

ORIGINAL PAPER



DOI: 10.26794/2587-5671-2024-28-4-71-83

UDC 336.02(045)

JEL H74, H77, Q58, R51

Budget Policy of the Largest Russian Cities as a Tool to Respond to Global Challenges

V.V. Klimanov, A.A. Mikhaylova

The Russian Presidential Academy of National Economy and Public Administration (The Presidential Academy, RANEP),
Moscow, Russia;
NGO Institute for Public Finance Reform, Moscow, Russia

ABSTRACT

The largest cities in Russia, just like other megacities in the world, are facing the challenges of a new reality. Fiscal policy actively helps to counter these challenges, among other things. The **purpose** of the study is to identify fiscal tools for large cities to respond to global challenges. The **methodology** consisted in the fact that, based on a unique database compiled by the authors on the budgets of the ten largest cities in Russia from 2011 to 2021, a comparative study of their parameters was carried out (tax and non-tax revenues by types, intergovernmental fiscal transfers by types, expenses by industry classification), their structures and dynamics. The **results** obtained indicate that the cities are very different and a lot of budget parameters, in principle, do not depend on the budget policy of the city, as they are determined by regional legislation, for example, transferred tax deduction standards or transferred spending powers. At the same time, it is **concluded** that cities retain the ability to pursue an independent budget policy, for example, by managing the structure of expenditures, which was transformed in a certain way during periods of crisis. That is an element of scientific novelty. To a greater extent, this statement is true for such a megacity as Moscow, which really showed a high degree of independence in times of crisis. Other large cities generally do not have sufficient independence in terms of opportunities to replenish their budgets and spend funds, and they have to rely on transfers from budgets at a higher level. The **practical significance** for higher-level government bodies lies in confirming the thesis about the need to implement a differentiated budget policy for cities that fall into different groups according to the level of budgetary provision.

Keywords: fiscal policy; megacity; fiscal sustainability; budgetary independence; intergovernmental fiscal transfers; budget openness; state programs and projects

For citation: Klimanov V.V., Mikhaylova A.A. Budget policy of the largest Russian cities as a tool to respond to global challenges. *Finance: Theory and Practice*. 2024;28(4):71-83. DOI: 10.26794/2587-5671-2024-28-4-71-83

INTRODUCTION

It is recognized that the world of today, and more that of the future, is a world of cities, the positive and negative impact of global challenges is manifested more in the big cities involved in international relations. Megacity challenges include overpopulation, large-scale migration, multiculturalism, social fragmentation, economic crises, environmental problems, and opportunities for new technologies, digitalization of economic sectors and spheres of life, overall growth in wealth and consequent growth in consumption, deficit and costly resources.

At the same time, for the various countries of the world, the current challenges concern both the industrial phase of development of countries and cities in the world and the stage of post-industrial society. This fact must be taken into account in the formulation of tools for responding to these challenges by governments at the country level and especially at the city-specific level.

Analysis of scientific literature on global challenges reveals the multiplicity of interpretations, from narrow to broad, of a theoretical or applied nature, including in the “link” to the UN Sustainable Development Goals, other international-level documents.

The manifestation of global challenges for cities at different stages of evolutionary development (industrial and post-industrial stages; various phases of technological development) is different. As N.V. Zubarevich shows, the largest cities are centers of modernization of the economy and human capital [1]. At the same time, the largest metropolises of the post-industrial world with a diversified urban economy, a highly skilled population, an advanced level of digitalization and a quality urban environment are becoming more resilient (shock-resistant) to external influences and shocks. This distinguishes them in a positive way compared to cities with a narrower set of economic functions, dependency of the city budget on a limited number of taxpayers, acute environmental

problems [2]. In this regard, the vulnerability of small cities to adverse impacts may be greater, including due to the limited implementation of budgetary maneuvers [3].

At the same time, the growth of the role of the city authorities in state and municipal administration is also necessary to realize the full economic potential of the largest cities [4]. S.V. Bogachov noted that the substantial role of state subsidies and grants in the income structure of city budgets can lead to a reduction in incentives for the work of municipal authorities to mobilize their own tax and non-tax sources [5].

The budgets of the major cities of Russia are a subject of scientific interest, mainly in terms of determining the budgetary possibilities of their socio-economic development [6, 7]. Thus, O.V. Kuznetsova shows that the autonomy of the authorities of urban districts is very low and has a tendency to decline. They lost their impact on health development, but started spending relatively more money on the economy. The amounts of funds that are disposed of by the authorities of the city districts are several times smaller in comparison with the volumes of Moscow and St. Petersburg funds [6].

According to our paper [3], global challenges were systematized, allowing them to be “adapted” to the conditions of Moscow as a megacity, acting as the main object of analysis. Thus, the following groups of challenges are important for Moscow:

- changes in the structure and composition of the population, including the problems of its ageing, active migration to the Moscow agglomeration of visitors from other regions of Russia and countries of “near abroad”, social stratification, labor deficit in a number of sectors;
- need to develop the transport complex, engineering and social infrastructure;
- housing construction on new principles;
- change and diversification of the economic structure, including — which is quite specific to Moscow and its budget in

the last decade — the decrease in the share of income associated with the concentration in the city headquarters of companies using the resources of other regions and cities;

- over-compressed urban space, shortage of free plots for new construction, and the need to re-profile the current use of land;
- technological innovations and their spread throughout the territory;
- environmental issues and demands for the quality of the urban environment;
- costs associated with the availability in the city of administrative bodies and representatives of the suburban level (country, other states, international organizations).

Similar challenges are in many ways characteristic of other megacities of countries of the world, characterized in the scientific literature as global cities.

A review of megacities' budget response practices to the challenges faced by the coronavirus-induced 2020 crisis shows that progressive cities have been able to use the difficult crisis period caused by the pandemic as an opportunity to improve their economic and budgetary policies [3]. In any case, the coronavirus pandemic has had a negative impact on the public finances of all the countries of the world [8]. Important to this crisis are the problems associated with economic inequality and different budgetary capabilities of regions and municipal institutions for the confrontation of the pandemic [9, 10]. Some studies have shown that countries and regions that had a well-established system of inter-budgetary relationships that could be used to provide rapid inter-budgetary transfers for prompt decision-making were more effective in this situation [11].

At the same time, during the period of lockdown and other constraints caused by the pandemic, many budget practices have improved, various fiscal innovations have been promptly developed, approved and implemented, including those relating to help to and certain categories of citizens.

Budgets of many megacities have become more focused on supporting the vulnerable segments of the population, helping small business, and the rate of adoption and implementation of budget innovations has increased.

In recent years, a number of studies have emerged on the impact of the pandemic on the budget parameters of cities and regions [12, 13], with continued emphasis on federal policy measures. S. P. Solyannikova shows that against the background of the growth of inter-budgetary transfers from the federal budget in many regions the income of the population from entrepreneurial activity is decreasing, but the share of social benefits and salaries of state and municipal employees is increasing [14].

Moreover, not only in times of crisis, the “green agenda” now plays a major role in the budgetary agenda of the world's megacities [15]. Climate change policy studies state that effective state climate action requires cooperation and coordination between all levels of state and municipal administration [16].

Next, a detailed study on the budgets of the largest cities of Russia will be presented, in which the authors attempt to answer the question: how has the structure of budgets in the largest Russian cities changed in connection with the need to respond to the challenges of the new reality?

This review does not address issues related to the 2022–2023 challenges due to large-scale changes in the geopolitical and geo-economic situation, including the imposition of economic sanctions against Russia by hostile countries. Analysis of the response of city budgets to these changes will require a separate study based on more up-to-date information.

MATERIALS AND METHODS

For extensive analysis, the budgets of the ten most populous Russian cities for 11 years, from 2011 to 2021, were selected. These cities

Table 1

Population, Revenues and Expenditures of the Budgets of the Largest Russian Cities

City	Resident population as of January 1, 2022, thousand people	Budget revenues in 2021, million rubles	Budget expenditures in 2021, million rubles
Moscow	12 635	3 335 600.0	3 445 684.8
St. Petersburg	5 378	843 344.7	796 487.6
Novosibirsk	1 621	57 697.9	57 347.4
Yekaterinburg	1 494	57 678.3	56 862.2
Kazan	1 259	37 924.1	36 414.9
Nizhny Novgorod	1 234	45 166.6	45 502.2
Chelyabinsk	1 179	49 642.4	48 193.7
Samara	1 137	33 718.0	33 264.1
Ufa	1 135	35 906.0	35 862.8
Rostov	1 135	45 229.8	44 444.2

Source: Compiled by the authors based on data from Rosstat and ConsultantPlus: Regional Legislation. URL: <https://rosstat.gov.ru/compendium/document/13282> (accessed on 03.18.2023).

are: Moscow, St. Petersburg, Novosibirsk, Yekaterinburg, Kazan, Nizhny Novgorod, Chelyabinsk, Samara, Ufa, and Rostov (*Table 1*).

In the course of the study, a unique database has been compiled, which includes information on the revenues and expenditure of the city budgets. Data collected from approved reports on the performance of the relevant budgets from the “ConsultantPlus: regional legislation system”. We have used the grouping of budget revenues by type and subtype and the grouping of expenditure according to sections of the budget classification. Unfortunately, the approved reports in a number of cases in different years did not have the data for the necessary classification, and only departmental groups were present. At the same time, the majority of the data was collected. The budget indicators of the city of St. Petersburg are also not considered, because the annexes to the laws on budget implementation containing the

classifications that interest us are not present in the “ConsultantPlus: Regional legislation system”.

Furthermore, using methods of comparative statistics, we analysed how the dynamics and structure of the largest urban budgets of Russia changed over the years.

It must be noted at once that such comparisons have a number of limitations. Thus, Moscow and St. Petersburg, being at the same time cities and regions of the Russian Federation, have a completely different structure of budgetary revenues and expenditure than the other millionaire cities. Their budgets are filled, inter alia, by substantial amounts of corporate income tax, property tax, transport tax and personal income tax. And in the expenditure part there are inter-budgetary transfers to municipalities, national defense expenditures. As can be seen in *Table 1*, the consolidated budget of Moscow is 100 times greater than the budget, for

Table 2

Growth of Budget Revenues of the Largest Cities, % to the Previous Year

City	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Moscow	0.6	-0.5	4.3	7.7	11.3	13.2	13.3	10.7	9.1	16.3
Novosibirsk	6.9	8.9	-3.8	-9.4	1.0	5.7	12.7	17.2	5.4	12.8
Yekaterinburg	5.9	9.9	-10.9	0.2	7.6	17.0	6.2	14.3	8.5	8.5
Kazan	12.4	-10.7	-0.8	2.1	1.3	0.1	20.6	1.6	5.6	30.5
Nizhny Novgorod	-11.6	4.8	4.5	0.3	18.1	13.2	-1.1	2.0	16.2	19.7
Chelyabinsk	0.0	7.3	-0.2	-4.7	9.2	9.1	14.5	17.4	14.7	-4.9
Samara	18.4	7.0	7.4	-8.3	10.4	10.8	-1.9	10.2	6.4	11.3
Ufa	10.3	21.6	-3.0	-1.0	4.2	4.3	14.0	19.6	0.6	8.0
Rostov	2.4	-0.6	12.6	12.8	-2.7	4.5	-2.6	0.7	18.1	16.9

Source: Compiled by the authors based on data from ConsultantPlus: Regional Legislation (accessed on 03.18.2023).

example, of Samara. Even with the population adjustment, the surplus will be more than 10 times. At the same time, the budgetary levels of cities, which are not regions, are comparable in theory, even corrected by the fact that budgetary legislation, transferable expenditure commitments and revenue authority vary from region to region.

RESULTS AND DISCUSSION

From 2012 to 2021, all the cities in our sample experienced a reduction in budget revenues in one way or another compared to the previous year (Table 2).

At the same time, Moscow is the only city that in the period considered in principle never showed a negative dynamic of the growth of tax and non-tax revenues of the budget (Table 3).

The 2014–2015 crisis almost everywhere affected both budget revenue and budget expenditure (Table 4), while the corona crisis, having a completely different nature, did not result in budget expenditures cuts in 2020. The exception is Chelyabinsk, which is mainly due to the high rates of growth of its income in 2019.

The average rate of growth of budget expenditure of the largest cities for the period 2012–2021 (Fig. 1) shows that only Moscow showed significantly high result.

When calculated on the basis of regional consumer price indices, it can be concluded that in only a few cities the real levels of revenue and expenditure of the budget increased compared to 2012 (Fig. 2). These are Ufa, Chelyabinsk, Moscow and Samara. In the other cities surveyed, real budget revenues in 2021 were even lower than they were in 2011. As is expected, the cities encountered the maximum drop in the crisis year of 2015 (the lowest indicators in Nizhny Novgorod, Chelyabinsk, Yekaterinburg, Novosibirsk), in 2020 such a strong decline did not follow, and by 2021 almost all cities reached the level of 2011 on the indicator of real budget income, taking into account the index of consumer prices. This can be explained by the fact that inter-budgetary transfers have increased significantly. In terms of the average rate of growth of urban budgets expenditure by major sectors, it is possible to identify almost everywhere (with the exception of Kazan) the growth of national expenditures, which

Table 3

Growth of Tax and Non-Tax Budget Revenues of the Largest Cities, % to the Previous Year

City	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Moscow	6.3	2.4	5.2	5.2	11.7	15.5	12.2	11.2	0.9	23.9
Novosibirsk	6.7	6.8	4.1	- 16.5	1.0	4.1	5.8	11.1	- 0.5	17.6
Yekaterinburg	5.8	6.5	- 10.8	- 4.0	- 1.9	9.0	7.8	23.9	- 1.7	5.4
Kazan	10.2	8.7	- 4.6	2.2	...	...	14.3	0.9	1.3	17.8
Nizhny Novgorod	- 11.1	16.8	4.6	...	...	...	...	...	...	...
Chelyabinsk	3.8	3.1	- 8.8	- 16.8	4.8	15.0	10.9	3.9	- 0.3	13.2
Samara	1.5	7.6	- 4.5	- 11.9	6.4	6.9	6.2	3.3	0.4	13.8
Ufa	- 11.3	17.0	3.9	- 0.3	- 14.9	6.5	17.7	10.3	6.7	9.5
Rostov	8.5	3.8	2.2	...	...	...	...	...	...	...

Source: Compiled by the authors based on data from ConsultantPlus: Regional Legislation (accessed on 03.18.2023).

Table 4

Growth of Budget Expenditures of the Largest Cities, % to the Previous Year

City	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Moscow	9.7	-0.4	4.7	-5.0	14.1	20.6	10.5	16.0	12.0	14.6
Novosibirsk	0.8	13.4	-6.6	-7.4	-2.5	10.5	8.5	18.2	2.5	11.1
Yekaterinburg	5.5	14.3	-8.9	-2.3	4.0	14.4	8.2	16.8	7.1	8.0
Kazan	-23.1	-1.0	-6.4	-0.2	-0.8	3.8	16.1	4.2	2.7	29.3
Nizhny Novgorod	-10.5	6.1	3.9	0.6	11.2	22.3	-7.7	6.3	12.1	19.3
Chelyabinsk	-2.4	7.1	-0.8	-2.8	6.7	6.7	16.4	18.6	13.7	-8.1
Samara	14.3	6.5	3.6	-4.8	4.3	16.5	-7.2	10.9	5.8	10.6
Ufa	9.5	14.1	9.0	-7.6	9.1	-4.6	9.0	20.7	-1.3	12.2
Rostov	4.1	4.3	12.5	8.4	-4.5	8.5	-0.1	-0.3	14.8	15.2

Source: Compiled by the authors based on data from ConsultantPlus: Regional Legislation (accessed on 03.18.2023).

exceeded the overall rate of expenditure growth by all items.

In the period since 2015 Moscow shows extremely dynamic growth in both income and expenditure (Fig. 3). In 2021, with the ability to implement an extremely independent budgetary policy, Moscow became the first region in Russia to issue an unprecedented amount of “green” bonds worth 70 billion

rubles, the funds from the placement of which went to the purchase of electric buses and the construction of the Ring Line of Moscow metro. Separately, it is possible to note the extremely high share of funds allocated in the budget of Moscow within the framework of state programs, approaching 100% of budgetary expenditures, which Moscow transferred as early as 2012.

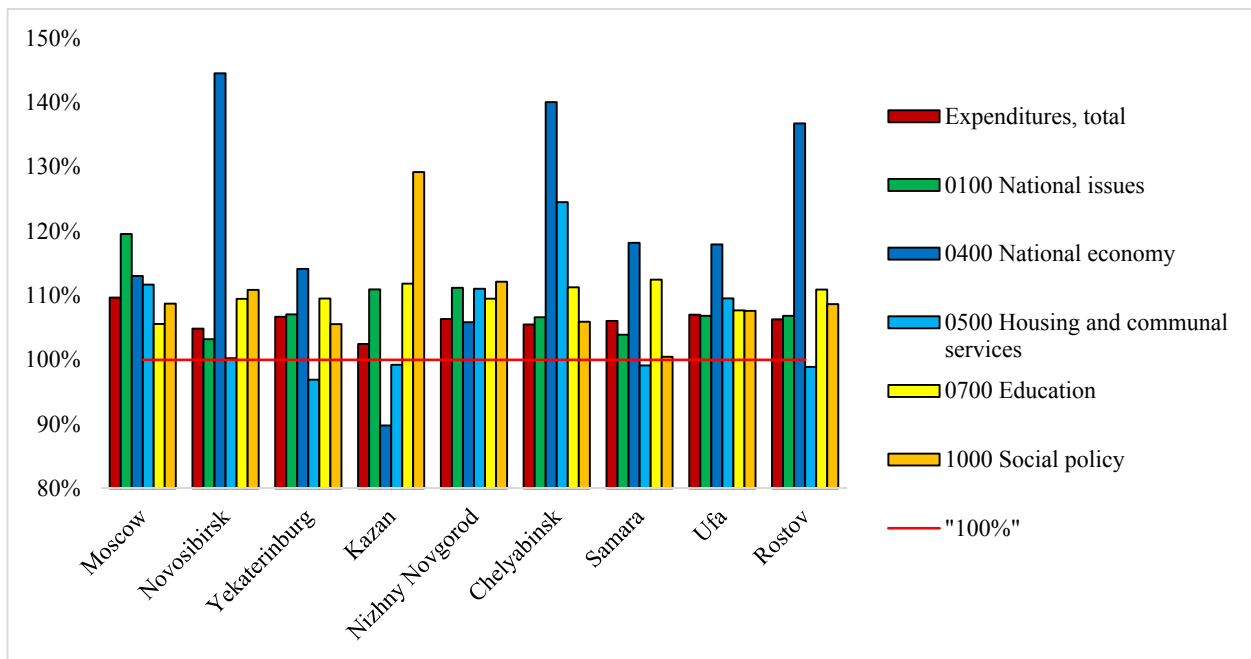


Fig. 1. The Average Growth Rate of City Budget Expenditures by Main Items, for 2012–2021

Source: Compiled by the authors based on data from ConsultantPlus: Regional Legislation (accessed on 03.18.2023).

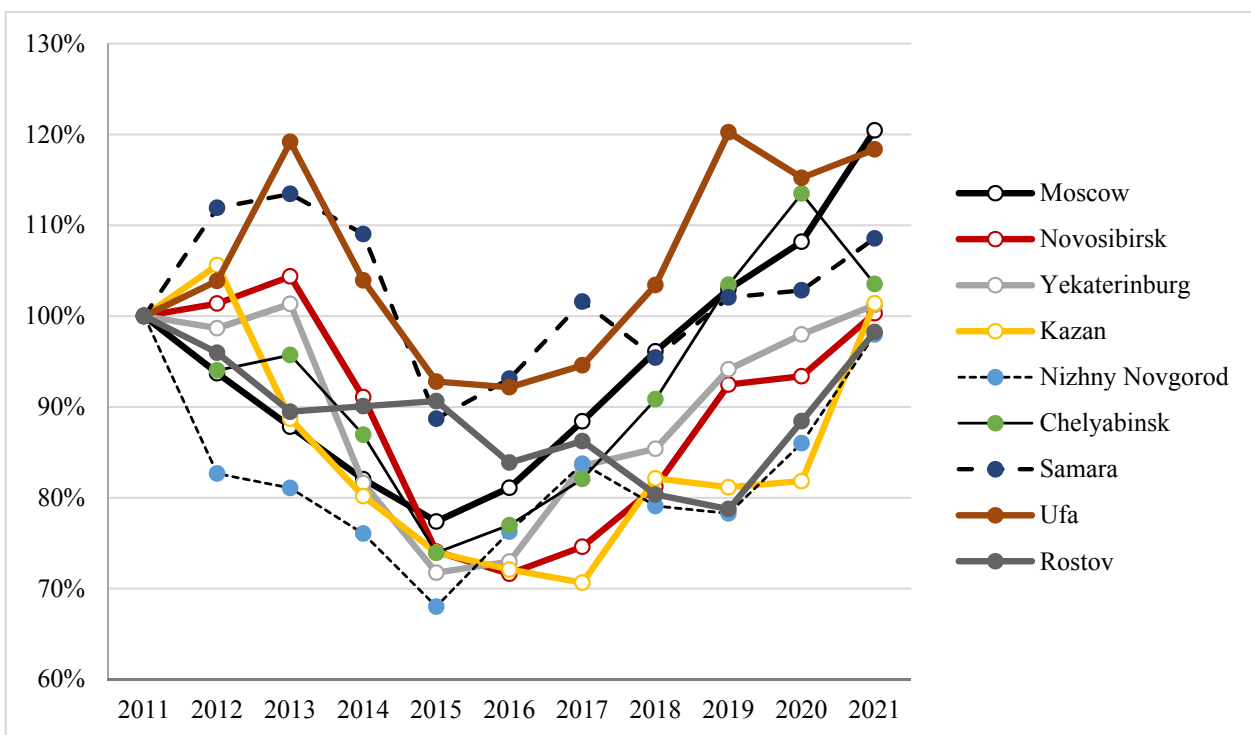


Fig. 2. Dynamics of City Budgets' Expenditure Compared to the 2011 Level at 2021 Prices, %

Source: Compiled by the authors based on data from ConsultantPlus: Regional Legislation (accessed on 03.18.2023).

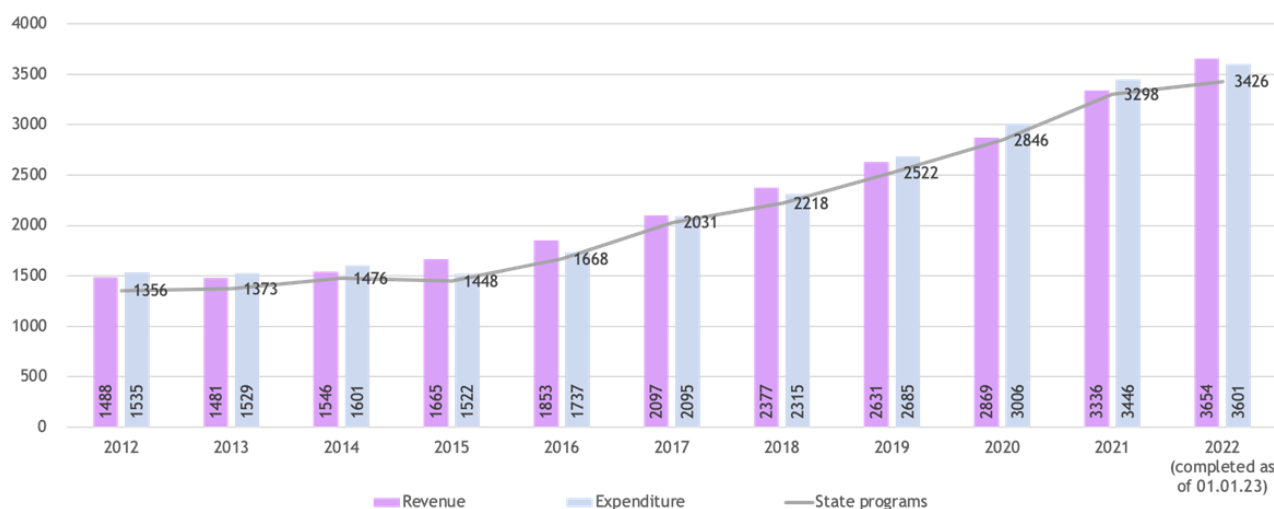


Fig. 3. Revenue and Expenditure of the Moscow Budget in 2012–2022, Billion Rubles

Source: Compiled by the authors based on data from ConsultantPlus: Regional Legislation (accessed on 03.18.2023).

It should be noted that at the end of May 2023, the “green” agenda in Moscow’s debt policy was continued. Special “green” bonds for the population were issued.¹

Analysis of the structure of the budgets of the largest Russian cities confirms the hypothesis that the sources of tax and non-tax revenue, as well as structure of expenditure in them differ, first of all, due to distinction in regional legislation. In different years, decisions were made in some regions to transfer certain norms on tax deductions, as well as expenditure obligations to the municipality level, which gives such a heterogeneous picture.

For example, since 2012, regions have been able to determine which health responsibilities are to municipalities and which are transferred to higher levels. And with rare exceptions, most of the authority since that period has been redistributed from cities to regions. For example, in Kazan and Nizhny Novgorod, expenditures under the article “health” in 2012 decreased by tens of times compared to 2011. In the budget of Novosibirsk since 2014 health expenditure is absent in principle. In Yekaterinburg,

healthcare expenditure decreased by only 1.5 times and, although it was in 2015–2016, retained its high level. Moreover, in 2020, healthcare expenditure in the capital of the Urals increased sharply — 2.5 times as compared to previous years, in response to the coronavirus pandemic. The situation in Rostov was almost identical to that of Yekaterinburg in terms of the financing of health care.

If you look at the income structure of the budgets of the largest Russian cities from 2012 to 2021, then from the group of cities in question, except for Moscow and St. Petersburg, they are all extremely dependent on inter-budgetary transfers from the higher level (Fig. 4). In addition, it can be seen that in all cities, except Moscow, the share of tax and non-tax income in the total amount of budget revenues decreased in 2021 compared to 2012 (Fig. 5). The main source of tax revenues is traditionally the income tax of individuals, followed by property taxes.

From the point of view of the structure of the expenditure budgets of the largest cities, the main share of them is traditionally the cost of education, which reaches 50% of all city budgets (Fig. 6). Otherwise predictable is the situation in Moscow, which, because of its regional status, also realizes the expenditure powers of the subject of the federation, and

¹ URL: <https://www.mos.ru/news/item/124385073> (accessed on 19.06.2023).

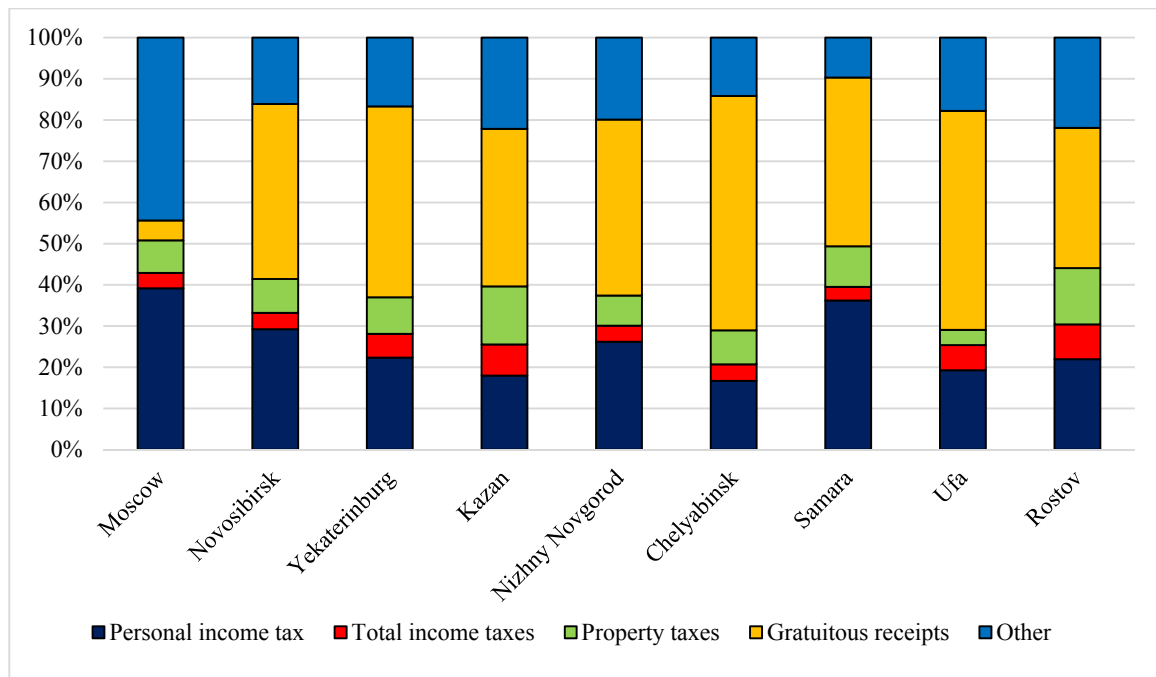


Fig. 4. Structure of Incomes of City Budgets, on Average for 2012–2021, %

Source: Compiled by the authors based on data from ConsultantPlus: Regional Legislation (accessed on 03.18.2023).

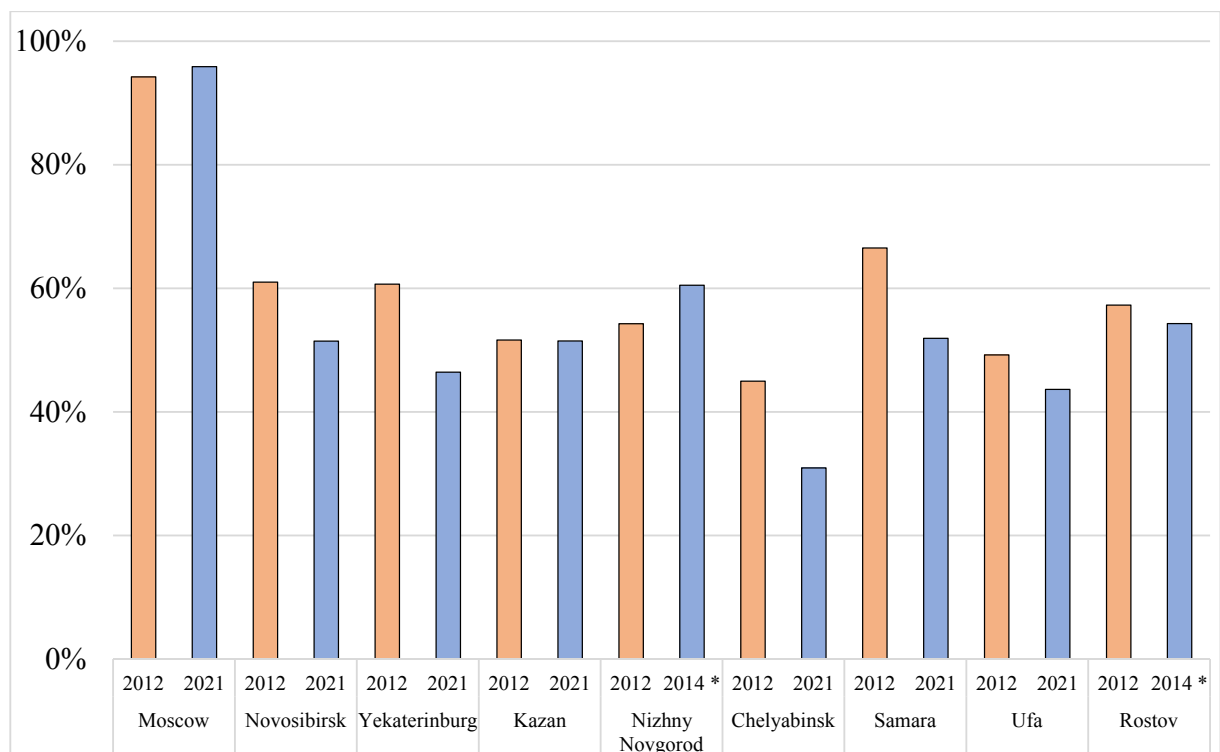


Fig. 5. Share of Tax and Non-Tax Revenues in the Total Revenues of City Budgets in 2012 and 2021, %

Source: Compiled by the authors based on data from ConsultantPlus: Regional Legislation (accessed on 03.18.2023).

Note: * The most recent data.

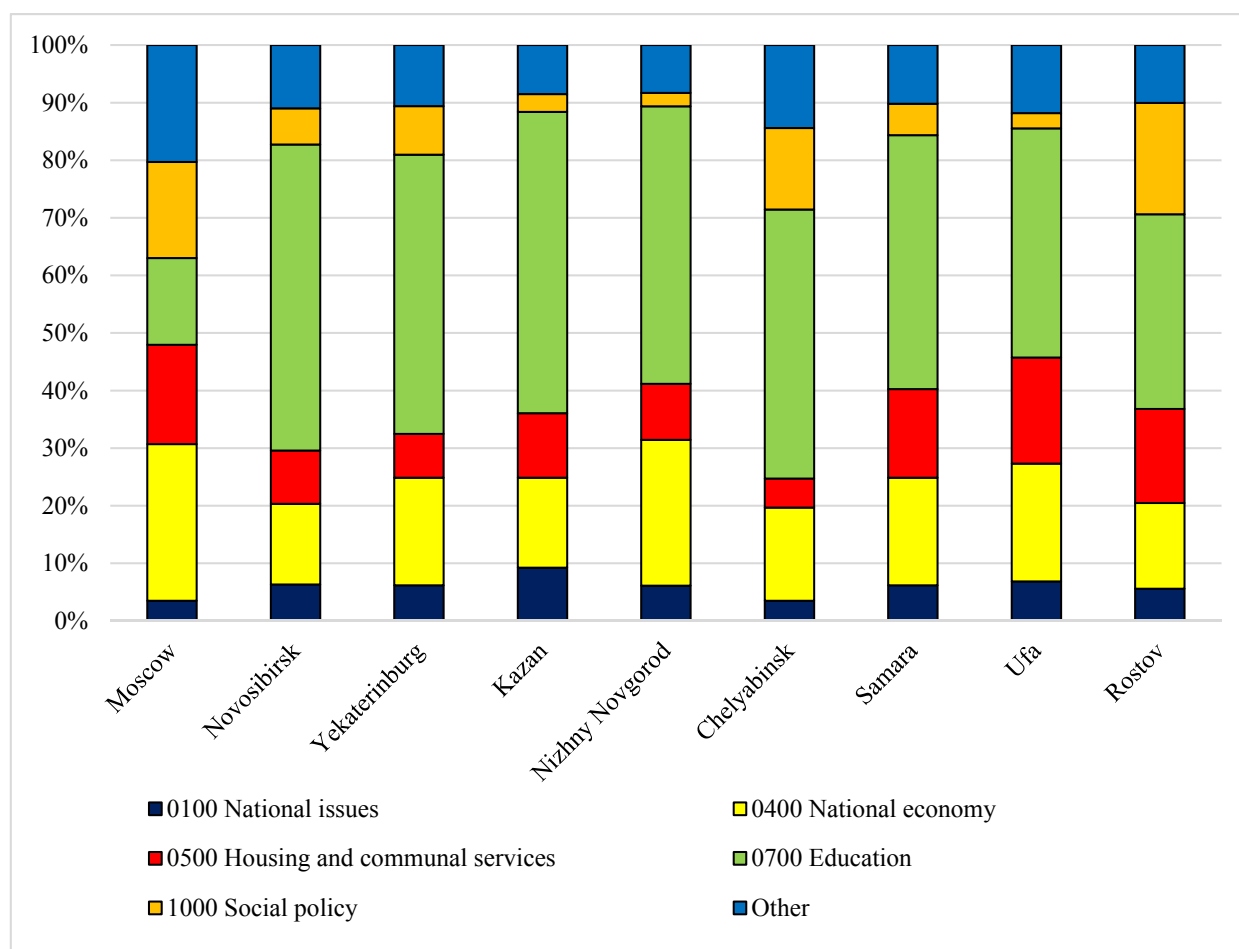


Fig. 6. Structure of Expenditures of City Budgets, on Average for 2012–2021, %

Source: Compiled by the authors based on data from ConsultantPlus: Regional Legislation (accessed on 03.18.2023).

therefore has a high share of healthcare costs and not as high as other cities, education costs.

Rostov is interestingly distinguished, where, like Moscow, healthcare is a significant expenditure sector, because health care authority was not transferred to the regional level. Moreover, the amounts of such expenditure in connection with the need to combat the coronavirus in Rostov in 2020–2021 have increased several times, and in 2020 even surpassed the expenditures on the national economy, which is traditionally the second (after education) most important item of the budgets of the largest cities. Otherwise, apart from the cities that have the status of regions, the situation is only in Chelyabinsk and Rostov, where expenditure on social policy for the time

period considered on average did not inferior or even vice versa exceeded costs on the national economy.

The differences in budgetary legislation determined the absence of media expenditure in Kazan throughout the period under review. In Chelyabinsk, this type of expenditure was absent from 2011 to 2017. There were no environmental costs in Rostov during the survey period.

It is of special interest that in the budgets of Kazan, Samara, Rostov and Chelyabinsk there are expenditures under Section 14 “Inter-budgetary transfers of a general nature”. It is not entirely clear how these costs appear, as not all documents provide their decoding. However, in the expenditure part of the approved execution of the Rostov budget, it is reflected that these are subsidies to the

budget of the region in connection with the excess of the level of estimated tax revenues, that is, this subsidy is a rare interesting case of negative transfer, when the funds, on the contrary, are transferred from the lower level to the higher level.

Another unusual point is the costs (although small) for the “National defense” section in Samara and Rostov. Local budgets do not, in principle, involve significant expenditure under this item. As in Rostov, for example, such expenditure is carried out in the framework of the organization and implementation of civil defense activities, protection of the population and the city territories from natural and technological emergencies.

CONCLUSION

As the study showed, the possibilities of using the budgetary policy of the city to respond to the challenges of the new reality are significantly different for the largest cities of Russia, if you compare them with Moscow, which is at the same time a subject of the Russian Federation and has a different structure of income sources and spending authority. The reasons for this situation consist in the differences in regional legislation, which the largest millionaire cities have no influence on. The budget of Moscow even with the population adjustment many times exceeds the budgets of other major Russian cities, and the volume of inter-budgetary transfers in the structure of its incomes is extremely low, unlike the rest of the cities.

The dynamics of the budget parameters of largest cities from 2011 to 2021 show that

only a smaller part of them (Ufa, Chelyabinsk, Moscow and Samara) in 2021 managed in real prices to exceed the volume of 2011 parameters in income and expenditure. Moscow can be confidently called the most dynamically developing megacity of Russia, having the opportunity to give effective budgetary responses to the challenges of the new reality and to implement independent budgetary policy.

The nature of the economic crises of the last decade has affected the way the largest cities have survived them. Thus, in 2014–2015, almost all of them faced a reduction in budgetary revenue and expenditure, and in 2020–2021, such a negative dynamic was not observed, as the need for growth of budgetary expenditures was offset by inter-budgetary transfers.

In this regard, proposals to the governing bodies of the largest cities as responses to global challenges should include both general and individualized provisions, both in relation to a particular period (situation) and in respect of each city. The overall solutions include revenue mobilization (involving greater inter-budgetary transfers), expenditure restructuring, balanced and long-term-oriented debt policy. Individual budget policy improvements envisage tighter spending measures for cities with negative budget parameters.

A general recommendation for higher-level authorities could be a proposal to develop a differentiated budgetary policy for cities falling into different groups in terms of budgetary stability, quality of public finance management and future development opportunities.

ACKNOWLEDGEMENTS

The research was carried out with the support of the Russian Science Foundation. Project No. 22-28-20117 “Fiscal policy of the megacity as a tool for responding to the challenges of New Normal”. The Presidential Academy, RANEPa.

REFERENCES

1. Zubarevich N. Cities as centers of modernization of economy and human capital. *Obshchestvennye nauki i sovremennost'* = *Social Sciences and Contemporary World*. 2010;(5):5–19. (In Russ.).
2. Klimanov V.V., Kazakova S.M., Mikhaylova A.A. Economic and fiscal resilience of Russia's regions. *Regional Science Policy & Practice*. 2020;12(4):627–640. DOI: 10.1111/rsp3.12282
3. Klimanov V.V., Mikhailova A.A. Responses of the budgetary policy of the world's megacities to the challenges of the new reality. *Obshchestvennye finansy* = *Public Finance*. 2022;(43):4–21. (In Russ.).
4. Herrschel T. Cities, state and globalisation: City-regional governance in Europe and North America. Abingdon: Routledge; 2014. 216 p.
5. Bogachov S.V. Tax-budget policy of large European cities. *Finansy: teoriya i praktika* = *Finance: Theory and Practice*. 2016;20(6):140–146. (In Russ.). DOI: 10.26794/2587–5671–2016–20–6–140–146
6. Kuznetsova O.V. Budget capacities of million-plus cities as a factor of their social-economic development. *Vestnik Moskovskogo universiteta. Seriya 5: Geografiya* = *Moscow University Bulletin. Series 5: Geography*. 2018;(4):75–82. (In Russ.).
7. Kuznetsova O.V. Budgets of Moscow and St. Petersburg: A comparative analysis. In: *Old and New Moscow: Tendencies and problems of development: Coll. sci. pap. Moscow: I.I. Matushkina Publ.*; 2018:9–24. (In Russ.).
8. Grossi G., Ho A. T., Joyce P. G. Budgetary responses to a global pandemic: International experiences and lessons for a sustainable future. *Journal of Public Budgeting, Accounting & Financial Management*. 2020;32(5):737–744. DOI: 10.1108/JPBAFM-12–2020–189
9. Andrew J., Baker M., Guthrie, J. Accounting, inequality and COVID-19 in Australia. *Accounting, Auditing & Accountability Journal*. 2021;34 (6):1471–1483. DOI: 10.1108/AAAJ-07–2020–4688.
10. Reveiu A., Constantin D.L. The impact of the COVID-19 pandemic on regional inequalities in Romania. Spotlight on unemployment and health conditions. *Regional Science Policy & Practice*. 2023;15(3):644–658. DOI: 10.1111/rsp3.12637
11. Ahrens T., Ferry L. Financial resilience of English local government in the aftermath of COVID-19. *Journal of Public Budgeting, Accounting & Financial Management*. 2020;32(5):813–823. DOI: 10.1108/JPBAFM-07–2020–0098
12. Zubarevich N.V. Possibility of decentralisation during the year of pandemic: What does the analysis of public budgets reveal? *Regional'nye issledovaniya*. 2021;(1):46–57. (In Russ.). DOI: 10.5922/1994–5280–2021–1–4
13. Yushkov A. O., Alexeev M.V. The fiscal impact of the COVID-19 pandemic on the Russian regions: An overview of federal support measures. *Zhurnal Novoi ekonomicheskoi assotsiatsii* = *Journal of the New Economic Association*. 2021;(3):232–242. (In Russ.). DOI: 10.31737/2221–2264–2021–51–3–12
14. Solyannikova S.P. Appropriate budgetary policy for a changing economy. *Mir novoi ekonomiki* = *The World of New Economy*. 2021;15(2):6–15. (In Russ.). DOI: 10.26794/2220–6469–2021–15–2–6–15
15. Jones S. Climate change policies of city governments in federal systems: An analysis of Vancouver, Melbourne and New York City. *Regional Studies*. 2013;47(6):974–992. DOI: 10.1080/00343404.2011.585150
16. Klimanov V., Kazakova S. Debt policy for the sustainable development of Russian regions and megacities. *R-Economy*. 2022;8(4):327–339. DOI: 10.15826/recon.2022.8.4.025

ABOUT THE AUTHORS



Vladimir V. Klimanov — Dr. Sci. (Econ.), Assoc. Prof., Director of the Center for Regional Policy of the Institute of Applied Economic Research, The Russian Presidential Academy of National Economy and Public Administration (The Presidential Academy, RANEP), Moscow, Russia; Director, NGO Institute for Public Finance Reform, Moscow, Russia
<http://orcid.org/0000-0001-9282-0812>
vvk@irof.ru



Anna A. Mikhaylova — Cand. Sci. (Econ.), Assoc. Prof., Leading Researcher at the Institute of Applied Economic Research, Russian Academy of National Economy and Public Administration under the President of the Russian Federation, Moscow, Russia; Head of Department at NGO Institute for Public Finance Reform, Moscow, Russia
<http://orcid.org/0000-0003-0831-2554>
Corresponding author:
aam@irof.ru

Conflicts of Interest Statement: The authors have no conflicts of interest to declare.

The article was submitted on 25.05.2023; revised on 25.06.2023 and accepted for publication on 27.06.2023.

The authors read and approved the final version of the manuscript.