends, holding conferences and online workshops as well as providing organizational support to startups. Therefore, companies operating in NTI markets will receive organizational and analytical and network interconnection support. The second line is to establish financial institutions designed to support startups, and the third line is to set up NTI competence centers (already in progress), where the NTI is to be aligned with the new 'Science' National Project: the creation of new NTI competence centers is an objective to accomplish as part of the National Project. The above policies are intended to contribute to the emergence of higher-quality projects for NTI cross-cutting technologies.

[1] Edovina T. "Technological development requires new forms and formats of organization" // Kommersant, No. 55, December 03, 2018, P. 15. URL: https://www.kommersant.ru/doc/3814104
[2] Butrin D. "We have managed to launch a series of technologically active sectors" // Kommersant, No. 55, December 03, 2018, P. 4. URL: https://www.kommersant.ru/gallery/3814084

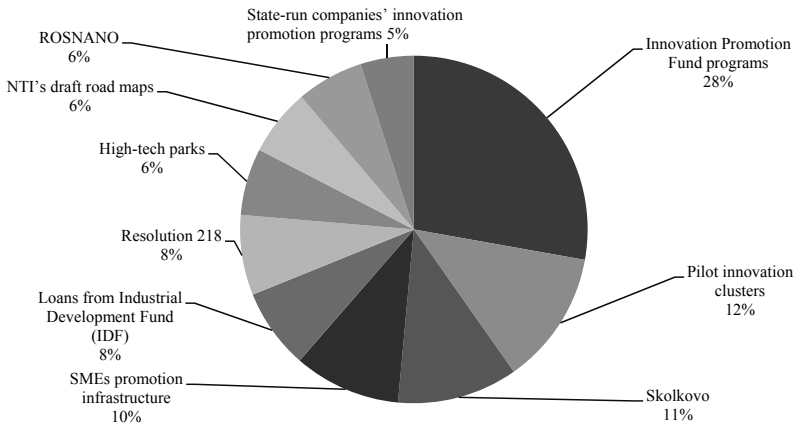

Fig. 3. Public support polices that have contributed most to promoting technological innovations in recent 5 years

Source: National Report on Innovations in Russia 2017. Ministry of Economy, Open Government, Russian Venture Company (RVC), 2018. P.21.

The Russia Digital Economy national program, which underwent changes during the year, could be another incentive for technological development. There is a basis for enhancing the digital development – according to recent data, digital economy has contributed 5.6 percent to Russia's GDP, surpassing the proportion of agricultural industry[1]. In addition, a survey 2018 of Skolkovo Business School revealed that managers in charge of digital transformation at some key state-run corporations have different views on how it should be implemented in their companies. This implies a wide range of new solutions rather than a lack of clarity over the matter of discussion. An important aspect of digital technologies development programs is the idea of relying upon companies. To date, 12 companies that are prepared to draft road maps for technological development have been identified, most of which are ready to be involved in the development of 2–3 technologies[2]. The front-runners are Rostech with plans to develop road maps for 7 digital technologies and MTS with road maps for 5 technologies. Companies that are involved in the development of road maps will have an opportunity to take the lead in technologies they select. This approach reminds of the principles of developing NTI road maps that have provisions for leadership and for responsibility of parent corporate developers for outputs. Although the approach has not

[1] Korovkin V. Russia facing the risk of missing "digital" opportunity for economic growth // ZNAK, December 05, 2018. URL: https://www.znak.com/2018-12-05/rossiya_riskuet_upustit_cifrovoy_shans_na_ekonomicheskiy_rost

[2] E. Balenko, A. Balashova, E. Litova. Companies to qualify for developing Digital Economy technologies // RBC, February 05, 2019. URL: https://www.rbc.ru/technology_and_media/05/02/2019/5c5820119a794707cf8ada4a?fbclid=IwAR2C0J5gpkxteRgCwFJhm8AW960oo29N-zPcnUQ4103SK9zfUHdxX4W1XlU

yet delivered unambiguously positive outputs, the Russia Digital Economy Program provides for the possibility to harness the NTI experience.

Despite a few advancements made so far, they are insufficient to change the overall technological innovations development landscape, and public support policies are yet to become more efficient. There are few reasons for that. The first reason is that federal funding of research and development is dominant even in the business sector, which somehow weakens business initiatives while supporting the practice of "state-funded innovation." The second reason is that innovations within the country have minor influence on the ability to compete. Access to administrative resources, particularly for big companies, remains the key aspect. The third reason lies in the fact that the level of innovation activities is determined by far not only the presence of policies designed to stimulate innovations. Basic economic factors (for example, terms of bank loans) are just as much important, but they at best do not interfere with the development of innovative processes.

* * *

Science in Russia is facing long-lasting problems of quantitative and qualitative parameters of the scientific potential and the structure of funding. The proportion of public funding remains high as never before, no serious incentives have been offered to encourage the business sector to invest in research and development, the promotion of technological innovations has not yet delivered scalable outputs. Sanctions have so far failed to have an effect in terms of promoting own advanced export-led technologies.

There is a positive shift in basic and exploratory research, publication activities are on the rise in institutions of higher education and in the public sector. It is important that leading institutions of higher education have started harnessing the incentives to raise the number and the quality of publications. Activities aimed at promoting Russian journals in international databases, namely Web of Science and Scopus, also contribute to the profile of Russian science.

As envisioned by the Russian government, the rationale and quality of scientific research should be raised due to new functions of the Academy which will be in charge of scientific and methodological management of all the organizations across the country that perform state-funded research and development. The solution, however, has some problematic aspects, namely the Academy's human resources are insufficient to meet the required volumes of expertise, the Academy's mandate to make decisions without having to bear responsibility for them, as well as increase in the already heavy bureaucratic burden on research-performing organizations and institutions of higher education.

Science is regarded as inherent value, according to new public scientific development plans, which is a positive, to a certain extent, factor, indicating that the state recognizes this area as an important area. There are plans to raise state budget funding of basic science and to enhance human resource potential. However, some of the new policies ignore the existence of (HR, financial, organizational) misalignments in science. The new projects continue to show the gap between scientific development targets and economic needs of the country, and there is a prevalent focus on various ratings.

6.4. The model of modern entrepreneurial university: has it been created in Russia?[1]

The competitive edge of national economic systems is largely determined by the activities of higher education institutions. In the modern world, universities carry out not only educational functions, but also generate actively new knowledge and innovations. Both in industrially developed economies and developing countries, universities are often the sources of new technologies for business, and there is numerous evidence of the consolidation of this role of the university sector[2].

Being a key component of the Triple Helix Model – a model of the industry-government-university relation, which has won a broad recognition of late – universities play an important role in innovation processes taking place in the knowledge-based economies[3]. The main point of the Triple Helix theory consists in the fact that the institutes responsible for development of new knowledge and formally established in different countries as universities have a dominating position in the innovation development system[4]. As compared to representatives of other sectors of science – research institutes and corporate labs – the universities' undeniable advantage is the permanent natural inflow of new personnel, that is, students who can act not only as assistants in handling of various issues, but also bring new non-trivial ideas into research and innovation activities because their perception of what is above and beyond the limits of science is limited to a lesser extent than with other researchers[5].

In the past 15-20 years, lots of universities have undergone substantial changes and become more independent entities with a more active position in their relations with the state and the business, as well as their search for new ways of development[6]. This pattern

[1] This section was written by Kuzyk M., the NRU HSE; Radygin A., the Gaidar Institute, the RANEPA; Simachev Yu., the NRU HSE, the RANEPA.

[2] Henderson R., Jaffe A., Trajtenberg M. (1998) Universities as a source of commercial technology: A detailed analysis of university patenting. // Review of Economic and Statistics 80(1), pp. 119–127.; Caloghirou Y., Kastelli I., Tsakanikas A. (2004) Internal capabilities and external knowledge sources: complements or substitutes for innovative performance? // Technovation 24 (1), pp. 29–39. ; Amara, N., Landry, R. (2005). Sources of Information as Determinants of Novelty of Innovation in Manufacturing Firms: Evidence from the 1999 Statistics Canada Innovation Survey. Technovation 25, pp. 245–259.; Tether B. S., Tajar A. (2008) Beyond industry–university links: Sourcing knowledge for innovation from consultants, private research organizations and the public science-base. Research Policy, 37 (6/7), pp. 1079–1095.

[3] Etzkowitz H. (2003) Innovation in innovation: The Triple Helix of university-industry-government relation. // Social Science Information, 42 (3), pp. 293–337; Etzkowitz H., Leydesdorff L. (2000) The Dynamic of Innovations: from National System and «Mode 2» to a Triple Helix of University-Industry-Government Relations. // Research Policy, 29, pp. 109–129.

[4] Dezhina I., Kiseleva V. (2007) "The Triple Helix" in Russia's Innovation System // Voprosy Ekonomiki, No. 12.

[5] Etzkowitz H. (2003) Innovation in innovation: The Triple Helix of university-industry-government relation. // Social Science Information, 42 (3), pp. 293–337.

[6] See, for example, Klyachko T.L., Mau V.A. Future Universities. Moscow, The Delo Publishers, 2015.

or "the new generation" of universities which not only generate and spread the knowledge, but also solve the goal of applying that knowledge for the benefit of the economy and the general public are called entrepreneurial universities[1].

This section deals with the analysis of the issues related to the introduction in Russia of the model of an entrepreneurial university in terms of the relevant international experience and the government's strategic position as regards consolidation of universities' role in R&D and promotion of innovations. The main attention is paid to universities' R&D and innovation activities because, on one side, these components (particularly, the latter) determine the "new quality" of modern entrepreneurial universities, while, on the other side, research activities and innovation activities were not traditionally incidental to the Soviet and Russian higher education system as in case of the former they were carried out by the academic science institutions, while in case of the latter, by the industry in close integration with the sectoral science. Within the frameworks of the research, the empirical analysis's information base includes the official statistics materials, the state authorities' open source data, the outputs of surveys of universities and companies, as well as in-depth interviews.

6.4.1. An entrepreneurial university: essential characteristics and modern aspects

As a starting point for the analysis of the existing perception of the evolution of universities and their role in the economy and the community, widely-recognized publications by Henry Etzkowitz[2], Burton Clark[3] and Johan Vissema[4] were used.

Analyzing the "classical" approach of David Riesman and Christopher Jencks[5], who dealt with the processes of development of the US higher education system and coined the term "academic revolution" for defining the extent of the changes which occurred in the middle of the 20th century, Henry Etzkowitz speaks about two "academic revolutions" as applied to the beginning of the 21st century. The first one started in the 19th century and still in action has managed not only to elevate research to the ranks of "the academic mission", but also led to establishment of research universities known

[1] Clark B. (1998) Creating Entrepreneurial Universities: Organizational Pathways of Transformation. Oxford: Pergamon Press; Clark B. (2001) The Entrepreneurial University: New Foundations for Collegiality, Autonomy, and Achievement // Higher Education Management, 13 (2), pp. 9–24; Etzkowitz H., Webster A., Gebhardt C., Cantisano Terra B.R. (2000) The Future of the University and the University of the Future: Evolution of Ivory Tower to Entrepreneurial Paradigm. // Research Policy, 29(2), pp. 313–330.

[2] Etzkowitz H. (2003) Innovation in innovation: The Triple Helix of university-industry-government relation. // Social Science Information, 42 (3), pp. 293–337.

[3] Clark B. (1998) Creating Entrepreneurial Universities: Organizational Pathways of Transformation. Oxford: Pergamon Press.Clark B. (2001) The Entrepreneurial University: New Foundations for Collegiality, Autonomy, and Achievement // Higher Education Management, 13 (2), pp. 9–24.

[4] Vissema J. (2016) The Third Generation University: University Steering in the Transition Period. [Translated from English]. – Moscow. The Olimp-Business Publishers.

[5] Jencks C., Riesman D. (1968) The Academic Revolution. Garden City, N. Y.: Doubleday and Co.

often as humboldtian universities[1]. Such universities' specifics consist in the effective combination of education and research activities, so they represent a kind of integrated research and educational centers[2]. It is to be noted that the importance of research activities was postulated by universities themselves, while implementation of such activities actually became the professorship's main objective[3]. In addition, in the mid-20th century some prominent researchers believed that universities were the "pure science" entities at the source of scientific progress[4].

An important result of the current second academic revolution is the emergence of the formation of the so-called entrepreneurial universities which assume the tasks of not only training of human resources and generation, preservation and transfer of knowledge, but also large-scale establishment of innovation firms and development and introduction of new technologies and, eventually, economic development[5].

An entrepreneurial university's key specifics which makes it different from a traditional research university consists in the fact that the former along with solution of purely research objectives takes the responsibility for practical application of the received outputs of the research. In other words, in addition to educational and research activities, the university carries out "the third mission" (also called the third role, the third objective and so forth) which focuses on facilitation of practical application by the business or the community of the outputs of research[6]. It is to be noted that for the long-term and sustainable development the entrepreneurial university has to ensure the balance between all the three missions to avoid domination of any of them to the detriment of the others[7].

Speaking about the new generation of universities, Johan Vissema singles out as their main specifics the facilitation of utilization of the created knowledge (that is, the third

[1] It comes from the family name of Wilhelm von Humboldt, renowned German scientist. political figure, philolog, linguist and the Minister of Education in the Post-Napoleon Prussia who initiated in 1809 the establishment of the Berlin University which soon became the leading university of Prussia/Germany (Vissema J. (2016) The Third Generation University: University Steering in the Transition Period. [Translated from English]. – Moscow: The Olimp-Business Publishers).

[2] Etzkowitz H. (2003) Innovation in innovation: The Triple Helix of university-industry-government relation. // Social Science Information, 42 (3), pp. 293–337.

[3] Guba K. (2012) Is the Academic World Just. Polit.ru URL: http://www.polit.ru/article/2012/06/24/publish_or_perish/

[4] Shibany A., Reiner C. (2014) Can Basic Research Prevent Economic Stagnation? // Foresight-Russia, 8 (4), pp. 54–63.

[5] Etzkowitz H., Webster A., Gebhardt C., Cantisano Terra B.R. (2000) The Future of the University and the University of the Future: Evolution of Ivory Tower to Entrepreneurial Paradigm. // Research Policy, 29(2), pp. 313–330; Etzkowitz H. (2003) Innovation in innovation: The Triple Helix of university-industry-government relation. // Social Science Information, 42 (3), pp. 293–337.

[6] Etzkowitz H. (2003) Innovation in innovation: The Triple Helix of university-industry-government relation. // Social Science Information, 42 (3), pp. 293–337; Williams G., Kitaev I. (2005) Overview of National Policy Contexts for Entrepreneurialism in Higher Education Institutions // Higher Education Management and Policy, 17 (3), pp. 125–141.

[7] Konstantinov G., Filonovich C. (2007) What is the Entrepreneurial University // The Voprosy Obrazovania, Issue No.1, pp. 49–62.

mission) primarily for the benefit of the university itself – the latter is viewed as "the cradle of new entrepreneurial activities"[1]. However, along with the above specifics, Johan Vissema presents six other important parameters of the new generation of universities:

- Active participation in competition both in the educational field (for best professors and students) and in the research field (for relevant contracts with companies);
- Active partnership and networking with companies, research institutions, other universities and investors, including through multiple external and internal infrastructure facilities. According to Johan Vissema, the existence of the effective international cooperation network is the determinant characteristic of the world's leading modern universities that makes them different from viable, but less advanced and prestigious universities of local importance;
- The multidisciplinary nature of activities, availability of relevant units (institutes) and research teams;
- The combination of mass and elite academic and research programs: implementation of standard higher education training programs and creation of special conditions for the most talented students and professors, carrying out of break-through and "incremental" research and other;
- Cosmopolitanism and multiculturalism with English used as the main language in all the spheres of activities;
- A high extent of universities' independence from the government, primarily, financial independence which can be facilitated, along with attraction of orders from the business and rendering of paid services, by university special purpose capital funds which are normally formed by university graduates.

It is noteworthy that by remaining independent as much as possible both from the government and the business, the entrepreneurial university should be at the same time in a close contact with both of them. Ideally, the definition of new research objectives often of multidisciplinary nature should stem from this networking. However, the transfer of knowledge between universities, state research institutions and companies should be carried out in "the two-lane street" regime[2].

An important component of a university's success consists in the activities of research groups and think-tanks which represent de facto its scientific core. At the entrepreneurial university, such groups should have characteristics common to a successful innovation company: an entrepreneurial initiative, constant search for external sources of funding, distribution of the information on their break-throughs and other, that is, everything

[1] Vissema J. (2016) The Third Generation University: University Steering in the Transition Period. [Translated from English]. – Moscow: The Olimp-Business Publishers.
[2] Clark B. (2001) The Entrepreneurial University: New Foundations for Collegiality, Autonomy, and Achievement // Higher Education Management, 13 (2), pp. 9–24; Etzkowitz H. (2003) Innovation in innovation: The Triple Helix of university-industry-government relation. // Social Science Information, 42 (3), pp. 293–337.

which is needed to reduce cultural differences and promote networking between the university science and the business[1].

The presented concept of the entrepreneurial university has the whole number of characteristics and parameters which make it different from research universities of the former generation (*Table 26*). In its turn, the complexity of transformation of universities into a new entrepreneurial model is justified by this situation. Burton Clark, architect of the concept of the entrepreneurial university singles out the three important conditions[2]:

(1) Strengthening of the steering core. In different countries and universities, the steering core may be different, but in any case it should include both the university's central steering bodies and academic units and be guided in its activities simultaneously both by managerial and academic principles and values. Development of the steering core makes it possible for universities to become more active and flexible, as well as be more oriented to the requirements of demand. It is to be noted that for the entrepreneurial university it is as much important as for traditional research universities to maintain the team-spirit and joint leadership both within the frameworks of research groups and department and at the level of the university as a whole, in particular[3];

(2) Expansion of the university's developmental periphery which includes infrastructure facilities in the field of transfer of technologies, intellectual property management, attraction of external sources of funding and even networking with graduates, as well as the university's multidisciplinary research centers. As compared to traditional academic departments, it is easier for such units to go beyond the limits of the university, communicate with outside agencies and research groups and act as intermediaries in networking between university departments and the outside world;

(3) Diversification of financing. Transformation of the university and its functioning in the new capacity requires additional resources. Apart from the baseline state funding which often happens to be reduced, the entrepreneurial university has to make efforts to attract state financing on a tender basis. In addition, the sources of additional funding may come from firms, regional authorities, charity organizations, graduates, students, intellectual properties and other. Such sources ensure not only financial diversification, but also the university's actual institutional independence at least in terms of Gomer Babbidge and Robert Rozenweig who defined it as "a lack of dependence from the narrow base of the sources of support"[4];

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[1] Slaughter S., Leslie L. (1997) Academic Capitalism: Politics, Policies, and the Entrepreneurial University. Baltimore: Johns Hopkins University Press; Subotzky G. (1999) Alternatives to the Entrepreneurial University: New Modes of Knowledge Production in Community Service Programs. // Higher Education, 8 (4), pp. 401–440.

[2] Clark B. (1998) Creating Entrepreneurial Universities: Organizational Pathways of Transformation. Oxford: Pergamon Press.

[3] Clark B. (2001). The Entrepreneurial University: New Foundations for Collegiality, Autonomy, and Achievement // Higher Education Management, 13 (2), pp. 9–24.

[4] Babbidge H., Rosenzweig R. (1962). The Federal Interest in Higher Education. New York: McGraw-Hill.

(4) Support on the part of the university's academic heartland, that is, its traditional departments which account for a larger volume of work. Success or failure of the transformation of the university depends in principle on whether the university's departments accept or oppose the undergoing changes. It is noteworthy that substantial changes are required from academic departments themselves; they should carry out actively entrepreneurial activities, including a search for external partners and additional sources of funding and combine the traditional academic values with new managerial views and approaches;

(5) Introduction of the entrepreneurial culture which first as an idea based on acceptance of changes and then as a system of views and opinions should spread all over the university, including its academic heartland, be integrated into practical activities and become an important component of the university's identity and reputation.

Table 26

Comparison of the model of the research and academic university

	Research university	**Entrepreneurial university**
1	2	3
Key objectives ("missions")	• educational – training of personnel • R&D – development of knowledge and technologies	• educational – training of personnel • R&D – development of knowledge and technologies • innovation – facilitation of utilization by economy and community of created knowledge and technologies
Main function in social and economic system	Development of intellectual and human capital	Facilitation of sustainable social and economic development
Nature of research	Generally, monodisciplinary	Monodisciplinary and multidisciplinary
Personnel training	• experts • researchers	• experts • researchers • entrepreneurs
Model of networking with business	line – supplier of personnel and knowledge	Network– online (occasionally– advanced) response to queries
Model of networking with state	Subordinate with high level of autonomy in business activities	Partnership with almost total independence
Government involvement	Moderate – determination of strategic agenda and financing	low – creation of conditions and participation in development of long-term vision
Identification of prospective lines of development	Independently, but with taking into account objectives formed by state	Independently in dialogue with state and business
Networking with external environment	limited, toughly regulated by formal and informal rules with small number of "enter-exit" points	Independent and active, carried out at all levels
Internal pattern	Rather rigid based on officially identified units – departments, institutes and other	Flexible based on combination of formal and informal units – creative teams and other.
"Role model" of internal departments	Elite research laboratory with strict research focus and rigid hierarchy	Innovation company which is in constant development and search for perspective lines of activities and partners
Cooperation with other departments	It often happens in those lines where there is lack of own competence; often harmonizes with competition in other lines	Inherent to units by virtue of their openness to cooperation and inflow of new knowledge, competences and ideas
Internal culture	Mainly intellectual and elite	Mainly entrepreneurial
Internal steering system	centralized	Decentralized one with emphasis on official and informal units
Optimal leader	Mainly distinguished scientist and official capable of networking with state authorities	Mainly innovator and entrepreneur capable of networking effectively with business, state authorities and professorship
Financial base	Mainly state funding	Diversified one where state is only one of sources
Infrastructure	Generally, internal	External and internal with emphasis on external

Cont'd

1	2	3
Geography of activities	Regional, national and rarely international level	global
Indicators of success	• graduates' employment and professional growth • academic recognition	• self-actualization of graduates • recognition in science and social and business environment • development of sustainable flow of innovation businesses • large-scale commercialization of created technologies • contribution to upgrading of indicators of social and economic development

Source: own compilation based on Clark, 1998; Etzkowitz et al., 2000; Etzkowitz, 2003; Vissema, 2016).

With evident difficulties related to compliance with transformation conditions formulated by Burton Clark, it is important to point out that a large number of universities have already succeeded in advancing much along this pathway. In his classic paper[1], Burton Clark singles out five such examples in Western Europe: the University of Warwick[2] and the University of Strathclyde in the UK, the University of Twente in the Netherlands, the Chalmers University of Technology in Sweden and the University of Joensuu in Finland[3]. Henry Etzkowitz[4] supplements the list of universities' successful transformation into the entrepreneurial phase with the Massachusetts Institute of Technology. Finally, Johan Vissema[5] provides the examples of universities which are passing through the "entrepreneurial" transformation – the Bandung Institute of Technology in Indonesia and the "Angel Kanchev" University of Ruse in Bulgaria – and those which successfully completed such a transformation late in the 20th century – early in the 21st century (the University of Cambridge). Analyzing the "Cambridge phenomenon", Johan Vissema identifies the three major components of its success[6]:

- formation of the university's "innovation belt": infrastructure facilities, such as a technology park, science part, entrepreneurial center, center for transfer of technologies, direct investment fund and other established partly by the university and its graduated and partly on the initiative and at the expense of the government;
- establishment of a large number of high-tech firms mainly owing to effectively functioning infrastructure so that they later managed to form themselves a favorable environment for innovation entrepreneurship;

[1] Clark B. (1998) Creating Entrepreneurial Universities: Organizational Pathways of Transformation. Oxford: Pergamon Press.
[2] Hereinafter, the English names of universities are given.
[3] At present, it is an integral part of the University of Eastern Finland.
[4] Etzkowitz H. (2003) Innovation in innovation: The Triple Helix of university-industry-government relation. // Social Science Information, 42 (3), pp. 293–337.
[5] Vissema J. (2016) The Third Generation University: University Steering in the Transition Period. [Translated from English]. – Moscow: the Olimp-Business Publishers.
[6] Ibid.

- adoption by the university's leadership of the policy of promotion of cooperation with the business.

So, the actively debated model of the entrepreneurial university is by no means detached from the reality and there are numerous instances of implementation thereof, though not always in absolute terms. In addition, according to Burton Clark, the very concept of the entrepreneurial university is a kind of "umbrella" over the collection of ideas about the modern progressive and independent university which is in search of new fields of knowledge and opportunities of development thereof. In networking with the government and the business, such a university is not a trailing side, but a partner and intermediary; also it is noteworthy that universities are capable of forming new "coalitions of knowledge" with participation of other parties[1].

6.4.2. Development of the university sector in different countries: models and the specifics

At present, universities are one of the major actors of the global innovation system, however, their role in generation of new knowledge and facilitation of practical utilization thereof greatly vary at the level of individual countries. In the US, Japan, Korea, Western Europe and Latin America, R&D is an important and integral part of the university's activities (though most of the above countries have a large sector of state-financed specialized research institutes). At the same time, if in the US, Germany and Italy the university research is normally carried out by units and the personnel engaged in the academic process, in other countries, such as the UK, Sweden, Norway and the Netherlands the research work is often de facto separated from the educational process, at least at the personalia level[2].

The high importance of the university science as a whole in a country is often accompanied by uneven distribution of research activities across universities. It is particularly typical of Latin American countries where research activities are mainly concentrated in a small number of elite (generally, state-run) universities, though in some countries, such as Brazil and Mexico, research institutes play an important role, too.

Another model of the university science has been formed in most former Soviet republics and socialist camp countries, as well as India and other countries which earlier gravitated to the Soviet bloc where research activities at universities were deemed as secondary because they were carried out by specialized research institutes and laboratories. However, individual post-communist countries, such as Estonia and Hungary have succeeded greatly in development of the university science sector[3].

[1] Clark B. (2001) The Entrepreneurial University: New Foundations for Collegiality, Autonomy, and Achievement // Higher Education Management, 13 (2), pp. 9–24.
[2] Altbach P., Reisberg L., Rumbley L. (2009) Trends in Global Higher Education: Tracking an Academic Revolution. Paris: UNESCO.
[3] Glänzel W., Schlemmer B. (2007) National research profiles in a changing Europe (1983–2003). an exploratory study of sectoral characteristics in the Triple Helix. // Scientometrics, 70 (2), pp. 267–275;

In China, the well-developed university science coexists with the vast sector of state research institutes; it is noteworthy that the latter account for the larger volume of R&D, while universities yield the prevailing volume of scientific publications[1]. In the higher education sector, research activities are concentrated in a small number (by China's standards) of state-funded elite national universities which are set the goal to build up China's innovation potential and secure leading positions in research areas which are important to the country's economic development and national security. In China, 112 universities – participants in the "211 Project"[2] (that is 6 percent of the total number of China's higher education establishments) – account for nearly 70 percent of the higher education sector's R&D, while most Chinese universities are oriented exclusively to academic activities[3].

The US is conventionally regarded as a particularly successful (if not model) country example of organization of universities' research and innovation activities. *US universities play an important role in R&D: the university science accounts for a larger portion of fundamental research carried out in the US.* Universities' research activities are closely linked with educational activities: leading researchers actively engage in the academic process and utilize the advanced scientific achievements and research outputs in it. It is to be noted that the quality of US university research meets the international standards, while in most areas it sets the standard de facto owing to high professionalism of the higher education teaching personnel and leading scientists attracted from abroad, as well as availability of the advanced material and technical base for R&D, including state-of-the-art research equipment[4].

Along with high research activities, universities pay much attention to commercialization of R&D outputs as they normally have for this purpose the required infrastructure: patent offices, centers for transfer of technologies, engineering centers

Altbach P., Reisberg L., Rumbley L. (2009) Trends in Global Higher Education: Tracking an Academic Revolution. Paris: UNESCO.

[1] Zhou P., Leydesdorff L. (2006) The emergence of China as a leading nation in science. // Research Policy, 35 (1), pp. 83–104.

[2] The project of China's Ministry of Education, which has been carried out since 1995. The project envisages state support for China's nearly 100 leading universities to ensure their competitive edge both at the national and international level in research and educational training in accordance with the challenges of the 21st century. The name of the project is derived from the combination of the figures "21" and "100" (for more details, see, for example, Zhao, Zhu, 2010; Cai, 2013).

[3] Zha Q. (2009) Diversification or homogenization: how governments and markets have combined to (re)shape Chinese higher education in its recent massification process. // Higher Education, 58 (1), pp. 41–58; Zhao L., Zhu J. (2010) China's higher education reform: What has not been changed? // East Asian Policy, 2 (4), pp. 115–125; Cai, Y. (2013) Chinese higher education: The changes in the past two decades and reform tendencies up to 2020. // In: L.d.C. Ferreira & J.A.G. Albuquerque (Eds.), China and Brazil: Challenges and Opportunities. Campinas: Anablumme, pp. 91–118.

[4] Maidanchik B. (2007) The Specifics of the US Higher Education System (University Science). // Izvestia UrGEU. Issue No.2, pp. 86–96; Altbach P., Reisberg L., Rumbley L. (2009) Trends in Global Higher Education: Tracking an Academic Revolution. Paris: UNESCO.

and other. In addition, in the US the university science constitutes traditionally a base for establishing a large number of new firms[1].

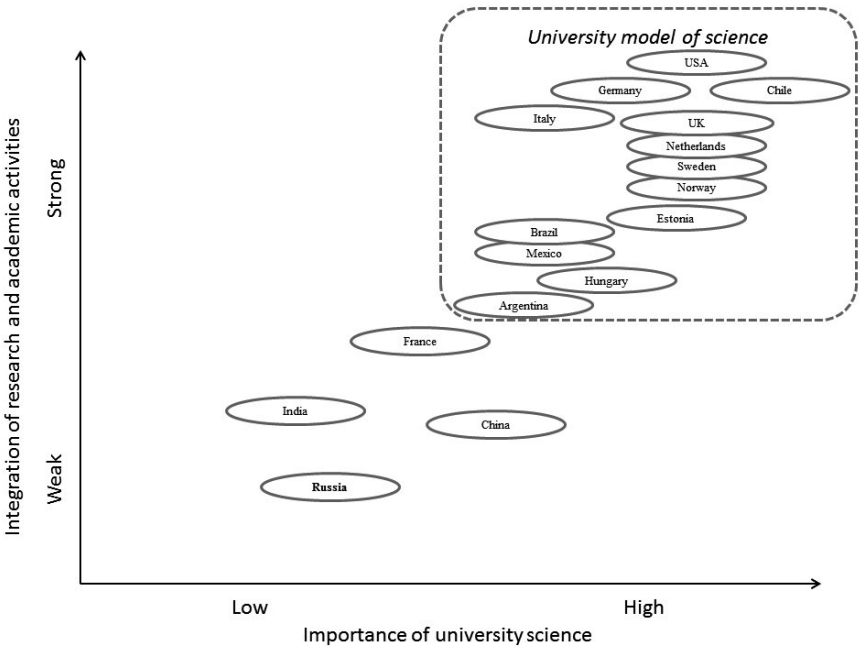


Fig. 4. University science in different countries, qualitative evaluation

Source: own compilation based on Zhou, Leydesdorff, 2006; Maidanchik, 2007; Glänzel, Schlemmer, 2007; Bernasconi, 2008; Altbach et al., 2009; Zha, 2009; Zhao, Zhu, 2010; Cai, 2013).

Undoubtedly, the successful development of the US university science would be infeasible without a sound and diversified financial base. Traditionally, the US federal government pays nearly a half of universities' expenditures on R&D (55 percent in 2015 and 61 percent three years earlier) and another 6 percent is paid by the government of the state and local authorities[2]. A large portion of government funding to universities is provided on a tender basis, while the main sources thereof are the Department of Health

[1] Altbach P., Reisberg L., Rumbley L. (2009) Trends in Global Higher Education: Tracking an Academic Revolution. Paris: UNESCO; Pankova V. (2016) Military Technologies, Innovations and Security. Moscow: IMEMO RAS.

[2] According to the data of the National Science Foundation, National Center for Science and Engineering Statistics. Higher Education Research and Development Survey. Higher education R&D expenditures, by source of funds: FYs 2010–2015. URL: https://ncsesdata.nsf.gov/herd/2015/html/ HERD2015_ DST_02.html

Protection and Human Services, the Defense Department and the National Science Foundation (NSF) which jointly account for about 80 percent of the expenditures on the university science[1]. It is to be noted that there is a whole range of specialized programs aimed at underpinning universities' R&D and research infrastructure, such as the Defense University Research Instrumentation Program (DURIP) and Multidisciplinary University Research Initiatives Program (MURI) sponsored by the US Defense Department and the Established Program to Stimulate Competitive Research (EPSCoR) of the NSF[2]. Apart from the government funding, universities actively attract funding from the business, nongovernment funds and organizations, as well as private donors, primarily, their graduates. Thanks to the established practice of patenting the prospective outputs of R&D, license royalties are an important source of universities' revenues[3].

It is to be remembered that the "quality" standard of US universities varies considerably. The above relates primarily to a dozen of elite universities which have succeeded in all the three components of the "academic mission": education, research and innovation[4]. However, the specifics of the US university sector consists in the fact that unlike other countries where universities are active participants in research activities (China, Korea, Brazil or Chile), in the United States R&D is not limited nation-wide to a small number of "elite" universities.

Interestingly, neither the US, nor other countries (the UK, Switzerland, Sweden, Japan, Korea or Israel) where the role of the higher education sector in R&D is generally believed to be of a paramount importance are attributed to the leaders as regards the share of the university in the overall volume of internal expenditures on R&D. The high index value is primarily typical of former Soviet republics: Georgia, Lithuania, Latvia and Estonia; other small European countries, such as Cyprus, Portugal, Slovakia, Greece and Malta and some new industrial countries, such as Turkey, Chile and Indonesia (*Fig. 5*). The distribution of countries by the unit weight of researchers representing the higher education sector is almost similar, but the leaders as regards this index include other former Soviet republics (Uzbekistan and Kirgizia) and new industrial countries (Malaysia, Iran and South Africa).

[1] According to the data of the National Science Foundation, National Center for Science and Engineering Statistics. Higher Education Research and Development Survey. Federally financed higher education R&D expenditures, by federal agency and R&D field: FY 2015. URL: https://ncsesdata. nsf.gov/herd/2015/html/HERD2015_DST_09.html

[2] In addition, similar programs of support are currently carried out by other four federal agencies – for more details, see (Harris, 2017).

[3] Maidanchik B. (2007) The Specifics of the US Higher Education System (University Science). // Izvestia UrGEU. Issue No.2, pp. 86–96; Gusev A. (2013) University Science in Russia: Transfer of the Western Model and Possible Risks. // Obschestvo i Ekonomika, Issue No. 9, pp. 141–164.

[4] It is to be noted that leading US universities along with some European leading universities were used as a base for the above-mentioned "ideal model" of a modern entrepreneurial university.

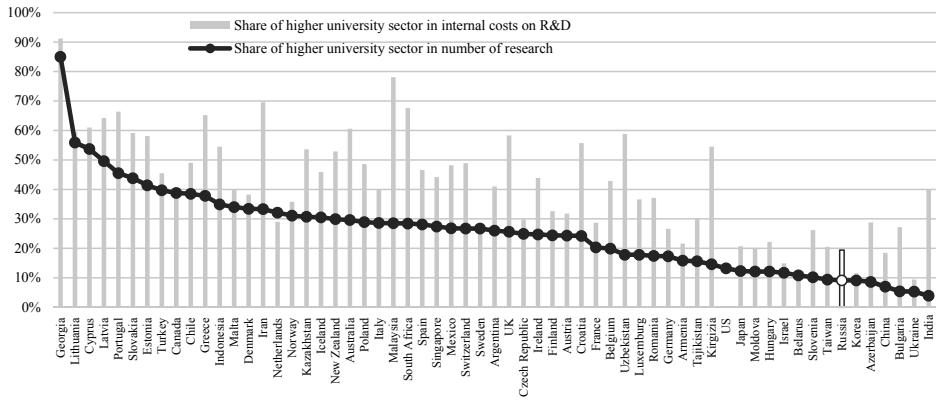


Fig. 5. The unit weight of the higher education sector in internal expenditures on R&D in 2016 (or the nearest year on which the data are available)

Source: NRU HSE, 2018.

The global ratings of the leading universities[1] – the most prominent ones are the QS (QS World University Rankings), the Times Higher Education (THE World University Rankings) and the Academic Ranking of World Universities (ARWU) – permit to get a general idea of the level of development of the university sector in different countries. All the above ratings, as well as the newly established the "Three Missions of University" Moscow International Rating of Higher Education Institutions make an emphasis on the quality and efficiency of universities' research and educational activities, but the methods of formation of the ratings and the scope of facts used in indicators vary considerably (*Table 27*).

As a result, different universities are at the top of the three major global ratings: the Massachusetts Institute of Technology has been the irreplaceable leader of the QS rating since 2012, the University of Oxford has been the leader of the THE rating in the past three years, while the Harvard University has led the ARWU rating for 16 years (the Harvard University is the leader of Russia's "Three Missions of University" rating, too). At the same time, if one examines the rankings of different countries which are usually determined by the top three universities[2], the differences between ratings as regards leader countries are the minimum: the US and the UK are at the top of all the ratings followed by in different order by Canada, Switzerland, Germany, China and Australia. Also, Hong Kong and Japan are among the leaders in two out of the three ratings. The

[1] Definitely, one is aware of substantial limitations of such an approach related to the inevitable conditionality of any methods of the rating process and the bias of obtained outputs. For this reason, one proceeds along the way of simultaneous examination of the outputs of different ratings to neutralize partially the bias.

[2] See, for example, Global Innovation Index 2018, URL: https://www.globalinnovationindex.org/gii-2018-report.

countries with a higher share of universities in internal R&D expenditures are neither represented in the global ratings at all, nor stand far from the leaders (*Fig. 6*).

Table 27

The key aspects of compiling global ratings of leading universities

QS World University Rankings	THE World University Rankings	Academic Ranking of World Universities	Three Missions of University
Utilized data			
Outputs of own surveys and open source data	Outputs of own surveys and open source data	Open source data only	Open source data only
Components (indicators) and weight			
40% - academic reputation of university determined by means of survey of over 80,000 representatives of higher education sector as regards quality of universities' academic and research activities; **20% – ratio between academic staff and students;** **20% – citation related to number of academic staff** in Scopus, normalized by subject area; **10% - reputation of university with employers** based on outputs of survey of 40,000 respondents as regards quality (competence, innovation and efficiency) of graduates; **5% – share of foreign academic staff;** **5% – share of foreign students**.	**30 percent – training (educational environment):** 15 percent – prestige value of university as regards training determined on basis of outputs of survey (over 20,000 respondents); 6 percent – ratio between number of postgraduates who defended their thesis and academic personnel; 4.5 percent – ratio between number of academic personnel and students; 2.25 percent – ratio between number of postgraduates and bachelor's degree students; 2.25 percent – revenues to number of academic staff; **30 percent – research (volume, revenues and reputation):** 18 percent – university's research reputation determined on basis of outputs of survey; 6 percent – revenues from research to number of academic staff; 6 percent – research efficiency – number of publications indexed by Scopus, normalized by size of organizations and subject areas; **30 percent – citation rate (effect of research):** average number of citations accounted for by Scopus, normalized by subject areas; **7.5 percent – internationality (personnel, students and research)**: 2.5 percent – share of foreign students; 2.5 percent – share of foreign employees; 2.5 percent – international cooperation: share of publications with foreign co-authors normalized by subject areas; **2.5 percent – revenues received from business (transfer of knowledge)** to number of academic staff.	**40 percent – number of academic staff:** 20 percent – number of employees who became Nobel Prize winners or were awarded Fields Medal; 20 percent – number of employees included in list of highly quoted researchers of Web of Science; **40 percent – research outputs:** 20 percent – number of papers published by Nature and Science in past five years (except for universities of social and humanitarian profile); 20 percent – number of publications accounted for in Science Citation Index-Expanded and Social Science Citation Index Web of Science; **10 percent – quality of training:** number of graduates (including postgraduates), who became Nobel Prize winners or were awarded Fields Medal; 10 percent – academic efficiency: total of weighted values of main indicators to number of academic personnel.	**45 percent – "Education":** 15 percent – ratio of university's budget to number of students; 15 percent – ratio of number of students to number of academic staff; 8 percent – share of foreign students in total number of students; 7 percent – number of wins at International Student Olympiads; **25 percent – University and Community":** 9 percent – number of university graduates whom individual page is dedicated in Wikipedia; 6 percent – number of university's online courses placed on global online platforms; 4 percent – share of university in overall volume of publications of universities nationwide; 3 percent – total number of pages of university's Web-site indexed by leading search systems; 3 percent – size of Internet audience of university's Web-site; 3 percent – number of university's account subscribers in social networks; 1 percent – number of browsings of university's Web-page in Wikipedia; **20 percent – "Science":** 6 percent – number of scientific prizes of university's academic staff and graduates from IREG list; 5 percent – ratio of revenues from research to number of academic staff; 5 percent – average normalized citation (global level) in Scopus; 5 percent – average normalized citation (global level) in Web of Science; 2 percent – normalized browsings of scientific publications (according to Scopus); 1 percent – average normalized citation (nationwide level) in Scopus; 1 percent – average normalized citation (nationwide level) in Web of Science.

Source: QS World University Rankings Methodology, URL: https://www.topuniversities.com/qs-world-university-rankings/methodology; World University Rankings 2019: methodology, URL: https://www.timeshighereducation.com/world-university-rankings/methodology-world-university-rankings-2019; ARWU2018 Methodology, URL: http://www.shanghairanking.com/ARWU-Methodology-2018.html; Methodology of the "Three Missions of University"Moscow International Rating of Universities, URL: https://mosiur.org/files/methodology_17/BUL_Metod_Tri_missii_ RU.pdf

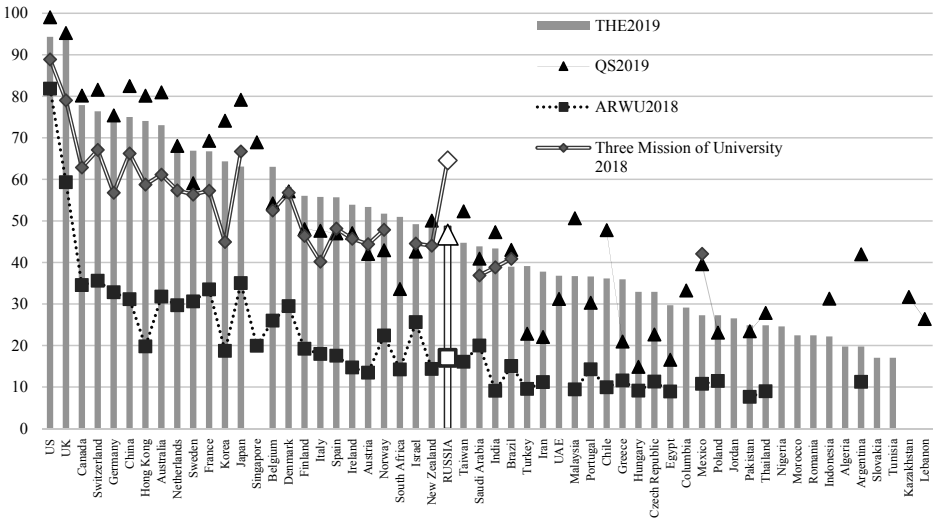


Fig. 6. The average values of the ratings of the country's top three universities in global ratings of universities

Source: own calculations based on the data of the QS World University Rankings 2019, URL: https://www.topuniversities.com/university-rankings/world-university-rankings/2019; THE World University Rankings 2019, URL: https://www.timeshighereducation.com/world-university-rankings/2019/world-ranking#!/page/0/length/25/sort_by/rank/sort_order/asc/cols/stats; Academic Ranking of World Universities 2018, URL: http://www.shanghairanking.com/ARWU2018.html; the "Three Missions of University" Moscow International Rating of Universities, URL: https://mosiur.org/ranking2018/.

It is noteworthy that all the above ratings either completely ignore or pay little attention to the third mission of universities, that is, innovation, by measuring the efficiency and creativity of research activities almost exclusively the number of publications and the rate of citation (*Table 27*). The only exception is the indicator of a university's revenues received from business; this indicator is accounted for by the THE rating with small weight. To remove that gap, let us consider a sub-index of the Global Competitiveness Index reflecting the extent of networking of universities with the business in R&D (*Fig. 7*). For over a decade, the leaders as regards this index are Switzerland, the US, Finland and Germany with Israel, the Netherlands and the UK joining them recently.

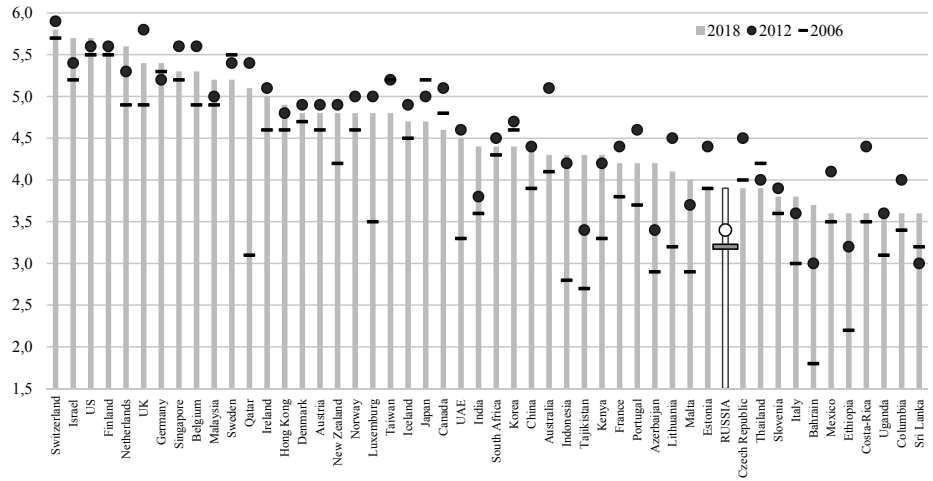


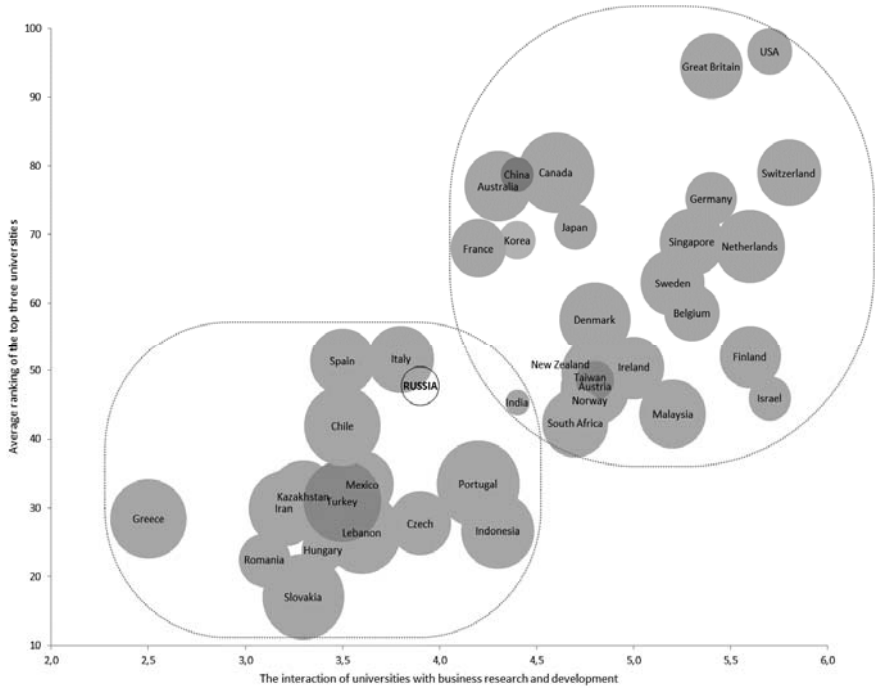
Fig. 7. The extent of the networking of universities with the business in R&D

Note: evaluation on the seven-grade scale (1 – no networking /minimum networking; 7 – broad/intense networking) based on the outputs of the survey of companies' CEOs: in 2018 – 12,300 respondents from 140 countries, in 2012 – 14,100 respondents from 140 countries and in 2006 – 11,200 respondents from 125 countries.

Source: The World Economic Forum. The Global Competitiveness Report 2017–2018. University-industry collaboration in R&D. URL: http://reports.weforum.org/global-competitiveness-index-2017-2018/competitiveness-rankings/#series=EOSQ072; The Global Competitiveness Report 2012 – 2013. Innovation. URL: http://reports.weforum.org/global-competitiveness-report-2012-2013/#=&section=data-tables-gcr_pillar12_2012-13; The Global Competitiveness Report 2006–2007. URL: http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2006-07.pdf.

To get a comprehensive idea of the extent to which the model of an entrepreneurial university is incidental to one or another country (at least at the level of the leading representatives of the university sector), it is necessary to consider the extent of implementation by the university sector of all the three missions to single out this formation of higher education institutions. The two missions – education and research – are fairly completely reflected in global university ratings of which the QS rating and the THE rating will be used because the ARWU rating is heavily "biased" towards the academic science, while the efficiency of implementation of the innovation mission is estimated on the basis of the abovementioned index of networking between universities and the business. This will permit to divide the aggregate of the countries on which all the required data are available into the two groups by the extent of proximity of the leading national universities to the model of an entrepreneurial university (*Fig. 8*). The group of leaders included the leading industrialized countries, as well as "Asian tigers" and some new industrialized countries. The group of the outsiders included individual countries of Southern Europe, a number of new industrialized countries mainly of the

"second" and the "third waves", as well as former socialist camp states and Soviet republics.



Note: The vertical axis shows the average ranking of the top three universities of a country in the QS World University Rankings 2019 and/or the THE World University Rankings 2019;
The horizontal axis shows the value of the index of networking of national universities with the business (Global Competitiveness Index 2017–2018);
The area of the circles is proportional to the share of the university sector in the internal expenditures on R&D in 2016. (or the nearest year on which the data are available).

Fig. 8. The development of the university sector of different countries in terms of the model of an entrepreneurial university

Source: own compilations based on the data of the QS World University Rankings 2019, URL: https://www.topuniversities.com/university-rankings/world-university-rankings/2019; THE World University Rankings 2019, URL: https://www.timeshighereducation.com/world-university-rankings/2019/world-ranking#!/page/0/length/25/sort_by/rank/sort_order/asc/cols/stats; World Economic Forum. The Global Competitiveness Report 2017–2018. University-industry collaboration in R&D. URL: http://reports.weforum.org/global-competitiveness-index-2017-2018/competitiveness-rankings/#series = EOSQ072; Indicators of Science: 2018: Statistical Bulletin. Moscow: NRU HSE, 2018.

Interestingly, BRIC countries are evenly distributed between the groups: China is among the apparent leaders, South Africa and India balance on the boundary of this group, while Russia and Brazil are among the outsiders.

6.4.3. Universities' research and innovation activities in Russia – the current situation and development trends

The specifics of the Russian science which dates back from the Soviet period consists in a considerable unit weight in R&D of "traditional" scientific institutes, that is, institutes included in the system of state academies of sciences (the academic science), as well as research institutes and engineering offices subordinated to sectrorial departments and agencies (the sectorial science); the role of universities in this system is still rather modest. However, since the beginning of the 2000s till the present day, Russia has observed sustainable growth in the volume of R&D carried out by universities and the number of researchers engaged in that work, both in absolute and relative terms (*Fig. 9*). As a result, the number of researchers in the university sector increased by 50 percent, while the volume of R&D in constant prices, by 200 percent. It is to be noted that the highest growth rates were typical of the 2010–2011 period when on the back of the post-crisis revival of the Russian economy the government tried to draw a lesson from the crisis and ensure the "new quality" of economic growth, including by means of a search for new drivers. Universities were expected to become one of such drivers; their role was not confined to educational training alone, they were to become research and innovation centers and for that reason the government started to pay higher attention to research and innovation activities of the university sector (for more details, see below).

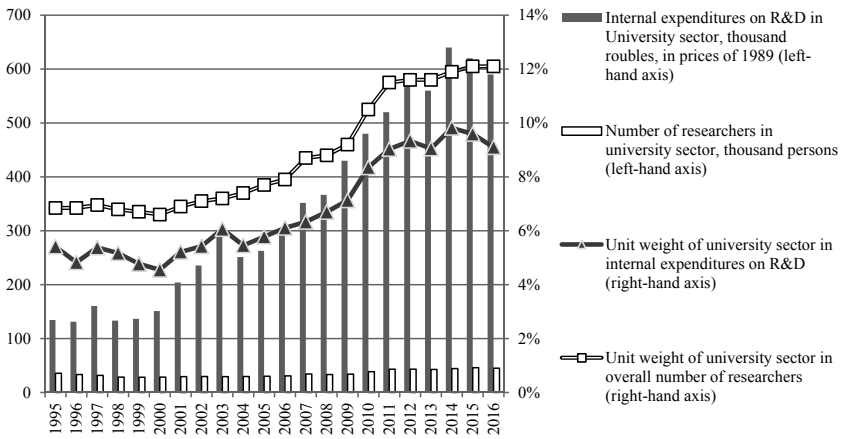


Fig. 9. The dynamics of research activities in the Russian higher education sector in 1995–2016

Source: own compilations based on SU–HSE, 2007; NRU HSE, 2018b.

Growth in the university sector's expenditures on R&D took place on the back of funding of applied research. In the past few years, such research accounted for nearly a half of the university sector's research-related expenditures, while early in the 2000s, for slightly over one-third (*Fig. 10*). Interestingly, within the same period the unit weight of R&D, which is "contiguous" to the applied research, decreased dramatically.

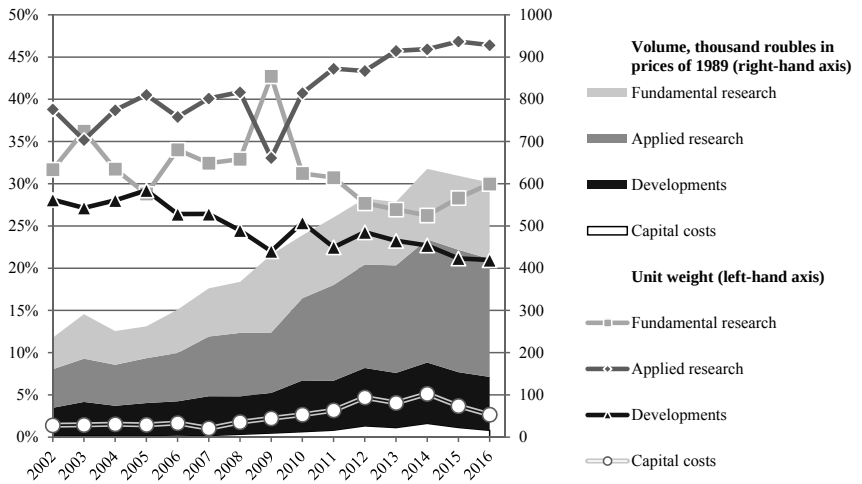


Fig. 10. The Russian university sector's internal expenditures on R&D in 2002–2016

Source: own compilations based on the data of SU–HSE, 2008b; NRU HSE, 2012b, 2013b, 2018b.

Despite substantial growth in absolute and relative indicators of the university science in the past few years, Russia is not among the leaders as regards the unit weight of R&D carried out by the university sector; it lags behind not only industrialized developed countries, but also some new industrialized nations and a number of post-Soviet countries and republics of the former USSR (*Fig. 5*). However, as was shown above, the universities' contribution to the overall volume of R&D, as well as the unit weight of all the researches working in them does not quite adequately reflect the extent of development of the country's university sector and its international competitiveness. Judging by the data of the main global university ratings, Russia is not among the leaders, either, as regards the "quality" of the leading national universities and their activities and is left much behind not only by the US, the UK and Switzerland, but also China, Korea and Finland (*Fig. 6*)[1].

[1] It is to be noted that as compared to foreign ratings the recently established "Three Missions of University" domestic international rating demonstrates much more optimism in respect of Russia's

It is noteworthy that in the past few years the presence of Russian universities in global ratings has largely expanded and consolidated (*Fig. 11*). However, this situation may be the result not only of the successful development of universities, but concentrated efforts to secure a ranking in the ratings and facilitate a subsequent advance upwards in them. One of the RF President's May 2012 Executive Orders determined as a baseline indicator of development of the university sector "the inclusion of at least five Russian universities into the global rating of the world's top 100 leading universities by 2020[1]" (a special mechanism of state support– "Project 5–100" was established soon for that purpose). However, as the university rating methods are open, with such an approach used there is a serious possibility of the initial data being manipulated both by universities and other persons interested in early demonstration of this state policy's success[2,3].

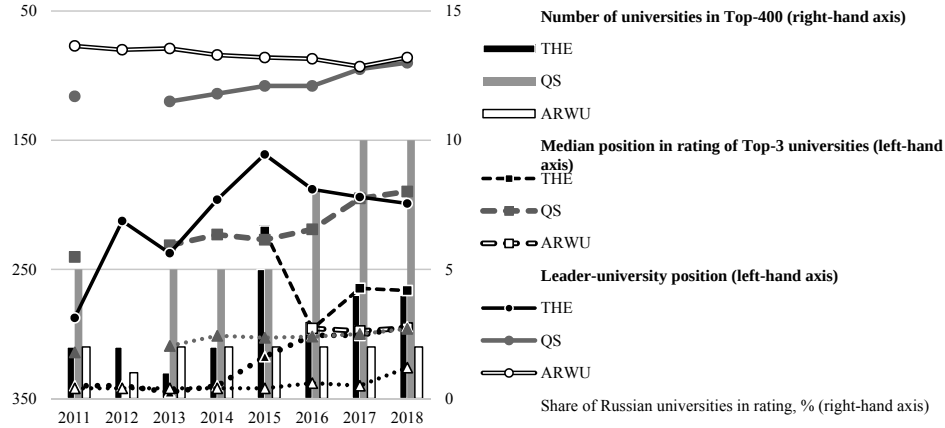


Fig. 11. Russian universities' positions in THE, QS and ARWU ratings in 2011–2018

Source: own compilations based on the data of THE World University Rankings, URL: https://www.timeshighereducation.com/world-university-rankings; QS World University Rankings, URL: https://www.topuniversities.com/qs-world-university-rankings; Academic Ranking of World Universities, URL: http://www.shanghairanking.com/index.html.

ranking by placing it in some distance from undisputable leaders – the US and the UK, but at the same level with Switzerland, China and Japan and above all other countries.

[1] Executive Order No.599 of May 7, 2012 "On Measures on Implementation of the State Policy in Education and Science".

[2] For more details, see, for example, Balatsky E., Ekimova H. (2012) Universities' Global Ratings: Manipulation Issue. The Journal of the New Economic Association, Issue No.1 (13), pp. 126–146.

[3] Generally speaking, such an effect in its various manifestations was repeatedly recognized in economic papers that received a collective name of the Goodhart law (principle) (Goodhart, 1975; Arnold, Fowler, 2011).

In reviewing the ratings of Russian leading universities by component, it should be stated that they lag much behind the world's leaders as regards the rate of scientific citation. At the same time, there are parameters where Russian universities and not only the leading ones occupy positions next to the leaders, for example, the ratio between the number of professors and students (*Fig. 12*).

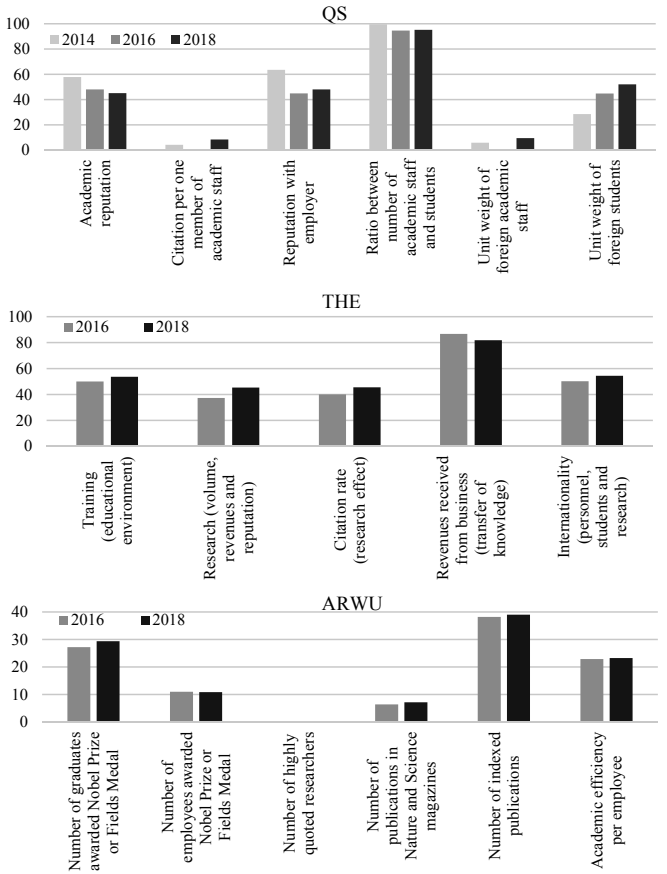
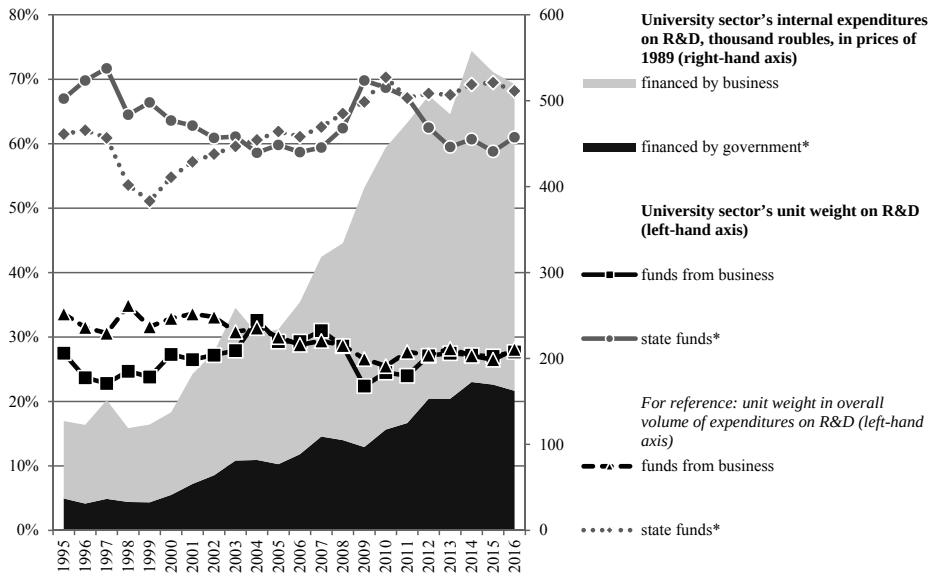


Fig. 12. Average values of the components of the world ratings of the top three Russian universities

Source: own compilations based on the data of THE World University Rankings, URL: https://www.timeshighereducation.com/world-university-rankings; QS World University Rankings, URL: https://www.topuniversities.com/qs-world-university-rankings; Academic Ranking of World Universities, URL: http://www.shanghairanking.com/index.html.

As regards implementation by Russian universities of the third mission, it is to be stated that despite sustainable growth since the early 2000s in the volume of research carried out at the expense of the business, the universities' share in the overall internal expenditures on R&D has not seen any explicit upward trend and varied in the range of 23 percent –33 percent, while in the past few years stabilized at the level of 27 percent – 28 percent with the share of state funding of the university science (including the public sector's companies' funds) explicitly reduced (*Fig. 13*). However, for the Russian science as a whole the relevant pattern looks even less promising: there has been sustainable growth in the unit weight of state financing of R&D and reduction of funding on the part of the business since the early 2000s.



* including funds of public sector entities.

Fig. 13. Funding by the business and the government of the university sector's internal expenditures on R&D in 1995–2016

Source: own compilation based on the data of SU–HSE, 2008b; NRU HSE 2018b.

The available official state statistics data do not permit to get an idea either of the number of higher education establishments networking with the business or the number of enterprises using the university science as a source of implementation of innovations, but with their use one can trace the quantitative dynamics of joint research projects carried out by industrial enterprises and universities, as well as innovation firms practicing such networking. The relevant data point to a rather modest but stable level of networking between industrial enterprises and universities accompanied by gradual

growth in the number of joint research projects, while the cooperation between the industry and research institutions has seen negative dynamics in the past few years (*Fig. 14*).

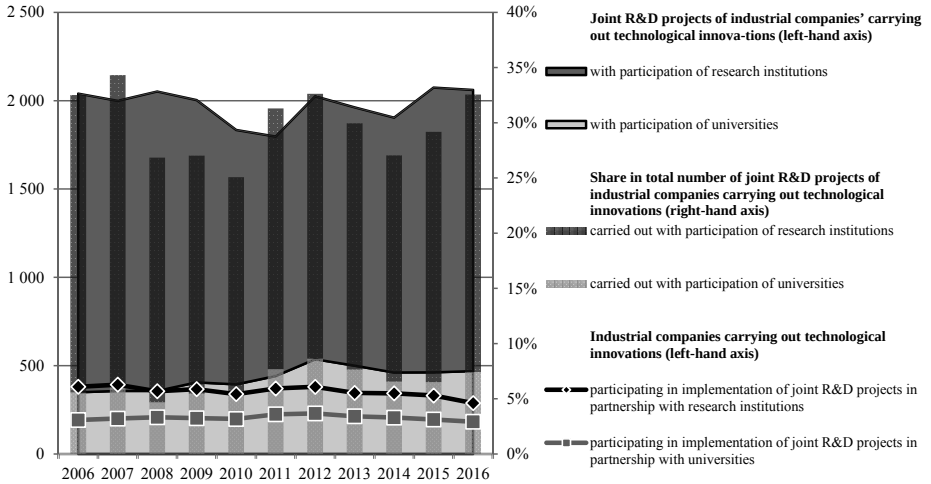


Fig. 14. Joint R&D projects of industrial companies with participation of universities and scientific research institutes in 2006–2016

Source: own compilation based on the data of SU–HSE, 2008a, 2009, 2010; NRU HSE, 2012a, 2013a, 2014, 2015, 2016, 2017, 2018a.

It is noteworthy that according to the above index of networking between universities and the business (*Fig. 7*) Russia, despite the explicit positive dynamics of the past few years, lags behind not only most industrially developed countries and new industrialized nations, but also a number of former Soviet republics.

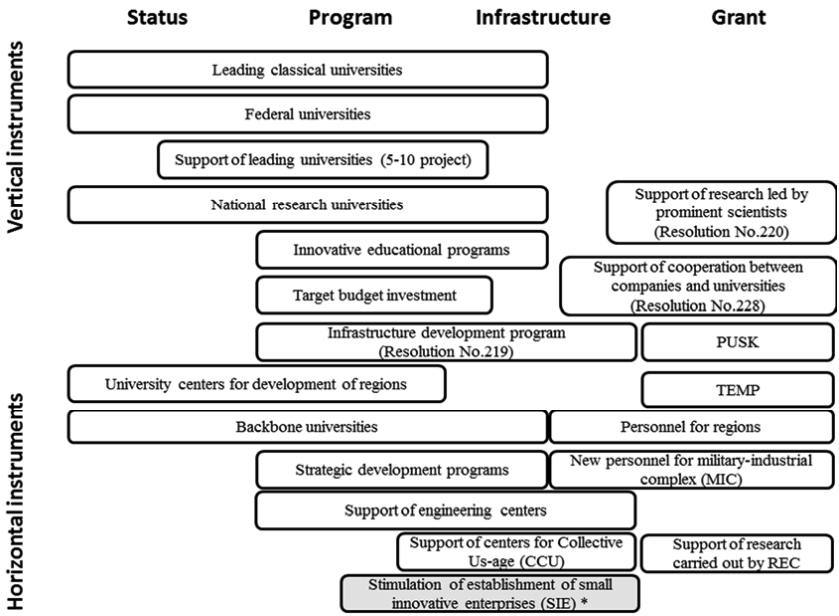
Generally speaking, despite leading Russian universities' some advance in global ratings and gradual growth in the university sector's contribution to R&D, Russia is not among the countries which have succeeded in development of an entrepreneurial university.

6.4.4. State support for development of Russian higher education establishments: the main lines and instruments[1]

From the middle of the past decade, the government started to pay a considerable attention to the comprehensive development of the university sector with an emphasis

[1] This section deals with state support measures and instruments which were initially aimed (completely or primarily) at universities. For this reason, funding of research projects within the frameworks of federal target programs (such as the "R&D in Priority Lines of Russia's Scientific and Technological

being made primarily on universities' research activities. The main formal and conceptual parameters of the state mechanisms of motivation of development of the university sector applied in 2005–2017 are shown in *Table 28*. Generally, the state policy in this field as in many others (in particular, the innovation policy[1] and the industrial policy[2]) is characterized by prevalence of financial instruments (*Fig. 15*).



Note:
The dark color is used to specify the instruments which envisage financial support;
* along with nonfinancial stimulation of the establishment of small innovation enterprises in 2010–2012, the Rosnauka and the Fund for Facilitation of Innovations rendered financial support to joint research projects of small innovation enterprises and research and educational centers (REC), however, this sub-line is accounted for in financial support for REC.

Fig. 15. The specifics of instruments of state support of universities

Source: own compilation.

Complex" Federal Target Program), grants of the Russian Scientific Fund and the Advanced Research Fund and other, in distribution of which universities act on equal terms with other recipients of support, are not taken into account.

[1] Kuzyk M., Simachev Yu. (2013) The Russian Policy of Stimulation of Innovations: Evolution, Achievements, Problems and Results // Section 6.4: The Russian Economy in 2012. The Trends and Prospects (Issue No. 34). Moscow: The Gaidar Institute, pp. 521–571.

[2] Simachev Yu., Kuzyk Moscow, Kuznetsov B., Pogrebnyak E. (2014) Russia on Its Way to New Technological Industrial Policy: Amid Inviting Prospects and Fatal Pitfall // Foresight, 8 (4), pp. 6–23.

Table 28

The main instruments of state support of universities

Instrument	Period of application	Nature of support	Objectives and emphasis	Requirements and limitations	Scope
Support of projects of establishment and development of centers for collective usage of scientific equipment (CCU)	Since 2005	Budget funding of projects	**Science:** implementation of perspective multidisciplinary research projects in priority lines of development of science and technologies in Russian Federation, including in cooperation with world's leading scientific and research centers **education:** participation in training of experts and high-skilled personnel with utilization of CCU's instruments and equipment	• Recipients of support can be federal research institutions and universities • volume of support of one project – up to RUB 100 million a year • at least 80percent of funds should be spent on purchasing of modern scientific equipment	• support was rendered to about 600 CCU, half of them are at universities • recipients of support are over 150 universities • average volume of support of one project is RUB 25 million
"TEMP" program ("Technologies for Small Enterprises")	2005–2010	Financing by Fund for Facilitation of Innovations of R&D of companies which secured relevant licenses from universities	**Innovations:** commercialization of developments carried out by universities and research institutions	License is bought and used by small enterprise individually or together with large enterprise	• funding of over 90 projects • average volume of support of one project is about RUB 9 million
Universities' innovative educational programs	2006–2008	Budget funding of programs	**Education:** application of advanced educational technologies, methods of training and forms of organization of educational processes; ensuring of high quality of training; facilitation of competitiveness of graduates on labor market **education, science and innovations:** integration of educational, scientific and innovation activities	• Volume of support of one program is up to RUB 1 billion • in selection, not only number of programs, but also condition and potential of universities were taken into account	• support of programs of 57 universities; • average volume of support of one program is over RUB 500 million
"PUSK" program (Program of partnership between universities and companies)	2006–2009	Budget funding of research of universities and "quasi-budget" funding (Fund for Facilitation of Innovations) of R&D of small enterprises	**Science:** development of new technologies; **innovations:** adaptation of technology to needs of specific enterprise with introduction into manufacturing **education:** training of experts in field of technology which is under development for subsequent employment at relevant enterprise	• Volume of sales of one project is up to RUB 16 billion (aggregately for university and small enterprise)	• support of 22 projects • average volume of support of one project is about RUB 12 million
Federal universities	Since 2006	• Status (category) • in most cases – budget funding of development programs	**Education:** implementation of innovative educational programs integrated into global educational space; system-based modernization of occupational education; training of personnel based on application of modern educational technologies for comprehensive social and economic development of region **science:** carrying out of fundamental and applied research in wide range of sciences **science, education and innovations:** integration of science, education and manufacturing, including by means of bringing outputs of intellectual activities to practical application	• Federal universities were formed by instructions without open tender • federal universities were established on base of existing state universities; in most cases their consolidation took place through affiliation of other higher and secondary education institutions • budget funding was envisaged by only 8 development programs	• 10 federal universities incorporating about 30 universities were established; • Average volume of support of one program is about RUB 400 million

Instrument	Period of application	Nature of support	Objectives and emphasis	Requirements and limitations	Scope
National research universities	Since 2008	• Status (category) • budget funding of development programs (within five years)	**Education:** providing personnel for priority lines of development of science, technologies , engineering, various economic sectors and social sphere **science and innovations:** development and introduction of high technologies in manufacturing	• It was established initially that for receipt of NRU status, university should carry out on equal basis both educational programs and fundamental and applied research in broad spectrum of sciences • in selection, parameters of university, its potential and efficiency, rather than quality of presented program were primarily taken into account	• Status of NRU was assied to 29 universities • average volume of support of one program is RUB 1.7 billion
Leading classical universities	Since 2009 (legal formalization)	• Status • budget funding of development programs (within 10 years)	**Science and education**: development of unique science and education complexes of great importance for development of Russian society	Formal assignment of special position of two largest Russian universities	• Status was assigned to Lomonosov Moscow State University and St. Petersburg State University • volume of support of each program is over RUB 10 billion
Support of research carried out by teams of research and educational centers (REC)[1]	2009–2013	Budget funding of research projects	**Science:** achievement of scientific results of global level in wide range of scientific research and formation of effective and economically viable research teams **education:** inclusion of postgraduates and students in research teams	Volume of support of 1 project is up to RUB 1.5 million–RUB 15 million (depending on category, subject area and year of beginning of project)	• Support of over 3,000 projects with participation of universities • support was received by about 250 existing universities • average volume of support of one project is about RUB 4 million
Stimulation of establishment by universities of small innovative enterprises (SIE)	Since 2009	• Prospects of establishment of SIE and allocation them with property • prospects of utilization by SIE of simplified scheme of taxation • reduced rates of contributions to state extra-budgetary funds form SIE	**Innovations:** introduction of intellectual activity outputs which rights belong to universities and research institutions	Mechanism is oriented at state and municipal budget-funded entities; tax and other privileges are applied only to SIE established by such entities	2,600 SIE established by 289 existing universities are officially accounted for
Support of joint project between universities and companies on development of high-tech manufacturing (Resolution No.218)	Since 2010	Budget subsidies to companies on funding of R&D carried out by universities within project frameworks	**Innovations:** support of cooperation between universities and companies; optimization of financial, organizational and regulatory mechanisms and facilitation of effective sustainable public-private partnership in implementation of integrated joint projects of universities and enterprises	• Volume of support of one project is up to RUB 130 million –RUB 300 million (depending on duration and year of beginning of project) • state's immediate counterparty is not university, ultimate recipient of support, but company which carries out project	• Support was rendered to over 400 projects with participation of over 100 universities • average volume of support of one

[1] REC is a structural unit (a part of a unit or the aggregate of units) of a university or a R&D and manufacturing entity carrying out general scientific research and training of high-skilled scientific personnel in compliance with the statutes on REC approved by the head of the entity.

Instrument	Period of application	Nature of support	Objectives and emphasis	Requirements and limitations	Scope
			science: determination of available scientific developments and identification of institutes or groups of researchers with potential to solve real objectives of development of knowledge-intensive productions; introduction of modern institutional and management principles of carrying out applied research and development at universities by required lines of high-tech production upgrading **education:** updating of educational programs and subjects areas of research in conformity with modern requirements of technology market	• result of each project should be establishment of high-tech manufacturing of new or upgraded products	project is about RUB 150 million
Programs of development of innovative infrastructure of universities (Resolution No.219)	2010–2012	Budget funding of infrastructure development programs	**Innovations:** formation of innovative environment; promotion of networking between universities and enterprises; support of establishment of SIE by universities	• Volume of support of one program is up to RUB 150 million. • Federal universities could be recipients of support • For receipt of support, university should carry out fundamental and applied research in priority lines of development of science, engineering and technologies and implement a complex of measures aimed at upgrading innovation infrastructure • In tender-based selection, not only presented programs, but also universities' research, educational and innovation potential were taken into account	• Support of 78 programs of 76 existing universities • Average volume of support of one program is RUB 115 million
Support of research led by prominent scientists (Resolution No.220)	Since 2010	Budget grants on research	**Science:** development of integration of Russian science into global scientific space; promotion of mobility and circulation of research personnel; promotion of international scientific cooperation; promotion of universities' activities in R&D and development of their scientific and research potential; attainment of scientific results of global importance; facilitation of establishment of competitive research labs; **science and education:** training of research personnel; integration of university science with training of high-skilled personnel; engagement of students and postgraduates in prospective scientific research led by prominent scientists; upgrading of quality of higher education; training and advanced training of research personnel; upgrading of vocational self-actualization of talented young people and securing of their position in Russian science; **science and innovations:** development of science and innovations in higher education	• grant's volume: up to RUB 90 million – RUB150 million (depending on year of beginning of project) with prospects of additional financing in case of extension of project • Prominent scientist should take leading position in determination of field of science • University's students and postgraduates should be part of research team	• 185 grants were allocated to 65 universities • Average volume of support of one research is about RUB 130 million

Instrument	Period of application	Nature of support	Objectives and emphasis	Requirements and limitations	Scope
			system; facilitation of growth in number of papers with high rate of citation and (or) patent applications for inventions		
Programs of strategic development of universities	2012–2014	Budget funding of development programs	**Education:** harmonization of pattern of vocational education with labor market requirements and strategy of social and economic development of region or sector; active introduction of new methods and technologies in educational process, modernization of labs and experimental base, formation of resource base in accordance with priorities in development of university; upgrading of efficiency of steering of universities, development of best steering practices and formation of institutes of strategic management in accordance with labor market requirements, goals of social and economic development of regions and perspective lines in science and technologies **science, education and innovations:** sustainable development of universities in such lines as talent pool, infrastructure of educational process and research and efficiency of educational, scientific and innovation activities; upgrading of competitiveness of universities at domestic and international level	• Volume of support of one program: up to RUB 300 million • recipients of support were only federal universities subordinate to Ministry of Education and Science of Russian Federation; • universities which received budget funding for implementation of other development programs could not be recipients of support	• Support of 55 programs • average volume of support of one program is about RUB 280 million
Support of programs of high-skilled personnel training for regions' enterprises and entities ("Personnel for Regions")	2013–2015	Budget funding of projects	**Education:** actualization of educational activities of university to prepare human resources for priority lines of economic development **science:** development of scientific infrastructure (including renewal of material and technical base) for implementation of project	• Volume of support of one project is up to RUB 100 million • federal universities subordinate to Ministry of Education and Science of Russian Federation and in regions where there were no universities which won tenders for funding of projects with volume of over RUB 90 million a year held by Ministry of Education and Science of Russian Federation in 2006-2013 were only recipients of support	• Support of 14 projects • average volume of one project is about RUB 50 million.
Support of leading universities in order to promote their competitiveness among world's leading research and educational centers (" 5–100 Project")	Since 2013	• Budget funding of development programs • status of project participant	**Science and education:** development of leading universities to upgrade their competitiveness among world's research and educational centers; listing of at least five Russian universities in rating of world's top 100 leading universities by 2020	Recipients of support were only universities which were included in international ratings and met formal requirements (as regards number of students and postgraduates, volume of expenditures on R&D, number of publications and other)	• Participants in project are 21 universities for rare exception of NRU and FU • average volume of support of one program is about RUB 3.8 billion
Support of projects of establishment and development	Since 2013	Budget funding of projects (state assignment)	**Innovations, education and science:** formation on university base and with their participation of universities of network of	• Recipients of support were only federal universities subordinate to Ministry of	• Support of 49 projects • average volume of

Instrument	Period of application	Nature of support	Objectives and emphasis	Requirements and limitations	Scope
of engineering centers on the base of universities			centers rendering engineering services to real sector entities engaging in training of personnel in engineering field and carrying out development of best available technologies and innovative R&D	Education and Science of Russian Federation • to receive support, university should be oriented on R&D and training of personnel in engineering lines • to receive support, university should establish separate legal entity whose volume of services to real sector is major target indicator, however, recipient of support is not that legal entity, but university • at least half of allocated funds should be spent on purchasing of equipment, software and intangible assets	support of one project is about RUB 90 million
Support of programs of training of personnel for military-industrial complex (MIC) ("New Personnel for MIC" program)	Since 2015	• Funding of projects on purpose training (state assignment) and infrastructure facilitation of purpose training	**Education**: in-depth student training based on introduction of adaptive system of practically oriented purpose development of competences within frameworks of networking and cluster cooperation between universities and MIC enterprises	• Recipients of support are only federal universities subordinate to Ministry of Education and Science of Russian Federation	• Recipients of support were over 80 universities • average volume of support per one university is about RUB 13 million
Backbone universities	Since 2016	• Status • funding of portion of development programs out of federal budget • funding of other development programs out of regional budgets	**Science, education and innovations:** social and economic development of regions, including by means of establishment of university centers for innovative, technological and social development	• Volume of support of one program is up to RUB 600 million • recipients of support are only federal universities • excluded from sphere of support are federal and national research universities, participants in 5-100 Project, as well as universities of Moscow and St. Petersburg • only one backbone university should be situated in one municipal entity • in selection of backbone universities, quality of their programs matters more than characteristics of universities	• 33 universities were selected: 19 universities – development programs were supported out of federal budget, 14 universities – regional budget support; • Average volume of support of programs out of federal budget – about RUB 200 million
University centers of innovation, technological and social development of regions	Since 2017	• Status • funding of transformation programs out of regional budgets	**Science, education and innovations:** involvement of universities in handling of issues of sustainable social and economic development of Russian Federation and subjects of Russian Federation; capitalization of educational, scientific and technological results in region's sectors **science and education:** participation in creation of conditions for system networking between research entities and enterprises through establishment of baseline departments and joint implementation of educational programs and research projects; development of conditions for implementation of project-oriented educational programs meant for team realization of full life cycle projects **science:** harmonization of lines of applied research with Strategy of	Formally declarative procedure for recognition of universities as university centers subject to tough filtration: university should be participant in 5-100 Project, federal and backbone university or meet formal requirements	51 universities were officially recognized as university centers

Instrument	Period of application	Nature of support	Objectives and emphasis	Requirements and limitations	Scope
			Scientific and Technological Development of Russian Federation; **education:** participation in facilitation of conditions for permanent education, promotion of information, financial and legal literacy of individuals and development of vocational competences of professors		
Target budget investments	Annually	Target financing of investment projects	Depending on specific projects	State universities	• In 2005-2017 about 300 universities were recipients of budget investments • average volume of support per one university is about RUB 1 billion

Source: own compilation based on regulatory and statutory acts and procedural and reporting documents and materials of official Internet-sites of state authorities, as well as projects, programs and instruments of support.

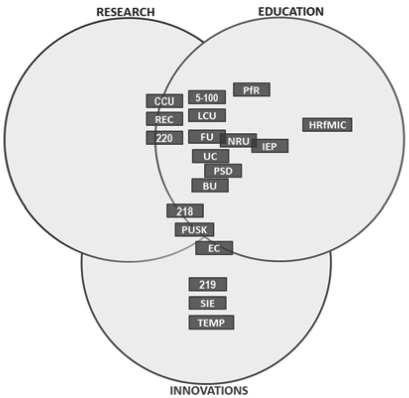
The state support measures were not always of a program nature; their initiation and application was often accompanied by assignment of a special status or category to universities. The state policy's main emphasis was made on the development of universities' material and technical base: a large portion of instruments originally pursued specific purposes (target budget investments, support of projects related to establishment of CCU and engineering centers, programs for development of innovation infrastructure, stimulation of establishment of small innovation companies and other), while in a number of other instruments a similar emphasis is traced de facto (innovative educational programs, and programs of development of federal, national research universities and leading classical universities).

As regards implementation of the three main missions of universities, it is noteworthy that most measures of support are "at the junction" of two missions – educational and research (*Fig. 16*) – so they are more related to support of universities of the former formation, that is, research universities, rather than entrepreneurial universities.

In 2005-2017, the overall volume of federal budget support of universities exceeded RUB 600 billion, which amount is comparable with the total government investments in the same period into all the state institutes for development: the Vneshekonombank, the ROSNANO, the Skolkovo Fund, the RVC and other[1]. The largest volume of support – about RUB 80 billion–RUB 90 billion – was observed in the 2011–2014 inter-crisis period when the government, on one side, was much concerned with a search for and "cultivation" of new drivers of sustainable growth (universities were expected to become one of such drivers), while, on the other side, did not switch over yet to handling

[1] For more details, see: Simachev Yu., Kuzyk M. (2017) The Effect of State Institutes for Development on Innovation Behavior of Companies: Quality Effects // Voprossy Ekonomiki, Issue No.2, pp. 109–135.

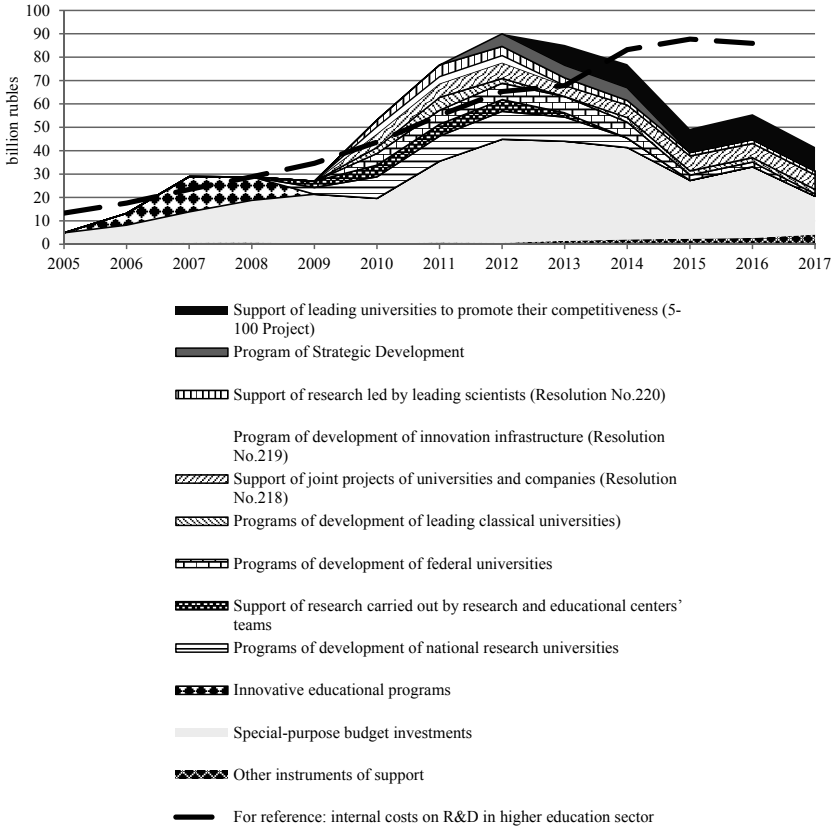
of new issues, which arose as a result of changes in the foreign policy and foreign economic situation, such as reduction of dependence of backbone industries on the imports.



Note: hereinafter the following abbreviations are used:
CCU is support of development of centers for collective usage of research equipment;
TEMP is the "Technology for Small Business" Program;
IEP is innovative educational programs;
PUSK is the "Partnership between Universities and Companies" Program;
FU is federal universities;
NRU is national research universities;
LCU is leading classical universities;
REC is support of research and educational centers;
SIE is stimulation of establishment by universities of small innovation enterprises;
218 is support cooperation between universities and companies within the frameworks of implementation of projects on establishment of high-tech manufacturing (Resolution No.218 of April 09, 2010 of the Government of the Russian Federation);
219 is programs of development of universities' innovation infrastructure (Resolution No.219 of April 09, 2010 of the Government of the Russian Federation);
220 is support of scientific research led by prominent scientists (Resolution No.220 of April 09, 2010 of the Government of the Russian Federation);
PSD is programs of strategic development of universities;
PfR is support of projects related to training of high-skilled human resources for enterprises and entities of various regions ("Personnel for Regions");
EC is support of establishment and development of engineering centers;
5–100 is support of leading universities to promote their competitiveness among the leading international research and educational centers (the "5–100" Project);
HRfMIC is support of programs of the system of training of human resources for MIC ("New HR for MIC" Program);
BU is backbone universities;
UC is university centers of innovative, technological and social development of regions;
SPBI is special-purpose budget investments

Fig. 16. The focus of state support instruments aimed at development of universities

Source: own compilation



* funds of budget of all the levels and public sector entities.

Fig. 17. Volumes of federal budget financial support of universities in 2005–2017

Source: own compilation based on regulatory and statutory acts, reporting documents and materials of the official Internet-sites of state authorities, as well as projects, programs and instruments of support; Indikatory Nauki (Indicators of Science), 2018: Statistical Bulletin. Moscow, NRU HSE.

The largest overall volume of university funding is ensured through special-purpose budget investments. This line of support exceeds several times over other mechanisms of state support of universities, among which, in its turn, the leaders are the support of joint projects of universities and companies within the frameworks of Resolution No.218 of April 09, 2010 of the Government of the Russian Federation, the "5–100" Project, as well as support of programs of development of NRU and federal universities

(*Fig. 18*). At the same time, if the volumes of budget funds per project or program are concerned, the apparent leader is the financial support of programs of development of leading classical universities followed by the support of universities within the framework of the "5–100" Project.

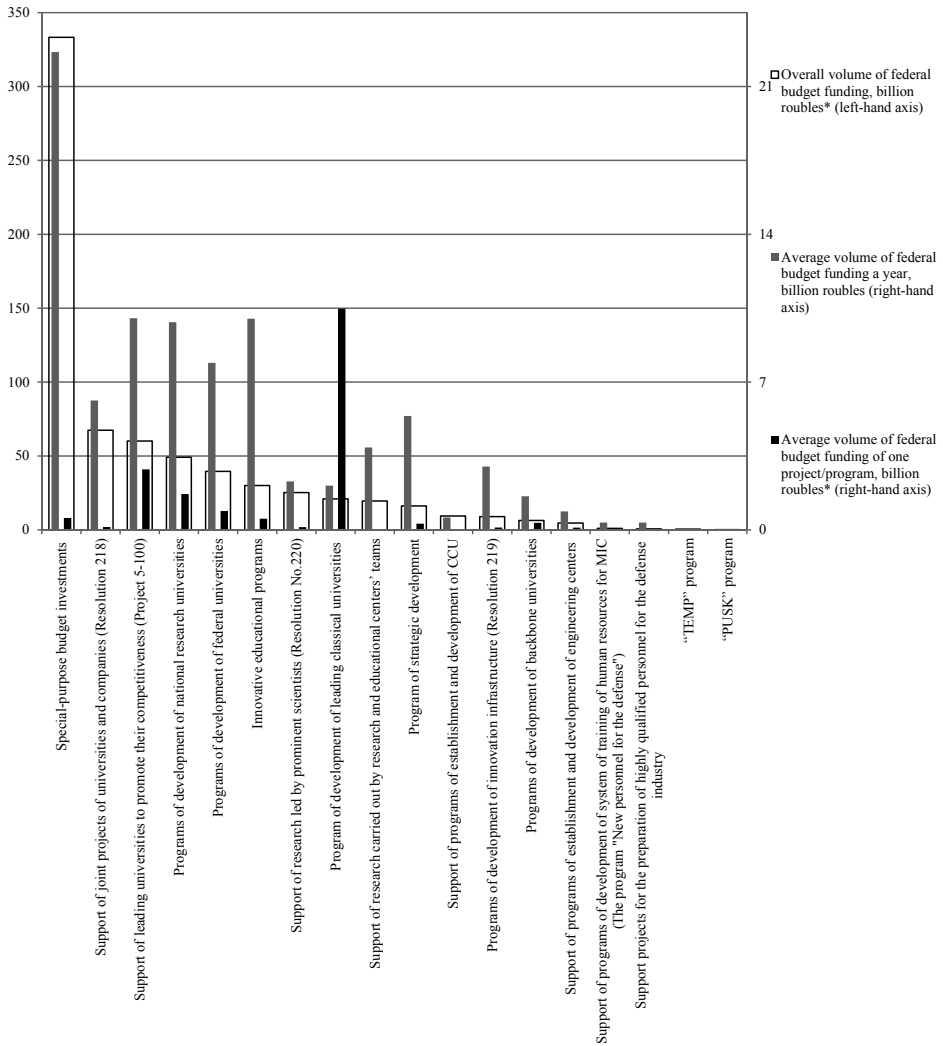
In 2005–2017, 414 universities[1] or nearly a half of their total number received state support. It is to be noted that the overwhelming majority (97 percent) of the beneficiaries are attributed to the state pattern of ownership. As a result, in the period under review 80 percent of state and municipal universities functioning in 2017 and the mere 4 percent of non-government higher education institutions received one or another form of state support. Undoubtedly, such a situation is justified primarily by the fact that most instruments of support are aimed only at state universities, however, the mechanisms which are officially meant for entities of any pattern of ownership are actually rarely applied to non-government universities.

If the "coverage" of individual measures and instruments applied to different entities – the number of beneficiary-universities – is concerned, the leaders in this regards are special-purpose budget investments and the stimulation of the establishment of small innovation companies (each of the above two measures is applied to nearly 300 universities), as well as the support of research carried out by REC's teams (about 250 universities are recipients of this support).

It is worth mentioning the uneven distribution of state support in the university sector: nearly two-thirds of the universities failed to receive any support in the period under review or used only one instrument of support, while 5 percent of the universities were the beneficiaries of ten or more instruments of support (*Fig. 19*). The leaders as regards the number of utilized lines of state support are large regional universities: Tambov State University (TSU), the Tomsk Polytechnic University (TPU), the Novosibirsk State Technical University (NSTU), the Samara State Aerospace University (SSAU) and the Ural Federal University (UFU). Interestingly, one can see among universities, which are beneficiaries of multiple instruments of support, not only universities which are listed permanently on global university ratings, but also less renowned ones, such as the Don State Technical University or the Petrozavodsk State University.

The uneven nature of state support of universities is even more explicit in distribution of budget funding: in 2005-2007, the mere 3 percent of universities accounted for nearly a half of all the allocated federal budget funds. The leaders were the NRU HSE, the Lomonosov Moscow State University, the St. Petersburg State University and the Moscow Institute of Physics and Technology; all the above universities are situated either in Moscow or St. Petersburg.

[1] Strictly speaking, the number of universities – recipients of support was somewhat higher, but a portion of them was reorganized through affiliation with other entities of the higher education sector.



* with budget liabilities taken into account.

Fig. 18. The volume of federal budget funds distributed within the frameworks of different instruments of financial support of universities

Source: own compilation based on regulatory and statutory acts, reporting documents and materials of the official Internet-sites of state authorities, as well as projects, programs and instruments of support.

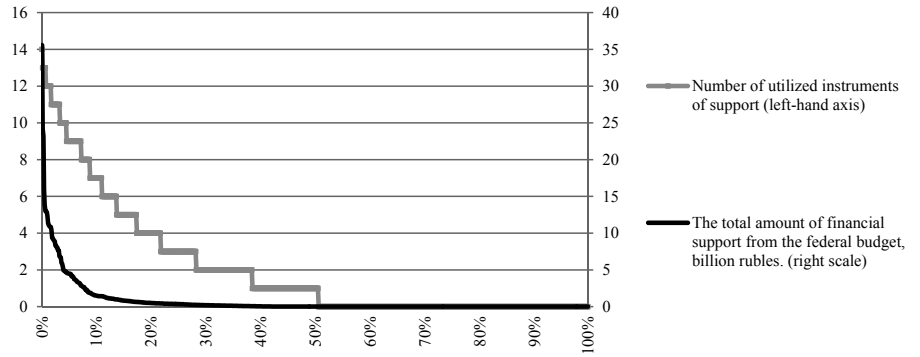


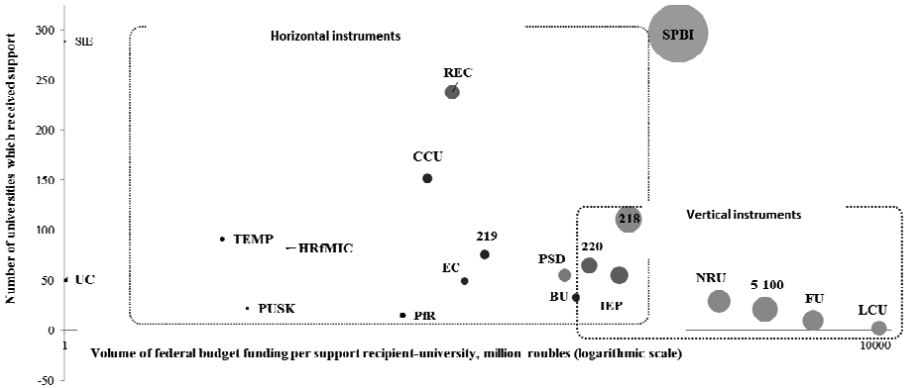
Fig. 19. Distribution of universities by the number of utilized instruments of support and the volume of received federal budget funds in 2005–2017

Source: own compilation based on regulatory and statutory acts, reporting documents and materials of the official Internet-sites of state authorities, as well as projects, programs and instruments of support.

The unevenness of the state support can be clearly seen at the level of individual instruments which envisage the possibility of repeated utilization thereof by one and the same university. For example, six universities – the Lomonosov Moscow State University, the Moscow Institute of Physics and Technology, the Bauman Moscow State Technical University, NRU ITMO and the Ural Federal University account for one-fifth of more than 400 joint projects between universities and companies on development of high-tech manufacturing. The distribution of megagrants on carrying out of research led by prominent scientists is even more uneven. A quarter of such grants was provided to four universities: the Lomonosov Moscow State University, the Novosibirsk State University, the Moscow Institute of Physics and Technology and the St. Petersburg State University. In addition, the Moscow State University has become the apparent leader as regards the support of research carried out by REC, having received almost one-third of the relevant funding distributed between universities. The NRU HSE surpasses explicitly other universities as regards the volume of special-purpose budget investments, having become the recipient of 9 percent of such allocations to the university sector in 2005–2017. The Ural Federal University (UFU) is an undisputed leader as regards organization and development with the state support of centers for collective usage of research equipment; the UFU' pattern includes nearly a dozen and a half of such infrastructure facilities.

Generally, within the frameworks of the state policy of stimulation of development of the university sector one can clearly see the two main lines: the first one – horizontal – includes instruments aimed at a broad range of recipients, relatively moderate (as compared with the other category of instruments) volumes of support of each individual program or project and support to universities which did not receive it before. The other

line – vertical – envisages a large-scale target financial support of a small group of the "privileged" universities (*Fig. 20*). In addition, some instruments of support occupy an intermediate position between these two lines. Special-purpose budget investments are vertical by virtue of their targeting nature, however, they cover a wide range of universities and not necessarily the best and renowned ones. In addition, at the juncture of the horizontal and vertical policies there are universities' innovative educational programs which actually used to perform the role of the predecessor of NRU, as well as the support of joint projects between companies and universities and megagrants on research lead by prominent scientists within frameworks of which the high rate of repetition of support was combined with efforts to cover new universities.



Note. The area of circles corresponds to the aggregate federal budget funding volumes.

Fig. 20. The scope of application of instruments of state support of the university sector (as of the end of 2017)

Source: own compilation based on regulatory and statutory acts, reporting documents and materials of the official Internet-sites of state authorities, as well as projects, programs and instruments of support.

In reviewing any lines and instruments of the state policy, a principle question arises whether the instruments used by the government proved to be effective. The available official data and materials neither provide an exhaustive answer, nor permit to get any ideas to come closer to it. On one side, throughout the entire period of state support a number of important parameters of the university sector's functioning saw an upward trend. On the other side, growth of relevant indicators started before the large-scale state support of universities and took place amid positive dynamics of the entire range of baseline macroindicators.

Generally speaking, to receive the required evidence of efficiency of the state policy it is necessary to identify both the effects which were received thanks to the instruments used by the government and effects which would not have been achieved in case of absence of such instruments. It is important to take into account not only direct outputs

of the support, but also indirect effects, including changes in the behavior of beneficiaries of support and their counterparties[1]. It is to be noted that both direct, indirect and, particularly, behavioral effects often take place with a substantial delay of up to several years. At present, there is no such practice of assessment used by the Russian state management system. Strictly speaking, this makes it impossible to provide well-founded judgments and conclusions not only in respect of the efficiency of the state policy of support of the university sector (as well as other sectors), but also the sustainability and viability of positive changes achieved if the support is stopped.

As regards the efficiency of the state policy of support, one cannot get an answer, either, in reviewing the rankings of Russian universities in the leading international ratings. On one side, in the past few years the presence of Russian universities in ratings has greatly increased: in 2018 as compared to 2013, the number of Russian universities in the QS rating, the ARWU rating and the THE rating increased 1.6-fold, 6-fold and 35-fold, respectively (!) (however, in case of ARWU and THE a low base effect was observed; in the period under review the total number of Russian universities with an assigned rankings increased substantially by 2-fold and 3-fold, respectively). In addition, relatively high rankings are often assigned to universities which are recipients of large volumes of support (*Fig. 21*).

On the other side, the whole range of actively supported state universities, including some federal and national research universities are not present for different reasons in any major global ratings. In addition, unlike the QS rating where the rankings of most Russian universities have been seriously upgraded of late, in the THE rating a larger portion of Russian universities demonstrated negative dynamics. Interestingly, the greatest progress (or the lowest regress) is generally typical of universities which are participants of the "profile" 5-100 Project aimed at upgrading the official rankings of Russian universities in global ratings, which situation in accordance with the abovementioned Goodhart principle may be the evidence not of the actual upgrading of universities' performance, but artificial overstatement of quantitative indicators used in rating.

[1] As a recent example of application of such an approach in Russia, see Simachev Yu, Kuzyk M., Zudin N. (2017) The Results of Fiscal and Tax Support of Russian Companies: Complementarity Check // The Journal of the New Economic Association, Issue No.2, pp. 59–93.

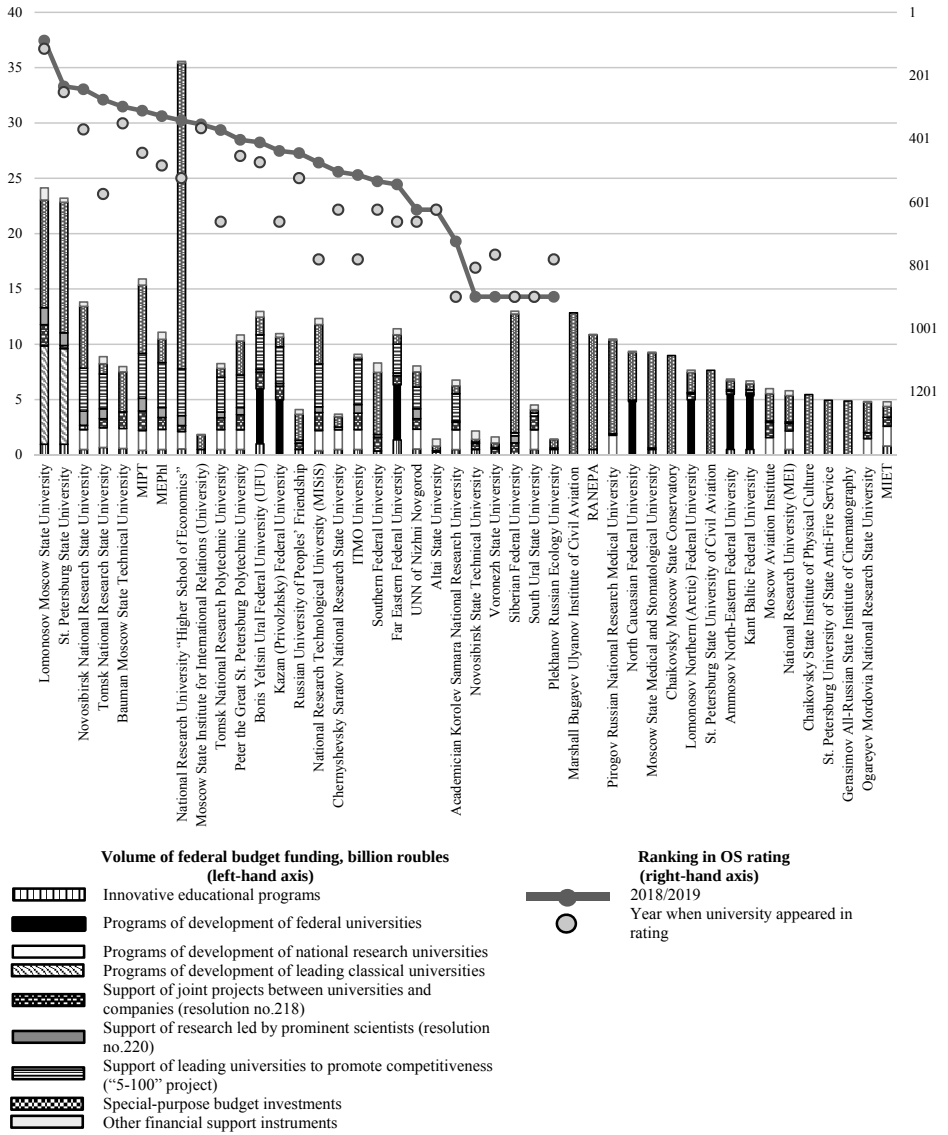


Fig. 21. The overall volume of federal budget financial support to universities in 2005–2017 and rankings of universities in the QS rating

Source: own compilation based on regulatory and statutory acts, reporting documents and materials of the official Internet-sites of state authorities, as well as projects, programs and instruments of support; QS World University Rankings, URL: https://www.topuniversities.com/qs-world-university-rankings.

To our opinion, the idea of a positive effect of the state support on rankings of universities in global ratings is quite realistic, and since the effects of support, as it was already stated, often occur with a substantial delay universities which are either not included in the ratings or have very low rankings may achieve success in the near future. However, it should be repeated again that without the practice of comprehensive assessment of state support used to identify a broad spectrum of effects on universities and separate those effects from the results of influence of other factors, one can assume quite the opposite: the utilized instruments do not effectively facilitate the global competitiveness of Russian universities, while upgrading of rankings of some universities is a result both of a favorable combination of circumstances and intentional manipulations.

* * *

At present, there is a number of evidence pointing to the growing influence of the university sector on the economic development. This factor is often related to the formation and development of a new generation of entities of the higher education sector, that is, entrepreneurial universities.

The "ideal image" of a modern entrepreneurial university is described in detail in the economic literature. The main specifics of an entrepreneurial university consists in the fact that along with educational and research functions it deals with "integration" of human resources it prepares and the knowledge and technologies it creates and develops into the economy and the society in general, thus becoming a key agent of long-term development. Despite the fact that it maintains continuous networking with the government and the business and receives from them the required funds and ideas for its own development, such a university preserves its complete independence in making decisions as regards its specific lines of development. In its turn, the university is an association of closely related independent creative teams managed by the single steering core and guided by the entrepreneurial spirit and culture which make them "ideologically" close to successful innovation firms. Owing largely to their activities, the university is able to go beyond the traditional frameworks of an educational and research institution and actually acts as a diversified corporation which not only produces, but also successfully "realizes" the knowledge and human resources required by the economy and the society in general.

It is noteworthy that the gathering "under the same roof" of a modern university of educational, research and innovation activates entails not only benefits and advantages, but also considerable risks of which the most serious one, in our view, consists in explicit domination of some types of activities to the detriment of others. However, if the innovation activities are able to generate substantial revenues, while perspective scientific projects contribute to consolidation of the academic reputation of the researchers who carry out them, various units and the university as a whole through

reports, publications, quotations and other, as well as permit to attract relevant grants, the educational activities look the least attractive in this situation because the outputs of educational activities become evident only in the long-term prospect, that is, in graduates' successful professional trajectories[1]. For this reason, it is necessary to avoid within the frameworks of functioning of the university any imbalances providing immediate benefits, but entailing risks in the long-term prospect. It is to be noted that according to the opinion of a number of experts the facilitation of the balance between the three main components of the university's activities – education, science and commercialization of the developed technologies – is the objective of the state policy[2]. Without going into discussion of this point of view, it is important to stress that the government's involvement should be like a "fine tuning" and not in the form of directive instructions or "quotas" for specific types of activities, otherwise, a fundamental principle of an entrepreneurial university – independent decision-making within the limits of professional competence – may be undermined.

Undoubtedly, theoretical models of a modern university are idealized to some extent, however, it is to be noted that they have quite real grounds: the "prototypes" of the model of an entrepreneurial university are the world's leading universities, primarily, in the US and Western Europe: the Massachusetts Institute of Technology, the Stanford University, the Cambridge University and other[3]. At the same time, only a small number (across the nation) of elite universities in countries with developed science meet the criteria of an entrepreneurial university. A kind of exception is the US where research and innovation activities are not concentrated with a small group of "elite" universities, but carried out by numerous higher education establishments.

It is noteworthy that the real level of development of the national sector of higher education as a whole and the university science, in particular, correlates weakly with the unit weight of the higher school in R&D: as regards this indicator Russia is comparable, on one side, with the US, Japan, Israel and Korea, while, on the other side, with Kirgizia, Tajikistan and Moldova. The role of the university sector is determined to a greater extent by the level of the "quality" of a country's leading universities, particularly, in terms of all the three major components – educational, scientific and entrepreneurial – of their activities. In such a context, all the industrially and economically developed countries of Western Europe, North America and Asia have advanced considerably in establishment of entrepreneurial universities.

[1] Belyaeva L., Belyaeva M. (2017) University Science: Logistic Turn // Pedagogical Education in Russia, 2017, Issue No. 1, pp. 135–214.

[2] Schartinger D., Polt W., Gassler H., Shibany A. et al. (2002) Good practice in industry–science relations. // European Commission. Benchmarking papers No 5/2002. Luxembourg: Office for Official Publications of the European Communities.

[3] Etzkowitz H., Webster A., Gebhardt C., Cantisano Terra B.R. (2000) The Future of the University and the University of the Future: Evolution of Ivory Tower to Entrepreneurial Paradigm. // Research Policy, 29(2), pp. 313–330; Vissema J. (2016) The Third Generation University: University Steering in the Transition Period. [Translated from English]. – Moscow, The Olimp-Business Publishers.

At present, Russia is not objectively among the leaders as regards introduction of the model of an entrepreneurial university. The situation is complicated by the fact that the Russian university sector has inherited from the Soviet period a back-seat role in generating knowledge and transforming it into commercial products and technologies; despite growth for nearly 20 years in quantitative indices of the university sector's research activities this role has not changed much.

In the past decade, the government has made great efforts to promote research and innovations in the university sector, particularly, after 2009 when it was drawing a lesson from the crisis and sought to facilitate a "new quality" of economic growth. Unlike other numerous lines of the government's activities, the state policy of support of the university sector has its own internal logic, though not quite indisputable one. So, the instruments of a broad "coverage" (stimulation of establishment of innovation firms and support of the projects of CCU and REC) were supplemented with the instruments of support of a small number of leader-universities (programs of development of national research, federal and leading classical universities, as well as the 5-100 Project). Also, it is important to notice the succession of some measures in relation to others: for example, a large-scale short-term support of innovative educational programs has overgrown into a situation where a larger portion of those programs was assigned the permanent status or category; federal and national research universities made up a bulk of participants in the "5-100" Project and this participation in its turn, along with the status of a federal and backbone university, made it easier for them to receive the official recognition as a university center for development of the region.

Generally, within the frameworks of the government's policy of development of the university sector there are two quite different and virtually "transversal" lines. The first line of development envisages a large-scale support of a narrow circle of leader-universities; it is to be noted that the relevant instruments of support were substantially developed in the 2020–2013 inter-crisis period. The other line of development was originally aimed at a broad range of beneficiary-universities and involvement in the state support "orbit" of new players: for this reason, some mechanisms include limitations on participation of universities which were earlier involved in other schemes of support.

As regards the efficiency of the government's instruments aimed at promotion of research and innovation activities in the university sector, this issue remains open. Taking into account the extended period of state support and its substantial volumes, it is believed that it has had a positive effect on development of the university sector as a whole and promotion of the competitiveness of Russian leading universities, though it cannot be stated unambiguously. At the same time, a very high concentration of the support, particularly, financial support, its recurrence and the existence of a relatively small number of permanent "consumers" in proportion to the size of the university sector suggests that the horizontal line of development aimed at the maximum coverage of universities lacks efficiency. Certainly, weak coverage of Russian universities by officially "large-scale" instruments of support can be explained by the fact that a large portion of them are weak and take a passive stance. However, there are limitations on

provision of support both formal – related to the university's form of ownership, departmental subordination and other – and informal, for example, a so-called "effect of Matthew" which is widespread in the state policy when the receipt by an entity of the state support makes that entity more accessible in future[1].

So, with unquestionable importance of support being rendered for development of national leader-universities, the potential of the state influence on promotion of competitiveness of the university sector consists in stepping up the development of the "broad strata" of the Russian university sector. According to the outputs of the research carried out earlier, budget funding mechanisms which traditionally prevail both among the instruments of the state support of universities and in other lines of the state policy suit quite well when they are aimed at specific targets, while for facilitation of a mass coverage it would be better to utilize fiscal instruments, standardization measures, as well as properly "adjusted" activities of institutes for development[2].

Returning to the issue of practical implementation in Russia of the model of an entrepreneurial university, it is to be admitted that the state policy of support of the university sector (and particularly its leading representatives) is aimed de facto at development of the former generation of universities – research universities – rather than entrepreneurial ones. One can agree in this context with the opinion of M. Sokolov that the leading idea of large-scale government's initiatives of the past few years meant to modify the existing university landscape, such as the assignment of categories, support of programs of national research universities and facilitation of the 5-100 Project, was "a research turn, that is, efforts to assess and reward universities on the basis of their compliance with the ideal model of an entrepreneurial university"[3]. The government's relevant activities have had a certain effect: Russia has formed a group of research universities, which effectively combine (or at least able to combine) educational and research activities. However, the number of representatives of this group in different types of research is estimated at about 20–40, while in most Russian universities educational activities are still the prevailing ones[4,5].

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[1] See, for example: Crespi, F., Antonelli, C. (2011). Matthew effects and R&D subsidies: knowledge cumulability in high-tech and low-tech industries. University 'Roma Tre'. Departmental Working Papers of Economics, № 0140.

[2] Ivanov D., Kuzyk M., Simachev Yu. (2012) Stimulation of Innovation Activities of Russian Manufacturing Companies: New Opportunities and Limitations. Foresight, 6 (2), pp. 18–41; Simachev Yu., Kuzyk M., Ivanov D. (2012) Russian Financial Institute for Development: Right Way? // Voprosy Ekonomiki, No.7, pp. 4–29.

[3] Sokolov M. (2017). The Myth about University Strategy // Voprosy Obrazovania, Issue No.2, pp. 36–73.

[4] In academic circles (primarily among the representatives of the academic science) there is a wide-spread opinion that in Russian realities universities can hardly become effective centers for research and transformation of research outputs into manufacturing, so they should concentrate their efforts on training of high-skilled human resources for the needs of the economy (See, for example, Polterovich, 2016).

[5] Abankina I., Aleskerov F., Belousov V., Gokhbert L., Zinkovsky K., KIselgof S., Shvydun S. (2013) The Typology and Analysis of Research and Educational Efficiency of Russian Universities // Foresight,

It is noteworthy that in the period of "the roaring 1990s" Russian universities approached to some extent the model of an entrepreneurial university, having gained a greater independence from the state than before and finding themselves in a situation where they had to look for funds on the market. Universities' units became more self-dependable and their activities, entrepreneurial[1]. However, diversification of funding of universities was ensured mainly through their rendering of paid services, as well as carrying out of other activities (including often non-core utilization of the property) with the research activities being on a downward path. That practice permitted universities to survive in the short-term prospect, but undermined their long-term development[2]. In the past few years, one can see quite the opposite process: on one side, universities have been developing quite successfully their research activities owing, primarily, to the large-scale state support, while on the other side with a formal diversification of channels of financing their dependence on the state has probably grown.

In addition, due to the fact that in the past decade the centralization of university management has greatly increased university units have lost much of their former independence and their entrepreneurial initiatives, both positive and negative in terms of long-term development, became limited[3].

According to T. Klyachko and Vladimir Mau, the growing uncertainties of the external environment which surround modern universities and create the impression of a crisis in their development should not be disregarded. As regards Russia, the main external challenge for universities is a change in the economic model and the growing uncertainty of economic development[4].

In conclusion, it is to be noted that unlike some other experts in our opinion it is feasible to solve the objective of establishing entrepreneurial universities in Russia. However, it requires from the state, which is traditionally the main actor and driver of the development of the university sector, substantial changes, not only in implementation of the policy in the relevant field, but also in its approach to the university sector. Firstly, in stimulating the development of the university sector the state should pay more attention to fulfillment by universities of their third (innovation) mission. Secondly, the state should give universities more independence in determining the lines of development and methods to be used by switching over from the model of "quasitotal control" to the model of "quasiequal partnership" However, in present conditions the latter, as opposed to the former, seems highly unlikely.

7 (3), pp. 48–63; Kuzminov Ya., Semenov D., Frumin I. (2013). The Pattern of the University Network: From Soviet to Russian "Mater Plan". Voprosy Obrazovania, Issue No.4, pp. 8–69.

[1] Sokolov M. (2017). The Myth about University Strategy // Voprosy Obrazovania, Issue No.2, pp. 36–73.

[2] Kuzminov Ya., Semenov D., Frumin I. (2013). The Pattern of the University Network: From от Soviet to Russian "Mater Plan". Voprosy obrazovania, Issue No.4, pp. 8–69.

[3] Sokolov M. (2017). The Myth about University Strategy // Voprosy Obrazovania, Issue No.2, pp. 36–73.

[4] Klyachko T.L., Mau V.A. The Future of Universities. Moscow, The Delo Publishers, 2015.pp. 28, 59.

6.5. Limited liability companies (1998–2018): justice versus common law[1]

6.5.1. Limited liability companies as principal business conduct in Russia

Legal framework of a limited liability company emerged in 1892 in Germany (Gesellschaft mit beschrankter Haftung,GmbH). It did not have any prototypes or models and was artificially created by German Ministry of Justice and approved as a law. Introduction of this legal framework owed largely to strengthening of shareholding legislation, which took place in 1884 as a follow up of a period when shareholding companies popped up using money collected from households in exchange of promise of high interest and accompanied by numerous fraud and abusive practices, taking advantage of liberalism of German shareholding legislation of that time[2].

Small and medium size entrepreneurs needed the opportunity to set up corporations with a low number of participants, relatively small assets and way of secession more complicated than in a shareholding company.

Such a corporation was liable for is debts and participants were exempted from corporation's debts, which made this legal framework attractive. Organizational design required by a limited liability company was adopted from a shareholding company and, therefore, they are frequently called "a younger sister of a shareholding company" in Germany or "small shareholding company".

Limited liability companies became the most popular form of entrepreneurship in Germany: at present, their number exceeded one million and they account for one third of all produced goods and services.

In addition to Germany, limited liability companies exist somehow in a number of civil law countries, i.e. in France (societe a responsabilitee – SARL), Italy (societa responsabilita limitata – SRL), Belgium (private limited liability company), Luxemburg (limited liability company), Portugal (share society). Private company and closed corporation exist in British/American system. Moreover, private limited liability companies can be set up in the USA (LLC)[3].

According to a different view, US private companies are not analogous to limited liability companies[4]. China with their limited liability companies provide another example of a country that adheres to common law model[5].

This legal form is characterized by:

1. Predominance of dispositive norms;

[1] This section was written by Elena Apevalova, RANEPA.
[2] See here and below: Evgeny A. Sukhanov, Comparative corporate right, M. Statut, 2015, pp. 75-77.
[3] See in detail: Corporate right. Edited by Irina. S. Shitkina. V.Wolters Khiver 2007, pp.577 – 581.
[4] Evgeny. A. Sukhanov. Issues of codification of corporate and ownership right. – M. Statit, 2018, p.21.
[5] See in detail: Corporate right. Topical issues of theory and practice. Edited by V.A. Belov – M. Urait, 2015, p. 95

2. Qualities typical for a union of persons and a union of capitals[1];

3. A more facilitated process of establishment of these entities compared to shareholding companies;

4. Lower accounting requirements[2].

Legal regulation of limited liability companies is indeed more dispositive than of shareholding and especially public companies, however, dispositivity level of this regulation is still an argumentative issue[3].

Current law on limited liability companies operating in Russia was adopted in February 1998[4], that is twenty years ago. At present, there are over 3.5 million limited liability companies, i.e. ¾ of 4.5 million registered legal entities[5]. Most of limited liability companies are small and medium-sized businesses.

6.5.2. Legal regulation of limited liability companies in Russia, stages of development and specific models

Russia's transition to market economy demanded new legal regulation of civil turnover and entrepreneurial activity. In 1994, the first part of Civil Code was adopted and it stipulated main provisions on legal entities as well as rules on limited liability companies adopted from Germany as mentioned above.

As from this time, one may speak about stage I **(1994 – January 1998)** in the development of legislation on limited liability companies known for providing **platform for regulation of legal entities, including limited liability companies, as an organizational and legal form**. It was determined that a limited liability company is a company established by one or several persons with authorized capital divided into shares defined per size by constituent documents.

Participants are not liable for its obligations and bear risk of losses associated with the activities of the company according to value of their contributions (Article 87 of the Civil Code of the Russian Federation). It was stated that another economic entity consisting of one person will not be a sole participant of this company (Section 2, Art. 88 of the Civil Code of the Russian Federation). This restriction is related to a dangerous

[1] According to a different view, limited liability companies represent a union of capitals For details, see, for example, Evgeny A. Sukhanov, Opere citato, p.21

[2] See details: Corporate right. Edited by Irina S. Shitkina. M. Wolters Khiver 2007, pp.577-581

[3] See details: Corporate right. Topical issues of theory and practice. Edited by V.A. Belov – M. Urait, 2015, p. 128–129.

[4] Federal law No.14 of February 8, 1998 "On limited liability companies".

[5] A number of scientific publications dedicated to the topic of legal regulation of limited liability companies: Stanislav D. Mogilevsky. Limited liability company. Legislation and practical implementation. M., 2010; Andrey A. Glushetsky. Public and private corporations. Specifics of shares turnover in the authorized capital of a limited liability company: legal and economic aspects. M. Statut, 2017; Andrey A. Glushetsky. Authorized capital: stereotypes and their overcoming. Economic analysis of corporate right standards; V.G.Borodkin "Civil-legal regulation of corporate agreement in Russian legislation: Monography-Justinform, 2017; A.G.Chreniavsky, D.A .Pashintsev, O.A. Ternovaya "International corporate right – Knorus M., 2019 and others.

situation when a group of legal entities may use the same person as sole participant controlling these legal entities and having no financial liability.

Firstly, it means to be responsible for obligations of a bankrupted legal entity caused by instructions of the founder and liability of the main company for obligations of the subsidiary.

According to Article 89 of the Civil Code of the Russian Federation, Agreement and Statutes present constituent documents. General meeting of shareholders will be the supreme governing body with its established competence (Article 91 of the Civil Code of the Russian Federation). Day-to-day management will be carried out by executive body, either collegial or individual. Executive body is accountable to general meeting of shareholders.

In addition, this law reflects on reorganization, liquidation of a company, transmission of a share in the authorized capital to another person and withdrawal of a participant from a company (Articles 92–94 of the Civil Code of the Russian Federation).

Moreover, Article 67 of the Civil Code secured the following rights and obligations of participants of the legal entity: to participate in management of activities, receive information about activities, participate in the distribution of profits; receive part of property remaining after settlements with creditors or its cost, etc. in case of liquidation. These duties include: investment and non- disclosure of confidential information about company's activities, etc., if they are provided for by its constituent documents.

According to Article 68, part 1 of the Civil Code of the Russian Federation, entities can be transformed into companies of a different type or production cooperatives by decision of the general meeting of participants.

Stage II: February 1998–2011, establishment of a system of standards on limited liability companies. In February 1998, Federal Law No.14 “On Limited Liability Companies” dated February 8, 1998 was adopted and consolidated the following standards:

- Subsidiaries and affiliates. A company shall be recognized as a subsidiary if another (principal) company has the ability to influence on decisions taken by this company due to its predominant equity holding or in accordance with the concluded agreement or otherwise. A company shall be recognized dependent if another (principal, participating) company has more than 20% of the authorized capital of the first company (Article 6 of the Federal Law "On Limited Liability Companies");
- withdraw regardless of consent of other participants;
- sell or otherwise award their share in the authorized capital of the company (Article 8, point 1 of the Federal Law "On Limited Liability Companies");
- introduce (terminate and restrict) additional rights for participants according to Statutes of this company (Article 8, point 2 of the Federal Law "On limited liability companies");
- contribute to the authorized capital of the company: monetary evaluation of in-kind contributions approved by unanimous decision of the general meeting;

- invite an independent assessor to evaluate contributions (Article 15 of the Federal Law "On Limited Liability Companies");
- sue for exclusion of a participant seriously violating his/her duties or rendering impossible or hampering company's activity due to his/her actions or inactions. Members possessing the least overall share of 10% of the authorized capital are entitled to have this right (Article 10 of the Federal Law "On Limited Liability Companies");
- increase authorized capital at the expense of the company's property, additional contributions of participants, deposits of third parties accepted by the company if not prohibited by Statutes (Article 17 of the Federal Law "On Limited Liability Companies");
- reduce authorized capital in a format of reducing nominal value of all participants' shares and/or repaying shares owned by the company (Article 20 of the Federal Law "On Limited Liability Companies");
- claim participant's share in the authorized capital. On creditors' demand for a share or part of a share, this request will be fulfilled only as a result of a court decision if there is no sufficient means to cover debts of other participant's property (Article 25 of the Federal Law "On Limited Liability Companies");
- contribute to company assets. Participants have the duty to contribute to company assets if stipulated by Statutes or by decision of a general meeting (Article 27 of the Federal Law "On Limited Liability Companies");
- allocate profits among participants. Company has the right to make a quarterly, semi-annual or annual decision on allocation of its net profit among participants (Article 28 of the Federal Law "On Limited Liability Companies");
- place bonds (Article 31 of the Federal Law "On Limited Liability Companies");
- regarding collegial executive body: It may be envisaged by Statutes, elected by general meeting (Article 41 of the Federal Law "On Limited Liability Companies");
- appeal decisions taken by governing bodies. Decision taken by general meeting violating law, legal acts of the Russian Federation, company's Statutes and rights of a participant who did not vote or voted against the contested decision, may be invalidated by the court (Article 43 of the Federal Law "On Limited Liability Companies".)
- liability of the Board of Directors, sole executive body and members of collegial executive body. All these bodies should act in good faith and reasonable in the company's interests when exercising their rights and duties. They are also liable for damages caused to company by their faulty actions and inactions, unless other grounds and amounts of liability are established by federal law (Article 44 of the Federal Law "On Limited Liability Companies");
- related-party transactions and major transactions (Articles 45, 46 of the Federal Law "On Limited Liability Companies"). Transactions proving interest of members of the Board of Directors, a sole or collegial executive body or of a member, who possesses

more than 20% of total number of votes together with affiliated persons, shall not be settled by company without consent of the general meeting.

A major transaction means a transaction or several interrelated transactions relevant to acquisition, alienation or possibility of alienation of a property by a company, directly or indirectly, with a value more than 25% of the property value unless the Statutes provides for a higher amount of a large transaction. Transactions settled in the ordinary course of business will not be considered major ones;

- auditing commission of the company. It will be elected by general meeting of participants for a period determined by Statutes (Article 47 of the Federal Law "On Limited Liability Companies");
- auditing procedures and public reporting (Article 48–49 of the Federal Law "On Limited Liability Companies");
- documents' storage (Article 50 of the Federal Law "On Limited Liability Companies");

The following principles were developed further:

- authorized capital and shares. (Article 14 of the Federal Law "On Limited Liability Companies");
- executive bodies: the highest body is the meeting of participants, the Board of Directors (supervisory board), the sole executive body (Article 32 of the Federal Law "On Limited Liability Companies");
- standards on general meeting of participants (Articles 33–39 of the Federal Law "On Limited Liability Companies";
- standards on reorganization and liquidation (Articles 51–58 of the Federal Law "On Limited Liability Companies").

As a result, a model of a limited liability company was established and characterized by:

1. Low authorized capital, i.e. Rb 10.000, slightly over 130 Euro;
2. Autonomy from their founder/founders with regard to activities and responsibility;
3. Separation of authorized capital into shares representing transferable complex of property and non-property rights, i.e. rights to take part in corporate organizations and in their management;
4. More complicated procedure of entry/withdrawal of founders compared to shareholding company;
5. Structure of executive bodies adopted from shareholding company.

Limited Liability Company is more attractive when participants are at the same time managers and there is no agency conflict or it is minimized. In this case, participants require much less of external additional management control compared to shareholding companies, i.e. external audit, registrar, state regulator. This will result in reduction of losses.

Innovations focused on exemption of strategic enterprises from legal terms were adopted in 2008–2011 (April 2008)[1]; powers of the Board of Directors which can be attributed to their competence by Statures, for example, definition of main activities, etc.) were significantly expanded, contract proving establishment of the company canceled as a constituent document, a list of issues requiring unanimous[2] decisions and two-thirds[3] majority approved, procedure of shares transmission to other participants clarified, procedure for concluding a pledge share detailed; a new chapter "Maintaining a list of a company members" introduced, wording of interested-party transactions clarified, duty of affiliated persons to notify the company in writing about their own shares confirmed, procedure for concluding major transactions clarified as well as the list of exemptions; procedure for mergers, acquisitions, transformations of companies, etc. clarified (December 2008)[4].

Furthermore, the right to demand transfer of a share in the court was confirmed in July-August 2009[5] if the party to the transaction wrongfully evades its notarization (Article 21 point 11 of the Federal Law "On Limited Liability Companies"); Article concerning appeal of decisions of company's executive bodies confirmed provision stating that "the court has the right to uphold the decision being appealed if the committed violations are not material and decision did not entail losses to the company or this participant or other adverse consequences" (Article 43 point 3 of the Federal Law "On Limited Liability Companies").

Moreover, provisions were added on company's responsibility to provide information, in particular, that a company has the responsibility to provide access to participants to their judicial acts on dispute related to the establishment of the company, management and participation, changes of the grounds or the subject of previously filed claim, etc.

In February 2010, procedure determining payment of a part of the distributed profit of the company was clarified[6] and the period of payment should not exceed 60 days from the date of the decision taken on distribution of profits among participants (Article 28 point 2 of the Federal Law "On Limited Liability Companies").

[1] Federal law No. 58 of April 29, 2008 "On amendments to certain legal acts of the Russian Federation and invalidity of certain provisions of legal acts of the Russian Federation as a result of approval of Federal law on international investment in business companies strategically important for defense and security of the state".

[2] This decision on establishment of a company, approval of its Statues, approval of its monetary evaluation of securities, other matters or property rights or different ones having monetary assessment of rights contributed by founders to pay shares in authorized capital.

[3] Decisions on election of executive bodies, establishment of a revision commission or election of a controller and approval of an auditor have to be made by two thirds of votes.

[4] Federal law No. 312 of December 30, 2008 "On amendments to Part one of the Civil law of the Russian Federation and certain legal acts of the Russian Federation".

[5] Federal law No. 205 of July 19, 2009 "On amendments to certain legal acts of the Russian Federation"

[6] Federal law No. 409 of December 30, 2010 "On amendments to certain legal acts of the Russian Federation relevant to payment of dividends (distribution of profit)."

A participant who has not received his share of a distributed part of profits has the right to demand payment of the respective amount within three years. Statutes may suggest a longer period but not more than 5 years. Deadline set for the appeal will not be prolonged if missed. If a participant did not file such a demand due to violence or threat, it could be regarded as exception (Article 28 point 4of the Federal Law "On Limited Liability Companies").

In July 2011, rules were clarified with regard to reduction of authorized capital of the company[1], in particular, company had the duty to report on this decision to a state organization maintaining registration of legal entities within 3 working days after the decision was taken and publish news in mass media twice a month. Requirements for publication of this news are stipulated in Article 20, points 3, 4 of the Federal Law "On Limited Liability Companies".

Then, the principles below were confirmed as follows:

- terms to claim early fulfillment of obligations for creditors, and/or when impossible, then, terminate it and pay damages 30 days from the date of publication of the last notice on reduction of authorized capital if creditor's claims arose before the notice was published;
- six month limitation of statutes from the date of the last publication on reduction of authorized capital;
- right of the court to refuse satisfaction of the above requirement, if the company proves that as a result of reduction of authorized capital rights of creditors were not violated and provided security was sufficient for proper implementation of duties (Article 20, point 6 of the Federal Law "On Limited Liability Company".

Furthermore, legislator settled the issues of funds and net assets of the company: the cost of such assets except for credit organizations is determined according to accounting data[2], for credit organizations it is the amount of own funds (assets)[3]. Company is obliged to provide access to information on the value of its net assets to any interested party. In addition, the company's annual report should contain information about the size of the company's net assets[4].

[1] Federal law No. 228 of July 18, 2011 "On amendments to certain legal acts of the Russian Federation relevant to reviewing methods of protection of creditors' rights under reduction of authorized capital, change of requirements to business companies in case authorized capital does not correspond to cost of net assets".

[2] Executive order of the Ministry of finances of Russia No. 84n of August 28, 2014 (edited on February 21, 2018) "On adoption of procedure to define cost of net assets".

[3] Instruction of the Bank of Russia No. 2332-Y of November 12, 2009 (edited on June 2, 2016) "On register, forms and procedure of formulation and presentation of accounting forms of credit organizations to Central Bank of the Russian Federation".

[4] Annual report should include:

1) parameters characterizing dynamics of changes of the cost of net assets and authorized capital in the three last completed financial years, including accounting year or every completed financial year if the company exists less than three years;

In the event of reduction of net assets versus authorized capital, the company is obliged to decide on reduction of the authorized capital or on liquidation of the company not later than six months.

Stage III. 2012 until present. The reform of civil legislation introduced systemic changes and formulated fundamental legal standards in the sphere of legal entities' activities aimed at further development of corporate governance standards by changing requirements on reorganization and liquidation of enterprises, introduction of standards on corporate agreements, rights and obligations of companies. The most significant changes concerned the following topics:

a) *introduction of a concept of corporate relations* associated with participation in corporate organizations or their management;

b) *provision of corporate rights* as a compulsory condition for activity of a legal entity;

c) *introduction of a system based on legal forms of legal entities*[1].

Legal entities will be divided into corporate, i.e. those where founders (participants) have the right to participate/be a member and define their supreme body, and unitary entities where founders will not become participants and acquire membership.

Corporate legal entities include business partnerships and societies, agricultural (farmers) households, economic partnerships, production and consumer cooperatives, public organizations, associations (unions), real estate owners associations, Cossack communities entered into relevant register, and small indigenous communities.

According to few authors[2], revision of standards on legal entities was driven basically by the necessity to simplify and unify legal regulation, eliminate multiple current laws and their mutual contradictions and enhance the role of the Civil Code in regulating status of legal entities.

d) *facilitation of constituent documents of legal entities*. All legal entities except business ones must act only in compliance with Statutes approved by founders (participants) while for business companies this will be a constituent agreement of association. It is possible to use standard Statutes approved by relevant government body. Founders have the right to approve internal regulations governing corporate documents.

2) results of analysis of reasons and factors which led to lesser cost of net assets than of authorized capital according to opinion of a single executive body of the company, board of directors (if this board of directors stablished in the company);

3) list of measures assuring compliance of the cost of net assets with the size of authorized capital (Article 30 point 3 of the Federal law "On limited liability companies"

[1] In May 2014, Federal law No.99 of May 5, 2014 "On amendments to chapter four of Part one of the Civil code of the Russian Federation and invalidity of certain provisions of legal acts of the Russian Federation".

[2] Tatiana V. Soifer. Modern trends of development of civil legislation on non-commercial organizations. – //Rossiiskaya – yustitsiya, 2014, No.3, p.8. Codification of Russian private law 2015 (edited by Pavel Krasheninnikov).– Statut, 2015.

e) *members of collegial bodies of a legal entity take the responsibility to act in their interests, in good faith and reasonably*, i.e. the same way as a person authorized to act on behalf of a legal entity. Principle of good faith practically means that mentioned participants of civil turnover must respect rights and interests of the counterparty, avoid abusing their rights, misusing own rights, taking actions aimed at "circumventing" the law and deliberately creating conditions for non-fulfillment of obligations or unjust acquisition of rights. Civil law cannot prescribe and prohibit any possible violations of someone's interest in practice, that is why it is important for courts to have the opportunity to recognize those or other persons dishonest and their actions to be abuse of the right.

Moreover, in our opinion, introduction of this principle brings this legal system closer to common law using the opportunity to take a decision based on general principles rather and specific norms.

f) *confirmation of responsibility of the person authorized to speak on their behalf as well as members of collegial bodies of legal entities* (with the exception of those who voted against the decision that caused losses or, acting in good faith, did not vote). The above-mentioned persons will be obliged to compensate damages caused to legal entity as a result of their fault at the request of legal entity and/or its founders (participants). Joint and several liability is envisaged if there are joint losses. Agreements to limit or eliminate such liability are void. In fact, a mechanism introduced to protect interests of the owner from abuses of management, which is a common practice in Russia. Practice of dealing with issues of recovery of losses from members of the board of directors has not yet developed;

g) *a significant change of reorganization standards of legal entities* – the possibility of a comprehensive reorganization of legal entities has been introduced, i.e. reorganization of a legal entity with a simultaneous combination of various forms of reorganization as well as reorganization involving more than two legal entities, including those belonging to different organizational and legal forms. It seems that these expanded abilities of reorganization will make it difficult to ascertain legal succession and contribute to the abuse by reorganized enterprises;

h) *introduction of the concept "non-operating legal entity*", which is a legal entity that for 12 months did not submit reporting documents provided for by the legislation on taxes and fees and did not carry out transactions at least at one bank account. Such an entity will be considered to have actually terminated its activities and subject to exclusion from the unified state register of legal entities, which does not prevent members of its governing bodies, individuals determining its actions from taking responsibility. Introduction of these procedures is considered positive, and will contribute to "clear" the market from abandoned companies and one-day firms;

i) *introduction of general provisions on participants' rights and duties*. It largely repeats the existing rules on rights and duties of legal entities. The new provisions are the following: to participate in corporate decisions required to continue corporation's activity, if their participation is critical for making such a decision, as well as duty to

avoid taking actions to the detriment of the corporation interests. It is important to secure the following rights:

– demand remuneration of losses caused to the corporation acting on their behalf;

– challenge transactions settled by the corporation and demand application of consequences of invalidity of void transactions.

Law and constituent document of a corporation may include other rights and obligations for its participants.

Members of the corporation collegial executive body have rights to receive information about corporation's activities, get acquainted with accounting and other documentation, claim compensation for corporation's losses, challenge transactions settled by corporation and claim application of consequences of invalidity of null and void transaction;

j) option *to redistribute powers of participants disproportionately to their shares in the authorized capital is a new approach to regulation of activities of non-public business companies*. This option can be realized when included in the Statutes or in a corporate agreement subject to introduction of this information into the Unified State Register of Legal Entities.

Thus, a new mechanism capable to change the distribution of forces in corporate governance was presented to participants of limited liability companies. Having mutually agreed, participants have the possibility to implement other regulation different from law on regulation;

k) *general provisions on the authorized capital of the economic company were also developed*. Only cash means have to contribute to authorized capital. Monetary assessment of in-kind contributions to the authorized capital should be implemented by an independent appraiser. Participants of the economic company were forbidden to determine monetary value of in-kind contributions above the value determined by the appraiser;

l) *solidarity subsidiary liability of participants and independent appraiser* determined in case company's property is insufficient when paying shares by non-monetary funds in the amount equal to overestimated evaluation of property contributed to authorized capital within 5 years from registration of the company and/or making relevant changes to Statutes. Such responsibility does not apply to companies set up in the process of privatization through privatization of unitary enterprises.

In 2012–2018, more stringent requirements for a number of transactions, i.e. notarial form, were introduced to the Federal law "On Limited Liability Companies" and notary has the right to make sure that alienated shares have been fully paid. Substantial changes pertained to articles on interested party transactions and major transactions. Interested party transactions are no longer required.

A different procedure for approval of interested-party transactions or instruction on non- application of interest standards can be established by the company Statutes. Only those transactions that go beyond the ordinary course of business are considered major transactions. New rules on option plan were introduced.

In 2014, a concept of a standard Statutes of limited liability companies was introduced in Article 52 of the Civil Code of the Russian Federation. Today there are 36 of them[1]. A real opportunity to choose a standard OOO Statutes will come into force only after June 25, 2019[2].

In 2016, Federal Notarial Chamber received an opportunity to maintain and store the list of participants included in the register of lists of participants of limited liability companies under unique information notarial system. The deadline for liquidation was reduced to one year. It was stipulated that the company's Statutes may provide for the need to obtain the consent of the board of directors or the general meeting to conduct certain transactions.

Existing law "On Limited Liability Companies" is twenty years old and the selected German model is characterized by the following principles:

- relatively low authorized capital, i.e. Rb 10.000, slightly more than130 Euro;
- company act and take responsibility independently from their founder/founders;
- authorized capital is divided into shares representing a complex of property and non-property rights, i.e. rights to take part in corporate organizations and their management;
- more complicated procedure of entry/withdrawal of founders compared to shareholding company;
- structure of LLC executive bodies adopted from shareholding company.
- predominance of dispositive standards in the legal regulation of limited liability companies;
- existing model of limited liability companies possess features of a union of persons and capital;
- lower accounting requirements for limited liability companies.

6.5.3. On certain issues of regulation of the limited liability companies

First of all, let us focus on corporate agreements. The first corporate agreements appeared in Russia nearly in the 90-s when participants of Russian economic companies wanted to bring out corporate agreements from Russian regulation[3].

[1] Presentation by Irina S. Shitkina at the Gaidar forum 2019 on January 17, 2019- http://gaidarforum.ru/about/mediamaterials/video17-yanvary-2019/

[2] Standard OOO Statutes in 2018- https://www.regberry.ru/registraciya-ooo/tipovoy-ustav-ooo-v-2017-godu.

[3] Corporate agreements were brought out from Russian regulation owing to such standard schemes as: 1) establishment of a holding structure with a conclusion of shareholders agreement on international right with regard to company switched under international jurisdiction; 2) application of international right directly to the agreement when establishment of a holding structure not possible. D.E. Lovyrev. Legal specifics of corporate agreements//Text of the presentation at the conference " Practice of implementation of shareholders agreement and responsibility issues of executive bodies, shareholders and participants of shareholding companies and limited liability companies" URL: http://www.mzs.ru/upload/iblock/434/434a72b108ab8584352722a2c0c37607.pdf

In 2006, decisions taken on specific issues of ZAO "Russian Standard Insurance" and OAO "Megafon" stated that principles of shareholders' agreements were recognized invalid as legislation lacked any detailed rule governing regulation of such agreements. However, courts did not investigate each individual principle of the agreement for its compliance with nature of corporate relations and obligations self-imposed by the parties[1].

Issues related to application of international law with regard to corporate agreements failed practical resolution for long enough. The reason was that corporate agreements "are at the junction of two areas of private law", which are characterized by opposing approaches at the level of private international law. It is a fact that principle of autonomy of the parties dominates in the area of contractual duties with parties having the opportunity to choose the law applicable to the contract (Article 1210 of the Civil Code of the Russian Federation).

On the opposite, corporate right represents an area of practically inseparable and imperative supremacy of private law of a legal entity understood as its right according to its place of state registration (Article 1202, point 1 of the Civil Code of the Russian Federation)[2].

Later, in December 2008[3] legislator adjusted separately agreements on rights of participants of an economic company and shareholding agreements in June 2009[4]. Adopted standards did not provide for a system and raised many questions among practitioners and theorists.

When Federal Law No.260 "On Amendments to Part Three of the Civil Code of the Russian Federation" of September 30, 2013 was adopted, it stated that parties to a corporate agreement including a foreign element have the right to subordinate its contract to an international law according Article 1214 of the Civil Code of the Russian Federation, however, obligatory taking into consideration imperative standards of a country where this legal entity was established and that is contracted.

Further development of standards on corporate agreements took place along with the reform of civil law, when, as of September 1, 2014[5], general provisions on a corporate agreement were enshrined (Article 67.2 of the Civil Code). Thus, participants of the economic company or some of them are entitled to conclude an agreement among themselves on exercising their corporate (membership) rights (corporate agreement).

[1] See details: V.G. Borodkin. Civil/legal regulation of corporate agreement in the Russian legislation: Monography. D.I.Stepanov. New provisions of Civil code on legal entities//Law 2014. N7.C.-Justinform 2017, pp. 14-15

[2] See details: V.G. Borodkin. Civil/legal regulation of corporate agreement in the Russian legislation: Monography. – Jusinform 2017, p.19

[3] Federal law No.312 of December 30, 2008 (edited on May 5, 2014) "O amendments to part one of the Civil code of the Russian Federation and certain legal acts of the Russian Federation"

[4] Federal law No.115 of June 3, 2009 (edited on June 29, 2015) "O amendments to Federal law "On shareholding companies" and Article 30 of the Federal law "On the market of securities".

[5] Federal law No.99 of May 5, 2014 "On amendments to chapter four of Part one of the Civil code of the Russian Federation and invalidity of certain provisions of legal acts of the Russian Federation".

Participants are obliged to implement these rights somehow according to the agreement or abstain from their implementation, i.e.to vote in a certain manner at the general meeting, fulfil other coordinated managerial acts, purchase or alienate shares in its authorized capital under specific circumstances or abstain from alienation of shares under specific circumstance.

A corporate agreement will not oblige its participants to vote in accordance with the instructions of executive bodies, determine structure of executive bodies and their competence. The terms of a corporate agreement that contradict the above rules are void.

Prior to adoption of changes to the Civil Code, the scope of powers of participants in the economic company was determined solely in proportion to their shares in the company's authorized capital. A corporate agreement may provide for a different amount of powers. A prerequisite is to include information on availability of such an agreement and on the scope of competence of the company's participants provided for in the unified state register of legal entities (Article 66, point 1, para 2 of the Civil Code of the Russian Federation). This can change influence and balance of power in corporate decisions, amount of dividends, etc.

Corporate agreement may include an obligation to vote at the general meeting of participants for provisions defining structure of executive bodies and their competence, to be included in the Statutes if, in accordance with the Civil Code and laws on business companies it is allowed to apply Statutes in order to change structure of executive bodies of the company and their competence.

Participants of business partnership having concluded a corporate agreement must notify the company about the fact of conclusion of a corporate agreement and its content does not have to be disclosed. When this obligation is not fulfilled, participants not being parties to the corporate agreement are entitled to claim compensation for their losses.

Unless otherwise provided by law, information on the content of a corporate agreement concluded by participants of a non-public company shall not be subject to disclosure and considered confidential.

Creditors and other third parties may also conclude an agreement with participants of economic company which obliges participants to exercise somehow their corporate rights in order to ensure legally protected interest of such third parties or refrain (refuse) from their implementation, i.e. vote in a specific manner at the general meeting, carry out other coordinated managerial actions, acquire or alienate shares of its authorized capital according to a special cost or refrain from alienation of shares prior to establishment of special circumstances. Rules on corporate agreement relevantly apply to this agreement.

Opposite from Russian law, corporate contract (agreement) is known for over a century for its developed international law enforcement, being part of common as well as continental law. At the same time, judicial and doctrinal recognition of such agreements did not happen at once. Corporate agreements were questioned for extended

period in law enforcement and science. However, at present, corporate agreements are recognized as an integral part of regulations governing relations between participants under international doctrine and judicial acts[1].

There are two principal positions with regard to the limits of the subject of a corporate agreement for participants of economic companies. The first one confirms unlimited subject of such an agreement relevant to management and activities of this company. This approach is typical for Great Britain and USA[2]. Practice of corporate agreements in closed corporations is most developed in the USA with specified agreements between participants of corporation and agreements with members of the Board of Directors. The latter are traditionally focused on certain curtailment of freedom to take decisions by members of the Board of Directors.

In England, a corporate contract may contain corporate governance, financial, accounting issues, procedure for transmission of company's shares and others matters regulating relations of the parties with regard to specific circumstances which may include conditions for exercising rights to demand sales of company's shares due to insolvency of the other party, substantial violation of its contractual obligations as well as changes in the composition of shareholders or indirect owners of a party to a contract in the event of "change of control" situation. Such an extensive regulation is associated with a long tradition of common law system.

The second position means that the subject of a corporate contract is limited to issues related to procedures for exercising corporate rights by shareholders and this is typical for Western Europe and Russia. If Europe has experience in concluding corporate contracts, the, most often there is no relevant legislation. Where it exists, for example, in Italy, there are only two articles dedicated to a corporate contract, included in the legislation in 2003 and containing strictly imperative rules on such contracts.

Civil Law of Italy titles them accompanying corporate legal contracts with mainly historical background. These contracts should not contradict illegal imperative norms and their subject is very limited, i.e.: exercise of voting rights in a shareholding company or in its parent company; restrictions on transmission of shares or participation in such companies; mutual control over subsidiaries, however, period of their validity is limited to 5 years (Art. 2341-bis Civil Code). In public companies, such contracts have to be publicly announced at general meetings and their contents recorded in the minutes of the meeting and in the commercial register (Art. 231 -ter CC).

Corporate contracts were mostly expanded in Switzerland and after a series of doubts, nevertheless, it allowed an option to conclude mutual contracts relevant not only to

[1] V.G. Borodkin. Civil/legal regulation of corporate agreement in the Russian legislation: Monography.-Jusinform 2017, p.4

[2] Here and below: D.V. Dobrachev. Topical issues of judicial practice in corporate and entrepreneurial right.-M. Infotropic Media, 2018

coordinated voting but also to preliminary or preferential purchase of shares exclusively between participants of small (private, non- public) shareholding companies, impose certain additional obligations on shareholders (refraining from mutual competition, not disclosing certain information) or grant them additional rights (to receive information and even participate in decision making), treating them as contracts of shareholders' rights but firmly stating their obligation-legal nature, which, therefore, does not affect the relationship between a party to such contract and shareholding company as a whole.

Such a contract does not provide participants with additional corporate rights, it is not a constituent document or an annex to company's statutes. If regulation of the contract on the implementation of participants' rights in an economic society is an essential stage of development for Russian legislation, recognition of such contracts by courts is a long historical tradition in English law.

These norms are stipulated in the Russian civil law while in English law legal norms relevant to these contracts are primarily expressed under existing precedent law. According to several authors[1], extension of scope of a corporate contract may serve as a platform for abuse due to legal opportunity to output corporate governance beyond governing bodies of a business entity.

Significant mitigation of responsibility at all levels of corporate relations, including the responsibility of corporations and individuals determining their activities to creditors, i.e. other participants of civil circulation may lead to adoption of such norms. A company could become dependent not only on company's participants but also on third parties who take part in shaping the terms of a specific corporate agreement[2].

According to a different view, a corporate contract contains such a regulation of their relations, which corresponds to their goals of participation in corporate management. Last but not the least, parties received a real opportunity to protect their rights in case of violation of a corporate contract by one or several signatories[3].

Limited liability companies face another significant issue, that is, the insecurity of creditors' rights. In order to ensure debtor's economic responsibility, creditors' interests have to be protected. In continental law, it happens at the expense of large authorized capital. In common law, authorized capital is minimal or does not exist and therefore protection of creditors' interests is carried out by means of a follow-up control (ex post).

Mandatory inspection of actual property status plays critical role in this system in order to prevent insolvency resulted from "redistribution of property". Directors should organize such an inspection using "solvency test." In order to increase protection of

[1] See details: Evgeny A. Sukhanov. Comparative corporate right.-M. Statut, 2015
[2] Decision of the Council on codification and improvement of civil legislation under the President of the Russian Federation of August 1, 2011, Protocol No.98. Civil Law Review Journal, 2011 No.5
[3] See D.I. Stepanov. New provisions of the Civil code on legal entities//Law 2014. N7.C.37

creditors, common corporate law strengthen personal subsidiary liability of directors and tighten rules on bankruptcy.

What is the situation in Russia? On one hand, the European (German) model of solid capital is used as a basis. On the other hand, the size of the authorized capital is pure symbolic (in Germany, for comparison, it accounts for 25.000 Euro), i.e. it does not protect interests of the creditors. At the same time, there is no follow-up system of monitoring, typical for British/American legal system. This leads to both the insecurity of creditors' rights and conditions for emergence of fictitious companies.

It seems that legislator should gradually increase the size of the authorized capital. At the same time, members of limited liability companies should have an opportunity to switch to individual entrepreneurship.

What are the prospects? The model of legal regulation of limited liability companies was shaped and its characteristics discussed above in details. German model served as a basis. It took twenty years to develop the foundation and key provisions relevant to activities of limited liability companies.

Nowadays, a trend focused on a higher specificity of legislation relevant to limited liability companies, regulation of acute issues, frequently used gaps and resolution of existing contradictions dominates in legal practice. Definition of the most important principles to be followed shall be an alternative in legal practice, which is typical for common law with its traditionally strong "judicial" law. Although it is possible to point out the convergence of continental and common law as a tendency, such emphasis on "judicial" law is not yet possible.

Norms adopted under reform of the civil law (2012–2018) present to a certain extent a compromise between continental and common law systems in terms of regulation of business societies, in particular, size of the authorized capital and corporate contracts mentioned above. In this regard, it is extremely important to secure balanced interests of shareholders of limited liability companies and of other interested parties including creditors and the state.

As for development of corporate legislation[1] in relation to limited liability companies, the following trends are topical inter alia: compliance (harmonization) of federal laws on business companies with the Civil Code of the Russian Federation, dispositive regulation of priority right of shareholders of a limited liability company to the acquisition of shares sold to third parties, amendment of rules on foreclosure of shares in a limited liability company in terms of determining value of shares in order to ensure effective protection of interests of creditors pledgees and acquirers of shares by tenders, invention of a mechanism for simultaneous recording of transmission of shares in several business entities, reduction of excessive requirements to business companies in terms of disclosure (provision) of information.

[1] See: URL: http://static.government.ru/media/files/ne0vGNJUk9SQjlGNNsXlX2d2CpCho9qS.pdf/

6.6. Government support of small and medium sized entrepreneurship in Russia[1]

Support of the small and medium sized entrepreneurship (SME) sector is recognized to be one of Russia's economic policy priorities[2,3]. It is customary to speak of that sector's low level of development compared with other countries. However, when comparable estimates are applied, the gap does not appear to be catastrophic. The relative share of SMEs in the value added produced by Russia's business sector amounts to about 44 percent, in the developed countries – OECD member states it amounts on average to 55 percent, in the USA – to 48 percent, and in Canada – to 30 percent. The problems faced by Russian SMEs, in qualitative terms, are as follows: the percentage of exporters and technological startups is low, and a greater part of that sector is unregulated; in 2018, the relative share of medium sized firms and the number of technological startups shrank even further.

The conditions for and specific features of the SME sector's development vary across Russia's regions, and this fact is completely overlooked by prevailing legislation. According to our estimations, entrepreneurial activity in the regions does not depend on government support, instead responding to macroeconomic and institutional changes. In 2018, in a majority of Russian regions, the number of SME subjects and their turnover declined in response to shrinking personal income, especially in the regions with a high relative share taken up by the shadow sector, while the same indices increased in those regions that hosted the FIFA World Cup events.

According to the results of business surveys, 91 percent of firms have never relied on government support instruments. Direct federal support measures may create wrong incentives for SMEs and obstacles to the elaboration of adequate policies in regions and municipalities. For example, tax exemptions and an access to government purchases encourage firms to artificially split up, while government support equalization for all the regions and cuts on subsidies do not create any stimuli for local authorities to engage in a more systemic interaction with small businesses. Direct support measures target only a negligible number of SME subjects (less than 3 percent).

The goals set by the SME Development Strategy and the Presidential Executive Order, in view of the current macroeconomic situation and institutional conditions, can be achieved only at the formal level. Previously, entrepreneurial policies were very often elaborated inconsistently, with no regard for the regional and other specificities of SMEs, and statistics were controversial. However, no qualitative development can be

[1] This section was written by V. Barinova, Gaidar Institute, RANEPA, RFTA; S. Zemtsov, Gaidar Institute, RANEPA, RFTA; Yu. Tsareva, RANEPA, RFTA.

[2] RF Government Directive No 1083-r dated June 2, 2016 'On Strategy of Small and Medium-sized Business Development in the Russian Federation for the Period until 2030' // Government of the Russian Federation. 2016. URL: http://government.ru/docs/23354/

[3] Executive Order of the President of the Russian Federation No 204 dated May 7, 2018 'On National Goals and Strategic Objectives of the *Russian Federation* through to 2024'. 2018. URL: http://www.kremlin.ru/acts/bank/43027

possible in the SME sector without correct and statistically substantiated targets. From 2017 onwards, direct support measures (subsidies, loans, government purchases) have been prevailing. There could be an alternative approach, i.e. the creation in the regions of local development institutions for SMEs, a professional investor pool, a specialized private and non-profit infrastructure, and support of entrepreneurial networks (in cooperation with consultants and local authorities).

6.6.1. The main development trends in Russia's SMB sector in 2017–2018

The main indicator of development in the SME sector is the role it plays in the national economy. According to official data released by *Rosstat* and the RF Ministry of Economic Development, the relative share of the SME sector in GDP increased from 21.6 percent in 2016 to 21.9 percent in 2017 (18.5 percent in 2012) (*Fig. 22*), while by the number of persons employed, it increased from 26.3 percent in 2017 to 26.5 percent in 2018.

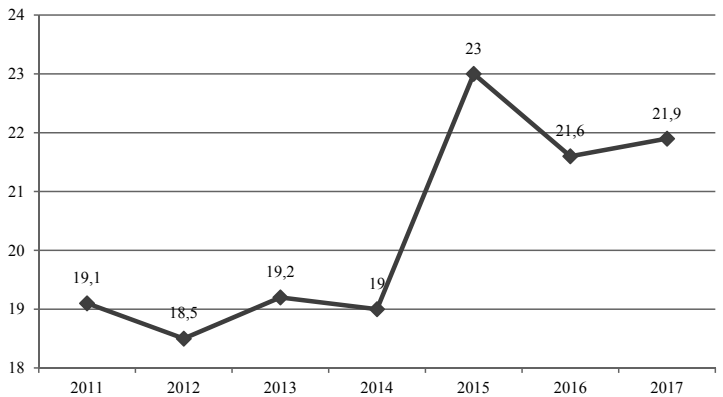


Fig. 22. The movement pattern of the GDP share of gross value added of SME subjects over the period 2011–2017, percent[1]

Source: Rosstat; RF Ministry of Economic Development.

Table 29 shows the main characteristics of the SME sector and their movement patterns in 2018. The number of SMEs in 2017–2018 increased only slightly – by 2.4 percent, or by 138,700. The highest growth rates in the SME sector were observed in several big regions that hosted the FIFA World Cup events[2]. This happened due to the increased number of firms operating in the services sector (trade, catering, lease of

[1] According to *Rosstat*, it is not correct to compare available data for 2015–2016 as a time series, because the criteria for attributing economic subjects to the category of SME were altered in 2016.
[2] For further details, see RBC at https://pro.rbc.ru/news/5c21e5a49a7947148c93660f

housing accommodations, entertainment). Overall across the 13 regions hosting those events, growth over the period from mid-2017 through mid-2018 was twice the regional average (3 percent), thus accounting for about 95 percent of the total number of new firms. In particular, the number of small and medium sized enterprises jumped as follows: in Moscow by 4.6 percent, in St. Petersburg by 3.6 percent, in Samara Oblast by 3.6 percent, in Leningrad Oblast by 5.6 percent, and in Moscow Oblast by 3.3 percent. During that period, the number of SMEs was shrinking at the fastest rates in several regions of the North Caucasian Federal Okrug (NCFO), most probably as a result of many small firms having shifted into the shadow sector. The decline in the Far Eastern Federal Okrug was 0.68 percent, and in the Arctic zone of the Russian Federation – 2.1 percent. In the northern regions, the negative factor could be the requirement to switch over to online cashier registers, which pushed firms to the unregulated business sector, because the businesses operating in remote settlements were unable to comply with the established rules, for financial and technological reasons, and also for lack of reliable Internet access.

Table 29

The main characteristics of the SME sector in 2016–2018

	Individual entrepreneurs	Micro companies	Small companies	Medium sized companies	SME subjects, total
Data as of November 10, 2017					
The number of SMEs, units	3,105,636	2,498,152	238,893	19,679	5,862,360
Average staffing number, thousands of persons	5,418.8	5,452.4	6,290.7	1,904.7	19,066.6
Average staffing number per enterprise, persons	1.7	2.2	26.3	96.8	3.3
Output of goods and services, billions of rubles	761	1,665	909	262	3,597
Productivity, millions of rubles per person	0.1	0.3	0.1	0.1	0.2
Structure of indices by enterprise size in 2017, percent					
Number of SMEs	52.98	42.61	4.08	0.34	100.00
Average staffing number	28.42	28.60	32.99	9.99	100.00
Output of goods and services	21.16	46.29	25.27	7.28	100.00
Data as of November 10, 2018					
Number of SMEs, units	3,316 472	2,441 283	224,741	18,595	6,001,091
Average staffing number, thousands of persons	5,771.3	5,885.1	5,820.9	1,787.2	19,264.4
Average staffing number per enterprise, persons	1.7	2.4	25.9	96.1	3.2
Output of goods and services, billions of rubles	1,105	2,369	895	271	4, 640
Productivity, millions of rubles per person	0.19	0.4	0.15	0.15	0.24
Structure of indices by enterprise size in 2018, percent					
Number of enterprises	55.3	40.7	3.7	0.3	100.00
Average staffing number	30.0	30.5	30.2	9.3	100.00
Output of goods and services	23.8	51.1	19.3	5.8	100.00

Source: Unified Register of Subjects of Small and Medium Sized Entrepreneurship. URL: https://ofd.nalog.ru.

Nationwide in 2018, the number of medium sized firms (those with the highest competitive capacity) declined by 5.5 percent, and their relative share in the SME sector shrank by nearly 12 percent. The number of legal entities operating in the SME sector declined over the course of 2018 by 72,000 units, while that of individual entrepreneurs (IEs) increased by 210,800. Some of them could emerge in connection with the FIFA World Cup events, thus moving away from the shadow sector (or from the self-employed category).

The number of persons employed in the sector increased only slightly from 19.07 million to 19.26 million, or approximately by 1 percent, this growth occurring in the main due to IEs and micro companies, while at the same time that index declined for small and medium sized businesses. Accordingly, the average number of employees per enterprise declined, while in the category of micro companies the same index soared by 9 percent.

Labor productivity increased, but perhaps this happened as a result of better data reporting in response to tougher control enforced by the Federal Tax Service (FTS), and not an increased output of goods and services in real terms.

In mid-2018, the national average entrepreneurial activity index (the ratio of the number of SMEs to staffing number) slightly increased relative to mid-2017 (by 1.4 percent). Its highest growth rates were observed in the regions situated near the cities that hosted the FIFA World Cup events: in Leningrad Oblast, the territories close to the city of St. Petersburg (7.57 percent); in the Republic of Mari El, the territories close to the cities of Kazan and Nizhny Novgorod (7.45 percent); in Samara Oblast (5.54 percent); and in the territories close to the city of Moscow. This phenomenon may be indicative of a notable proliferation of small businesses in the cities and regions surrounding the biggest agglomerations after the surge of economic activity in response to the FIFA World Cup.

In spite of expectations of economic growth, the turnover of small firms in H1 2018 increased only slightly relative to H1 2017 – by a mere 0.51 percent; in the North Caucasus Federal Okrug it dropped by 12.3 percent, and in the Arctic zone – by 0.04 percent. In the regions involved in the FIFA World Cup event, the turnover index increased somewhat higher than the national average – by 0.67 percent, but still remained below the CPI growth rate. The highest effects of the FIFA World Cup can be seen in the Republic of Tatarstan (growth by 31.3 percent), Moscow Oblast (19.7 percent), Leningrad Oblast (8.4 percent), Rostov Oblast (6.2 percent), Kaliningrad Oblast (6 percent), and the Republic of Mordovia (2.85 percent). The relative shares of companies in the total turnover of small enterprises across Russia providing designer services, comprehensive servicing of business premises, telephone call processing, waste disposal, land development, gambling, and B&B services all doubled. All these types of business activity have to do with hosting a football tournament.

According to data released by *Rosstat*, the number of small and medium sized exporting companies increased significantly – from 30,000 to 47,000, or by 57.4 percent[1]. The relative share of exporters in the total number of small and medium sized enterprises jumped from 11.6 to 19.5 percent, but their relative share in the total number of SMEs increased less impressively – only from 1.1 to 1.8 percent; for reference: in Germany – 32 percent, in the USA – 21.2 percent, in Poland – 14.6 percent. The aforesaid positive movement pattern may be an upshot of the ongoing measures designed to promote the development of regional export centers, but it also may have

[1] The number of small and medium sized enterprises contributing to exports // *Rosstat*. 2018. URL: gks.ru/metod/pred-export.xlsx

been contributed to by the Russian ruble's weakening relative to foreign currencies and the domestic market shrinkage (due to plunging personal income). Another possible cause is the increased exports of services during the FIFA World Cup.

Overall in 2018, the structure of the SME sector demonstrated negative dynamics: the number of small and medium sized enterprises dropped, that of IEs increased, and the relative share of small and medium sized firms in the production of goods and services declined. These changes may have had to do with the desire of businesses to reduce their costs through splitting up and claiming tax exemptions[1], or their moving into the shadow sector.

According to a variety of estimations, the role of the shadow economy in Russia is quite prominent: over the course of last year, about 44.8 percent of the total number of persons employed in 2017 at least once were hired in violation of the Labor Code of the Russian Federation or were paid 'under the counter' ('in an envelope'), and 31.4 percent of them do this on a regular basis[2]. According to *Rosstat*'s estimations (*Fig. 23*), the relative share of the unregulated economy increased significantly from 16.4 percent in 2010 to 19.8 percent in 2017, while the number of persons employed in the 'informal' sector jumped from 12.6 million in 2006 to 19.8 million in 2017. Meanwhile, the informal employment structure demonstrated an increase in the number of persons employed in the 'informal' sector only from 85.7 percent in 2006 to 93.4 percent in 2017.

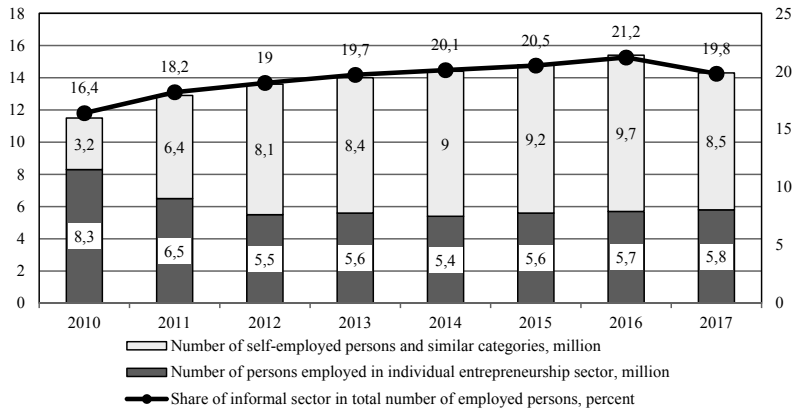


Fig. 23. The number and relative share of persons employed in the informal sector from 2010 through 2017

Source: Workforce, employment and unemployment in Russia. URL: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1139918584312

[1] The experiment aiming at legalization of self-employed individuals may also result in a reduced number of individual entrepreneurs, because the latter will be registered in the self-employed category.
[2] Research *Center* for Politico-Social Monitoring, RANEPA School of Public Policy.

The by-industry structure of the SME sector is similar to that observed in the OECD member states, where a significant share of SMEs is likewise taken up by trade and services. The lower number of SMEs operating in manufacturing industries in Russia can be in part explained by this country's specialization in the context of global trade. There is a deficit of industrial fast-growing firms[1]; thus, for example, in the RBC's ranking of fast-growing companies for 2017, the majority of successful companies operated in the trade and services sector[2].

Russia differs from foreign countries in that the number of innovative startups here is small relative to the total population. For example, in December 2018, the RF Ministry of Education and Science's database included only 2,890 small innovative enterprises set up by higher educational establishments[3]. Over the course of 2017, just under 15,000 new firms with non-zero proceeds were established in the hi-tech sector of the economy[4], which is 11 percent less than in 2016. The characteristic feature of technological startups is their high concentration in the cities of Moscow and St. Petersburg and in Moscow Oblast, where approximately 40 percent of their total number are situated. Meanwhile, the number of startups supported by the Foundation for *Assistance to Small Innovative Enterprises* (FASIE) (the START and UMNIK Programs) shrank, in 2017, by 43 percent from 3,439 to 1,967. As a result, the relative share of startups receiving the Foundation's support in the total number of hi-tech startups shrank from 23 to 13 percent. The volume of funding allocated by the Foundation to all its programs likewise declined, from RUB 6.5 billion to 5.2 billion. However, both the funding volume and the number of projects may increase in the framework of the National Technology Initiative (NTI) in connection with the National Project's implementation.

6.6.2. The system of government support of SMEs in Russia

It took more than a decade to build the existing system of government support measures targeting SMEs in Russia, but prior to 2015 its activity was mostly reduced to allocating subsidies and granting tax exemptions. A new comprehensive package of measures was adopted after the Russian Federation State Council's meeting in

[1] Zemtsov S. P., Maskaev A. F. Fast-growing firms in Russia: characteristics and growth factors // Innovations, 2018. No 6, P. 67–75.

[2] RBC // RBC Ranking: 50 Fastest-growing companies in Russia. 2018. URL: https://www.rbc.ru/magazine/2018/12/5bf2eac39a7947ec0fd1785f)

[3] Records and monitoring of small innovative enterprises in the science and education sphere // Register of notifications concerning the creation of economic societies and economic partnerships. 2018. URL: https://mip.extech.ru/docs/reestr_3_2018.pdf

[4] Adamaytis S. A, Barinova V. A, Zemtsov S. P, Kidyaeva V. M, Kotsyubinsky V. A, Semenova R. I, Fedotov I. V., Tsareva Yu. V. National Report 'High-tech business in the Russian regions'. Issue 2. Moscow: RANEPA, AIRR, 2019. 108 p. (In Russian).

2015 addressing the issue of developing small and medium sized enterprises[1]. However, the focus of attention, as before, was on various measures of financial support, which can be of little effect in view of the currently underdeveloped social control institutions (independent mass media, professional associations, non-profit organizations, etc.).

On the whole, the situation in the SME sector has remained basically unchanged over several recent years: its basic development indices demonstrate some fluctuations, but no fundamental changes. This could be an indirect indication of an inadequate performance of the government support system. The targets and directions formulated in the *Strategy of SME Development*, and later on in the National Project *SME and Support of Individual Entrepreneurial Initiative*, still retain their importance. The key targets set in the national project are as follows: to increase the number of persons employed in the SME sector, including individual entrepreneurs (IEs), from 19.2 million in 2018 to 25 million in 2024; to increase the input of small and medium sized entrepreneurship in GDP from 22.3 percent in 2018 to 32.5 percent in 2024; and to increase the contribution by SME subjects, including IEs, to total non-raw-materials exports from 8.6 percent in 2018 to 10 percent in 2024.

The results of surveys of small and medium sized firms in Russia point to many weaknesses in the system of government support of entrepreneurship[2]. A study based on a representative sample of approximately 2000 firms, which reflected the structure of the SME sector in Russia, demonstrated that only a fraction of them had taken advantage of the government support programs targeting Russian businesses – 9 percent on average. The most popular answers to the question as to their reasons for not filing such an application were as follows: lack of access to information (92 percent), very small amount of funding to be received (51 percent), lack of trust in the government (45 percent), and excessively bulky reporting package that needs to be submitted in order to receive the support (34 percent). Meanwhile, the respondents generally estimate the effect of support to be quite low (2.2 points out of 5).

In 2017, different types of support were received by 166,000 SME subjects[3], or 2.77 percent of their total number, although in the framework of the Strategy of SME Development it had been expected that by 2018, government support recipients would be not less than 5 percent of SMEs. Of these, 64 percent received support in the form of consulting – that is, the least effective form of assistance provided most often by way of educational seminars. Only 50 percent of the companies that received the support, whose data was entered into the FTS database, actually increased their turnover or staffing number by the year's end. The highest numbers of firms with improved performance

[1] RF Government Directive No 1083-r dated June 2, 2016 'On Strategy of Small and Medium-sized Business Development in the Russian Federation for the Period until 2030' // Government of the Russian Federation. 2016. URL: http://government.ru/docs/23354/

[2] The surveys were conducted by the RANEPA ISS's Sociological Research Center.

[3] Report on the results of the study of the status and development of SMEs in the Russian Federation, the outcome of the implementation of measures of their support, and elaboration of estimate-based projections for their development. SME Corporation, Moscow, 2018.

indices were noted in Chukotka Autonomous Okrug, Tyumen Oblast, Ulyanovsk Oblast, Smolensk Oblast, Lipetsk Oblast, and Maritime (Primorsky) Krai.

The total volume of budget funding allocated to the implementation of the Subprogram *Development of Small and Medium Sized Entrepreneurship* of the RF Government Program *Economic Development and Innovative Economy* over the period from 2013 through 2020 amounted to RUB 123.5 billion, and it has invariably displayed a downward movement pattern (*Fig. 24*). In 2017–2018, up to 90 percent of support measures were earmarked for the SME support infrastructure[1] (the service-mode support model); in money terms, its volume is relatively small, because the bulk of planned infrastructure has already been built.

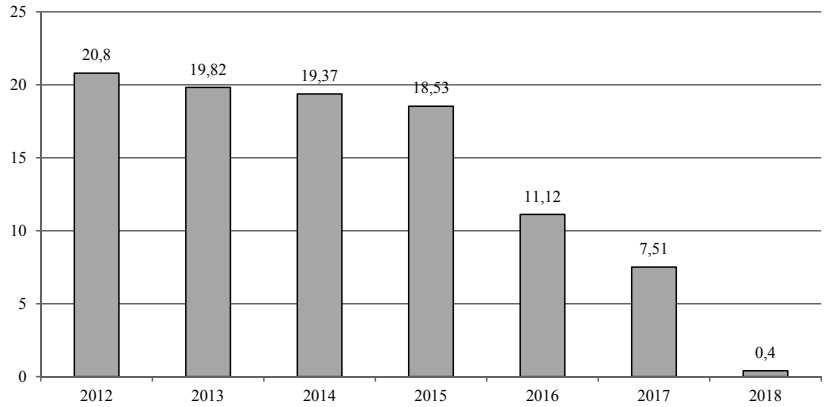


Fig. 24. The volume of federal budget subsidies earmarked for government support of SMEs in Russia, billions of rubles

Source: Government of the Russian Federation. On the allocation, in 2017, of subsidies earmarked for government support of small and medium sized entrepreneurship. 2017. URL: http://government.ru/docs/26283/

In 2015, SME Corporation began its activities, and in 2017, its capital amounted to RUB 92.8 billion[2]. The certificate of the national project targeting SMEs envisages a significant increase in the volume of financing, including that allocated to SME Corporation by way of providing a backing for its guarantees to SMEs, in the amount of RUB 14.3 billion. In fact, we should say that direct forms of support (subsidies to firms, loans, guarantees, government purchases, etc.) have prevailed after 2017.

[1] Report on the use of federal budget funds for the government support of subjects of small and medium sized entrepreneurs and the assessment of efficiency of implementation of government support measures for small and medium sized entrepreneurship in the Russian Federation. RF Ministry of Economic Development, 2018.

[2] For further details, see the RBC website at https://www.rbc.ru/economics/27/07/2018/5b59e72b9a79474e8742c043

SME Corporation was initially set up as a systemic integrator of support measures granted to SMEs, but so far it has not been fully performing its functions of a single center. To be more particular, the policy programs within the system of support measures are dispersed between several ministries: the RF Ministry of Economic Development, the RF Ministry of Agriculture, and the RF Ministry of Industry and Trade. There is no single register of the support infrastructure entities, no single register of support recipients, and no monitoring of support instruments for all these government departments. It is not clear as to what economic effects have been produced by the SME support system, because these cannot be traced on the basis of the actual economic indices reported by that sector or the results of business surveys. We do not know in which regions the effects are highest. It should be admitted though, that SME Corporation has openly published rather detailed information concerning SME development.

On the whole, while the role of the RF Ministry of Economic Development, and consequently that of regional authorities, in shaping SME support policies has been declining, SME Corporation has been gaining in prominence while providing various forms of support[1] to SMEs, including hi-tech and innovative companies, and to organizations operating as part of the SME support infrastructure. Formally, the key targets set for SME Corporation have been met[2]: the volume of purchases is on the rise, and the same can be said of the nomenclature of purchased products. According to data released by SME Corporation, by 2018 its lending volume had surged above RUB 121 billion, and the interest rate on loans was 10.6 percent per annum for small firms and up to 9.6 percent for medium sized ones; at the same time, the *minimum loan* amount was reduced from RUB 50 million to RUB 3 million, and the number of business navigator users rose to 300,000. At the same time, there is a certain balance shift in favor of direct support measures (lending, guarantees on loans), away from indirect forms of support (consulting, tax incentives). In this connection it has become known that in some cases[3], financial support may push down the performance indices of those firms that receive it.

The regional aspect of support of small and medium sized enterprises also appears to be insufficiently elaborated. The budgets of regions receive financing under the Subprogram *Development of Small and Medium Sized Entrepreneurship*[4], calculated according to a formula that takes into account both the budget sustainability level and the number of SMEs in a given region. However, in spite of the frequent adjustments to

[1] Article 25.1 of Federal Law No 209-FZ dated July 24, 2007 (as amended on November 28, 2018) 'On the Development of Small and Medium Sized Entrepreneurship in the Russian Federation'.

[2] Report on the results of the study of the status and development of SMEs in the Russian Federation, the outcome of the implementation of measures of their support, and elaboration of estimate-based projections for their development. SME Corporation, Moscow, 2018.

[3] Storey D. Six steps to heaven: Evaluating the impact of public policies to support small businesses in developed economies // In: The Blackwell Handbook of Entrepreneurship / Ed. by Sexton D., Landström H. New York: Blackwell Publishers Ltd, 2017. pp. 176–193.

[4] On the allocation, in 2017, of subsidies to government support of small and medium sized entrepreneurship. 2017. URL: http://government.ru/docs/26283/

that formula, the federal center, when elaborating its policy and support measures in respect of SMEs, still relies on the equalization principle, while foreign states apply a differentiating approach targeting the development of the strengths of each particular region (smart specialization). In Russia, in some cases it happens so that the less developed regions receive bigger amounts of funding to support their SMEs. These controversies do not conduce to the creation of effective incentives for regional authorities to develop the SME sector.

6.6.3. Comparable statistics for SMEs

The Strategy of SME Development until 2030 sets the target of doubling the input of the SME sector in GDP (from 20 to 40 percent)[1], and the employment input target for SMEs was to increase that index from 25 to 35 percent, thus bringing it to the same level as in the developed countries. In the Presidential Executive Order[2], it is set forth that the number of persons employed in the SME sector, including IEs and self-employed persons, should be increased from 19.1 to 25 million by 2024, and this, in fact, means that the deadline for meeting the SME employment input target has been moved from 2030 to 2024. The National Project *SME and Support of Individual Entrepreneurial Initiative* envisages that the input of the SME sector in GDP should be increased to 32.5 percent, and this roughly corresponds to the targets set by the Strategy of SME Development. According to data released by *Rosstat*, the input index in 2017 amounted to 21.9 percent of GDP.

One of the problems associated with strategic planning has to do with the impossibility to compare Russia's target indicator with those of other countries because of the differences between the criteria applied in attributing enterprises to the SME sector.

In foreign countries, the level of development of the SME sector is determined on the basis of indices reflecting the role of small and medium sized enterprises in the economy (GDP, turnover, exports) and in the social sphere (employment, new jobs, earnings). Meanwhile, on a global scale, there is no single definition and no unified criteria for indentifying an SME. Thus, in particular, only 46 of 132 countries attribute to the SME sector those enterprises that employ less than 250 people[3]. Only several countries rely on this single criterion (in addition, also proceeds, assets, and investments can be applied), and in many other countries different values of these indices are applied to different industries. The variability of criteria has to do with the objective institutional specificities of each country, differences in the structure of national economies, and

[1] RF Government Directive No 1083-r dated June 2, 2016 'On Strategy of Small and Medium-sized Business Development in the Russian Federation for the Period until 2030' // Government of the Russian Federation. 2016. URL: http://government.ru/docs/23354

[2] Executive Order of the President of the Russian Federation No 204 dated May 7, 2018 'On National Goals and Strategic Objectives of the *Russian Federation* through to 2024'. 2018.

[3] Kushnir K. Micro, small, and medium enterprises around the world: how many are there, and what affects the count? // World Bank, 2010.

different government policy goals. The staffing number is calculated by different methods: thus, the employees having a second job or trainees can be taken into account or overlooked, etc. The same applies to affiliated organizations or various legal forms of an enterprise: self-employed, family business, partnership, association, firm, IE, NPO, and so on.

The main sources of statistical information on entrepreneurship development in different countries around the globe are the databases of the Organization for Economic Cooperation and Development (OECD)[1] and Eurostat[2], collected via the statistical data and metadata exchange (SDME) methodology.

According to their estimations, small and medium sized businesses in the OECD member states account for approximately 55 percent of GDP, approximately 59.1 percent of jobs, and more than 99.8 percent of all enterprises, and in the European Union member states the average relative share taken up by the SME sector is even higher: 57.5 percent of GDP, and 65 percent of all employed persons. For reference: according to OECD data, Russia's SME sector employs approximately 33 percent of all workers, while there is no data for its input in GDP.

The estimates of the development of small and medium sized enterprises in foreign countries are not applicable as Russia's targets. When comparing international data, the OECD relies on by-country enterprise samples. For Russia, the study samples are selected from the RUSLANA database, which relies on the information supplied by tax agencies. That database contains information only on 250,000 companies, while their total number in Russia is approximately 2.7 million[3]. The database overlooks individual entrepreneurs and most of micro companies, because these submit zero reporting, and also government organizations and the financial sector (banks). That is why the OECD and Eurostat apply the term business sector.

According to OECD data[4], the business sector of SMEs in Russia employs 6.1 million persons, while the figure in the SME Register is 19.22 million. Evidently, only a small number of all such firms operating in Russia in entered in the OECD database for Russia.

A similar situation can be observed with regard to the structure of turnover and some other indices. OECD data indicate that in Russia, SMEs account for approximately 33 percent of all persons employed by companies. If we look at available Russian data, this figure may significantly vary depending on the denominator: thus, the share of persons employed by SMEs in the total number of employed persons recorded in H1 2018 is 26.5 percent, but if we take the average staffing number for the entire range of organizations, that index will amount to 38 percent[5].

[1] OECD. Entrepreneurship at a Glance 2017 2017. URL: https://www.oecd-ilibrary.org/employment/entrepreneurship-at-a-glance-2017_entrepreneur_aag-2017-en

[2] Eurostat: [website]. [2018]. URL: http://ec.europa.eu/eurostat/data/database

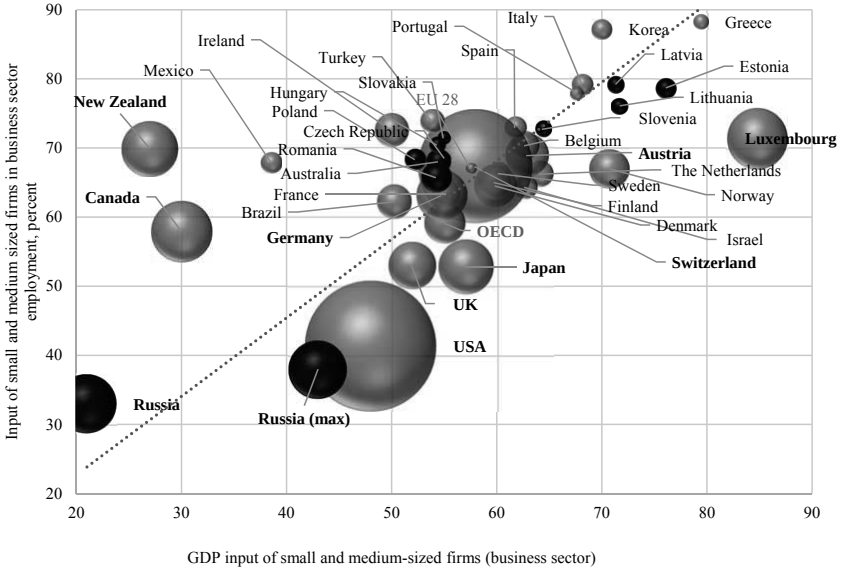
[3] Unified Register of Subjects of Small and Medium Sized Entrepreneurship: [website]. [2018]. URL: https://ofd.nalog.ru

[4] OECD. Entrepreneurship at a Glance 2017. URL: https://www.oecd-ilibrary.org/employment/entrepreneurship-at-a-glance-2017_entrepreneur_aag-2017-en

[5] The number of individual entrepreneurs is added both to the numerator and denominator.

If we should follow the methodology applied by OECD experts, we will need to subtract from the GDP structure the inputs of the public and financial sectors[1], and then to divide the value added index of the SME sector by the remaining GDP value. In this case, according to our estimations, the input of SME in the value added produced by Russia's business sector in 2017 will be approximately 44 percent; for reference: according to *Rosstat* data, its index for total GDP is 21.9 percent, or half that number.

When we compare the relative shares of SME indices across different countries (*Fig. 25*), it becomes evident that the inputs of SMEs in the employment index and GDP strongly depend on the structure and size of a national economy. By this criterion, Russia is closer not to the EU member states, but to the USA, Canada, or Japan, because it develops labor-intensive and capital-intensive sectors, relying on a high index of average company size.



Note. The size of sphere depends on the ratio of a country's GDP volume to the total number of firms; the names of top ten countries by that index are in semi-bold; black spheres correspond to post-socialist countries; Russia (max) represents the maximum estimated values for the Russian Federation of the indices under consideration.

Fig. 25. The relative shares of GDP and employment inputs of the SME sector in different countries

Source: own calculations based on data released by the OECD, Eurostat and *Rosstat*.

[1] From Russia's GDP, the value added of the financial and insurance sectors (4.3 percent) and the input of the public sector (46 percent) are subtracted. See 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. V. 13, No 1, p. 36–39.

A comparison of these indices demonstrates that the situation with regard to SME development in Russia is less catastrophic than it may appear at a first glance, when the differences in estimation methodologies are not taken into account; indeed, it simply has its own specificities produced by a wide range of factors. Therefore, in this case there is no necessity to bring the current indices to the level that is typical of the EU and the OECD member states.

Russia's problem is not that there are too few small and medium sized enterprises, but that the SME sector, by its qualitative characteristics, cannot match its counterparts existing in the developed countries: there are too few exporting and industrial companies, technological startups and innovative companies, and a greater number of enterprises operate outside of legal regulation, fully or in part.

The SME statistics in Russia are controversial and incomplete. An analysis based on available statistical data does not yield a distinct picture as to the level and the pace of development of Russia's SME sector. In addition to the annual reports released by *Rosstat*, monthly data have been published since 2016 by the Unified Register of Subjects of Small and Medium Sized Entrepreneurship operated by the RF Federal Tax Service.

Due to the differences in the data collection methods used by different government departments, as well as some complications in the operation of the recently created Unified Register, statistics vary with regard to the number of SMEs. Thus, for example, according to data in the Unified Register, as of September 2017, a total of 2.999 million individual entrepreneurs (IE) in the category of SME subjects were registered in Russia; according to the FTS[1], their number was 3.7 million; and according to *Rosstat* data – 2.561 million. *Rosstat* calculates the number of IEs by extrapolating sample data to the entire sector; the Unified Register records those IEs who have submitted at once their entire reporting package; and the FTS collects data in the framework of EGRIP (Unified State Register of Individual Entrepreneurs), which also contains data on those IEs that are in fact absolutely idle and do not submit any reports.

Calculations based on employment data may give rise to their duplication, if an IE also holds a job with another employer, including another SME. Such a situation frequently occurs with regard to legal entities, when an entrepreneur is registered as an IEs and at the same time owns an LLC, where he or she occupies a post of director or deputy director – that is, holds a job.

By their labor productivity index, Russia's small and medium sized firms, most probably, lag far behind their counterparts in the developed countries, but there are no available correct indices for a reliable estimation. If the turnover to staffing number ratio is to be applied (the same index as applied in the Strategy of SME Development), Russia will match the level of some developing countries (Brazil and Mexico)[2]. But if we make a comparison between Russia's regions, the leaders will be the regions with the least

[1] RF Federal Tax Service's website [2018]. URL: https://www.nalog.ru

[2] OECD. Entrepreneurship at a Glance 2017 2017. URL: https://www.oecd-ilibrary.org/employment/entrepreneurship-at-a-glance-2017_entrepreneur_aag-2017-en

staffing number reported by SMEs and the highest share of the shadow sector: the Chechen Republic, the Republic of Dagestan, and the Republic of Ingushetia. In fact, the firms there report underestimated employment indices. So, this estimation system has some serious weaknesses.

So far, Russia has lacked an adequate entrepreneurship development indicator, especially at the regional level:

- the high number of firms in the SME category may be the result of splitting-up of bigger enterprises for the purpose of claiming tax exemptions and participating in government purchases;
- the employment index of SMEs strongly depends on the economic situation: it varies depending on the percentage of unrecorded and part-time employment, etc.;
- the GDP input of SMEs is an index that is not calculated in accordance with a single approved methodology, its value may differ depending on a specific calculation method and the use of data for the public, financial and shadow sectors;
- the index of business births (the number of new firms) may reflect the emergence of fly-by-night firms, it varies depending on data source.

The national project targets cannot be reliably calculated, either. Thus, in particular, there is no methodology for calculating the input of exporting SME subjects in the total volume of non-raw-materials exports.

6.6.4. Unpredictability of the policy of support of small and medium sized enterprises in Russia

The development of SME in Russia is practically not influenced by government support in its present form, although it is a well-known fact that any inconsistency in decision-making is fraught with negative effects. The dynamics and specificity of entrepreneurship development in the regions depend on the ongoing macroeconomic and institutional changes. Meanwhile, the current policy effectively overlooks the versatility of both the types of SMEs and regional conditions.

The unpredictability of government policy pushes SMEs into the shadow economy. The policy targeting SMEs often lacks in logic. A promise not to raise taxes[1] is followed by a raise of insurance contributions[2]. The intention to simply calculate the total number of self-employed persons and to let them work on a legal basis without making worse their current situation gives way to the imposition of taxes and fines for a failure to pay them[3]. The low level of trust in established institutions across society results in growth

[1] Presidential Address to the Federal Assembly of December 4, 2014: 'I propose to freeze the existing tax parameters as they are for the next four years, not revisit the matter again, not change them'.
[2] The new formula for calculating the insurance contributions to the RF Pension Fund was based not on the amount of profits, but on the amount of proceeds (without deducting costs). As a result, many IEs had to apply the highest tariff – RUB 138,600, and not RUB 32,500 as under the previous system. When the minimum wage is increased, so will jump the contributions to the social funds.
[3] From January 1, 2019, professional income tax was introduced for self-employed persons.

of the informal sector[1]. The relative shares of self-employed people and similar categories of citizens who do not consider themselves to be unemployed, but who are not officially registered as hired workers or IEs, are on the rise.

From a formal point of view, the self-employed people and similar categories of citizens operating in the informal sector can translate into an increasing number of people employed by SMEs. In 2017, their number was 8.5 million, which is above the employment growth rate for SMEs set as a target in the Presidential Executive Order (just under 6 million). However, the state so far has failed to create incentives for their legalization.

In 2017, a tax holiday was introduced for those self-employed persons who used no hired labor[2]: private tutors, nannies, housekeepers, caregivers. A zero rate was applied to the taxes and insurance contributions on their incomes received in 2017 and 2018, on condition that the FTS should be notified of the fact of self-employment. However, as of December 2018, only 2,880 self-employed persons (0.03 percent) had legalized their status, and some of them, who had been previously registered as an IE, simply changed their status.

The new draft law on the introduction, by way of experiment, of professional income tax in several pilot regions[3] has been sharply criticized by experts: they argue that the absence of significant incentives to register a legal status coupled with the rising financial costs for entrepreneurs may translate into a situation where no accelerated legalization will actually take place. However, since early 2019, 30,000 Russians have registered as self-employed through the app *My Tax*[4].

Government support has no influence on the development of SMEs in the regions. Our estimations[5] demonstrate that entrepreneurial activity in Russia's regions does not depend on subsidies, tax exemptions, or the volume of government purchases. Quite often, support is repeatedly allocated to the same firms, which may be affiliated with local administrations. Several IEs[6] participate in the purchases to the value of billions of rubles by big companies (for example, *RZD* OJSC). The access to government purchases and tax exemptions serves as an incentive for artificial splitting-up of firms, which has absolutely nothing to do with the SME sector's development. However, subsidies are

[1] Anokhin S., Schulze W. 'Entrepreneurship, innovation, and corruption.' Journal of Business Venturing, Vol. 24, No. 5, 2009, pp. 465–476.

[2] Self-employed persons are understood to be those RF citizens who provide services to individuals but are not registered as individual entrepreneurs, e.g., nannies, private tutors, drivers, designers, interpreters, photographers, repair and construction workers, etc.

[3] Federal Law No 422-FZ dated November 27, 2018 'On launching the experiment of establishing a special tax regime *Professional Income Tax* in the city of Moscow, in Moscow Oblast and Kaluga Oblast, and in the Republic of Tatarstan' // Consultant Plus. 2018. URL: http://www.consultant.ru/law/hotdocs/55771.html/

[4] For more details, see https://www.kommersant.ru/doc/3889871

[5] Barinova V. A., Zemtsov S. P., Tsareva Y. V. Entrepreneurship and institutions: Does the relationship exist at the regional level in Russia? // *Voprosy ekonomiki*, 2018. No 6, p. 92-116. (In Russian).

[6] RBC study: How IEs in Russia receive billions of rubles from the State // RBC. 2017. URL: https://www.rbc.ru/own_business/13/12/2017/5a1d68bb9a7947745d083338

important for underdeveloped municipalities, where they can help to create new jobs and to solve, to a certain extent, the existing social problems.

In our calculations, entrepreneurial activity was understood as the ratio of the number of small (including micro) enterprises in a given region to the number of its economically active population[1]. In a sense, this is a proxy variable for the region's 'entrepreneurial capital' level, in contrast to registration or early phase of entrepreneurial activity, as the latter reflect only the fact of registration or business intentions[2].

To test the hypothesis of the influence of government on entrepreneurial activity, we developed an empirical model. The dependent variable is entrepreneurial activity in the regions. The control variables are the rate of unemployment, access to markets, and institutional conditions. The independent variables are the various government support estimates[3]: the volume of subsidies allocated in the federal budget to RF subjects for the support of SMEs, as the amount of support in rubles per SME; the total sum of tax exemptions granted to organizations, as the amount of exemptions in rubles per organization.

The effects on government support on the development of small businesses are controversial, because empirical studies often underestimate the selection effect, when known strong firms are supported[4]. Thus, in particular, the study by KPMG[5,6], while describing the high effect of support measures received by SMEs in Russia, offers no

[1] It reflects the degree of population involvement in the creation of new types of businesses, as well as in the management and development of the existing companies, and so it can be treated as the main indicator of SME development at the regional level. Although this indicator in influenced by another factor – the registration of fly-by-night companies, we believe that it is appropriate for achieving our study's goals. On the one hand, fly-by-night companies are entered on records only with regard to the by-region distribution of micro enterprises hiring a small number of staff, while the by-region distribution of small firms with a staffing number of more than 15 can be considered to be free from the effects of that phenomenon. On the other hand, the correlation coefficient for the number of micro enterprises that determine our dependent variable's distribution and that of small firms, on average over the period from 2008 through 2015, amounted to 0.95 (in 2015, it was 0.99). In other words, even if the sample takes into account fly-by-night companies, these register in those regions where the level of entrepreneurial activity is already high.

[2] National report 'Global Entrepreneurship Monitor'. Russia 2016/2017', Graduate School of Management, St. Petersburg State University, St. Petersburg, 2017.

[3] Barinova V. A., Zemtsov S. P., Tsareva Y. V. Entrepreneurship and institutions: Does the relationship exist at the regional level in Russia? // *Voprosy ekonomiki*, 2018. No 6, p. 92–116. (In Russian).

[4]Storey D. Six steps to heaven: Evaluating the impact of public policies to support small businesses in developed economies // In: The Blackwell Handbook of Entrepreneurship / Ed. by Sexton D., Landström H. New York: Blackwell Publishers Ltd, 2017. pp. 176–193

[5] KPMG is an audit company on the global top four list. The name 'KPMG' stands for the first letters of the names of its founders – Piet Klijnveld, William Barclay Peat, James Marwick and Reinhard Goerdeler.

[6]Performance assessment of the SME support program of the RF Ministry of Economic Development // SME federal portal. 2015. URL: http://smb.gov.ru/files/images/MSP-Executive+summary_final.pdf.

assessment of the said effect. As noted by Chepurenko[1], Russia also needs more complete records of the framework conditions of the SME sector's development, such as the quality of institutions, regional specificities, etc.

The regions differ significantly by the volume of received government support. Subsidies are allocated in accordance with the approved formula, which is geared to the size of SME sector and the results of support received over the previous period. The largest amount of support was provided to Voronezh Oblast (10.8 percent of the nationwide total), the Republic of Mordovia (7.9 percent), the city of St. Petersburg (4.3 percent), Omsk Oblast (3.97 percent), Nizhny Novgorod Oblast (3 percent), Murmansk Oblast (2.97 percent), Samara Oblast (2.95 percent), and the Republic of Tatarstan (2.85 percent). The correlation coefficient for the volume of subsidies and the number of SME subjects (sector size) is 0.5, but there is no correlation with the number of supported SMEs, and so it can be concluded that the support of enterprises strongly varies by region.

The average subsidy volume per SME amounts to RUB 3,300. In 2016, for some underdeveloped regions this index was above RUB 20,000: the Republic of Tyva, the Republic of Khakassia, Jewish Autonomous Oblast, Altay Krai, the Republic of Ingushetia, and the Karachay-Cherkess Republic. In these regions, the informal sector's share is significant. The minimum volume of support per SME was noted in the regions with a high sector size index. The subsidy volume per supported enterprise likewise varies significantly. In the regions with the maximum support volume it exceeds RUB 4 million: in the Karachay-Cherkess Republic, Kamchatka Krai, Nenets Autonomous Okrug, the Republic of Tyva, the Republic of Adygea, Altay Krai, the Jewish Autonomous Oblast, Magadan Oblast, Kostroma Oblast, and Voronezh Oblast. In the regions with difficult natural conditions this happens because of the elevated costs. In the regions with the lowest ratio, the support volume per enterprise amounts to several thousands of rubles: in Vologda Oblast, Ulyanovsk Oblast, Kaliningrad Oblast, Sverdlovsk Oblast, Kursk Oblast, Novosibirsk Oblast, Krasnodar Krai, and the Chechen Republic. Evidently, the support received in such amounts cannot produce any serious effect on the development of enterprises; more often it is spent on educational and consulting seminars.

The nationwide index of the relative share of SMEs that have received government support amounts to a modest 2.77 percent[2], and it is relatively stable. In the leader regions it is above 10 percent. The latter are, in the main, those regions that set the goal of mass-scale development and support of SMEs. The regions where support is granted to less than 1 percent of companies are major centers with a developed SME sector: the

[1] A.Yu. Chepurenko. What is entrepreneurship and what entrepreneurship policy does Russia need? (Marginal notes on works of modern foreign classics) // Journal of the New Economic Association, 2012. V. 14, No 2. P. 102–124.

[2] Report on the results of the study of the status and development of SMEs in the Russian Federation, the outcome of the implementation of measures of their support, and elaboration of estimate-based projections for their development. SME Corporation, Moscow, 2018.

city of Moscow, Moscow Oblast, and also the regions where the SME sector is dispersed among remote settlements: Orenburg Oblast, Magadan Oblast, the Republic of Kalmykia, Kamchatka Krai, Yamalo-Nenets Autonomous Okrug.

Regions also vary significantly by the effects of government support. One newly created or preserved job in the best-performing regions that have effectively created their own entrepreneurial ecosystems costs less than RUB 20,000: Altay Krai, Ulyanovsk Oblast, Leningrad Oblast, Novosibirsk Oblast, Kaluga Oblast, and Kaliningrad Oblast. The administrations of these regions strived to cover the SME sector by a broad network of microsubsidies. The ratio of newly created or preserved jobs to the total number of persons employed in the SME sector is also higher in these regions. But there are also some regions where one newly created or preserved job costs the State millions of rubles: the city of St. Petersburg (RUB 9 million), the Republic of Mordovia (RUB 8 million), Nenets Autonomous Okrug (RUB 6 million), the Karachay-Cherkess Republic (RUB 5.5 million), Novgorod Oblast (RUB 1.6 million), the Republic of Tyva (RUB 1.4 million), and Voronezh Oblast (RUB 1.4 million). Meanwhile, the effect of support on growth in the total number of SME staff is negligible.

Tax exemptions are generally equally granted to all regions, and target predominantly medium sized and big firms (for example, within special economic zones), that is, small firms do not see any advantages relative to particular regions, and so no effect was observed with regard to that factor, either.

The level of entrepreneurial activity is palpably higher in the regions harboring biggest agglomerations (*Fig. 26*) – the cities of Moscow and St. Petersburg, Novosibirsk Oblast, Sverdlovsk Oblast, Tyumen Oblast, Perm Krai; in those with favorable institutional conditions (the cities of Moscow and St. Petersburg, and Tyumen Oblast, which top the ASI's ranking[1]); and in those with beneficial economic and geographical situation, i.e., proximity to major foreign markets and the Moscow agglomeration: Kaliningrad Oblast, Primorsky Krai, Yaroslavl Oblast, etc.[2] Agglomerations are characterized by a higher concentration and versatility of economic activity, and consequently a lower monopolization index; very often they have better formal institutions, and so the entry barriers there are lower, but competition is higher. Besides, they have a bigger consumer market, while a majority of SMEs operate in the trade sector[3]. Besides, a prominent role in the group of leaders is played by the southern regions with their high relative share of the tourism industry – for example, Krasnodar Krai, the Republic of Crimea.

[1] National Regional Investment Climate Ranking (Agency for Strategic Initiatives) for 2017 // ASI. 2017. URL: http://asi.ru/investclimate/rating/

[2] Zemtsov S. P., Baburin V. L. Assessing the Potential of Economic-Geographical Position for Russian Regions // *Ekonomika regiona*, 2016. V. 2, No 1, P. 117-138. (In Russian).

[3] The majority of small and medium sized enterprises operate in the trade sector (28 percent of total employment in the SME sector), the sector of real estate deals, lease and services (19 percent), and in manufacturing industries (16 percent).

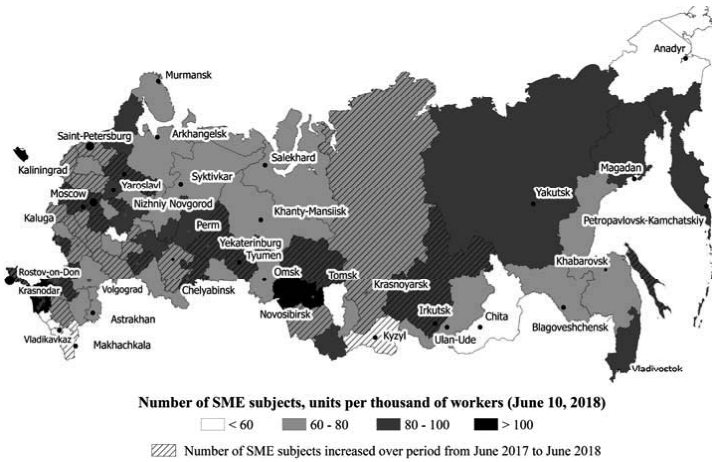


Fig. 26. The by-region differentiation of entrepreneurial activity in Russia

Source: Unified Register of SMEs.

The high investment risks associated with the social, financial and ecological situations in the regions, and high crime rates are the factors that suppress the growth of entrepreneurial activity[1]. Accessibility of banking services, on the contrary, boosts its growth. A higher banking infrastructure density may be an indicator of low interest rates resulting from competition between banks, and so can be used as a proxy for estimating capital accessibility. Every year, small firms refer to insufficient access to financing as one of the most important factors that restrict their growth[2]. Human capital improvement[3] in a region, according to our estimations, should also have a positive effect on entrepreneurial activity growth, because in order to create a successful business, in most cases one should possess a certain set of knowledge and skills.

For the development of entrepreneurship in Russia's regions, the per capita gross regional product (GRP) and a region's market potential are very important, because these may be the indicators of demand for services rendered by entrepreneurs. The former is also an indirect indicator of quality of life and of effective demand. The latter is applied to estimate the proximity (accessibility) of major international and regional markets. The nearer a firm to consumers with a high purchasing power and a big goods

[1] Barinova V. A., Zemtsov S. P., Tsareva Y. V. Entrepreneurship and institutions: Does the relationship exist at the regional level in Russia? // *Voprosy ekonomiki*, 2018. No 6, p. 92–116. (In Russian).
[2] Main business activity indices of small enterprises (less micro companies) // *Rosstat*. 2018. URL: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/enterprise/reform/#
[3] Barinova V. A., Zemtsov S. P., Tsareva Y. V. Entrepreneurship and institutions: Does the relationship exist at the regional level in Russia? // *Voprosy ekonomiki*, 2018. No 6, p. 92–116. (In Russian).

and services market, the higher its opportunities for selling its finished product and purchasing equipment, spare parts, raw materials, and other goods.

Thus, the development of entrepreneurship in Russia's regions is influenced by institutional and macroeconomic factors, and so any amendments to legislation or a plunge of personal income may actually offset all the positive trends created by government support.

Overall, the entrepreneurial activity level across Russia is characterized by a high changeability and territorial heterogeneity. However, some regions are capable of sustaining a high entrepreneurship development level over a long period of time[1].

In foreign countries it was found that a high level of entrepreneurial activity persisted in some regions for centuries[2]. In those regions (Bavaria, North Rhine-Westphalia, and some others), entrepreneurship has developed very deep roots in the form of accumulated information, knowledge and business skills, interaction networks and an environment of trust. The average correlation coefficient for entrepreneurial activity in Russian regions between a year under consideration and the previous year is 0.97, and for that between a year under consideration and 15 years earlier – 0.51; so, on the whole, the regional structure of entrepreneurial activity displays a rather high degree of inertia.

We selected a group of regions that displayed high entrepreneurial activity indices over the period 1998–2014[3]: the cities of St. Petersburg and Moscow, Kaliningrad Oblast, Novosibirsk Oblast, Samara Oblast, Yaroslavl Oblast, Sverdlovsk Oblast, Belgorod Oblast, and Omsk Oblast. They maintained a combination of factors that favored the development of small and microenterprises throughout the entire period under consideration: a large consumer market, no monopolization of the economy, high diversification, and relatively beneficial institutional conditions. Most of these regions harbor big agglomerations.

The regions with long-standing entrepreneurial traditions may be viewed as future sites of intensive socioeconomic growth. In fact, these regions have developed sustainable entrepreneurial ecosystems.

The regions that displayed high indices only during certain periods, are geographically close to the regions of the first group (Leningrad Oblast, Tomsk Oblast, Altay Krai), and also to seashores (Krasnodar Krai, Primorsky Krai, Khabarovsk Krai, and Rostov Oblast). When identifying the entrepreneurship factors, special attention should be focused on those regions that were constantly upgrading their status by moving upwards in the ranking during both subperiods: Tyumen Oblast, Kirov Oblast, Ulyanovsk Oblast, Lipetsk Oblast, Pskov Oblast, and Khabarovsk Krai. It can be assumed that these are regions that relied on successful practices.

[1] Zemtsov S. P., Tsareva Y. V. Entrepreneurial activity in the Russian regions: How spatial and temporal effects determine the development of small business // Journal of the New Economic Association. V. 37. No 1. 2018. P. 145–165.

[2] Fritsch M., Wyrwich M. The long persistence of regional levels of entrepreneurship: Germany, 1925–2005, // Regional Studies, 2014. T.48, No 6. C. 955–973).

[3] Zemtsov S. P., Tsareva Y. V. Entrepreneurial activity in the Russian regions: How spatial and temporal effects determine the development of small business // Journal of the New Economic Association. V. 37. No 1. 2018. P. 145–165

According to the results of econometric calculations, the entrepreneurial activity index in a region strongly depends on its level over the two previous years, and is also influenced by similar activity in the neighboring regions not farther than 300 km.

We identified *interregional entrepreneurial activity clusters* where the leader regions are concentrated (Novosibirsk Oblast and Tomsk Oblast), and also the outsider regions (the North Caucasus). In the former case, the high activity in these regions correlates with the high activity in the neighboring regions, in the latter – the situation is directly opposite. In foreign countries, this phenomenon is explained by the interregional knowledge spillover effect[1]. If that is the case, the former can be explained by the intense interaction between two cities and cultural similarities, in particular the decades-long influence of Siberian higher educational establishments. The latter may have to do with the negative influence of institutional environment in the North Caucasus region.

The dependence of the level of entrepreneurial activity on its level over the previous periods, the stable existence, among the regions, of leaders and outsiders, and also of a great number of regions with fluctuating entrepreneurial activity movement patterns may all serve as a substantiation for territorially differentiated policies in the SME sector.

At present, although the government support of SMEs targets different groups of entrepreneurs (beginners, microenterprises, small, and medium sized enterprises), in actual practice it still has little regard for their sectoral and regional differences. The institutional differences between regions rather strongly influence the development of entrepreneurship, in spite of the nationwide successful implementation of the National Entrepreneurial Initiative and progress in the Doing Business ranking. These differences also influence the implementation of those legislative initiatives that are not geared to regional specificities. For example, in the study by E. Yakovlev and E. Zhuravskaya[2] it is demonstrated, on the basis of econometric calculations, that after 'Gref's reform' launched in order to simplify the registration procedures and lower the administrative pressure, the index of business births in the early 2000s varied between the regions depending of the quality of their institutions. In some regions, the reforms gave rise to a growing number of small firms, and elsewhere they could conduce to the shadow sector's expansion. In our opinion, local and regional authorities should view entrepreneurship development as their priority, but the existing fiscal system does not conduce to a systemic interaction with the SME sector. One can see a lack of understanding of SME specificities and the differences of their development conditions in different territories, including legislation unification, and provision of support regardless of business type and location. This results in a poor correlation between the support measures and the actual needs of businesses, the absence of distinctly understood priorities, and significant policy inconsistencies.

[1] Audretsch D., Lehmann E. Does the knowledge spillover theory of entrepreneurship hold for regions? // Research Policy. 2005. T. 34. No 8. C. 1191–1202

[2] Yakovlev E., Zhuravskaya E. The unequal enforcement of liberalization: Evidence from Russia's reform of business regulation // Journal of the European Economic Association. 2013. T. 11. No . 4. C. 808–838.

6.7. The defense economics and the military reform in Russia[1]

6.7.1. The military personnel and social policy

In 2018, the total strength of the Armed Forces (AF) of the Russian Federation did not change. Early in February 2018, the President of the Russian Federation increased by 200 persons to 10,740 persons the ultimate staff number of the Central Office of the Ministry of Defense (without the guarding and building maintenance personnel taken into account), which is not included in the strength of the Armed Forces[2].

Proceeding from the manning level[3] declared in November, in 2018 the total accountable strength of the Armed Forces exceeded 950,000 persons, an increase of 20,000 persons as compared to the end of 2016. According to the data of telephone conferences of the Ministry of Defense, the number of compulsory-duty servicemen of the Armed Forces decreased within a year by 3.2 percent to 232,280 persons. In 2018, 260,500 persons were drafted to the military service, a decrease of 15,500 persons (5.7 percent) as compared to the year before[4]. Also, 684 persons, including 160 persons with four research squadrons of the *Era* military innovation technopolis established on the initiative of the Ministry of Defense in the city of Anapa in 2018, served in 16 research squadrons established since 2013.[5] Apart from four sport squadrons with 171 conscripts, in 2018 the Ministry of Defense established four R&D squadrons in the city of Tula, Severodvinsk, Kaliningrad, and Sevastopol with the total strength of 109 persons "in order to direct young people to enterprises of the military-industrial complex"[6].

In 2018, the number of the contract military servicemen (privates and the junior command personnel) rose to 393,800 servicemen (*Fig. 27*); to achieve that strength, over 60,000 persons were hired to serve on contract[7]. At the Collegium of the Ministry of Defense, it was declared about the planned increase in the number of this category of military servicemen to 475,000 persons by the end of 2025; for this purpose an average

[1] This section was written by Vasily Zatsepin, RANEPA.
[2] Executive Order No.60 of February 09, 2018 "On Amendment of Executive Order No.1062 of August 16, 2004 of the RF President "On the Issues of the Ministry of Defense of the Russian Federation" and the Statute Approved by that Executive Order".
[3] Tikhonov *A.* Ambitious Tasks should Be Always Set // The Krasnaya Zvezda. November 6, 2018 (Issue No. 124). p.4.
[4] Executive Order No. 129 of March 30, 2018 of the RF President and Executive Order No. 552 of September 28, 2018 of the RF President.
[5] Executive Order No. 364 of June 25, 2018 of the RF President and Executive Order No.501 of August 28, 2018 of the RF President.
[6] According to Burdinsky E., Head of the Main Organization and Mobilization Department of the Joint Staff. URL: https://function.mil.ru/news_page/country/more.htm?id=12198737@egNews (date of reference: 07.10.2018).
[7] The meeting of the Collegium of the Ministry of Defense. Moscow, 18.12.2018. URL: http://www.kremlin.ru/events/president/news/59431 (date of reference: 18.12.2018).

annual increase of about 11,700 persons – four times less than the failed plan of 2012 – will be required.

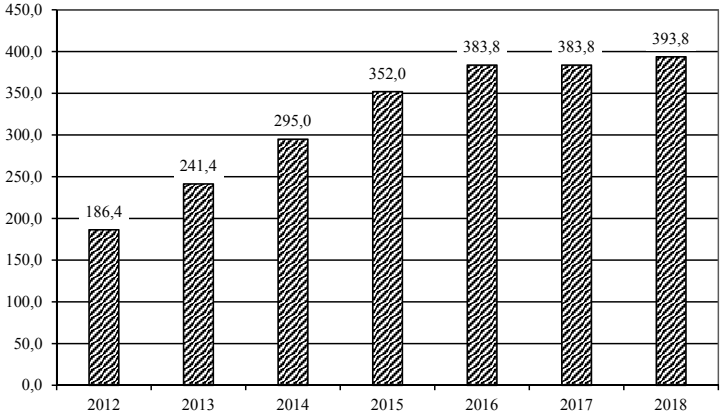


Fig. 27. The manpower of the Armed Forces (contract privates and junior command personnel) in 2012-2018, thousand persons

Source: The Krasnaya Zvezda. December 19, 2018 (Issue No.142). p.4.

In 2018, over 60,000 persons underwent training at 28 military educational establishments and eight branches[1]; apart from that, 60,000 students of civil higher education institutions were trained at 93 military centers without suspending their studies. As a result of release of three classes of graduates from higher education institutions of the Ministry of Defense – in March, June and December – over 12,000 officers, including 1,300 young pilots were directed to the Armed Forces. Sergei Shoigu, Minister of Defense noted in particular that "this year, the system of the military education was restored in full and higher education institutions of the Ministry of Defense have managed to prepare graduates properly"[2].

According to the mass media's reports, district six-month courses of squad commanders of critical skills will be established again in the Army for soldiers and sergeants serving on the contract basis. In 2018, over 7,000 servicemen of this category received the rank of a warrant officer, warrantor and officer.

In 2018, the number of servicemen being at the disposal of their commanders and superiors and on the waiting list for the receipt of permanent housing fell from 1,400

[1] The issues of state end-of-course assessment of graduates of military higher education institutions were discussed at the Ministry of Defense of the Russian Federation. Moscow, 28.02.2019. URL: https://function.mil.ru/news_page/country/more.htm?id=12219462@egNews (Date of reference: 01.03.2019).

[2] See: The meeting of the Collegium of the Ministry of Defense.

persons in February to 96 persons in December[1], which situation suggests that this issue can be completely solved within the next few months.

In 2018, money allowances of military servicemen and pensions of the Ministry of Defense were increased by 4 percent from January 1 to their average values of RUB 68,800 and RUB 24,600, respectively[2]. It is to be noted that money allowances of contract soldiers and sergeants remain much below the average level.

In 2018, permanent housing was provided to 8,500 servicemen of the Ministry of Defense, a decrease of 15 percent compared to the previous year (10,000 servicemen). In 2018, service housing was granted to 37,283 servicemen of the Ministry of Defense (about 31,000 servicemen in 2017)[3]. In 2018, the Service Housing Fund of the Ministry of Defense increased by 16,500 apartments and at present includes over 275,000 service residential premises. The data on the number of persons on the affordable housing waiting list and in need of service housing have not been published. The savings and mortgage system is currently the Defense Ministry's main way of solving the housing issue. Early in the year, 212,000 servicemen with other 43,000 servicemen joining later in the year participated in that system. In 2018, the annual saving contribution allocated out of the federal budget per participant was equal to RUB 268,465.6.

On instructions of the President of the Russian Federation, in 2018 together with the heads of the subjects of the Russian Federation the Ministry of Defense succeeded in reducing by 97 percent and 99 percent the waiting list to pre-school institutions and the number of military servicemen's family-members in need of employment, respectively, in all the subjects of the Russian Federation, except for, Dagestan, North Osetia-Alania and the Sakhalin Region, where 202 children were left without a place in the kindergarten[4].

In August, Valery Gerasimov, Head of the Joint Staff ordered district commanders, commanders-in-chief of the branches of the Armed Forces and commanders of corps to stop the practice of violating the duty-time rules: holding staff meetings at night, on weekends and holidays, keeping servicemen after hours "until the departure of the superiors" and ordering servicemen to come on duty at their off-duty time without any necessity[5]. In addition, to establish equal rights of servicemen to rest and leisure, at the autumn session of the Federal Assembly legislators annulled the limitations for

[1] *Tomilenko E.* Construction Projects are Being Developed at High Rate // The Krasnaya Zvezda. December 17, 2018 (Issue No. 141). p. 3.

[2] The average money allowance in the Armed Forces is notionally considered the one of a lieutenant serving as a troop commander. See: Tatyana Shevtsova: After 2021 the State Defense Order will be Gradually Decreased. Moscow, 18.12.2018. URL: https://www.vesti.ru/videos/show/vid/781907/cid/3962/# (date of reference: 18.12.2018).

[3] The Minister of Defense held a telephone conference with the High Command of the Armed Forces. Moscow 25.12.2018. URL: https://function.mil.ru/news_page/country/more.htm?id=12209596@egNews (date of reference: 26.12.2018).

[4] See: The Meeting of the Collegium of the Ministry of Defense.

[5] *Safronov I.* Valery Gerasimov is Going to Regulate the Time-Schedule //The Kommersant daily. September 3, 2018. (Issue No. 158). p. 6.

servicemen of permanent readiness units on additional holidays granted for official duty performance in excess of the established weekly period of duty[1].

Established in November on the basis of the Main Morale Building Department of the Ministry of Defense, in addition to organization of military and social activities the Main Military and Political Department of the Armed Forces will deal with consolidation of the military discipline and prevention of lawlessness because the situation with such cases in the Armed Forces remains quite tense. According to the data of the Main Military Investigation Department, in 2018 in entities which were subordinate to the military investigation the total number of registered crimes increased by 2.2 percent and exceeded 10,000 cases. A positive downward trend of reduction of crimes in the troops of the Federal National Guard, the EMERCOM and the Federal Security Guard Service was registered, while quite the opposite trend was observed with the Ministry of Defense and the Federal Security Service; within a year, the number of cases of abuse of power and bribery increased by 30.5 percent and 30.9 percent, respectively. It is reported that 2,144 cases of corruption (growth of 4.4 percent) were registered. At the same time, the number of the registered cases of application of physical force to subordinates fell by 9 percent to 489 cases, while violations of the regulations dealing with mutual relations between the servicemen (the harassment of subordinates), by 3.7 percent to 573 cases[2].

According to the data of the Main Military Prosecution Office, in 2018 the damage from military corruption crimes increased four-fold and exceeded RUB 7 billion; according to the acts of response of the prosecution office 2800 functionaries were brought to disciplinary responsibility including 28 officials dismissed due to the loss of confidence[3]. According to the mass media's reports, it became known that criminal cases were initiated in 2018 due to the fact of corruption at the Department of Audit of State Contracts of the Ministry of Defense, the Military Academy of the Joint Staff and the 46th Central Research and Development Institute of the Ministry of Defense[4], which overstated the value of contracts and used "deadheads" and fly-by-night companies.

As regards the general public's attitude to the Armed Forces, in 2018 a turning point occurred according to the data – published by the All-Russia Public Opinion Research Center later that year – of the sociological survey ordered by the Ministry of

[1] *Filachev O.* The Parliament is the Place for Debates // The Voenno-Promyshlenny Kurier. January 15, 2019 (Issue No. 1).

[2] In 2018 the number of corrupt practices and briberies among servicemen increased by 30 percent. URL: https://tass.ru/armiya-i-opk/6171158 (date of reference: 01.03.2019).

[3] *Gavrilov Yu.* Dismissed With No Confidence // The Rossiiskaya Gazetta. March 22, 2019 (Issue No. 63).

[4] *Senatorov Yu.* The Colonel Reported On the Deputy // The Kommersant daily. February 7, 2019. (Issue No. 22). p. 4; *Sergeyev N.* A Mediator on Syria was Asked Not to Meddle // the Kommersant daily. January 28, 2019. (Issue No. 14). p. 4; *Sidorkova I., Alekhina M.* Developers of the State Armament Program were Accused of Fraud. URL: https://www.rbc.ru/society/16/01/2019/5c3df3489a79471f974d126f (date of reference: 16.01.2019).

Defense[1].For the first time since 2013, the share of the Russians who believed that the state of things in the Armed Forces was excellent or good decreased by 1 percentage point to 61 percent as compared to the previous year; the share of those who believed that it was moderate increased by 3 percentage point to 27 percent, while as many as 6 percent of the Russians found it unsatisfactory (+1 percentage point). The overall level of approval of the Armed Forces' activities decreased (–1 percentage point, to 87 percent), as well as the job rating of Sergei Shoigu, Defense Minister (for the first time since 2014 it fell from 4.7 percent to 4.6 percent); the share of those who trusted the Defense Minister fell by 9 percentage point to 39 percent).

An important shift in public sentiments was registered by the Institute of Sociology of the Russian Academy of Sciences. If in October 2014 67 percent of the respondents believed that "Russia should be a great power with the mighty Armed Forces", in October 2018 this opinion was shared only by 49 percent of the respondents (–18 percentage point). Also, 51 percent of the respondents against 33 percent of the respondents in October 2014 are now confident that "Russia should care about the well-being of its own people, while the country's greatness and military might are secondary"[2].

6.7.2. The military-technical policy

In January 2018, President Vladimir Putin approved the latest State Armament Program (SAP) in 2018–2027[3]. For implementation of the SAP, it is envisaged to spend RUB 20.0 trillion, of which RUB 19.0 trillion is meant for purchasing, repair and development of arms, as well as military and specialized equipment and RUB 1.0 billion, for building the infrastructure for the benefit of the SAP[4]. Any further information on the program is unavailable due to the fact that it is completely classified, however, as early as March Sergei Shoigu, Minister of Defense requested proposals to be prepared to modify it[5].

The beginning of the new political cycle did not virtually change the existing work schedule. In May and November, President Vladimir Putin held traditional marathon

[1] The Army and the Society. Moscow: All-Russia Public Opinion Research Center (ARPORC), 26.12.2018. URL: https://wciom.ru/fileadmin/file/reports_conferences/2018/2018-12-24_army_society. pdf (date of reference: 02.04.2019).

[2] *Khamrayev V.* Prosperity is More Important than Greatness // The Kommersant daily. November 6, 2018. (Issue No.203). p. 3.

[3] Approval of the State Armament Program is Being "Finalized" – Peskov. 10.01.2018. URL: https://www.militarynews.ru/story.asp?rid=1&nid=470872&lang=RU (date of reference: 12.01.2018); The Visit to the Ufa Engine-Building Plant. Ufa, 24.01.2018. URL: http://www.kremlin.ru/events/president/news/56697 (date of reference: 25.01.2018).

[4] According to the report of T. Schevtsova, Deputy Defense Minister at her meeting with journalists on December 29, 2017. URL: https://function.mil.ru/news_page/country/more.htm?id=12156812@egNews (date of reference: 12.02.2018).

[5] Sergei Shoigu, Defense Minister and General of the Army held a telephone conference with the high command of the Armed Forces Moscow, 20.03.2018. URL: https://function.mil.ru/news_page/country/more.htm?id=12167511@egNews (date of reference: 20.03.2018).

sessions of meetings on the various aspects of implementation of the SAP and development of the military and industrial complex. The only meeting of the Military Industrial Commission under the chairmanship of President Vladimir Putin was held in September. The key issue of that meeting was the beginning of formation of the perspective SAP in 2023-2032[1]. At the beginning of the current year, the activities of the Military Industrial Commission were reduced to holding of a collegium chaired by Vice Premier Dmitri Rogozin[2].

The practice of holding for the general public of the so-called Single Days of Acceptance of Military Equipment at the National Defense Control Center – this practice existed since July 2014 – was suspended in autumn 2018. It can be explained by the transfer of Yu. Borisov, initiator of this practice from the Ministry of Defense to the Government.

According to Sergei Shoigu, Defense Minister, all the activities envisaged by the SDO of 2018 were accomplished, while "as regards some items, such as aircraft and helicopters, target indicators were approached".[3] The target indicators were partially revealed by President Vladimir Putin on May 17 at the meeting with the top officials of the Ministry of Defense and senior executives of enterprises of the military and industrial complex (MIC) in Sochi: "… the Armed Forces should receive over 160 units of aviation equipment, 10 surface warships and 14 space complexes. The armory of general-purpose forces is expected to be completed with 500 units of rocket and missile artillery ordance, tanks and armored vehicles".[4]

According to the data of the Ministry of Defense, in 2018 the Armed Forces actually received 126 modern aircraft and helicopters (79 percent of the target plan), 9 spacecraft (64 percent of the target plan), over 300 units of armament of armored force vehicles and equipment and over 120 units of weapon ordance (over 88 percent of the target plan).[5] The Navy received 9 surface warships (90 percent of the plan)[6]. It was officially confirmed that deliveries of two *Proton* missiles and three Il-76MD-90A cargo aircraft were failed by the Krunichev Plant and the Ulyanovsk Aircraft Plant, respectively.

Within a year, equipment with modern samples increased in the strategic nuclear forces by 3 percentage point to 82 percent (19 percentage point a year before), the

[1] The meeting of the Military and Industrial Commission. Kubinka, September 19, 2018. URL: http://www.kremlin.ru/events/president/news/58596 (date of reference: 19.09.2018).

[2] Collegium of the Military and Industrial Complex discussed the development of the Navy's infrastructure. Moscow, 23.02.2018. URL: https://www.militarynews.ru/story.asp? rid=1&nid= 471863&lang=RU (date of reference: 23.01.2018).

[3] See: The meeting of the Collegium of the Ministry of Defense.

[4] The meeting of the top officials of the Ministry of Defense and top executives of enterprises of the military and industrial complex. Sochi, 17.05.2018. URL: http://www.kremlin.ru/events / president/news/57483 (date of reference: 18.05.2018).

[5] See: The meeting of the Collegium of the Ministry of Defense; *Avdeyev Yu.* The Implementation of the state defense order in figures and facts // The Krasnaya Zvezda. December 19, 2018. (Issue No.142). p. 7.

[6] *Lurie E.* Simple Arithmetic: The Way Shipbuilders Implement by 100 Percent the State Defense Order. URL: https://flotprom.ru/2018/ИтогиГода5/ (date of reference: 28.12.2018).

aerospace forces – by 1 percentage point to 74 percent (7 percentage point in 2017), the Navy – by 8.3 percentage point to 62.3 percent (6 percentage point a year before) and the ground forces – by 3.6 percentage point to 48.3 percent (2.7 percentage point in 2017)[1].

Generally, by the end of 2018 the equipment of the Armed Forces with modern weapons was equal to 61.5 percent, with the target plan of 62 percent declared for two years in succession, having increased within a year by 2 percentage point (80 percent of the target plan). It is noteworthy that in 2018 the main target indicator of the SAP – equipment of the Armed Forces with modern weapons–conformed much better the relevant components and indicators of actual implementation of the SAP than a year before. In last year's failure situation, it is believed the country's leadership made the correct decision by demonstrating the latest state-of-the-art developments of the military and industrial complex to Russian citizens and foreign observers on March 1.

In 2018, the efficiency of utilization of financial resources for implementation of the SAP improved, but is still unacceptably low (see *Table 30*). The observed considerable reduction of the volume of the SDO was caused by the return of loans in 2014 and 2015; the assessment thereof is presented in *Table 36*. A 5.1 percent increase (planned by the Ministry of Industry and Trade) in the output of the military and industrial complex in 2018 may turn out to be too optimistic because the indices of the physical volume of the gross added value were as follows this year: "manufacturing of computers and electronic and optical products" (98.7 percent), "manufacturing of machines and equipment which are not included in other groups" (99.3 percent) and "manufacturing of other transport vehicles and equipment" (the mere 96.9 percent)[2].

Table 30

The efficiency of utilization of financial resources for implementation of the SAP in 2010–2018

	2010	2011	2012	2013	2014	2015	2016	2017	2018
SDO with taking into account utilization and repayment of loans, billion rubles	509.1	707.6	888.3	1 283.0	1 676.2	1 767.1	2 100.6	1 468.6	1 297.4
SDO increase, % on previous year	1.8	39.0	25.5	44.4	30.6	5.4	18.9	–30.1	–11.7
Growth in output of military and industrial complex, % on previous year	17.4	5.8	6.4	13.5	15.5	12.9	9.5	5.3	5.1
Equipment with modern samples, %	12.0	14.0	16.0	19.0	30.0	47.2	58.3	59.5	61.5
Equipment growth, percentage point	3.0	2.0	2.0	3.0	11.0	17.2	11.1	1.2	2.0
Unit costs, billion rubles/ percentage point of equipment growth	169.7	353.8	444.2	427.7	152.4	102.7	189.7	1 223.8	648.7

Source: Federal Laws on Budget Administration; the Federal Treasury; the Ministry of Industry and Trade; the Ministry of Defense and own calculations.

[1] See: The meeting of the Collegium of the Ministry of Defense.

[2] The indices of the physical volume of the gross value added by the sector of the economy. Moscow: The Rosstat, 02.04.2019. URL: http://www.gks.ru/free_doc/new_site/vvp/vvp-god/tab12a-2.xls (date of reference: 03.04.2019).

6.7.3. The military and financial policy

In compliance with the existing practice, the administration of the 2018 federal budget was accompanied by two adjustments in July and November.[1] The allocations on "the National Defense" established originally by the Law on the 2018 Federal Budget in the amount of RUB 2,769 trillion[2], a decrease of RUB 84 billion (2.9 percent) as compared to the actual expenditures on this budget item in 2017 were increased by RUB 28 billion (1.0 percent) to RUB 2,797 trillion and RUB 31 billion (1.1 percent) to RUB 2,828 trillion (2.7 percent of GDP) in July and November, respectively. At the same time, the redistribution of allocations within this budget item on R&D of weapons and military equipment (WME) within the frameworks of the State Defense Order in order to implement the SAP by the end of the year were increased by RUB 12 billion by means of allocations on delivery and maintenance of the WME for the same purpose.

The abovementioned amounts of military allocations which are not specified in the published laws were received from the materials of subsequent draft laws on amendment of the federal budget. In 2018, the classified executed federal budget expenditures decreased somewhat (see *Table 31*) and amounted to RUB 2,794 trillion (2.7percent of GDP), a decrease of RUB 39billion as compared to 2017.

Table 31

The share of classified federal budget expenditures in 2009–2018, %

Code and name of section (subsection) with classified expenditures	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1	2	3	4	5	6	7	8	9	10	11
Total federal budget expenditures	10.1	10.5	11.7	11.6	13.8	14.9	19.1	21.7	17.3	16.7
0100 FEDERAL ISSUES	5.6	5.9	10.4	11.4	10.1	10.1	15.1	12.5	14.6	15.2
0108 International relations and international cooperation	–	–	–	–	<0.1	1.4	24.1	23.1	26.5	24.9
0109 State material reserve	84.6	83.9	85.6	86.5	86.1	86.7	87.2	84.1	86.8	87.2
0110 Fundamental research	0.7	0.2	0.5	0.8	0.7	0.8	0.8	0.8	0.6	0.9
0112 Applied research in field of federal issues	–	–	–	0.3	0.3	0.8	0.7	–	–	48.2
0114 Other federal issues	1.9	1.9	1.7	1.6	3.6	5.1	5.3	3.4	4.4	3.9
0200 NATIONAL DEFENSE	47.7	46.5	45.4	47.5	50.4	56.0	65.4	70.5	63.9	65.1
0201 Armed Forces of Russian Federation	39.2	37.8	39.3	40.7	46.7	52.0	65.3	69.0	60.5	59.9
0204 Mobilization preparation of economy	100	100	100	100	100	100	100	100	100	100
0206 Nuclear weapons complex	100	100	100	100	100	100	100	100	100	100
0207 Implementation of international obligations in area of military and technical cooperation	100	100	100	61.6	80.6	76.7	80.8	77.6	76.9	83.6

[1] Federal Law No.362-FZ of December 05, 2017 "On the 2018 Federal Budget and the 2019-2020 Planned Period"; Federal Law No.193-FZ of July 03, 2018 "On Amendment of the Federal Law "On the 2018 Federal Budget and the 2019-2020 Planned Period""; Federal Law No.458-FZ of November 29, 2018 "On Amendment of Federal Law "On the 2018 Federal Budget and the 2019-2020 Planned Period"".

[2] The Conclusion of the Accounts Chamber on the Federal Draft Law "On Amendment of the Federal Law " On the 2018 Federal Budget and the 2019-2020 Planned Period"" approved by Resolution No. 31K(1252) of June 01, 2018 of the Collegium of the Accounts Chamber. p.15.

Cont'd

1	2	3	4	5	6	7	8	9	10	11
0208 Applied research in field of national defense	92.9	91.7	92.4	92.9	94.3	92.1	91.7	96.3	95.7	95.1
0209 Other issues of national defense	37.1	48.0	35.0	48.6	34.6	46.9	38.8	41.8	55.6	65.8
0300 NATIONAL SECURITY AND LAW ENFORCEMENT	31.0	31.5	31.6	24.0	26.6	27.1	28.4	29.1	29.4	28.2
0302 Law enforcement agencies	3.7	4.2	3.9	3.3	3.8	3.9	4.9	5.8	5.8	5.6
0303 Interior troops	*8.2*	*8.2*	*7.4*	*4.6*	*4.4*	*5.3*	*6.9*	–	–	–
0303 National guard troops	–	–	–	–	–	–	–	7.7	7.0	5.6
0304 Judicial authorities	–	–	–	–	–	–	–	3.2	3.4	3.9
0306 Security agencies	99.6	99.6	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8
0307 Frontier service agencies	99.5	98.6	99.2	99.1	99.6	99.9	100	100	100	100
0309 Protection of population and territory from natural and man-made emergency situations, civil defense	50.0	48.6	44.5	41.6	38.5	39.1	39.7	45.7	49.1	30.6
0310 Migration policy	–	–	–	–	–	–	–	–	0.1	–
0313 Applied research in field of national security and law enforcement	75.0	91.4	86.6	86.6	82.5	82.7	91.2	90.5	92.4	91.0
0314 Other issues of national security and law enforcement	60.6	49.9	12.4	12.1	11.8	44.8	60.7	59.3	58.2	60.9
0400 NATIONAL ECONOMY	0.8	1.4	1.9	2.5	4.7	3.6	5.5	7.0	9.5	6.7
0403Research and use of space	–	–	–	–	–	–	–	–	56.3	–
0408Transport	–	–	–	–	0.1	–	0.2	–	–	–
0410Communications and IT	–	–	–	<0.1	1.8	2.0	0.5	–	–	–
0411 Applied research in field of national economy	4.5	5.4	11.9	15.3	18.3	23.8	26.7	14.2	17.6	14.4
0412 Other issues in field of national economy	0.9	2.9	2.2	2.5	9.4	2.9	8.0	17.3	18.2	16.1
0500 HOUSING AND PUBLIC UTILITIES	9.5	15.0	13.8	6.7	9.1	9.7	4.3	7.8	1.4	0.3
0501 Housing services	11.4	19.1	20.2	8.6	16.8	25.0	12.0	22.3	7.7	1.8
0700 EDUCATION	2.9	3.2	4.0	3.3	3.8	4.1	3.3	3.1	3.1	2.8
0701 Pre-school education	3.6	3.5	3.7	3.2	0.7	0.8	1.2	7.2	6.8	2.2
0702 General education	2.9	2.7	0.7	0.3	0.5	1.1	1.0	0.6	0.8	0.8
0704 Secondary vocational education	0.2	–	–	–	–	–	–	–	–	–
0705 Vocational training, retraining and advanced training	2.6	11.8	18.1	11.3	4.5	2.8	2.9	3.4	2.5	3.1
0706 Higher and post-graduate vocational education	3.4	3.6	5.0	4.1	4.9	5.1	3.9	3.6	3.7	3.6
0709 Other issues of education	0.6	0.5	0.3	0.4	0.5	0.9	1.2	0.9	–	–
0800 CULTURE. CINEMATOGRAPHY AND MASS MEDIA	*0.2*	*0.2*	–	–	–	–	–	–	–	–
0800 CULTURE. CINEMATOGRAPHY	–	–	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
0801 Culture	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
0804 Printed media	*3.1*	*3.3*	–	–	–	–	–	–	–	–
0900 HEALTHCARE. PHYSICAL CULTURE AND SPORTS	*2.9*	*2.8*	–	–	–	–	–	–	–	–
0900 HEALTHCARE	–	–	2.4	2.1	2.8	2.6	2.6	2.9	3.4	3.0
0901 In-patient care	1.9	1.8	2.1	1.5	2.3	1.6	1.7	1.9	3.3	3.7
0902 Out-patient care	3.6	4.6	2.3	2.3	3.3	3.0	2.6	3.3	2.7	2.5
0905 Spa and recreation care	14.7	11.0	10.0	10.6	12.3	14.6	15.3	16.1	17.1	16.8
0907 Sanitary and epidemiological welfare	0.2	0.5	0.6	0.7	0.7	0.6	0.7	0.7	0.7	0.5
0908 Physical culture and sports	*0.6*	*0.8*	–	–	–	–	–	–	–	–
0908 Applied research in healthcare	–	–	–	–	–	–	–	–	–	0.2
0909 Other issues of healthcare	–	–	0.4	0.3	0.4	0.6	0.4	0.5	0.7	0.5
0910 Other issues of healthcare. physical culture and sports	*1.2*	*0.9*	–	–	–	–	–	–	–	–
1000 SOCIAL POLICY	<0.1	–	–	0.1	0.1	<0.1	0.1	0.1	0.1	0.2
1001 Pension coverage	–	–	–	–	–	–	0.1	0.1	0.1	0.1
1003 Social security of population	<0.1	–	–	0.3	0.4	0.1	0.2	0.3	0.4	0.4
1004 Family and childhood welfare	–	–	–	–	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Cont'd

1	2	3	4	5	6	7	8	9	10	11
1100 PHYSICAL CULTURE AND SPORTS	–	–	0.2	0.3	0.3	0.3	0.2	0.3	0.2	0.4
1101 Physical culture	–	–	62.0	4.9	6.9	7.6	3.8	3.6	5.2	5.7
1200 MASS MEDIA	–	–	0.2	0.2	0.4	0.4	0.3	2.2	0.3	0.3
1202 Printed media	–	–	2.9	3.1	5.0	5.4	4.5	5.1	5.4	5.3
1204 Other issues in field of mass media	–	–	–	–	–	–	–	12.9	–	–

Source: As regards the data on 2009–2017, laws on administration of the federal budget were used; as regards the data on 2018 – quarterly reports of the Federal Treasury on administration of federal and consolidated budgets as of January 01, 2019; the data on 2009–2010 are provided to relevant sections and subsections of the budget classification of expenditures which became effective since 2011; The data on the earlier budget classification are shown in italics; own calculations.

The absolute and relative values of the main components of direct military expenditures of the Russian Federation in the 2018 Federal Budget and the change thereof as compared to 2017 in nominal terms[1] determined on the basis of the Federal Treasury's monthly reports on administration of the consolidated and federal budgets in December 2018 are shown in *Table 32.*

Table 32

Direct military federal budget expenditures on the "National Defense" item in 2018

Name of section and subsections	Amount of expenditures, million rubles	Change on 2017, million rubles (growth, %)	Share of expenditures, % (change on 2017, percentage point)	
			In 2018 federal budget	In GDP
1	2	3	4	5
NATIONAL DEFENSE	2 827 015	–25 260 (–0.89)	16.92 (–0.46)	2.72 (–0.38)
Armed Forces of Russian Federation	2 163 059	–56 016 (–2.52)	12.94 (–0.57)	2.08 (–0.33)
Mobilization and pre-conscription and reserve military training	7 128	493 (7.43)	0.04 (–)	0.01 (–)
Mobilization preparation of economy	3 175	176 (–5.25)	0.02 (–)	<0.01 (–)
Nuclear-weapons complex	45 117	680 (1,53)	0,27 (–)	0,04 (–0,01)
Implementation of international obligations in field of military and technical cooperation	10 087	1 264 (14.32)	0.06 (0.01)	0.01 (–)
Applied research in national defense	324 861	54 362 (20.10)	1.94 (0.30)	0.31 (0.02)
Other issues of national defense	273 588	–25 866 (–8.64)	1.64 (–0.19)	0.26 (–0.06)

Source: The Federal Treasury; own calculations.

In 2018, the expenditures on the "National Defense" budget item were carried out with the saving of RUB 1 billion as compared to the final version of the law on the federal budget. At the same time, on the back of saving RUB 56 million worth of expenditures on the "Other Issues of National Defense" item excess expenditures were made on the "Armed Forces of the Russian Federation" item in the amount of RUB 41 billion, of which 50 percent is related to the delivery and maintenance of the WME within the frameworks of the State Defense Order (SDO) and RUB 14 billion on the "Applied Research in National Defense" item for research in the field of the WME within the frameworks of the SDO.

[1] Federal Law No.345-FZ of October 11, 2018 "On Administration of the 2017 Federal Budget".

It is noteworthy that RUB 205 billion which were unutilized in 2017 and carried forward to 2018 by decision of the President of the Russian Federation surpassed by large the limit of the expenditures of the consolidated budget breakdown as compared to the allocations envisaged by the law on the federal budget as regards the "National Defense" item within the entire year starting from RUB 184 billion to RUB 235 billion in December. However, in 2018 those considerable financial resources were not utilized because of the existing risks in the Ministry of Defense of renewed growth in accounts receivables on advance payments which decreased for the first time a year before by 0.8 percent to RUB 2,864 trillion (as much as two annual volumes of the SDO). Later in November, the RF Minister of Defense declared that the issue of overadvancing of the military and industrial complex for nearly RUB 400 billion was solved.[1]

Military expenditures in other items of the federal budget are listed in *Table 33*. The general reduction of RUB 5 billion in military expenditures was caused by substantial reduction (RUB 74 billion) in the "National Defense" item's classified expenditures which compensated evident growth of RUB 34 billion (74 percent) in the expenditures of the Ministry of Defense on the "Housing and Public Utilities" item. A substantial relative increase in expenditures on the "Elimination of Chemical Weapons in the Russian Federation" Presidential Program is related to the activities aimed at completing that program in 2018.

Table 33

Direct and indirect military spending under other sections of federal budget, 2018

Name of subsection, target item or *type of expenditures*	**Total expenditure million RUB**	**Change on 2017, million rubles (growth, %)**	**Expenditure (% change over 2017 percentage point)**	
			Federal budget 2018	**as a percentage of GDP**
1	2	3	4	5
"National Matters"				
Expenditures of Ministry of Defense	8	–1 (–15.80)	<0.01 (–)	<0.01 (–)
Mobilizational preparation of government agencies	109	6 (–)	<0.01 (–)	<0.01 (–)
"National Security and Law Enforcement"				
Federal National Guard	228 438	5 850 (2.63)	1.37 (0.01)	0.22 (–0.02)
Frontier service authorities	136 867	–3 518 (–2.51)	0.82 (–0.04)	0.13 (–0.02)
Mobilizational preparation of government agencies	16	–6 (–27.91)	<0.01 (–)	<0.01 (–)
"National Economy"				
Mobilizational preparation of government agencies	182	58 (46.63)	<0.01 (–)	<0.01 (–)
"Destruction of Chemical Weapons Stockpiles in Russian Federation" Presidential Program	434	86(24.65)	<0.01 (–)	<0.01 (–)
Subsidies on Russia-NATO coordination center	18	–1 (–5.04)	<0.01 (–)	<0.01 (–)

[1] The Ministry of Defense controls 3,500 contracts of the State Defense Order up to each aircraft. Moscow, 30.11.2018. URL: https://function.mil.ru/news_page/country/more.htm?id=12206217@egNews (date of reference: 30.11.2018).

Cont'd

1	2	3	4	5
Federal Target Program "Industrial Utilization of Arms and Military Equipment in 2011–2015 and in the period till 2020"	49	36 (277.50)	<0.01 (–)	<0.01 (–)
Capital development within frameworks of SDO	7 520	549 (7.88)	0.04 (–)	0.01 (–)
Contributions to charter capitals and subsidies to MIC	10 013	5 745 (134.61)	0.06 (0.03)	<0.01 (0.01)
Classified expenditures	160 221	–73 898 (–31.56)	0.96 (–0.47)	0.15 (–0.10)
"Housing and Public Utilities"				
Expenditures of Ministry of Defense	79 726	33 797 (73.59)	0.48 (0.20)	0.08 (0.03)
Expenditures of Federal National Guard	2 801	518 (22.68)	0.02 (–)	<0.01 (–)
"Destruction of Chemical Weapons Stockpiles in Russian Federation" Presidential Program	261	259 (12341.59)	<0.01 (–)	<0.01 (–)
Mobilizational preparation of government agencies	13	13 (–)	<0.01 (–)	<0.01 (–)
Environmental Protection				
Expenditures of Ministry of Defense	1 525	113 (7,99)	0,01 (–)	<0,01 (–)
"Education"				
Expenditures of Ministry of Defense	80 578	6 801 (9.22)	0.48 (0.03)	0.08 (–)
Expenditures of Federal National Guard	5 644	863 (18.04)	0.03 (–)	0.01 (–)
Presidential program 'Destruction of Chemical Weapons Stockpiles in RF'	90	90 (–)	<0,01 (–)	<0,01 (–)
"Culture and Cinematography"				
Expenditures of Ministry of Defense	3 921	160 (4.26)	0.02 (–)	<0.01 (–)
Expenditures of Federal National Guard	377	102 (37.22)	<0.01 (–)	<0.01 (–)
"Healthcare"				
Expenditures of Ministry of Defense	72 019	13 322 (22,70)	0,43 (0,07)	0,07 (0,01)
Expenditures of Federal National Guard	4 838	463 (10,59)	0,03 (–)	<0,01 (–)
Pharmacological support ZATO Federal Biomedical Agency	91	–4 (–4.07)	<0.01 (–)	<0.01 (–)
Mobilizational preparation of government agencies	11	4 (65.75)	<0.01 (–)	<0.01 (–)
"Social Policy"				
Expenditures of Ministry of Defense	490 693	2 899 (0.59)	2.94 (–0.03)	0.47 (–0.06)
Expenditures of Federal National Guard and Frontier Service Authorities	75 297	3 392 (4.72)	0.45 (0.01)	0.07(–0.01)
Material support of experts of nuclear weapons complex of Russian Federation	7 346	20 (0.27)	0.04 (–)	0.01 (–)
Benefits to families of killed servicemen and servicemen who became disabled as result of military injuries	11 241	–3 093 (–21.58)	0.07 (–0.02)	0.01 (–)
Lump-sum benefits to pregnant wives of servicemen who are on compulsory-duty service, as well as monthly child benefits	803	–123 (–13.26)	<0.01 (–)	<0.01 (–)
Resettlement of citizens from closed administrative territorial units (CATU)	509	62 (13,90)	<0.01 (–)	<0.01 (–)
Mobilizational preparation of government agencies	8	2 (27.80)	<0.01 (–)	<0.01 (–)
"Physical Fitness and Sports"				
Expenditures of Ministry of Defense	3 792	75 (2.02)	0.02 (–)	<0.01 (–)
"Mass Media"				
Expenditures of Ministry of Defense	2 810	505 (21.90)	0.02 (–)	<0.01 (–)
Mobilizational preparation government agencies	4	<1 (–4.74)	<0.01 (–)	<0.01 (–)
"General Intergovernmental Transfers Within the Budget System of the Russian Federation"				
Subsidies to CATU budgets	9 151	–298 (–3.16)	0.05 (–)	0.01 (–)
TOTAL ON OTHER ITEMS	1 397 427	–5 157 (–0.41)	8.36 (–0.18)	1.35 (–0.17)

Source: The Federal Treasury; own calculations.

As a result, in 2018 the overall military expenditures (see *Table 34*) of the Russian federal budget calculated in accordance with the UN standards applicable to military expenditures decreased by 0.5 percentage point of GDP to 4.1 percent of GDP as compared to the previous year.

Table 34

The overall indices of military and related federal budget expenditures in 2018

Name of expenditures	Amount of expenditures, million rubles	Change on 2017, million rubles (growth, %)	Share of expenditures, % (change on 2017, percentage point)	
			In 2018 federal budget	In GDP
Overall military expenditures related to present and previous military activities	4 224 442	–30 416 (–0.79)	25.28 (–0.64)	4.07 (–0.55)
Overall expenditures by items "National Defense" and "National Security and Law Enforcement"	4 798 598	28 304 (0.65)	28.71 (–0.34)	4.62 (–0.56)

Source: The Federal Treasury, own calculations.

In 2018, the peak of expenditures on the "National Defense" item in Q4 (31.7 percent or RUB 898 billion) decreased substantially as compared to the previous year (36.9 percent or RUB 1.54 trillion). The quarterly dynamics of execution of expenditures by the main subsections of the "National Defense" item of the federal budget in 2016–2018 are shown in *Fig. 28–30.*

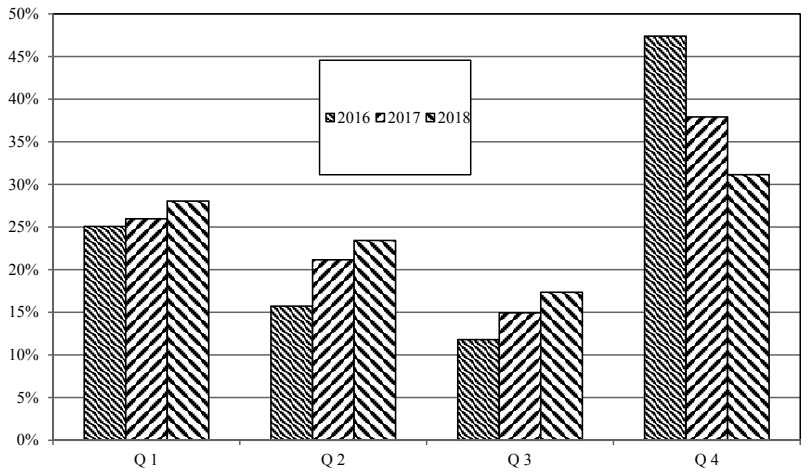
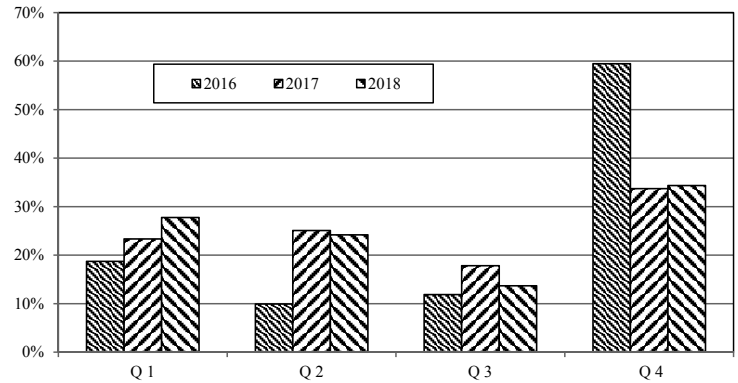


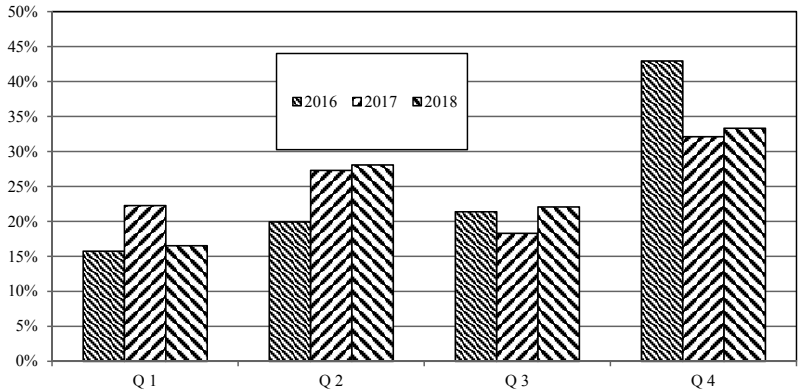
Fig. 28. The execution of federal budget expenditures by the "Armed Forces of the Russian Federation" subsection in 2016–2018

Source: The Federal Treasury; own calculations.



Source: The Federal Treasury; own calculations.

Fig. 29. The execution of federal budget expenditures by the "Applied Research in National Defense" subsection in 2016–2018



Source: The Accounts Chamber; own calculations.

Fig. 30. The execution of federal budget expenditures by the "Other Issues of National Defense" subsection in 2016–2018.

In 2018, the expenditures on allowances to servicemen of the Ministry of Defense amounted to RUB 506,481 billion (0.49 percent of GDP), an increase of 3.4 percent in nominal terms within a year. The expenditures on labor remuneration of the civilian personnel of the Ministry of Defense amounted to RUB 209,934 billion (0.20 percent of GDP), an increase of 5.8 percent in nominal terms for the first time since 2013. In 2018 the expenditures on pensions to servicemen of the Ministry of Defense of the Russian Federation amounted to 343,282 billion (0.33 percent of GDP), an increase of 1.5 percent in nominal terms as compared to the previous year.

The main indicators of the federal budget expenditures on the manning of the Armed Forces in 2011–2018 are shown in *Table 35*. The expenditures of the Ministry of Defense are considered here in a package with the expenditures on allowances to servicemen and civilian personnel in terms of the expenditures on the manning of the Armed Forces with servicemen in the previous periods.

Table 35

Federal budget expenditures on the manning of the Armed Forces in 2011–2018

Type of expenditures	2011	2012	2013	2014	2015	2016	2017	2018
In nominal terms, billion rubles								
Payments to servicemen	262.0	352.7	379.4	400.7	429.8	473.5	489.9	506.5
Payments to civilian personnel	n/a	189.2	213.2	211.3	203.7	199.0	198.4	209.9
Pensions of Ministry of Defense	136.4	252.6	262.6	287.4	305.3	327.1	338.3	343.3
% of GDP								
Payments to servicemen	0.44	0.53	0.53	0.51	0.53	0.55	0.53	0.49
Payments to civilian personnel	n/a	0.28	0.30	0.27	0.25	0.23	0.22	0.20
Pensions of Ministry of Defense	0.23	0.38	0.37	0.37	0.38	0.38	0.37	0.33
% expenditures on "National Defense" item								
Payments to servicemen	17.3	19.5	18.0	16.2	13.5	12.5	17.2	17.9
Payments to civilian personnel	n/a	10.4	10.1	8.5	6.4	5.3	7.0	7.4
Pensions of Ministry of Defense	9.0	13.9	12.5	11.6	9.6	8.7	11.9	12.1
Growth within year in nominal terms, %								
Payments to servicemen	–	34.6	7.6	5.6	7.3	7.5	3.5	3.4
Payments to civilian personnel	–	n/a	12.7	–0.9	–3.6	–2.3	–0.3	5.8
Pensions of Ministry of Defense	–	85.3	3.9	9.5	6.2	7.1	3.4	1.5

Source: The Federal Treasury; own calculations.

The data presented in *Table 35* point to the fact that in 2018 despite an increase in nominal terms in cash allowances and pensions of the Ministry of Defense the Government managed to reduce at least a portion of the expenditures on the manning of the Armed Forces in real terms, which situation can be explained by insignificant growth in the number of servicemen in combination with the reduction of the number of military pensioners.

In 2018, the expenditures of the Ministry of Defense on fuels and lubricants and material support decreased again as compared to the previous year and amounted to RUB 59,020 billion (–19.2 percent) and RUB 24,792 billion (–9.0 percent), respectively. The expenditures on subsistence support grew by 14.9 percent to RUB 73,952 billion.

In 2018 the budget investments of the Ministry of Defense in capital development projects within the frameworks of the SDO and subsidies on purchasing of housing by individuals decreased as compared to the previous year and amounted to RUB 82,404 billion (–32.4 percent) and RUB 129,032 billion (–1.8 percent), respectively. The capital development plans of the Ministry of Defense envisaged spending of RUB 117,093.9 billion, including RUB 93.9 billion on building of special and military projects[1].

[1] A meeting of the Collegium of the Ministry of Defense of the Russian Federation was held in Moscow. Moscow, 26.02.2018. URL: https://function.mil.ru/news_page/country/more.htm?id=12164444@egNews (date of reference: 26.02.2018).

Presented in *Table 36* is the updated and adjusted estimate of the contribution of credit financing to Russian military expenditures in 2011–2018 based on the data of the Accounts Chamber on the actual utilization of state guarantees for the financing of the SDO, as well as the published data on repayment of commercial loans. To calculate the interests (a banking premium), the adjusted value of the officially declared markup to the Central Bank's rate of refinancing (the key rate) was used. The overall contribution of the lending scheme for each year is determined as the difference between the utilized guarantees and the body of the debt.

Table 36

The contribution of credit financing to Russian military expenditures in 2011–2018

	2011	2012	2013	2014	2015	2016	2017	2018	2011–2018
Utilized guarantees, billion rubles	123.2	187.7	350.5	470.9	8.5	200.8	–	–	1 341.6
Repayment of loans, billion rubles, including:	–	–	–	–	181.5	792.0	186.8	477.0	1 637.2
Return of body of debt, billion rubles	–	–	–	–	123.2	578.5	132.4	306.7	1 140.8
Repayment of interests, billion rubles	–	–	–	–	58.3	213.5	54.4	170.2	496.4
Overall contribution of lending scheme, billion rubles	+123.3	+187.7	+350.5	+470.9	–114.7	–377.6	–132.4	–306.7	–
Overall contribution of lending scheme, % of GDP	+0.20	+0.28	+0.48	+0.59	–0.14	–0.44	–0.14	–0.30	–

Source: The Accounts Chamber; the Ministry of Defense; the Vedomosti daily. December 14, 2016. (No. 235); own calculations.

Presented in *Table 37* are the Russian military expenditures in 2008–2018 accounted for in the overall balanced expenditures on the "National Defense" item of the consolidated budgets of the subjects of the Russian Federation in 2018 in the amount of RUB 1,394 billion and the contribution of credit financing in 2011–2018 in accordance with the data of *Table 36*.

Таблица 37

The main indicators of military expenditures of the Russian Federation in 2008–2018

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1	2	3	4	5	6	7	8	9	10	11	12
1. In nominal terms (in current prices), billion rubles											
Federal Budget allocations on "National Defense" item: in current budget classification	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	2 827.9
Execution of federal budget expenditures on "National Defense" item in current budget classification [a]	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	2 827.0
Military expenditures of Russian Federation in accordance with data provided to UN [b]	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	n/a	n/a
Overall military expenditures related to current and previous military activities [c]	1 448.8	1 748.7	1 880.3	2 267.1	2 841.9	3 344.0	3 928.8	4 197.6	4 535.4	4 124.4	3 919.1
2. In real terms (in prices of 2018) [d], billion rubles											
Federal budget allocations on "National Defense" item: in current budget classification	2 220.5	2 517.5	2 362.1	2 451.5	2 698.7	2 928.3	3 186.9	3 793.3	4 526.8	3 363.9	2 827.9

Cont'd

1	2	3	4	5	6	7	8	9	10	11	12
Execution of federal budget expenditures on "National Defense" item in current budget classification	2 240.5	2 507.6	2 359.3	2 417.2	2 649.1	2 917.0	3 197.9	3 814.4	4 387.3	3 146.0	2 827.0
Military expenditures of Russian Federation in accordance with data provided to UN	2 406.5	2 461.0	2 148.6	2 269.5	2 469.2	2 302.1	2 531.0	3 481.0	2 388.8	n/a	n/a
Overall military expenditures related to current and previous military activities	3 118.5	3 690.5	3 475.4	3 614.9	4 154.1	4 637.1	5 067.9	5 032.8	5 270.5	4 459.0	3 919.1
3. In real terms (in prices of 2008) [c], billion rubles											
Federal Budget allocations on "National Defense" item: in current budget classification	1 031.6	1 169.5	1 097.4	1 138.9	1 253.7	1 360.4	1 480.5	1 762.2	2 103.0	1 562.7	1 313.7
Execution of federal budget expenditures on "National Defense" item in current budget classification	1 040.8	1 164.9	1 096.1	1 122.9	1 230.7	1 355.1	1 485.6	1 772.0	2 038.2	1 461.5	1 313.3
Military expenditures of Russian Federation in accordance with data provided to UN	1 118.0	1 143.3	998.2	1 054.3	1 147.1	1 069.5	1 175.8	1 617.2	1 109.0	n/a	n/a
Overall military expenditures related to current and previous military activities	1 448.8	1 714.5	1 614.5	1 679.4	1 929.8	2 154.2	2 354.4	2 338.1	2 448.5	2 113.3	1 820.7
4. Military burdening of economy, % GDP											
Federal budget allocations on "National Defense" item: in current budget classification	2. 50	3.07	2.76	2.55	2.71	2.89	3.13	3.81	4.53	3.31	2.72
Execution of federal budget expenditures on "National Defense" item in current budget classification	2.52	3.06	2.76	2.51	2.66	2.88	3.14	3.83	4.39	3.10	2.72
Military expenditures of Russian Federation in accordance with data provided to UN	2.71	3.00	2.51	2.36	2.48	2.27	2.48	3.49	2.39	n/a	n/a
Overall military expenditures related to current and previous military activities	3.51	4.51	4.06	3.76	4.17	4.57	4.97	5.05	5.27	4.48	3.77
5. By purchasing power parity (in current prices), billion rubles											
Federal Budget allocations on "National Defense" item: in current budget classification	71.9	85.1	80.8	88.6	100.0	108.7	117.6	134.1	159.9	125.3	108.5
Execution of federal budget expenditures on "National Defense" item in current budget classification	72.6	84.8	80.7	87.4	98.2	108.3	118.0	134.9	155.0	117.2	108.5
Military expenditures of Russian Federation in accordance with data provided to UN	78.0	83.2	73.5	82.1	91.5	85.5	93.4	123.1	84.4	n/a	n/a
Overall military expenditures related to current and previous military activities	101.0	124.8	118.8	130.7	153.9	172.2	187.0	178.0	186.2	169.4	150.4
6. By average annual exchange rate (in current prices),billion rubles											
Federal Budget allocations on "National Defense" item: in current budget classification	41.5	37.6	42.1	52.3	59.4	66.3	64.3	51.9	58.1	52.3	45.1
Execution of federal budget expenditures on "National Defense" item in current budget classification	41.9	37.5	42.0	51.6	58.3	66.1	64.5	52.2	56.3	48.9	45.1
Military expenditures of Russian Federation in accordance with data provided to UN	45.0	36.8	38.3	48.4	54.3	52.1	55.1	47.6	30.7	n/a	n/a
Overall military expenditures related to current and previous military activities	58.3	55.1	61.9	77.1	91.4	105.0	102.3	68.9	67.8	70.6	62.5
For reference											
Deflator of gross domestic product, % on previous year	118.0	102.0	114.2	115.9	109.1	105.4	107.5	107.6	103.2	105.4	110.3
Purchasing power parity, RUB/USD	14.34	14.02	15.82	17.35	18.46	19.42	21.01	23.59	24.36	24.34	26.06
USD/RUB exchange rate (average weighted), USD/RUB.	24.86	31.72	30.37	29.39	31.09	31.85	38.42	60.96	67.03	58.35	62.71

[a] As regards 2018 – the data of a monthly report of the Federal Treasury on execution of the consolidated budget in December 2017.

[b] As regards 2017, the data were not provided to the UN as a result of termination for unknown reasons of Resolution No.11 of January 9, 1994 of the Government of the Russian Federation "On Submission on the Annual Basis of the Data on Military Expenditures of the Russian Federation to the UN Secretary-General and the Information on the Military Budget of the Russian Federation to the Conference on Security and Cooperation in Europe".

[c] Including pensions to servicemen and expenditures on the elimination of stockpiles of chemical weapons and utilization of weapons and military equipment.
[d, e] Deflated by means of the GDP deflator.
Source: Federal Laws on Federal Budgets in 2008–2018 and Amendment of Federal Budgets in 2008–2017; United Nations Report on Military Expenditures; the Central Bank of the Russian Federation; the Rosstat; the Federal Treasury, OECD.Stat.

6.8. North caucasus in 2018: factors of changes[1]

This section deals with a brief evaluation of developments in the regions of North Caucasus in 2018 as they can be regarded as indicators of significant changes in that part of the country. Such developments include personnel changes in the government of Dagestan where for the first time in the post-Soviet period key positions in the region were taken by officials who never worked in that republic, as well as large-scale public activities in Ingushetia over the issue of the region's borders.

6.8.1. Dagestan: economic consequences of "Cleansing" of clan bureaucracy

In 2018, federal law enforcement units carried out "cleansing" of crony bureaucracy in Dagestan, an unprecedented act for North Caucasus. As a result, criminal cases were brought against the head of the region's government, two vice premiers, three ministers and heads of territorial authorities of a number of federal bodies in Dagestan. On the back of personnel changes which followed that "cleansing", in the region's governing bodies the share of executive officials who never worked in the republic before has grown. At present, such officials include Vladimir Vasiliev, Head of Dagestan (who became the acting head of the region four months before the initiation of criminal cases) and Artem Zdunov, Chairman of the Government (who was appointed after the arrest of his predecessor Abdusamad Gamidov in February 2018).

A large-scale attack on crony officials and emergence in the region's leadership of officials who were not involved in any groups of interests in the local bureaucracy gave rise to expectations of "the rules of the game" in the economy – such non-transparent rules which do not comply with the federal legislation were formed for decades of the "clan" rule in Dagestan – to be modified. After large-scale personnel changes in the region, it is too early to make conclusions on whether they were successful. However, it is worth analyzing the situation in those sectors of the regional economy where the issue of non-transparent mechanisms of regulation was earlier believed to be the most acute one.

Building

One of the first sectors where with a leadership change in the region new developments affected all the players was the building industry. Violations in housing development used to be one of the main issues Vladimir Vasiliev publicly referred to

[1] This section was written by K. Kazenin, Gaidar Institute, RANEPA; I. Starodubrovskaya, Gaidar Institute, RANEPA.

from the very date he was appointed the head of the region. What is meant here is the practice of issuing illegally building permits and non-compliance with engineering standards in building of apartment houses. In addition, the region's leaders and new members of the government repeatedly criticized the state of things in production of building materials, particularly, bricks: it was specified that brick-making plants in the Republic used technologies which were dangerous to the environment and lots of such plants did not have any registration whatsoever. It is noteworthy that during the post-Soviet period, housing development in Dagestan was one of the most viable sectors of the economy with a high level of competition between local businessmen and a widespread practice of informal relations between market participants (for example, a standard practice was a "barter" exchange of apartments in new houses for building materials supplied). According to market participants' numerous evidence, the practice of issuing building permit documents largely depended on informal relations between developers and state authorities; as a result of such a practice unjustified building permits were often issued.

As of the end of 2018, it can be stated that the situation in the building industry of Dagestan has largely modified since completion of personnel changes in the government. As a result, numerous building permits issued earlier were withdrawn. According to the information of the press office of the Head and the Government of Dagestan, as of November 2018 there were 384 apartment houses either already built or under construction whose permit documents were found illegal. At present, construction of most such buildings is suspended and the issue of their demolition is considered by courts of law. Also, according to the data of the government of Dagestan by the end of 2018 out of 60 brick-making plants operating in the Republic 44 plants stopped working because of noncompliance with ecological requirements. It means that effective prohibitive measures against illegal practices in building and production of building materials were implemented.

As of the date of preparation of this Review, no official data were available to receive a quantitative evaluation of the effect of the measures in question on the state of the building industry (it is to be noted that in 2018 the official statistical data of Dagestan are unlikely to make it feasible to produce any reliable evaluation because the official statistics on building in Dagestan in previous years – such data could be used for comparison purposes – are not regarded by experts as trustworthy). Market participants claim that in 2018 the volume of building in Dagestan decreased nearly by a half. At the round table meeting held in Makhachkala on December 18[1]. businessmen said that such a reduction of the extent of building was related not only to the withdrawal of the existing building permits, but also the procedure for issuing new ones which became much more complicated. Also, local businessmen noted that building companies from other subjects of the Russian Federation won tenders held in the Republic.

[1] Novoe Delo, December 19, 2018 URL: https://ndelo.ru/novosti/problemy-stroitelnoj-otrasli-dagestana-obsudili-na-kruglom-stole

So, as of the end of 2018 changes which took place in Dagestan' building industry largely facilitated solution of the existing deep-rooted legal problems, but failed to create conditions for growth or solid prospects for survival of local businesses. It is clear that the future of the building industry which experienced so far the effect of personnel changes in the government of the region more dramatically than other sectors of the economy will depend on the steps to be taken by Dagestan's leadership to create new business-friendly "rules of the game" instead of those denounced.

Land Relations

One of the Republic's specific issues, which Dagestan's new leadership has repeatedly declared its commitment to solve, is the legislative regulation of agricultural land utilization. What is primarily meant here is the distant-pasture cattle tending lands with the total area of over 1.5m ha. It is flatlands which used to be provided to mountain farms for cattle ranging. At present, the utilization of such lands is regulated by the Republic's special law under which lands are deemed the property of the Republic and rented out to agricultural sector enterprises. The key problems related to distant-pasture cattle tending lands include: firstly, a large number of spontaneous settlements on such lands where people from the mountains move to[1] and, secondly, a highly nontransparent nature of lease relations and corrupt practices associated with them where large leaseholders who received distant-pasture cattle tending lands at their disposal at unjustifiably low prices subleased them unofficially to businessmen. These problems are recognized by Dagestan's new leaders, as well[2].

It is possible to single out two major things which the new leadership of Dagestan has managed to achieve on distant-pasture cattle tending lands to change the situation for the better.

Firstly, the authorities are determined to carry out the inventory of such lands and analysis of the existing rent agreements. Such actions can be regarded as a preliminary step for taking a general decision on the status of those lands, which is infeasible to do without more accurate knowledge of the actual situation there. On the other side, it is to be remembered that Dagestan's authorities repeatedly declared their inventory plans in the previous years, too, however, no concrete decisions were made after the inventory stage.

Secondly, the initiatives from "the below" as regards distant-pasture cattle tending lands fail to receive support. In particular, the call by residents of the Nagaisky District of Dagestan for a district referendum to be held on the status of distant-pasture cattle tending lands was not supported[3].

[1] K.I. Kazenin. The Components of Caucasus: Land, Power and Ideology in the Republics of North Caucasus. Moscow: REGNUM, 2012. C.6–21.

[2] Social Activists Advise the Minister to Carry Out the Land Reform. AiF Dagestan, May 15, 2018. URL: http://www.dag.aif.ru/society/huzhe_chem_est_chego_hotela_kumykskaya_obshchestvennost_ot_tolstikovoy

[3] The authorities in Dagestan refused the Nogai to hold a referendum // Kavkazsky Uzel, September 8, 2018. URL: https://www.kavkaz-uzel.eu/articles/325135/

So, there is a situation where the authorities have recognized the existence of a deep-rooted problem in land relations, but do not publicly identify the ways of solving it, nor support the initiatives of the population on this issue. Assessing the prospects of the situation around distant-pasture cattle tending lands, experts warn that the issue in question is a source of risk for inter-ethnic relations in Dagestan and is constantly raised by public ethnical organizations[1]. If no concrete strategy is developed in respect of this problem, it may have adverse consequences for the region's socio-political situation.

6.8.2. The conflict process of establishing trans-regional borders

In 2018, the process of amendment of borders between subjects of the Federation in the North Caucasian Federal Okrug was initiated. It began on September 26 when the leaders of Ingushetia and Chechnya signed an agreement on the administrative border between the two republics. Early in 2019, a similar procedure was started between Chechnya and Dagestan. The process which was originally, by all accounts, perceived as a bureaucratic formality has resulted in a surge of protest activities in North Caucasus in the past few years. Social consequences of that decision were explicitly underestimated. The border issue has opened a Pandora's box: land disputes which seemed to have calmed down started anew[2] and the hurt related to the loss by the Ingush of the Prigorodny District[3] was refreshed again.

The information on road works from the side of Chechnya on the territories which in absence of the established border were deemed to be a part of Ingushetia stirred up the general public in Ingushetia even before the agreement was signed. At that time, the negotiations started between nongovernmental organizations on a joint preparation of the forum for discussion of the border issue. When it became known that the decision on the transfer to Chechnya of the territories which were perceived as original Ingush territories had been already taken behind-the-scenes without public consultations held and the general public being informed, a spontaneous meeting, which gathered at some points up to 100,000 persons was held in the Ingush capital of Magas. The meeting continued day and night for two weeks running.

Protest activities in Ingushetia can be characterized by the following:

1) smoothing of traditional "fault lines" in the Ingush society. The most vivid example was the fact that religious differences – both between different groups within the limits

[1] *A. Z.*, *Adiev, R.A. Murzayev.* The Ethno-Confessional Aspects of Land Conflicts in North Caucasus // Vlast, 2014. Vol. 22. No. 1. pp. 177–179.

[2] In 2012–2013, there was a conflict between the leaders of the two republics over the Sunzha District of Ingushetia which was included by the Chechen legislation on borders of municipal districts into Chechnya.

[3] Before the deportation of the Ingush in 1944, the Prigorodny District was a part of the Chechen-Ingush Autonomous Soviet Socialist Republic (ASSR); later it was transferred to North Osetia and remained a part of it after the return of the deported population. In 1992, a violent conflict took place there and the Ingush residents had to leave it. The consequences of that conflict have not been overcome till the present day.

of the traditional Sufi Islam and between the Sufi and the Salafits – were overcome during the protests. One of the most respected elders publicly apologized before the Salafit youth for unjust treatment in the past. During the meeting, religious-type rituals were held by imams of different Islamic trends. Also, various non-governmental organizations which earlier opposed one another consolidated in the face of the common threat and facilitated the organization of the protests. It is noteworthy that most law enforcement officers stood together with the protesters and performed Namaz (prayed) with them;

2) differentiation of the attitude to protests within the framework of traditional groups. So, some religious figures, including both the Sufi and the Salafits opposed meetings. In opposition to the opinion of their teips (groups of blood relatives), some representatives of the elite supported the agreement on the border, though they ran the risk of being expelled from their teips, a severe punishment in a conservative community. At the same time, there were divisions on this issue in the elite, too: some deputies and members of the Constitutional Court of the Republic opposed the approval of the agreement;

3) an active participation of the youth and women in protests, that is, the groups which normally have a subordinate position in the conservative community. But in those protests, they showed initiative, organized the meeting, participated in the negotiations and occupied key positions in information coverage of the developments. Along with the most respected elders and social activists, journalist Izabella Evlova became a symbolic figure of the protests;

4) a high level of organization of the meeting where spontaneous manifestations of the aggressive behavior were just single and no violent actions were observed. Leaders of the Ingush civil society whose community work earned them a great reputation managed to keep the spontaneous public protest under control and prevent it from becoming radicalized. During the meeting, there were moments when the situation could get out of control, but they managed to prevent it, though more radical groups, which disagreed with the moderate course adopted by the protest leaders, left the meeting;

5) no violent crackdown by the authorities on the protest; only targeted reprisals against protest leaders. Unlike other regions, the Ingush authorities were more tolerant to protesters. It can probably be explained by the fact that those were mass protests with participation of the older generation and women, the regional elite was split on this issue and local law enforcement officers explicitly supported the protests. Two days later, the meeting was approved by the authorities. In their turn, the protesters met the authorities halfway and agreed to change the place of the meeting. After the expiry of the agreed upon term of the meeting, the protesters left. However, it does not mean that the authorities completely gave up the idea of exerting pressure on protest organizers. Several persons were dismissed for far-fetched reasons from prestigious jobs (in Ingushetia where the number of jobs is limited a person who was dismissed may face serious problems). Also, protest activists were subjected to pressure from law enforcement agencies, particularly, the Center for Prevention of Extremism.

Nongovernmental organizations which actively took part in the protests fear to be closed down by the authorities; some of them experience problems with renting premises.

After the meeting was over, the protest assumed an institutionalized form. Despite the fact that on December 6 the Constitutional Court of the Russian Federation found the agreement on borders compatible with the Constitution of the Russian Federation, protest organizers were going to continue their campaign to secure a fair decision via utilization, both of international legal norms and provisions of the traditional law which was in effect in the territories of Ingushetia and Chechnya. However, the decision of the Constitutional Court of the Russian Federation caused a great disappointment in the Ingush society. Social activities started to decline.

Can one say that the situation in Ingushetia has stabilized and does not entail any risks? Actually, the most likely scenario is as follows: having failed to produce positive results, the mass protest mobilization came to naught and left the society in discontent and depression. It is unlikely that protests will resume again in the near future. Though the protest organizers kept the movement within moderate frameworks, made compromises and held negotiations with the authorities and complied with the "rules of the game", they failed to achieve the goals, so, it is highly likely that at the next stage of social activities new protest leaders may emerge and they will be more radical and less bound by conventionalities of the traditional society. If it happens, protests may embark on another, more devastating, trajectory. In any case, such risks will remain in the mid-term prospect. However, if the authorities try to intensify pressure, resort to repressions and crack down on organization centers of the current protests, the abovementioned risks may materialize in the short-term prospect.

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Notes

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