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**ECONOMIC  
AND SOCIAL  
CHANGES:  
FACTS, TRENDS, FORECAST**

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## ECONOMIC AND SOCIAL CHANGES: FACTS, TRENDS, FORECAST

A peer-reviewed scientific journal that covers issues of analysis and forecast of changes in the economy and social spheres in various countries, regions, and local territories.

The main purpose of the journal is to provide the scientific community and practitioners with an opportunity to publish socio-economic research findings, review different viewpoints on the topical issues of economic and social development, and participate in the discussion of these issues. The remit of the journal comprises development strategies of the territories, regional and sectoral economy, social development, budget revenues, streamlining expenditures, innovative economy, and economic theory.

**Founder:** Vologda Research Center of the Russian Academy of Sciences

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**Federal State Budgetary Institution of Science Vologda Research Center of the Russian Academy of Sciences (VoIRC RAS)** is the only unit of the Academy on the territory of the Vologda Oblast. The history of the Center started in 1990 from a Department of the Institute for Economic Studies of the Kola Science Centre of RAS on studying the problems of socio-economic development of the Vologda Oblast. Since then the Center has undergone manifold transformations. In 1993 it became an independent subdivision – the Vologda Scientific Coordinating Center of RAS. In 2009 it transformed into the Institute of Socio-Economic Development of Territories of RAS (ISED T RAS).

In 2017 the socio-economic research was supplemented by agricultural issues. ISED T RAS was joined by the Northwestern Dairy and Grassland Farming Research Institute, and was reorganized into the Vologda Research Center of the Russian Academy of Sciences.

In 2019 the Center continued expanding having launched the Laboratory of Bioeconomics and Sustainable Development within the framework of the national project “Science”. The Laboratory is engaged in scientific research aimed at introducing biotechnologies into the practice of agriculture.

The VoIRC RAS Director is Aleksandra A. Shabunova (Doctor of Economics). The Academic Leader of the Center is Vladimir A. Ilyin (RAS Corresponding Member, Doctor of Economics, Professor, Honored Worker of Science of the Russian Federation).

### **MAIN RESEARCH DIRECTIONS**

In accordance with the Charter, the Vologda Research Center carries out fundamental, exploratory and applied research in the following fields:

- problems of economic growth, scientific basis of regional policy, sustainable development of territories and municipalities, and transformations of socio-economic space;
- regional integration into global economic and political processes, problems of economic security and competitiveness of territorial socio-economic systems;
- territorial characteristics of living standards and lifestyle, behavioral strategies and world view of different groups of the Russian society;
- development of regional socio-economic systems, implementation of new forms and methods concerning territorial organization of society and economy, development of territories' recreational area;
- socio-economic problems regarding scientific and innovative transformation activities of territories;
- elaboration of society's informatization problems, development of intellectual technologies in information territorial systems, science and education;
- development of scientifically based systems of dairy cattle breeding in the conditions of the North-Western region of Russia;
- development of new breeding methods, methods and programs for improving breeding work with cattle;
- development of scientifically based feed production systems, norms, rations and feeding systems for cattle in the conditions of the North-Western region of Russia;

- development of zonal technologies for the cultivation of agricultural crops;
- development of technologies for the creation, improvement and rational use of hayfields and pastures in the conditions of the North-Western region of Russia;
- development of technologies and technical means for agricultural production in the North-Western region of Russia;
- assessment of biodiversity in the North-Western region of Russia;
- development and implementation of biotechnologies in agricultural production;
- improvement of breeding methods and creation of new varieties of forage crops.

### **INTERNATIONAL TIES AND PROJECTS**

VoIRC RAS is actively developing its international activities. It is involved in joint international grant projects and regularly holds international conferences and workshops. The Center has Cooperation agreements and Memoranda of understanding with research organizations:

2007 – Cooperation agreement is signed with the Institute of Sociology of the National Academy of Sciences of Belarus, Center for Sociological and Marketing Investigations at the “International Institute of Humanities and Economics” (Belarus, 2008).

2008 – Memorandum of agreement is signed with Alexander’s Institute at the Helsinki University (Finland, 2008).

2009 – Cooperation agreement is signed with Center for System Analysis of Strategic Investigations of NAS (Belarus, 2009).

2010 – Cooperation agreement is signed with the Institute of Economics of the National Academy of Sciences of Belarus (Minsk, Belarus, 2010).

2011 – Cooperation agreements are signed with National Institute of Oriental Languages and Civilizations (Paris, France, 2011), Institute of Business Economy at Eszterhazy Karoly College (Hungary, 2011), Republican research and production unitary enterprise “Energy Institute of NAS” (Belarus, 2011). Memoranda of understanding are signed with Jiangxi Academy of Social Sciences (China, 2011), Research and Development Center for Evaluation and Socio-Economic Development and the Science Foundation of Abruzzo region (Italy, 2011).

2012 – Cooperation agreement is signed with Center for Social Research at the Dortmund Technical University (Germany, 2012).

2013 – Memorandum of understanding is signed with Jiangxi Academy of Social Sciences (China, 2013). July 2013 – The application for research performance by international consortium involving ISED T RAS within the 7th Framework Programme of European Community.

2014 – Cooperation agreement is signed with Center for System Analysis and Strategic Research of the National Academy of Sciences of Belarus (Belarus, 2014). Memoranda of understanding are signed with Jiangxi Academy of Social Sciences (Mao Zhiyong, China, 2014), National Institute for Oriental Studies INALCO (Julien Vercueil, France, 2014).

2015 – Memorandum of understanding is signed with Jiangxi Academy of Social Sciences (China, 2015). Cooperation agreement is signed with the Institute of Sociology of the National Academy of Sciences of Belarus (Belarus, 2015).

2016 – Cooperation agreements are signed with the Center for the Study of Industrialization Modes of the School of Advanced Studies in the Social Sciences (EHESS) (Paris, France, 2016); Institute of Philosophy, Sociology and Law of NAS RA (Yerevan, Armenia, 2016); Yerevan Northern University (Armenia, 2016), Yerevan State University (Armenia, 2016). Memoranda of understanding are signed with Jiangxi Academy of Social Sciences (China, 2016).

2018 – Cooperation agreements are signed with the Department of Agrarian Sciences of the National Academy of Sciences of Belarus (Belarus, 2018); the Republican Unitary Enterprise “Scientific and Practical Center of the National Academy of Sciences of Belarus for Agricultural Mechanization” (Belarus, 2018). Memorandum of understanding is signed with the European School of Social Innovation (ESSI) (Germany, 2018).

2019 – Memorandum of understanding is signed with Jiangxi Academy of Social Sciences (China, 2019).

2020 – Memorandum of understanding is signed with Jiangxi Academy of Social Sciences (China, 2020).

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## V.A. Ilyin, the Journal's "Economic and Social Changes: Facts, Trends, Forecast" Editor-in-Chief, Celebrates His 85th Anniversary



### **Vladimir A. ILYIN**

RAS Corresponding Member, Doctor of Sciences (Economics), Professor, Scientific Director of Vologda Research Center of the Russian Academy of Sciences.

Honored Scientist of the Russian Federation, Honorary Doctor of VolRC RAS. Editor-in-Chief of the journal "Economic and Social Changes: Facts, Trends, Forecast".

Author of a series of monographs and scientific articles on the problems of public administration efficiency.

The scholar's publication record (according to RSCI data as of February 2026): 442 publications, of which 171 are in the RSCI core; over 6,600 citations; h-index – 39. He is among the top 1% of most cited Russian economists.

This issue of the journal opens with a special section dedicated to the 85th anniversary of Vladimir Aleksandrovich Ilyin, Corresponding Member of the Russian Academy of Sciences, Doctor of Sciences (Economics), Professor, Honored Scientist of the Russian Federation, and Editor-in-Chief of the journal "Economic and Social Changes: Facts, Trends, Forecast".

The contributors are distinguished economists and sociologists who form the circle of the journal's regular authors and reviewers. Their essays reflect on the multifaceted contribution of V.A. Ilyin to the development of academic science. Colleagues and like-minded associates of Vladimir Aleksandrovich offer their assessments of his role in establishing a scientific center, in shaping the journal into a respected platform for professional discourse, and in exploring fundamental questions of public administration efficiency. These materials serve as vivid sketches contributing to the portrait of a man who, by common consensus, embodies the finest qualities of the Russian scientific community.



**Aleksandra A. SHABUNOVA**

Doctor of Sciences (Economics),  
Director of Vologda Research Center  
of the Russian Academy of Sciences.  
Honored Scientist of the Russian Federation.  
Editor-in-Chief of the journal “Social  
Area”. Author of a series of monographs and  
scientific articles on problems of demography  
and healthcare.

The scholar's publication record  
(according to RSCI data as of February 2026):  
425 publications, of which 142 are in the  
RSCI core; over 9,600 citations; h-index – 44.  
She is among the top 1% of most cited Russian  
sociologists.

On January 19, 2026, Vladimir Aleksandrovich Ilyin – Scientific Director of Vologda Research Center of the Russian Academy of Sciences, Corresponding Member of the Russian Academy of Sciences, Honored Scientist of the Russian Federation, Editor-in-Chief of the journal “Economic and Social Changes: Facts, Trends, Forecast” – celebrated his 85th birthday. Last December also marked the 35th anniversary of the Center itself.

The journey of our institution – from a modest regional outpost to a scientific center of federal significance – is a living testament to Vladimir Aleksandrovich's vision and dedication. For 25 years, he served as its founder and permanent director, and over the past decade, as Scientific Director, he has generously shared his unique experience with the team. It was he who built the very community that now shapes the Center's future. The secret of this success, as Vladimir Aleksandrovich often says, lies in a systemic approach. Only through such systemic thinking could academic science take root in a region during the difficult 1990s, grow, and unite both young and seasoned researchers around a shared purpose.

Over the years of our collaboration, I have repeatedly witnessed Vladimir Aleksandrovich's remarkable foresight – both in management and in science. He has an instinct for identifying the most promising directions and consistently brings them to life. Among the ideas that have become the hallmark of VoIRC RAS are the Research and Educational Center, which trains highly qualified specialists; the unique public opinion monitoring system, now in its third decade; and, of course, our journal “Economic and Social Changes: Facts, Trends, Forecast”, which under his leadership earned a place in the Web of Science database and today ranks among the leading economic journals in Russia.

An anniversary such as this invites us to reflect on the scale of Vladimir Aleksandrovich's personality through the eyes of distinguished colleagues who have known him through joint work. The editorial office has received essays from RAS Corresponding Member Zh.T. Toshchenko, professors E.V. Balatsky and V.A. Volkonsky, and foreign RAS member Professor Jacques Sapir. Each, from their own vantage point, recognized and emphasized systematicity as the core of V.A. Ilyin's multifaceted activity – offering deep and precise insights into what it takes to build and sustain a scientific organization at the highest level for decades.

RAS Corresponding Member Zh.T. Toshchenko aptly captured Vladimir Aleksandrovich's unique gift: an organic fusion of deep practical knowledge of production with fundamental scientific thought – a combination that enabled him to become a true scientist-organizer, transforming a small team into a recognized academic center. Reflecting on V.A. Ilyin's scholarly works, Zhan Terentyevich observes that they captivate readers above all because they offer the researcher's response to pioneering and underexplored issues of our time – such as trauma society, social health, and the social contract. Highlighting the editor-in-chief's section that V.A. Ilyin curates in the journal “Economic and Social Changes: Facts, Trends, Forecast”, Zhan Terentyevich describes his articles as “a deep and thorough analysis of social relations”.

Professor E.V. Balatsky calls V.A. Ilyin a “scientist-practitioner” – someone for whom abstract theory matters less than scientific output capable of genuinely influencing the life of the country. Today, Vladimir Aleksandrovich has taken on the demanding mission of regularly composing a “snapshot” of the national situation through his editorial articles. Yet his greatest achievement, as E.V. Balatsky notes, lies in his enduring role as a research organizer who built one of Russia's leading regional centers. His worldly wisdom and extraordinary optimism, E.V. Balatsky emphasizes, make him irreplaceable even at 85.

Professor V.A. Volkonsky sees in V.A. Ilyin's works not merely academic inquiry, but a true chronicle of one of the most complex periods in Russian history. Of particular value, in Victor Aleksandrovich's view, is the issue V.A. Ilyin raises of public trust in authority and ideological unity. At the same time, V.A. Volkonsky observes, Vladimir Aleksandrovich displays a wise restraint, fully aware of the intricacy of historical processes and the role experts should play in helping those in power choose the right path.

Foreign Member of the Russian Academy of Sciences, Professor Jacques Sapir, offers his assessment of the journal “Economic and Social Changes: Facts, Trends, Forecast”. He describes it as “an outstanding scientific achievement and a great intellectual adventure” – one that began 18 years ago under the guidance of Editor-in-Chief V.A. Ilyin. In J. Sapir's view, the journal's inclusion in the most prestigious international database stands as recognition of the competence, scientific rigor, and consistency of its editorial team.

Reflecting on these remarkably consonant voices, I realize they all converge on a single point: Vladimir Aleksandrovich Ilyin is a man of an era, one who created a unique system for the advancement of science in the region. I see him nearly every day and know the immense effort behind every one of his achievements.

On behalf of the Administration and the entire staff of Vologda Research Center of the Russian Academy of Sciences, I once again extend our heartfelt congratulations to you, Vladimir Aleksandrovich, on your 85th birthday! Your energy, wisdom, and dedication over all these years have forged and sustained in us a special spirit and creative drive. We are endlessly grateful for your purposeful work in passing on unique experience and knowledge to the younger generation. Thanks to your gift as a mentor, a whole constellation of students has arisen, bringing your ideas to life. We wish you robust health, peace of mind, strength, and new accomplishments for the good of our Motherland!

## My Ideal of a Contemporary Scientist (Personal Reflections)



### Zhan T. TOSHCENKO

RAS Corresponding Member, Doctor of Sciences (Philosophy), Professor. Editor-in-Chief (1995–2018), Chairman of the Editorial Board (since 2018) of the journal “Sotsiologicheskie issledovaniya” (Sociological Studies), Chief Researcher at the Institute of Sociology of the Federal Center of Theoretical and Applied Sociology of the Russian Academy of Sciences. Honorary Doctor of the Institute of Sociology RAS, Honorary Professor of Lomonosov Moscow State University and the Russian State University for the Humanities. Author of the monograph “Society of Trauma: Between Revolution and Evolution (An Attempt at Theoretical and Empirical Analysis)” (2020). The scholar’s publication record (according to the Russian Science Citation Index (RSCI) data as of February 2026): 1,000 publications, of which 207 are in the RSCI core; over 17,500 citations; h-index – 63. He is among the top 1% of most cited Russian sociologists.

Upon first meeting V.A. Ilyin and exchanging thoughts on the current state of Russian society, I had the impression I was conversing with the director of a major industrial enterprise – the kind I had encountered before. In my mind’s eye, he embodied not only a comprehensive knowledge of virtually every significant economic and social issue but also a remarkable capacity for drawing profound scientific conclusions.

This brought to mind my own experience working as an in-house sociologist at two of Siberia’s largest enterprises: Glavkrasnoyarskstroy and the Krasnoyarsk Aluminum Plant, each employing tens of thousands of people. Their directors – V.P. Abovsky and V.V. Strigo – were exceptional individuals who combined broad knowledge of production organization, technology, and economics with a genuine appreciation for the social dimensions of industrial life and the creative role of those working under their leadership. They were, in other words, both managers of specific industries and scientifically minded individuals, exemplifying what true leadership should look like. It was no coincidence that their teams became leaders by many measures. It was precisely in such a mold that V.A. Ilyin first took shape in my imagination.

I learned of this – the industrial chapter in V.A. Ilyin’s life – only some time later. He devoted over 30 years to working in industry, including 12 years as director of the Vologda Optical-Mechanical Plant. And in that role, I am certain, he was not limited to just technical, technological, and

organizational issues. For him, the transition to academic work became a kind of organic shift to a new field of endeavor. His arrival in science was, in my view, extraordinarily fruitful precisely because his research fused deep knowledge of real-world life with a solid grounding in the fundamentals of various disciplines: economics, sociology, psychology, law, political science, and even certain natural sciences such as geography, biology, and mathematics.

I believe the weakness and limitations of many studies in the social sciences stem from the fact that their authors often built their careers solely within the confines of their academic institutions and purely scholarly activities, with only a superficial knowledge – or none at all – of what happens in the very spheres of social life they sought to understand.

It is this organic fusion of profound knowledge of production and fundamental scientific principles that has earned V.A. Ilyin a worthy and prominent place in economic science.

V.A. is also endowed with innate qualities as an organizer. This has manifested itself both in industry and in academia: the research team he took under his wing at the start of his scientific career he rapidly transformed into a major research institute, recognized in Russia and beyond – earning the esteem of practitioners and the Russian Academy of Sciences alike, which elected him a corresponding member. It is precisely these qualities that have led V.A. Ilyin to coordinate the work of all research groups in Vologda.

Now let me turn to what draws me to V.A.'s works.

First, through the prism of regional issues, he offers a deep and thorough analysis of development trends across many sectors of the Russian economy as a whole. This approach reveals

both the possibilities and the limitations at the regional level while simultaneously channeling efforts to apply this knowledge toward achieving broader goals.

Second, he carefully and attentively examines social problems in all their complexity and contradiction. These are always given due consideration when analyzing the most diverse aspects of life – both in the region and the country at large, especially in comparison with neighboring territories in the Northwestern Federal District.

Third, economic and social issues – and to a considerable extent political ones as well – are analyzed from the standpoint of governance challenges. He offers recommendations and judgments that are clearly oriented toward practical solutions.

Fourth, V.A.'s works engage with many pioneering, contestable, and underexplored problems – such as trauma society, social health, and the social contract.

Finally, the monitoring of public opinion across virtually all spheres of life allows him to track changes taking shape in the hearts and minds of the people of Vologda, providing a foundation for informed decision-making.

I would especially like to mention the editor-in-chief's column in the journal he heads, "Economic and Social Changes: Facts, Trends, Forecast". It is far more than a commentary on published articles – it is always a deep and thorough analysis of the state of social relations, encompassing economic, social, political, and spiritual dimensions.

I am convinced that Vladimir Aleksandrovich still has much to contribute to the scientific field – that he will continue to offer us, and especially those in governance, ideas, insights, and recommendations of enduring constructive value.

## Modern Model of a Scientist-Practitioner



### Evgeny V. BALATSKY

Doctor of Sciences (Economics), Professor, Chief Researcher at the Laboratory of Mathematical Economics of the Central Economics and Mathematics Institute RAS, Chief Researcher at the Sector of Socio-Economic Development and Migration Processes of the Primakov National Research Institute of World Economy and International Relations RAS.

Author of a series of publications on the problems of contemporary global socio-economic and technological challenges and social models for responding to them. The scholar's publication record (according to RSCI data as of February 2026): 512 publications, of which 243 are in the RSCI core; over 10,000 citations; h-index – 45.

He is among the top 1% of most cited Russian economists.

My acquaintance with V.A. Ilyin began over the phone when he called me and proposed reprinting an article of mine that had appeared in the journal “Obshchestvo i ekonomika”. He found it so significant that he decided to feature it in his own journal. This very fact is unprecedented for our country and our time – the editor-in-chief of an academic publication personally and meticulously monitors interesting developments in other scientific journals, finds the necessary contacts, and reaches out to authors himself, striving to maximally enhance the content of the journal entrusted to him by attracting them. However, later, when I met Vladimir Aleksandrovich in person and began collaborating with VolRC RAS, I learned that his activity is not limited to selecting interesting authors and articles.

He circulates articles he deems significant among the staff of his institute, thereby aiming to acquaint them with new ideas and developments. He invites researchers from other cities across the country to Vologda, where they give presentations at VolRC RAS and provide external evaluations of the center's work. Sometimes Vladimir Aleksandrovich organizes public lectures in the city, open to all interested parties and representatives of the city administration. And there are many, many other initiatives too numerous to mention, but one deserves special attention.

The journal “Economic and Social Changes: Facts, Trends, Forecast” has been published in full-format bilingual versions – Russian and English – for over 10 years. Moreover, the translation into

English is of very high quality, which was personally confirmed to me by an acquaintance from the USA: in his opinion, the text of the materials closely resembles authentic English, is lively, and completely adequate. Today, this initiative is being replicated for other journals of VolRC RAS – “Social Area” and “Problems of Territory’s Development”. Thus, the Center’s publications are increasingly penetrating the global knowledge market. I have witnessed firsthand how these three journals have transformed from purely regional ones into national publications, where even the most renowned researchers from Moscow, Saint Petersburg, and Yekaterinburg now actively seek to publish. Today, these journals are slowly but surely evolving into international publications, despite the extremely unfavorable international climate. For me, these achievements represent a certain benchmark for all scientific centers and journals in Russia, as I know of literally only a handful of organizations and periodicals that maintain a stable presence in both the Russian and English-language segments of the scientific research market.

As for Vladimir Aleksandrovich’s scientific style, it’s quite straightforward: he is a *scientist-practitioner*. Moreover, he himself formulated his scientific credo: what matters is not *induction*, *deduction*, or *abduction*, but *scientific output*. He refers to scientific output that would, in one way or another, influence the life of the country. This means he “gathers” fruitful ideas, concepts, practical mechanisms, and analytical tools that can offer a fresh perspective on serious national problems and provide additional opportunities for government bodies. Professor Ilyin has no interest

in purely theoretical research divorced from reality. It might seem that this is a perfectly normal stance, but that is not entirely true – today’s academic science in Russia, both on the part of individual researchers and organizational leaders, tends towards fruitless speculative inquiries. V.A. Ilyin counteracts this destructive trend – and this fact can hardly be overstated.

Today, V.A. Ilyin, as a researcher, has taken upon himself the difficult and largely thankless mission of quarterly compiling a “snapshot” of the situation in the country within his editorial articles. This work provides the raw material for periodically taking stock of where Russia is heading and what management decisions it needs. However, it would be a great mistake to perceive V.A. Ilyin merely as an *individual researcher*; he has long ceased to be just that – he is a *research organizer*. And the fact that today VolRC RAS, modest by Russian standards, has become one of the country’s leading regional scientific centers is the best proof of that.

Regarding Vladimir Aleksandrovich’s personal qualities, the key ones are his worldly wisdom and truly fantastic optimism. Nothing can discourage him, break his spirit, or deprive him of his drive. I believe these qualities, combined with his scientific and organizational skills, make him an indispensable element of the Vologda scientific system, even at 85. People of his caliber and experience become the embodiment of the national scientific environment, which younger generations need like air. Considering V.A. Ilyin’s creative plans, in the future he will undoubtedly surprise and delight us many times over with his innovative initiatives and projects.

## On the Anniversary of V.A. Ilyin



### **Victor A. VOLKONSKY**

Doctor of Sciences (Economics), Professor, Chief Researcher at the Institute of Economic Forecasting of the Russian Academy of Sciences. Laureate of the N.P. Fedorenko International Scientific Foundation for Economic Research Prize (2003) in the nomination “For Outstanding Contribution to the Development of Economic Science in Russia”.

Author of the monograph “The Drama of Spiritual History: Non-Economic Foundations of the Economic Crisis” (2002). The scholar’s publication record (according to RSCI data as of February 2026): 135 publications, of which 60 are in the RSCI core; approx. 2,500 citations; h-index – 24. He is among the top 2% of most cited Russian economists.

I am delighted to congratulate Vladimir Aleksandrovich on his anniversary. I believe all Russian economists are ready to wish him many more years of equally fruitful life and work – not formally, but from the heart. His works and the journal he heads, “Economic and Social Changes: Facts, Trends, Forecast”, truly advance science, and not only its economic and sociological branches but the entire science of society, expanding its horizons. For the past several years, I have published most of my articles precisely in this journal. Russian economic journals typically limit their subject matter to purely economic and political issues. Lately, however, I have been interested in factors that, while related to economics, belong to other humanities fields – history, psychology, philosophy. And it turns out that finding a scientific journal willing to publish such articles is no easy task. The journal “Economic and Social Changes” is a wonderful example of combining depth and breadth in the issues it covers. Within it, you will find both a deep and detailed exposition of specific pressing problems requiring urgent solutions, and a discussion of humanity’s eternal questions. In my opinion, this is one of the best economic journals in the country.

A number of articles and the book “On the Difficult Path to Healing from the ‘Trauma’... 25 Years of V.V. Putin’s Implementation of the National Development Course of the Russian Federation” (V.A. Ilyin, M.V. Morev) are devoted to assessing and interpreting the current stage of Russian history. I think these works will be

perceived by our descendants as a chronicle of our very challenging period. About how V.V. Putin increasingly grasped the situation and, stage by stage, pulled Russia out of its semi-colonial state. It is these works that will most often be cited, if only because the authors have gathered a vast amount of primary data to describe each event and substantiate each thesis. This material includes both statistical data and quotes from legislative documents and statements by authoritative politicians, scientists, and publicists. This material shows how certain events and ideas are perceived by society (we ourselves, those currently living, do not always know this!). In addition to this material, Vologda Research Center of the Russian Academy of Sciences (of which V.A. Ilyin is also the Scientific Director) regularly conducts social surveys.

But more importantly, of course, is that V.A. Ilyin's works identify and explore the main problems and tasks facing society, and their recognition by the elite, the president, and the people. The most important of these problems is the ideological unity of society, eliminating the lingering dangers of schisms remaining from the 1990s: between the wealthiest oligarchs and the majority of the population, between the bureaucracy and the people, between a part of the pro-Western elite and the patriotic core of the nation.

The works of V.A. Ilyin and his journal provide a vivid and detailed account of the struggle waged by the President and patriots for the revitalization of society. The results of this struggle are the slow but steady strengthening of public consciousness,

grounded in the traditional supreme value – the sovereignty of society and the state.

Another issue that is comprehensively illuminated in V.A. Ilyin's portrayal of Russian society is the question of trust, of Russians' agreement with the policy and ideology of the Putin path. He shows that many authoritative thinkers and public figures in Russia criticize the authorities for being overly cautious in international policy, for hindering high rates of economic growth, for the detrimental activities of the Central Bank – in other words, they insist on a radicalization of the political course. V.A. Ilyin does not express an unequivocal position on this matter. I interpret Vladimir Aleksandrovich's position as follows.

At present, historical processes (primarily spiritual and ideological) are moving toward a change in the world order, toward something better. The leadership of the Russian state must very carefully assess which radical changes in the political course might lead to an undesirable acceleration of these processes. The role of Russian experts (even opponents) should be limited to assisting the President in choosing the timing and direction of such radical changes.

I recently learned that Vologda Research Center of the Russian Academy of Sciences was established by V.A. Ilyin during the most challenging time for the country – in the 1990s, and by 2008 the journal had already begun publication. It is thanks to people like Vladimir Aleksandrovich that Russia stands as a model of steady progress along the difficult path of culture and civilization.

Once again, my heartfelt congratulations.

## About the Journal “Economic and Social Changes: Facts, Trends, Forecast”



### Jacques SAPIR

Professor of Economics, Research Director at the School for Advanced Studies in the Social Sciences (EHESS) and the Center for Industrialization Studies (CEMI-EHESS), France; associate professor at Lomonosov Moscow State University; Foreign Member of the Russian Academy of Sciences. Specialist in research on problems of Russia and the CIS countries. Member of the Editorial Board of the journal “Economic and Social Changes: Facts, Trends, Forecast”. The scholar’s publication record (according to the Scopus international database as of February 2026): 61 publications; 126 citations; h-index – 6.

The scientific journal “Economic and Social Changes: Facts, Trends, Forecast” has become a prominent institution in Russian and international academic circles. This is largely due to the remarkable work carried out since its founding in 2008 by its editorial team under the leadership of Professor Vladimir A. Ilyin. He has attracted a distinguished team that has worked tirelessly to make this scientific journal a true benchmark in its field.

“Economic and Social Changes: Facts, Trends, Forecast” covers a wide range of topics. It is a multidisciplinary journal that fosters dialogue and mutual enrichment between the fields of Economics, Sociology, and Political Science. It publishes articles on topics ranging from economic theory, mathematical, statistical, and instrumental methods in economics, the theory, methodology, and history of sociology, and demography. It also publishes articles on topics related to applied sciences, such as the study of the global economy, financial issues, studies of regional and sectoral economies, economic sociology, political sociology, and the sociology of culture and management.

Its indexing in Web of Science (ESCI) in 2015 was a recognition of the competence, rigor, and consistency of the work carried out by its editorial board under the direction of Vladimir A. Ilyin. The journal became one of the leading economics journals in Russia and was included in the first level of the Unified State List of Scientific Publications. The presence of researchers from various countries on its Editorial Board and Editorial Council testifies to its international recognition, as well as to the intellectual pluralism that this journal has maintained since its inception.

The scientific journal “Economic and Social Changes: Facts, Trends, Forecast” is therefore a first-rate scientific achievement and a great intellectual adventure that began 18 years ago and continues brilliantly under the direction of Vladimir Ilyin, whose 85th birthday we are celebrating.

# EDITORIAL

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## Efficiency of Strategic Public Administration: The State of Russian Society Following Four Years of the Special Military Operation



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**Abstract.** The deep civilizational crisis that humanity is currently experiencing, the emergence of a new multipolar world order, and the challenges confronting Russia in this context underscore the urgent need to examine the strategic effectiveness of public administration. The authors emphasize the importance of a rigorous scholarly approach to understanding Russia’s role in the ongoing historical shift toward multipolarity, as well as in the wake of four years of the special military operation. To evaluate the effectiveness of strategic governance, the study employs the “evolutionary leap model” developed by E.V. Balatsky, which draws on the classical theories of historians, philosophers, and sociologists such as L. Gumilev, A. Schopenhauer, A. Toynbee, and E. Todd. The article also traces the evolution of Russian society and scrutinizes the caliber of the ruling elites as bearers of what Gumilev termed “passionarity energy” – the decisive factor determining whether the country will make an “evolutionary leap” to the

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next stage of historical development or face a crisis of statehood that directly threatens its very survival. The authors' conclusions are grounded in data from nationwide and regional sociological surveys, official statistics, empirical evidence, and expert opinions, enabling a holistic assessment of public administration effectiveness, including its strategic dimensions: goal-setting, long-term consequences, and the motivations of decision-makers. Both the subjective evaluations and objective data presented in the article point to an acute need for improving the strategic effectiveness of governance. The President of Russia, who over the past quarter-century has consistently demonstrated strategic foresight, must now bring this quality to bear on the ruling elites, many of whose decisions continue to run counter to national interests and, as the study reveals, deepen the rift between society and the state. The study's scholarly contribution lies in applying the "evolutionary leap model" to assess not only the effectiveness of strategic public administration but also the state of society and the quality of ruling elites in contemporary Russia.

**Key words:** effectiveness of strategic public administration, civilizational crisis, new multipolarity, "evolutionary leap" model, passionarity, RF President, ruling elites, public opinion.

The first half of the 21st century has found global civilization in the grip of yet another profound socio-cultural, civilizational, and geopolitical crisis. As Russian President Vladimir Putin emphasized back in 2021 (prior to the start of the Special Military Operation), *"the crisis we are facing is conceptual, even civilizational... it is a crisis of the approaches and principles that define human existence on Earth"*. This circumstance, naturally, brings to the fore the critical task of **enhancing the effectiveness of strategic public administration** – that is, the ability to foresee the future strategically and to think in terms of grand historical and civilizational categories.

It is worth noting that Russian legislation lacks a clear definition of the term "strategic public administration"<sup>1</sup>. However, the head of state

"We are already living [in an era of change], whether we want it or not, and these changes are becoming ever deeper, ever more fundamental... **The crisis we are facing is conceptual, even civilizational. In essence, it is a crisis of the approaches and principles that define the very existence of man on Earth...** This is not simply a shift in the balance of power or a scientific-technological breakthrough, although both, of course, are also taking place. **Today we are confronted with simultaneous systemic changes across all fronts:** from the increasingly complex geophysical state of our planet to ever more paradoxical interpretations of what man himself is, and what the meaning of his existence is"<sup>2</sup>.

<sup>1</sup> Instead, Federal Law 172-FZ of June 28, 2014 (as amended on July 13, 2024) "On Strategic Planning in the Russian Federation" provides the following definitions:

1) strategic planning – the activities of strategic planning participants in goal-setting, forecasting, planning and programming of the socio-economic development of the Russian Federation, constituent entities of the Russian Federation and municipalities, sectors of the economy and spheres of state and municipal administration, ensuring the national security of the Russian Federation, aimed at solving the tasks of sustainable socio-economic development of the Russian Federation, constituent entities of the Russian Federation and municipalities and ensuring the national security of the Russian Federation;

2) public administration – the activities of public authorities to exercise their powers in the sphere of socio-economic development of the Russian Federation and ensuring the national security of the Russian Federation.

<sup>2</sup> Vladimir Putin's speech at the Valdai International Discussion Club meeting on October 21, 2021. Available at: <http://www.kremlin.ru/events/president/transcripts/66975?ysclid=mlrleg8wpi868699092>

2008: “Today we are already setting goals and objectives for ourselves not for a month or two ahead, but for 20–30 years ahead”<sup>3</sup>.

2012: “What is needed is precisely a long-term state approach, taking into account the interests of the regions, practically all sectors of the economy, as well as geopolitical and social factors. We need to look 10, 20, 30 years ahead”<sup>4</sup>.

2022: “Always – when making any decisions – one must identify the main thing. What is the main thing for us? To be independent, self-reliant, sovereign, and to ensure development for the future – both now and for future generations...”<sup>5</sup>

2023: “The country has always thought about the future. And you and I, of course, must act precisely in this way. Always, under any circumstances, think about the future of the people and of our state. That is what we are doing”<sup>6</sup>.

2025: “...the very idea [of building the Trans-Siberian Railway across the entire country to the Pacific Ocean] serves for us as an example of strategic vision of the future, when not only current needs and circumstances are taken into account, but also the country’s interests for centuries to come...”<sup>7</sup>

consistently draws attention to the absolute necessity of a strategic, long-term approach in implementing managerial decisions, urging that we consider “*not only current needs and circumstances, but also the country’s interests for centuries to come*”.

For the Russian Federation, the urgency of issues related to improving the effectiveness of strategic governance stems from two key factors.

**First, today, during the Special Military Operation, which began on February 24, 2022, and whose fourth anniversary is now being marked, Russia is navigating a pivotal chapter in its history.**

The fact is that every major state-civilization – one with a long historical trajectory that has played and continues to play a significant role in the cultural, economic, and geopolitical landscape of global civilization – develops cyclically. Such states repeatedly overcome critical periods that demand the mobilization of all their strength and resources<sup>8</sup>.

<sup>3</sup> Vladimir Putin’s speech at the ceremony inaugurating Dmitry Medvedev as President of the Russian Federation on May 7, 2008. Available at: <http://www.kremlin.ru/events/president/transcripts/2>

<sup>4</sup> Vladimir Putin’s opening remarks at the meeting on the development of railway infrastructure and high-speed traffic on April 26, 2012. Available at: <http://archive.premier.gov.ru/events/news/18783/>

<sup>5</sup> Vladimir Putin’s speech at the Plenary Session of the St. Petersburg International Economic Forum on June 17, 2022. Available at: <http://www.kremlin.ru/events/president/transcripts/speeches/68669>

<sup>6</sup> Vladimir Putin’s speech at the Plenary Session of the World Russian People’s Council on November 28, 2023. Available at: <http://www.kremlin.ru/events/president/transcripts/copy/72863>

<sup>7</sup> Vladimir Putin’s speech at the Plenary Session of the VI International Arctic Forum “Arctic – Territory of Dialogue” on March 27, 2025. Available at: <http://www.kremlin.ru/events/president/transcripts/copy/76554>

<sup>8</sup> For example, in the USA:

- ✓ The economic crisis of the 1780s due to debts incurred during the War of Independence;
- ✓ The Civil War (1861–1865);
- ✓ The Great Depression of the 1930s.

In China:

- ✓ The Peasant War of 1628–1644;
- ✓ The crisis in the Qing Empire at the end of the 18th century;
- ✓ The Xinhai Revolution (1911);
- ✓ The crisis during the Great Leap Forward (1958–1960).

In India:

- ✓ The crisis of the Mughal Empire during the reign of Padishah Aurangzeb (1658–1707);
- ✓ The crisis of British India in the 19th century;
- ✓ The crisis of independent India (1960s – 1970s);
- ✓ The 1991 crisis;
- ✓ The balance of payments economic crisis in 1991.

As the Russian sociologist and philosopher N. Ya. Danilevsky wrote – and his views have been cited twice by the President in public speeches (on November 1, 2018, at the World Russian People’s Council<sup>9</sup>, and on October 27, 2022, at the plenary session of the Valdai International Discussion Club<sup>10</sup>) – *“history is not linear; it is a totality of civilizations that are in a constant cycle of formation and decline... Each civilization passes through certain stages of development: emergence, flourishing, decline, and demise”*<sup>11</sup>.

A “test of strength” in the form of critical stages in the life cycle of a state-civilization truly tempers it, makes it stronger, and enables it to reach new historical frontiers of development. **But this holds true only if it proves capable of learning from previous experience and, drawing on that accumulated wisdom, finds an effective and swift response to the challenges of the present.**

This is precisely the challenge facing the President and the entire system of governance he

leads. Russian (or Rus) civilization is no exception to this rule. Over its more than thousand-year history, it too has repeatedly faced crises of statehood, at times teetering on the brink of disappearance<sup>12</sup>.

**Today, during the Special Military Operation, Russia is once again undergoing such a stage in its development.** As Vladimir Putin stated, *“Everyone must understand the times we live in and the historical stage Russia is going through. And if we understand this, then everyone – everyone – must work as if on the front line. Everyone must feel mobilized. Only then will we achieve the goals we have set for ourselves”*<sup>13</sup>.

M. Yemelyanov<sup>14</sup>: *“Some Russian political scientists believe that overcoming the unipolar world is the ultimate goal of Russian foreign policy, after which bliss in international relations will follow. This is not so! A multipolar world order gives rise to exceptionally serious challenges for Russia and its diplomacy”*<sup>15</sup>.

<sup>9</sup> Excerpt from Vladimir Putin’s speech: “It is impossible to imagine human history without such unique civilizations as India, China, Western Europe, America and many others. This is truly a multifaceted complexity, each facet of which complements and enriches the other. And here I want to recall the words of the outstanding Russian thinker of the 19th century, Nikolai Danilevsky: ‘...No civilization can boast that it represents the highest point of development...’” (source: Vladimir Putin’s speech at the World Russian People’s Council meeting on November 1, 2018. Available at: <http://www.kremlin.ru/events/president/news/59013>)

<sup>10</sup> Excerpt from Vladimir Putin’s speech: “I want to quote here the words of the great Russian philosopher Nikolai Yakovlevich Danilevsky, who believed that progress does not consist in everyone going in the same direction, as some of our opponents push us to do – in such a case, progress would soon cease, says Danilevsky – but in ‘traversing the entire field that constitutes the arena of humanity’s historical activity in all directions.’ And he adds that no civilization can boast that it represents the highest point of development” (source: Vladimir Putin’s speech at the plenary session of the Valdai International Discussion Club on October 27, 2022. Available at: <http://www.kremlin.ru/events/president/news/69695>).

<sup>11</sup> Kazarinov Yu.G. Russia and the West: The current situation. Based on the works of the Russian philosopher N. Yu. Danilevsky. Available at: <https://herzenlib.ru/main/news/detail.php?ID=82853&ysclid=mlkr1xk9hj686660426>

<sup>12</sup> For example, in Russia:

- ✓ The “Time of Troubles” at the end of the 16th – beginning of the 17th century;
- ✓ The Patriotic War of 1812;
- ✓ The crisis of the Russian Empire (the revolutions of 1905–1907 and 1917);
- ✓ The Great Patriotic War (1941–1945);
- ✓ The Cold War (1945–1991) (the collapse of the USSR);
- ✓ The start of the Special Military Operation (February 24, 2022).

<sup>13</sup> Vladimir Putin’s speech at the meeting of the Council for Strategic Development and National Projects and the State Council commissions on socio-economic development directions on May 29, 2024. Available at: <http://www.kremlin.ru/events/president/transcripts/74162>

<sup>14</sup> Mikhail Vasilyevich Yemelyanov – Candidate of Sciences (Law), Deputy of the State Duma of the Russian Federation of the II–VII convocations (1995–2021), Chairman of the Council of the regional branch of the Just Russia Party in the Rostov Region. Author of more than 50 scientific publications on issues of public administration, constitutional law, and electoral legislation.

<sup>15</sup> Yemelyanov M. The new multipolarity is not what Russia expected. Available at: [https://www.ng.ru/vision/2026-01-20/8\\_9419\\_multipolarity.html?ysclid=mnknofr9yu294865114](https://www.ng.ru/vision/2026-01-20/8_9419_multipolarity.html?ysclid=mnknofr9yu294865114)

The second factor driving the urgency of enhancing the effectiveness of strategic public administration is linked to the fact that the **process of shaping a new multipolarity in the 21st century “gives rise to exceptionally serious challenges for Russia and its diplomacy”**.

The formation of a multipolar world, as Putin has repeatedly noted, is not a process contingent on the wishes of Russia, China, or any other single actor. **It is driven by the objective trends in the development of the potential of the world’s leading powers.** *“We can accelerate this process, we can, or someone might try to slow it down, and perhaps they might even manage to reduce the pace at which the multipolar world is being built. But its creation is inevitable”*<sup>16</sup>.

2023: “The multipolar world is creating itself, as a matter of fact. And it is happening due to the growth of the potential of many countries”<sup>17</sup>.

2024: “It is precisely on the basis of the new political economic reality that the contours of a multipolar and multilateral world order are being shaped today, and this is an objective process”<sup>18</sup>.

2025: “The new world order is emerging naturally. It’s like the sunrise. There’s no getting away from it”<sup>19</sup>.

**Moreover, as many experts point out, this process is unfolding not along state (national) lines, but along civilizational ones. In other words, the emerging multipolar world is likely to be a world not of numerous nation-states, but a world of macro-regions, or “pan-regions”.**

“The most likely scenario for the world’s development over the next twenty years is a ‘world of pan-regions’... That is precisely what the world will look like after a New Yalta: rights for the great powers, law and taxes for the rest...”<sup>20</sup>

**In such circumstances, the question of who holds the initiative in shaping their own “pan-region” and in the broader process of forming a multipolar world becomes fundamentally important. And it is precisely this point that places heightened demands on the effectiveness of strategic state governance.**

“The structure of the situation is simple to the point of banality: whoever takes the initiative sets the rules of the game, the level of escalation, the fabric of misconceptions, the dynamics of traps, the labyrinths of intrigue”<sup>21</sup>.

It is worth noting that the Russian Federation effectively led and for a long time remained “at the vanguard”<sup>22</sup> of this new multipolarity. The beginning of the “passive”, or latent, phase of this process was marked by Vladimir Putin’s speech in Munich on February 10, 2007.

It was then that Putin, addressing the so-called Western “civilized” world, drew attention to the fact that ***“a world with one master, one sovereign, is ultimately destructive not only for all those within this system, but also for the sovereign itself, because it destroys it from within... For the modern world, a unipolar model is not only unacceptable, but also entirely impossible. And not only because, with a single leader in the modern – precisely the modern –***

<sup>16</sup> V. Putin’s interview with Chinese media corporation. Available at: <http://www.kremlin.ru/events/president/transcripts/72508?ysclid=mlhlcjajxf736701540>

<sup>17</sup> V. Putin’s interview with Chinese media corporation. Available at: <http://www.kremlin.ru/events/president/transcripts/72508?ysclid=mlhlcjajxf736701540>

<sup>18</sup> V. Putin’s speech at the meeting with the leadership of the Russian Ministry of Foreign Affairs. Available at: <http://www.kremlin.ru/events/president/news/74285?ysclid=mlhldrjeun34926444>

<sup>19</sup> V. Putin’s speech at the meeting with the leadership of the Russian Ministry of Foreign Affairs. Available at: <http://www.kremlin.ru/events/president/news/74285?ysclid=mlhldrjeun34926444>

<sup>20</sup> Shkolnikov A. The World after Globalization and a New Yalta. Available at: <https://shkolnikov.info/articles/11-analitika-i-prognozy/71549-mir-posle-globalizatsii-i-novoy-jalty?ysclid=mlhlgc7ax101150444>

<sup>21</sup> Ageev A. How long? Available at: <https://izborsk-club.ru/27754>

<sup>22</sup> Naryshkin: Today Russia again stands at the vanguard of the struggle for a more just world order. Available at: [https://rg.ru/2025/03/25/banalnyj-grabez.html?ysclid=mkxshpg7o5176187012&utm\\_referrer=https%3A%2F%2Fya.ru%2F](https://rg.ru/2025/03/25/banalnyj-grabez.html?ysclid=mkxshpg7o5176187012&utm_referrer=https%3A%2F%2Fya.ru%2F)

*world, there will be a shortage of both military-political and economic resources. But more importantly, the model itself is unworkable, as it lacks, and cannot have, a moral and ethical foundation for modern civilization*<sup>23</sup>.

In this forecast, the President of the Russian Federation demonstrated his strategic foresight. Essentially, all his subsequent actions within the country<sup>24</sup> were aimed, as Aleksandr Dugin writes, at “purging the West from within itself”<sup>25</sup> – at preparing Russia for the moment when the unipolar world model would collapse, and amidst its ruins, an even more complex, brutal process of forming a new, multipolar model would begin, fraught with military conflicts and artificially created cultural and value ruptures.

Russia also initiated the “active” phase of shaping the new multipolarity. This occurred with the Supreme Commander-in-Chief’s announcement of the Special Military Operation in Ukraine on February 24, 2022. “Since then”, experts note, “Russia has led the struggle for a multipolar world, drawing in a cautious China, a wavering India, and other international players striving for genuine independence”.

**However, three years later, a new stage has begun in the historical process of forming a new multipolarity.** This is linked to Donald Trump’s victory in the US presidential elections in early 2025<sup>26</sup>.

“The first powerful blow to the unipolar world was struck by Russian President Vladimir Putin with his famous Munich speech in 2007. Since then, Russia has led the struggle for a multipolar world, drawing in a cautious China, a wavering India, and other international players striving for genuine independence”<sup>27</sup>.

The US withdrawal from 66 international organizations; the imposition of trade tariffs on virtually every country in the world; territorial claims against Canada, Greenland, Venezuela... With all these moves, the United States is demonstrating a “readiness to disregard anything – anyone’s sovereignty, any international law, any public opinion, and even the official position of any state or group of states”<sup>28</sup>.

**On January 22, 2026, at the Davos forum, Donald Trump officially announced the creation of a “Board of Peace”.** Its “sole chairperson is Trump himself”<sup>29</sup>. As experts noted, “Trump seems to simply want to replace institutions with himself – and this is one of the most striking demonstrations of their current state and weakness”<sup>30</sup>;

**“The US actions are not the arbitrary folly of a weakening global hegemon, but the desire of a metropolis to establish its own order within the territory of the pan-region it is shaping for itself.. The US considers the entire Western Hemisphere its exclusive sphere of influence, whether others like it or not”<sup>31</sup>.**

<sup>23</sup> V. Putin’s speech at the Munich Conference on Security Policy on February 10, 2007. Available at: <http://www.kremlin.ru/events/president/transcripts/24034?ysclid=mlqalwd6zd174930989>

<sup>24</sup> Such as the strengthening of statehood after the protest actions on Bolotnaya Square (2011–2012); the “Crimean Spring” – the incorporation of Crimea and Sevastopol into the Russian Federation (2014); amendments to the Constitution of the Russian Federation (2020); the ban on the activities of “Navalny’s headquarters”<sup>\*</sup> (2021), the start of the Special Military Operation and the incorporation of 4 new regions into the Russian Federation (2022).

<sup>\*</sup> The activities of Navalny’s headquarters were recognized as extremist and banned on the territory of the Russian Federation.

<sup>25</sup> Dugin A. The key to victory in the special military operation lies in the 1990s. The capitulation of Ukraine will not be enough. Available at: <https://izborsk-club.ru/27605?ysclid=mlqdgpk4y774158587>

<sup>26</sup> The US presidential elections themselves took place on November 5, 2024, but their final results were confirmed on January 5, 2025, and D. Trump’s official inauguration ceremony was held on January 20, 2025.

<sup>27</sup> Emelyanov M. The new multipolarity is not what Russia expected. Available at: [https://www.ng.ru/vision/2026-01-20/8\\_9419\\_multipolarity.html?ysclid=mknkofr9yu294865114](https://www.ng.ru/vision/2026-01-20/8_9419_multipolarity.html?ysclid=mknkofr9yu294865114)

<sup>28</sup> Ageev A. How long? Available at: <https://izborsk-club.ru/27754>

<sup>29</sup> Sysoev I. All Power to the Board? The US President Presented a “Board of Peace”. Will it become an institution with real influence? Available at: <https://rg.ru/2026/01/22/k-sovetu-mira-uzhe-prisoedinilis-59-gosudarstv.html?ysclid=mkwm5vm92j199165143>

<sup>30</sup> Ibidem.

<sup>31</sup> Shkolnikov A. Venezuelan glimpses of the World of Pan-regions. Available at: [https://zavtra.ru/blogs/venesuel\\_skie\\_probleski\\_mira\\_panregionov?ysclid=mkwgbzrx8219157854](https://zavtra.ru/blogs/venesuel_skie_probleski_mira_panregionov?ysclid=mkwgbzrx8219157854)

The key characteristic of this new stage is, firstly, a change in the very nature of the process itself: it is no longer merely a struggle between the “new” and the “outgoing” models of world order, **but a struggle among the world’s major powers (“metropolises”) for spheres of influence (“pan-regions”).**

**Secondly, the initiative in this new stage of forming a multipolar world is increasingly being seized by the very actor that led the outgoing unipolar model into global crisis – the United States.**

As experts note, the new Trump administration *“is implementing a decision to completely demolish the entire visible layer of the Western elite, its basic principles and laws... we are witnessing a deliberately provoked catastrophe of the Western elite system, not a crisis, but a catastrophe”*<sup>32</sup>.

Thus, *“right before our eyes, the architecture of the world order, built on the basis of the Yalta-Potsdam agreements following World War II, is crumbling”*<sup>33</sup>. And, of course, such qualitative, systemic transformations of the entire global architecture cannot but pose a challenge for the Russian Federation. It is no coincidence that the first meeting of the Russian Security Council in 2026 (on January 19) was devoted by Vladimir Putin precisely to two themes: *“issues in the sphere of security”* and Russia’s participation *“in the construction of a multipolar world and our actions in this regard”*<sup>34</sup>.

**Based on this, we see that the increased demands on the effectiveness of strategic public administration are dictated by the dynamics of the historical process not only at the national, but also at the global level.** As experts note, *“a long solo voyage lies ahead of us, and it requires a radical improvement in public administration at all levels”*.

**“The Munich Security Conference in 2026 showed that the Third World is unlikely to rally around Russia on an anti-colonial basis...”**

India, Brazil... all it takes is for the Americans to push a little, offer a profitable deal/transaction, and these countries act in their own interests...

**A long solo voyage lies ahead of us. It requires a radical improvement in public administration at all levels”**<sup>35</sup>.

How can we ensure that, at this pivotal moment in history that Russia is navigating at the end of the first quarter of the 21st century, we not only preserve the state, literally survive, but perhaps even strengthen our geopolitical standing? How do we avoid being left “by the wayside” of the chaotic and rapidly unfolding process shaping a new multipolar world? And, ultimately, how do we keep from ending up on the “backburner” of history?

**Vladimir Putin: “...all of us together must feel and understand what is happening in the world, around us, and what challenges lie before us.**

The fact is that the speed of technological change is accelerating rapidly, going sharply upwards. **The one who rides this technological wave will leap far ahead. Those who cannot do so will be overwhelmed and drowned by it”**<sup>36</sup>.

These are all questions of strategic public administration, and it is crucial to emphasize that finding answers to them is particularly vital for our country. For many states around the world, a pessimistic scenario might mean being, as President Putin has noted, simply *“overwhelmed and drowned by the wave of technological change”*. **But for Russia, this carries the additional, direct threat of military**

<sup>32</sup> Shkolnikov A. They decided not to take every creature onto the new elite ark. Available at: [https://zavtra.ru/blogs/na\\_novij\\_elitnij\\_kovcheg\\_reshili\\_brat\\_ne\\_kazhduyu\\_tvar\\_](https://zavtra.ru/blogs/na_novij_elitnij_kovcheg_reshili_brat_ne_kazhduyu_tvar_)

<sup>33</sup> Remchukov K. In Davos, the end of globalization was proclaimed. Available at: [https://www.ng.ru/politics/2026-01-25/1\\_9421\\_250126.html?ysclid=mkwlo4qm4q391437725](https://www.ng.ru/politics/2026-01-25/1_9421_250126.html?ysclid=mkwlo4qm4q391437725)

<sup>34</sup> Meeting with permanent members of the Security Council. Available at: <http://kremlin.ru/events/president/news/79020>

<sup>35</sup> Remchukov K. In Munich, they dreamed of exhausting Russia. Available at: [https://www.ng.ru/politics/2026-02-15/1\\_9437\\_14250502.html?ysclid=mlrv1wh0v2458702895](https://www.ng.ru/politics/2026-02-15/1_9437_14250502.html?ysclid=mlrv1wh0v2458702895)

<sup>36</sup> Presidential Address to the Federal Assembly of the Russian Federation. Available at: <http://www.kremlin.ru/events/president/news/56957?ysclid=ml0mr4gfs540557247>

**intervention.** As Foreign Minister Sergey Lavrov underscored after the start of the Special Military Operation, “*Russia is fighting for its very survival, for the right to remain on the political map of the world*”<sup>37</sup>, and moreover, “*for the first time in its history, Russia is fighting alone against the entire West*”<sup>38</sup>.

It is important to note, however, that four years into the Special Military Operation, some experts – notably D.R. Belousov<sup>39</sup> – continue to point to troubling symptoms within the system of state economic management, symptoms that create risks

for sustaining the course of national development in the 21st century.

The systemic problems highlighted by this leading forecasting expert<sup>41</sup> demand deep scholarly analysis and a thorough understanding of their root causes. In our view, these causes are convincingly revealed in the “**Structural Model of the Evolutionary Leap**”, presented by Doctor of Sciences (Economics) Professor E.V. Balatsky, in his article “Russia at the Epicenter of Geopolitical Turbulence: The Accumulation of Global Contradictions”<sup>42</sup>.

Assessment by D.R. Belousov, Candidate of Economic Sciences, Deputy Director General of the Center for Macroeconomic Analysis and Short-Term Forecasting (CMASF):

**“At present, the formation of a long-term development strategy has, at the very least, slowed down. We are making a number of important decisions regarding space and digitalization, but unfortunately, we lack coherent strategic constructs that integrate technology, the economy, and socio-cultural aspects:**

✓ In current economic policy, very harsh decisions are being made that **paralyze investment**. I am referring primarily to fiscal consolidation and maintaining the Central Bank’s key rate at a very high level in real terms.

✓ **A marker of the absence of a wartime economy is that we still haven’t abandoned the inflation targeting concept adopted in the first half of the 2010s...**

✓ **Overall, it must be said that the economy is experiencing stagnation, even stagflation...** In the coming year... the risk of a recession is quite real, especially at the beginning of the year.

✓ **A decline in output is observed in a large segment of manufacturing industries.** There is a severe crisis in the automotive industry, with no end in sight...

✓ **At the instigation of the Central Bank, behind-the-scenes discussions have already begun on whether to lower the target inflation rate to two percent per year...** In a worst-case scenario, instead of accelerating economic growth to above three percent, we could slide into stagnation with growth rates below one percent, accompanied by fairly high inflation...

**The previous model of our integration into the global economy... is completely exhausted. It cannot be replicated under any circumstances... What is needed is to extend the planning horizon for development prospects... to break free from the trap of short-term balancing”<sup>40</sup>.**

<sup>37</sup> Russia is fighting a battle for life and death for a place on the political map. Available at: <https://rg.ru/2022/03/10/lavrov-rf-vedet-boj-ne-na-zhizn-a-na-smert-za-mesto-na-politicheskoj-karte.html?ysclid=mlhllc2tvz549323038>

<sup>38</sup> Lavrov speaks of Russia’s war against the West. Available at: <https://www.rbc.ru/politics/28/07/2025/688746759a794772781fef2a?ysclid=mlhlmo6lrm741557729>

<sup>39</sup> Dmitry Removich Belousov – Candidate of Sciences (Economics), Head of the Macroeconomic Analysis and Forecasting Department, Deputy Director General of the Center for Macroeconomic Analysis and Short-Term Forecasting (CMASF). Head of Laboratory; Head of the Macroeconomic Analysis and Forecasting Department at the Institute of Economic Forecasting of the Russian Academy of Sciences. Led projects on long-term socio-economic forecasting and scientific-technological foresight commissioned by the Ministry of Economic Development and the Ministry of Education and Science of Russia.

<sup>40</sup> Belousov D.R. The most impressive challenge in the last three generations. *Monokl*. No. 5. 26.01.2026.

<sup>41</sup> The main man for forecasts. *Business Card*. D.R. Belousov. Available at: <https://www.kommersant.ru/doc/2916474?ysclid=mloqj2lgax676222315>

<sup>42</sup> Balatsky E.V. (2025). Russia at the epicenter of geopolitical turbulence: The accumulation of global contradictions. *Economic and Social Changes: Facts, Trends, Forecast*, 15(4), 42–59.

The “evolutionary leap” model itself, along with some key characteristics necessary for understanding its essence, are presented in *Inserts 1 and 2*. Here, we will highlight the main point — the advantages of this model from the perspective of strategic effectiveness of public administration:

✓ first, the approach proposed by E.V. Balatsky draws upon and synthesizes knowledge from the classical theories of historians, philosophers, and sociologists (notably figures such as L. Gumilev<sup>43</sup>, A. Schopenhauer<sup>44</sup>, A. Toynbee<sup>45</sup>, E. Todd<sup>46</sup>, and others);

✓ second (and most importantly), the “evolutionary leap” model allows us to analyze the historical stage of multipolarity formation not from the perspective of global processes and events unfolding on the geopolitical arena, **but from the standpoint of internal changes, mechanisms, tasks, and challenges at the level of a specific state (a state-civilization). In other words, it enables an assessment of the effectiveness of strategic public administration.** It is precisely this feature that ensures the practical significance of the model.

It is also worth noting that in the first quarter of the 21st century, within the dynamics of successively unfolding stages of evolution (“warming-up period”, “reflection period”, “learning period”, and “innovation period”; *Insert 1*), the Russian Federation, in our view, finds itself situated between the first and second stages (between the “warming-up period” and the “reflection period”). This is because a “*cascade of internal and external challenges*” is present but has not yet been overcome; an “*inventory of all the system’s*

*capabilities, its shortcomings, and hidden reserves*” is underway, but it is still too early to speak of all the system’s resources being “*mobilized*”.

As can be seen from the key propositions presented in *Insert 2*, the crucial factors in the development of a state-civilization are the “**level of well-being**” (which, upon reaching certain limits, causes the passionary energy to wane) and the **state of the elites** (among whom, at a certain point in time, individuals emerge who are oriented not toward national, but toward personal interests).

This is precisely how, in their time, the Roman Empire and the Soviet Union faded into oblivion. Regarding the latter, E.V. Balatsky writes: “*The USSR lasted 70 years and, due to errors in public administration, disappeared irretrievably. The question boils down to details, which become decisive*”<sup>47</sup>.

“The main criterion of a ‘national elite’ is its ability to implement policy in the interests of society, aimed at strengthening the country’s sovereignty. There are situations where an elite **either has not yet become national**, remaining a kind of ruling force representing the interests of individual territorial communities; **or it has already ceased to be such, having incorporated itself into the ‘global elite’ or become a comprador elite...**

The degeneration of the elite, an important sign of which is its loss of national identity, leads to the decline of society... As soon as the elite loses its quality as a national force, becoming supranational, the stage of civilization’s decline begins, the final point of which is its demise”<sup>48</sup>.

<sup>43</sup> Gumilev L.N. (2005). *Landscape and Ethnos. Articles and Works (1949–1990)*. Old Buryat Painting. Saint Petersburg, Moscow: Kristall; ONIKS. 975 p.

<sup>44</sup> Schopenhauer A. (2011). *Sayings. Aphorisms of Worldly Wisdom*. Minsk: Kharvest. 416 p.

<sup>45</sup> Toynbee A.J. (2011). *Civilization on Trial. The World and the West*. Moscow: AST: Astrel. 318 p.

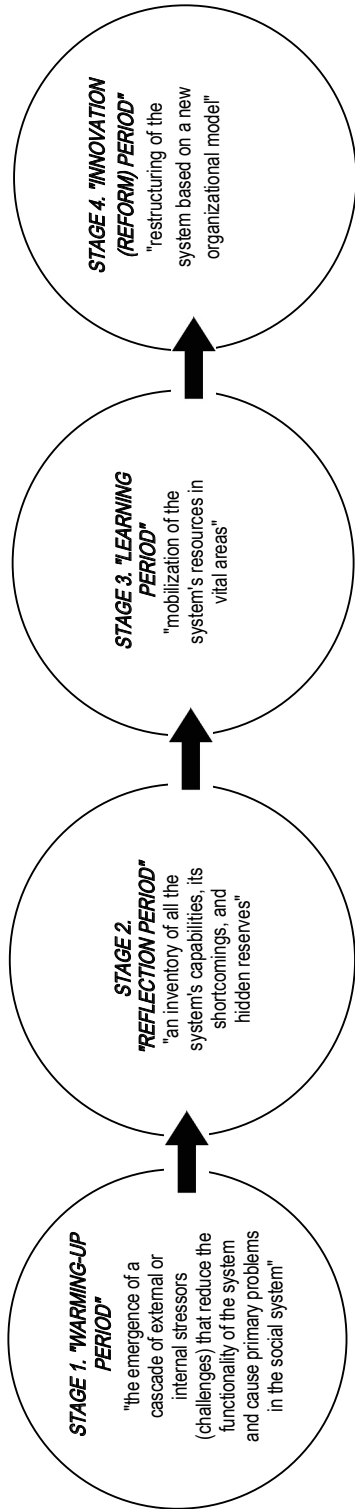
<sup>46</sup> Todd E. (2025). *The Defeat of the West*. Moscow: AST Publishing House. 320 p.

<sup>47</sup> Balatsky E.V. (2025). The extinction of passionarity in E. Todd’s demographic concept. *Sotsialnoe prostranstvo*, 11(3), p. 18.

<sup>48</sup> Ekimova N.A. (2024). The role of the elites in the evolutionary process: Conceptual framework and modern interpretations. *Economic and Social Changes: Facts, Trends, Forecast*, 17(2), p. 69.

Insert 1

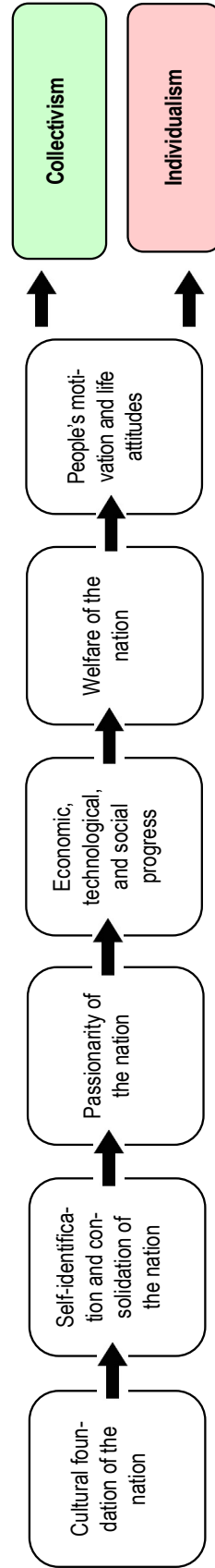
The “Evolutionary Leap” model



Compiled from Balatsky E.V. (2025). The extinction of passionarity in E. Todd's demographic concept. *Sotsialnoe prostranstvo*, 11(3), p. 3.

*“The realization of the full cycle of these four stages ensures the emergence of a hypercompensation effect, or, in other words, a passionate explosion of the nation”<sup>49</sup>.*

The mechanism of passionarity development



*“At the final stage of implementing a passionate impulse, a fork in the road emerges, depending on the nature of the elites, who can be either national (i.e., defending the country's national interests) or supranational (i.e., defending their own supranational interests)... When supranational elites dominate, the passionate scenario cannot be realized”<sup>50</sup>.*

<sup>49</sup> Balatsky E.V. (2025). The extinction of passionarity in E. Todd's demographic concept. *Sotsialnoe prostranstvo*, 11(3), p. 3.

<sup>50</sup> Ibidem. P. 4.

## Insert 2

Key propositions revealing the essence and significance of E. V. Balatsky's "Evolutionary Leap model"<sup>51</sup>

1. **The mechanism of decline for different civilizations and states is uniform and is associated with the attenuation of passionarity. The central element is the nation's well-being, which determines the motivation and life attitudes of the population. Moreover, the role of well-being is ambiguous. Up to a certain level, it serves as an additional stimulus for human activity; however, after exceeding a certain threshold, it begins to operate in the opposite direction...**
2. **Any significant historical phenomenon represents a reaction of the state and the nation to an existential challenge from the surrounding world... An external challenge acts as a detonator, triggering the mechanism for optimizing all the nation's resources and thereby generating a surge of passionarity...**
3. **Within the structure of ruling elites, there exist polar properties – passionarity and conservatism. It is the dominance of one of these properties among representatives of the ruling class that largely determines the paths of societal development – ranging from stagnation to reform.**
4. **Three institutions – family, ethics, and language – form the foundation that unites a nation and enables it to act as a cohesive whole, without which passionarity cannot be born... Developed versions of these three institutions serve as the initial impetus for the formation of a nation's passionarity. In their absence, an external challenge to the nation and state may even be acknowledged, but an effective response to it will not be forthcoming.**
5. **The "Iron Law of Welfare": a person (and humanity) can exist only within a relatively narrow range of material well-being – between certain minimum and maximum thresholds... Under excessively poor living conditions, a person loses their personality and individuality, descending into a primitive animal existence focused on mere survival. Conversely, under excessively comfortable conditions, sociability, collectivism, and activity are destroyed within the individual, provoking various forms of social autism.**
6. **It is possible to manage not the passionary impulse itself, but the critical passionarity on which the existence of the nation and state depends. This should be the goal. The level of well-being in the described scheme is also subject to management, which makes it possible to prevent undesirable events in the country's history. This is a subtle dialectical process, involving balancing a decent standard of living for the population against the backdrop of a social model that demands considerable effort from people to attain it. The combination of such developmental aspects constitutes the sacred essence of the art of public administration.**

<sup>51</sup> Balatsky E. V. (2025). The extinction of passionarity in E. Todd's demographic concept. *Sotsialnoe prostranstvo*, 11(3), 1–23.

It is worth noting that we have discussed these “decisive details” in detail in our previous articles<sup>52</sup>, when we addressed the specific personal characteristics of the so-called “grave-diggers of the USSR” – representatives of the ruling elites personally responsible for the collapse of the Soviet Union.

“No objective circumstances led to that geopolitical catastrophe [the collapse of the USSR]. **Here, the subjective factor played an enormous and decisive role – people who, due to their position, whether consciously or through thoughtlessness, did everything to ensure that the Soviet state ceased to exist...**

These phantom-like individuals developed completely different, hypertrophied social qualities – **an inordinate thirst for power, an unlimited desire for wealth, a morbid craving for fame...**

Their behavior completely (or significantly) diverges from, **and even contradicts, what interests and concerns the majority of the country’s population**”<sup>53</sup>.

The “evolutionary leap” model precisely describes the global processes unfolding today, including the most important aspect – **the state of “passionary energy” within our own country**. As E.V. Balatsky writes: *“The conditions for the decline of passionarity in Russia are fully met: a high rate of marital dissolution and low birth rate; low religiosity*

*and blurred ethical norms; the erosion of the Russian language... in Russia, which for 30 years has strived for integration into the Western community, cosmopolitan values and a model of behavior have taken shape that are not characteristic of a unified nation with a high degree of self-identification and the desire to overcome external pressure*”<sup>54</sup>.

In these circumstances, the “existential challenge from the surrounding world” (which, theoretically, should have led to the “emergence of a hypercompensation effect, or, in other words, a passionary explosion of the nation”) for Russia undoubtedly became the Special Military Operation – or, more precisely, the sharply increased threats to national security from the united Collective West that emerged after its commencement... **Yet, no “passionary explosion” or “evolutionary leap” has occurred in Russia so far. Why?**

In our view, the answer to this question lies precisely in the fact that even with the accumulation of a critical mass of passionary energy in society, Russia lacks *“the very possibility of realizing a passionary explosion”*<sup>55</sup>. And this possibility is absent precisely for the two key reasons highlighted by E.V. Balatsky: **the dominance within the state of elites guided by personal rather than national interests, and the “iron law of welfare”**, according to which *“the main ‘culprit’ in the decline of passionarity is the growth of well-being”* – more precisely, that stage of it when *“excessively comfortable life”* sets in, which is relevant above all for the ruling elites.

<sup>52</sup> See, for example:

Ilyin V.A., Morev M.V. (2022). A framework for a new Social Contract is being formed in Russia. *Economic and Social Changes: Facts, Trends, Forecast*, 15(6), 9–34.

Ilyin V.A., Morev M.V. (2025). Vladimir Putin’s 25 years of presidential terms: “Warrior”, “Ruler”, “Creator”. *Economic and Social Changes: Facts, Trends, Forecast*, 18(1), 9–45.

Ilyin V.A., Morev M.V. (2025). What a 30-year absence of state ideology leads to: “Great nations are not built without great, guiding ideas, and having lost them, they collapse with a thunderous crash”. *Economic and Social Changes: Facts, Trends, Forecast*, 18(4), 9–45.

<sup>53</sup> Toshchenko Zh.T., Kozhemyako V.S. (2025). *Werewolves in Power: They Killed the Soviet Country*. Moscow: Rodina. Pp. 9, 16.

<sup>54</sup> Balatsky E.V. (2025). The extinction of passionarity in E. Todd’s demographic concept. *Sotsialnoe prostranstvo*, 11(3), p. 17.

<sup>55</sup> Balatsky E.V. (2025). The extinction of passionarity in E. Todd’s demographic concept. *Sotsialnoe prostranstvo*, 11(3), p. 17, p. 4.

A caveat should be made here: the term “*excessively comfortable life*” is highly subjective. It is virtually impossible to give an objective assessment (that is, to specify a concrete value) of what level of well-being constitutes “comfortable” and what constitutes “excessively comfortable”. These magnitudes differ for different countries of the world, for representatives of different social strata, and so on.

However, if we set aside all this “political correctness” and call things by their proper names (as the situation in the country demands), then, at the very least, an understanding of “excessively comfortable life” is quite illuminated by descriptions of the assets of specific representatives of the ruling elites and members of their families that become

public knowledge after criminal cases are opened against them<sup>56</sup>.

It should be noted at this point that episodes of corruption and bribery among representatives of the ruling elites continue on a daily basis (over the last two months, from December 19, 2025, to February 19, 2026, at least 26 episodes; *Insert 3*).

According to the monthly reports of the Ministry of Internal Affairs of the Russian Federation on the state of crime in Russia over the four years of the Special Military Operation (from 2022 to 2025):

- ✓ **the level of corruption-related crime increased by 22% (from 35,000 to 43,000 cases);**
- ✓ **the number of bribery-related crimes increased by 38% (from 19,000 to 27,000 cases)<sup>57</sup>.**

<sup>56</sup> For example:

**1. On January 16, 2026**, the Khostinsky District Court of Sochi satisfied an anti-corruption lawsuit filed by the Prosecutor General’s Office of the Russian Federation and ordered the assets of the former head of the resort city, A. Kopaigorodsky, totaling 1.6 billion rubles, to be confiscated to the state. The list of confiscated property included 77 real estate properties, registered mainly in the name of the former official’s wife and other defendants. In addition, the supervisory authority demanded the confiscation of a collection of rare wines worth about 7.7 million rubles, jewelry, and nearly two dozen wristwatches, the price of individual specimens being comparable to the cost of housing in the capital.

The lawsuit also involved warehouse complexes, land plots, parking spaces, and ten cars, including a Porsche 911 and several Mercedes vehicles. Separately, the prosecutor’s office claimed the recovery of funds in the amount of more than 215 million rubles as the equivalent of property alienated before the trial began (source: Kommersant. 16.01.2026. Available at: [https://www.kommersant.ru/doc/8360590?from=doc\\_vrez](https://www.kommersant.ru/doc/8360590?from=doc_vrez)).

**2. On January 21, 2026**, the Prosecutor General’s Office of the Russian Federation filed an anti-corruption lawsuit seeking to confiscate to the state the assets of former State Duma deputy Voronovsky, as well as State Duma deputy A. Doroshenko and deputy of the Legislative Assembly of the Krasnodar Territory A. Karpenko. The lawsuit involves a total of 30 defendants and 19 third parties. Corruption proceeds exceeded 2.8 billion rubles. The Prosecutor General’s Office demands the seizure of dozens of land plots, apartments and houses..., the defendants’ shares in various companies, funds in their accounts, and securities. In particular, a claim has been made to confiscate 19 enterprises, most of which are involved in road construction, to the Russian Federation. The case is ongoing (source: Kommersant. 01.02.2026. Available at: <https://www.kommersant.ru/doc/8397826?ysclid=mlerhgli46524131676>).

**3. On January 30, 2026**, the property of the former Chairman of the Supreme Court of the Republic of Adygea, A. Trakhov, and his close relatives was confiscated to the state. The treasury received 469 land plots, 176 non-residential buildings and commercial premises, 8 mansions, and 9 apartments. Also, 3 billion rubles received by the defendants from the sale of property belonging to them were recovered to the state revenue (source: Kommersant. 30.01.2026. Available at: [https://www.kommersant.ru/doc/8397208?from=doc\\_vrez](https://www.kommersant.ru/doc/8397208?from=doc_vrez)).

<sup>57</sup> Monthly reports of the Ministry of Internal Affairs of the Russian Federation “The State of Crime in Russia”. Available at: <https://xn--b1aew.xn--p1ai/reports/1/>

*Insert 3***Facts of detentions and arrests of representatives of the ruling elites (December 19, 2025 – February 19, 2026)<sup>58</sup>**

- February 18** – Deputy Head of Novorossiysk, Head of the Construction Directorate R. Karagodin was detained (details not provided).
- February 18** – Minister of Culture of Bashkiria A. Shafikova was detained. She is suspected of exceeding official authority and embezzlement of budget funds.
- February 17** – Chairman of the Committee for State Procurement of Saint Petersburg D. Tolstykh was detained in a case of exceeding official authority and as the organizer of a criminal scheme. In the same case, the Head of the Department for Centralized Procurement and Interdepartmental Interaction of the Committee, E. Leonov, was also detained.
- February 16** – In Kuban, Acting Minister of Civil Defense and Emergency Situations S. Shtrikov was detained. He is suspected of exceeding official authority.
- February 13** – In the Chelyabinsk Region, the Head of the Rospotrebnadzor Administration, A. Semenov, was detained on suspicion of fraud.
- February 12** – The Acting Minister of the Agro-Industrial Complex and Food Policy of Zaporozhye Region was detained, charged with corruption on an especially large scale (over 4.8 million rubles).
- February 12** – On charges of taking a bribe of 8 million rubles, the former Director of the Department for Shipbuilding Industry and Marine Engineering of the Ministry of Industry and Trade, B. Kabakov, was detained.
- February 12** – On charges of taking a bribe on an especially large scale, Vice-Governor of the Chelyabinsk Region A. Faleichik was detained.
- February 9** – In a case of mediation in the transfer of a bribe, the Head of the Department of Housing and Communal Services and Transport of the Cabinet of Ministers of Tatarstan, F. Salikhov, was detained.
- February 5** – On charges of taking a bribe on an especially large scale, the Head of the Department of Agriculture and Food of the Chukotka Autonomous Area, P. Kashcheev, was detained.
- February 3** – Head of the Primorye Interregional Directorate of the Rosselkhoznadzor (Federal Service for Veterinary and Phytosanitary Surveillance), D. Zdanovich, was detained on suspicion of receiving a bribe.
- February 3** – First Deputy Head of the Sergiev Posad District was detained. Along with him, the Head of the District Administration's Department of Agriculture, two of his subordinates, a Moscow Region deputy, and businessmen were detained. All became suspects in a criminal case involving the embezzlement of budget funds.
- January 29** – In Saint Petersburg, Captain Second Rank V. Nikitin, Head of the 178th Military Representative Office of the Russian Ministry of Defense, was detained on suspicion of receiving a bribe on an especially large scale.

<sup>58</sup> Source: RT in Russian. Latest news on detentions. Available at: <https://russian.rt.com/tag/zaderzhanie?ysclid=mdzkzlnnsn147444962>

*End of Insert 3*

**January 26** – In Dagestan, the former head of the Rosimushchestvo (Federal Agency for State Property Management) directorate was detained in a case of exceeding official authority. Between 2021 and 2024, the accused made illegal decisions to lease and subsequently transfer into ownership a federally owned land plot to individuals who did not possess subsoil use licenses.

**January 23** – The head of the Civil Defense and Emergency Situations Department of Syktyvkar was detained on suspicion of receiving a bribe for the acceptance of work under contracts for the major repair of fire reservoirs, which had not been fully completed.

**January 22** – In Moscow, S. Razzhivin, Head of a department at the Federal Agency for Nationalities (FADN), was detained in a fraud case. The official is suspected of fraud on an especially large scale and abuse of official authority.

**January 21** – In the Krasnodar Territory, two deputy heads of the regional Ministry of Transport were detained on suspicion of embezzling funds under state contracts.

**January 14** – In the Kaliningrad Region, A. Kalina, Director of the Curonian Spit National Park, was detained on suspicion of organizing large-scale illegal logging. The aim of the crime was to clear the area for the construction of a private complex of buildings intended for commercial tourist accommodation... damage exceeding 12.7 million rubles was caused.

**January 10** – In the Chelyabinsk Region, former regional deputy E. Sarsenbaev was detained. He is suspected of giving a bribe on an especially large scale.

**December 29** – In Saint Petersburg, V. Sagalae, Head of the “Dachnoye” Municipal Formation, was detained. He is charged with organizing an explosion near a house close to Smolny in 2003.

**December 29** – Former Head of the Tambov Region, M. Egorov, was arrested in a case involving bribes from entrepreneurs.

**December 27** – Thai police detained on Phuket Island a Russian citizen, D. Nazarets, who previously served as a deputy of the Legislative Assembly of the Primorye Territory. The detention was carried out as part of an international search.

**December 27** – In Italy, former president of Bashneft and ex-senator V. Khoroshavtsev, accused in Russia of large-scale fraud, was detained. The day after his detention, he was released due to Russia’s withdrawal from the Council of Europe and the termination of participation in agreements.

**December 24** – In the Rostov Region, the head of a production department at the defense industry enterprise JSC Almaz was detained. He is suspected of abuse of authority.

**December 23** – In the Krasnodar Territory, the mayor of Krymsk was detained on suspicion of possible involvement in land fraud in favor of the former head of Krymsky District, S. Les. With his participation, a land plot worth 120 million rubles was transferred into the ownership of persons controlled by Les.

**December 22** – Deputy Military Prosecutor of the Saint Petersburg Garrison, Lieutenant Colonel of Justice I. Kupkenov, was detained on charges of receiving a bribe on an especially large scale.

**December 22** – Chief of Police of Magnitogorsk, K. Kozitsyn, was detained for divulging state secrets.

The facts presented above, testifying to the frequency of corruption and the approximate level of financial, material, and other assets discovered among the corrupt officials themselves and their relatives, are important for gaining a rough understanding of what constitutes “excessively comfortable life” – the very thing “thanks to” which state servants and elites begin to be guided by personal rather than national interests.

However, the issue, of course, extends far beyond mere corrupt officials. As Aleksandr Dugin notes, it concerns a **“special group of the population” – the “global class”**; that is, people with a different worldview, a different operating system,” who form the “core of the sixth column operating within our society”.

For instance, in a previous editorial article, “What Kind of State Do Russians Want to Live In? What Kind of State Has Been Built?”<sup>59</sup> we cited the opinions of many experts pointing out that the entire “modern monetary system effectively blocks economic development”<sup>60</sup>, that “virtually the entire liberal part of state administration works in the interests of the banking system”<sup>61</sup> and that, by some assessments, the Central Bank’s policy simply “contradicts the Constitution of the Russian Federation”<sup>62</sup>.

S.Yu. Glazyev: “Russia’s current monetary policy, based on a high key rate, **effectively blocks economic development, creating a vicious circle of stagnation**”<sup>63</sup>.

“Over the past 35 years in our country – as in almost the entire rest of the world – **a special group of the population has formed, which can be called the ‘global class’**. These are people who, either during this period, managed to amass huge fortunes or become integrated into global processes at the level of culture, science, and technology...

**In Russia, over these 35 years, this class has become so intertwined with the ruling class as to be almost indistinguishable.** I am not asserting that our entire elite is like this, **but its most influential and prominent representatives are precisely part of the ‘global class’...**

Those representatives of the global class who remained in Russia and still constitute a significant part of our ruling elite in the broad sense are hindering our further development... **without systematically eliminating this ‘global class’ from Russian reality, the country will not be able to move forward. Preserving this class within the political elite condemns Russia to sabotage and an inability to move into the future.**

**Let me emphasize, this is not just about corruption.** The ‘global class’ consists of people with a different worldview, a different ‘operating system’. Appeals to simply obey the law do not work on them. **They form the core of the ‘sixth column’ operating within our society**”<sup>64</sup>.

<sup>59</sup> Ilyin V.A., Morev M.V. (2025). What kind of state do Russians want to live in? What kind of state has been built? Economic and Social Changes: Facts, Trends, Forecast, 18(6), 9–45.

<sup>60</sup> Sergey Glazyev on the Central Bank rate and real estate. Available at: <https://smarent.com/tpost/jzvje1rka1-sergei-glazev-pro-stavku-tsb-i-nedvizhim?ysclid=mj025ng0t5809690879>

<sup>61</sup> Delyagin M. The banking ‘diaspora’ is destroying the Russian economy. Available at: <https://argumenti.ru/economics/2025/09/966797>

<sup>62</sup> Katasonov V. Once again on Russia’s international reserves. Available at: [https://zavtra.ru/blogs/eshe\\_raz\\_o\\_mezhdunarodnih\\_rezervah\\_rossii\\_kommentarij\\_k\\_tcifram\\_ria\\_novosti\\_kak\\_informatciya\\_dlya\\_razmishleniya](https://zavtra.ru/blogs/eshe_raz_o_mezhdunarodnih_rezervah_rossii_kommentarij_k_tcifram_ria_novosti_kak_informatciya_dlya_razmishleniya)

<sup>63</sup> Sergey Glazyev on the Central Bank rate and real estate. Available at: <https://smarent.com/tpost/jzvje1rka1-sergei-glazev-pro-stavku-tsb-i-nedvizhim?ysclid=mj025ng0t5809690879>

<sup>64</sup> Dugin A. On the necessary extermination of the global class. Available at: [https://zavtra.ru/blogs/imenno\\_oni\\_predali\\_rossiyu\\_dugin\\_vskril\\_sabotazh\\_elit\\_chistka\\_neizbezna](https://zavtra.ru/blogs/imenno_oni_predali_rossiyu_dugin_vskril_sabotazh_elit_chistka_neizbezna)

M.G. Delyagin: “The Russian banking system today is the **largest, institutionally recognized speculator. Virtually the entire liberal part of state administration works in their interests**”<sup>65</sup>.

V.Yu. Katasonov: “Take, for example, the current policy of the Central Bank. It’s called inflation targeting. These guys have become utterly brazen...! **Inflation targeting contradicts what is written in the Constitution of Russia**”<sup>66</sup>.

A.M. Babakov: “...at the present moment, we must still ensure that the state exercises real control over the financial sector. **Either the financial system governs the state, or the state governs the financial system.** Banks should not be simply analogues of commercial enterprises”<sup>67</sup>.

However, following the “Direct Line with Vladimir Putin,” which took place on December 19, 2025, experts from the Center for the Study of Political Culture of Russia (CISPKR) concluded that the head of state “*expressed full support for the Central Bank’s policy: the President reaffirmed the ultra-liberal economic policy in the financial sector, supporting the ‘independence of the Central Bank’.* The recent reduction in the key rate was described by the president as ‘probably sufficient’. The policy of ‘cooling down’ the economy received positive appraisals, *which may be perceived by the Central Bank’s leadership as a ‘green light’ to continue curbing inflation, even at the cost of slowing production growth rates*”<sup>68</sup>.

On February 13, 2026, at its first meeting of the year, the Bank of Russia lowered the key rate by 0.5 percentage points, to 15.5% per annum. This marked the sixth consecutive reduction of the key rate.

Expert assessments<sup>69</sup>:

1. **“The Central Bank’s actions did not fit into the worldview of the majority of analysts who were trying to build consensus forecasts... the standard communication channel between the Central Bank and the market has been destroyed and is beyond resuscitation...** Apparently, the Central Bank knows information about the economy and bank balances – information the market does not know – which led to yet another 180-degree turn in rhetoric, where inflation problems supposedly no longer exist... **decisions have to be made ‘literally on the fly,’ maneuvering between inflationary and economic risks that are layering on top of each other. And this problem has become acute not only for business, but apparently even for the departments authorized to manage and regulate**” (P. Ryabov, financial analyst).

2. “Despite the fact that a rate cut of 0.5% **will not be able to significantly impact macroeconomic indicators,** it was generally a positive signal for the market” (E. Zinoviev, analyst at “Tsifra broker”).

3. **“This decision will not have a significant impact on the real estate market,** but it should be perceived as a signal that the Central Bank is consistently pursuing a policy of monetary policy easing” (S. Lobzhanidze, Director of the bnMAP.pro analytical platform).

<sup>65</sup> Delyagin M. The banking ‘diaspora’ is destroying the Russian economy. Available at: <https://argumenti.ru/economics/2025/09/966797>

<sup>66</sup> Valentin Katasonov on the actions of the Central Bank: “These guys have become utterly brazen”. Available at: <https://reosh.ru/valentin-katasonov-o-dejstviyax-cb-rebyata-sovsem-uzhe-obnagleli.html?ysclid=mj0005afk5541099434>

<sup>67</sup> Sunday Evening with V. Solovyov”. 25.05.2025. Available at: <https://smotrim.ru/article/4517705?ysclid=mj01zv9heg609035726>.

<sup>68</sup> Obukhov S.P., Mikhalechuk A.M., Bogachev A.M., Strelkov D.A., Khamadieva T.V., Chervontsev A.V. Results of 2025 from V.V. Putin. An express analysis of the message to Russian society and foreign opponents. Available at: <https://kprf.ru/politindx/239901.html?ysclid=mlhmrkgapk916136109>

<sup>69</sup> Sources:

1. The Central Bank lowered the key rate for the 6th time in a row: How will this affect mortgages. Available at: <https://realty.rbc.ru/news/698f03349a7947750701a513?ysclid=mlorjv7u46820964095>

2. A turn of the “key” by 0.5%: how life will change with a rate of 15.5%. Available at: <https://www.mk.ru/economics/2026/02/14/povorot-klyucha-na-05-kak-izmenitsya-zhizn-pri-stavke-155.html?ysclid=mlornc5bcp869164106>

3. Bashkatova A. The Central Bank cautiously stepped down. Available at: [https://www.ng.ru/economics/2026-02-15/1\\_9437\\_lobbyists.html?ysclid=mlorxxhc67787441593](https://www.ng.ru/economics/2026-02-15/1_9437_lobbyists.html?ysclid=mlorxxhc67787441593)

It is also worth noting that it is far from the first time experts have pointed to the problem of imperfections in Russian legislation, which introduces confusion into the interpretation of the official status of the Central Bank, and consequently into its functions, goals, and the rules governing its activities. As State Duma Deputy M. Delyagin notes, *“Officially, we consider that the Bank of Russia is not a body of state administration. Contrary to what is written in the Constitution, contrary to what is written in the Federal Law on the Bank of Russia”*<sup>70</sup>.

Another striking example of how highly controversial, contradictory decisions – ones that do not correspond to national interests yet are highly significant – are made within the system of public administration lies in the sphere of culture. This sphere (like education) *“is not only a purely humanitarian field, but also an area for shaping society and managing consciousness... during the educational process, the consciousness of people is formatted, sometimes of entire generations, entire countries... it was precisely through the sphere of education that the colonization of Russia at the mental level took place”*<sup>71</sup>.

**“...in the entire body of Russian legislation, you will not find a definition of what the Central Bank of the Russian Federation is... In federal legislation... regarding the Central Bank, it is stated that its status shall be determined by the law on the Central Bank of the Russian Federation. **The circle is closed: the Constitution refers to the Civil Code of the Russian Federation, the Civil Code refers to the law on the Central Bank, the law on the Central Bank refers back to the Constitution!****

The Central Bank is indeed an unusual phenomenon, a kind of hybrid of a state body and a commercial (or non-commercial?!) organization. On the one hand, the Central Bank has the right to issue regulations binding on all, controls financial organizations, registers credit institutions and non-state pension funds, and exercises other executive and administrative powers. That is, it performs functions that can only be carried out by a body of state authority. On the other hand, it earns a profit, 75% of which goes to the state, and 25%, by decision of the Board of Directors, is transferred to certain funds. **Profit is a characteristic of commercial organizations.** But Article 3 of the law on the Central Bank states that the Central Bank does not aim to make a profit. This is a characteristic of a non-commercial organization...

In the Russian Constitution, the independence of the Central Bank from other bodies of state authority is enshrined only in the exercise of one, albeit the main, function — protecting and ensuring the stability of the ruble. **The law on the Central Bank already ‘adjusts’ the Constitution and speaks of the independence of performing all functions.** In practice, all activities of the Central Bank turn out to be ‘independent’...<sup>72</sup>

<sup>70</sup> Ivanov A. Vice-President of “Oboronstroy” embezzled 786 million and hid from our authorities, holding foreign residency. Available at: [https://zavtra.ru/events/vitse-prezident\\_oboronstroya\\_ukrala\\_786 mln\\_i\\_skrivalas\\_ot\\_nashih\\_organov\\_imeya\\_inostrannij\\_vnzh](https://zavtra.ru/events/vitse-prezident_oboronstroya_ukrala_786 mln_i_skrivalas_ot_nashih_organov_imeya_inostrannij_vnzh)

<sup>71</sup> Dugin A. To decolonize the sphere of education. Available at: [https://zavtra.ru/blogs/provesti\\_dekolonizatsiyu\\_sferi\\_obrazovaniya?ysclid=mkxo3njd3s288198716](https://zavtra.ru/blogs/provesti_dekolonizatsiyu_sferi_obrazovaniya?ysclid=mkxo3njd3s288198716)

<sup>72</sup> Yemelyanov M. The Central Bank of Russia as an unusual phenomenon. Available at: [https://www.ng.ru/society/2024-09-10/8\\_9090\\_phenomenon.html](https://www.ng.ru/society/2024-09-10/8_9090_phenomenon.html)

Specifically, we are referring to the decision by Minister of Culture O. Lyubimova to appoint K. Bogomolov as acting rector of the Moscow Art Theatre School-Studio. This decision provoked widespread public outcry<sup>73</sup> and, within just a few days, forced the scandal-plagued theater director to resign<sup>74</sup>.

“The [Moscow Art Theatre] School is considered one of the main training grounds for representatives of the acting profession in Russia and a cultural brand of the country, which means the post of its director is a **matter of virtually state importance**”<sup>75</sup>.

It must be noted that the episode with Bogomolov’s appointment in early 2026 is far from the first “unsavory incident” to occur in the sphere of culture with a context that is far from merely cultural, **but distinctly political and social**. This includes episodes during the period of the Special Military Operation (*Insert 4*).

**Nevertheless, whereas in the past, in similar episodes, the opinion of society was simply ignored by decision-makers, today, in early 2026, public indignation led to the reversal of a decision — effectively, a victory over yet another almost-accomplished act of injustice.**

“Public indignation managed to shift what seemed like a done deal... Even the attempt by those promoting Konstantin [Bogomolov] to quickly fashion a patriot out of him did nothing to save the situation – the people unequivocally said ‘no,’ and it worked”<sup>76</sup>.

This says a great deal about the state of contemporary Russian society and how the situation in the country has changed over the past four years of the Special Military Operation. Yet the fact remains:

- ✓ the Minister of Culture’s decision to appoint K. Bogomolov, a former (or current) “Navalny supporter”, was made and would most likely have stood, were it not for public outrage;
- ✓ many representatives of elite circles from government bodies (including the Presidential Administration), culture, and show business spoke out in support of this decision<sup>77</sup>;
- ✓ on February 6, 2026, K. Bogomolov served as the host of one of the country’s main national literary awards, “Slovo” (“The Word”), and none of those present (among whom there were also many representatives of elite circles<sup>78</sup>) saw anything reprehensible in *this*.

<sup>73</sup> The public outcry was linked, in particular, to the fact that K. Bogomolov’s theatrical productions simply **contradict the legislation of the Russian Federation** and specifically the Decree of the President of the Russian Federation 809 of November 9, 2022, “On Approval of the Foundations of State Policy for the Preservation and Strengthening of Traditional Russian Spiritual and Moral Values”. Furthermore, “during the 2013 Moscow mayoral election, **Bogomolov actively supported Navalny and spoke at Navalny-supporting rallies**” (source: Ivanov A. An unexpected decision by the Ministry of Culture: Bogomolov appointed acting rector of the Moscow Art Theatre School-Studio. Yes, that one. Available at: [https://zavtra.ru/events/neozhidannoe\\_reshenie\\_minkul\\_ta\\_i\\_o\\_rektora\\_shkoli-studii\\_mhat\\_naznachen\\_bogomolov\\_da\\_tot\\_samij](https://zavtra.ru/events/neozhidannoe_reshenie_minkul_ta_i_o_rektora_shkoli-studii_mhat_naznachen_bogomolov_da_tot_samij)).

<sup>74</sup> This decision was announced on January 23, 2026, and on February 10, 2026, amid widespread public outcry, K. Bogomolov requested to resign from his appointed position.

<sup>75</sup> Avdoshina E. The solitaire of the Moscow Art Theatre School-Studio has not yet been laid out: Bogomolov is gone, but who will come? Available at: [https://www.ng.ru/vision/2026-02-12/8\\_9436\\_bogomolov.html?ysclid=mlow7xao68541793612](https://www.ng.ru/vision/2026-02-12/8_9436_bogomolov.html?ysclid=mlow7xao68541793612)

<sup>76</sup> Ivanov A. “He was recommended”: Bogomolov refused the rectorship at the Moscow Art Theatre School-Studio. Available at: [https://zavtra.ru/events/emu\\_porekomendovali\\_bogomolov\\_otkazalsya\\_ot\\_rektorstva\\_v\\_shkole-studii\\_mhat](https://zavtra.ru/events/emu_porekomendovali_bogomolov_otkazalsya_ot_rektorstva_v_shkole-studii_mhat)

<sup>77</sup> Among them: Minister of Culture of the Russian Federation O. Lyubimova, Special Representative of the President of the Russian Federation for International Cultural Cooperation M. Shvydkoy, General Director of the Rossiya Segodnya Media Group D. Kiselev, Member of the Governmental Council for the Development of National Cinematography F. Bondarchuk, Rector of the Russian Institute of Theatre Arts (GITIS) G. Zaslavsky, President of the National Drama Theatre of Russia (Alexandrinsky Theatre) V. Fokin.

<sup>78</sup> The awards to the winners of the prize were presented by the Press Secretary of the President of the Russian Federation D. Peskov, Deputy Head of the Security Council of the Russian Federation D. Medvedev, Aide to the President of the Russian Federation V. Medinsky, President of the Russian Book Union S. Stepashin, and Deputy Minister of Defense of the Russian Federation A. Tsivileva. The Grand Prix of the “Slovo” Prize was awarded to People’s Artist of the RSFSR N. Mikhalkov. Awards were also given to Z. Prilepin, M. Simonyan, and others.

### Some examples of controversial administrative decisions in the sphere of culture that caused public resonance

<p>1. <u>On August 27, 2022</u>, A. Saprykina was appointed Executive Director of the Sergiev Posad State Historical and Art Museum-Reserve. Described as an “art manager from the unequivocally liberal scene, a devoted adherent of contemporary art”<sup>79</sup>.</p>
<p>2. <u>On September 20, 2022</u>, N.S. Trukhanskaya was appointed Rector of the Pushkin State Russian Language Institute. One of her first initiatives was a proposal to strip the Russian language of its status as a state language in the national republics of the Russian Federation and to consider it a foreign language. The Head of the National Anti-Corruption Committee, a member of the Presidential Council for Civil Society and Human Rights, K. Kabanov, noted that Trukhanskaya’s statement, “even as a topic for discussion, is a provocation and a threat to the integrity of the Russian Federation”.</p> <p>In early April 2024, members of a group were detained in Moscow for issuing invalid Russian language proficiency certificates to migrants. Among those detained were employees of the Russian Language Institute. In total, according to investigators, the criminal group “serviced” 464 citizens of Uzbekistan and Tajikistan in this manner. On April 12, 2024, Natalya Trukhanskaya was dismissed<sup>80</sup>.</p>
<p>3. “On January 10, 2023, it became known about the first case initiated under the new article on LGBT propaganda against the scandalous publishing house Popcorn Books, which had published that very pedophilic novel ‘Summer in a Pioneer Tie’, its sequel ‘What the Swallow Keeps Silent About’, and many other perverted ‘masterpieces’. The case was opened under Article 6.21 of the Code of Administrative Offenses (propaganda of non-traditional sexual relations and/or preferences, sex change) and under Article 20.1 (petty hooliganism).</p> <p>On February 1, 2023, the owner of Popcorn Books, Denis Kotov (President of the ANO ‘Creation’, co-owner of the United Retail Chain ‘Chitai-Gorod – Bookvoed’)... joined the renewed composition of the Public Council under the Ministry of Culture of the Russian Federation. The corresponding order was signed by Minister of Culture Olga Lyubimova”<sup>81</sup>.</p>
<p>4. <u>On July 17, 2024</u>, former Moscow Minister of Culture A. Kibovsky was detained on charges of fraud and receiving bribes on an especially large scale<sup>82</sup>.</p>

<sup>79</sup> Ivanov A. The “stuffy Kapkov legacy” has reached Sergiev Posad. Available at: [https://zavtra.ru/blogs/dushnoe\\_kapkovskoe\\_nasledie\\_dobralos\\_do\\_sergieva\\_posada](https://zavtra.ru/blogs/dushnoe_kapkovskoe_nasledie_dobralos_do_sergieva_posada)  
<sup>80</sup> Russian language exam failed: A “black mark” for the migrant lobby. Available at: [https://tsargrad.tv/articles/jekzamen-po-russkomu-provalen-chjornaja-metka-dlja-migrantskogo-lobbi\\_990057?ysclid=mlkki8j3lf644988524](https://tsargrad.tv/articles/jekzamen-po-russkomu-provalen-chjornaja-metka-dlja-migrantskogo-lobbi_990057?ysclid=mlkki8j3lf644988524)

<sup>81</sup> Ivanov A. A person charged in an LGBT propaganda case joins the Council of the Ministry of Culture of the Russian Federation. Available at: [https://zavtra.ru/events/figurant\\_dela\\_ob\\_lgbt-propagande\\_voshyol\\_v\\_sovet\\_ministerstva\\_kul\\_turi\\_rf?ysclid=mlkip4aiac422954726](https://zavtra.ru/events/figurant_dela_ob_lgbt-propagande_voshyol_v_sovet_ministerstva_kul_turi_rf?ysclid=mlkip4aiac422954726)

<sup>82</sup> Lokotetskaya M., Rusakova R. Alexander Kibovsky was credited with one hundred million. Available at: <https://www.kommersant.ru/doc/6837466?ysclid=mlrpkulci341227036>

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5. On June 17, 2025, speaking at a plenary session of the State Duma, Russian director and active public figure N. Mikhalkov recounted a specific episode of how his proposal on quotas for foreign films in Russian film distribution was first approved and signed by the President, but then, during consideration in various instances, the head of state's written resolution simply disappeared.

Excerpt from N. Mikhalkov's speech: ***“The letter was written on March 1, 2025. A resolution was placed on this letter. ‘I ask you to support the idea. Measures need to be taken to protect the market in advance, even before competitors start returning. Work it out and report back.’ This was addressed to Vladimir Medinsky... Then this document is sent out to eight different organizations for consultation, probably to understand how and what. But the most interesting and most important thing: this document is sent out without the first page of my letter, on which the President’s resolution stands. And this document ceases to be supported by the President. It becomes a private initiative of some people...”***<sup>83</sup>

6. On July 9, 2025, V. Kekhman, Artistic Director of the Mikhailovsky Theatre in Saint Petersburg and General Director of the Gorky Moscow Art Theatre, former artistic director of the Novosibirsk Academic Theatre, was summoned to the Investigative Committee to give testimony and was then released on his own recognizance. On July 11, the newspaper “Izvestia”, citing sources in law enforcement agencies, reported that Kekhman had been charged with embezzlement related to exceeding the estimated cost of at least three contract agreements<sup>84</sup>.

7. On February 18, the Minister of Culture of Bashkiria, A. Shafikova, was detained. She is suspected of exceeding official authority and embezzlement of budget funds. As experts noted, ***“what happened was what should have happened much earlier. The reasons have been clear to everyone for a long time. They simply, apparently, lacked sufficient factual data... We don't know the documents the investigation has, but we can assume the following: if in any department there is a fact that a major contractor turned out to be, conditionally speaking, a criminal or is suspected of something, then the minister's ignorance of this situation is ruled out. The only question is the extent of their involvement”***<sup>85</sup>.

<sup>83</sup> Speech by N.S. Mikhalkov at the Plenary Session of the State Duma on June 17, 2025. Available at: <http://duma.gov.ru/news/61632/>

<sup>84</sup> Zhilyaeva A. The case of Vladimir Kekhman: How one businessman manages three theaters in the country. Available at: <https://www.forbes.ru/forbeslife/541748-delo-vladimira-kehmana-kak-odin-biznesmen-upravlaet-trema-teatrami-sirany?yslid=mlrpng3r2m650101321>

<sup>85</sup> Skryp A., Senopalnikov A. The pianist played too far: Why was the minister of culture of Bashkortostan arrested? Available at: <https://www.business-gazeta.ru/article/695203?yslid=mlt1mjjeiu862328495> (the assessment of the political strategist A. Potyitsin).

Thus, the Bogomolov episode is not an isolated incident; it is a “system”, and for many experts it raises serious questions about the quality of administrative decisions and the goals pursued by those making them.

S. Mardan (host of Solovyov Live TV channel): “Questions remain regarding the Ministry of Culture’s personnel policy. Questions, however, that no one will answer anyway”<sup>86</sup>.

N. Burlyayev (First Deputy Chairman of the State Duma Committee on the Development of Civil Society, Issues of Public and Religious Associations): “This temporary misunderstanding has now persisted for decades, causing bewilderment among the overwhelming majority of normal people”<sup>87</sup>.

M. Raikina (Editor of the Literature and Art Department, Moskovsky Komsomolets): “What is happening with personnel policy in the sphere of culture? Rapid appointments and dismissals may indicate that **there is an invisible battle of thrones going on – there’s no other word for it...**

Who summoned whom, where, who announced what to whom, or, worse, ordered what – we cannot predict... One thing is clear, and the more time passes, the more convinced we become: to get a theater, a school, or indeed any post in another cultural institution, you need to have a resource. And this resource must be more powerful than all other resources. **Where this battle of resources/thrones will lead, particularly in culture – one can only guess at the catastrophic nature of the consequences**”<sup>88</sup>.

In the sphere of culture, we once again see confirmation of Aleksandr Dugin’s words that, regarding elites guided not by national but by

personal interests, we must speak “*not simply of corruption,*” but of a “*global class – people with a different worldview*”<sup>89</sup>. It is precisely their administrative decisions, contradicting what the President says and does, that ultimately lead to the “decline” of **passionary energy in society as a whole.**

How does this work in a concrete example?

In December 2025, following the year’s end and, more broadly, four years of the Special Military Operation, a number of research organizations conducted public opinion surveys. Based on the results, experts concluded: “*For the first time in many years, a clear demand for a constructive agenda has formed in public consciousness*”<sup>90</sup>; “*the country is entering 2026 with weariness from geopolitics and a colossal demand for the normalization of everyday life*”<sup>91</sup>.

“**For the first time in many years, a clear demand for a constructive agenda has formed in public consciousness. People are tired of the feeling of ‘empty talk’ and ‘stagnation’ that dominated in 2024. Instead, a demand for order and stability has come to the forefront (23% compared to 9% a year earlier). And crucially, the share of those who see development in the life of society has tripled (11%). This is not just adaptation to difficulties, but the formation of an expectation of positive dynamics and real deeds...**

The outcome of 2025 is a transition from shock and disappointment to hard-won stability and constructive expectations. **Society, having endured a severe crisis, is psychologically ready for a recovery agenda, but this demand requires concrete actions and results**”<sup>92</sup>.

<sup>86</sup> Skryp A., Senopalnikov A. The pianist played too far: Why was the minister of culture of Bashkortostan arrested? Available at: <https://www.business-gazeta.ru/article/695203?ysclid=mlt1mjleju862328495> (the assessment of the political strategist A. Potylitsin).

<sup>87</sup> Ibidem.

<sup>88</sup> Raikina M. The war of thrones in culture: What lies behind Bogomolov’s swift resignation. Available at: <https://www.mk.ru/culture/2026/02/11/voyna-prestolov-v-kulture-chto-skryvaetsya-za-stremitelnoy-otstavkoy-bogomolova.html?ysclid=mlkhog8j80515588527>

<sup>89</sup> Dugin A. On the necessary extermination of the global class. Available at: [https://zavtra.ru/blogs/imenno\\_oni\\_predali\\_rossiyu\\_dugin\\_vskril\\_sabotazh\\_elit\\_chistka\\_neizbezhna](https://zavtra.ru/blogs/imenno_oni_predali_rossiyu_dugin_vskril_sabotazh_elit_chistka_neizbezhna)

<sup>90</sup> Obukhov S.P., Mikhalchuk A.M., Bogachev A.M., Strelkov D.A., Khamadieva T.V., Chervontsev A.V. Results of 2025 from V.V. Putin. An Express Analysis of the Message to Russian Society and Foreign Opponents. Available at: <https://kprf.ru/politindx/239901.html?ysclid=mlhmrkgapk916136109>

<sup>91</sup> Ibidem.

<sup>92</sup> Garmonenko D. The Communist Party of the Russian Federation revealed the reasons for United Russia’s victory. Available at: [https://www.ng.ru/politics/2026-01-19/1\\_9418\\_kprf.html](https://www.ng.ru/politics/2026-01-19/1_9418_kprf.html)

In particular, a survey of experts conducted in December 2025 by the Center for the Study of Political Culture of Russia (CISPKR) revealed “three main demands that the authorities ignore or are afraid to discuss”<sup>93</sup>:

1. **“Just PEACE” (66%) – ending the Special Military Operation as the primary unspoken desire.**

2. **“Let us breathe” (62%) – a demand to stop rising prices and tariffs.**

3. **“Give me back my internet” (62%) – a demand for digital normality without an “electronic concentration camp”.**

**Some conclusions from the CISPKR report on the state of Russian society following 2025**<sup>94</sup>:

1. **United Russia (64%) blames economic failures solely on sanctions and hides behind “unity” (64%).**

2. **55% of respondents believe that the voice of the people remains “a voice crying in the wilderness”.**

3. **“The battle of the refrigerator against the television” (55%) – prices and tariffs frighten more than external enemies.**

4. **The final diagnosis of the social situation on the eve of 2026: “anxious equilibrium”:**

✓ Experts rated the mood of society as “apathy and muted irritation” (4.2 points out of 5).

✓ Weariness from geopolitics and **longing for a “normal life”** (3.95).

✓ **“Everyday concerns” outweigh the Special Military Operation (prices worry more than events on the line of combat contact) – 3.60.**

✓ Hope for the intervention and promises of the President as an “island of stability” **fell to 2.43 points.**

5. **The country is entering 2026 with weariness from geopolitics and a colossal demand for the normalization of everyday life – from price tags in stores to internet connection speeds and the functioning of messengers.**

*“This clear demand for a constructive agenda” is precisely the accumulation of a critical mass of passionary energy. At the same time, as V. Fedorov, Director General of VCIOM (Russian Public Opinion Research Center), emphasizes, the Russian people have “become more complex. More diverse. Wiser... people have begun to value themselves more..., have begun to feel our unity more deeply, to understand that we must be truly together. We have become more inclined towards what are called traditional spiritual and moral values. Strong family, patriotism, mutual assistance and mutual support...”*<sup>95</sup>.

*“We have managed to create something that ‘filters out’ the energetic, socially active, passionary part of society – those who have managed to change their social role and are ideologically charged. Moreover, in terms of their characteristics, these people are more of an entrepreneurial, ‘pioneering’ type than classical ‘service class people’ or, even more so, bureaucrats...”*

This new middle class also includes **workers from the revitalized defense industry... Volunteers** and all those who, through deeds – actual deeds, not chatter that masks idleness and lack of will – demonstrate empathy for the events unfolding at the front and in the rear, also gravitate toward this stratum in terms of values and function...

Until now, it seemed that our state rested on state servants – but no, it rests not only on them. **It turns out that to no lesser extent, it rests on these very active young (and not only) technological entrepreneurs...**

**We now have a chance that this class of passionaries, its social energy, will allow post-war Russia to make a leap forward in the economy and in technology. For the first time, we may obtain a mass, patriotically minded class of entrepreneurs in terms of behavioral model...”**<sup>96</sup>

<sup>93</sup> Obukhov S.P., Mikhalechuk A.M., Bogachev A.M., Strelkov D.A., Khamadieva T.V., Chervontsev A.V. Results of 2025 from V.V. Putin. An Express Analysis of the Message to Russian Society and Foreign Opponents. Available at: <https://kprf.ru/politindx/239901.html?ysclid=mlhmrkgapk916136109>

<sup>94</sup> Ibidem.

<sup>95</sup> Alfimov V. From salary to victory: How Russian society has changed over the year (interview with VCIOM Director V. Fedorov). Available at: <https://www.kp.ru/daily/27763.3/5191948/?ysclid=mkgituc55z530676123>

<sup>96</sup> Belousov D.R. The most impressive challenge in the last three generations. Available at: <https://monocle.ru/monocle/2026/05/samaya-vpechatlyayuschaya-zadacha-za-posledniye-tri-pokoleniya/?ysclid=mlunibi57a474763118>

V. Fedorov: “In 2022–2023, the Special Military Operation was in focus. It was unclear, frightening. Remember, for example, in 2023 Ukraine promised a counteroffensive – it failed, but people felt danger. 2023 can be considered a turning point. Our offensive began, which has now been ongoing continuously for a year and a half. This is good from a military perspective. But from a socio-psychological perspective, there are other consequences. **We are no longer afraid of losing: our heroic fighters are advancing. We, as a society, believe that all tasks will be achieved.** Of course, we would like it to be faster, but if the enemy is not ready to accept fair terms, we will continue to fight...

...the army is fighting, the people watch on TV, through Telegram channels... how our troops overcome the enemy’s resistance, **and worry about something else: about the economy, salaries, jobs, prices, children’s education, healthcare**”<sup>97</sup>.

Thus, various research organizations, independently of each other, are recording the same trend – a growing public demand for the “normalization of everyday life”; people’s primary concern is not the progress of the Special Military Operation, but the dynamics of their standard and quality of life.

In other words – along with people’s confidence in the success of the Special Military Operation, that demand from the population to the authorities which was relevant before the crisis is returning.

**Only now:**

**A) this demand comes from a society that (in V. Fedorov’s words) has become “more complex, more diverse, wiser...”;**

**and B) the acuteness of this demand is “heated” by a period of almost six years of waiting (from 2020 to 2025), when society, quite understandingly and patiently, supporting the President and consolidating**

**around him, “pushed” the agenda of standard and quality of life to the background, bringing the priorities of national security to the forefront.**

Experts quite rightly draw attention to the fact that **“this demand requires concrete actions and results”**<sup>98</sup>. And for this, as G. Zyuganov emphasizes, **“the socio-economic course in Russia must be urgently changed... It is impossible to solve problems within the framework of that oligarchic capitalism that our Government demonstrates today”**<sup>99</sup>.

Nevertheless, decisions like those occurring in the sphere of culture, the financial system, etc., are effectively “dampening” this passionate energy accumulating in society, blocking the “demand for a constructive agenda”.

**As a result, alienation of society from the authorities (the state) occurs.** Thus, according to VCIOM research data on Russians’ subjective assessments of the outgoing year, the majority of Russian citizens noted that 2025 was for them personally “generally successful, very good” (56%), while for the country it was “rather difficult, bad, very hard” (64%, *Insert 5*). **That is, Russians assess the results of the past year for themselves personally and for the country as a whole not just differently, but in opposite ways.**

**Moreover, in crisis periods for the country, this characteristic intensifies, and the specific nature of the crisis also matters here.** Thus, for the period from 2003 to 2019 (preceding the COVID-19 pandemic), the gap between the share of people positively assessing the year’s results for themselves and for the country averaged 14 percentage points; during the pandemic period before the start of the Special Military Operation (2020–2021) – 26 percentage points; over the four years of its conduct (2022–2025) – 32 percentage points (*Tab. 1; Insert 5*).

<sup>97</sup> Alfimov V. From salary to victory: How Russian society has changed over the year (interview with VCIOM Director V. Fedorov). Available at: <https://www.kp.ru/daily/27763.3/5191948/?ysclid=mkgituc55z530676123>

<sup>98</sup> Garmonenko D. The Communist Party of the Russian Federation revealed the reasons for United Russia’s victory. Available at: [https://www.ng.ru/politics/2026-01-19/1\\_9418\\_kprf.html](https://www.ng.ru/politics/2026-01-19/1_9418_kprf.html)

<sup>99</sup> “It is impossible to solve problems within the framework of oligarchic capitalism.” G.A. Zyuganov commented on the “Direct Line with President V.V. Putin”. Available at: <https://kprf-saratov.ru/2025/12/nevozmozhno-reshat-zadachi-v-ramkah-oligarhicheskogo-kapitalizma-g-a-zyuganov-prokomentiroval-pryamuyu-liniyu-s-prezidentom-v-v-putinyam/>

Table 1. Dynamics of assessments of the year's results (VCIOM, data for the Russian Federation), % of respondents

Period	For oneself (one's family)	For the country	Difference + / –
<b>Share of positive assessments</b>			
2003–2019 (before COVID-19)	55	42	+14
2020–2021 (before the start of the SMO)	39	14	+26
2022–2025 (4 years of the SMO)	55	23	+32
<b>Share of negative assessments of the year's results</b>			
2003–2019 (before COVID-19)	43	52	-9
2020–2021 (before the start of the SMO)	60	80	-21
2022–2025 (4 years of the SMO)	42	71	-29
Source: Results of 2025, expectations for 2026. VCIOM. 24.12.2025. Available at: <a href="https://wciom.ru/analytical-reviews/analiticheskii-obzor/itogi-2025-goda-i-ozhidaniya-ot-2026-goda">https://wciom.ru/analytical-reviews/analiticheskii-obzor/itogi-2025-goda-i-ozhidaniya-ot-2026-goda</a>			

Table 2. Dynamics of assessments of the year's results (VoIRC RAS, data for the Vologda Region), % of respondents

Period	For oneself/ one's family	For the country	Difference + / –
<b>Share of positive assessments</b>			
2003–2019 (before COVID-19)	46.6	37.6	+9
2020–2021 (before the start of the SMO)	36.6	25.8	+11
2022–2025 (4 years of the SMO)	45.2	24.9	+18
<b>Share of negative assessments of the year's results</b>			
2003–2019 (before COVID-19)	44.5	45.0	-1
2020–2021 (before the start of the SMO)	55.3	60.9	-6
2022–2025 (4 years of the SMO)	48.8	64.0	-15
Source: VoIRC RAS public opinion monitoring.			

**Thus, the majority of Russians positively assess the results of the past year for themselves personally and negatively for the country as a whole.**

The same feature was noted based on the results of studies conducted at the level of a specific region – Vologda Region: the gap between the share of people positively assessing the year's results for themselves personally and for the country as a whole averaged 9 p.p. in 2003–2019, 11 p.p. in 2020–2021, and 18 p.p. in 2022–2025 (*Tab. 2, Insert 6*).

**This discrepancy in the population's assessments of their personal and public life intensifies during periods of crisis and (as the research results show) has manifested itself especially clearly precisely during the period of the Special Military Operation.**

This same alienation of society from the authorities is evidenced by the decline in people's interest in the “Direct Line with Vladimir Putin” (that is, in the President's direct communication with the people, which has always formed the basis of the special, deep, trusting relationship that has developed between them; *Insert 7*).

According to FOM data, in 2025<sup>100</sup>:

✓ for the first time since 2019, the share of Russians who were generally interested in the “Direct Line with Vladimir Putin” decreased (from 66 to 64%);

✓ for the first time since 2018, the share of people who did not watch the “Direct Line” increased (from 43 to 46%);

✓ for the first time, the share of people who liked the “Direct Line” decreased (from 48 to 44%);

✓ for the first time, the share of those who noted that the questions asked during the “Direct Line” were “good, interesting” decreased (from 41 to 36%).

Thus, for the first time in the entire long crisis period in which our country finds itself (recall that the COVID-19 pandemic period can quite reasonably be included here), Russian society has demonstrated a decline in interest in what concerns our fellow citizens and in how V.V. Putin personally responds to this: what he says, what he does, and what he intends to do.

<sup>100</sup> “Results of the Year with Vladimir Putin”. Interest in the program and impressions from the Direct Line. Available at: <https://fom.ru/posts/15290>

### What was the past year like...? (VCIOM data for Russia, % of respondents)\*

Year	Overall successful, very good		Rather difficult, bad, very difficult		+/-
	For Russia	For oneself (one's family)	For Russia	For oneself (one's family)	
2025	29	56	64	40	-24
2024	23	53	70	43	-27
2023	26	57	66	41	-25
2022	14	52	83	45	-38
<b>Average for 4 years of SMO implementation</b>	<b>23</b>	<b>55</b>	<b>71</b>	<b>42</b>	<b>-29</b> ✓
COVID-19 pandemic	19	45	72	53	-19
2020	8	33	88	66	-22
<b>Average for 2 years of the COVID-19 pandemic</b>	<b>14</b>	<b>39</b>	<b>80</b>	<b>60</b>	<b>-21</b> ✓
2019	34	54	58	45	-13
2018	33	57	60	40	-20
2012	38	55	56	44	-12
2007	64	62	27	35	8
2005	46	51	49	48	-1
2003	45	55	50	44	-6
<b>Average for the "pre-crisis" period of 2003-2019</b>	<b>42</b>	<b>55</b>	<b>52</b>	<b>43</b>	<b>-9</b> ✓

\* Over the presented measurement period, the share of those who "found it difficult to answer" the question ranged from 1 to 9%.

Source: Results of 2025, expectations for 2026. VCIOM. 24.12.2025. Available at: <https://wciom.ru/analytical-reviews/analiticheskii-obzor/itogi-2025-goda-i-ozhidaniya-ot-2026-goda>

As VCIOM data show, for the period from 2003 to 2019, the difference between the share of people positively assessing the past year for themselves personally and for the country as a whole **did not exceed 24 p.p.** However, after the country entered a crisis period (associated with the COVID-19 pandemic, then with the start of the Special Military Operation), this indicator increased and began to range from 25 to 38 p.p.

A similar situation is observed in the share of those who negatively assess the year's results for themselves and for the country: before the coronavirus pandemic, the difference between them **did not exceed 20 p.p.**; after 2020, it ranged **from 19 to 38 p.p.**

**Thus, during the crisis period (especially after the start of the Special Military Operation), the share of people who assess the results of the past year differently for themselves personally (their family) and for the country as a whole increases.**

Insert 6

What was the past year like...? (VoIRC RAS data for Vologda Region, % of respondents)\*

Year	Overall successful, very good			Rather difficult, bad, very difficult			
	For Russia	For oneself (one's family)	+/-	For Russia	For oneself (one's family)	+/-	
SMO period	2025	24.9	45.2	+20	64.0	48.8	-15
	2024	24.7	43.2	+19	64.7	50.0	-15
	2023	23.8	40.1	+16	65.5	54.0	-12
	2022	21.6	36.2	+15	66.0	57.4	-9
<b>Average for 4 years of SMO implementation</b>		23,8	41,2	<b>+18</b> ✓	65.1	52.6	<b>-13</b> ✓
COVID-19 pandemic	2021	26.4	37.3	+11	60.5	54.9	-6
	2020	25.1	35.9	+11	61.2	55.7	-6
<b>Average for 2 years of the COVID-19 pandemic</b>		25,8	36,6	<b>+11</b> ✓	60.9	55.3	<b>-6</b> ✓
«Pre-crisis» period	2019	33.6	43.8	+10	53.1	48.8	-4
	2018	31.6	44.1	+13	54.0	46.3	-8
	2012	39.9	45.4	+6	43.9	45.5	+2
	2007	48.6	53.6	+5	29.0	35.9	+7
	2005	33.1	47.4	+14	48.3	44.7	-4
<b>Average for the "pre-crisis" period of 2003-2019</b>		38.5	45.1	+7	41.6	45.7	+4
			<b>46.6</b>	<b>+9</b> ✓	<b>45.0</b>	<b>44.5</b>	<b>-1</b> ✓

\* Over the presented measurement period, the share of those who "found it difficult to answer" the question ranged from 6 to 26%. Source: VoIRC RAS public opinion monitoring.

Not identical data (primarily due to the difference in the share of "those who found it difficult to answer"), but similar features (trends) were identified when analyzing data from sociological surveys conducted in the Vologda Region.

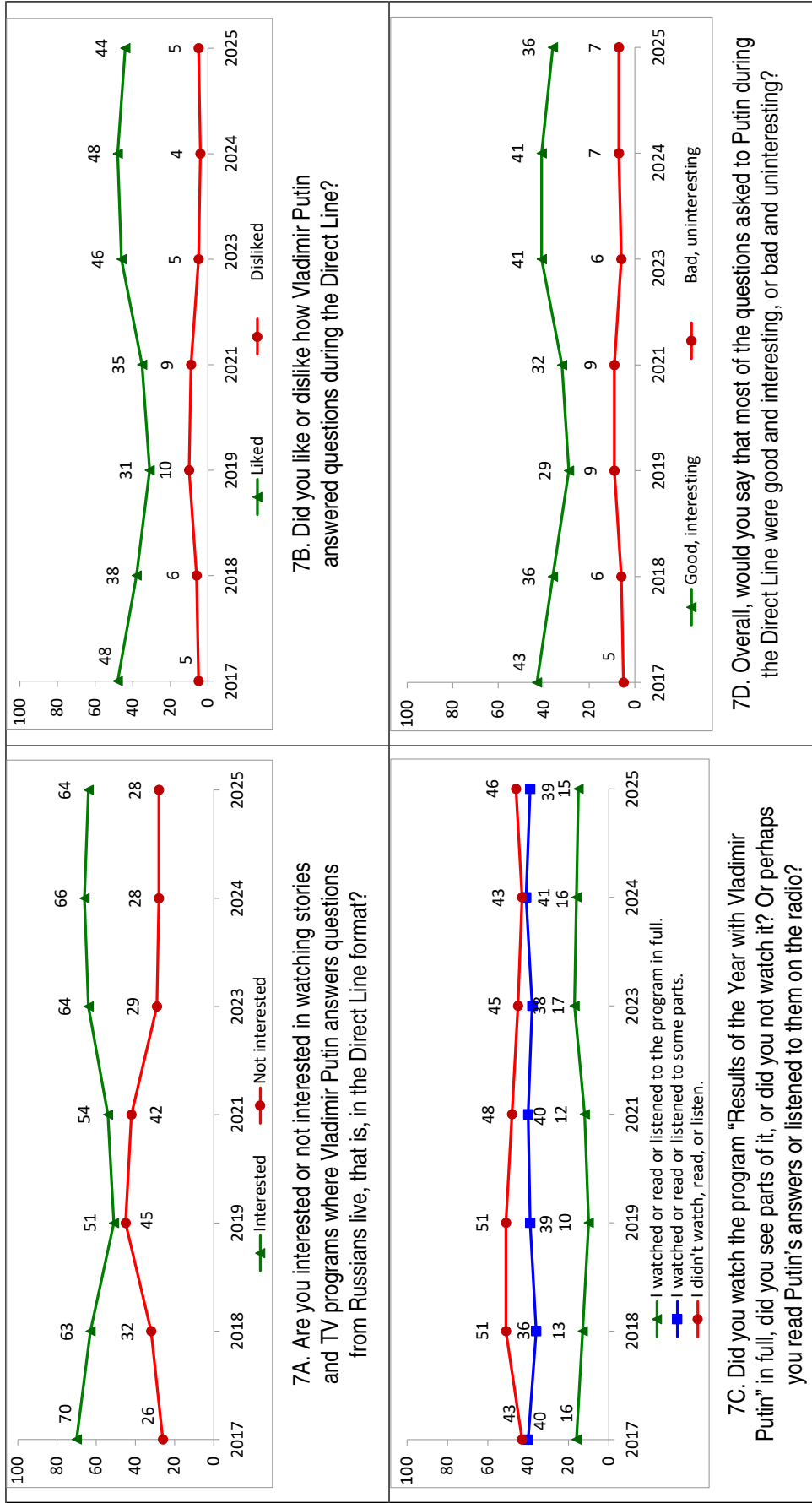
For the "pre-crisis" period of 2003–2019, the difference between the share of people **positively** assessing the year's results for themselves personally and for the country as a whole averaged 9 p.p., during the COVID-19 pandemic – 11 p.p., during the Special Military Operation – 18 p.p.

The difference between the share of those who **negatively** assess the year's results for themselves and for the country was 1 p.p. in 2003–2019, 6 p.p. during the pandemic, and 13 p.p. during the Special Military Operation.

Thus, even with regional peculiarities that cause differences in the specific data obtained by VCIOM for Russia and VoIRC RAS for the Vologda Region, **the identified feature of the widening "gap" between society and the authorities during crisis periods (especially during the Special Military Operation) occurs in all territories.**

Insert 7

Dynamics of Public Opinion on the “Direct Line with Vladimir Putin” (FOM data, overall for Russia)<sup>101</sup>



In 2025 (for the first time since 2019):

- ✓ the share of people interested in following the President’s live communication with Russians decreased (by 2 p.p., from 66 to 64%; Fig. 7A);
- ✓ the share of Russians who liked the past “Direct Line with Vladimir Putin” decreased (by 4 p.p., from 48 to 44%; Fig. 7B);
- ✓ the proportion of those who watched the program “Results of the Year with Vladimir Putin” fully or partially increased (by 3 p.p., from 43 to 46%; Fig. 7C);
- ✓ the proportion of people who found the questions asked during the “Direct Line” with the President interesting decreased (by 5 p.p., from 41 to 36%; Fig. 7D).

<sup>101</sup> “Results of the Year with Vladimir Putin”. Interest in the program and impressions from the Direct Line. Available at: <https://fom.ru/posts/15290>

**The presented sociological data show that Russians are “withdrawing into themselves”, “distancing themselves” from the state and the country (55–60% of people assess the results of the past year differently for themselves personally and for the country as a whole; Russians’ interest in the “Direct Line” with the President is declining, and the assessment of the quality of the head of state’s direct communication with the people is decreasing). Consequently, the “hypercompensation effect” capable of leading to a “passionary explosion” and an “evolutionary leap” is not occurring”.**

**It is important to note that this trend is hidden, latent in nature,** because the direct level of approval of the head of state’s activities in the country remains consistently high, and the assessment of the overall direction of Russia’s development remains significantly more positive than before the start of the Special Military Operation; the same can be said regarding people’s overall satisfaction with their living conditions.

According to VCIOM data<sup>102</sup>:

✓ the approval rating for the activities of the President of the Russian Federation in January 2026 was 75%; the average for 2025 was 76%.

✓ The index of the state of affairs in the country\* averaged 59 points in 2025, compared to an average of 37 points in 2021 (i.e., before the start of the Special Military Operation).

✓ The index of public sentiment\*\* averaged 62 points in 2025, compared to an average of 50 points in 2021.

\* Question wording: “To what extent do you agree that things in the country are going in the right direction?”

\*\* “To what extent are you satisfied with the life you are currently leading?”

Incidentally, similar latent trends in the dynamics of public opinion are also noted in the results of regional studies, particularly those conducted by Vologda Research Center of the Russian Academy of Sciences (VolRC RAS) in the Vologda Region.

On the one hand, according to the results of monitoring surveys conducted in the Vologda Region (*Tab. 3*):

✓ throughout 2025 and the first months of 2026, the approval rating for the head of state’s activities remained stable at 64–66%, which is higher than the average for 2021 (before the start of the Special Military Operation; 52%) and for 2022 (the first year of the Special Military Operation; 57%);

✓ at the same time, the share of people positively assessing their overall psychological state remained stable at 44–47% from February 2025 to February 2026, which is also higher than in 2021 and 2022 (41–42%).).

However, at the same time, over the last 12 months (from February 2025 to February 2026; *Tab. 3*):

✓ the share of positive opinions about the head of state’s work in strengthening Russia’s international positions decreased by 3 p.p. (from 50 to 47%);

✓ the proportion of people who believe that the President of the Russian Federation is successfully restoring order in the country decreased by 6 p.p. (from 54 to 48%);

✓ the share of positive assessments of the head of state’s work in protecting democracy and strengthening citizens’ freedoms decreased by 4 p.p. (from 45 to 41%);

✓ the proportion of people positively assessing the President of the Russian Federation’s work in boosting the economy and increasing citizens’ well-being decreased by 4 p.p. (from 41 to 37%).

Thus, the overall approval rating for the activities of the President of the Russian Federation is significantly higher (65–66%) than the assessments of his success in almost all individual areas reflecting the most acute problems (40–50%).

Furthermore, more pronounced negative changes are observed in their dynamics: over the last 12 months, they are quite evident across all key areas of the tasks facing the head of state.

<sup>102</sup> Official website of VCIOM. Ratings. Available at: <https://wciom.ru/ratings>

Table 3. Dynamics of subjective assessments of public opinion on the activities of the President of the Russian Federation and personal psychological well-being (VoIRC RAS data for the Vologda Region), % of respondents

Indicators	Average annual data					Last 12 months		Dynamics (+/-), Feb. 2026 to Feb. 2025*
	Year before the start of the SMO	SMO period				Feb. 2025	Feb. 2026	
	2021	2022	2023	2024	2025			
Share of positive assessments of the President's activities	51.5	57.0	61.4	66.7	65.9	66.3	63.7	-2
Share of positive assessments of social mood	66.7	67.4	65.6	69.0	71.6	69.4	69.7	0
<i>Share of positive assessments of the President of the Russian Federation's success in addressing key national problems</i>								
Strengthening Russia's international positions	46.6	47.7	47.4	52.4	51.1	49.6	47.0	-3
Restoring order in the country	43.1	44.4	39.6	49.7	50.1	53.7	48.0	-6
Protecting democracy, strengthening citizens' freedoms	33.3	36.8	40.8	44.9	43.1	44.8	40.5	-4
Boosting the economy, increasing citizens' well-being	26.0	31.5	36.1	39.0	40.5	40.9	37.1	-4
* Changes of +/- 2 p.p. fall within the margin of error and can be considered insignificant. Question wording: "How do you currently assess the activities of the President of the Russian Federation?"; "What could you say about your mood in recent days?"; "How successfully, in your opinion, is V. Putin coping with the problems...?"								

The presented data indicate that recently, according to both Russian and regional sociological measurements, a latent trend of deteriorating assessments of public administration effectiveness has been observed. In our view, this reveals a quite obvious cause-and-effect relationship between the decisions made by individual representatives of the ruling elites and the dynamics of the state of Russian society.

This provides a direct answer to the question about the reasons for the "decline of passionarity energy" required for the "evolutionary leap" of a state-civilization and its transition to a new stage of development: "At the stage of societal consolidation, unity of the elites must also be observed"<sup>103</sup>. If this unity is absent, then a transition to the next stage of the "evolutionary leap" is out of the question.

"The most acute problem arising for the state lies in the degeneration of elites... when elites abandon a holistic systemic orientation and begin to pursue primarily their own selfish personal interests. In such cases, the public administration system loses effectiveness, and the country begins to move towards its demise. If such a process acquires sufficient scale and lasts long enough, the probability of a negative outcome rises to a critical level and may very well materialize"<sup>104</sup>.

It must be acknowledged, of course, that over the past 25 years, Vladimir Putin has taken many systematic steps to enhance the effectiveness of public administration in Russia.

<sup>103</sup> Balatsky E.V. (2025). The extinction of passionarity in E. Todd's demographic concept. *Sotsialnoe prostranstvo*, 11(3), p. 4.

<sup>104</sup> Balatsky E.V. (2024). Elite economics and political instability. *Economic and Social Changes: Facts, Trends, Forecast*, 17(2), p. 56.

Furthermore, throughout the entire period of the Special Military Operation, the head of state, the Government, and the State Duma have been pursuing an active policy to strengthen the cultural and economic foundations of Russia's sovereignty in the context of confrontation with the "collective West." This includes measures for the socio-economic support of broad strata of the population, participants in the Special Military Operation, and members of their families (*Insert 8*).

However, despite all the measures taken, the expert assessments, facts, statistical data, and sociological survey results presented above indicate that the *"task of renewing/purging the elite remains as pressing as ever"*. Consequently, the state and the country still need a *"consistent continuation of the revolution from above begun by the president"*.

This means that the paramount **"question-challenge"** remains: **whether the President and the country will have enough time to put the public administration system in order, to make it correspond to the goals and objectives of national policy dictated by the realities that have objectively changed since the start of the Special Military Operation.**

N. Berdyaev: "Since the creation of the world, a minority has always ruled, rules, and will always rule, not the majority... **The only question is whether the ruling minority is the better or the worse**"<sup>105</sup>.

"In the early 2000s, removing oligarchs from the levers of power and replacing the thieving liberal elite became an imperative for the country's survival... **Step by step, in the 2000s, the most odious comprador oligarchs were pushed away from the levers of power by V. Putin and replaced with more loyal state oligarchs.** The country, it seemed, had stepped back from the edge of the abyss, but the liberal elite in power continued to guard the interests of the wealthy minority and siphon capital out of the country, while the scale of corruption and social inequality grew.

**The start of the Special Military Operation showed that the steps taken by the president were clearly insufficient and the task of renewing/purging the elite remains as pressing as ever.** The remaining supporters of the Gaidar-Chubais course in power have become less brazen, they speak in a new way, in the spirit of the times, **but they have not linked their fate with the fate of the people, and they still do not...**

It would seem that there is complete clarity on the question of what kind of elite we need. Its inherent qualities must be incorruptibility, readiness for Service, spirituality..., strategic vision of the situation... **But how can we ensure that the political, cultural, scientific, and business elites all meet these strict criteria? Only through the consistent continuation of the revolution from above begun by the president...**"<sup>106</sup>

<sup>105</sup> Berdyaev N. The Philosophy of Inequality. Sixth Letter. On Aristocracy. Available at: <https://www.livelib.ru/book/82753/read-filosofiya-neravenstva-nikolaj-berdyaev/~6>

<sup>106</sup> Batchikov S. Cream or aoam? Once again on the tasks of the Russian elite. Available at: [https://zavtra.ru/blogs/slivki\\_ili\\_pena?ysclid=mkkvioxane829493273](https://zavtra.ru/blogs/slivki_ili_pena?ysclid=mkkvioxane829493273)

**Monitoring of regulatory legal acts (laws, decrees) signed by the President of the Russian Federation  
in the period from December 13, 2025 to February 14, 2026<sup>107</sup>**

**MEASURES TO SUPPORT PARTICIPANTS OF THE SPECIAL MILITARY OPERATION AND THEIR FAMILY MEMBERS, DEVELOPMENT  
OF THE MILITARY-INDUSTRIAL COMPLEX, MOBILIZATION, ORGANIZATION OF MARTIAL LAW, ENHANCEMENT OF ANTI-TERRORIST  
PROTECTION OF FACILITIES**

**December 15 – Federal Law 468 “On Amendments to Article 20 of the Federal Law ‘On the Status of Military Personnel’.**” Military personnel are granted the right to free travel to and from the place where military medical (flight medical) commissions conduct military medical examinations.

**December 15 – Federal Law 469 “On Amendments to the Federal Law ‘On the Status of Military Personnel’.**” The right to extraordinary provision of housing (housing subsidy) was granted to military personnel: those with children who are disabled from childhood; those declared by a military medical commission as unfit or partially fit for military service due to health conditions resulting from injuries (wounds, traumas, concussions) or illnesses sustained during combat operations, but who, despite this, decide to continue military service; those for whom the head of the federal executive body or federal state body where military service is provided for by law has made relevant decisions.

**December 15 – Federal Law 486 “On Amendments to Certain Legislative Acts of the Russian Federation.”** Benefits and social guarantees provided for by the legislation of the Russian Federation for family members of military personnel, citizens in volunteer formations, and employees of certain federal state bodies are extended to children who have reached the age of 18 and have completed their education in basic general or secondary general education programs, for the period until September 1 of the year in which such education was completed.

**December 15 – Federal Law 490 “On Amendments to Article 68 of the Federal Law ‘On Education in the Russian Federation’.**” The right to receive secondary vocational education again in a different profession or specialty at the expense of budgetary funds is granted to military personnel of the Armed Forces of the Russian Federation and the Russian National Guard, citizens called up for military service through mobilization, and citizens who have signed a contract for voluntary assistance in carrying out tasks assigned to the Armed Forces of the Russian Federation or the Russian National Guard troops, provided they have participated in the special military operation or performed tasks to repel armed incursion into the territory of the Russian Federation.

**December 29 – Federal Law 534 “On Amendments to the Criminal Code of the Russian Federation.”** Criminal liability is strengthened for certain crimes committed by mobilized personnel and contractors who have been conditionally released from serving their sentence or in respect of whom criminal prosecution has been suspended due to undergoing military service. Unauthorized leave from a place of service or failure to report for service without a valid reason for 2–10 days is punishable by imprisonment for 2 to 6 years; failure to report for service without a valid reason for one month – 3 to 8 years; desertion with weapons or by a group – 10 to 12 years; feigning illness, self-inflicted injury, or document forgery – up to 12 years.

**December 29 – Federal Law 572 “On Amending Article 3 of the Federal Law ‘On Veterans’.**” It is envisaged to classify as combat veterans prosecutors and employees of the Investigative Committee of the Russian Federation who performed their official duties in accordance with decisions of the prosecution authorities of the Russian Federation or the Investigative Committee of the Russian Federation on the territory of the Syrian Arab Republic from September 30, 2015, during the special military operation on the territories of Ukraine, the Donetsk People’s Republic, and the Lugansk People’s Republic from February 24, 2022, and on the territories of the Zaporozhye Region and Kherson Region from September 30, 2022.

<sup>107</sup>This insert is a continuation of the monitoring of the most important regulatory legal acts signed by the President of the Russian Federation, which has been conducted since June 2022 (the first issue of the monitoring was presented in the article: Ilyin V.A., Morev M.V. (2022). The difficult road after the Rubicon. Economic and Social Changes: Facts, Trends, Forecast, 15(3), 9–41).

**MEASURES TO PROTECT INFORMATION SECURITY, LIMIT THE INFLUENCE OF FOREIGN AGENTS, AND DEVELOP THE EDUCATION AND UPBRINGING SYSTEM FOR YOUNGER GENERATIONS**

**December 15 – Federal Law 462 “On Amendments to the Federal Law ‘On Countering the Legalization (Laundering) of Criminally Obtained Income and the Financing of Terrorism’ and Articles 41 and 51 of the Federal Law ‘On Special Economic Measures and Coercive Measures’.”** Individuals for whom there is information about involvement in extremism, terrorism, or sabotage will be required to coordinate financial transactions with Rosfinmonitoring (the Federal Financial Monitoring Service). Not only the salaries of these individuals but also other income determined by the Government will come under control. Banks will be required to block transactions of persons who are wanted and included in the list of terrorists and extremists.

**December 29 – Federal Constitutional Law “On Amending Article 1 of the Federal Constitutional Law ‘On the State Emblem of the Russian Federation’.”** The description of the State Emblem of the Russian Federation is clarified. It stipulates that the small crowns, the large crown, and the orb are surmounted by straight, equal-ended, four-pointed crosses with flared ends.

**December 29 – Federal Law 528 “On Amendments to the Code of the Russian Federation on Administrative Offenses.”** Fines are provided for officials and other employees of the Passport and Visa Service of the Ministry of Internal Affairs and the Multifunctional Migration Center who violate requirements for providing assistance in rendering public services in the sphere of migration. For violating the procedure for providing assistance to the Ministry of Internal Affairs or its territorial body in implementing certain powers when rendering public services and performing functions in the migration sphere, the fine for officials ranges from 5,000 to 10,000 rubles, and for other employees, from 2,000 to 2,500 rubles.

**MEASURES FOR SOCIO-ECONOMIC SUPPORT OF THE GENERAL POPULATION AND STRENGTHENING THE COUNTRY’S ECONOMY, INCLUDING ON THE INTERNATIONAL ARENA**

**December 28 – Federal Law 505 “On Amendments to Certain Legislative Acts of the Russian Federation.”** Control over the money and property of civil servants and their family members has become continuous and is carried out in real time within the “Poseidon” system. It allows for the rapid acquisition of information from the Federal Tax Service, Rosfinmonitoring, Rosreestr, Rosimushchestvo, the Bank of Russia, and other agencies. Officials are no longer required to submit annual declarations of income and property. The obligation to submit a declaration remains when entering service, being appointed to a position, transferring, or being included in the personnel reserve. Such information must also be provided upon the occurrence of circumstances established by law, for example, when acquiring property whose value exceeds the civil servant’s family income for three years.

**December 29 – Federal Law 545 “On Amendments to Certain Legislative Acts of the Russian Federation.”** The law is aimed at protecting the rights of consumers of services provided by microfinance organizations (MFOs). From April 1, 2027, MFOs are prohibited from approving a new consumer loan with a total cost exceeding 100% until three days have passed after the full repayment of a previous loan with similar parameters from any credit institution or MFO. From October 1, 2026, to April 1, 2027, MFOs cannot issue a consumer loan with a total cost exceeding 200% if there are outstanding obligations under two consumer credit (loan) agreements with similar parameters concluded with any credit institution or MFO. From April 1, 2026, the overpayment on microloans of up to one year will be reduced from 130% to 100%.

**December 29 – Federal Law 561 “On Amendments to Articles 3.5 and 14.8 of the Code of the Russian Federation on Administrative Offenses.”** Administrative liability for imposing additional goods (works, services) on a consumer for a separate fee is strengthened. The fine for officials is set at 50,000 to 150,000 rubles, and for legal entities, at 200,000 to 500,000 rubles.

In conclusion, it should be noted that “*critical mass of passionarity*,” the “*life cycle of the state*,” and the “*level of well-being*” (as the main factor in the decline of passionary energy) – all these are categories that can only be considered in long-term, historical dynamics, **within the context of the evolution of a state-civilization**. This means they are a matter of the effectiveness of strategic public administration, and most importantly, **all these categories “are subject to management”**.

“How can passionarity be maintained at the maximum possible level...? **Through the support of effective public administration. This is the only way to extend the life cycle of the state and the nation.**

It is possible to manage... the critical passionarity on which the existence of the nation and state depends. This should be the goal. **The level of well-being [the main culprit in the process of passionarity’s decline] is subject to management, which makes it possible to prevent undesirable events in the country’s history.** This is a subtle dialectical process, involving **balancing a decent standard of living for the population against the backdrop of a social model that demands considerable effort from people to attain it.** The combination of such developmental aspects constitutes the **sacred essence of the art of public administration**”<sup>108</sup>.

At this pivotal moment in history (which Russia is currently undergoing), a great deal (if not everything) depends on the President, as a person of a “passionary psychological type”.

It depends, on the one hand, on his ability to learn the lessons from the true causes of the USSR’s collapse; that is, **to create such a structure of public administration in which new Gorbachevs, Yeltsins, Yakovlevs, and Chubais** could not emerge (and there are still many of them in the current system

of public administration, as experts note and as real facts show, especially in the first years of the Special Military Operation).

“People of a passionary psychological type are individuals **possessing very great energy and directing it towards great deeds**, typically towards the transformation of society, ready to risk their own lives and the lives of their community in the name of a great goal. The main stimuli for the activity of a passionary personality, as a rule, are **‘supra-personal’ values and meanings – that is, not individual, personal interests, but spiritual-ideological essences or meaningful orientations connected with the life of the community with which they identify themselves**”<sup>109</sup>.

“Former Russian Prime Minister M. Kasyanov\* has sailed off abroad and now resides in Latvia.

Deputy Prime Minister A. Dvorkovich moved to the USA.

Former Deputy Prime Ministers I. Klebanov, A. Khloponin, and ministers Ya. Urinson, M. Akimov chose Israel as their place of residence.

Former Head of State Property A. Kokh resides in Germany.

V. Khristenko has an apartment in Spain.

Former Deputy Prime Minister O. Golodets is also torn between two countries, one of them being the same Spain.

Also residing abroad are former heads of the Presidential Administration of the Russian Federation (V. Voloshin, V. Yumashev together with B. Yeltsin’s daughter Tatyana), former ministers and their deputies (A. Kozyrev, E. Skrynnik, A. Vavilov, I. Chuyan, A. Reimer, and others), numerous former governors and their deputies, and scores of federal government officials!”<sup>110</sup>

\* Entered in the register of foreign agents.

<sup>108</sup> Balatsky E.V. (2025). The extinction of passionarity in E. Todd’s demographic concept. *Sotsialnoe prostranstvo*, 11(3), p. 18.

<sup>109</sup> Volkonsky V.A. (2025). The epochs of passionaries and conservatives and the image of the future in historical processes. *Economic and Social Changes: Facts, Trends, Forecast*, 18(2), p. 41.

<sup>110</sup> Toshchenko Zh.T. Old and new faces of betrayal. Available at: <https://gazeta-pravda.ru/issue/9-31502-3031-yanvaryaya-2024-goda/starye-i-novye-liky-predatelstva/?ysclid=mlunjtsddn27983037>

On the other hand, it depends on the President's ability **to initiate and lead the process of forming in Russia an Image of the Future** as the main (and perhaps even the only) real instrument capable of resisting the power of capital, the power of money, and the lack of spirituality, which, in fact, has become a problem not only for our country but for the entire passing world of the "one hegemon".

As E. Birov notes<sup>111</sup>, *"when power is reduced to money, the image of the future becomes superfluous, which is why capital imposes on the masses a reluctance to strive for ideals."* But if there is an Image of the Future, then "capital loses its power, is reduced to the role of a servant," and this is *"the salvation of society from degradation"*.

**"The Image of the Future, when it exists, actually shapes the future... Its absence, the absence of a goal and constructive meanings, leads to degradation..."**

**When power is reduced to money, to the ownership of capital, then the image of the future becomes superfluous, unnecessary...** Capital imposes on the masses a reluctance to strive for ideals... Hence the constant sabotage of attempts to formulate ideals, spiritual values, and the image of a just world order. Otherwise, capital will lose its power, be reduced to the role of a servant, which is what it should be.

**Values are a threat to price tags. The Image of the Future is a threat to capital. But it is salvation for society from degradation"**<sup>112</sup>.

But what should this image of the future look like? Judging by the results of mass sociological surveys<sup>113</sup>, Russian society expects from the head of state an Image of the Future based on concepts such as **"law", "order", "justice", "human rights", "peace", "freedom", and "patriotism"**.

**"It can be stated that there is a clear deficit in society of politics** based on law, order, justice, human rights, and peace. In terms of content, such a set of ideas correlates with the priorities of the **value model of socialism** present in the mass consciousness..."<sup>114</sup>

This understanding of the Image of the Future, obtained by sociologists from research conducted in the early 2020s, remains stable and correlates well with what V. Fedorov, Director General of VCIOM, said in December 2025: *"In Russia, there are three Images of the Future. They do not contradict each other and overlap in many ways:*

✓ *The first image: 'Russia as a social state'. A very kind state that loves everyone, helps everyone, and protects everyone.*

✓ *The second: 'Russia as a comfortable country'. Everything is very convenient, well-ordered, polite.*

✓ *The third image: 'Russia the great'. That is, a Russia on which a great deal in the world depends"*<sup>115</sup>.

<sup>111</sup> E. Birov – journalist, columnist at the TASS analytical center, regular contributor to Zavtra newspaper; until 2013, he participated in the work of the "Center for Problem Analysis and State-Management Design" (Sulakshin Center), and was the editor-in-chief of the online publication "Russia Forever".

<sup>112</sup> Birov E. The image of the future vs the power of capital. Available at: [https://zavtra.ru/blogs/obraz\\_budushego\\_protiv\\_vlasti\\_kapitala](https://zavtra.ru/blogs/obraz_budushego_protiv_vlasti_kapitala)

<sup>113</sup> The research was conducted by the Federal Center of Theoretical and Applied Sociology of the Russian Academy of Sciences (FCTAS RAS). The experts' conclusions are based on the results of the following projects:

1. Sociological monitoring "How Are You, Russia?", conducted by the Center for Strategic Social and Socio-Political Studies of the Institute of Socio-Political Research of FCTAS RAS from 1992 to the present.

2. Research project "The Image of the Future as a Foundation for Sustainable Social Optimism in the Context of Interactions between Russian Society and the State", implemented with the support of the Expert Institute for Social Research, within the framework of which an all-Russian public opinion survey was conducted in June 2023.

3. Research project "Forecasts and Alternatives for Russia's Development Through the Eyes of Russians (How Social Strata Assess the Future and Prospects for the Country's Development)", which was implemented in 2021.

<sup>114</sup> Bulanova M.B., Velikaya N.M., Grebnyak O.V. et al. (2023). The Image of the Future in the Prism of Sociological Measurements: Monograph. Moscow: Mir Nauki. P. 51.

<sup>115</sup> Sociologists named the most popular images of the future among Russians. Available at: <https://iz.ru/2015949/2025-12-26/sotciologi-nazvali-samye-populiarnye-u-rossiian-obrazy-budushchego>

1. Zh.T. Toshchenko: **“The social contract... is a fundamental but at the same time special state of relations between the state and the people, which is expressed in the philosophy of a shared destiny – an explicit (open) and latent mutually agreed-upon achievement of goals, means, and methods for their implementation in carrying out socio-economic, socio-political, and socio-cultural transformations”**<sup>116</sup>.

2. S.A. Karaganov: **“An image of the world in which we would like to live, a living dream-idea of Russia, a state ideology put forward and promoted, is needed so that all of us, from the President to the farmer, worker, engineer, officer, scientist, entrepreneur, civil servant, understand what we want to be and what we want our country to be... The presence of a common ideological platform, a national idea, is one of the most important constitutive features of a sovereign state – and we do not want to be, nor can we be, anything else. Its absence is a sign of under-sovereignty”**<sup>117</sup>.

**It is likely that such an Image of the Future – the creation of which is perhaps one of the main tasks facing the President after the conclusion of the Special Military Operation – could become the foundation of a new Social Contract. One based not on external (formal) agreement, but on a deeply internal, mutual understanding between society and the state.**

This would contribute to enhancing the effectiveness of strategic public administration, enabling the President to continue implementing the course of national development, guided *“not only by current*

*needs and circumstances, but also by the country’s interests for centuries to come...”*<sup>118</sup>

Vladimir Putin: **“...the very idea [of building the Trans-Siberian Railway across the entire country to the Pacific Ocean] serves for us as an example of a strategic vision of the future, when not only current needs and circumstances are taken into account, but also the country’s interests for centuries to come...”**<sup>119</sup>

<sup>116</sup> Toshchenko Zh.T. (2025). The social contract in contemporary Russia: Has a balance of interests been achieved? *Sotsis*, 2, p. 5.

<sup>117</sup> Karaganov S. (2025). The Living Dream-Idea of Russia, The Code of a Russian in the 21st Century: Report within the framework of the project “The Russian Dream-Idea and the Code of a Russian in the 21st Century” under the auspices of the Council on Foreign and Defense Policy and the Faculty of World Economy and World Politics of the National Research University Higher School of Economics. July 2025.

<sup>118</sup> Ibidem.

<sup>7</sup> Vladimir Putin’s speech at the Plenary Session of the VI International Arctic Forum “Arctic – Territory of Dialogue” on March 27, 2025.

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## The Strategic Dilemma of Support Settlements: Between Self-Development and Transfer Dependence



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**Abstract.** The relevance of the study stems from the introduction into the Spatial Development Strategy of the Russian Federation until 2030 of a new instrument of regional policy – support settlements, formally intended to become growth points for balancing spatial development. The aim of the work is to identify systemic contradictions in the concept of support settlements as presented in the Strategy and to substantiate necessary adjustments aimed at reorienting this institution from a compensatory to an economically stimulating model of functioning. The scholarly novelty lies in the comprehensive identification and structuring of four key institutional contradictions: between goal-setting and unified instrumentation; in the logic of selecting settlements based on the criterion of “problematic nature” rather than potential; between the functions assigned and available resources; between long-term development goals and the short-term nature of budget planning. The methodological basis of the study comprised systemic and content analysis of the text of the Strategy and related documents, as well as conducting a

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series of semi-formalized expert interviews with representatives of local self-government bodies from twelve constituent entities of the Russian Federation. The main results indicate that the current implementation of the support settlement institution tends toward the logic of fiscal equalization, and the empirical data obtained confirm the skepticism of municipalities and their demand for economic incentives. A stimulating model has been developed, proposing specific institutional solutions for transitioning to a paradigm of self-development, the key elements of which are a functional typology of settlements, the introduction of special economic regimes, a clear delineation of powers, and a shift to long-term program-based financing. A limitation of the study is its focus on qualitative analysis of the perception of the problem, which determines the need for further quantitative assessment of the effectiveness of pilot projects implemented within the framework of the proposed paradigm.

**Key words:** strategic planning, spatial development, fiscal equalization, regional policy, municipalities, support settlements, economic stimulation.

### Introduction

The adoption of the Spatial Development Strategy of the Russian Federation for the period up to 2030 with a forecast up to 2036<sup>1</sup> (SDS-2030) marked a new stage in the state's understanding of the principles of Russian territorial organization. Unlike the previous, largely unsuccessful, Spatial Development Strategy of the Russian Federation for the period up to 2025<sup>2</sup> (SDS-2025), the new document contains several conceptually important innovations, among which the institution of support settlements (SS) stands out. Formally positioned as one of the key tools for ensuring balanced spatial development, this institution is designed to accumulate resources and efforts for the development of non-agglomeration territories.

However, as with many other initiatives in the field of Russian strategic planning, a systemic

methodological issue lies hidden behind the declaration of good intentions. An analysis of the SDS-2030 document, as well as the prior practice of implementing similar “targeted” instruments (e.g., macro-regions and geostrategic territories in the SDS-2025), allows us to hypothesize that SS policy is based on the predominantly compensatory model rather than stimulating in nature. In fact, it risks replicating the vicious logic of “transfer dependence”, where support from the federal center is directed not at triggering endogenous mechanisms of economic growth, but at plugging budget holes and maintaining the social sphere in the context of chronic depression.

Thus, a fundamental dilemma emerges: will the support settlements (there are over two thousand of them in Russia<sup>3</sup>) become real points of growth and self-development for the surrounding territories, or will their lot be to establish themselves as passive recipients of budget funds, whose existence depends solely on the amount of incoming subsidies? Resolving this dilemma has not only a purely

<sup>1</sup> Spatial Development Strategy of the Russian Federation for the period up to 2030 with a forecast up to 2036 (approved by the RF Government Resolution 4146-r, dated December 28, 2024). Available at: [https://www.economy.gov.ru/material/directions/regionalnoe\\_razvitie/strategicheskoe\\_planirovanie\\_prostranstvennogo\\_razvitiya/strategiya\\_prostranstvennogo\\_razvitiya\\_rossii\\_do\\_2030\\_goda\\_c\\_prognozom\\_do\\_2036\\_goda](https://www.economy.gov.ru/material/directions/regionalnoe_razvitie/strategicheskoe_planirovanie_prostranstvennogo_razvitiya/strategiya_prostranstvennogo_razvitiya_rossii_do_2030_goda_c_prognozom_do_2036_goda) (accessed: 10.10.2025).

<sup>2</sup> Spatial Development Strategy of the Russian Federation for the period up to 2025 (approved by the RF Government Resolution 207-r, dated February 13, 2019. (as amended on September 30, 2022)). Available at: <http://static.government.ru/media/files/UVAIqUtT08o60RktoOXI22JjAe7irNxc.pdf> (accessed: 10.10.2025).

<sup>3</sup> 2160 units according to the Unified List of Support Settlements of the Russian Federation (approved by the Presidium (Headquarters) of the Government Commission on Regional Development in the Russian Federation (Protocol 143pr, dated December 2024)). Available at: [https://www.economy.gov.ru/material/file/b941182ed4b1c06707b31a18756689d1/edinyy\\_perechen\\_opornyh\\_naselennyh\\_punktov\\_rf.pdf](https://www.economy.gov.ru/material/file/b941182ed4b1c06707b31a18756689d1/edinyy_perechen_opornyh_naselennyh_punktov_rf.pdf) (accessed: 15.10.2025).

economic but also a constitutional and political dimension, as it directly concerns the issue of combining the principle of equality of constituent entities of Russia with the need for a differentiated approach to their support.

The aim of the study is to identify systemic contradictions in the concept of support settlements presented in the SDS-2030 and to substantiate necessary adjustments aimed at reorienting this institution from a compensatory to an economically stimulating model of functioning. In accordance with this aim, the work addresses the following tasks: a critical analysis of the interpretation of SS in the text of the Strategy; a synthesis of practical expectations and concerns associated with this status among representatives of municipalities; identification of the underlying conflict between equalization and self-development; formulation of specific proposals for integrating SS into real economic processes and creating sustainable revenue sources for them.

For a deeper understanding of the identified dilemma and systemic contradictions, it is necessary to turn to the theoretical foundations of spatial development, within which the dichotomy of equalization and self-development is traditionally key.

### **Theoretical and methodological foundations of the research**

The issue of the correlation between equalization and self-development of territories, central to understanding the role of support settlements in Russia's new Spatial Development Strategy, has deep theoretical roots. An analysis of the evolution of scientific views allows us to identify the methodological basis of the managerial contradictions embedded in the SDS-2030.

Classical theories of regional growth, developed by F. Perroux (the concept of "growth poles") and A. Hirschman (the theory of "unbalanced growth"), revealed the fundamental mechanism of spatial

development: the concentration of economic activity in "centers" is natural and can stimulate the development of the "periphery" through "trickle-down effects" (Perroux, 1955; Hirschman, 1958). However, as G. Myrdal showed, in the absence of targeted policy, cumulative causation dominates, reinforcing inequality (Myrdal, 1957). These ideas were further developed in the works of M. Fujita, P. Krugman, and A.J. Venables (Fujita et al., 2001), who, within the framework of the "new economic geography", proved that agglomeration effects scale advantage are key factors in the spatial concentration of activity.

Theorists of institutionalism made a significant contribution to understanding the institutional aspects of spatial development. O. Williamson explored the role of transaction costs in organizing economic activity across different territories (Williamson, 1985), and D. North substantiated the decisive influence of institutions and their evolution on the long-term economic dynamics of regions (North, 1990), which is highly relevant to the formation of effective development institutions for support settlements.

In the Russian scientific tradition, this dilemma has always been the focus of attention of regional scientists. A.G. Granberg, whose ideas greatly influenced domestic regional policy, consistently argued that the Russian economic space as a "multi-regional organism" requires a combination of integrity and diversity (Granberg, 2009). He warned that equalization suppresses initiative, but spontaneous polarization threatens the unity of the country. P.A. Minakir emphasized that spatial development is not a choice between equalization and growth, but a search for a balance where support for lagging territories should not hinder the development of leaders (Minakir, Demyanenko, 2014). A.N. Demyanenko, developing these ideas in his interdisciplinary research, underscores the complexity of the challenges of spatial development in Russia (Demyanenko, 2021).

Close to the settlement network concept are the ideas of V.L. Glazychev about the frame-nodal structure of the territory, where support centers act as integrators of the surrounding space (Glazychev, 2008). E.M. Buchwald and O.N. Valentik contributed to the understanding of economic space as an object of management (Buchwald, Valentik, 2024), while R.F. Gataullin researched the processes of forming a new framework model of spatial development (Gataullin, 2020). Methodological aspects of assessing the quality of regional economic space are revealed in the works of A.A. Urunov and I.M. Morozova (Urunov, Morozova, 2024), and a macro-level analysis of Russia's economic space is presented by P.V. Stroeve and O.V. Pivovarova (Stroeve, Pivovarova, 2024).

Also important for the analysis of SS is the modern concept of “smart specialization” (formed as a result of objective processes), detailed by P. McCann and R. Ortega-Argilés (McCann, Ortega-Argilés, 2013); Russian researchers in this field are M.V. Kurnikova, G.A. Khmeleva, E.V. Bolgova (Kurnikova et al., 2023), A.A. Pobedin (Pobedin, 2025), and others. This concept involves abandoning universal recipes in favor of identifying and supporting the unique potential of each territory. This approach gains particular relevance in light of international experience, notably the European Union's smart specialization strategy<sup>4</sup>, where the key principle is the concentration of resources on a limited number of priorities identified through a process of “entrepreneurial discovery” involving business, science, and government. However, as A. Wigger notes, the “smart specialization” policy can deepen structural asymmetries, which requires a cautious and adapted application of this approach (Wigger, 2023). Unlike the compensatory paradigm dominating the current Russian practice of fostering

support settlements, the stimulating approach aims to activate endogenous growth through the formation of competitive advantages based on the unique assets of territories. This implies not just budget equalization, but the creation of special economic regimes that stimulate private investment and diversification into related segments. Applied to SS, this means the need to move from unified support for “problem” territories to differentiated strategies that consider the specifics of the local economic landscape and the potential for forming growth points within regional and global value chains, which is reflected in studies on the differentiation of rural sub-regions development conducted by E.N. Koroleva and L.A. Mustafina (Koroleva, Mustafina, 2025).

Contemporary analysis of Russian regional policy, presented in the works of N.V. Zubarevich, reveals systemic institutional barriers to spatial development. The author convincingly argues that the established highly centralized management model, relying on large-scale but inefficient budget redistribution, not only fails to overcome but actually reinforces disparities (Zubarevich, 2017). In this context, her conclusions about the need for a transition to decentralization, support for leading cities, and targeted social policies mitigating inequality serve as a critically important argument against maintaining the compensatory paradigm in the policy of periphery development.

The conducted analysis of modern scientific literature on support settlements suggests that this topic has been actively developed by Russian researchers in recent years. The article by E. Markvart, N.N. Kiseleva, and D.P. Sosnin makes a fundamental contribution to the theoretical and methodological substantiation of the SS policy. The authors conduct a meticulous analysis of central place theory, examine in detail its application in German spatial planning, and then critically evaluate attempts to adapt this concept in contemporary Russia (Markvart et al.,

<sup>4</sup> Research and innovation strategies for smart specialization. Available at: [http://projects.merit.com/foresightlibrary/attachments/smart\\_specialisation\\_en.pdf](http://projects.merit.com/foresightlibrary/attachments/smart_specialisation_en.pdf) (accessed: 10.11.2025).

2022). The work of A.V. Odintsova is one of the first to systematically raise issues of integrating SS into the institutional architecture of federal relations and local self-government (Odintsova, 2025). This direction is significantly complemented by the research of A.V. Vilenskiy, who provides a detailed critical analysis of the functions and tasks assigned to various types of SS (non-urban and strategic) within the framework of the SDS-2030. The author not only reveals the essence of the new concept but also identifies its duality: on the one hand, SS are seen as a tool for solving demographic and social problems; on the other, as centers of economic growth and ensuring national security (Vilenskiy, 2025). The study by M.V. Gligich-Zolotareva and N.I. Luk'yanova offers a deep insight into the theoretical foundations of the concept (Gligich-Zolotareva, Luk'yanova, 2024). This direction is developed further in the article by E.V. Evlampieva, which examines the evolution of the SS phenomenon – from W. Christaller's central place theory and the Soviet concept of the "support framework of settlement" to the modern criteria enshrined in the 2022 methodological recommendations and the new Strategy. The author focuses on the role of SS as a basis for counteracting "spatial compression" and forming a settlement system, clearly distinguishing approaches to non-urban and strategic support points (Evlampieva, 2025). The article by O.M. Roy and V.S. Bichun analyzes the role of SS in the new spatial strategy through the lens of the settlement system. The authors propose an original classification of SS based on criteria from the unified list, analyze the levels of their interaction, and conclude that the likely scenario of population inflow into support points is optimal (Roy, Bichun, 2025). Their research shifts the focus from general principles to specific mechanisms of territorial reorganization.

The conducted analysis allows us to conclude: the modern paradigm of spatial development, enriched by theories of new economic geography,

institutionalism, and smart specialization, rejects the dichotomy "equalization or growth", offering a strategy for their combination. However, a textual analysis of the SDS-2030 shows that this balance has not been found concerning support settlements. The approach embedded in the Strategy leans toward a compensatory rather than a stimulating logic, which contradicts both theoretical ideas about self-development and the declared goals of forming a balanced territorial organization of the economy. Thus, theoretical analysis indicates the need for a balance that should be institutionally embodied.

To achieve the aim of the work, a set of methods was applied, including:

- 1) systemic analysis of the text of the Spatial Development Strategy of the Russian Federation for the period up to 2030 with a forecast up to 2036, as well as related regulatory legal acts;

- 2) content analysis of strategic planning documents of Russian regions concerning spatial development and support for municipalities;

- 3) expert interviews with representatives of local self-government bodies from 12 constituent entities of Russia, conducted from January to March 2025 (sample – municipalities included and not included in the list of support settlements).

Based on the literature analysis, it can be concluded that this study provides constructive criticism and performs a synthesizing function, thus occupying a special place among the mentioned publications. The following directions are realized:

- 1) deepening of critical analysis and movement toward paradigmatic contradictions; while A.V. Odintsova points to institutional inconsistencies, A.V. Vilenskiy to functional duality and inconsistency, M.V. Gligich-Zolotareva, N.I. Luk'yanova, and E. Markvart et al. to methodological and practical implementation problems, the authors of this article identify systemic paradigmatic contradictions in the very logic of state policy;

2) empirical substantiation by “demand from the field”; unlike works based primarily on document analysis and theoretical models (A.V. Vilenskiy, E.V. Evlampieva, E. Markvart, etc.), this study is supported by the results of expert interviews with representatives of local self-government bodies;

3) proposal of a holistic alternative model as a roadmap; the main contribution of the study lies not only in in-depth criticism but also in the created mature stimulating paradigm for the development of SS.

### Research results

In the text of the Strategy there is a formal definition of support settlements as “settlements located outside the boundaries of urban agglomerations, forming the basis for accelerated infrastructure development, allowing for realization of social guarantees... and other needs of the population of the territory of one or more municipalities” (section IV).

Critical analysis reveals several systemic problems in this concept.

1. Socio-infrastructure bias. The definition is dominated by the social function of the SS, with almost no attention to economic component. The text implies that support settlements are intended primarily for the implementation of social guarantees, rather than for generating economic growth.

2. Lack of differentiation. The Strategy does not provide for different types of SS depending on their economic capacity, geographical location, and specialization. All 2,160 settlements fall under uniform criteria and, presumably, uniform support mechanisms.

3. Uncertainty of implementation mechanisms. The text lacks a description of specific tools that would ensure accelerated development. Sources of funding, the scope of powers, and performance criteria are not specified.

To assess the perception and practical expectations associated with the institution of support settlements at the local level, an expert survey of representatives of local self-government bodies was conducted from January to March 2025 (Center for Federalism and Regional Development, Institute of Economics of RAS)<sup>5</sup>. The research sample included 47 experts (heads of municipalities, their deputies, and heads of relevant committees). The expert survey was conducted among representatives of 12 constituent entities of the Russian Federation, selected to ensure representativeness in terms of geographical, economic, and typological characteristics. The sample included the following regions: Arkhangelsk Region, Sverdlovsk Region, Krasnoyarsk Territory, Voronezh Region, Republic of Bashkortostan, Novosibirsk Region, Perm Territory, Republic of Crimea, Volgograd Region, Irkutsk Region, Tver Region, and Chelyabinsk Region. This list covers several federal districts (Northwestern, Ural, Siberian, Central, Volga, Southern) and includes both donor regions and recipient regions, which allowed considering different conditions and positions in analyzing SS perception.

The selection criterion was the presence within the municipality’s territory of a settlement included in the SS list under the SDS-2030. Municipalities that did not receive this status were also included for comparative analysis. The data collection methodology involved semi-structured in-depth interviews using a unified questionnaire, which allowed obtaining both quantifiable assessments and detailed qualitative judgments. The program included the following key thematic blocks:

1) perception and awareness: knowledge about the SS status, expectations and concerns associated with obtaining it;

<sup>5</sup> The sampling error for  $n = 47$ , confidence level = 95% and maximum variance ( $p = 0.5$ ) is  $\pm 14.3\%$ . This indicates the approximate nature of the quantitative estimates, but the qualitative analysis of the narratives remains relevant.

2) assessment of support instruments: opinions on the effectiveness of existing (transfers) and potentially necessary (tax incentives, special regimes) measures;

3) institutional and budgetary barriers: assessment of the sufficiency of existing powers and resources to perform the functions assigned to SS, problems of inter-budgetary relations;

4) proposals for optimization: specific initiatives from experts to change approaches to fostering support settlements.

Processing and analysis of interview transcripts were carried out using content analysis with qualitative coding. During the coding process, stable semantic categories were identified, such as: “budget dependence”, “demand for economic incentives” (including subcategories “tax incentives” and “investment preferences”), “criticism of status uncertainty”, “demand for expanded budget autonomy”, and “skepticism about the effectiveness of transfers”. Subsequent statistical aggregation of the frequency of mentions of these codes allowed for a transition from qualitative data to quantitative estimates presented in the results.

The survey results revealed a contradictory picture of the perception of the new institution at the municipal level.

1. Awareness and formal attitude. The vast majority of respondents (78%) confirmed awareness of their territories' inclusion in the SS list. However, only 24% of those surveyed could specify the potential opportunities or obligations associated with this status, indicating its formal, declarative nature at the initial stage of implementation.

2. Assessment of potential effectiveness. Two-thirds of experts (67%) expressed skepticism regarding the real possibilities of obtaining additional resources and managerial preferences. The main risks cited were the preservation of the previous logic of inter-budgetary relations and a high probability of transforming the SS into another

instrument of targeted transfer equalization without creating incentives for economic growth.

3. Priorities in support measures. When asked about the most effective support measures, the distribution of responses clearly indicated a demand for economic rather than budgetary instruments. Almost half of the respondents (45%) indicated the need to introduce special tax regimes and preferences for businesses as a priority measure. Another 32% of experts emphasized the importance of expanding budget powers and securing additional revenue sources for local budgets. Only 23% of survey participants saw the solution in increasing the volume of gratuitous transfers from higher-level budgets.

The quantitative assessments of the experts were also reflected in their judgments during the interviews. Qualitative analysis of interview transcripts revealed key narratives. For instance, the head of a municipal district from the Sverdlovsk Region noted: “We expect not just subsidies, but real tools to attract investment – special economic zones, tax incentives. The status should create a competitive advantage, not just label problems”. Similarly, the mayor of an urban settlement from the Voronezh Region stated: “Without changing the principles of inter-budgetary relations, the SS status will remain just a pretty signboard. We need not one-time injections, but long-term rules of the game that allow us to plan development”.

The conducted research demonstrates that at the municipal level, there is a clear demand for a transition from the compensatory paradigm of support to a stimulating model based on the creation of economic incentives and the expansion of financial independence. The identified skepticism among experts indicates that a credit for new spatial development institutions is lost after previous experience with similar initiatives.

The empirical data from expert interviews, as well as the textual analysis of the SDS-2030, allow us to identify not just individual shortcomings,

but systemic contradictions embedded in the very concept of support settlements. These contradictions explain the lost credit from municipalities and predetermine the risks of implementing the SS institution.

The first fundamental contradiction lies in the fact that the declared goal of creating “growth points” on the periphery objectively requires the concentration of resources and the creation of special economic conditions, while the established system of inter-budgetary relations and public administration continues to operate within the logic of unification and equalization. In fact, there is an attempt to create islands of a special economic regime in a sea of unified rules, which is doomed to failure. A municipality included in the SS list does not receive real tools to change its economic trajectory; it merely receives a status that, at best, allows it to claim a slightly larger volume of transfers.

The second contradiction is the fact that the very logic of selecting SS is based on their “problem nature”: low fiscal capacity, remoteness, depopulation. This approach systematically excludes the possibility of identifying and supporting actually promising growth points on the periphery, which may have a relatively better starting position.

The third contradiction manifests itself in the institutional plane. Declaring a settlement as “support” actually means imposing additional functions on it to serve the surrounding territories. However, neither the financial nor managerial resources to perform these functions are transferred. The SS status should be economically beneficial. However, local administrations find themselves in a situation where their responsibility increases, but their capabilities remain the same. This gives rise to the phenomenon of a “symbolic status” – much is said about the importance of SS, but real powers and resources are concentrated at higher levels of government.

The fourth contradiction concerns the time horizon. Economic development is a long-term process requiring consistent policy over many years. However, budget planning and political cycles are focused on the short and medium term. As a result, support measures for SS are targeted and project-based, not forming a unified development strategy. Municipalities receive scattered subsidies for individual infrastructure facilities but do not get the opportunity to pursue a consistent investment policy.

It is worth noting that long-term socio-economic development plans for up to 10 years have already been approved for urban agglomerations and large support settlements<sup>6</sup>. However, for the vast majority of SS (non-agglomeration territories), there are no such documents or they provide only a general framework. Furthermore, existing long-term development plans are focused primarily on infrastructure and social investments, while mechanisms for stimulating economic activity are presented fragmentarily.

To resolve the identified contradictions, especially the second (selection by “problem nature”) and third (institutional vagueness), “smart specialization” principles can be applied. This would require shifting the focus from criteria of depression to mechanisms of “entrepreneurial discovery” of the unique potential of each SS with the participation of businesses and local communities, followed by the development of differentiated strategies and targeted economic regimes for them depending on the identified specialization – agro-industrial, logistical, tourist-recreational, or service-oriented.

<sup>6</sup> RF Government Resolution 2058-r, dated July 31, 2023. Available at: <http://publication.pravo.gov.ru/document/0001202308010028?index=1> (accessed: 13.02.2026); RF Government Resolution 3014-r, dated October 27, 2025. Available at: <http://publication.pravo.gov.ru/document/0001202510270034> (accessed: 13.02.2026).

The combined effect of these contradictions creates a vicious circle: the SS status, designed to stimulate development, in fact reinforces the dependency model. Breaking it requires not an evolutionary, but a paradigmatic shift – a transition from compensatory logic to a stimulating paradigm (Fig. 1).

The comparison between the current and proposed models is presented in *Table 1*.

The data analysis demonstrates that the current model reproduces dependency practices. The proposed model, on the contrary, is based on the principles of economic stimulation and implies a transition to a program-targeted method of

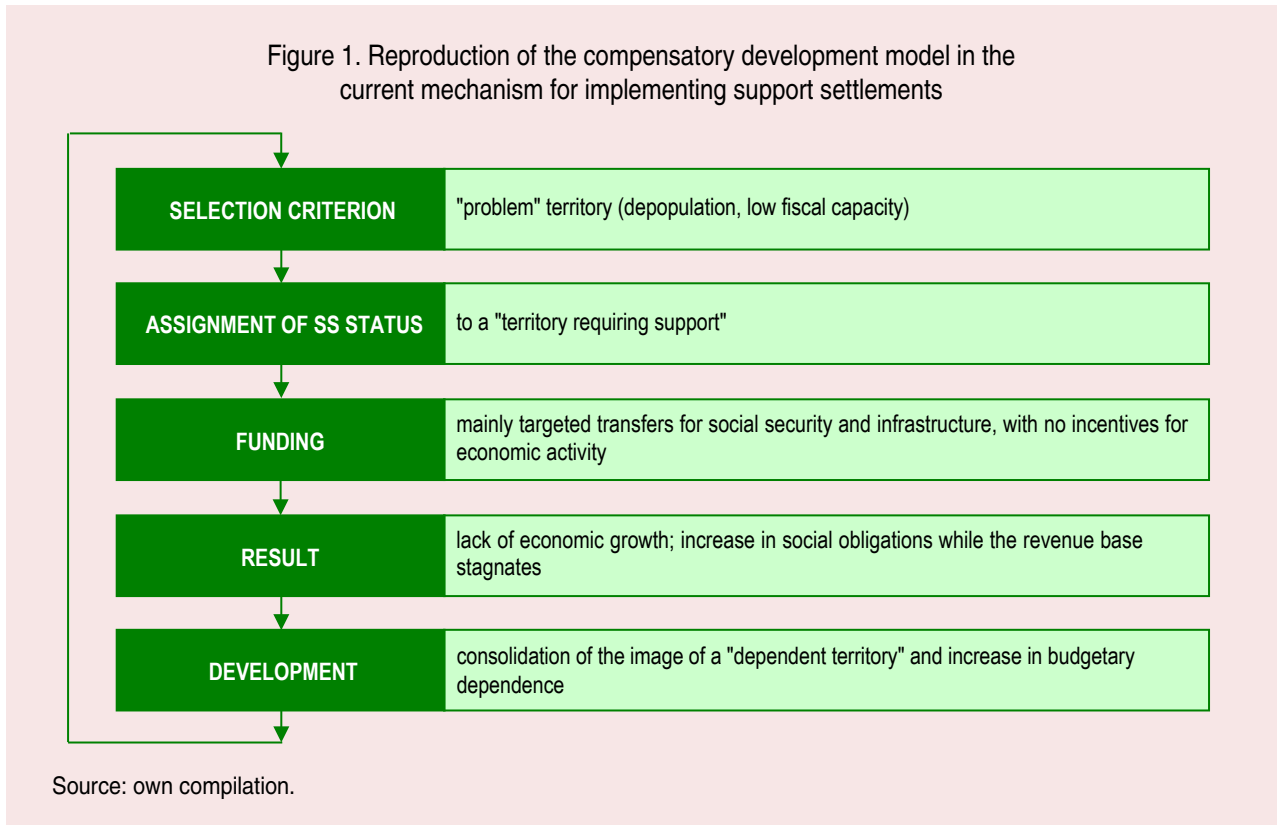


Table 1. Comparative analysis of the current and proposed models for implementing the institution of support settlements

Analysis criterion	Current model (compensatory)	Proposed model (stimulating)	Transformation effect
Basic principle	Equalization of fiscal capacity, social standards maintenance	Stimulation of economic self-development, increasing tax capacity growth	Overcoming of the principle of compensatory financing and transition to self-development
Main tools	Subsidies, grants, targeted transfers	Tax incentives, investment funds, guarantees	Creation of institutional environment for private investment
Effectiveness criteria	Budget development, compliance with standards	Growth of tax revenues, volume of investment, job creation	Focus on real economic results
Budgetary consequences	Increase in expenditure obligations of higher-level budgets	Growth of local budget revenues	Reduction of long-term budget burden
Time horizon	Short-term (annual) planning	Long-term (5–7 years) financial program	Stable conditions for investors and local self-government bodies

Source: own compilation.

Table 2. Key elements of the proposed stimulating model for the development of support settlements

Model element	Content	Expected effect
1. Functional typology of support settlements	Transport and logistics centers; agro-industrial centers; centers for tourism and recreation; social service centers	Differentiated approach allows applying targeted support instruments depending on the specialization and potential of the territory
2. Tax incentives and preferences	Regional level: reduced income tax rate and exemption from property tax, investment deductions; municipal level: land tax and personal property tax incentives (for businesses of individual entrepreneurs and self-employed), reduced rent for municipal property	Creation of competitive advantages to attract private investment; stimulation for creating new industries and jobs
3. Delineation of powers and resources	Federal level: establishes general framework, creates targeted development funds; regional level: develops and co-finances specialized programs for each type of SS; municipal level: granted expanded budgetary powers and responsible for implementing specific projects	Overcoming of “institutional vagueness”; assignment of responsibilities and resources to each level of government
4. Financing vehicles	Long-term programs (7–10 years) – appendix to approved long-term socio-economic development plans or independent documents; co-financing: a) targeted investment funds (federal, regional) of state programs and development institutions; b) infrastructure budget loans, concessions, bonds	Stable long-term resource base, budget planning linked with long-term socio-economic development plans, replacement of one-time subsidies with program financing
5. Infrastructure	Reorientation of expenditures: from individual objects to comprehensive development of investment sites; differentiation by SS type: – logistics: access roads, warehouses; – agro-industrial: energy, water supply, land reclamation; – tourism: roads, communications, beautification; – social services: educational, healthcare facilities, service centers	Creation of a material base for private investment, reduction of infrastructure costs for businesses, increase in extra-budgetary investment in fixed capital
6. Key performance indicators (KPIs)	Universal KPIs: – growth of local budget tax revenues per capita; – volume of private investment in fixed capital (excluding budget funds); – number of new permanent jobs; – net migration; Specialized KPIs (by SS type): – logistics: cargo turnover, number of operators; – agro-industrial: volume of shipped products, storage capacity; – tourism: tourist flow, room stock; – social services: accessibility of services, satisfaction level	Transition from assessing budget development to assessing real socio-economic results; link between the volume of support and effectiveness
Source: own compilation.		

managing SS development. The key difference is effectiveness assessment reorientation from budget development criteria to indicators of real economic growth – an increase in tax revenues, the volume of fixed capital investment, and job creation. It is not superficial adjustments that can help overcome the identified systemic contradictions – it is a different approach to SS development management. The stimulating model presented in Table 1 serves as the basis for developing specific institutional solutions structured in *Table 2*.

The criteria for assigning a support settlement to a particular functional type should be based on objective quantitative and qualitative indicators verifiable at the regional level:

1) transport and logistics centers: presence of transport junctions of federal/regional significance; roads included in the core road network; active railway stations, river ports, multimodal terminals; share of employment in transportation and storage above the regional average;

2) agro-industrial centers: specialization in processing agricultural products; presence of operating agricultural producers and food industries; high proportion of rural population; potential for creating storage and marketing logistics;

3) centers for tourism and recreation: presence of cultural heritage sites, nature reserves, natural areas of preferential protection; tourist flow not less than a threshold value; developed or promising accommodation infrastructure; inclusion in federal and regional tourist routes;

4) social service centers: performance of intermunicipal service functions (education, healthcare, service centers); stable commuting from surrounding territories; absence of pronounced economic specialization, but availability of human and infrastructural capacity for developing non-commercial services.

The typology is not rigidly fixed; mixed types are allowed (e.g., agro-industrial-logistical), as

well as transition from one type to another based on the implementation of long-term development plans.

Tax incentives for SS are understood not as new types of special economic zones or priority development territories (which would require separate federal laws), but as targeted adaptation of existing mechanisms to the context of support settlements: extending certain preferential elements to SS: investment tax deduction, benefits on rent for municipal property; certain tax benefits.

Investment funds for SS development are proposed to be created on co-financing principles:

- federal level: state programs funds, as well as targeted inter-budgetary transfers as part of the oversight of SS by federal executive authorities;

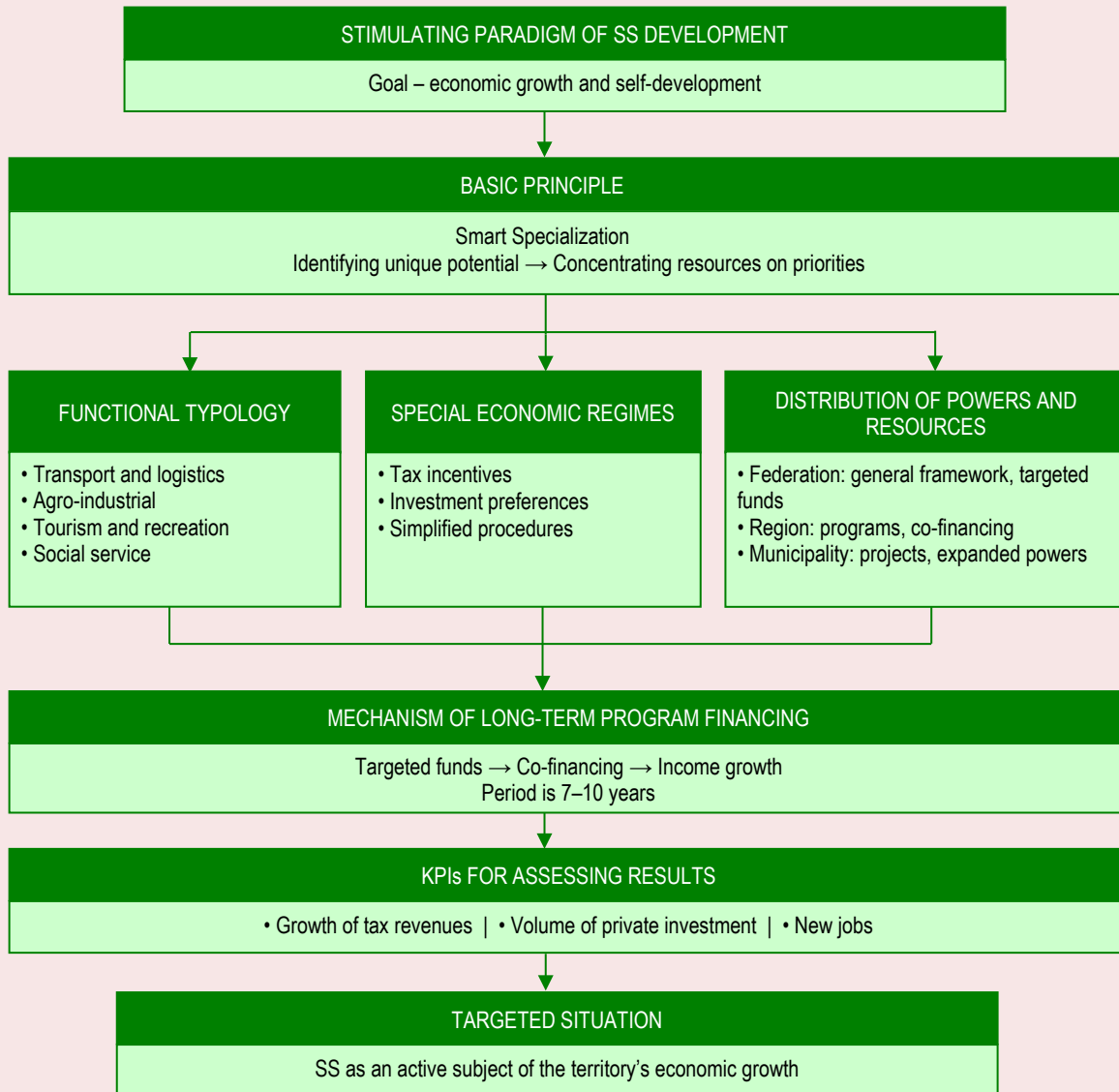
- regional level: funds from the budgets of Russian regions, including grants to support balanced-budget measures, reoriented from current expenditures to investment purposes;

- extra-budgetary sources: joint programs with the federal level: funds from development institutions (VEB.RF, Territorial Development Fund), as well as private investments attracted under state guarantees of Russian regions within their established debt limits.

The transition to long-term program financing (7–10 years) proposed in this study does not mean duplicating or replacing approved long-term development plans, but substantively supplementing them with economic blocks (tax incentives, investment regimes, KPIs for private investments and jobs) and extending this approach to all types of SS.

The key direction is a paradigm shift in supporting SS – a transition from unified budget equalization to differentiation of development. Simultaneously, differentiation and division of support settlements into several types are required, which will allow moving from the vicious logic of selection based on the criterion of “problem nature” toward supporting real potential. Finally,

Figure 2. Stimulating model for support settlements development within the self-development paradigm



Source: own compilation.

overcoming of “institutional vagueness” and the contradiction between long-term goals and short-term planning is possible through a clear structuring of powers between levels of government and the introduction of budgetary innovations based on long-term financing programs.

The stimulating model presented in Table 2 serves as the basis for developing specific institutional solutions. Its conceptual architecture, integrating functional typology, special regimes, delineation of powers, and long-term financing, is reflected in *Figure 2*.

A key condition for implementing the stimulating model is a clear distribution of responsibility between the regional and municipal levels for the introduction of economic instruments.

At the regional level, the following is ensured:

- establishment of reduced rates for the corporate income tax payable to the budget of the Russian constituent entity for residents of SS;
- exemption from payment of corporate property tax (its regional component) for the investment period.

At the municipal level (within transferred or expanded powers):

- establishment of benefits for land tax and personal property tax for individual entrepreneurs and self-employed individuals (for business objects) for the duration of the investment project;
- application of reduction coefficients to rental rates for municipal property and land plots;
- reduction of administrative procedures according to the “one contact” principle for projects implemented on the territory of the SS.

The growth of tax potential and revenues of local budgets is ensured not by directly increasing deduction standards, but indirectly – through expanding the tax base as a result of attracting new investments and creating jobs. It is private investment, stimulated by the listed preferences, that forms a stable revenue increase, replacing transfer dependence.

The issue of developing social, engineering, utility, and transport infrastructure of the SS deserves special attention. In the current version of the SDS-2030, infrastructural development is positioned as the main tool for implementing social guarantees. However, in the absence of economic incentives, infrastructure investments do not create a multiplier effect and are not converted into growth of the revenue base.

In the proposed stimulating model, infrastructural development is seen not as a goal, but as a necessary condition for attracting private

investment and triggering endogenous growth. This implies:

1) reorientation of infrastructure budget expenditures from point objects to the comprehensive development of investment sites (industrial parks, industrial sites, tourist clusters) with connected networks and engineering preparation;

2) integration of infrastructure sections into long-term development plans of SS, linking timelines, funding volumes, and responsible executors; in this regard, the performance criterion becomes not the volume of funds utilized, but the commissioning of facilities and the subsequent increase in private investment on the created infrastructure base;

3) use of mechanisms such as infrastructure budget loans, bonds, and concessions, repaid from future tax revenues from investment projects implemented in the SS territory;

4) differentiation of infrastructure standards depending on the functional type of SS: access roads and warehousing are priorities for logistics centers; for agro-industrial centers – energy capacity and water supply; for tourist centers – roads, communications, beautification.

Thus, infrastructure policy towards SS should be subordinated to the logic of economic self-development. Only in this case can support settlements perform the function of “growth points” for the surrounding territories and transform into effective instruments of spatial regulation.

### Discussion

The findings indicate the systemic nature of the issues in implementing the SS institution. The identified contradictions between the declared goals of growth and compensatory instruments are not accidental – they naturally stem from the persistent logic of unified budget equalization. This confirms theoretical concerns about the reproduction of a “dependency” model of development in the absence of a targeted stimulating policy.

The proposed model, integrating the principles of “smart specialization” and international experience, offers a way to overcome this systemic trap. Its key advantage is the rejection of unification in favor of targeted support for the competitive advantages of territories. However, its implementation will require overcoming institutional barriers, primarily the established system of inter-budgetary relations.

A limitation of the study is its focus on a qualitative analysis of the perception of the problem. Further work should be directed toward a quantitative assessment of the effectiveness of pilot projects implemented within the proposed paradigm.

### Conclusion

The conducted research allows us to draw a fundamental conclusion about the systemic nature of the problems associated with the implementation of support settlements in the Spatial Development Strategy until 2030. The empirical data obtained from document analysis and expert interviews convincingly demonstrate that the SS institution in its current methodological and regulatory form not only fails to solve the issue of reducing spatial disparities but also reproduces the vicious model of “transfer dependence”, systematically entrenching the chronic dependence of territories on budget transfers. The identified set of fundamental contradictions between the declarative goals of growth and compensatory instruments, the logic of selecting “problem” areas and the expected

results of self-development, indicates a deep methodological crisis in the approach to periphery development.

Overcoming these systemic dysfunctions requires not partial adjustments or an increase in the volume of transfers, but a genuine paradigmatic shift in the philosophy of regional policy – a decisive transition from unified budget equalization to a strategy of purposefully creating and supporting endogenous competitive advantages. The stimulating model developed in this study, integrating a functional typology of settlements, targeted special economic regimes, a clear legislative delineation of powers between levels of government, and long-term program financing, outlines the specific institutional framework of this necessary transition. Its implementation will allow reorienting management from criteria of fund utilization to indicators of real economic growth – an increase in tax revenues, investments, and the creation of new jobs.

It is precisely this comprehensive, institutionally-oriented approach that will make it possible in practice to transform support settlements from passive recipients of aid into real growth points and drivers of spatial development. This will ensure not artificial, but organic development, based on unlocking and utilizing the maximum unique internal potential of each territory, which will ultimately contribute to strengthening not only regional but also national economic resilience.

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## Digital Divide in Russia's Regions: Assessment and Priorities in the Context of Achieving National Development Goals



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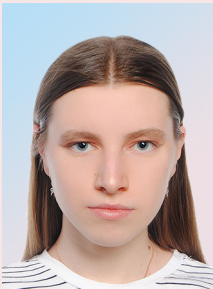
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**Abstract.** The persistent spatial differentiation in digitalization levels across Russian regions underscores the urgent need to identify the determinants of the digital divide to inform effective state policy. This study aims to identify and econometrically assess the key determinants shaping this divide across three structural levels – inequality in access, quality of use, and the ability to derive benefits – for three primary stakeholders: households, businesses, and the state. The scientific novelty of this research lies in its comprehensive, panel-data analysis of determinants across these three user groups and its identification of paradoxical relationships within the digitalization adoption. Employing fixed effects models on data from 82 Russian regions for the period 2017–2023, the analysis reveals a stable and significant influence of economic factors on all levels of the digital divide. Specifically, rising Internet service provider (ISP) charges and an increased share of the population in poverty are found to significantly reduce household access and digital

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activity. For the business sector, however, the analysis uncovers paradoxical relationships, which are likely attributable to the structure of official statistical data. The study also establishes that elderly populations demonstrate high digital activity, potentially as a means to compensate for offline limitations, while satisfaction with digital public services is unexpectedly higher in more depressed regions, a phenomenon explained by adapted expectations. The findings confirm the sector-specific nature of the determinants, necessitating differentiated policy measures. Furthermore, spatial analysis indicates a poor diffusion of innovations from digitalization centers to peripheral regions, highlighting a critical challenge for equitable development.

**Key words:** digital divide, digital inequality, households, business, public sector, fixed effects models, regional economy, Russian regions.

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### Introduction

The digital transformation of society, heralded as the fourth industrial revolution, promises not only unprecedented opportunities for economic growth, social inclusion, and access to knowledge but also new forms of social stratification. Traditional constraints are gradually being replaced by digital inequality – a complex issue involving differentiation in access to information and communication technologies (ICT), as well as in their use and benefits derived from them. However, a static understanding of inequality as just internet access is becoming irrelevant to a rapidly changing technological environment. Today, the focus shifts to the dynamic and multidimensional concept of the digital divide, reflecting differences in infrastructure availability, as well as a growing gap in skills, quality of use, and the ability to derive capital from the digital environment.

The term “digital divide” was coined in academic discourse in a 1995 report by the U.S.

National Telecommunications and Information Administration, which highlighted the differentiation in access to telecommunications technologies among various socio-geographic groups<sup>1</sup>. Although the phenomenon had been discussed earlier in public discourse, this report provided a systematic definition, framing it as inequality in possessing information resources due to differences in the availability of telephony, computers, and the internet between residents of rural and urban areas, low-income groups, racial minorities, and the rest of the population. U.S. President Bill Clinton played a significant role in popularizing the term, using it in public speeches and expanding its meaning to highlight the gap between those included in and excluded from the digital economy<sup>2</sup>. He emphasized the need to overcome this inequality, identifying its key parameters: income level, education, geographic location, and race.

<sup>1</sup> United States. National Telecommunications and Information Administration. *Falling Through the Net: Defining the Digital Divide: A Report on the Telecommunications and Information Technology Gap in America*. US Department of Commerce, National Telecommunications and Information Administration, 1999.

<sup>2</sup> Remarks to the National Academy Foundation Conference in Anaheim, California. Available at: <https://www.presidency.ucsb.edu/documents/remarks-the-national-academy-foundation-conference-anaheim-california> (accessed: 15.04.2025).

The term gained further academic grounding in the work of sociologist Pippa Norris (Norris, 2003), who defined it as inequality in access to digital technologies between socially vulnerable and advantaged population groups. Norris proposed a multi-level concept, distinguishing a global dimension (the disparity between developed and developing countries), a social dimension (internal differences based on income, education, age, and race), and a democratic dimension (inequality in the use of digital resources for political participation). In 2001, the Organization for Economic Co-operation and Development (OECD) brought the term into the international policy agenda, cementing it in the report “Understanding the Digital Divide”. According to the OECD, the digital divide characterizes the imbalance between different socio-economic entities not only in opportunities to access ICT but also in the intensity of their use for a wide range of tasks, including commercial activity<sup>3</sup>. So, the emphasis has shifted to the comprehensive use of ICT, a broader issue than just internet access.

The modern concept of digital inequality is structured across three levels. The first level involves inequality in access to ICT, driven by differences in infrastructure availability, economic affordability of equipment and access for socially vulnerable groups and remote areas (Attewell, 2001). The second level is characterized by inequality in the quality of use of digital technologies, where the key factor is the differentiation of digital competencies. The effectiveness of technology use varies depending on the socio-economic context – from educational practices to professional application (Zhuravlev, Chaadaev, 2024). Even with technical skills, the problem of inefficient use of ICT potential persists, for example, when passive content consumption predominates over its creation (Gladkova et al., 2019).

<sup>3</sup> Understanding the Digital Divide. OECD Digital Economy Papers. No. 49. Paris: OECD Publishing. DOI: <http://dx.doi.org/10.1787/236405667766>

The third, most complex level of inequality is related to the opportunities to derive benefits from using digital technologies and “digital capital” concept. Following the Weberian approach of Ragnedda, digital capital represents a set of resources (infrastructural and cognitive) that allow transforming technological opportunities into positive changes in quality of life (Ragnedda, 2017). This level integrates the previous ones, as deriving benefits is impossible without basic access and developed competencies (Rastvortseva, Panasiuk, 2025). The third level is particularly significant for regional economies, as the concentration of digital capital in developed regions leads to deepening disparities in labor productivity (Zhuravlev, 2018), increased dependence of peripheral territories on federal digital platforms (Uskova, Kozhevnikov, 2013), and out-migration of highly qualified personnel to digital clusters, limiting the economic potential of depressed regions (Derevtsova et al., 2021).

A digital divide is evident among Russian regions (Basova, 2021; Kozhevnikov, 2019). For instance, according to Rosstat data for 2023, in leading regions (Moscow, Saint Petersburg, Republic of Tatarstan) the share of households with broadband internet access exceeds 90%, while in a number of other regions (Novgorod, Tver, Orel, Tambov, Kostroma regions) this figure remains below 80%, and the gap can be even more significant for organizations. This differentiation directly affects the quality of life of citizens, business competitiveness, and public administration efficiency, creating “digital peripheries” with limited development opportunities.

Research on social inequality between urban and rural populations has shown the need for state support for socially vulnerable families and low-income households in organizing access to ICT (Kostyaev, 2024). A study by A.I. Ivanova identified key factors of digital inequality for three stakeholder groups – households (internet access is influenced

by age, education level, and ICT subsidies, while quality of use is influenced by regional ICT expenditures), the state (the share of the elderly constrains development, while digitalization subsidies stimulate both access and use of services), and business (digitalization is slower in densely populated southern regions due to cultural specifics, demand for e-commerce depends on education, and business subsidies showed no significant effect) (Ivanova, 2023).

We think that the levels of the digital divide may manifest differently for each group of Russia’s constituent entities (Fig. 1). Understanding the factors shaping its key components across three levels for different economic sectors will enable more targeted and effective digitalization policies in the regions.

Addressing digital inequality is key to achieving Russia’s national development goals formulated in strategic documents. Primarily, this includes the “Strategy for the Development of the Information

Society in the Russian Federation for 2017–2030”<sup>4</sup>, which sets the task of eliminating digital inequality and ensuring across-the-board access to reliable and fast internet networking. Its implementation is detailed in the national program “Digital Economy of the Russian Federation”, where one of the priorities is overcoming gaps in digital infrastructure between regions.

Furthermore, tasks to reduce digital inequality are integrated into the Presidential Decree “On National Development Goals until 2030”<sup>5</sup>, particularly the issues of ensuring “digital transformation” and improving citizen well-being.

The goal of this study is to identify and conduct an econometric assessment of the key determinants shaping the digital divide in Russian regions across three structural levels (inequality in access, quality of use, and opportunities to derive benefits) for three key stakeholder groups – households, business, and the state.

Figure 1. Indicators of the three levels of the digital divide for different economic sectors in Russian regions

	Digital divide Level I	Digital divide Level II	Digital divide Level III
Households	Share of households with broadband internet	Level of daily internet use among population	Prevalence of online shopping among population
Business	Share of organizations with broadband internet	Prevalence of cloud services among organizations	Share of e-commerce in retail turnover
State	Share of state and local authorities with internet speed of at least 2 Mbps	Population engagement in interaction with authorities	Satisfaction with quality of electronic services

Source: own compilation.

<sup>4</sup> On the Strategy for the Development of the Information Society in the Russian Federation for 2017–2030: Presidential Decree 203, dated May 9, 2017. Available at: <https://base.garant.ru/71670570> (accessed: 14.12.2025).

<sup>5</sup> On the national development goals of the Russian Federation for the period up to 2030 and for the future until 2036: Presidential Decree 309, dated May 7, 2024. Available at: <https://www.consultant.ru/law/hotdocs/84648.html> (accessed: 14.12.2025).

### Research methodology and rationale for its selection

The primary method was panel data econometric analysis. Three approaches were used for model building: pooled regression, random effects regression, and fixed effects regression. The correct model specification was determined using the Breusch – Pagan and the Hausman statistical tests. Gretl econometrics package was used for the analysis. It was found that in all cases, fixed effects regression models performed best.

The criteria for qualitative assessment of econometric models in panel data research include theoretical justification of variables, statistical significance of coefficients (*p-value*), coefficient of determination ( $R^2$ ), fulfillment of key assumptions (absence of multicollinearity and autocorrelation of residuals), and testing for heteroskedasticity using robust standard errors. In this work, the choice of the fixed effects (*FE*) model was statistically and substantively justified. First, the Breusch – Pagan test rejected the null hypothesis of no individual regional effects, indicating the inadequacy of the pooled *OLS* regression. Then, the Hausman test, showing statistical significance, rejected the assumption of the random effects (*RE*) model about the non-correlation of individual effects with regressors. Since such constant but unobserved regional characteristics (e.g., geographic location, historically formed institutional environment) almost certainly affect both the level of digitalization and economic-demographic indicators, the *FE* model is appropriate. It allows eliminating the influence of time-invariant regional characteristics and estimating effects solely based on intraregional dynamics over the 2017–2023 period, providing consistent estimates of the correlation between regressors and levels of the digital divide.

The dependent variables were defined as indicators of the three levels of the digital divide for different stakeholder groups, presented in *Figure 1*.

Independent variables in the models:

1) *Pop\_urbaniz* – share of urban population in the total population, % (+ a positive impact on indicators is assumed) (Shabunova et al., 2020; Kostyaev, 2024; Fong, 2009; Rastvortseva, Manaeva, 2022);

2) *Pop\_women* – share of women in the total population, % (- a negative impact) (Antonio, Tuffley, 2014; Acilar, Sæbø, 2023);

3) *Pop\_pension* – share of population aged 65 and over, % (-) (Gruzdeva, 2022a; Van Dijk, 2013; Krueger et al., 2018);

4) *Empl\_educ* – share of the employed with higher education, % (+) (Cruz-Jesus et al., 2016; Soomro et al., 2020);

5) *Inst\_inform* – share of employment in the informal sector, % (-) (Anakpo et al., 2023; Dutta et al., 2023);

6) *Inst\_small\_bus* – share of micro and small enterprises in the total number of enterprises, % (+) (Duncombe, Heeks, 2002; Arendt, 2008);

7) *Econ\_paym* – share of ISP charges in average income, % (-) (Martin, Robinson, 2007);

8) *Econ\_Inequal* – Gini index, % (-) (Fidan, 2016);

9) *Econ\_food* – share of food expenditures in total expenditures, % (-) (Nanthikesan, 2000; Zhang, 2013);

10) *Econ\_poverty* – population with income below the poverty line, % (-) (Gruzdeva, 2022b; Norris, Inglehart, 2013; Wamuyu, 2017).

Data source: open statistical data from the annual publications “Regions of Russia” for 2018–2024 and the Rosstat statistical survey<sup>6</sup>. Research objects: 82 constituent entities of the Russian Federation, period: 2017–2023<sup>7</sup>. The sample comprises 574 observations.

<sup>6</sup> Selective federal statistical monitoring of the use of ICT networks by the population. Federal State Statistics Service. Available at: [https://rosstat.gov.ru/free\\_doc/new\\_site/business/it/ikt24/index.html](https://rosstat.gov.ru/free_doc/new_site/business/it/ikt24/index.html) (accessed: 30.08.2025).

<sup>7</sup> In 2017, the Russian Federation adopted the Information Society Development Strategy until 2030.

**Research results**

Let us consider the distribution of digital divide indicators across all three levels for households in Russian regions (*Fig. 2–4*).

Analysis of the share of households with broadband internet showed that in 2023, 87.3% of households had access to it. The highest growth in this indicator is demonstrated by regions with major

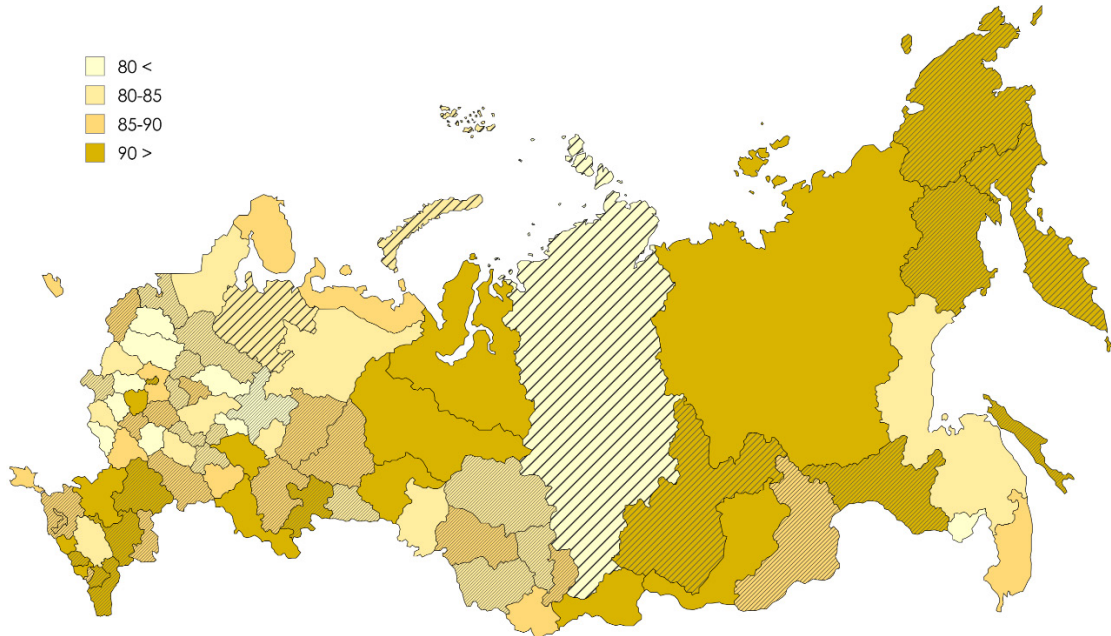


Figure 2. Share of households with broadband internet, 2023, %

Note: regions with growth rates above average in 2017–2023 are shaded.

Source: own compilation.

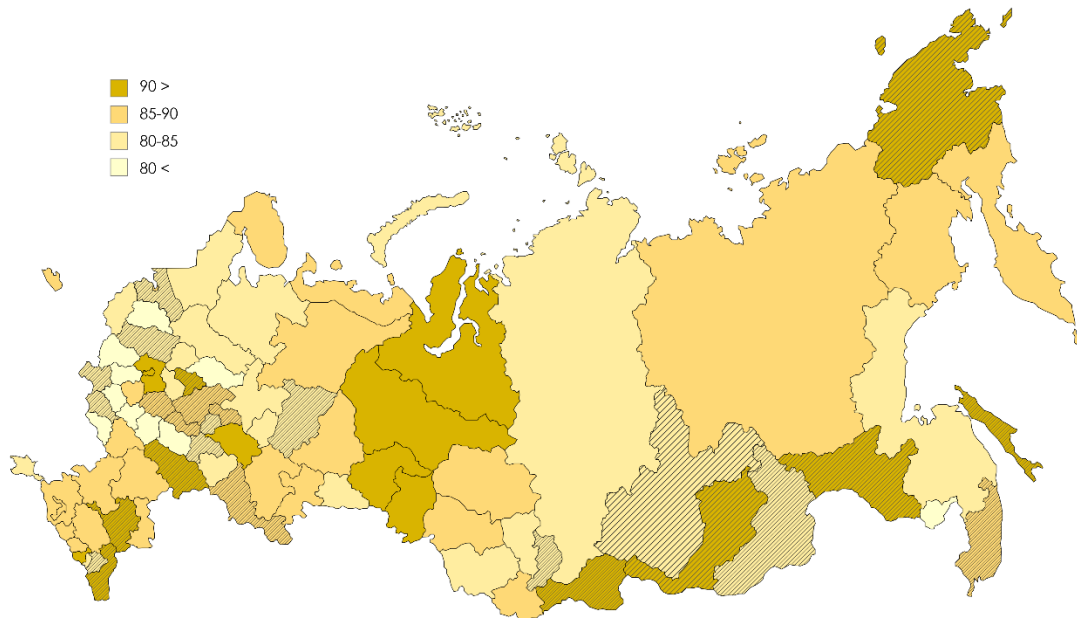


Figure 3. Level of daily internet use among the population in Russian regions, 2023, %

Note: regions with growth rates above average in 2017–2023 are shaded.

Source: own compilation.

investment projects and support for innovative business (Republic of Tatarstan, Moscow, Chechen Republic) and northern territories, where digital infrastructure compensates for geographic remoteness. Notably, high indicators are also observed in southern regions stimulated by tourism sector development and in sparsely populated regions where it is easier to achieve full coverage. Conversely, agricultural regions lag behind due to the predominance of the elderly whose professional activities are not related to the online environment. Even active digitalization in some of these regions has not yet overcome the general lag.

The highest level of daily internet use is characteristic of developing regions (Republic of North Ossetia-Alania, Republic of Dagestan, Republic of Kalmykia) and remote territories (Chukotka Autonomous Area, Amur and Sakhalin regions). This is explained by the compensatory role of digital technologies: in conditions of limited access to offline opportunities for entertainment, education, professional activity, and communication (especially in mountainous and remote areas), the internet becomes a key channel. In this context,

high internet activity becomes a consequence of unfavorable socio-economic conditions.

The assumption that innovations diffuse from the center to neighboring regions can also be rejected. For example, the southeastern semi-circle around Moscow shows a lag in the adoption of IT. Constraining factors include the aging rural population and low resource availability, which is typical for northwestern territories, where high connection costs and relatively low incomes hinder the acquisition of devices and payment for high-speed access. This suggests that digital skills can form even under conditions of resource scarcity.

The spatial differentiation in the spread of online shopping in Russia demonstrates a pronounced dependence on the socio-economic characteristics of regions. The leadership of capital agglomerations and the innovation center (e.g., Republic of Tatarstan), as well as the influence of the neighborhood effect, confirms the role of economic development and infrastructural proximity as drivers of growth. In remote regions (Republic of Kalmykia, Republic of Buryatia, northern autonomous areas), e-commerce compensates for

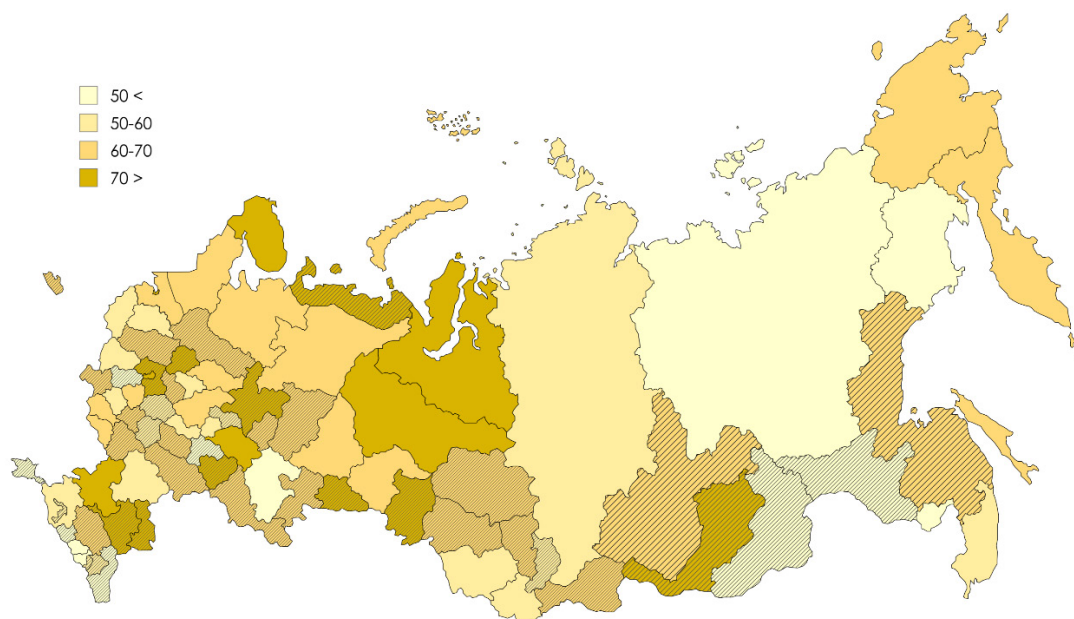


Figure 4. Prevalence of online shopping among the population in Russian regions, 2023, %

Note: regions with growth rates above average in 2017–2023 are shaded.

Source: own compilation.

offline trade, while low activity in other peripheral constituent entities is associated with remoteness, a high share of elderly people, and limited incentives for business diversification, indicating significant potential for further industry growth.

Three built models of factor influence on these three indicators are presented in *Table 1*.

The analysis revealed a statistically significant negative relationship between the share of ISP charges in income and the prevalence of broadband internet access: a 1% increase in ISP charges leads to a 5.87% decrease in the share of households with internet access. Digital accessibility is negatively

related to the share of those with incomes below the poverty line: an increase in this indicator reduces broadband access by 2.9%. A positive correlation with the share of food expenditures was found, likely mediated by a general increase in income and welfare stimulating online consumption (Olumekor et al., 2024). An increase in the share of the informal economy reduces household internet access by 0.33%, reflecting regional economic distress<sup>8</sup>. Among demographic factors, the share of women has a positive influence: a 1% increase raises accessibility by 0.01%, which is associated with their higher internet activity<sup>9</sup>.

Table 1. Models of factor influence on the digital divide in Russian regions for households

Variable	Model 1		Model 2		Model 3	
	Values of coefficients	HDE	Values of coefficients	HDE	Values of coefficients	HDE
Dependent variable	Share of households with broadband internet		Level of daily internet use among population		Prevalence of online shopping among population	
<i>const</i>	103.022		206.246		190.357	
<i>Econ_paym</i>	-5.86872*** (<0.0001)	-	-6.72647*** (<0.0001)	-	-6.49025*** (<0.0001)	-
<i>Econ_food</i>	0.577059*** (<0.0001)	-	0.286635*** (0.0069)	-		
<i>Econ_poverty</i>	-2.08662*** (<0.0001)	-	-3.15031*** (<0.0001)	-	-3.51617*** (<0.0001)	-
<i>Econ_inequal</i>			-2.53034*** (<0.0001)	-	-2.35555*** (<0.0001)	-
<i>Pop_pension</i>			0.303511*** (<0.0001)	-	0.335796*** (<0.0001)	-
<i>Pop_women</i>	0.00972588*** (0.0046)	-				
<i>Inst_inform</i>	-0.330099*** (0.0031)	-			-0.47624*** (0.0037)	-
<i>Inst_small_bus</i>					0.06118*** (0.0041)	+
R-squared	0.723586		0.765169		0.736065	
Standard error of model	5.402668		5.552066		7.898893	
Number of observations	574		574		574	
<p>*p &lt; 0.1;  **p &lt; 0.05;  ***p &lt; 0.01.  Note: p-values are in parentheses; HDE – hypothesized direction of effect.  Source: own compilation.</p>						

<sup>8</sup> Informal employment is growing along with the economy. Available at: <https://www.vedomosti.ru/economics/articles/2021/09/14/886678-tenevaya-zanyatost> (accessed: 04.05.2025).

<sup>9</sup> Women are the most active internet users. Available at: [https://rapsinews.ru/digital\\_law\\_news/20231207/309451985.html](https://rapsinews.ru/digital_law_news/20231207/309451985.html) (accessed: 04.05.2025).

Lack of high income limits the possibility of high-speed connections with large data traffic, forcing reduced usage. The Gini coefficient shows a negative correlation: a high level of economic inequality, meaning income concentration in a small group, leads to a 2.5% reduction in daily internet use due to its inaccessibility for broader segments. Low accessibility fosters weak digital competence due to a lack of conditions for acquiring and practicing relevant skills. A paradoxical positive relationship was identified with the share of the elderly: its increase raises the frequency of internet use by 0.3%, explained by this user group’s specific digital skills for solving practical tasks and the need to maintain social connections (Kochetkov, Melnikova, 2024).

The conducted econometric analysis confirms the relationship of the third level of digital inequality, manifested in using the internet for online shopping, with factors from the first and second levels, such as access and competencies. The population’s ability to derive advantages from

digitalization is seriously undermined by a set of unfavorable economic factors. At the same time, a positive correlation between the share of online shopping and the share of the elderly was identified: a 1% increase raises the indicator by 0.33%, explained by the online environment’s function of providing access to goods in conditions of limited physical mobility. Furthermore, this indicator is positively connected with the density of micro and small organizations: their increase per thousand people raises the level of online shopping by 0.06%, as this sector provides competitive local supply, stimulating service use.

Let us consider the distribution of Russian regions by digital divide indicators among organizations (*Fig. 5–7*).

Digital inequality in the business sector, as for households, is largely due to differences in the broadband internet access. Analysis shows that in recent years, the share of organizations with broadband internet access has been declining in most regions.

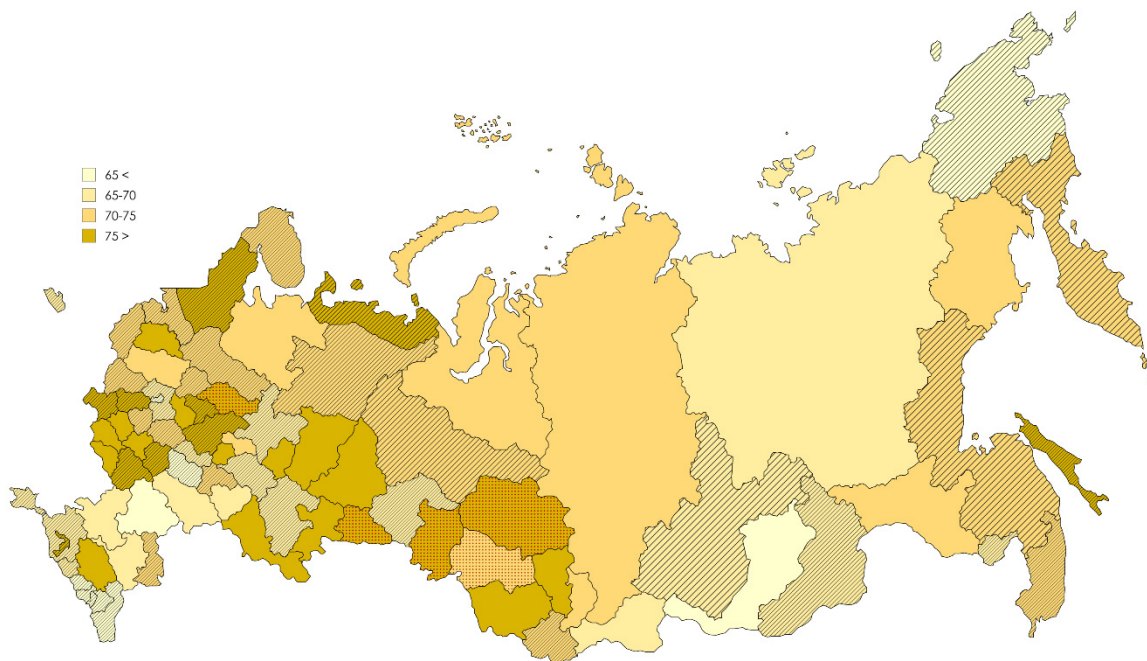


Figure 5. Share of organizations with broadband internet in Russian regions, 2023, %

Note: regions with growth rates above average in 2017–2023 are shaded.

Source: own compilation.

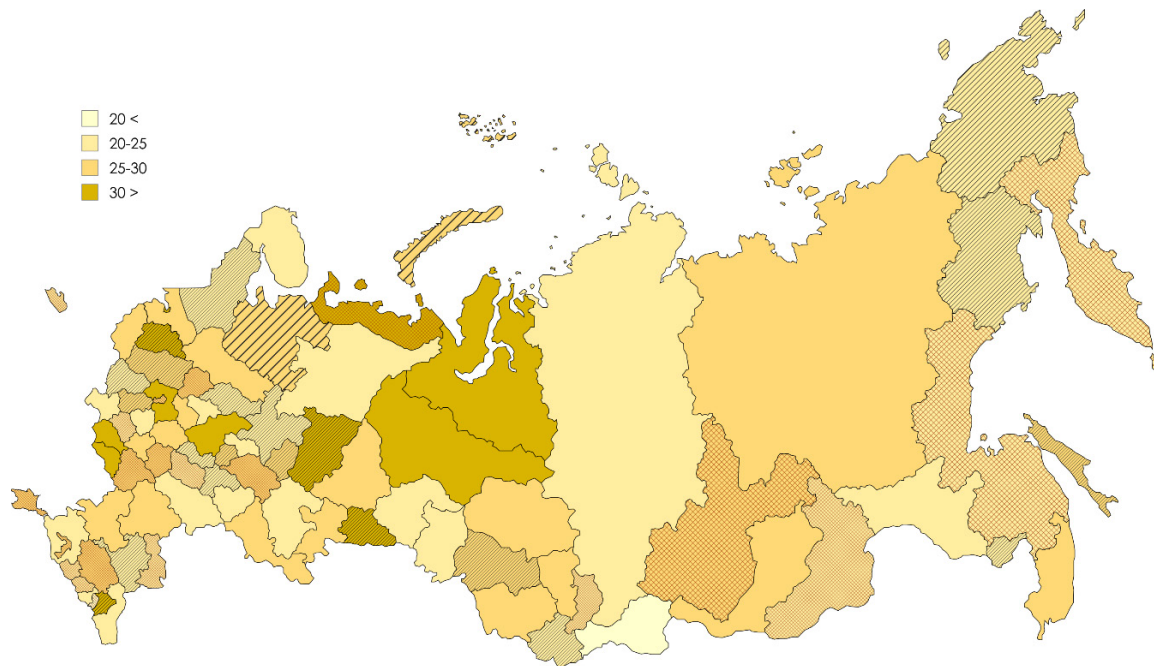


Figure 6. Prevalence of cloud services among organizations in Russian regions, 2023, %

Note: regions with growth rates above average in 2017–2023 are shaded.

Source: own compilation.

A negative relationship between internet access of households and organizations is observed in a number of leading regions, such as Orenburg, Kaluga, Orel, Belgorod regions, Republic of Udmurtia, Altai Territory and Kemerovo Region, where broadband internet access of organizations likely acts as a factor for entering new markets and developing. The Tomsk Region's growth is associated with the implementation of the federal project "Information Infrastructure" and the presence of knowledge-intensive structures requiring stable connectivity<sup>10</sup>. Meanwhile, the decrease in internet provision for organizations in southern regions, Moscow, Saint Petersburg, and Republic of Tatarstan may be explained by the spread of informal connection schemes through

<sup>10</sup> Another 15 small villages in the Tomsk Region will have internet access in 2023. Available at: <https://www.tvtomsk.ru/news/84182-esche-15-malyh-sel-v-tomskoj-oblasti-podkljuchat-k-internetu-v-2023-godu.html> (accessed: 29.04.2025).

individuals, as well as the post-pandemic shift to remote work, where employees use personal connections accounted for in household statistics.

The observed increase in the share of organizations using cloud services, from 20.5% in 2017 to 26.7% in 2023, is characterized by significant interregional differentiation. The leadership of constituent entities such as the Novgorod Region is linked to the implementation of targeted IT business support programs<sup>11</sup>, while in the Chechen Republic, adoption is driven by the needs of key economic sectors – trade and construction. High indicators in a number of other regions are explained by the presence of large IT companies expanding interregional interaction. However, after 2022, in some regions, including the Republic of Tatarstan, growth rates have slowed or turned negative, possibly due to the

<sup>11</sup> New measures to support IT specialists are implemented in the Novgorod Region. Available at: <https://mindigital.novreg.ru/medianews/news/836> (accessed: 29.04.2025).

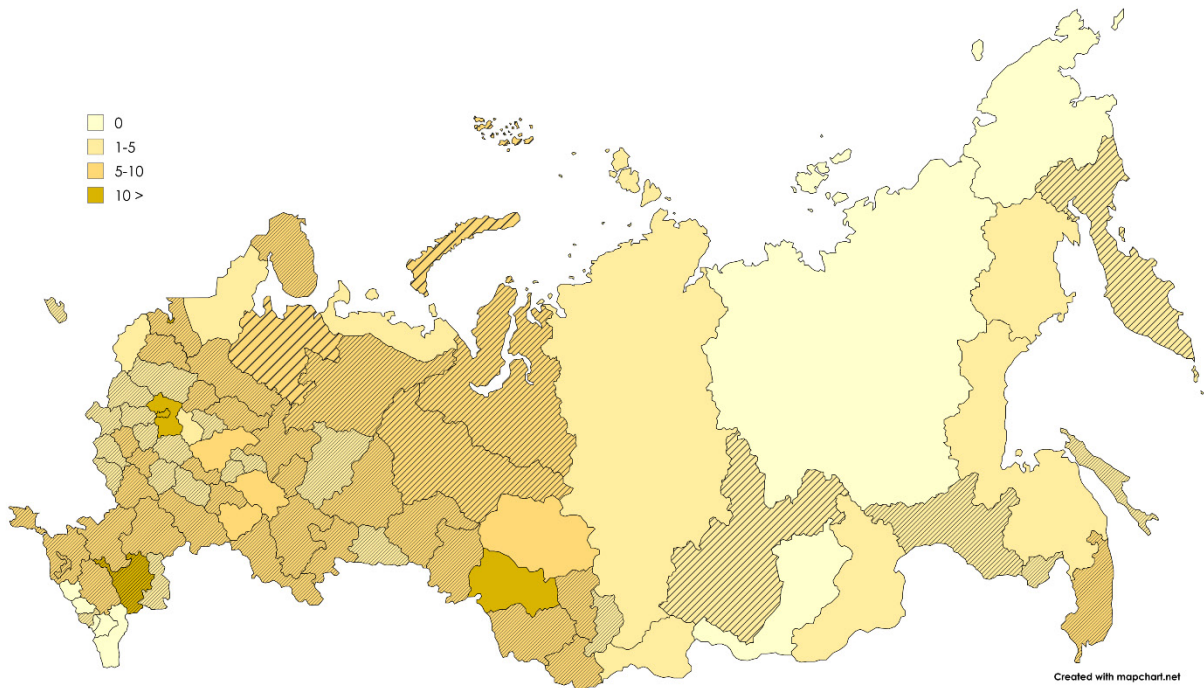


Figure 7. Share of e-commerce in retail turnover in Russian regions, 2023, %

Note: regions with growth rates above average in 2017–2023 are shaded.

Source: own compilation.

departure of international IT companies and the transition of some organizations to domestic or proprietary technological solutions during the adaptation period, which may impact the level of digital competencies in professional activity in the future.

The third level of differentiation among organizations is determined by the share of online sales in total retail turnover. At the national level in 2023, this indicator reached 8.1%, which is more than a six-fold increase from 2017 and reflects the overall trend. The Republic of Kalmykia demonstrates exceptional dynamics: its share of online sales increased several-fold in 2022–2023, correlating with the growth in the number of online stores by one-third. Traditionally high indicators are characteristic of Moscow, Moscow

Region, and Saint Petersburg, where solvent consumer demand and a focus on time saving stimulate the development of online services. Expansion of e-commerce is observed eastward from these innovation clusters, accompanied by the development of regional logistics infrastructure and the launch of delivery services by local offline stores, facilitated by low initial competition. High growth rates are also noted in Far Eastern border regions, where re-export activities using foreign goods are developed. Meanwhile, low online sales values in regions adjacent to the Moscow agglomeration are explained by the availability of more competitive goods from the central cluster, limiting incentives for developing local internet platforms.

Let us define the factors shaping the digital divide for business across three levels (*Tab. 2*).

Table 2. Models of factor influence on the digital divide for business in Russian regions

Variable	Model 4		Model 5		Model 6	
	Values of coefficients	HDE	Values of coefficients	HDE	Values of coefficients	HDE
Dependent variable	Share of organizations with broadband internet		Prevalence of cloud services among organizations		Share of e-commerce in retail turnover	
<i>const</i>	41.0952		-11.8994		7.82935	
<i>Econ_paym</i>	4.33742*** (0.0026)	-				
<i>Econ_food</i>	-0.641560*** (0.0002)	-				
<i>Econ_poverty</i>	1.06756*** (0.0009)	-	-0.550377*** (<0.0001)	-	-0.77296*** (<0.0001)	-
<i>Econ_inequal</i>	2.00355*** (0.0009)	-	-2.53034*** (<0.0001)	-		
<i>Pop_urbaniz</i>			1.00442*** (<0.0001)	+		
<i>Pop_pension</i>	-0.486757*** (<0.0001)	-			0.137196*** (<0.0001)	-
<i>Empl_educ</i>	-0.862195*** (<0.0001)	+				
<i>Inst_small_bus</i>					0.022634*** (0.0002)	+
R-squared	0.454307		0.677729		0.612755	
Standard error of model	8.904748		3.112697		1.956002	
Number of observations	574		574		574	
<p>*p &lt; 0,1;  **p &lt; 0,05;  ***p &lt; 0,01.  Note: p-values are in parentheses; HDE – hypothesized direction of effect.  Source: own compilation.</p>						

The analysis revealed a paradoxical positive correlation between the relative cost of internet services and their availability for organizations. Rising costs are associated with infrastructure development. Meanwhile, the greatest availability is noted in economically lagging regions, whereas in developed Russian regions the share of connected organizations declines. This may be explained by incomplete statistical data on connections for individual entrepreneurs and small enterprises, and the concentration of large internet consumers in wealthy regions.

At the second level of digital inequality, the use of cloud technologies shows an inverse relationship with regional economic well-being. A 1% increase

in the share of the population with incomes below the poverty line reduces the adoption of cloud solutions by 0.55%. The main consumers of these services are large companies in developed regions, where urbanization, not education level, is the key adoption factor.

At the third level, it was established that the share of online sales positively correlates with the activity of micro and small enterprises and the presence of the elderly people as a target audience, despite the overall decrease in the use of online channels in regions with high poverty shares. E-commerce allows small enterprises to expand their sales geography and increase operational efficiency.

Let us consider the development of the digital divide across three levels for the public sector in Russian regions (Fig. 8–10).

The first level of digital inequality in the public sector is characterized by the share of state authorities and local government bodies provided with the data transfer speed of at least 2 Mbps. By 2023, this indicator reached 72.6%, 12.5 p.p. higher than six years before. The most significant growth was recorded in 2020, when coronavirus pandemic countermeasures catalyzed the transition of interaction between state and local authorities, as well as communication with the population, to online formats, including rapid information dissemination via social networks. This leap was possible due to accelerated digitalization, supported in part by targeted state subsidies directed to specific regions.

Analysis of digitalization processes in public administration across Russian regions reveals significant differentiation. Undisputed leaders are Moscow and Saint Petersburg, the first to actively implement IT solutions in government processes. Among other regions, the Omsk Region stands out, achieving leading positions in the share of state and municipal authorities with internet access. There, the GIS “Unified Budget Process Management System” functions successfully, and the regional Ministry of Economy is integrated into the digital platform MSP.ru (SMEs) with prospects for its use by municipalities.

The Perm Territory demonstrates active development of digital infrastructure, possessing over 200 state information systems, 62 of which are key for the region. Its municipalities digital transformation is based on regular assessments by

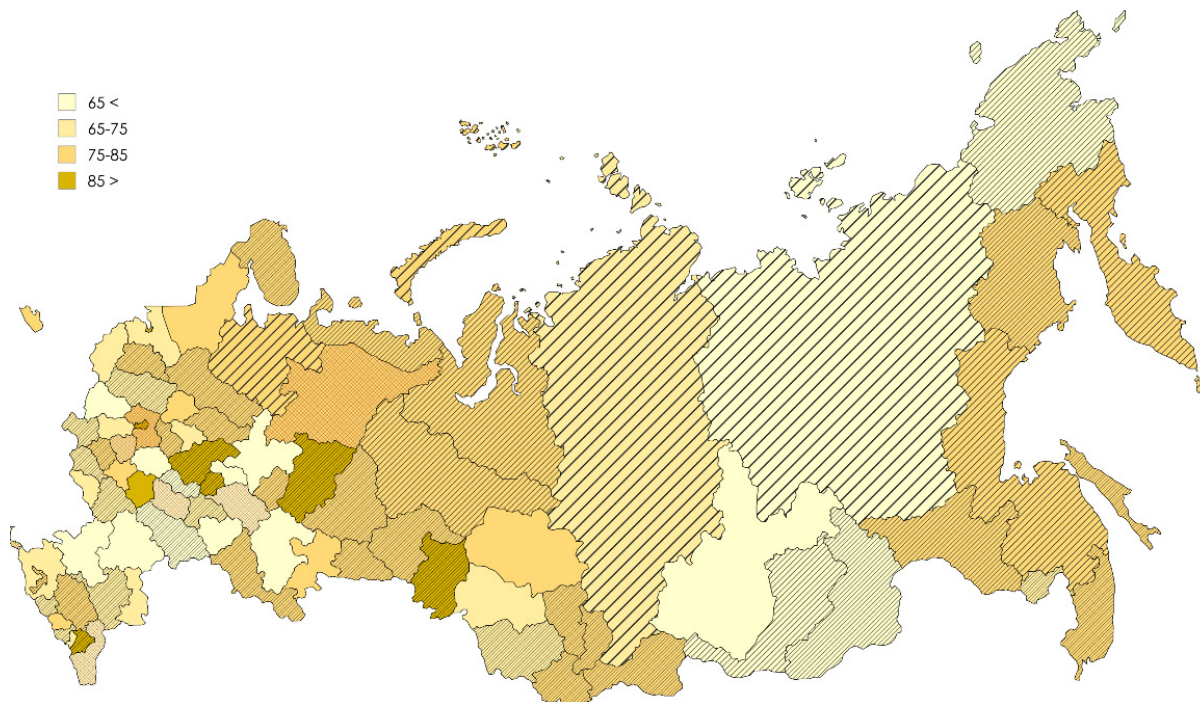


Figure 8. Share of state authorities and local government bodies with internet speed of at least 2 Mbps in Russian regions, 2023, %

Note: regions with growth rates above average in 2017–2023 are shaded.  
Source: own compilation.

seven target indicators, and business digitalization is supported<sup>12</sup>. Significant progress is observed in the Chechen Republic, where the level of digitalization has grown due to the implementation of a republican program<sup>13</sup>.

At the same time, in a number of regions, such as the Irkutsk, Ryazan, Volgograd, and Rostov regions, where socio-economic problems persist, digitalization is at around 60%, showing no substantial growth. The Republic of Tatarstan, a pioneer in providing the full range of 319 state and municipal services in digital form, faces the problem of high-speed internet accessibility. The most challenging situation is characteristic of the Chukotka Autonomous Area, the Penza Region,

and the Republic of Buryatia, where digital technologies in the public administration system are in the early stages of development.

According to 2023 data, the national average for population engagement in interaction with authorities reached 74.6%, indicating growth of over one-third in the six-year period in the intensity of citizen interaction with state and municipal authorities via the internet. This trend is also observed across Russian regions. The highest values are reached in the Krasnodar Territory, Voronezh and Ivanovo regions, and republics of Bashkortostan and Tyva. In these regions, the “Gosuslugi” platform is actively used mainly by low-income population groups to obtain information in the

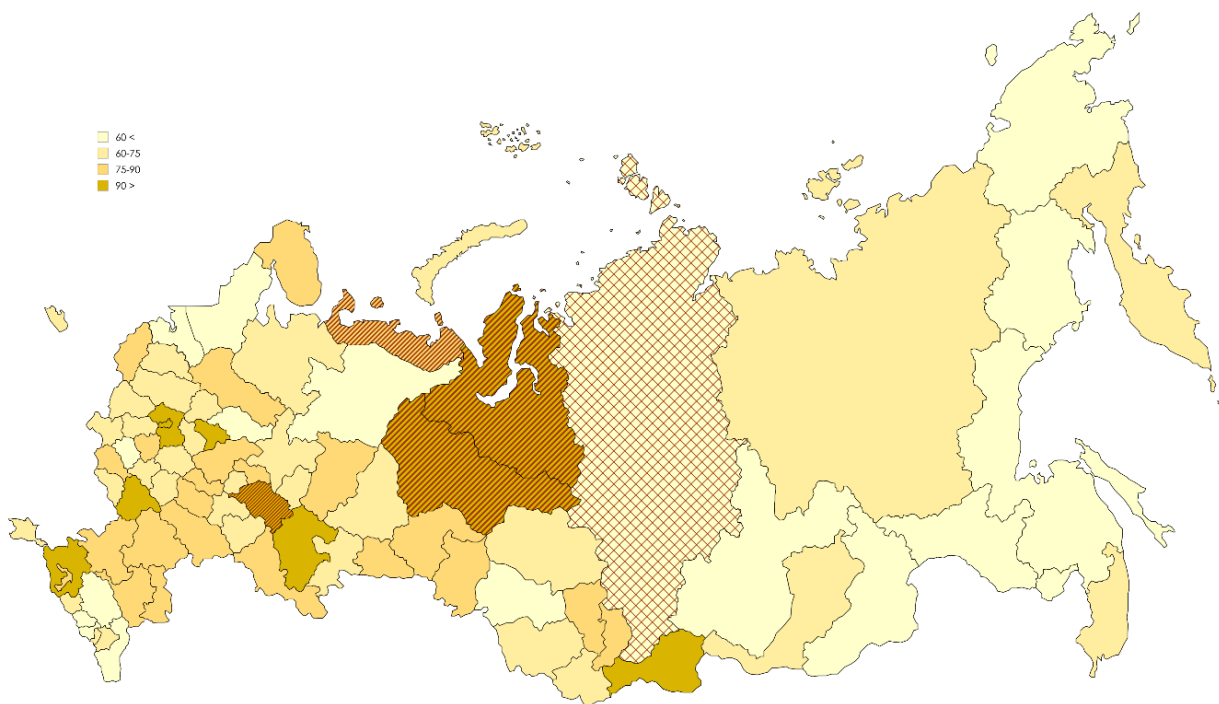


Figure 9. Population engagement in interaction with authorities in Russian regions, 2023, %

Note: regions with growth rates above average in 2017–2023 are shaded; cross-hatched regions show negative growth.  
Source: own compilation.

<sup>12</sup> Khinshtein A. Perm Territory's progress in digitalization is significant at the federal level. Available at: <https://permkrai.ru/news/aleksandr-khinshteyn-uspekhi-permskogo-kraya-po-tsfrovizatsii-znachimy-na-obshchefederalnom-urovne/> (accessed: 30.04.2025).

<sup>13</sup> Available at: [https://mtisshr.ru/index.php?option=com\\_content&view=article&id=%201719&Itemid=1720](https://mtisshr.ru/index.php?option=com_content&view=article&id=%201719&Itemid=1720) (accessed: 30.04.2025).



Figure 10. Satisfaction with the quality of electronic services in Russian regions, 2023, %

Note: regions with growth rates above average in 2017–2023 are shaded; cross-hatched regions show negative growth.  
Source: own compilation.

social sphere<sup>14</sup>. Meanwhile, the most significant lag is noted in regions of the South and Far East, where interaction with authorities is either underdeveloped or largely conducted in the traditional form of in-person visits, due to both cultural characteristics and insufficient development of civil society institutions.

The indicator of citizen satisfaction with the quality of public e-services reflects the third level of inequality in the public sector. By 2023, the share of satisfied users was 49.8%, 20% lower than 2017 values. This trend is predominant for most regions.

The greatest lag in satisfaction with the quality of public electronic services is recorded in the Pskov, Voronezh, Kaluga, Magadan, and Amur regions, as well as the republics of Altai and Mari El, where

digitalization processes are implemented less intensively compared to other Russian regions. The consequence is limited availability of socially significant services, especially those in high demand in depressed regions. According to Rosstat data, in the Pskov Region, 12.1% of the population marked this reason as the main factor for refusing to use electronic public services.

An additional factor exacerbating the situation is the low socio-economic development of these regions, where elderly people predominate, preferring in-person interaction through multi-functional public services centers (MPSCs) not only for resolving administrative issues but also for satisfying the need for social communication.

<sup>14</sup> 98% of residents of the Ivanovo Region are registered on Gosuslugi. Available at: [https://i3vestno.ru/news/2024/01/25/na\\_gosuslugah\\_est\\_98\\_zhiteley\\_ivanovskoy\\_oblastir](https://i3vestno.ru/news/2024/01/25/na_gosuslugah_est_98_zhiteley_ivanovskoy_oblastir) (accessed: 30.04.2025).

The leading group in terms of satisfaction includes the Samara and Leningrad regions, the Rostov Region, the Republic of Tatarstan, and the Kabardino-Balkarian Republic. These regions are characterized by relatively high economic development within their federal districts, contributing to the formation of a more financially secure and educated population possessing the necessary skills, opportunities, and resources to effectively use digital public services.

Let us define the influence of factors on the formation of the digital divide in the public sector (Tab. 3).

The econometric analysis allowed determining broadband internet accessibility for authorities, where the growth of ISP charges reduce connec-

tions by 5.89%. Socio-economic factors show multidirectional influence: improved financial well-being (increase in the share of food expenditures as a welfare indicator) increases internet accessibility for the public sector by 0.92%, while rising poverty and social inequality reduce it by 1.4 and 2.94% respectively. The educational level of the population positively correlates with digital infrastructure development (increase of 0.7%), and the presence of the informal sector stimulates public administration digitalization by 0.63% for enhanced control purposes. Electronic interaction between citizens and authorities intensifies with lower internet costs (increase of 6.11%) and rises in regions with significant shares of elderly (0.45%) and female populations

Table 3. Models of factor influence on the digital divide in Russian regions for the public sector

Variable	Model 7		Model 8		Model 9	
	Values of coefficients	HDE	Values of coefficients	HDE	Values of coefficients	HDE
Dependent variable	Share of state and local authorities with internet speed of at least 2 Mbps		Population engagement in interaction with authorities		Satisfaction with quality of electronic services	
<i>const</i>	140.919		183.443		-92.9155	
<i>Econ_paym</i>	-5.89839*** (0.0002)	-	-6.11085*** (<0.0001)	-		
<i>Econ_food</i>	0.921734*** (<0.0001)	-			-0.84133*** (0.0017)	-
<i>Econ_poverty</i>	-1.40137*** (<0.0001)	-	-4.18377*** (<0.0001)	-	6.27475*** (<0.0001)	-
<i>Econ_Inequal</i>	-2.94431*** (<0.0001)	-	-1.95192*** (0.0007)	-	2.87417*** (0.0021)	-
<i>Pop_women</i>			0.0157516*** (0.0083)	-		
<i>Pop_pension</i>			0.449120*** (<0.0001)	-	-0.4633*** (0.0010)	-
<i>Empl_educ</i>	0.707953*** (0.0020)	+				
<i>Inst_inform</i>	0.624537*** (0.0024)	-				
R-squared	0.537785		0.782276		0.577240	
Standard error of model	9.832942		9.368695		14.08579	
Number of observations	574		574		574	
*p < 0.1; **p < 0.05; ***p < 0.01. Note: p-values are in parentheses; HDE – hypothesized direction of effect. Source: own compilation.						

(0.02%), but decreases with rising poverty (-4.18%) and inequality (-1.95%). Satisfaction with digital public services decreases with higher expenditures on basic needs (-0.84%) and in the older age group (-0.46%), but increases in depressed regions with high poverty (+6.27%) and social segregation (+2.87%), which is explained by the population's adapted expectations.

The conducted research revealed persistent spatial differentiation of Russian regions by levels of digitalization. The key problem is three-tiered inequality, manifested in internet access, its use, and derived advantages. Despite high average household internet access rates (87.3%), significant lag persists in depressed and rural regions, due to infrastructure limitations and low demand. In the business environment, a paradoxical situation is recorded: a decline in formal access to 72.9% in the context of growing cloud service use (26.7%), indicating a structural transformation of digital practices.

The most acute problem in the public sector is the decline in satisfaction with the quality of electronic services to 49.8%, explained by the non-simultaneous technological and social adaptation, especially in regions with a predominant elderly population. Spatial analysis confirms the poor innovation diffusion from digitalization centers to peripheral regions, forming persistent clusters of the digital lag.

All three levels of digital inequality in the household, business, and public sectors are determined by economic conditions, particularly the share of the population with incomes below the poverty line, but the impact of these factors is sector-specific. For households, key constraints are the high relative cost of internet services and low incomes, while the elderly and women turned out to be active users due to needs for communication, online shopping, and solving everyday tasks. In the business sector, the prevalence of digital technologies is positively linked to urbanization

and small business development, though in less developed regions limitations arise from high connection costs and low purchasing power of demand. The public sector demonstrates dependence on budgetary constraints and regional economic well-being, while satisfaction with electronic services is higher among low-income groups, likely due to lowered expectations, whereas elderly citizens more often expressed dissatisfaction, stemming from a deficit of digital competencies.

### Conclusions

Based on the conducted econometric analysis of the determinants of digital inequality in Russian regions for households, business, and the public sector, some conclusions and policy recommendations can be formulated. The study confirms the persistent and multidimensional nature of digital inequality in Russian regions, which persists across three interconnected levels: access to infrastructure, quality of use, and the ability to derive benefits. A key systemic conclusion is the dominant role of economic factors, particularly population income levels and the relative cost of internet services, which significantly negatively impact all sectors and levels of digitalization. This indicates that measures focused solely on infrastructure development, without considering purchasing power and the overall economic well-being of territories, have limited effectiveness. State digitalization policy should be comprehensive, integrating with regional socio-economic development programs.

For the household sector, the priority is reducing financial barriers to access. The strong negative relationship between internet cost and its prevalence necessitates mechanisms for charges regulation or targeted subsidies for low-income groups and residents of remote territories. Simultaneously, it is important to develop digital literacy programs focused not only on basic skills but also on the effective use of online services for solving daily tasks, employment, and entrepreneurship. The identified

high digital activity of the elderly and women should be considered in inclusion programs, transforming from a forced compensation for offline deficits into a tool for improving quality of life.

In the business environment, policy should be sharply differentiated depending on company size and region. For micro and small enterprises, which are drivers of e-commerce, support is needed in the form of consulting services, preferential access to digital platforms, and support for solving logistics issues, especially in regions lagging in online sales share. For large businesses and organizations, where paradoxical statistics show declining formal connectivity alongside growing cloud service use, it is important to improve statistical accounting methodologies to adequately reflect real digital practices. A common priority is stimulating the adoption of cloud technologies and digital solutions in regions with low economic development through special investment programs and the creation of IT infrastructure hubs.

Digitalization of the public sector requires a shift from quantitative coverage indicators to service quality and user satisfaction. The critical decline in citizen satisfaction with electronic public services signals a gap between the technical possibility of providing a service and its real value to the user. Deep user adaptation of interfaces, simplification of procedures, and provision of technical support are needed, especially for elderly citizens. The positive link between satisfaction and poverty levels in regions reflects an effect of low expectations, which is an unsustainable basis for assessment. Therefore, the focus should shift toward improving the objective quality, speed, and transparency of services. Simultaneously, it is important to continue eliminating infrastructure gaps in providing high-speed internet to government bodies, especially at the municipal level.

A crucial strategic conclusion is the confirmation of poor spatial diffusion of digital innovations from leading central regions to the

periphery. Accordingly, persistent clusters of digital lag are formed and this requires targeted leveling policies, including the creation of regional digital competence centers, development of interregional IT partnerships, and implementation of infrastructure projects focused on territorial connectivity. Thus, overcoming digital inequality in Russia should become not a separate technological direction but a key element of comprehensive regional policy aimed at reducing socio-economic disparities and creating conditions for the inclusive development of all Russian territories.

#### **Debate on the results**

The results obtained in the study are representative and statistically significant but allow for alternative interpretations and reveal several debatable points. For example, the positive relationship between the share of the elderly and the level of daily internet use and the prevalence of online shopping may not be an indicator of successful digital inclusion so much as a reflection of structural imbalances in regional development. High internet activity in depressed and remote regions may signal not the overcoming but the reproduction of digital inequality, where the digital environment becomes a forced substitute for inaccessible offline services and does not necessarily translate into improved quality of life or digital capital.

The identified positive correlation between the cost of internet services and their availability for organizations contradicts basic postulates of economic theory and requires cautious interpretation. This result may be due to imperfect accounting of connection channels (use of employees' personal accounts) in developed regions, where actual business digitalization outpaces formal statistics. Consequently, the observed "decline" in access may reflect not a real regression but a shift in technological consumption models.

Debatable is also the conclusion about increased satisfaction with the quality of electronic public services in regions with a high share of poor

population. While this may be explained by adapted expectations, it cannot be ruled out that this effect is temporary and related to the initial positive perception of the very possibility of remote access to services. In the long term, as population demands grow and services become more complex, satisfaction may decline if formal service provision is not followed by a real increase in their quality, transparency, and convenience.

We believe that the conducted analysis, focusing on quantifiable determinants, has further development prospects for including qualitative aspects of the digital divide, such as user motivation, cultural barriers, and subjective perception of technologies. Further research requires the integration of mixed methods for a deeper understanding of the causal mechanisms behind the identified statistical patterns.

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## Assessment of Small and Medium-Sized Enterprise Development at the Regional Level



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**Abstract.** In the current context, there is a growing need to assess the development of small and medium-sized enterprises (SMEs) in the constituent entities of the Russian Federation, particularly regarding their contribution to ensuring the country's technological sovereignty. Such an assessment is essential for identifying reserves for regional development and formulating informed management decisions aimed at enhancing economic resilience amidst external challenges. The scientific problem addressed in this study stems from the need to bridge the methodological gap between existing approaches to assessing SME development (which do not fully account for the specific properties of SMEs that influence their potential in this area) and diagnostics of the level of regional technological sovereignty (which often overlook the role of the SME sector as a factor in its reinforcement). The aim of the work is to conduct a comprehensive assessment of SME development at the regional level as a component of the economic environment capable of contributing to the strengthening of state technological independence. Achieving this aim required elucidating the theoretical and methodological foundations and formulating assessment principles, as well as developing and testing a methodological toolkit using empirical data from the constituent entities of the Northwestern Federal District. Various types and combinations of scientific methods were employed in preparing the study, ranging from general scientific to specialized economic methods. A particular place is occupied by methods of economic sociology – a targeted expert survey and interviews – which made it possible to form an information array that served as the basis for testing the developed methodological toolkit. The approbation of the author's toolkit made it possible to compile a ranking of regions by the level of innovative activity of SMEs (this ranking is of particular significance since innovative activity is fundamental in the context of the task of strengthening technological sovereignty); identify the factors and directions through which small and medium-sized enterprises in regions with a relatively low level of SME innovative activity can contribute to ensuring technological sovereignty; assess the level of adaptation of small and medium-sized enterprises to conditions of constant changes in the external environment; and forecast the possibility of achieving partial technological sovereignty, including through the contribution of regional small and medium-sized enterprises.

**Key words:** small and medium-sized entrepreneurship, region, technological sovereignty, innovative activity, assessment, ranking, forecast.

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### **Introduction**

The entrepreneurial sector plays a vital role in the economies of most countries with market and mixed economic systems. From this perspective, entrepreneurship should be regarded as one of the elements of Russia's economic system, contributing to GDP formation, job creation (including high-tech employment), and addressing socio-economic objectives at various levels of governance.

The Russian model of economic development is dominated by large businesses, particularly in the extractive and manufacturing industries. This stems from the historical specificities of the country's economic system formation and the need to address large-scale economic challenges in the period following the dissolution of the USSR.

Contemporary economic conditions, including sanctions pressure, bring to the forefront the issue of balanced development across all entrepreneurship sectors, including small and medium-sized enterprises (hereinafter – SMEs). At the same time, the share of SMEs in the Russian economy remains significantly lower than in developed countries: according to the Ministry of Economic Development data for 2023, it amounted to 21.7% of GDP<sup>1</sup>. For comparison, in OECD countries this indicator exceeds 50%, reaching 60% in the USA and Finland, and 70% in Italy<sup>2</sup>.

Despite their relatively modest share in GDP, the SME sector possesses development potential and can make a certain contribution to strengthening technological sovereignty<sup>3</sup> (Alekseev, 2024; Bartalevich, Makhkamova, 2023; Zainutdinov, 2015; Ivanov, 2025; Kuvalin et al., 2024; Terebova, Borisov, 2019; Araujo et al., 2021; Eldridge et al., 2021; Rogers, 2004). In particular, small and medium-sized enterprises:

- undertake highly specialized and high-risk functions that often fall outside the interests or operational capabilities of large businesses (Egorova, Bushansky, 2024, p. 313; Ivanov, 2025);
- demonstrate high adaptability and responsiveness to new opportunities, facilitating the introduction of technological innovations (Rogers, 2004, p. 143);

<sup>1</sup> Contribution of SMEs to the Russian economy exceeds 34.5 trillion rubles. Ministry of Economic Development of the Russian Federation. Available at: [https://economy.gov.ru/material/news/vklad\\_msp\\_v\\_ekonomiku\\_rossii\\_prevysil\\_345\\_trln\\_rubley.html](https://economy.gov.ru/material/news/vklad_msp_v_ekonomiku_rossii_prevysil_345_trln_rubley.html) (accessed: 29.04.2025).

<sup>2</sup> Contribution of SMEs to the Russian economy grows to 21%. Available at: <https://clck.ru/3EaEWu> (accessed: 29.04.2025).

<sup>3</sup> The study (Ivanov S.L. (2025). Entrepreneurship as a factor in ensuring technological sovereignty: Modern development trends. *Obshchestvo i ekonomika*, 8, 33–57. DOI: 10.31857/S0207367625080033) reveals the essence of the concept of “technological sovereignty” and identifies approaches to its formation and provision; substantiates the role of entrepreneurship as one of the factors in strengthening state technological sovereignty; examines and describes the specifics of the contribution of individual categories of entrepreneurial firms (according to the “size” criterion) to ensuring technological sovereignty at the federal and regional levels.

- frequently generate products with a high degree of novelty, in contrast to large enterprises whose innovations are often aimed at optimizing internal processes rather than radically renewing production (Terebova, Borisov, 2019, p. 56).

Both global and Russian experience illustrate the potential of SMEs as a factor in intensifying innovation processes:

- in North Brabant (The Netherlands), the formation of a high-tech cluster of small enterprises helped overcome industrial recession (Zainutdinov, 2015, p. 116);
- in the Ruhr region (Germany), vertical cooperation between large holdings and specialized small businesses ensured technological modernization and a way out of systemic crisis (Zainutdinov, 2015, p. 117);
- in Kuzbass, targeted program support for over 500 SME projects facilitated the diversification of a mono-industry economy, employment growth, and technological transformation of coal regions (Zainutdinov, 2015, p. 117).

The examples presented above illustrate the potential contribution of SMEs to strengthening state technological independence; however, realizing this potential depends on a complex of factors related to the economic development of specific territorial entities. It is important to consider that in Russian realities, the level of small and medium-sized business involvement in addressing the task of achieving technological sovereignty varies significantly depending on regional specificities. The high heterogeneity of socio-economic and scientific-technological development across regions (Sidorov, 2025; Ustinova et al., 2025) creates diverse conditions for SME development, which directly affects the capacity of enterprises in different territories to contribute to strengthening the aforementioned type of state sovereignty.

It is precisely the existence of such profound interregional disparities that determines the relevance of this study. An objective need arises for

developing an assessment system that would help to analyze the current level of SME sector development in regions, taking into account its potential contribution to strengthening the country's technological sovereignty.

The scientific problem of the study lies in the following aspects:

1) most approaches to assessing SMEs at the regional level presented in the scholarly literature do not account for their essential characteristics that determine the contribution to technological sovereignty (e.g., propensity for innovation and adaptability to external shocks caused by economic sanctions); moreover, such approaches do not reflect the interregional differentiation of SME operating conditions determined by the aforementioned characteristics, which is important not only for scholarly analysis of the SME contribution to the formation of national technological sovereignty but also for developing differentiated regional policy measures aimed at identifying and stimulating "growth points" of technological development in the SME sector, taking into account the specificities of individual territories; optimizing the allocation of support resources (financial, infrastructural, human) across regions based on the actual potential of local enterprises, etc.;

2) existing approaches to diagnosing the contribution of regions to achieving national technological sovereignty, by focusing on macro-structural components, often ignore the role of the SME sector as one of the factors in its strengthening.

The foregoing indicates the existence of a methodological gap, highlighting the need for developing an original approach to conducting the stated assessment.

The object of the study is small and medium-sized entrepreneurship as an element of the regional economic system capable of making a certain contribution to ensuring technological sovereignty. The subject of the study is the characteristics and indicators of SME development at the regional level that determine its potential in the context of strengthening technological sovereignty.

The aim of the study is to conduct a comprehensive assessment of SME development at the regional level as one of the components of the economic environment capable of contributing to strengthening the state's technological independence.

To achieve this aim, the following tasks need to be addressed:

1) to elucidate the theoretical and methodological foundations and formulate the methodological principles for conducting such an assessment;

2) to develop and test a methodological assessment toolkit using empirical data from the constituent entities of the Northwestern Federal District (NWF).

The theoretical significance of the study lies in advancing the methodology for assessing the level of SME development at the regional level, enabling the consideration of their role in ensuring technological sovereignty. The practical significance is determined by the possibility of using the research findings for managerial decision-making in the sphere of SME development at the regional level.

#### **Research methods and materials**

In preparing this study, various types and combinations of scientific methods were employed – from general scientific to specialized economic methods. The foundation of theoretical methods comprised analysis, synthesis, induction, deduction, and generalization. Specifically, they were applied in examining the theoretical and methodological basis for assessing the level of SME development as one of the factors capable of influencing the attainment of technological sovereignty, as well as in formulating the methodological principles for conducting such an assessment and developing the corresponding methodological toolkit.

A particular place in the context of this research is occupied by methods of economic sociology – a targeted expert survey and interviews. These made it possible to form an information array that served as the basis for testing the developed methodological assessment toolkit.

The approbation of this toolkit comprises two main stages. The first stage is aimed at compiling a ranking of regions by the level of innovative activity of SMEs using data from a targeted expert survey of heads of innovative companies. At this stage, the following were assessed: the dynamics of company performance across a range of indicators, the conditions of the regional environment for innovative activity, the diversity of directions and the effectiveness of such activity, as well as the level of enterprise adoption of fifth- and sixth-technological-paradigm technologies. To convert the subjective assessments of managers into objective statistical values, a scoring method was employed. Aggregated results for each region were subjected to comparative analysis, which made it possible to rank the territories and identify interregional disparities in SME innovative activity. The second stage involves a qualitative assessment of the potential contribution of SMEs to ensuring technological sovereignty for regions with a relatively low level of innovative activity, using data from interviews with representatives of regional SME development institutions. This stage made it possible to assess the level of SME adaptation to sanctions conditions, identify key adaptation factors, and determine the contribution of both innovative and traditional enterprises to ensuring technological independence.

The information base of the study comprised works by leading Russian and foreign scholars devoted to issues of assessing the level of small and medium-sized enterprise development at the regional level, as well as measuring the level of technological sovereignty and approaches to evaluating its achievement.

***Theoretical and methodological foundations and methodological principles for conducting an assessment of SME development in the region as a factor capable of influencing the attainment of technological sovereignty***

In contemporary scholarly literature, a substantial body of work devoted to assessing SMEs

at the regional level has emerged. Let us examine some of these in more detail.

One relevant tool for applied analysis is the rating assessment developed and tested by D.V. Filippov using the example of municipal districts of the Republic of Sakha (Filippov, 2013). His methodology is based on calculating a composite index through normalization of local criteria and determining their specific weights. The assessment system includes indicators at both the regional and municipal levels. Key indicators included: the share of goods, works, and services produced by small and medium-sized enterprises in the gross regional product; the share of net investments in the total volume of gross investments of small enterprises; the share of those employed in small businesses in the total number of the employed in the economy; small enterprise turnover per capita; and others.

A team of authors led by O.E. Ivanova proposed an analysis methodology based on calculating threshold values of an integral indicator (Ivanova et al., 2014). The assessment is divided into two blocks: analysis of general development parameters (number of enterprises, employees, and wage levels) and assessment of the sector's financial condition (turnover and investments per employee, share of profitable organizations).

An assessment of SME development in Russia's resource-rich regions is presented by I.V. Korchagina. The author supplements standard statistical analysis with the use of the Wilcoxon T-test to assess trends and compares the share of SMEs in the GRP of resource territories with the Russian average indicators. Particular attention is paid to resource productivity and investment potential (Korchagina, 2023).

A comprehensive approach to SME assessment is presented in the work of A.E. Kremin, where the level of development of the sector under consideration is assessed through a system of three criteria: criterion "X" – the level of SME development (turnover of SMEs per employee and

per capita); criterion “Y” – the role of SMEs in the regional economy (share of employment in SMEs, share of investment in fixed capital of SMEs, etc.); criterion “Z” – the effectiveness of state support for SMEs (share of assistance recipients among SMEs, volume of microloans and guaranteed loans) (Kremin, 2022).

In the context of contemporary economic transformations, the methodology of L.V. Glezman is noteworthy, focusing on the dynamics of SME development under new challenges (using the example of the Perm Territory). The study aims to identify factors shaping the contemporary business environment and analyze indices of changes in the number and turnover of SMEs in comparison with all-Russian trends (Glezman, 2022).

Concluding the review is the work of V.V. Petrushevskaya and A.N. Sharyi, who proposed a toolkit combining quantitative indicators and expert assessments. Their methodology stands out from the others in that it takes into account not only the economic performance of SMEs (revenue, profit, employment) but also criteria, properties, and characteristics of the sector that are important for technological sovereignty (Petrushevskaya, Sharyi, 2024). This is the only study among those presented that includes indicators of innovative activity and the volume of innovative product sales in the small business sector.

Thus, it should be emphasized that within the framework of most of the presented studies, the assessment of SME development is based on aggregated indices using traditional quantitative parameters: average number of SME employees, share of employment in SMEs, SME turnover, and investment in fixed capital of SMEs. This approach does not allow for a full assessment of the sector’s role in strengthening technological sovereignty, as it ignores the criterion of “innovativeness.” An exception is the work (Petrushevskaya, Sharyi, 2024), which applies specific indicators corresponding to this criterion.

For comparison, when assessing the level of SME development in foreign countries, authors typically rely on indicators characterizing the level of innovative activity of enterprises, especially in the context of fifth- and sixth-technological-paradigm technologies (Owalla et al., 2022; Rauch et al., 2020; Vásquez et al., 2021).

Indeed, the innovative activity of SMEs deserves reflection in such assessments, being one of the foundational components for achieving technological sovereignty. This approach is substantiated by the following arguments (Ivanov, 2025):

- the effectiveness of the innovation process in market conditions largely depends on the potential of the entrepreneurial sector (including SMEs) in terms of commercializing R&D; entrepreneurs contribute to the practical implementation of developments, forming a substantial part of the flow of new products and technologies;

- enterprises themselves, alongside research institutes, universities, and others, also conduct scientific research; small innovative enterprises (SIEs) are established at scientific and educational institutions, serving as a crucial linking element between science and production.

At the same time, within the framework of the strategy for achieving technological sovereignty, the auxiliary functions of SMEs not directly related to the creation of innovations should also be taken into account. Although such enterprises are not a source of technological breakthroughs, they provide the necessary infrastructural support and adaptability of the economy. According to a study by N.E. Egorova and S.P. Bushansky, due to their flexibility, small businesses effectively fill market niches and integrate into the production chains of large enterprises, creating conditions for the implementation of import-substituting projects (Egorova, Bushansky, 2024, p. 313). Furthermore, SMEs undertake the tasks of “small-scale logistics”, ensuring the saturation of local markets through parallel and direct imports, which supports demand stability

during the transition period. Consideration of these service functions is necessary for a comprehensive assessment of the sector's potential.

Beyond the direct assessment of SME development, a parallel strand of literature warrants attention – one focused on diagnosing and measuring the level of technological sovereignty itself, and, by extension, on developing approaches to evaluate its attainment. This body of work has gained considerable traction in recent years, attracting growing interest not only within the Russian Federation (Glazunova, 2024; Kochina, 2023; Medvedeva, 2024) but also internationally (e.g., Sapir, 2020).

Notably, as V.V. Glazunova points out, “addressing the task of measuring technological sovereignty entails assessing the level of technological advancement of the economy”. Moreover, in the researcher's view, “index-based methods fail to provide a precise picture of the level of technological sovereignty” (Glazunova, 2024, p. 22). This underscores the importance of conducting a “qualitative” assessment – specifically, measuring technological sovereignty separately for each technological domain, taking into account the qualitative characteristics of the technologies employed. Particular attention is drawn to the need to consider investments in both new and established technologies within the total investment volume (Glazunova, 2024, p. 29), as well as to assess the significance of imported technologies and the feasibility of their replacement with domestic

alternatives (Glazunova, 2024, p. 28).

Following the aforementioned principles, the author developed an algorithm for the comprehensive measurement of technological sovereignty (offering an alternative to index-based assessment methods), which determines the quantitative ratio of technologies, their qualitative characteristics, and degree of novelty (Glazunova, 2024, p. 31).

At the same time, according to N.V. Medvedeva, a contemporary system for assessing the achievement of technological sovereignty should be grounded in “a universal integral approach” and must be formed “on the basis of a set of the most significant measurable indicators that are integrated into a cohesive whole” (Medvedeva, 2024, p. 94). The application of an integral assessment, as the author contends, “provides a comprehensive understanding of the object and enables the compilation of a ranking based on it,” with the assessment to be carried out “across the segment of high technologies (critical and cross-cutting)” (Medvedeva, 2024, pp. 94–95).

According to S.K. Kochina's position, diagnosing the level of technological sovereignty development should align with the main strategic “vectors” of the country's technological development (innovation-digital, investment-financial, intellectual-human capital, and material-technical), as well as with the factors and criteria (*Tab. 1*) of the type of sovereignty under consideration (Kochina, 2023, p. 36).

Table 1. Factors and criteria for assessing technological sovereignty (using the example of industrial enterprises)

Factors	Criteria
Sanctions pressure, shifts in the geopolitical landscape, the reorientation of industrial business structures' needs, hypercompetition, transformation of market conditions, inflated consumer demands and expectations	Presence of high-tech enterprises' activities, resource provision (regional, interregional), a low share (or absence) of parallel imports, ownership of critically important technologies, successfully implemented national innovation projects, a low share (or absence) of imported equipment at enterprises, developed production infrastructure, investment in technological competencies, social protection and employee motivation systems, digital security, high intellectual and human capital potential, functioning clusters (ecosystems), digital activity of enterprises, investment attractiveness, state regulation and protection of business entities' interests.
Source: (Kochina, 2023).	

In the author's view, the most appropriate method for conducting diagnostics that yields objective results is an expert survey (Kochina, 2023, p. 36).

Summing up the presented review, it can be concluded that most approaches to assessing SMEs at the regional level found in the scholarly literature do not account for their essential characteristics that determine the contribution to technological sovereignty (e.g., propensity for innovation, among others). At the same time, existing approaches to diagnosing the contribution of regions to achieving national technological sovereignty, by focusing on macro-structural components, often overlook the role of the SME sector as one of the factors in its strengthening.

This methodological gap underscores the need to develop an original approach to conducting the stated assessment – one that would incorporate the foundational research on the level of small and medium-sized enterprise development in regions (Glezman, 2022; Ivanova et al., 2014; Korchagina, 2023; Kremin, 2022; Petrushevskaya, Sharyi, 2024; Filippov, 2013), as well as the specificities of assessing the level and feasibility of achieving technological sovereignty (Glazunova, 2024; Kochina, 2023; Medvedeva, 2024).

The procedure for such an assessment should be grounded in the following methodological principles, which were formulated based on an analysis of the aforementioned studies:

1. The principle of accounting for baseline indicators characterizing various aspects of small and medium-sized enterprise activity in the region. These should include indicators of company performance, as well as indicators characterizing the conditions and factors shaping the regional business environment.

2. The principle of accounting for factors that characterize small and medium-sized enterprises both from the perspective of their innovative component and from the standpoint of properties

inherent to SMEs as such (not directly related to innovation); in particular, this may refer to adaptability to sanctions restrictions, among others.

3. The principle of accounting for the potential of small and medium-sized enterprises in the region to master fifth- and sixth-technological-paradigm technologies, as well as critical and cross-cutting technologies (the list of such technologies is approved by Presidential Decree 529 dated June 18, 2024)<sup>4</sup>.

4. The principle of accounting for factors and criteria of technological sovereignty (e.g., consideration of shifts in the geopolitical landscape, market conditions, etc.).

5. The principle of combining quantitative and qualitative research methods (including analysis of standardized or normalized statistical indicators, expert surveys, interviews, etc.).

***Methodological toolkit for regional assessment of the level of small and medium-sized enterprise development as an element of the regional economic system capable of contributing to ensuring state technological sovereignty***

Taking into account the methodological principles proposed in the previous section of the study, a toolkit has been developed that enables a comprehensive assessment of the level of SME development in the context of the task of strengthening technological sovereignty.

This toolkit was tested using the example of regions of the Northwestern Federal District. This choice is justified by the fact that the regions in question possess substantial scientific and technological potential (Ustinova, 2025) and are capable of making a significant contribution to strengthening the state's technological sovereignty. This holds true even though these regions have considerably suffered from the consequences of

<sup>4</sup> On approval of priority areas of scientific and technological development and the list of most important knowledge-intensive technologies: Presidential Decree 529 of June 18, 2024. Available at: <https://www.garant.ru/hotlaw/federal/1725998/> (accessed: 19.05.2025).

economic sanctions against the Russian Federation, as key sectors of their economies had long depended on Western supplies of equipment and components. Nevertheless, some regions within this group (e.g., Arkhangelsk Region) have managed to adapt quickly to the new conditions and demonstrate economic growth<sup>5</sup>.

The approbation procedure for the authors' toolkit was carried out in two stages.

Stage I. Given that innovative activity is fundamental in the context of the task of strengthening technological sovereignty (Ivanov, 2025), the first stage involved developing a ranking of innovative activity of small and medium-sized enterprises across regions, based on data concerning:

- the current state of SMEs engaged in research and development, as well as the production of innovative goods, works, and services (in particular, the dynamics of company performance in 2024 compared to 2023 were assessed according to the following indicators: volume of output (goods, works, services), product range, number of employees, volume of investments in development or improvement of activities, etc.; moreover, an assessment was made of regional conditions for conducting innovative entrepreneurial activity (stability of economic conditions, accessibility and quality of regional state programs, level of development of commercial, professional, and physical infrastructure, level of development of the personnel training system for the needs of innovative activity));

- the implementation of scientific, scientific-technical, and innovative activities at small and medium-sized enterprises; the level of adoption by such enterprises of fifth- and sixth-technological-paradigm technologies (identifying what types of work within the innovation process companies

undertake, what types of intellectual property they possess, what share of the total volume of goods, works, and services is accounted for by innovative products, etc.).

The ranking was developed based on information gathered through a targeted expert survey<sup>6</sup> conducted with the direct involvement of the author. The initial research concept included the analysis of official statistics in accordance with methodological principle No. 5; however, it subsequently became evident that a synthesis of expert and statistical data was impossible due to fundamental differences in the methodology of data collection.

The calculation of the integral assessment indicator, on the basis of which the ranking was formed, was carried out sequentially: 1) each answer to the questionnaire items was assigned a certain number of points (typically from 1 to 5); 2) the share of points earned for each answer relative to the maximum possible number of points was calculated; 3) the arithmetic mean of the point shares across all questions was computed; 4) using the method of structural grouping, groups of regions reflecting the level of SME innovative activity were identified.

Let us examine the methodology for compiling the ranking using the example of the Vologda Region:

1) An expert assessment was conducted of the dynamics of company performance in 2024 compared to 2023. The assessment was carried out

<sup>5</sup> Aleksandr Tsybul'sky: Import substitution is our industrial maturity. Available at: <https://rg.ru/2025/06/18/reg-szfo/ot-idei-do-voploshcheniia.html> (accessed: 18.06.2025).

<sup>6</sup> For the approbation of stage 1 of our methodological approach, 45 experts were surveyed – heads of small and medium-sized innovative companies from nine regions of the Northwestern Federal District. The representation of experts by region is uniform (five people from each constituent entity under study). To avoid distortion of the accuracy of the assessment results, Saint Petersburg and the Nenets Autonomous Area were excluded from the analysis. Saint Petersburg was excluded as a megapolis and federal city, whose economic scale and concentration of SMEs qualitatively surpass the indicators of other constituent entities of the Northwestern Federal District, which creates a risk of shifting average values with small expert samples. The Nenets Autonomous Area was removed from the analysis due to its narrowly specialized resource-extraction economic model and critically small number of innovative SMEs, which makes it impossible to form a representative group of experts within the established framework (five people per region).

in accordance with the following indicators: volume of output (sales, works, services, etc.); product range; number of employees; volume of investments in development or improvement of activities.

In accordance with the dynamics of change in the indicator assessed by the expert, the following scoring system was applied: 2 points – for indicating significant growth of the indicator; 1 point – for characterizing growth as insignificant or minimal; 0 points – in the case of no growth or negative dynamics of the indicator.

The results of this assessment are presented in *Table 2*.

According to the assessment methodology, a region could receive up to 40 points. The actual result of 17 points corresponds to 42.5% of the maximum possible value.

The results of the assessment of the specified parameter for all regions presented in the study are reflected in *Table 3*.

2) An assessment was conducted of the regional environment conditions necessary for conducting innovative entrepreneurial activity, according to the following indicators: stability of economic conditions; accessibility and quality of regional state programs; financial support (accessibility of financial resources, including grants and subsidies); commercial and professional infrastructure (development of commercial accounting, legal services, and support organizations); physical infrastructure (transport, communications, etc.); education and professional training.

The results of this assessment are presented in *Table 4*.

Table 2. Results of expert assessment of company performance dynamics in 2024 compared to 2023 (using the example of the Vologda Region)

Expert No.	Indicator	Response options		
		Insignificant growth of the indicator (up to 10%) – 1 point	Significant growth of the indicator (more than 10%) – 2 points	No growth or decline in the indicator – 0 points
1	Volume of output (sales, works, services, etc.)		+	
2			+	
3				+
4		+		
5		+		
1	Product range	+		
2				+
3				+
4		+		
5			+	
1	Number of employees			+
2				+
3				+
4		+		
5		+		
1	Volume of investments in development or improvement of activities	+		
2			+	
3				+
4		+		
5		+		

Source: own compilation based on the expert survey.

Table 3. Results of expert assessment of company performance dynamics in 2024 compared to 2023, by region of the Northwestern Federal District

Region	Actual score	Share of maximum possible score, %
Arkhangelsk Region	15.0	37.5
Vologda Region	17.0	42.5
Kaliningrad Region	13.0	32.5
Leningrad Region	20.0	50.0
Murmansk Region	14.0	43.8*
Novgorod Region	13.0	32.5
Pskov Region	14.0	35.0
Republic of Karelia	10.0	25.0
Komi Republic	11.0	27.5

\* The maximum possible score for the Murmansk Region was 32. This is due to the fact that one of the surveyed companies did not operate in 2023.  
Source: own calculations based on the expert survey.

Table 4. Results of expert assessment of regional environment conditions necessary for conducting innovative entrepreneurial activity (using the example of the Vologda Region)

Expert No.	Indicator	Degree of satisfaction				
		1 point	2 points	3 points	4 points	5 points
1	Stability of economic conditions				+	
2			+			
3			+			
4				+		
5				+		
1	Accessibility and quality of regional state programs			+		
2				+		
3				+		
4			+			
5				+		
1	Financial support (accessibility of financial resources, including grants and subsidies)		+			
2			+			
3			+			
4				+		
5				+		
1	Commercial and professional infrastructure (development of commercial accounting, legal services, and support organizations)		+			
2				+		
3				+		
4				+		
5				+		
1	Physical infrastructure (transport, communications, etc.)				+	
2				+		
3			+			
4				+		
5					+	
1	Education and professional training			+		
2			+			
3			+			
4				+		
5				+		

Source: own compilation based on the expert survey.

The expert assessment established that the region's potential in the context of the examined parameter was evaluated at a maximum of 150 points. The actual result was 83 points, or 55.3% of the maximum possible.

The results of the assessment of the specified parameter for other constituent entities of the Northwestern Federal District are presented in *Table 5*.

3) An assessment was carried out of the diversity of innovative activity directions implemented at enterprises in the region (*Tab. 6*). According to the survey rules, each expert had the

right to select only three priority directions from the proposed list. If an expert indicated more directions, only the first three options were taken into account. This limitation determines the maximum score a particular region can achieve.

Within the overall scoring system, the maximum possible result is 15 points. Based on the assessment results, experts from the Vologda Region accumulated a total of 10 points, which corresponds to 66.7% of the maximum achievable indicator.

The results of this assessment for the remaining regions of the Northwestern Federal District are presented in *Table 7*.

Table 5. Results of expert assessment of regional environment conditions necessary for conducting innovative entrepreneurial activity, by region of the Northwestern Federal District

Region	Actual score	Share of maximum possible score, %
Arkhangelsk Region	80	57.1*
Vologda Region	83	55.3
Kaliningrad Region	115	76.6
Leningrad Region	115	76.6
Murmansk Region	97	64.4
Novgorod Region	81	54.0
Pskov Region	87	54.7
Republic of Karelia	78	52.0
Komi Republic	73	48.6

\*The maximum possible score for the Arkhangelsk Region was 140, as one of the experts was unable to assess certain indicators.  
Source: own calculations based on the expert survey.

Table 6. Results of expert assessment of the diversity of innovative activity directions implemented at enterprises in the Vologda Region

Expert No.	Types of work performed*							
	A (1 point)	B (1 point)	C (1 point)	D (1 point)	E (1 point)	F (1 point)	G (1 point)	H (1 point)
1	+	+						
2	+	+	+	+	+			
3				+		+	+	
4	+							
5		+						

\* A – Research and development work; B – Technological work, production preparation, and industrial testing; C – Acquisition (sale) of patents, licenses, know-how; D – Investment in R&D and innovative activities; E – Certification and standardization of innovative products; F – Marketing solutions for innovative activities; G – Selection and organization of sales markets for innovative products; H – Training and retraining of personnel for innovative activities.

Source: own compilation based on the expert survey.

Table 7. Results of expert assessment of the diversity of innovative activity directions implemented at enterprises (by region of the Northwestern Federal District)

Region	Actual score	Share of maximum possible score, %
Arkhangelsk Region	11	73.3
Vologda Region	10	66.7
Kaliningrad Region	13	86.7
Leningrad Region	12	80.0
Murmansk Region	11	73.3
Novgorod Region	10	66.7
Pskov Region	9	60.0
Republic of Karelia	10	66.7
Komi Republic	11	73.3

Source: own calculations based on the expert survey.

4) An assessment was conducted of the range of intellectual property objects held by enterprises in the region. Such an assessment is important for the following reasons: the presence of diverse intellectual property objects (inventions, trademarks, etc.) indicates a comprehensive approach to development, active research activity, and the formation of a strong brand. A broad spectrum of intellectual property objects demonstrates that the enterprise pays attention to both technological innovations and image-related components (logos, product design). Such diversity helps the company strengthen its competitive position, form a unique selling proposition, and ensure protection for its developments.

According to the survey conditions, experts could select no more than three intellectual property objects from the proposed list. This limitation directly affected the maximum possible score from each expert.

The results of this assessment are presented in *Table 8*.

In the existing assessment system, the highest possible score is 15 points. The Vologda Region received 9 points, which constitutes 60% of the maximum possible.

The results of the assessment of the specified parameter for other constituent entities of the Northwestern Federal District are reflected in *Table 9*.

5) The effectiveness of innovative activity of SMEs in the region was assessed based on measuring the share of innovative products in the total volume of goods, works, and services they produce (*Tab. 10*).

The assessment system is based on the percentage share of the company's output, where each range corresponds to a specific number of points. The point distribution is as follows: for a share of output up to 20% – 1 point is awarded;

Table 8. Results of expert assessment of the range of intellectual property objects at enterprises in the Vologda Region

Expert No.	Type of intellectual property objects				
	Patents (1 point)	Author's certificates (1 point)	Trademarks (1 point)	Know-how (1 point)	Other (1 point)
1	+				
2	+		+	+	
3		+	+	+	
4	+				
5	+				

Source: own compilation based on the expert survey.

from 20 to 40% – 2 points; from 40 to 60% – 3 points; from 60 to 80% – 4 points; for a share exceeding 80% – 5 points.

The maximum possible number of points under this system is 25. According to the assessment results, the Vologda Region received 9 points, which corresponds to 36% of the maximum possible result.

The results of the assessment of SME innovative activity effectiveness for other constituent entities of the Northwestern Federal District are presented in *Table 11*.

Table 9. Results of expert assessment of the range of intellectual property objects at enterprises (by region of the Northwestern Federal District)

Region	Actual score	Share of maximum possible score, %
Arkhangelsk Region	8	53.3
Vologda Region	9	60.0
Kaliningrad Region	11	73.3
Leningrad Region	7	46.7
Murmansk Region	7	58.3*
Novgorod Region	6	50.0*
Pskov Region	7	46.7
Republic of Karelia	10	66.7
Komi Republic	11	73.3

\*The maximum possible score for the Murmansk and Novgorod regions was 12, as one of the experts did not answer the corresponding question.  
Source: own calculations based on the expert survey.

Table 10. Results of expert assessment of the effectiveness of innovative activity of SMEs in the Vologda Region

Expert No.	Share of innovative goods, works, and services in total output				
	0–20 (1 point)	20–40 (2 points)	40–60 (3 points)	60–80 (4 points)	80–100 (5 points)
1			+		
2		+			
3		+			
4	+				
5	+				

Source: own compilation based on the expert survey.

Table 11. Results of expert assessment of the effectiveness of SME innovative activity (by region of the Northwestern Federal District)

Region	Actual score	Share of maximum possible score, %
Arkhangelsk Region	8	32.0
Vologda Region	9	36.0
Kaliningrad Region	10	50.0*
Leningrad Region	8	32.0
Murmansk Region	7	46.7*
Novgorod Region	8	32.0
Pskov Region	9	36.0
Republic of Karelia	7	28.0
Komi Republic	13	52.0

\*Differences in the maximum number of points between regions are due to incomplete expert responses. Thus, the Murmansk Region was assessed on a 15-point scale, while a maximum threshold of 20 points was set for the Kaliningrad Region due to the absence of answers from some specialists to certain questionnaire items.  
Source: own calculations based on the expert survey.

6) An assessment was conducted of the level of adoption by small and medium-sized enterprises of fifth- and sixth-technological-paradigm technologies (*Tab. 12*).

The maximum number of points a region could receive for the assessed parameter is 15. The Vologda Region scored 4 points, or 26.6% of the maximum possible.

The results of this assessment for the remaining regions of the Northwestern Federal District are presented in *Table 13*.

The final results of the conducted assessment across all six directions (assessment of company performance dynamics in 2024 compared to 2023; assessment of regional environment conditions necessary for conducting innovative entrepreneurial activity; assessment of the diversity of innovative activity directions implemented at small and medium-sized enterprises; assessment of the range of intellectual property objects at SMEs; assessment of the effectiveness of SME innovative activity;

assessment of the level of adoption by SMEs of fifth- and sixth-technological-paradigm technologies) by region of the Northwestern Federal District are presented in *Table 14*.

The calculation of arithmetic mean scores across all assessment directions, combined with the method of structural grouping, made it possible to identify groups of regions according to their degree of innovative activity in the SME sector.

To partition the indicators into groups, we first determine the overall range of values: the minimum value is 41.0, the maximum value is 56.6. In this case, the range of variation is 15.6.

We divide the presented indicators into three groups based on the principle of value proximity:

- Group 1 (relatively low values): 41.0; 42.5; 43.1;
- Group 2 (medium values): 46.6; 49.0; 49.2; 50.9; 52.3;
- Group 3 (high values): 56.6.

Table 12. Results of expert assessment of the level of adoption of fifth- and sixth-technological-paradigm technologies by small and medium-sized enterprises in the Vologda Region

Expert No.	Fifth-technological-paradigm technologies (1 point)	Sixth-technological-paradigm technologies (2 points)
1	+	
2	+	
3	+	+
4		
5		

Source: own calculations based on the expert survey.

Table 13. Results of expert assessment of the level of adoption by small and medium-sized enterprises of fifth- and sixth-technological-paradigm technologies, by region of the Northwestern Federal District

Region	Actual score	Share of maximum possible score, %
Arkhangelsk Region	4	26.6
Vologda Region	5	33.3
Kaliningrad Region	3	20.0
Leningrad Region	3	20.0
Murmansk Region	4	26.6
Novgorod Region	3	20.0
Pskov Region	2	13.4
Republic of Karelia	3	20.0
Komi Republic	3	20.0

Source: own calculations based on the expert survey.

Table 14. Final results of the expert assessment (by region of the Northwestern Federal District)

Region	Results of the expert assessment by each direction* (share of points earned from the maximum possible value, %)						
	1	2	3	4	5	6	Av. %
Arkhangelsk Region	37.5	57.1	73.3	53.3	32.0	26.6	46.6
Vologda Region	42.5	55.3	66.7	60.0	36.0	33.3	49.0
Kaliningrad Region	32.5	76.6	86.7	73.3	50.0	20.6	56.6
Leningrad Region	50.0	76.6	80.0	46.7	32.0	20.0	50.9
Murmansk Region	43.8	64.4	73.3	58.3	46.7	26.6	52.3
Novgorod Region	32.5	54.0	66.7	50.0	32.0	20.0	42.5
Pskov Region	35.0	54.7	60.0	46.7	36.0	13.4	41.0
Republic of Karelia	25.0	52.0	66.7	66.7	28.0	20.0	43.1
Komi Republic	27.5	48.6	73.3	73.3	52.0	20.0	49.2

\*Notes:  
1 – assessment of company performance dynamics in 2024 compared to 2023;  
2 – assessment of regional environment conditions necessary for conducting innovative entrepreneurial activity;  
3 – assessment of the diversity of innovative activity directions implemented at small and medium-sized enterprises;  
4 – assessment of the range of intellectual property objects at SMEs;  
5 – assessment of the effectiveness of SME innovative activity;  
6 – assessment of the level of adoption by SMEs of fifth- and sixth-technological-paradigm technologies.  
Source: own calculations based on the expert survey.

Rationale for the grouping: the first group contains values close to the minimum indicator (spread of 2.1); the second group includes indicators located approximately in the middle of the range (spread of 5.7); the third group includes a single (highest) value.

Table 15 presents the results of the ranking carried out.

The conducted assessment revealed differentiation among regions in terms of the level of SME innovative activity. The leader among the constituent entities of the Northwestern Federal District is the Kaliningrad Region with a score of 56.6%. An average level of innovative activity (from 46.6 to 52.3%) is characteristic of the Arkhangelsk, Vologda, Leningrad, and Murmansk regions, as well

as the Komi Republic. Regions with a relatively low level (from 41.0 to 43.1%) are the Novgorod and Pskov regions, along with the Republic of Karelia.

Analysis of the innovative activity indicators showed that regions demonstrate heterogeneous results across different assessment directions. The success and relative lag of regions in the SME innovative activity ranking stem from a combination of factors identified during the first stage of approbation of the methodological toolkit.

Thus, the Kaliningrad Region (average score based on the expert assessment results – 56.6%) leads due to the highest values in the following parameters: “assessment of regional environment conditions necessary for conducting innovative entrepreneurial activity” (76.6%), “assessment

Table 15. Distribution of regions by level of innovative activity of SME entities

Group	Regions
Regions with a relatively low level of SME innovative activity development	Novgorod Region, Pskov Region, Republic of Karelia
Regions with an average level of SME innovative activity development	Arkhangelsk Region, Vologda Region, Leningrad Region, Murmansk Region, Komi Republic
Regions with a relatively high level of SME innovative activity development	Kaliningrad Region

Source: own compilation based on calculations performed using the results of the expert survey.

of the diversity of innovative activity directions implemented at small and medium-sized enterprises” (86.7%), and “assessment of the effectiveness of SME innovative activity” (50.0%).

The Murmansk Region (52.3%) achieves its success through high values in the parameters “assessment of the effectiveness of SME innovative activity” (46.7%) and “assessment of regional environment conditions necessary for conducting innovative entrepreneurial activity” (64.4%).

The Leningrad Region (50.9%) maintains its position thanks to the parameters “assessment of company performance dynamics in 2024 compared to 2023” (50.0%) and “assessment of regional environment conditions necessary for conducting innovative entrepreneurial activity” (76.6%), despite low values in the parameter “assessment of the effectiveness of SME innovative activity” (32.0%).

The Komi Republic (49.2%) showed its best result in the parameter “assessment of the effectiveness of SME innovative activity” (52.0%) and a high level in the parameter “assessment of the range of intellectual property objects at SMEs” (73.3%), but has a low value in the parameter “assessment of regional environment conditions necessary for conducting innovative entrepreneurial activity” (48.6%).

The Vologda Region (49.0%) demonstrates stability due to the highest indicator in the district for the parameter “assessment of the level of adoption by SMEs of fifth- and sixth-technological-paradigm technologies” (33.3%) and balanced values across the remaining criteria.

The Arkhangelsk Region (46.6%) occupies a middle position due to a high value in the parameter “assessment of the diversity of innovative activity directions implemented at small and medium-sized enterprises” (73.3%), with a relatively low value in the parameter “assessment of the effectiveness of SME innovative activity” (32.0%).

The Republic of Karelia (43.1%) finds itself in the lower group of the ranking due to the minimum values in the parameters “assessment of company performance dynamics in 2024 compared to 2023” (25.0%) and “assessment of the effectiveness of SME innovative activity” (28.0%).

The Novgorod Region (42.5%) holds an even weaker position in the ranking due to low values in the parameters “assessment of company performance dynamics in 2024 compared to 2023” (32.5%) and “assessment of the effectiveness of SME innovative activity” (32.0%).

The Pskov Region (41.0%) became the outsider due to the lowest value in the parameter “assessment of the level of adoption by SMEs of fifth- and sixth-technological-paradigm technologies” (13.4%), as well as comparatively low scores across other parameters.

Stage II. In the second stage of approbation of the methodological toolkit, using the example of regions with a relatively low level of SME innovative activity, a qualitative assessment was carried out of the role of small and medium-sized enterprises as an instrument for strengthening technological sovereignty from the perspective of factors inherent to SMEs as such, which are not conditioned by their “innovative” nature (see methodological principle No. 2). The assessment was conducted based on interview materials featuring experts – representatives of regional SME development institutions<sup>7</sup>.

The first question posed to the experts concerned a subjective assessment of the level of adaptation of SMEs in the region to the conditions of sanctions restrictions. Notably, there was complete consensus among the experts, who agreed that the level of SME adaptation deserves a score

<sup>7</sup> For the interviews, experts were invited from three regions: the Novgorod Region, the Pskov Region, and the Republic of Karelia. The experts represented key institutional structures: the Office of the Business Ombudsman, the Chamber of Commerce and Industry, and the Public Chamber.

of 4 points on a 5-point scale. This is classified as a result “above the average level”.

During the study, we asked specialists about the key factors that helped small and medium-sized businesses adapt to the changed conditions. The experts identified several main areas: 1) state support – 66.7% of respondents noted this as the most important factor of adaptation; 2) development of cooperation with enterprises from friendly countries – also 66.7% of respondents pointed to this aspect; 3) internal reserves of companies – 33.3% of experts emphasized their significance; 4) search for new markets for product sales – 33.3% of respondents noted this factor; 5) the market being vacated by foreign investors and manufacturers – 33.3% of specialists named this as a significant condition for adaptation; 6) cooperative ties within the domestic market – another 33.3% of respondents noted this aspect.

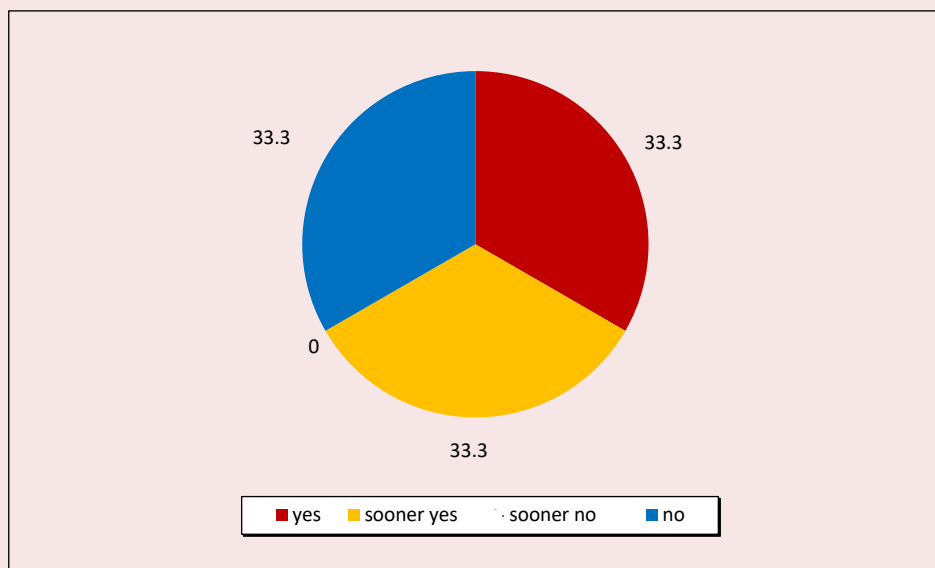
Thus, the majority of experts agree that state support and international cooperation with friendly countries played a decisive role in the adaptation of SMEs in the regions under consideration.

Central to the discussion with experts were questions assessing the role of SMEs in shaping the state’s technological independence and identifying the areas of activity within the regional small and medium-sized business sector that hold the greatest potential for addressing the task of ensuring technological sovereignty.

Analysis of the expert assessments revealed a clear division of opinions: two-thirds of the specialists confirmed the significance of the region’s SMEs as one of the factors in ensuring technological sovereignty, while the remaining third expressed doubts in this regard (*Fig. 1*).

The experts also identified the main directions that enabled SME entities in the studied regions to contribute to strengthening the type of sovereignty under consideration. As noted by two-thirds of the experts, “at the present moment, the level of innovative activity of regional SMEs does not allow them to contribute sufficiently to ensuring technological sovereignty; in this regard, particular emphasis is placed on traditional small and

Figure 1. Results of the assessment of the significance of regional SMEs as one of the factors in ensuring the country’s technological sovereignty



Source: own compilation based on the results of the expert interview.

medium-sized enterprises, which are either partially integrated into the production innovation process with large businesses or perform a number of service functions within the framework of this process”. According to the remaining third of the experts, “certain tasks within the framework of achieving technological sovereignty are accomplished not only through the innovative activity of SMEs, for example, when it comes to the development of parallel and partially direct imports within the scope of small-scale logistics”.

The research methodology involved a subjective assessment by experts of the specific contribution of innovative and traditional SME entities to ensuring technological sovereignty. For the sake of data comparability, the total contribution of SMEs was considered a normalized value (100%). The distribution of shares obtained during the interviews is reflected in the graph (Fig. 2).

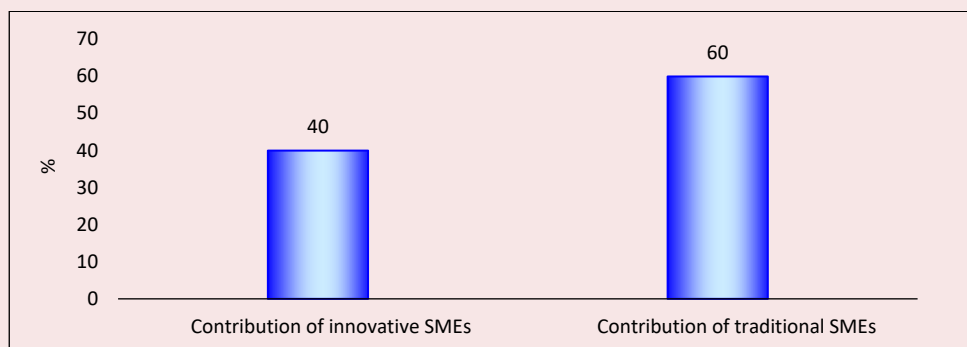
Analysis of the expert assessments indicates that in regions with low SME innovative activity, the structure of small business contribution to technological sovereignty is shifted toward traditional enterprises. Their significance in this context is rather compensatory in nature: small business acts not as a source of technological breakthroughs, but as a stabilizing element whose role lies in the service

support and functional maintenance of existing economic processes.

At the same time, experts pointed to individual regional enterprises in the SME sector that contribute to the development and strengthening of technological sovereignty precisely through innovative activity. This information is presented in the form of excerpts from the interview transcript (Tab. 16).

Moreover, it turned out that in the regions under study there are enterprises that already produce (or will be capable of beginning to produce within the next 2–3 years) critical and cross-cutting technologies. Experts classified the following as such technologies: biomedical and cognitive technologies for healthy and active longevity; technologies for the development of next-generation medicines and platforms (biotechnological, high-tech, and radiopharmaceutical drugs); technologies for creating trusted and secure system and application software, including for managing social and economically significant systems; transport technologies for various fields of application (sea, land, air), including unmanned and autonomous systems; technologies for creating new materials with specified properties and performance characteristics; artificial intelligence technologies in

Figure 2. Results of the assessment of the contribution of innovative and traditional (i.e., not related to innovative activity) small and medium-sized enterprises to ensuring technological sovereignty



Source: own compilation based on the results of the expert interview.

Table 16. Information on regional SMEs demonstrating impressive results in the sphere of technological development and contributing to strengthening the country's technological independence

Enterprise name	Region of operation	Contribution to strengthening technological sovereignty (expert commentary)
LLC "ENERGOINFORMICS"	Novgorod Region	Creation of solutions for digitalizing the energy sector, which is particularly important in the context of import substitution and increasing the efficiency of the fuel and energy complex. The company participates in projects related to the introduction of AI in the energy sector.
JSC "ELSI"	Novgorod Region	Development of innovative technologies that can be applied in the defense industry, the IT sector, and other strategic industries. The company demonstrates potential for creating products with high added value.
CJSC "Zavod 'Elbor'"	Novgorod Region	Development of materials with improved characteristics that are used in the manufacturing industry and mechanical engineering. The company's products contribute to enhancing the competitiveness of Russian enterprises.

Source: own compilation based on the results of the expert interview.

economic sectors, the social sphere (including the sphere of public safety), and public authorities; technologies for creating domestic means of production and scientific instrumentation, among others.

Finally, the experts provided a forecast regarding the possibility of achieving partial technological sovereignty, including through the activities of regional SMEs. Below are the responses of some experts:

- “partial achievement of technological sovereignty in the Russian Federation is possible in certain industries within the next five years, provided there is substantial subsidization of manufacturing enterprises by the state”;

- “small technology companies (STCs) can act as drivers of breakthrough innovations, especially in the fields of artificial intelligence, bioeconomics, and new materials; the goal of increasing STC revenue sevenfold by 2030 indicates high expectations for this sector”;

- “if current levels of support for specialized industries (UAS, microelectronics, etc.) are maintained, partial achievement of technological sovereignty through SME activities is possible within the next 20 years”.

The variation in expert estimates of the time-frame for achieving technological sovereignty (ranging from 5 to 20 years) is attributable, in our view, to the following factors:

- level of support: the 5-year forecast is contingent upon substantial subsidization and state support; the 20-year forecast is based on maintaining current (significantly lower) levels of support;

- sectoral specificity: in certain sectors where SMEs are more active, achieving partial sovereignty may be possible faster than, for example, in capital-intensive microelectronics;

- the nature of SMEs: experts differ in their views on who contributes more – innovative SMEs (focus on breakthrough technologies) or traditional ones (focus on filling market niches and adaptation).

Summarizing the obtained data, we can conclude that in regions with relatively low innovative activity of small and medium-sized businesses, SME sector enterprises act as a stabilizing factor. Even without possessing high technological competencies, they maintain the stability of local markets and demonstrate high adaptability to changes. This creates the necessary foundation for further strengthening technological sovereignty, although

the current contribution of such enterprises is driven more by their operational flexibility than by the creation of breakthrough solutions.

Among the key directions that have enabled SME entities in the studied regions to make an indirect contribution to strengthening the type of sovereignty under consideration, it is worth highlighting:

- integration of SMEs into the production innovation process with large businesses, including the performance of a number of service functions within the framework of this process;
- development of parallel and partially direct imports in the context of small-scale logistics.

It is important to note the following. The integration of SMEs into the production innovation process with large businesses is not merely “servicing”, but rather the freeing up of resources of large national enterprises from non-core tasks. The outsourcing of service functions to SMEs allows industry leaders to concentrate investments and scientific potential on breakthrough developments, while small businesses ensure the uninterrupted operation of the existing base.

Despite the fact that imports represent a temporary measure, under current conditions they act as a critical condition for the survival of national industries. The activities of SMEs in supplying unique components and consumables prevent technological regression and production line stoppages, creating the “time lag” necessary for domestic developers to create and scale their own full-fledged alternatives.

In particular, even in such a complex industry as microelectronics, SMEs can contribute to technological sovereignty without necessarily creating the final high-tech product from scratch; their role may be realized, for example, through the performance of service and support functions within the innovation process of large corporations (e.g., specialized testing, software development, small-scale logistics of components).

## Conclusion

This study has developed a fundamentally new methodology for assessing SME development at the regional level as one of the components of the economic environment capable of contributing to strengthening the state’s technological independence, significantly expanding existing analytical approaches.

The system-forming element of the methodology is a set of methodological principles that ensure a comprehensive assessment of SMEs – from baseline performance indicators to the potential for mastering critical and cross-cutting technologies in the context of technological sovereignty tasks. The key distinguishing features of the methodology are: a comprehensive mechanism for integrating economic indicators with indicators of SME innovative development and technological potential; a multifactor assessment of quantitative and qualitative characteristics of entrepreneurial activity (including adaptability to sanctions restrictions and import substitution potential); consideration of regional specificities of SME development; and the inclusion of indicators for the adoption of fifth- and sixth-technological-paradigm technologies.

The practical embodiment of this methodology is the methodological toolkit, which made it possible (using selected empirical data from constituent entities of the Northwestern Federal District) to compile a ranking of regions by the level of innovative activity in the SME sector, as well as to identify the directions through which enterprises in this sector, in regions with low innovative activity, can provide an indirect contribution to strengthening technological sovereignty – not only through the implementation of new developments, but also through other components of their activities that enable maintaining the stability of production chains without a direct link to innovation.

It was established that innovative activity of SMEs in the Northwestern Federal District

demonstrates significant differentiation (the average values of this indicator were 48.5%<sup>8</sup>, with a maximum in the Kaliningrad Region – 56.6% and a minimum in the Pskov Region – 41.0%).

It was revealed that the contribution of SMEs to technological sovereignty is realized both through traditional enterprises in regions with low innovative activity and through integration potential in the production chains of large businesses, with state support and international cooperation with friendly countries (66.7%) serving as key factors in enterprise adaptation to external challenges.

Our approach to conducting the assessment can be used to develop measures for stimulating qualitative growth of innovative SME entities by providing regional authorities with detailed information for making informed management decisions. In particular, the differentiation of regions by level of innovative activity makes it possible to tailor support measures, focusing attention on the specific needs of each group.

It also helps formulate specific incentive measures, focusing on the development (or lag in development) of particular areas of SME innovative activity. Furthermore, the approach allows for forecasting resource needs by assessing the level

of adoption of new paradigm technologies, which is critically important for ensuring technological sovereignty.

Let us provide concrete examples of proposals for regional policy using the Vologda Region as an example, based on the results of approbation of this approach.

1. Despite its average position in terms of innovative development level, the region demonstrates one of the highest rates of adoption of fifth- and sixth-technological-paradigm technologies in the Northwestern Federal District (33.3%). In this regard, it is advisable for regional authorities to develop a grant support program specifically for small technology companies engaged in the implementation of artificial intelligence and new materials, in order to consolidate leadership in these niches.

2. The region demonstrated strong positions in the range of intellectual property objects (60% of the possible maximum), outpacing many neighbors. Thus, it seems appropriate to introduce regional subsidies for the commercialization of existing patents and know-how. This will help transform “paper” innovations into real product turnover, the share of which currently stands at only 36%.

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<sup>8</sup> The observed excess of the indicator over official statistical values is due to the fact that the study’s calculation base was limited to innovative SMEs, rather than all small and medium-sized enterprises.

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#### **Authors' contribution:**

1) Anna G. Bezudnaya – substantiation of the relevance, formulation of the scientific problem, aim and objectives of the study, preparation of the “Introduction” section;

2) Vladimir M. Razumovsky – search for studies on assessing the level of small and medium-sized enterprise development in Russian regions, as well as on assessing the level of technological sovereignty development at the regional level;

3) Semen L. Ivanov – comparative characterization of the studies proposed by V.M. Razumovsky, development of a methodology for assessing SME development at the regional level as one of the components of the economic environment capable of contributing to strengthening the state's technological independence (elaboration of methodological principles for the assessment; development and approbation of an assessment toolkit, including a ranking of innovative activity of small and medium-sized enterprises in regions, as well as a qualitative assessment of the role of regional small and medium-sized enterprises in strengthening technological sovereignty).

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## The Impact of Innovative Development on Economic Growth in the Russian Federation



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**Abstract.** This article assesses the impact of innovative development on the growth of the Russian economy. By considering factors such as scientific research, the implementation of its results in production, and net exports, the innovative state of the economy is characterized. The manifestation of these factors clearly demonstrates how the economy's innovative capacity is utilized. Economic modeling allowed determining the effect of innovative development on Russia's economic growth. An economic-mathematical model of the innovative development of the Russian Federation was built. Based on this model, the influence of the studied factors was determined, revealing the effectiveness of using the economy's innovative capacity. By calculating the contribution of these factors to the GDP growth rate, the economic structure of Russia's innovative development was constructed. This formed the basis for developing principles and postulating a taxonomy for the intensification of the Russian economy. Utilizing the predictive function of Russia's

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innovative development, three types of economic growth were identified: 1) inertial; 2) imperative; 3) experimental. It is emphasized that collectively, this constitutes a methodology for assessing economic intensification, which involves decomposing the effect of the identified factors on GDP growth, summing these effects, and determining their contribution to building the structure of such an effect. The assessment of innovative development revealed the factors driving the intensification of the Russian economy. Regulation of these processes became the foundation for developing the taxonomy of economic intensification. The impact of innovative development on the dynamics of the final economic indicator provides a new qualitative dimension to its growth rates, signaling the creation of a new economic management model that can allow achieving technological independence in the near future.

**Key words:** innovative development, innovative capacity, innovative state, economic-mathematical model, economic intensification, taxonomy, Russian economy.

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### Introduction

The ongoing restructuring of the entire reproductive mechanism in Russia is intended to fundamentally change existing structures and impart new dynamism to economic growth<sup>1</sup>. Addressing the issue of a new quality of growth for the Russian economy should be based on identifying and substantiating the prospects for the development of scientific research and the comprehensive, rapid implementation of its results in production. In this regard, a key goal has been set: achieving technological sovereignty for the Russian Federation. Specifically, the Concept of Technological Development for the period up to 2030 was developed<sup>2</sup>, and an instrument

like the “technology credit” was introduced<sup>3</sup>. Simultaneously, the negative trend associated with importing certain types of products essential for the Russian economy should be reversed in the very near future.

As a result of persistent efforts over a relatively short period, a federal law on technological policy was adopted<sup>4</sup>, which, in our view, could serve as one of the instruments for achieving technological independence for the Russian economy. It will complement the already substantial list of other regulatory legal documents related to scientific and technological development which are currently in force.

In foreign literature, a key direction in the study of innovative development assessment can be identified (Cantamessa, Montagna, 2023). While

<sup>1</sup> This scientific article is based on the results of a public presentation at the Plenary Conference of the Moscow Academic Economic Forum (MAEF) 2024 on the topic “Technological sovereignty of Russia: From import substitution to leadership”, dedicated to the 100th anniversary of the birth of V.F. Stanis (Russia, Moscow, Peoples' Friendship University of Russia named after Patrice Lumumba, May 16, 2024). Certain provisions were also reported at the International Scientific Conference “State and market: The Eurasian dominant of development in the context of the formation of a multipolar world” (Russia, Saint Petersburg, Saint Petersburg State University of Economics, October 19–20, 2023).

<sup>2</sup> RF Government Resolution 1315-r, dated May 20, 2023. Available at: <http://government.ru/docs/all/147621/> (accessed: 14.04.2025).

<sup>3</sup> On amendments to certain acts of the Government of the Russian Federation: RF Government Resolution 2064, dated December 2, 2023. Available at: <http://government.ru/docs/all/150960/> (accessed: 08.12.2023).

<sup>4</sup> On technological policy in the Russian Federation and on amendments to certain legislative acts of the Russian Federation: Federal Law 523-FZ, dated December 28, 2024. Available at: <http://www.kremlin.ru/acts/bank/51500> (accessed: 14.04.2025).

earlier works primarily focused on individual stages of innovative activity, contemporary research is mostly devoted to defining the interaction of stakeholders for the effective use of innovative capacity (Ahmed et al., 2025; Spigel et al., 2026). However, the question of assessing the impact of innovative development on ensuring economic growth remains open and is the subject of active debate.

Consequently, the scientific problem lies in resolving the contradiction between the potential to intensify the Russian economy through the effective use of its innovative capacity and the ability to change the economy's structure.

This approach is of fundamental importance and defines the aim of our work: to assess the impact of innovative development on the growth of the Russian economy. Achieving this aim requires setting and solving the following tasks:

- 1) identify the factors exerting the greatest influence on the change in the final economic indicator to shape the innovative state of the economy;
- 2) determine the degree of influence of these factors on the GDP growth rate;
- 3) reveal the qualitative content of the Russian economy's growth rates and develop ways to regulate it;
- 4) based on the predictive function of innovative development, justify the choice of growth type for the Russian economy.

The subject of the study is a set of issues related to the implementation of innovative development in the Russian economy. It is worth noting here that while this process persists, the approaches to its deployment remain unchanged. Hence, the picture of the economy's innovative state has remained largely static for a long time. We are to break this tradition, which hinders and, in some cases, destroys economic growth.

The object of the study is the Russian economy.

### Literature and research review

Under current economic constraints, the role of innovative development as a determining condition for economic intensification immeasurably increases. It becomes pivotal. In this context, the use of the economy's innovative capacity acts as the primary tool for ensuring this intensification. It is a fundamental requirement for overcoming existing limitations and an imperative for the emerging innovation economy. Let us recall that *innovative capacity is the aggregate ability and readiness of an economic unit to produce innovative products*<sup>5</sup>.

Every challenge facing Russia today urgently requires the effective use of the economy's innovative capacity (Brown, 1966; Troisi et al., 2024). Therefore, constant and utmost attention should be paid to the development of domestic science and the technical re-equipment of all economic sectors without exception, based on the application of scientific research results. This is precisely why the effectiveness of using innovative capacity is among the key economic issues.

This formulation of the question implies the intensification of the economy through the creation and widespread application of new machinery, materials, and technological processes. In this context, what does the "innovative development" concept, frequently encountered in various publications not so long ago – particularly in fundamental works like (Mensch, 1973; Freeman, 1992; Santo, 1990) – and heard in academic discourse, actually mean? It is not given due attention anymore because of the current situation in the scientific agenda (a focus on foreign issues rather than domestic developments) and especially the requirements for scientific results to be published in foreign journals.

<sup>5</sup> Kochetkov S.V., Kochetkova O.V. (2023). An innovative capacity of the Russian economy: Is there spread for reappearance? First chapter. *Nauchnye trudy Vol'nogo ekonomicheskogo obshchestva Rossii=Scientific Works of the Free Economic Society of Russia*, 241(3), 342–353. Available at: <https://elibrary.ru/jiwqnx>; <https://doi.org/10.38197/2072-2060-2023-241-3-342-353> (in Russian).

In Russian literature, for instance, in (Trifonova, Prikazchikova, 2011; Golova, 2021), researchers examine intermediate assessments of Russia's innovative development, which do not allow revealing its internal potential. T.A. Nevzorova and V.G. Kucherov in their work present the concept of a technological innovation system used in studying technological innovations in developed countries. This system's assessment is process-oriented rather than result-oriented (Nevzorova, Kucherov, 2022).

Despite their progressiveness, foreign developments also have drawbacks. For example, the assessment of innovative development is often limited to the stage of scientific research, while the implementation of its results in production is not reflected, potentially indicating the inadequacy of the methodological toolkit for such an assessment (Zeng et al., 2010; Franco, Leoncini, 2013; van Beers, Zand, 2014). At the same time, attempts are being made to organize the process of implementing scientific research results into production (Torrecillas et al., 2017; Spanuth et al., 2020). However, works (Lu, Chesbrough, 2022; Rammer, 2023; Srisathan et al., 2023) lack an assessment of how the economy assimilates the research results implemented in production.

The applied definitions of innovative development and the assessments based on them in previous years proved untenable, as they not only failed to contribute to the theory of the issue but also, crucially, were not followed by concrete practical results due to the lack of a comprehensive methodological toolkit for assessing the contribution of innovative development to the dynamics of the country's GDP.

At the same time, there are certain achievements in the development and resolution of these issues. Works (Farbirovich, 1978; Abalkin, 1988; Griliches, 1988; Barbiroli, 1996) are devoted to constructing the sequence from idea to practical implementation of scientific and technical achievements. They also study the problems of qualitatively enriching

economic growth rates. In turn, studies (Karlsson et al., 2004; Freeman, Soete, 2009) develop indicators for assessing the effectiveness of using innovative capacity. Consequently, problems of modeling innovative development have been addressed in works (Lawson, Samson, 2001; Yi et al., 2021; Codini et al., 2023).

Despite certain achievements, the issues of assessing the impact of innovative development on economic growth are not studied sufficiently to solve the problems of economic intensification.

We defined innovative development using the concept of "innovative capacity" because it unites scientific research, the implementation of its results in production, and their subsequent assimilation by the economy into a single chain, while also considering the import of necessary products. A break in this sequence would indicate the inaccessibility of innovative development for the economy. In this regard, the effectiveness of using innovative capacity is one of the key tasks for intensifying the Russian economy, as it substantiates the choice of prospects for its innovative development. Without ensuring the necessary level of such effectiveness, the economy cannot move toward intensification, i.e. development driven by factors like scientific research, the implementation of its results, and net exports, based on the transformation of old properties and the emergence of new ones. These types of movement constitute the taxonomy of economic intensification.

### **Materials and methods**

Innovative development is an indispensable condition for radical restructuring and successful progress toward new frontiers, for the transition to economic intensification. This is not merely an economic directive; it should have detailed and substantial content and be reflected in the impact on the final economic outcome, i.e. assess the efficiency of resources used in influencing the resulting indicator. The aspiration to give new content to economic growth is linked to the action

of specific factors, among which we highlight science, the implementation of its results in production, and net exports. In these conditions, the objective necessity for restructuring is dictated by the fundamentally changed internal structure of the innovative development of the Russian economy in the preceding stage of its functioning.

In light of the above, existing approaches to assessing the innovative development of the economy also require new content. In many ways, the transition to technological independence will contribute to a significant increase in production efficiency. Based on this, for the first time in economic science, the authors propose an original *method for assessing the innovative development of an economy, which consists of calculating the efficiency of using its innovative capacity, i.e. decomposing into components and determining the effect of the aforementioned factors on the final economic indicator, summing these effects, and also isolating their contribution and constructing its structure.* This will allow for a more comprehensive investigation and resolution of the stated scientific problem.

The established course toward intensifying the Russian economy, its scale, and complexity require formulating and solving a research task. Its essence lies in assessing the impact of factors such as expenditures on scientific research, expenditures on implementing their results in production, and net exports on the GDP growth rate. Using the method of regression and correlation analysis and its tools, we need to evaluate the efficiency of allocated resources and their contribution to the growth of the Russian economy.

The introductory part of the work is prepared based on the method of concretization. The current state of the scientific problem was investigated using the method of literature analysis. Using the modeling method, an economic-mathematical model of the innovative development of the Russian Federation was created. The study of the economy's innovative capacity is based on methods of analysis and

synthesis. Using deduction and induction methods, the economic structure of Russia's innovative development was examined. Based on the classification method, a taxonomy of economic intensification was constructed. The forecasting method allowed investigating the predictive function of the innovative development of the Russian economy. The statistical method runs through the entire work. In accordance with the generalization method, conclusions were drawn and proposals formulated.

Data sources for the paper are the Federal State Statistics Service (Rosstat) and the International Monetary Fund (IMF).

### **Research results**

#### ***Modeling the innovative development of the Russian economy***

In examining innovative development, we noted that it is a determining condition for economic intensification, as its economic role is to reduce the impact of imports on GDP dynamics. State economic policy should increasingly focus on stimulating such structural shifts.

In this regard, economic design consists of determining the elements, their structure, and characteristics (the degree of factor influence) of using the economy's innovative capacity. The approach applied in this article is that the assessment reflects the final results calculated under the influence of innovative development (from idea to implementation and assimilation by the economy) on GDP dynamics. The choice of the economic-mathematical model is based on the analysis of Russia's GDP components according to the form approved by the Federal State Statistics Service, where research expenditures, costs on implementing their results in production, net exports, and other relevant factors are considered. On this basis, a preliminary correlation analysis was conducted, and the factors exerting the greatest influence on GDP dynamics were selected<sup>6</sup>.

<sup>6</sup> The preliminary correlation analysis is not presented in this article to save space.

To examine the influence of scientific research, the implementation of its results in production, and net exports on GDP dynamics, we represent the innovative state of the Russian economy (Tab. 1).

A fundamental place in the methodological substantiation for solving the stated scientific problem – economic intensification – belongs to a new theoretical understanding of innovative development, as it is now perfectly clear that existing backlogs do not guarantee its automatic and uninterrupted implementation. Innovative development is a purposeful change in the state (the composition – ability, and structure – readiness, i.e., stable connections) of the innovative capacity of an economic unit, i.e., the transition of innovative capacity from an initial (baseline) to a final (planned or desired at a certain point in time) state<sup>7</sup>, ensuring imperative economic growth. This definition expands the cognitive potential of the concept of innovative economic development.

The mechanism for realizing the economy's innovative capacity is presented in Figure 1.

Using the innovative state (Tab. 1), we will characterize the process of utilizing the economy's innovative capacity (Fig. 1), i.e., the effects of the selected factors. To assess the impact of these factors on the GDP growth rate, an economic-mathematical model of innovative development was developed, which is presented below:

$$Y = 55\,349.66 + 10.04 \times X_1 + 12.72 \times X_2 + 1.01 \times X_3 \quad (1)$$

The developed economic-mathematical model of Russia's innovative development is adequate (Fisher's test:  $F_{statistic} (38.63) > F_{critical\ value} (4.07)$ ) and can be used in further calculations and analysis. At the same time, the scope of its practical application may be limited by the state of information support.

Thus, the change in GDP under the influence of scientific research, the implementation of its results in production, and net exports is shown in Figure 2.

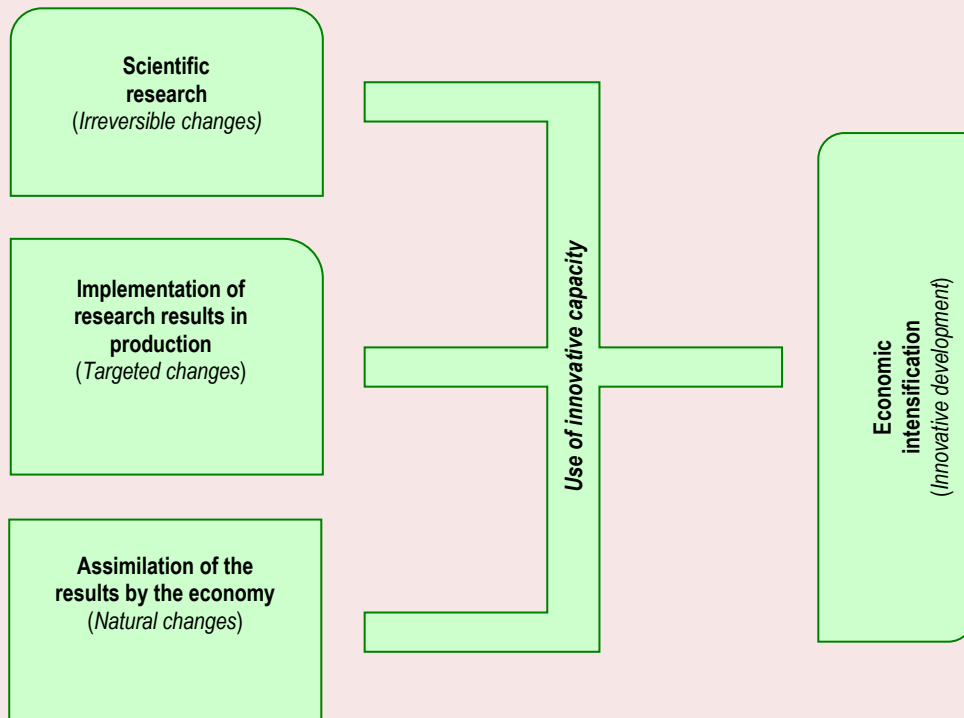
Table 1. Innovative state of the Russian economy, in 2016 prices, billion rubles

Analyzed period	Result	Factors		
	GDP, Y	Research expenditures, $X_1$	Costs on implementing research results in production, $X_2$	Net exports, $X_3$ (exports – imports)
2010	75 363.14	741.59	607.28	6 086.04
2011	81 750.60	772.96	997.94	6 601.63
2012	85 040.30	817.97	1 129.52	5 666.44
2013	86 533.10	829.87	1 318.92	4 675.84
2014	87 170.20	877.34	1 336.72	5 597.07
2015	85 450.60	878.59	1 237.87	6 876.58
2016	85 616.10	873.78	1 284.59	4 444.20
2017	87 179.30	902.00	1 333.64	4 625.07
2018	89 626.60	829.02	1 270.96	8 967.70
2019	91 596.67	886.31	1 633.02	6 996.25
2020	89 166.01	903.88	1 767.48	4 527.37
2021	94 181.03	830.87	1 656.55	8 694.01

Calculated based on: Rosstat, IMF data.

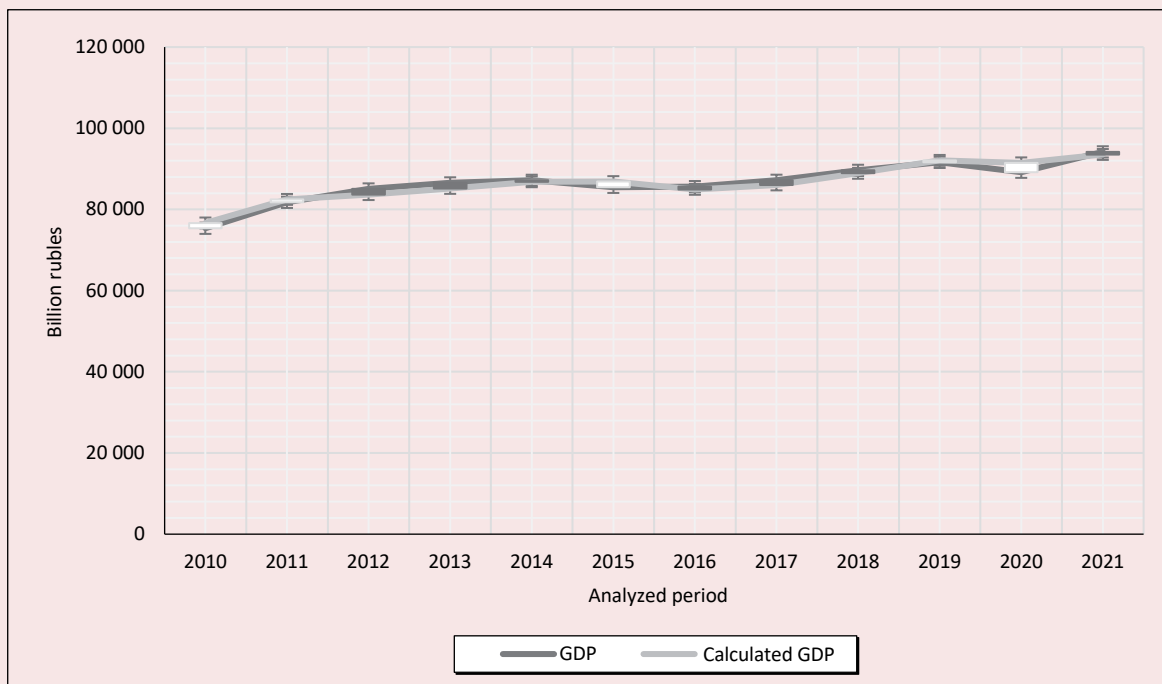
<sup>7</sup> Kochetkov S.V., Kochetkova O.V. (2018). Innovative potential of industrial enterprises as an instrument for economic development. *Ekonomicheskoe vozrozhdenie Rossii*=Economic Revival of Russia, 3(57), 78–91. Available at: <https://elibrary.ru/xztlvj> (in Russian).

Figure 1. Mechanism for realizing the economy's innovative capacity



Source: own compilation.

Figure 2. Intensification of the Russian economy



Source: own calculation.

Under the current conditions, the intensification of the Russian economy requires improving the interaction between science and the implementation of its results, at all levels of management: from an individual enterprise to the state as a whole. Organizational shortcomings are explained by the slow assimilation of designed capacities in industry. Due to the lack of production at the necessary science and technology level, the Russian economy underproduces a significant volume of innovative products.

This suggests that the mechanism for using the economy's innovative capacity represents the organization of effective interaction between science and industry. In this case, the economy's innovative capacity acts as the direct source for creating such interaction.

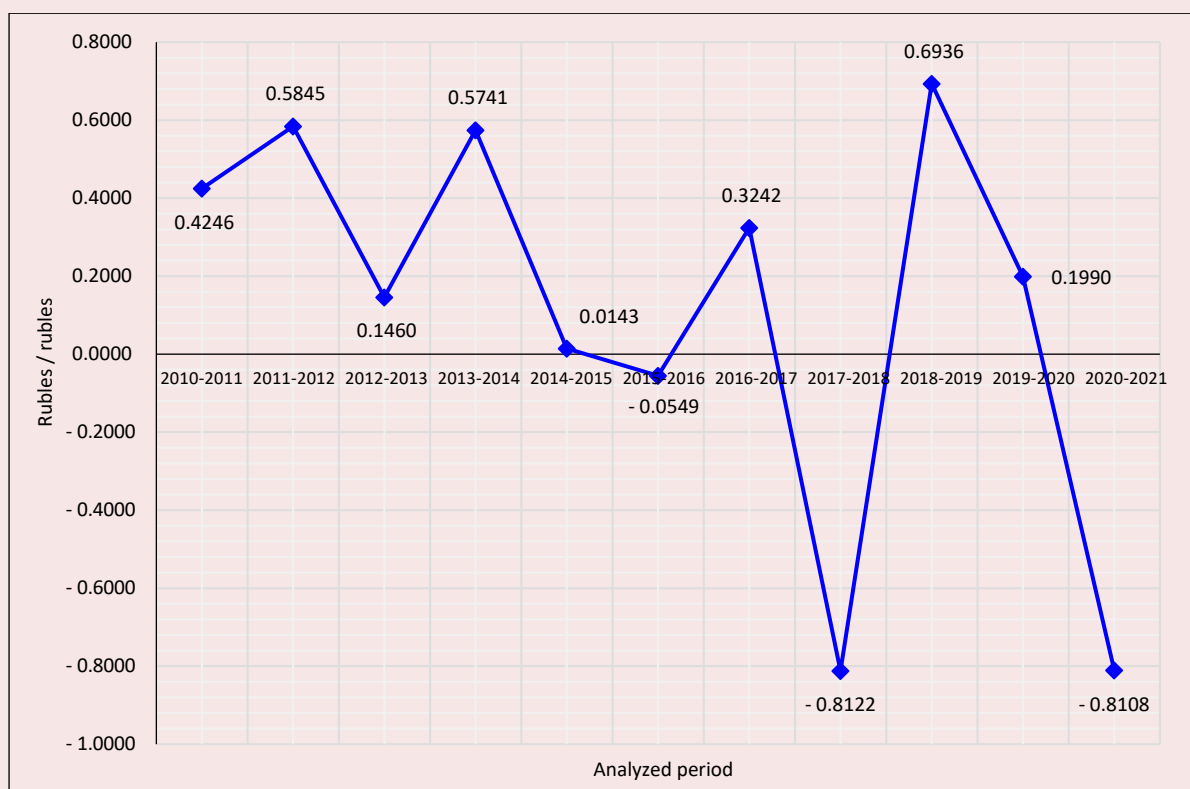
### *Effectiveness of using Russia's innovative capacity*

The transition to innovative development of the Russian economy, i.e., the intensive use of its innovative capacity, is objectively an urgent need. Economic intensification is crucial for achieving high growth rates. Today, the directions that should justify the predominance of reindustrialization and new fixed assets construction over imports have been identified, namely: scientific research, the implementation of its results in production, and net exports.

Examining this issue through the lens of the impact on GDP, it is necessary to assess the influence of these factors on its change.

First, in the context of economic intensification, the role of scientific research is as follows (Fig. 3).

Figure 3. Effectiveness of research activities



Note: calculated based on the developed economic-mathematical model of Russia's innovative development.

Source: own calculation.

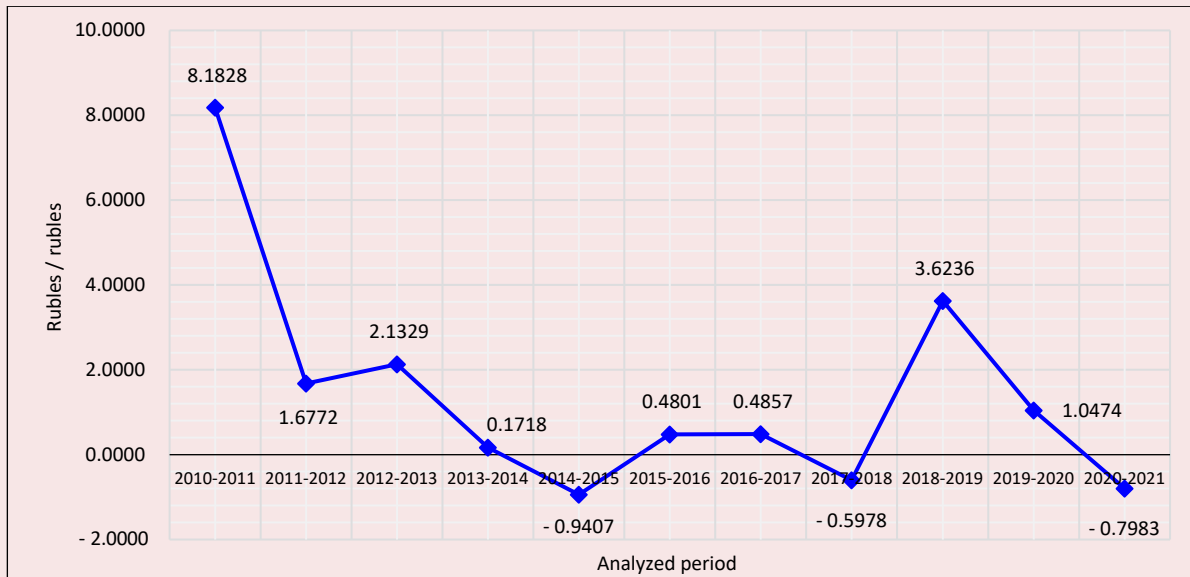
Despite constantly increasing research expenditures – from 741.59 billion rubles in 2010 to 830.87 billion rubles in 2021 – their effectiveness decreased from 0.4246 rubles/rubles in 2010–2011 and even turned negative to -0.8108 rubles/rubles in 2020–2021 (Fig. 3). This is explained by the fact that the predominant result of research activities in the analyzed period was publications, especially in foreign journals and publishing houses. The process of implementing results into production was of secondary or sometimes even no importance. Periodic spikes in efficiency improvement in 2013–2014 (from 0.1460 to 0.5741 rubles/rubles), in 2016–2017 (from -0.0549 to 0.3242 rubles/rubles), and especially from -0.8122 to 0.6936 rubles/rubles in 2018–2019 respectively, are due to governmental attempts to create conditions for implementing research results into production (specifically, the

creation of science cities, the National Technology Initiative Project Support Fund, (Skolkovo Foundation), the Foundation for Promotion of Small Innovative Enterprises (Innovation Promotion Fund), etc.), as well as the implementation of developments from previous years. However, as we can see, these efforts are insufficient.

At the same time, it should be emphasized that generally this factor has a negative impact on GDP: for every additional ruble invested in science, GDP grows by a smaller amount, so we can state a slowdown in its growth. In our opinion, the continued work of the “Priority-2030” program<sup>8</sup> to improve the current situation will yield positive results.

Second, the influence of the factor “implementation of research results in production” on GDP change is no less significant (Fig. 4).

Figure 4. Effectiveness of implementing research results in production



Note: calculated based on the developed economic-mathematical model of Russia’s innovative development.

Source: own calculation.

<sup>8</sup> On measures to implement the strategic academic leadership program “Priority-2030”: RF Government Resolution 729, dated May 13, 2021. Available at: <http://government.ru/docs/all/134443/> (accessed: 07.11.2023).

We can see (Fig. 4) that in the analyzed period, there was a downward trend in the effectiveness of implementing research results into production, as it dropped from 8.1828 rubles/rubles in 2010–2011 to a negative value of -0.7983 rubles/rubles in 2020–2021. This situation is explained by the near-complete depletion of Russia's production potential, which is also confirmed by the persistent decrease in the growth rate of expenditures on implementing research results. A certain jump in this indicator from -0.5978 to 3.6236 rubles/rubles in 2018–2019 indicates the effect obtained from the aforementioned recent efforts to implement research results. This characterizes not only a slowdown in Russia's GDP growth due to this factor but also its decline at the end of the analyzed period, as research results find virtually no support in the economy.

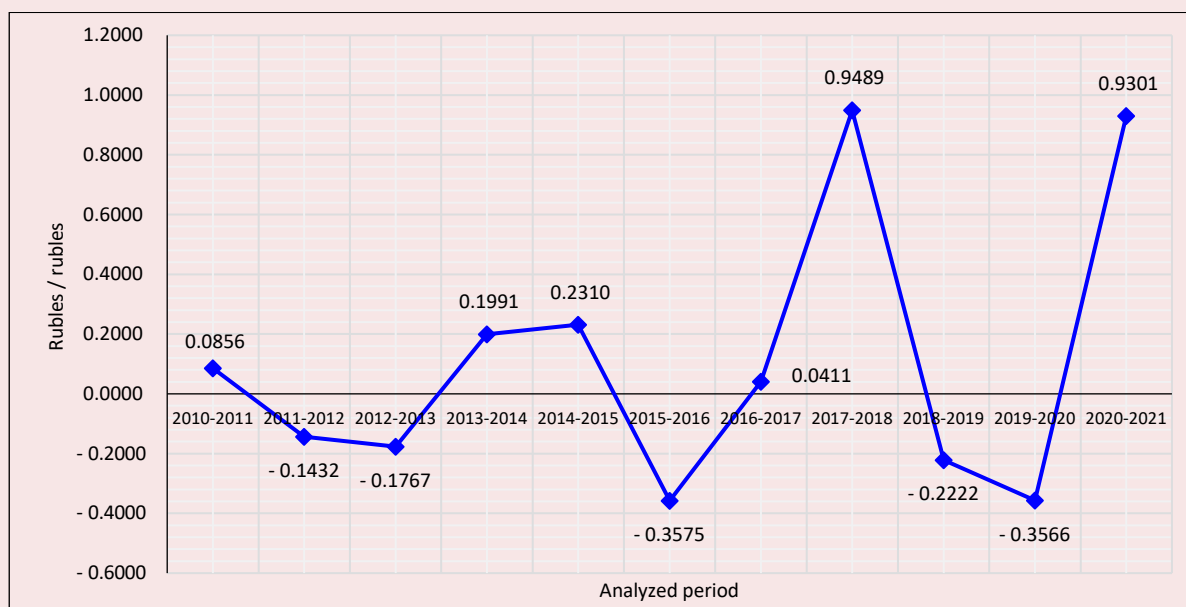
Third, the influence of net exports on GDP change is presented in *Figure 5*.

Under current conditions, this trend looks most paradoxical (Fig. 5). Despite the increase in GDP due to net exports from 0.0856 rubles/rubles in 2010–2011 to 0.9301 rubles/rubles in 2020–2021, a trend of gradual slowdown in its impact is evident. Although certain breakthroughs are observed in 2017–2018 (from 0.0411 to 0.9489 rubles/rubles, respectively) and in 2020–2021 (from a negative value of -0.3566 to 0.9301 rubles/rubles), they are, unfortunately, associated with a slight increase in Russia's export opportunities, mainly in the raw materials sector, and, crucially, with a significant decrease in imports related to restrictions imposed by Western countries.

In the long term, the trend of exports taking the lead over imports should become a natural result of the innovative development of the Russian economy.

These are just some data on the influence of the economy's innovative capacity on GDP change.

Figure 5. Effectiveness of net exports



Note: calculated based on the developed economic-mathematical model of Russia's innovative development.

Source: own calculation.

In the current situation, major tasks are set to improve conditions for the effective use of the economy’s innovative capacity to achieve high growth rates. In our opinion, the very adoption of the federal law on technological policy in Russia speaks to its paramount importance.

**The economic structure of innovative development**

Naturally, the phase of efficiency fluctuations (or the limits of a given factor’s influence) should aim for permanent GDP growth. This becomes achievable by selecting and justifying priorities in science, identifying the production base for implementing its results, and managing net exports. This implies building a system that spans from scientific research to the implementation of its results in production, contingent upon the economy’s successful assimilation of these results. In this case, the amplitude of efficiency fluctuations will, without a doubt, be minimal. Organizing this system and its institutionalization require immediate decisions today, as the current

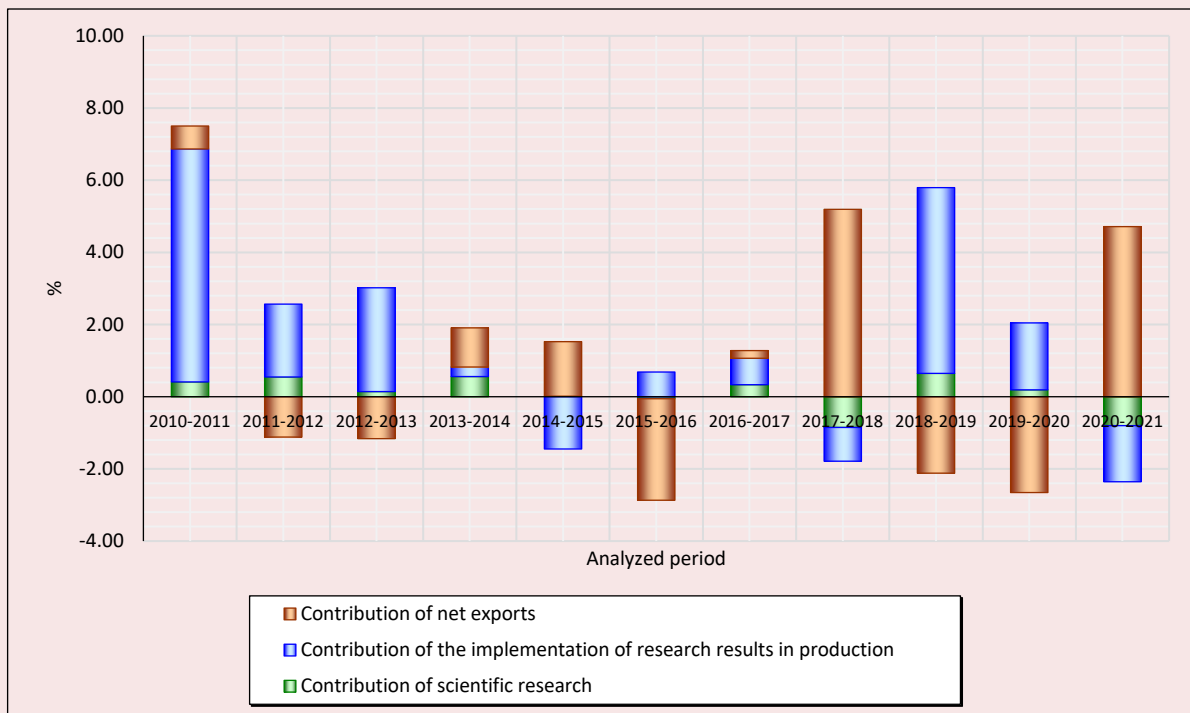
framework for this process has proven ineffective, a fact confirmed by the results obtained.

There should be such a combination of scientific research, implementation of its results in production, and net exports that yields the maximum GDP growth rate.

Alongside the steady decline in the role of imports in meeting existing and emerging needs in Russia, the implementation of research results into production becomes the determining factor for GDP growth (Fig. 6).

It can be seen (Fig. 6) that while the implementation of research results in production is the main driver of GDP growth compared to other factors (scientific research and net exports), a process of gradual attenuation of this impact is observed. This fact, undoubtedly, necessitates production facilities restoration and, primarily, new production capacities construction. To resolve the issue – a decline in the contribution

Figure 6. Innovative development of the Russian economy



Note: calculated based on the developed economic-mathematical model of Russia’s innovative development.

Source: own calculation.

of the implementation of research results to the GDP growth rate from 6.45% in 2010–2011 to a negative value of -1.55% in 2020–2021 so that GDP growth is restrained – favorable conditions for implementation should be created. As calculations show, the existing levers are insufficient.

Considering the contribution of factors influencing GDP change, the structure of such a contribution should be noted (*Tab. 2*).

The data in Table 2 clearly demonstrate the impact of the dominant factor – the implementation of research results in production – on GDP dynamics. In these conditions, the transformation

of innovative development should begin with shifts in the reproductive, sectoral, and technological structures of the Russian economy.

#### *Taxonomy of intensification of the Russian economy*

A primary focus on using innovative capacity, rather than simply scaling up production, will give new meaning to the very concept of “economic intensification”, which lies in the impact of innovative development on GDP growth within the limits of influence of the studied factors (*Tab. 3*).

The data in Table 3 reveal the full picture of the taxonomy of Russian economic intensification.

Table 2. Economic structure of Russia's innovative development

Indicator name	Analyzed period										
	2010–2011	2011–2012	2012–2013	2013–2014	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019	2019–2020	2020–2021
R expenditures	5.48	14.87	3.42	29.32	0.49	(1.56)	26.09	(12.20)	8.18	4.07	(11.33)
I expenditures	86.05	54.80	68.80	13.86	(48.70)	19.27	57.26	(13.39)	65.06	39.44	(21.99)
Net exports	8.48	(30.33)	(27.79)	56.82	50.82	(79.17)	16.65	74.41	(26.77)	(56.49)	66.67
Real GDP growth rate	100	100	100	100	100	(100)	100	100	100	(100)	100

Source: own calculation based on data in Figure 6.

Table 3. Classification of economic intensification principles

Analyzed period	Principles of economic growth intensification											
	I. Cost principle				II. Efficiency principle				III. Contribution principle			
	Result	Factors of economic intensification			Result	Factors of economic intensification			Result	Factors of economic intensification		
	GDP growth rate, %	Research	implementation of research results in production	Net exports	GDP growth rate, %	Research	implementation of research results in production	Net exports	GDP growth rate, %	Research	implementation of research results in production	Net exports
2010–2011	7.50	9.23	11.92	78.85	7.50	4.88	94.13	0.98	7.50	5.48	86.05	8.48
2011–2012	1.45	10.74	14.83	(74.42)	1.45	24.30	69.74	(5.95)	1.45	14.87	54.80	(30.33)
2012–2013	1.86	12.16	19.33	(68.51)	1.86	5.95	86.86	(7.19)	1.86	3.42	68.80	(27.79)
2013–2014	1.91	11.23	17.11	71.66	1.91	60.75	18.18	21.07	1.91	29.32	13.86	56.82
2014–2015	0.08	9.77	(13.76)	76.47	0.08	1.21	(79.31)	19.48	0.08	0.49	(48.70)	50.82
2015–2016	-2.18	(13.23)	19.46	(67.31)	-2.18	(6.15)	53.79	(40.06)	-2.18	(1.56)	19.27	(79.17)
2016–2017	1.28	13.15	19.44	67.41	1.28	38.10	57.07	4.83	1.28	26.09	57.26	16.65
2017–2018	3.41	(7.49)	(11.48)	81.03	3.41	(34.43)	(25.34)	40.23	3.41	(12.20)	(13.39)	74.41
2018–2019	3.68	9.31	17.16	(73.52)	3.68	15.28	79.83	(4.89)	3.68	8.18	65.06	(26.77)
2019–2020	-0.61	12.56	24.55	(62.89)	-0.61	12.41	65.34	(22.25)	-0.61	4.07	39.44	(56.49)
2020–2021	2.36	(7.43)	(14.82)	77.75	2.36	(31.93)	(31.44)	36.63	2.36	(11.33)	(21.99)	66.67

Note: the combined influence of factors is 100%.

Source: own compilation based on data in Figures 3, 4, 5, 6.

According to the cost principle, economic intensification is presented in *Figure 7*.

We can see (Fig. 7) that the cost structure for intensifying the Russian economy contributes not only to inertial GDP growth, mainly due to factors like net exports, but also to a decline in growth from 7.50% to 2.36% over the analyzed period. In this case, the main components of investment flows into economic intensification that do not lead to an increase in GDP growth rates are expenditures on research and on implementing its results.

The Russian economy intensification based on the efficiency principle is presented in *Figure 8*.

At the same time, the shift in the structure of Russia's economic intensification (Fig. 8), despite the fluctuations in GDP growth rates, toward the efficiency of scientific research and the efficiency of implementing its results in production indicates a reduction in the payback period for these

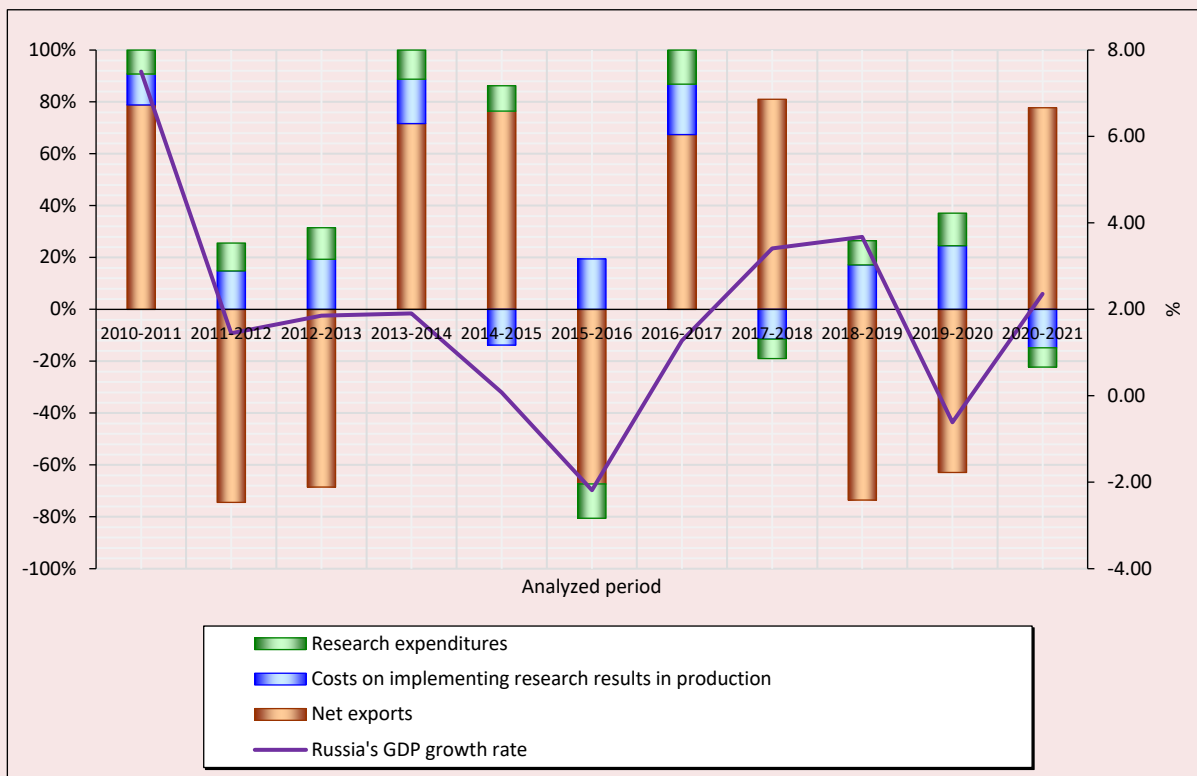
expenditures, meaning that the period for utilizing scientific and technical achievements in the production process is shortened.

Finally, the contribution principle of the Russian economy intensification is presented in *Figure 9*.

Accordingly, the economic structure of Russia's innovative development, or the structure of the factors' contribution to the real GDP growth rate (Fig. 9), suggests that achieving imperative economic growth at the current stage will be extremely difficult. The contribution of scientific research and the implementation of its results in production to the GDP growth rate from 2010 to 2021 is minimal and steadily declining.

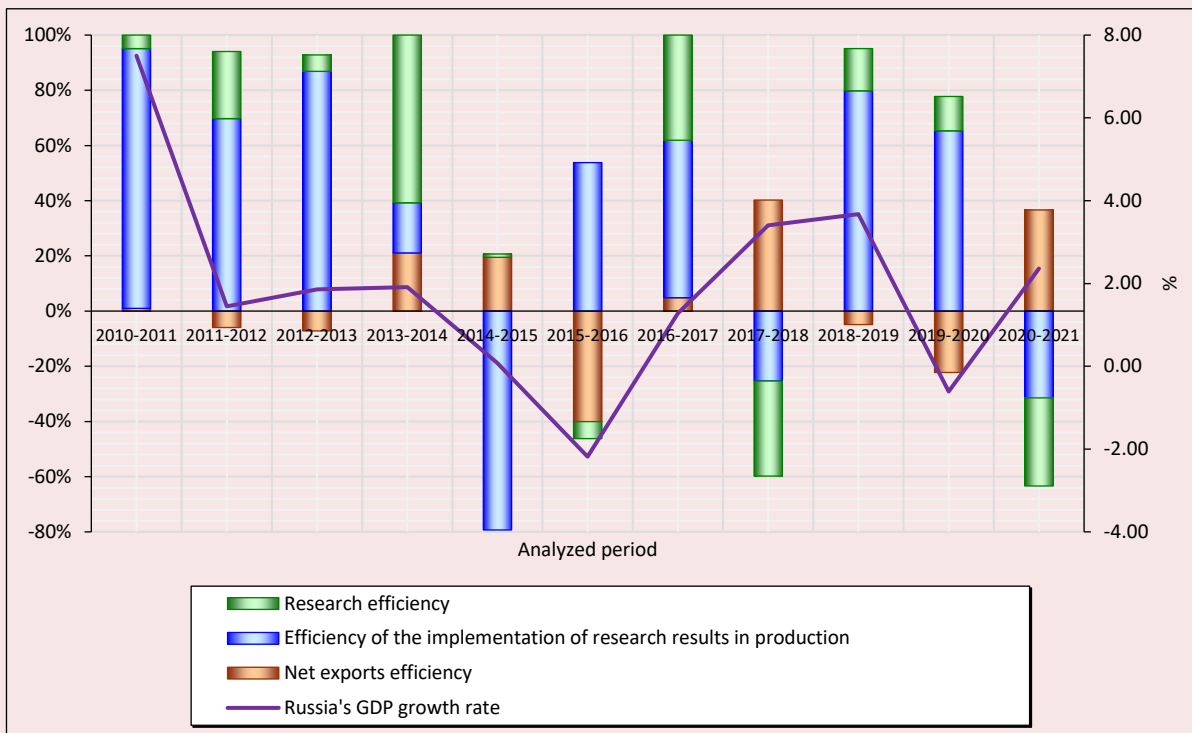
In this regard, the taxonomy of economic intensification reveals and substantiates ways to regulate innovative development in order to achieve the desired GDP values in the future.

Figure 7. Taxonomy of intensification of the Russian economy (cost principle)



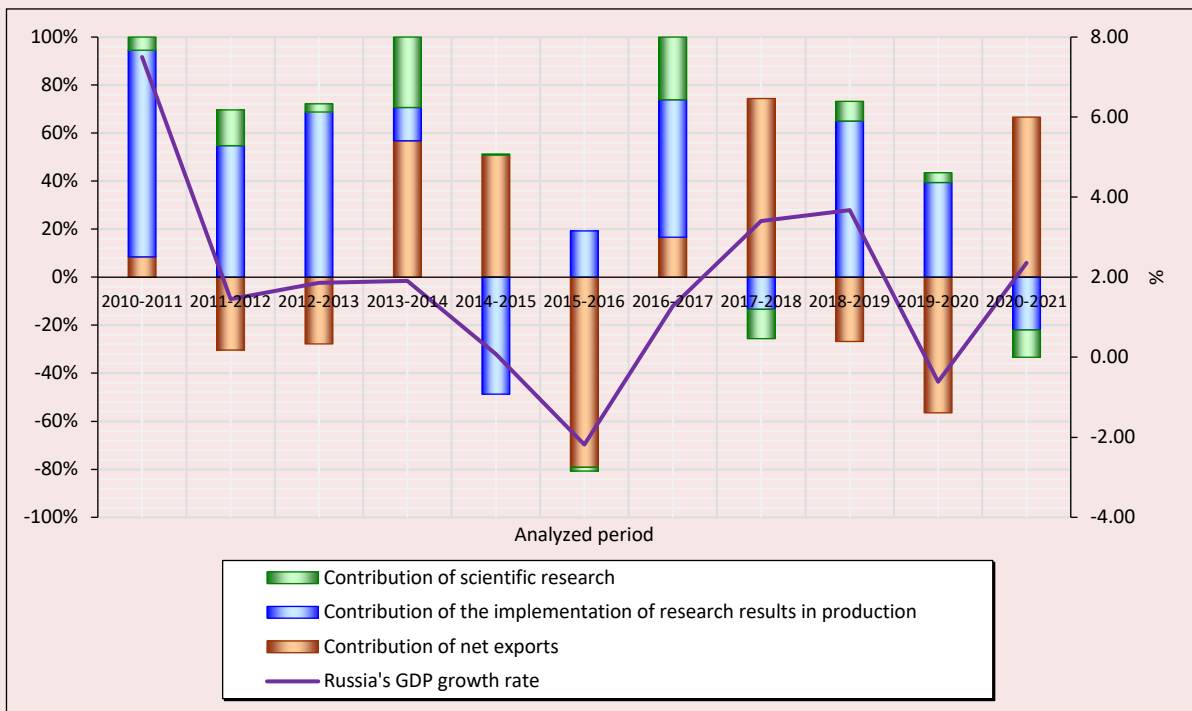
Calculated based on: data in Table 3.

Figure 8. Taxonomy of intensification of the Russian economy (efficiency principle)



Calculated based on: data in Table 3.

Figure 9. Taxonomy of intensification of the Russian economy (contribution principle)



Calculated based on: data in Table 3.

In light of the above, it can be argued that economic intensification is a process accompanied by qualitative changes (reorganization) of the economic structure of innovative development (through the use of innovative capacity). In other words, this is a type of movement associated with the accelerated achievement of the resulting indicator (GDP growth rate) and its maintenance at the required level (e.g., optimal or maximum value) under the prevailing conditions.

The analysis of the Russian economy intensification allows us to establish the following patterns of innovative development:

The decline in GDP growth rates is explained, first, by the negative influence of scientific research and net exports, and, second, by the positive impact of implementing research results in production. In this context, when transitioning to positive values in research and implementation simultaneously with a negative influence of net exports, a reduction in the downturn of the Russian economy is observed, indicating an increasing importance of scientific research.

Minimal influence of scientific research and the implementation of its results in production allows

maximizing Russia’s GDP growth rate. At the same time, the influence of net exports allows achieving such GDP growth rates only at its maximum, peak values. This means that science and the implementation of its results in production ensure intensive economic growth, when a stable interaction between science and industry is being established. Net exports, in turn, tend to have an extensive impact on economic growth.

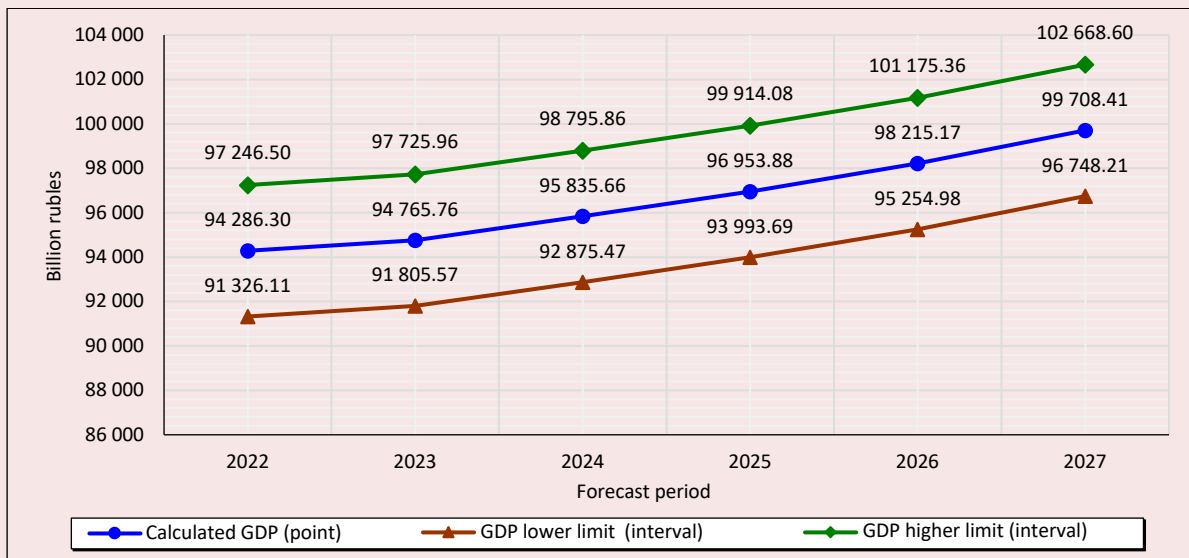
This follows from the previous points. There is a tendency toward a compensatory effect of the considered factors on positive GDP dynamics.

Across the entire Russian economy, the development of these natural tendencies will contribute to imperative growth.

***The predictive function of innovative development of the Russian economy***

Assessing the current intensification of the Russian economy requires making a forecast of the impact of innovative development on its growth. According to the developed economic-mathematical model of innovative development, the point and interval forecast of inertial GDP change is presented in *Figure 10*.

Figure 10. Inertial growth of the Russian economy



Note: calculated based on the developed economic-mathematical model of Russia’s innovative development.  
Source: own calculation.

It is easy to notice (Fig. 10) that in the forecast period, while maintaining the influence of the studied factors, GDP dynamics is not changed significantly. On the contrary, their contribution to it constantly decreases. They have considerable influence provided that Russian production capacities are overloaded, which may subsequently lead to the depletion of the economy’s innovative capacity.

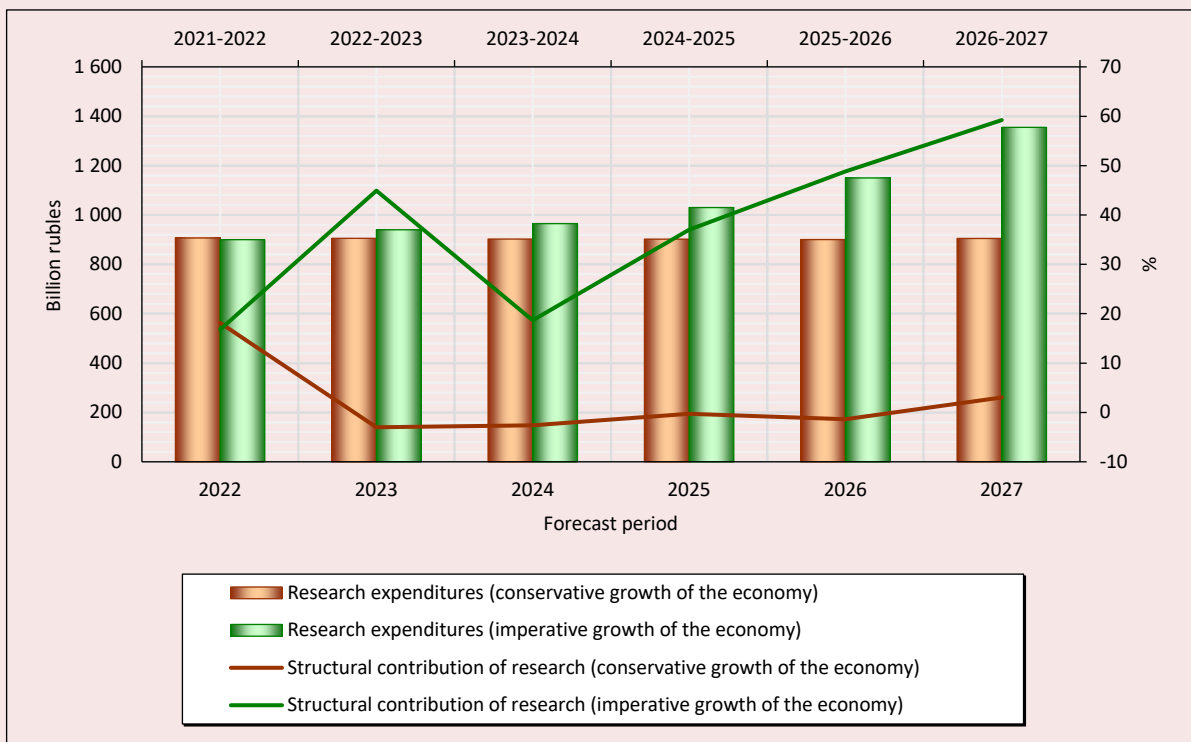
In accordance with the calculations performed, to characterize the imperative growth of the economy, we will use structural contribution indicator. Achieving its required value facilitates imperative economic growth.

Within the framework of the identified innovative economic development pattern, the growing influence of research is presented in Figure 11.

The anticipated transformations of the Russian economy’s innovative capacity (Fig. 11), causing qualitative changes in science, lead to significant transformations in management. The process of assessing the quality of scientific research acquires important new features. This set of issues requires immediate consideration in the near future.

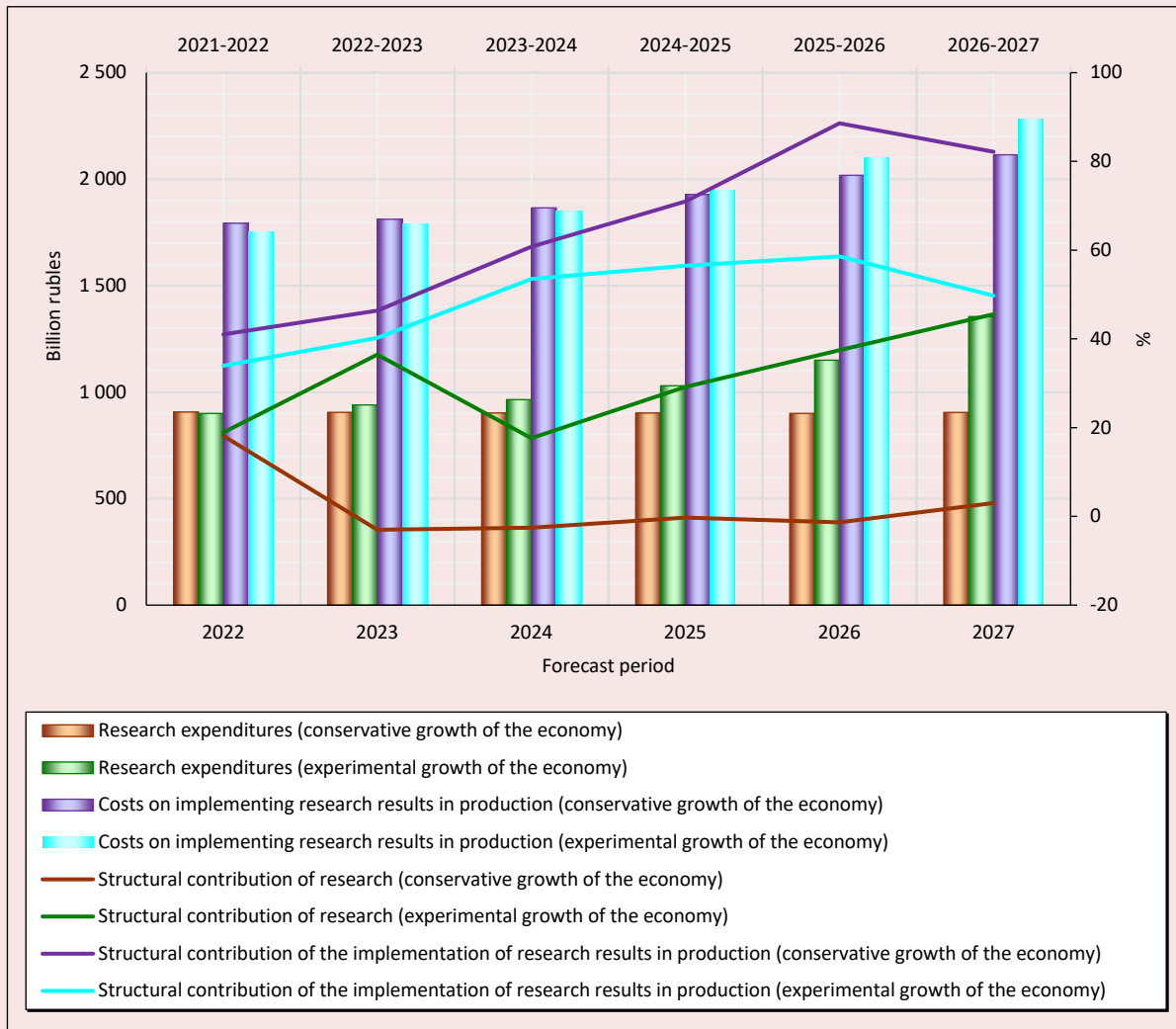
Undoubtedly, the development of science has been and remains an objective pattern for the effective use of the economy’s innovative capacity. However, the practical implementation of new scientific ideas today, as always, is no less important than their development. In this regard, the established pattern concerning the combined influence of scientific research and the implementation of its results in production reveals the following picture of the Russian economy intensification in the forecast period (Fig. 12).

Figure 11. Imperative growth of the Russian economy



Note: calculated based on the developed economic-mathematical model of Russia’s innovative development.  
Source: own calculation.

Figure 12. Experimental growth of the Russian economy



Note: calculated based on the developed economic-mathematical model of Russia's innovative development.  
 Source: own calculation.

It seems that this variant of economic intensification (Fig. 12) allows using innovative capacity more effectively, shaping its rational state and the desired economic structure to prevent its premature depletion. In other words, a coherent system is being built, and the innovative

development of the Russian economy is being fine-tuned. The ongoing changes in innovative capacity can significantly accelerate economic intensification and establish a faster, broader, and more effective implementation of scientific and technical achievements.

It is worth noting that in the forecast period, the Russian economy, unfortunately, cannot do without imports. At the same time, its impact (structural contribution) on economic growth under the emerging conditions of intensification is systematically decreasing, from 28.72% in 2022–2023 to 6.22% in 2026–2027, despite its slowdown in 2021–2022 (-41.51%). The same picture is observed with experimental economic growth – a decrease from 23.26% in 2022–2023 to 4.74% in 2026–2027. The growth slowdown here amounts to -47.10% in 2021–2022. The negative values characterizing the slowdown in economic growth are just a natural outcome of previous periods.

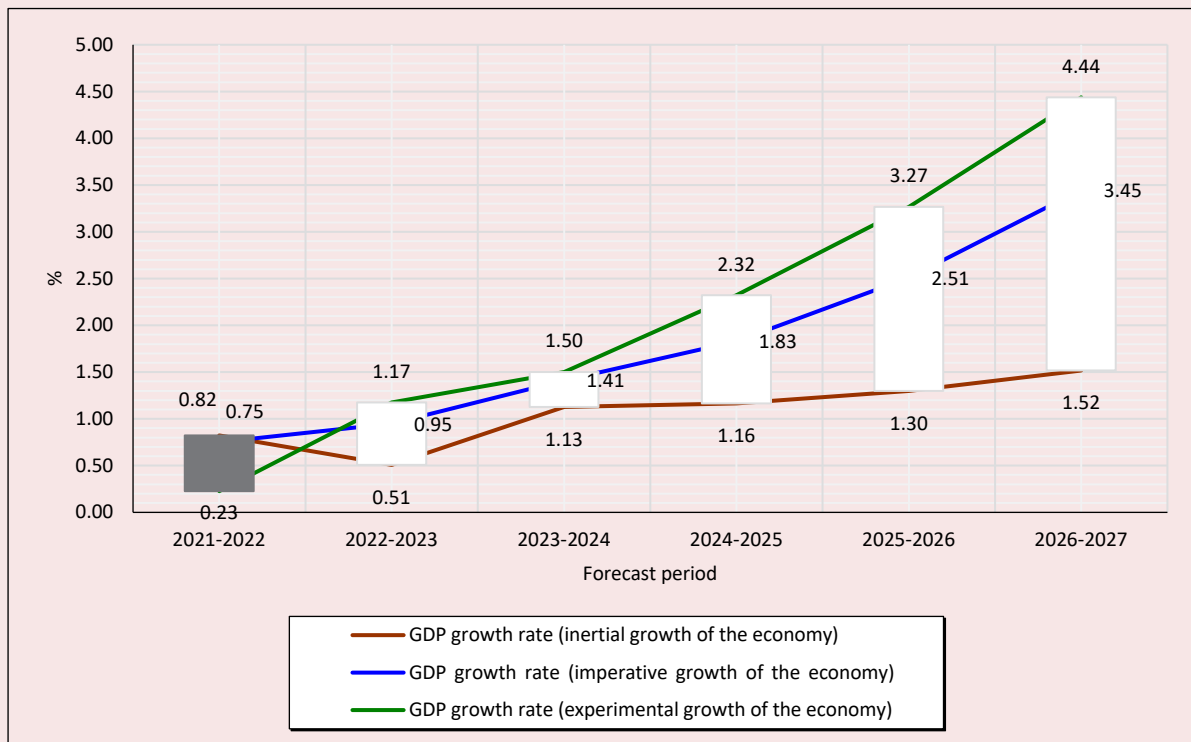
All this substantiates the choice between the identified variants of intensifying the Russian

economy – variants of the economic structure of innovative development. So, the rate and scale of economic growth depend on the effectiveness of using innovative capacity (Fig. 13).

The choice in favor of one or another variant should be made based on the feasibility of forming specific conditions for Russian economy intensification. We believe that the most acceptable variant is associated with the experimental growth of the Russian economy, under which the maximum GDP growth rate can be achieved (Fig. 13).

Overall, it can be argued that forecasting innovative development is the basis for formulating, selecting, and substantiating promising paths for Russian economy intensification.

Figure 13. Economic growth of Russia



Note: calculated based on the developed economic-mathematical model of Russia’s innovative development.  
Source: own calculation.

## Conclusions

The results obtained have led to the following conclusions.

The key characteristics of an economy's innovative state have been identified as scientific research, the implementation of its results in production, and net exports. Together, these factors facilitate the entire process – from an idea, to its implementation, and finally its assimilation by the economy – which demonstrates the application of innovative capacity. The degree to which each of these identified factors impacts GDP dynamics determines the innovative development of the economy. Consequently, when aiming for intensification, innovative development should be viewed as a reflection of qualitative transformations within the economy.

Using the developed economic-mathematical model of innovative development, we assessed the influence of the factors under study on changes in GDP. This assessment reflects the efficiency of utilizing Russia's innovative capacity. Overall, it should be noted that the assessment indicates a modest impact of innovative development on the dynamics of this final economic indicator.

The contribution of these factors to the GDP growth rate reveals the economic structure of Russia's innovative development. The factor exerting the greatest influence is the implementation of scientific research results in production.

Based on this, a taxonomy for economic intensification was established, founded on specific principles: costs, efficiency, and the contribution of the identified factors. Applying this taxonomy allowed determining the patterns of innovative development in the Russian economy.

Through forecasting the innovative development of the economy, three types of economic growth for Russia have been substantiated: inertial, imperative, and experimental. In the authors' view, the experimental growth path is the most preferable for Russia.

Taken together, the above constitutes a methodological approach that differs from those already existing. Its essence lies in the fact that the assessment reflects the final results achieved through the impact of innovative development (from idea to implementation and economic assimilation) on the change in the final indicator, thereby revealing opportunities for economic intensification. Its uniqueness lies in its applicability at various levels: a region, a territory, an economic area, an association of enterprises (a complex), or an individual production enterprise.

Based on the foregoing, *a method for assessing the innovative development of an economy is proposed. This method involves calculating the efficiency of using its innovative capacity. This is achieved by decomposing it into its components, determining the effect of the aforementioned factors on the final economic indicator, aggregating this effect, isolating their individual contributions, and constructing a structure of these contributions.*

In light of the above, the application of the method developed by the authors consists of a sequence of the following procedures:

- defining the innovative state of the economy;
- assessing the efficiency of the factors under study;
- determining the contribution of the factors under study to the growth rate of the final economic indicator;
- on this basis, constructing a taxonomy of economic intensification to regulate its innovative development.

Accordingly, *economic intensification is a process accompanied by qualitative changes (a restructuring) of the economic structure of innovative development (through the use of innovative capacity). It represents a type of dynamic focused on accelerating the achievement of the resulting indicator (the GDP growth rate) and maintaining it at the required level (e.g., optimal or maximum value) under the prevailing conditions.*

All of this determines a new quality of economic growth, namely the selection of its type based on the proposed principles of economic intensification. This, in turn, allows for a more comprehensive consideration of the prospects for innovative development when constructing the mechanism for the economy's functioning. In other words, it concerns a new qualitative substance for the growth rates of the final economic indicator.

The outlined measures and initiatives aimed at addressing the priority tasks of economic intensification can and should form the basis for developing a comprehensive scientific and technical program for Russia to achieve

technological independence for its economy. In addition to this, to ensure genuine, true, and proper technological sovereignty for the Russian Federation at the current, initial stage of this process, the first step of the proposed comprehensive scientific and technical program should be the immediate reinstatement of the federal law on scientific discoveries, which ceased to be in effect in Russia in 1992. The consequences of its absence are evident, and we are witnessing them today. This federal law would become the primary resource for implementing the program and, most importantly, is precisely what is needed to accomplish this.

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## Progressive Taxation of Dividends: The Dynamics of Fiscal Effects and Risks in 2022–2028



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**Abstract.** The transition to a progressive scale of personal income taxation in Russia has affected not only labor but also investment income. The newly created preferential tax regime for dividends has sparked considerable debate and divergent views on achieving a balance between tax equity for ultra-high incomes and maintaining an attractive investment climate. The aim of our study is to assess the fiscal effects of the recent dividend tax reform and to identify the long-term effects and risks associated with various scenarios for its further adjustment, drawing on international experience. An econometric model for evaluating the fiscal consequences of the shift to progressive dividend taxation is constructed based on an analysis of data on declared dividend income and tax revenues across the constituent entities of the Russian Federation. The scientific novelty of the research lies in synthesizing the results of our study of international mechanisms for preferential dividend taxation to identify sources of potential risks and systemic vulnerabilities that should be considered when developing proposals to improve dividend tax policy. The paper systematically categorizes and critically analyzes international practices and empirical research on possible approaches to dividend taxation, while also assessing the fiscal implications of their potential implementation for the Russian budget. We identify directions for optimizing the personal income taxation of dividends, taking into account the need to adhere to the principles of tax neutrality and equity. The research pays particular attention to the risks associated with the development of tax avoidance schemes. This provides the basis for further building analytical models to identify constituent entities of the Russian Federation with the possible use of “dividend-based” tax avoidance strategies by individual entrepreneurs.

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**Key words:** dividends, tax neutrality, profit distribution, fiscal federalism, tax policy, income taxation, tax preferences, progressive taxation.

### Introduction

Being at the intersection of corporate profit taxation and personal income taxation, dividend taxation involves striking a delicate balance between eliminating double economic taxation on one hand, and preventing tax avoidance and inequality on the other. To mitigate the negative effect of double economic taxation of dividends, global practice has developed various approaches – from integrating corporate and income taxes to fully exempting dividends from taxation. However, investors can receive income not only in the form of dividends but also from the sale (or other disposal) of shares (capital gains). Achieving balance in taxing these types of income is crucial for upholding the principles of tax neutrality (ensuring that investment decisions are not affected by tax considerations) and fairness (ensuring that taxpayers with similar incomes bear a similar tax burden) (Goncharenko, 2024).

Russia's transition to progressive rates of personal income tax (PIT) has resulted in preferential taxation of most investment income (including dividends) compared to earned income. However, on a global scale, dividends are increasingly viewed as ordinary income that should be taxed at standard income tax rates. For example, in Norway, the dividend tax rate was raised by 2 percentage points to reduce the gap between marginal tax rates on capital income and wages: "Income from stocks and shares is highly concentrated among those with high incomes and wealth, and an increased dividend tax will therefore contribute towards a more redistributive income tax"<sup>1</sup>.

<sup>1</sup> Taxes 2023. Prop. 1 LS (2022–2023). Proposition to the Storting (Bill and Draft Resolution) for the 2023 Budget Year. Chapter 1 and 2. Norwegian Ministry of Finance. P. 8. Available at: <https://www.regjeringen.no/contentassets/882fb5c97bf04386b4eb5d1ed898ae7b/en-gb/pdfs/prp2022202300011s0engpdfs.pdf>

In the USA, there is also discussion about equalizing tax rates on dividends and earned income for wealthy taxpayers who receive the largest share of dividend income (raising the rate from 20% to 39.6%)<sup>2</sup>. At the same time, there are proposals to lower the dividend tax rate from 20% to 15% to stimulate economic growth through taxes on investment income<sup>3</sup>.

In Russia, there is also intense debate about the optimality of the current tax regime and directions for its reform. The proposals being put forward cover virtually the entire spectrum of possible options: from exempting dividends from taxation to setting a rate of 35% to achieve greater tax fairness. The lack of consensus underscores the importance of rethinking international experience, considering alternative models and their modifications to suit Russian current economic development goals.

The aim of the research is to provide, based on accumulated empirical data, an assessment of how the transition to a progressive PIT scale has affected tax revenues from dividends, and to identify sources of potential risks that should be considered when evaluating proposals to improve their taxation. Research objectives: to conduct a retrospective analysis of the fiscal consequences of transitioning to progressive dividend taxation; to provide a prospective assessment of the consequences of lowering the threshold for the 15% PIT rate on dividends for the period 2025–2028; to assess, based on the author's systematization of foreign

<sup>2</sup> Ross J. Biden Tax Proposals Would Correct Inequities Created by Trump Tax Cuts and Raise Additional Revenues. Apr 14, 2023. Available at: <https://www.americanprogress.org/article/biden-tax-proposals-would-correct-inequities-created-by-trump-tax-cuts-and-raise-additional-revenues/>

<sup>3</sup> Michel A.N. (2024). Slashing Tax Rates and Cutting Loopholes. Options for Tax Reform in the 119th Congress. CATO Policy Analysis. No. 975. Available at: <https://www.cato.org/sites/cato.org/files/2024-06/policy-analysis-975.pdf>

methodological tools for dividend income taxation, feasibility of their implementation in the Russian tax system.

The scientific interest lies in the developed counterfactual model for assessing the fiscal consequences of transitioning to progressive taxation, which allows for an empirical fiscal assessment of PIT revenues from dividends in Russia. The novelty also includes the results of a critical analysis of the feasibility of implementing elements of foreign methodological tools for preferential dividend taxation in Russia. In the context of proposals for further changes to dividend taxation, foreign practices and empirical research are systematized, and the fiscal effects for the Russian budget are assessed. Directions for optimizing dividend income taxation are identified, considering the need to adhere to the principles of tax neutrality and fairness. Particular attention is paid to identifying risks in the development of tax avoidance schemes.

#### Literature review

Regarding the fairness of preferential taxation of investment income, two principal approaches can be distinguished.

A number of researchers characterize dividends “as ‘super-incomes’, since the average level of dividend income per recipient significantly exceeds the average wage per worker”<sup>4</sup>. “The source of such super-incomes are dividend payments, income from owning and selling securities and other

property, and other income not related to wages” (Panskov, 2020). At the same time, “significant dividend income is paid out to individuals owning shares (stakes) in enterprises in the fuel-energy and metallurgical sectors, as well as enterprises producing mineral fertilizers, etc.” (Topchi, 2022). For these reasons, “an increased rate should be set on total annual income, including income in the form of dividends, interest on deposits, on shares, from the sale of property and securities” (Panskov, 2020). Uniform taxation of all personal income regardless of its origin would make the process of determining tax liabilities more transparent and simplify tax administration (Ordynskaya, Cherkovets, 2023).

Those who contribute to this viewpoint propose not only to “ensure equality of taxation for different types of income” and to unify the taxation of wages and capital income but also to introduce additional tax brackets for ultra-high incomes (Semenova, 2025), or simply to increase the tax on dividends to 35%, as for income from large winnings<sup>5</sup>. Such proposals aim to make dividend taxation contribute more to reducing inequality, as the implemented reform has had almost no impact on income concentration and key income stratification indicators (Gini and Palma ratios, share of low-income population).

Other researchers, conversely, propose to improve the investment climate by “temporarily removing the restriction ... for setting the 13% rate and not setting the 15% rate” (Popova, 2022), resulting in dividends being taxed at a lower rate than capital gains from share sales. To encourage citizens to make long-term rather than speculative investments without reference

<sup>4</sup> Zagvozdina V.N., Shmakov V.G. (2018). To the question of taxation of dividend income of individuals. In: Rossiiskie regiony v fokuse peremen: sbornik dokladov XII Mezhdunarodnoi konferentsii, Ekaterinburg, 16–18 noyabrya 2017 goda=Russian Regions in the Focus of Change: Proceedings of the XII International Conference, Yekaterinburg, November 16–18, 2017. Ministry of Education and Science of the Russian Federation; Ural Federal University named after the first President of Russia B.N. Yeltsin, Higher School of Economics and Management. Vol. 2. Yekaterinburg: UMTS UPI Publishing House.

<sup>5</sup> Mironov proposes to introduce taxes on luxury and excessive profits. Available at: <https://tass.ru/ekonomika/23957909>

to other characteristics of securities, some even propose introducing a regressive scale for dividend tax depending on the investment period: taxing dividends at an 8% PIT rate if shares are held for more than 3 years, 3% for more than 5 years, and 0% for more than 7 years (Milogolov, Berberov, 2022).

Both positions are largely unsupported by empirical data; however, foreign empirical studies show that reducing the maximum dividend tax rate provides only a modest stimulus for investment due to moderate investment elasticity (Koivisto, 2023; Isakov et al., 2020; Lee, Hong, 2020). There is also a slight increase in capital and labor inputs in small and micro-businesses, along with improved productivity (Jacob, 2020), and individual shareholders supervise the efficiency of resource allocation more actively (Kong, Ji, 2021; Kong, Ji, 2024). However, all these effects are relatively short-term and ultimately lead merely to budget losses (Ghilardi, Zilberman, 2024).

A drastic increase in the dividend tax rate (as in France in 2013, when the rate rose from 15.5% to 46%) leads to a sharp reduction in dividends and the use of saved funds for increased investment, especially when good growth opportunities exist (Matray, Boissel, 2020). Analysis shows that virtually no company reduced investment after the tax increase. Thus, the assumption that higher dividend taxes suppress investment is refuted. On the contrary, tightened dividend taxation can, under certain circumstances, stimulate profit reinvestment.

#### Research methods and data

For counterfactual modeling of the fiscal consequences of transitioning to progressive taxation, we use retrospective empirical analysis of statistical tax reporting data from the Federal Tax Service of Russia (FTS) for the Russian

Federation as a whole and by constituent entities: data from forms No. 5-NDFL, No. 7-NDFL (2016–2024), No. 5-P (2012–2024), No. 1-NM (2023–2025).

The fiscal consequences of transitioning to progressive taxation regarding dividends ( $\Delta Fisc_r$ ) can be estimated as the difference between actual tax receipts from dividends and the estimated amount that budgets could have received if the PIT rate had remained flat:

$$\Delta Fisc_r = \sum_{t=2022}^{2024} (T_{r,t}^{acc,13} + T_{r,t}^{acc,15} - T_{r,t}^{flat}), \quad (1)$$

where:  $T_{r,t}^{acc,13}$  and  $T_{r,t}^{acc,15}$  are the actual amounts of PIT from dividends within 5 million rubles and above, respectively, received in 2022–2024;

$T_{r,t}^{flat}$  is the estimated amount of tax revenue that could have been received if the flat PIT scale had been retained.

To average the effect, we take into account the aggregate actual FTS data for 2022–2024 from form No. 7-NDFL. However, it provides only aggregated data on dividends taxed at the 15% rate, which does not allow separating dividends paid to residents and non-residents. Since this is necessary for modeling the fiscal effect, we introduce an additional variable ( $\theta_r$ ), reflecting the average share of dividends paid to non-resident individuals taxed at 15% in the structure of dividends paid by Russian organizations in region  $r$  in 2016–2021:

$$\theta_r = \frac{\sum_{t=2016}^{2021} DI_{r,t}^{15}}{\sum_{t=2016}^{2021} (DI_{r,t}^{13} + DI_{r,t}^{15} + DI_{r,t}^{oth})}, \quad (2)$$

where:  $DI_{r,t}^{13}$ ,  $DI_{r,t}^{15}$  and  $DI_{r,t}^{oth}$  are the aggregate dividends taxed in region  $r$  at rates of 13%, 15%, and other rates stipulated by double tax treaties, respectively.

The following calculations can then be made:

$$T_{r,t}^{acc,13} = T_{r,t}^{13} - Cr_{r,t}^{13}, \quad (3)$$

$$T_{r,t}^{acc,15} = (1 - \theta_r) \times T_{r,t}^{15} - Cr_{r,t}^{15}, \quad (4)$$

$$T_{r,t}^{flat} = (DI_{r,t}^{13} + (1 - \theta_r) \times DI_{r,t}^{15}) \times 0,13 - Cr_{r,t}^{13} - Cr_{r,t}^{15}, \quad (5)$$

where:  $T_{r,t}^{13}$  is the amount of PIT calculated in region  $r$  in year  $t$  from dividends within 5 million rubles paid to residents (i.e., taxed at 13%);

$T_{r,t}^{15}$  is the amount of PIT calculated in region  $r$  from dividends paid to residents exceeding 5 million rubles, and to non-residents (i.e., taxed at 15%);

$Cr_{r,t}^{13}$  and  $Cr_{r,t}^{15}$  are the amounts of corporate profit tax withheld on dividends from subsidiaries and subject to offset against dividends taxed at rates of 13% and 15%, respectively.

The results of the structured model can be analyzed using descriptive statistical methods (absolute and relative growth rates, mean and median regional changes, assessment of effects concentration across regions).

To forecast changes in PIT amounts resulting from the reduction in the threshold for applying the 15% PIT rate in 2025, we extrapolate data on PIT amounts for the same period of the previous year:

$$\hat{T}_{r,2025}^{tot} = \frac{T_{r,2024}^{acc,13}}{T_{r,9M2024}^{acc,13}} \times T_{r,9M2025}^{acc,13} + \frac{T_{r,2024}^{acc,15}}{T_{r,9M2024}^{acc,15}} \times T_{r,9M2025}^{acc,15}, \quad (6)$$

where:  $\hat{T}_{r,2025}^{tot}$  is the predicted total amount of PIT that will be received by the budget in region  $r$  in 2025 from dividends taxed at rates of 13% and 15%.

To forecast PIT revenues from dividends for 2026–2028, we use data from scenario forecasts by the Russian Ministry of Economic Development on the projected profit of profitable organizations<sup>6</sup>:

$$\hat{T}_{SC,r,t}^{tot} = \hat{T}_{r,2025}^{tot} \times \frac{P_{SC,t}}{P_{SC,2025}}, \quad (7)$$

where:  $\hat{T}_{SC,r,t}^{tot}$  is the forecasted total amount of PIT from dividends in year  $t$  in the baseline or conservative scenario (SC);

$P_{SC,t}$  and  $P_{SC,2025}$  are the forecasted profit of profitable organizations in year  $t$  in the baseline or conservative scenario (SC).

The qualitative component of the research is based on the author's systematization and classification of foreign methodological tools for dividend taxation. A comparative analysis of foreign approaches to dividend taxation is used, with an assessment of the fiscal consequences of their introduction in Russia based on statistical tax reporting data.

### Research results

The modeling results show that, due to the transition to progressive dividend taxation in 2022–2024, the Russian budget system received approximately additional 186.1 billion rubles (PIT from dividend income increased by 11.46%, to 1.81 trillion rubles compared to 1.62 trillion rubles with the flat scale). Although this increase is a purely static result, it allows estimating the maximum potential benefit from the transition to progressive taxation, whereas the actual increase may be smaller if high-income individuals adjusted their behavior or found ways to optimize their tax burden.

At the regional level, the average increase in PIT from dividends paid to tax residents was about 9.1%, and the median change was about 10.1%, meaning that in half of the Russian regions, the income increase from transitioning to progressive dividend taxation exceeded 10%. However, this result varies significantly depending on the share of high-income individuals in the total number of taxpayers.

<sup>6</sup> Scenario conditions for the functioning of the Russian Federation's economy, key parameters of the forecast for the socio-economic development of the Russian Federation, and projected changes in prices (tariffs) for goods and services provided by economic entities engaged in regulated activities in the infrastructure sector for 2026 and the planned periods of 2027 and 2028.

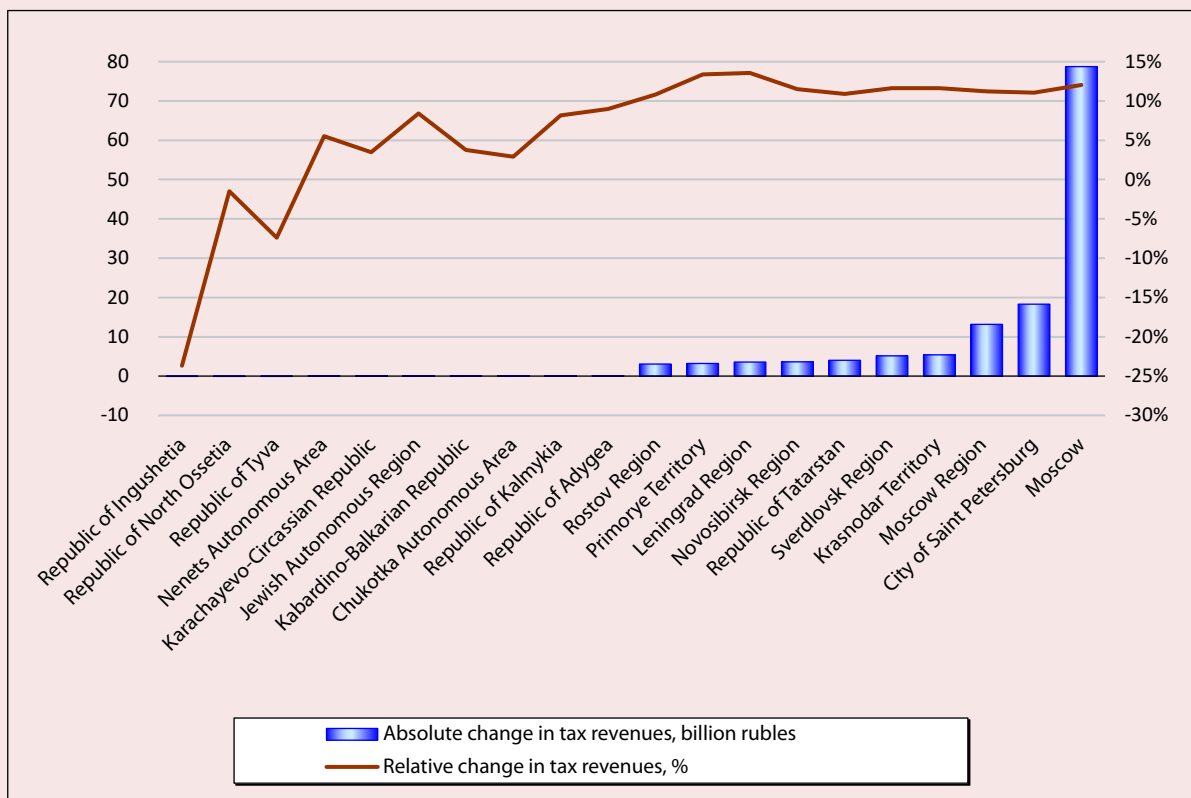
Nearly 60% of the nationwide increase in PIT from dividends came from three regions: Moscow, where tax revenues from dividends grew by 78.7 billion rubles (an increase of 12%, accounting for about 42% of the nationwide increase); Saint Petersburg (18.3 billion rubles, or 11%<sup>7</sup>, about 9.8% of the nationwide increase); and Moscow Region (13.16 billion rubles, or 11%).

Among other regions with the largest increases in the PIT tax base from dividends are the Krasnodar Territory (5.4 billion rubles, or an 11.6% increase), the Sverdlovsk Region (5.15 billion rubles, or 11.6%), and the Republic of Tatarstan

(4 billion rubles, or 11%). The highest growth rate was in the Kaliningrad Region (2.5 billion rubles, or 13.7%), which may be explained by the active development of the special economic zone and the re-registration of holding companies there.

In three regions, total tax revenues from dividends, conversely, decreased (*Fig. 1*): republics of Ingushetia (by 23.7%, or 17.9 million rubles), Tyva (by 7.4%, or 7 million rubles), and North Ossetia-Alania (by 1.5%, or 7.3 million rubles). A peculiarity of these regions is that a relatively small portion of dividend income falls into the top bracket of the progressive scale (15%).

Figure 1. Regions with the smallest and largest changes in tax revenues from dividends due to the transition to the progressive PIT scale



Calculated based on: FTS Russia form No. 7-NDFL data.

<sup>7</sup> The relative increase is calculated as the ratio of the difference between the progressive and flat tax rates for dividends to the estimated flat tax rate for dividends:

$$\Delta\%_{total} = \frac{T_{r,t}^{sub} + T_{r,t}^{fed} - T_{r,t}^{sub,flat}}{T_{r,t}^{sub,flat}}$$

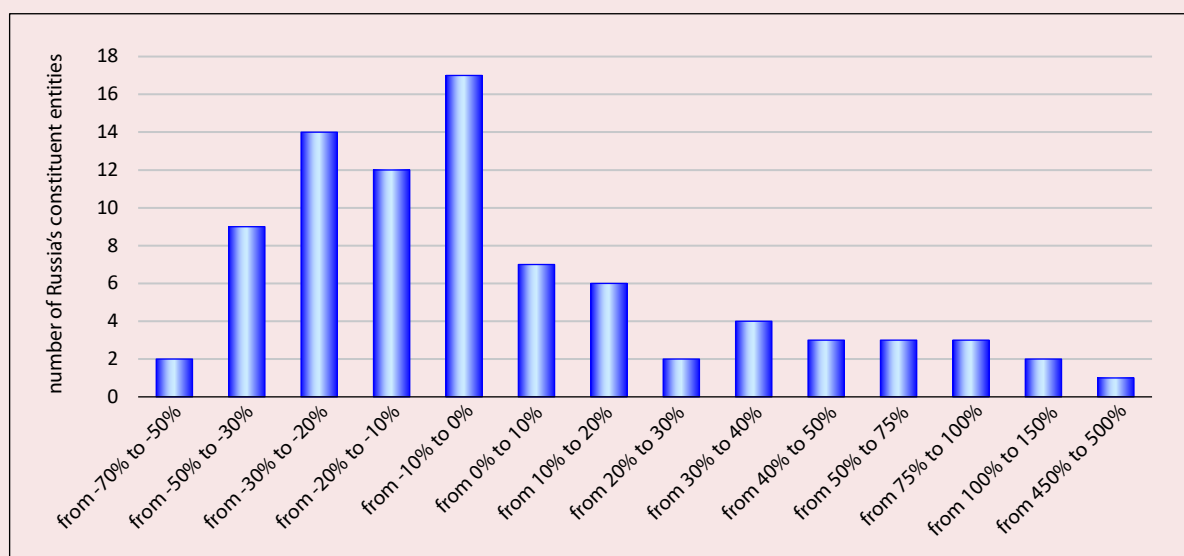
Starting in 2025, the threshold for applying the 15% rate was halved (from 5 million rubles to 2.4 million rubles); however, no significant increase in tax revenues is expected. On the contrary, they may decrease by 79 billion rubles (from 905 to 826 billion rubles). The largest decrease will be in tax receipts from dividends up to 2.4 million rubles (by 30%, from 151 billion rubles to 106 billion rubles), while dividends above 2.4 million rubles will decrease by only 4.5% (from 753.7 billion rubles to 720 billion rubles). The decline is mainly associated with an objective 6.9% reduction in the balanced financial results of companies' activities<sup>8</sup> and, consequently, lower dividend distributions. At the same time, the lowering of the threshold for the 15% rate led to an increase in the share of dividends taxed at this rate from 83.3% in 2024 to 87.2% in 2025.

However, the regional results of adjusting the tax scale are mixed. Revenues from dividends taxed at the 13% rate will decrease by 20–40% in most regions

(65 out of 85 analyzed); in 5 regions they will decrease by 10–17%, and in the remaining 16 by 41–82%. For dividends taxed at the 15% rate, conversely, tax revenues will increase in 40 regions (including more than doubling in 6 regions – Chechen Republic (585%), Republic of Dagestan (174%), Jewish Autonomous Region (173%), Republic of Sakha (Yakutia) (126%), Kostroma (125%) and Vladimir (106%) regions), while they will decrease in 45 regions (including more than halving in 4 regions – Orel (73%), Vologda (59%), Kaliningrad (51%) regions, and Republic of Buryatia (51%)). Consequently, tax revenues will increase in about one-third of regions and decrease in two-thirds (*Fig. 2*).

Divergent results of the adjustment once again confirm that taxpayer behavioral responses to changes in dividend taxation largely depend on company size, number of shareholders, and the role of minority shareholders in governance (Hillmann, 2023; Lee, 2022; Berzins et al., 2019).

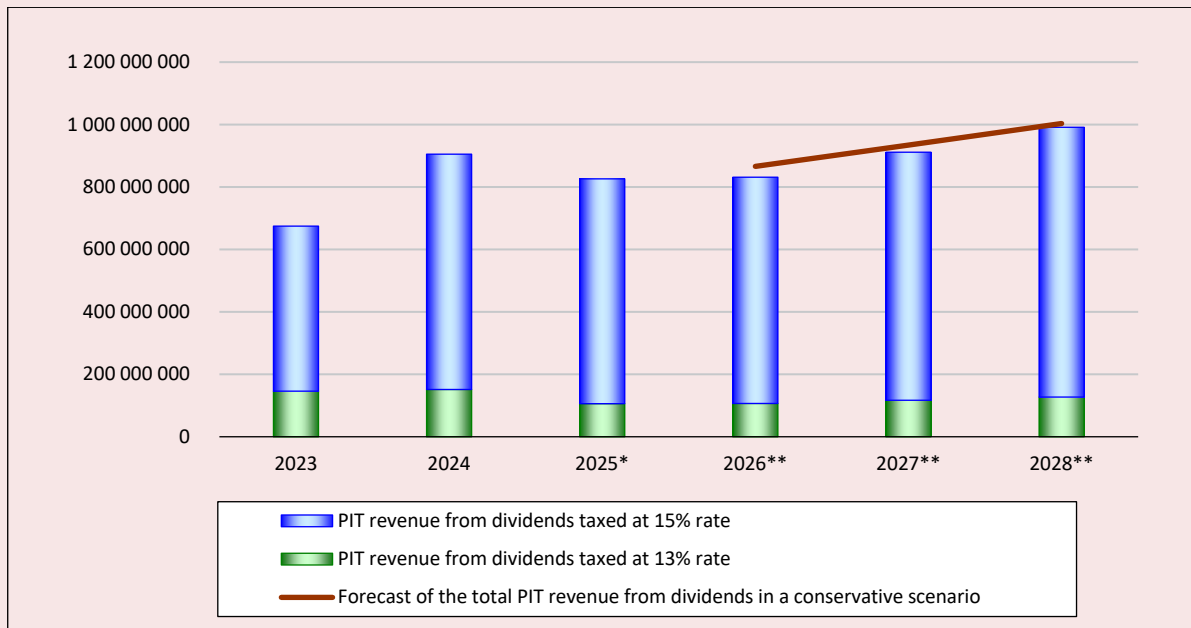
Figure 2. Distribution of regions by growth rates of PIT revenues from dividends in 2025 compared to 2024



Compiled based on: FTS Russia form No. 1-NM data.

<sup>8</sup> According to the Bank of Russia, “as of the end of 2024, companies’ balanced financial results dropped by 6.9% year on year (YoY) to 30.4 trillion rubles, with the number of profitable companies declining in the majority of the industries”. Financial Stability Review: 2024 Q4 – 2025 Q1. Available at: [https://www.cbr.ru/analytics/finstab/ofs/4q\\_2024\\_1q\\_2025/](https://www.cbr.ru/analytics/finstab/ofs/4q_2024_1q_2025/)

Figure 3. Dynamics of PIT revenues under different scenarios of economic changes



\* Estimated value based on 9 months of 2025 data.

\*\* Forecasted PIT revenue.

Calculated based on: FTS Russia form No. 1-NM data.

A prospective analysis of PIT revenue development from dividends for 2026–2028 was conducted according to baseline and conservative scenarios for projected growth in corporate profits. In the baseline scenario, tax revenues from dividends in 2026 will remain virtually unchanged (about 831 billion rubles, +0.6%; *Fig. 3*). In 2027, they will slightly exceed the PIT level before the tax scale adjustment (about 911 billion rubles, +9.6%), and by 2028 will reach 991 billion rubles (+8.8%).

The conservative scenario predicts a slightly faster recovery in tax revenues (about 866 billion rubles, or +4.8% in 2026) but slower growth rates in subsequent years: 934 billion rubles (+7.9%) in 2027 and 991 billion rubles (+7.4%) in 2028. Nevertheless, both scenarios ultimately yield almost identical forecast values.

The conducted estimates allowed assessing prospective dynamics of PIT revenues from dividends under given tax conditions and a changing economic situation. However, it is also necessary

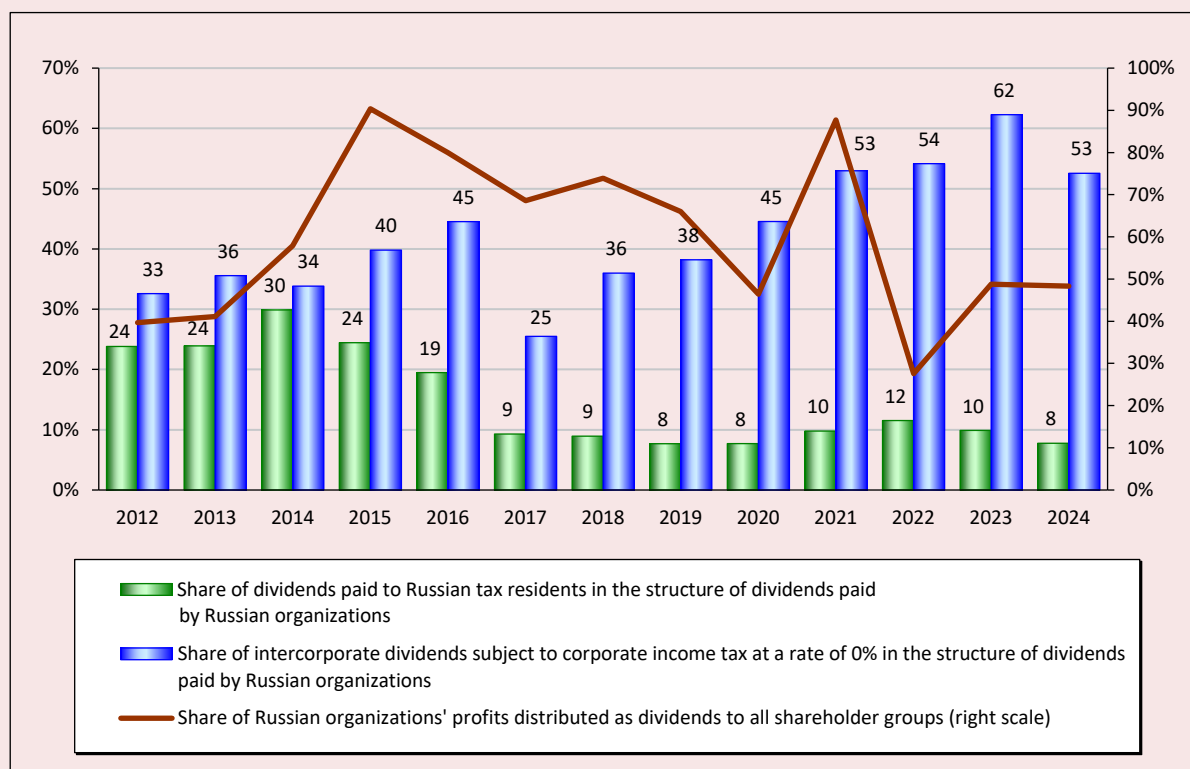
to analyze the fiscal consequences of fundamental changes in approaches to dividend taxation.

### Discussion

*Evaluation of proposals for further progressive dividend taxation reform in the context of global experience*

Russia long used a relatively neutral and simple “classical” tax system, where dividends were taxed at the same personal income tax rates as wages. This system led to double economic taxation of dividends but was intended to encourage companies to retain and reinvest profits. However, practice showed that Russian companies, on the contrary, distributed an increasing share of profits as dividends: dividend payouts fluctuated within 40–60% of net profit, and this share could jump to 80–90% in anticipation of large-scale restructuring. One reason for this was the predominance of intercorporate dividends taxed at 0% (53–62%) and, conversely, the low share of dividends paid to resident individuals – about 8–12% (*Fig. 4*).

Figure 4. Dynamics of dividend payouts structure of Russian companies



Compiled based on: FTS Russia form No. 5-P data.

Although globally the “classical” system is still prevalent (adhered to by about 14% of countries, accounting for ~37% of global GDP)<sup>9</sup>, it is increasingly complemented by measures for fine-tuning capital income taxation to ensure fair distribution of the tax burden, overall tax neutrality while preserving targeted tax incentives, and elimination of tax avoidance schemes.

The ratio of PIT rates on dividend income, capital gains on shares, and wages established since 2025 corresponds to the practice of most economically developed countries. It reflects the most common form of partial relief from double economic taxation of dividends (Shareholder Relief

Systems) – setting lower rates for them compared to standard income tax rates (Hourani et al., 2023). At the same time, both dividends and capital gains from share sales are taxed at a single reduced rate relative to earned income to ensure neutrality in their taxation. Besides Russia, this approach is followed by about 18.5% of countries, representing roughly 36% of global GDP, including Germany, Italy, Spain, Austria, Denmark, Poland, France, and China. For example, in Germany, most capital income (dividends, interest, capital gains) is taxed at a flat rate of 25%, not the progressive scale up to 45%<sup>10</sup>; in Italy, capital income is taxed at 26%, not the progressive scale up to 43%<sup>11</sup>.

<sup>9</sup> Here and further, the share of global GDP accounted for by countries with different taxation of dividends and capital gains on shares was calculated by the author based on World Bank data and GDP in US dollars as of 2023. Available at: <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD>

<sup>10</sup> Worldwide Personal Tax and Immigration Guide. 2024–25. EY. 2025. P. 503–504.

<sup>11</sup> Worldwide Personal Tax and Immigration Guide. 2024–25. EY. 2025. P. 743–744.

The level of the maximum PIT rate on dividends for residents (15%) was linked to the tax rate on dividends paid to non-residents as an element of preventive action against tax avoidance using foreign jurisdictions<sup>12</sup>. This is a simple but rather controversial criterion, found mainly in developing countries (Barbados, Hungary, Guinea, Zimbabwe, Costa Rica, Lithuania, Malta, Nicaragua, Pakistan, Papua New Guinea, Republic of Congo, Rwanda, São Tomé and Príncipe, Serbia, Montenegro, Czech Republic, Uganda, Jamaica).

Taxing dividends at a lower rate than capital gains from share sales is found in about 20% of developing countries, accounting for less than 6% of global GDP (Indonesia, Philippines, Czech Republic, and a number of others). This may create an incentive to hold shares for dividends rather than selling them for capital gains. In Russia, implementing such a proposal would lead to a reduction in federal budget revenues of about 98 billion rubles annually and in regional and municipal budget revenues of 2.5 billion rubles annually. The largest decline in revenues would be experienced by the regional and municipal budgets of Moscow (-1 billion rubles), Saint Petersburg (-260 million rubles), and the Moscow Region (-208 million rubles).

This effect would only be noticeable with a sufficiently large difference in rates. For instance, in Indonesia, dividends are taxed at 10%, while capital gains are taxed at 35%. Domestically, dividends may be fully exempt from taxation if reinvested or if below certain thresholds<sup>13</sup>. In the Czech Republic, dividends are taxed at 15%, while capital gains (from shares held for a certain period or from a significant block of shares) are taxed at

the main income tax rate<sup>14</sup>. In Ireland, dividends are taxed at 25%, while capital gains are taxed at 40%.

Analysis of global practice shows that about 11% of countries, accounting for about 1.4% of global GDP, tax dividends at higher personal income tax rates than capital gains. This approach is not used in developed economies because a mature financial market typically features a large number of income-oriented investors, whereas emerging markets are more focused on capital growth itself. To encourage this, profit reinvestment is promoted through the “lock-in effect”: it becomes more beneficial for shareholders when companies retain profits (leading to share price growth) rather than distribute dividends.

However, such an effect can, conversely, reduce share liquidity and lead to potential overcapitalization of companies, which is why this approach is relatively rare and found only in growing economies. For example, in Colombia, dividends are taxed at progressive rates from 0 to 39%, while capital gains are taxed at 15%<sup>15</sup>. Other countries with this approach include Vietnam, Zimbabwe, Laos, Rwanda, Chad, and South Africa. However, in practice, a significant effect from stimulating profit reinvestment is not noticeable in these countries. Often, companies simply hoard cash or buy back their own shares because paying dividends is disadvantageous from a tax perspective.

In Russia, the lock-in effect may also be insignificant due to the predominant share of intercorporate dividends (53–62%) and the low share of dividends paid to individuals (8–12%) in the structure of dividends distributed by Russian firms<sup>16</sup>. On the contrary, it may only stimulate tax avoidance.

<sup>12</sup> The State Duma supported amendments on five stages of personal income tax progression. Available at: <https://www.rbc.ru/economics/20/06/2024/6673f47b9a794779df3d3057>

<sup>13</sup> PWC Worldwide Tax Summaries. Indonesia. Individual – Income determination. Available at: <https://taxsummaries.pwc.com/indonesia/individual/income-determination>

<sup>14</sup> Worldwide Personal Tax and Immigration Guide. 2024–25. EY. 2025. P. 353.

<sup>15</sup> Worldwide Personal Tax and Immigration Guide. 2024–25. EY. 2025. Pp. 286–287.

<sup>16</sup> FTS Russia form No. 5-P data.

*Prospects for partial exemption of dividends from taxation*

Partial relief from double taxation of dividends can also be implemented by taxing only a portion of dividends (with the remaining portion taxed at the standard income tax rate). The exempt amount can be expressed in absolute terms (a minimum non-taxable amount, which can be indexed annually) or relative terms (a specific proportion of dividends received).

Relative exemption of dividends is used in Luxembourg and Portugal (50% of dividends received by residents)<sup>17</sup>. In Switzerland, 30% of dividends are exempt from taxation at the federal level if the shareholder holds at least 10% of the company's shares<sup>18</sup>. In Finland, 15% of dividends from public companies are exempt from taxation (actually, only the remaining 85% of dividends are subject to income tax)<sup>19</sup>. By reducing the tax base, the effective tax rate on dividends is lowered.

In developed countries, absolute dividend exemptions are more targeted at small, retail investors. For example, in the UK, the tax-free dividend allowance was reduced from £2000 to £1000 in 2023, and then to £500 in 2024 (~63 000 rubles)<sup>20</sup>. In Belgium, conversely, the tax-free allowance is indexed slightly – from 833 euros in 2024 to 859 in 2025 (~79 000 rubles)<sup>21</sup>.

Developing countries often set high tax-free thresholds, aiming to practically exempt typical investors from taxation entirely. For instance,

Kazakhstan indexes its tax-free threshold annually; in 2025 it amounted to 117 960 000 tenge (~23 million rubles)<sup>22</sup>. Such an extremely high ceiling means that most individual investors pay no tax on dividends unless they are very large shareholders. In Colombia, dividends equivalent to 1090 units of tax value (Unidad de Valor Tributario) were exempt from taxation in 2025, equivalent to over 54 million Colombian pesos (~1.3 million rubles)<sup>23</sup>. In Malaysia, dividends up to 100 000 ringgits (~2.2 million rubles) are exempt from tax since 2024<sup>24</sup>, in Tunisia – 10 000 Tunisian dinars (~310 000 rubles)<sup>25</sup>.

The vast difference in the size of dividend tax-free thresholds reflects differences in tax policy: European countries are more focused on supporting small investors and the middle class overall, while developing countries aim to create a favorable investment environment even for fairly large investors to attract or retain capital in their markets.

For Russia, introducing a tax-free threshold for dividends (possibly tied to an investor's average dividend income) could also be a tool to encourage public investment in shares while limiting such benefits for very large investors. The average size of dividends paid to individuals has been steadily growing and exceeded 1.2 million rubles per taxpayer (*Fig. 5*).

However, setting a tax-free threshold of, for example, 100 thousand rubles would lead to forgone revenues for regional and municipal budgets of up to 537 billion rubles<sup>26</sup>. It should be considered that a

<sup>17</sup> Worldwide Personal Tax and Immigration Guide. 2024–25. EY. 2025. Pp. 917, 1305.

<sup>18</sup> Worldwide Personal Tax and Immigration Guide. 2024–25. EY. 2025. P. 1506.

<sup>19</sup> Worldwide Personal Tax and Immigration Guide. 2024–25. EY. 2025. P. 443.

<sup>20</sup> Worldwide Personal Tax and Immigration Guide. 2024–25. EY. 2025. P. 1622.

<sup>21</sup> Worldwide Personal Tax and Immigration Guide. 2024–25. EY. 2025. P. 133; PWC Worldwide Tax Summaries. Belgium. Individual – Income determination. Available at: <https://taxsummaries.pwc.com/belgium/individual/income-determination>

<sup>22</sup> Worldwide Personal Tax and Immigration Guide. 2024–25. EY. 2025. P. 794.

<sup>23</sup> Worldwide Personal Tax and Immigration Guide. 2024–25. EY. 2025. P. 289.

<sup>24</sup> PWC Worldwide Tax Summaries. Malaysia. Individual – Income determination. Available at: <https://taxsummaries.pwc.com/malaysia/individual/income-determination>

<sup>25</sup> PWC Worldwide Tax Summaries. Tunisia. Individual – Income determination. Available at: <https://taxsummaries.pwc.com/tunisia/individual/income-determination>

<sup>26</sup> Own calculation based on FTS Russia form No. 5-NDFL data.

significant tax reduction typically results in income shifting between wages and dividends (Koivisto, 2025). For this reason, a tax-free threshold would not so much stimulate the development of individual investments in the stock market as increase the efficiency of tax avoidance schemes, particularly among individual entrepreneurs, whose national average dividend size has already exceeded 3.6 million rubles per taxpayer, and is even higher regionally: 57.7 million rubles per individual entrepreneur in Kaliningrad Region; 54 million rubles – in Magadan Region; 33 million rubles – in Sakhalin Region<sup>27</sup>.

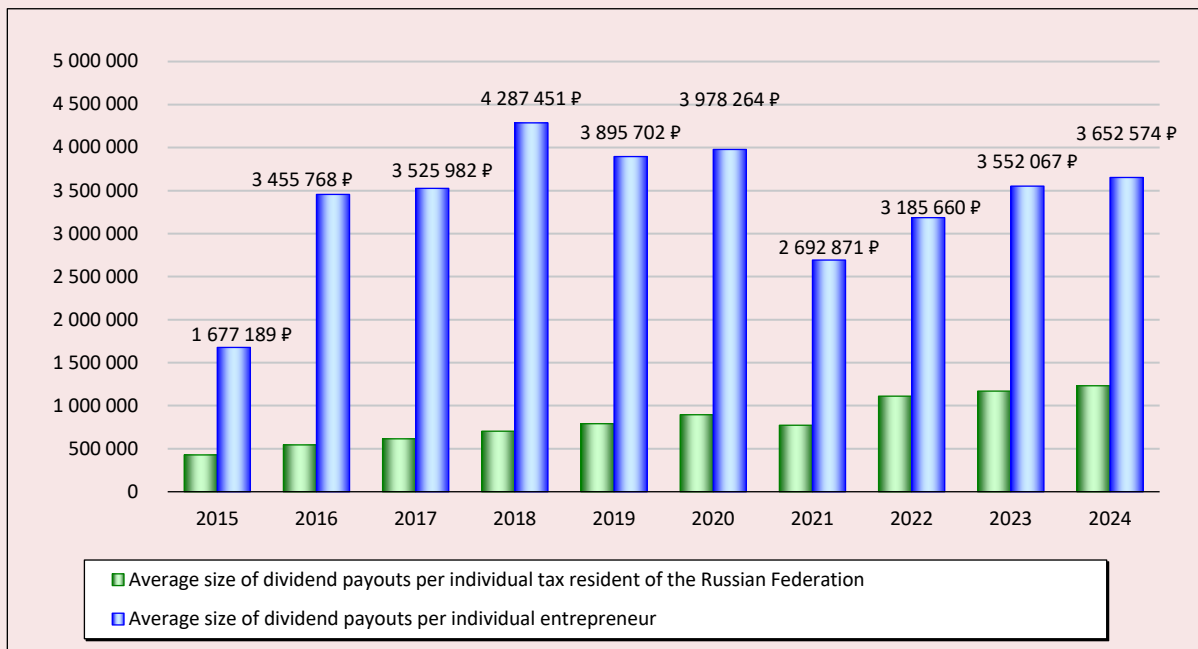
Given that the average level of dividend income per taxpayer exceeds the average wage per taxpayer, regressive taxation would exacerbate income inequality between the majority of the population earning only wages and wealthy individuals with

high passive incomes. Regressive dividend taxation would discourage earned income and increase opportunities for tax arbitrage, encouraging to distribute dividends instead of paying wages to minimize taxation. This could have long-term negative consequences: undermine progressive income tax policy and reduce tax revenues.

#### *Risks of full exemption of dividends from taxation*

One radical deviation from the classical model is the Dividend Exemption System, where dividends to shareholders are fully exempt from personal income taxation. Within this system, corporate profit tax is considered the final tax on distributed income, and if profit is paid as dividends, it is not taxed again for any shareholder (whether individual or corporate). From an economic viewpoint, this completely eliminates double economic taxation of dividends – income is taxed only once at the

Figure 5. Dynamics of the average size of dividends paid to individuals, rubles



Calculated based on: FTS Russia form No. 5-NDFL data.

<sup>27</sup> Own calculation based on FTS Russia form No. 5-NDFL data.

corporate level. Under this approach, dividends are viewed as a recovery of money invested or as a non-taxable transfer of already-taxed profit. The presumed goal is typically to stimulate equity investment by increasing the after-tax return on shares and neutralizing the advantages of debt financing over equity financing (since capital income is taxed no higher than interest on loans).

In practice, only about 13% of countries (comprising roughly 3.5% of global GDP) use this system. Most are small, open economies or financial centers seeking to attract international investment through tax incentives. For example, in Hong Kong, Cyprus, and Singapore, it is part of a broader low-tax strategy for investment income<sup>28</sup>.

Brazil was the only large economy where dividends were not subject to personal income tax from the mid-1990s, with Brazilian companies instead paying a higher corporate tax<sup>29</sup>. But in May 2025, it announced a reform under which dividends would be taxed at a 10% rate. Slovakia (2004–2017), India (1997–2020), and Uzbekistan (2022–2024) also experimented with exempting dividends from taxation but ultimately restored the dividend tax.

The main advantage of this system is ensuring neutrality in dividend taxation:

- elimination of an extra layer of equity income taxation ensures neutrality in the choice between debt and equity financing;
- companies can make decisions on dividend payments or reinvestment based on business needs, not tax considerations;
- slight simplification of the mechanism for taxing and administering personal income.

However, these benefits come with significant costs and risks, which is why this system has not gained wide acceptance.

<sup>28</sup> Worldwide Personal Tax and Immigration Guide. 2024–25. EY. 2025. Pp. 338–340, 611–612, 871–873, 1402–1404.

<sup>29</sup> Worldwide Corporate Tax Guide. 2024. EY. 2024. P. 238.

First, there is a high forgone tax revenue, especially in countries with significant dividend payouts. Only jurisdictions confident in their ability to otherwise compensate for lost revenues or willing to sacrifice them to enhance the country's tax competitiveness can absorb this strike. For example, in Malaysia, dividends were exempt from taxation from 2008, but due to a budget deficit, it was decided to abandon this in 2024. Instead, a modest 2% tax on dividends exceeding 100 000 ringgit per year (~2.3 million rubles) was introduced<sup>30</sup>. Given that dividends below this limit remained exempt, the change is clearly aimed at the wealthiest residents.

Second, there is high potential for abuse and tax arbitrage. To take advantage of the exemption, certain groups of high-income taxpayers may attempt to reclassify other types of income as dividends. In Brazil, the phenomenon of *pejotização* (a term derived from “Pessoa Jurídica” – “legal entity”) emerged, when individuals (e.g., lawyers, doctors, engineers) began creating shell companies to channel their, in fact, earned income into corporate profit, which was then distributed as tax-exempt dividends<sup>31</sup>. Employers began terminating employment contracts with their employees and then hiring them as representatives of small companies, converting salaries (taxed at progressive rates up to 27.5%) into tax-exempt dividends.

Such a tax avoidance strategy became so widespread that it not only undermined the personal income tax base but also led to horizontal inequality, because other workers performing similar jobs (e.g., in the public sector or companies not using such

<sup>30</sup> For more information, see: Ida Lim. Malaysia's new dividend tax aimed at T20 could touch some M40, but minimal impact at 2pc rate. Available at: <https://www.malaymail.com/news/malaysia/2024/10/20/expert-malaysias-new-dividend-tax-aimed-at-t20-could-touch-some-m40-but-minimal-impact-at-2pc-rate/154195>

<sup>31</sup> For more information, see: Vitor Torres. *Pejotização: O que é? Confira as regras a partir da nova reforma trabalhista.* Available at: <https://www.contabilizei.com.br/contabilidade-online/pejotizacao/>

schemes) continued to pay full personal income tax. As a result, for the wealthiest Brazilian citizens, the effective personal income tax rate became extremely regressive: while for 99% of the population the effective rate steadily increased up to 12.3%, for the top 0.05% of the ultra-wealthy who could utilize the dividend exemption, it, conversely, sharply dropped to about 7%<sup>32</sup>.

This distortion not only sparked debates about the fairness of such tax policy but also required labor law reform and anti-tax avoidance measures. Ultimately, in 2025, a tax reform was proposed, including not only the introduction of a 10% tax on dividends but also the establishment of a minimum effective tax rate for high-income individuals. As a result, individuals with large previously tax-exempt dividends would have to pay at least a base tax<sup>33</sup>.

Third, dividend exemption disproportionately benefits wealthy investors and exacerbates income inequality. Capital ownership (and receipt of dividends) is typically concentrated in high-income households, and exempting dividend tax allows the wealthiest individuals to pay less tax relative to their total income. Since capital income is distributed more unevenly than labor income, not taxing it undermines the progressivity of the tax system and can worsen inequality (Hourani, Perret, 2025). This was evident in Brazil and is a primary reason why other countries also combine dividend tax reform with other, broader measures regarding wealthy citizens' income.

Fourth, dividend exemption encourages profit distribution rather than reinvestment. It is usually considered beneficial for investors if profits are reinvested to ensure company growth. However,

in the case of tax-exempt dividends, shareholders, on the contrary, pressure the company to distribute profits, allowing them to receive income tax-free. This contradicts the idea of using the tax system to stimulate investment and can lead to corporate decapitalization. Essentially, dividend payments would be used as a way to extract corporate capital. Such concerns were one of the reasons for abolishing the dividend tax exemption in Malaysia.

A unique solution to this problem exists in Estonia, where profit is subject to a 20% corporate tax only upon distribution<sup>34</sup>. Effectively, profit taxation is deferred until dividends are paid, with the shareholders themselves exempt from tax. Such a model of corporate tax with separate rates for distributed and retained profit (Split Corporate Tax Rate System) ensures tax neutrality and genuinely stimulates profit reinvestment. Exempting company profits from taxation until distribution resembles a cash flow tax. However, this model has its own drawbacks. Estonia is forced to use strict anti-tax avoidance rules to prevent masking non-commercial expenses or owner payments as deductible expenses.

Given all these disadvantages, most countries eventually abandon full dividend tax exemption. Therefore, proposals heard in Russia to exempt dividends paid to individuals from taxation should be considered cautiously. Their implementation would result in forgone revenues of 905 billion rubles annually, including 98 billion rubles from the Russian federal budget<sup>35</sup>. Moreover, it would not lead to an “influx of domestic and foreign capital due to increased interest in creating organizations” (Nasyrov, Shtyrlyayeva, 2015) but would stimulate the development of tax avoidance strategies. One should agree with researchers who note that “full exemption of dividends without harmonization with the capital gains taxation mechanism will lead

<sup>32</sup> For more information, see: Anne Brockmeyer. Brazil: Options for Tax Reform. Available at: <https://documents1.worldbank.org/curated/en/09991150626322053/pdf/IDU062b34da603ecc043a80b9890c173a6084542.pdf>

<sup>33</sup> For more information, see: Brazil's Proposed Income Tax Reform. Alert May 27, 2025. Available at: <https://www.cov.com/en/news-and-insights/insights/2025/05/brazils-proposed-income-tax-reform>

<sup>34</sup> Worldwide Corporate Tax Guide. 2024. EY. 2024. P. 546.

<sup>35</sup> Own calculation based on FTS Russia form No. 5-NDFL data.

to new types of distortions, as it will become more beneficial for companies to distribute all profits to shareholders, which may reduce the volume of reinvested profit” (Milogolov, Berberov, 2022).

### Conclusion

The conducted analysis allows making a number of conclusions which contribute to further study of dividend income taxation.

The proposed model for assessing the fiscal consequences of transitioning to progressive dividend taxation showed that tax revenues of the consolidated budget increased by 186.1 billion rubles over three years. At the same time, the tax base is distributed extremely unevenly: nearly 60% of the increase comes from three regions – Moscow, Saint Petersburg, and the Moscow Region. Those regions where holding companies actively re-register in special economic zones also benefited (Kaliningrad and Sverdlovsk regions, Republic of Tatarstan). Conversely, a decline in the tax base was experienced by regions where a small portion of dividend income fell into the top bracket of the progressive scale (republics of Ingushetia, Tyva, North Ossetia-Alania).

In the case of a return to a flat scale for taxing dividends, shareholders would not receive a significant incentive for long-term shareholding due to the relatively small difference in rates. Meanwhile, federal budget revenues would decrease by about 98 billion rubles, and regional and local budget revenues by 2.5 billion rubles.

If dividends are viewed as “super-incomes” and their tax rate is raised to 35%, there would be a “lock-in effect” because shareholders would benefit from companies retaining profits and from rising

share prices. However, at a macroeconomic level, this effect would not be significant due to the predominance of tax-exempt intercorporate dividends (53–62%) in the structure of dividends of Russian organizations, while the share of dividends paid to individuals is only 8–12%.

In developed countries, tax-free thresholds are used to stimulate investment activity among small retail investors. However, in Russia, establishing a tax-free threshold of, for example, 100 thousand rubles would lead to forgone revenues for regional and municipal budgets of up to 537 billion rubles.

When determining directions for further reform of dividend income taxation, one should remember the high potential for income transfer between wages and dividends. For instance, the average dividend size among individual entrepreneurs (3.6 million rubles per taxpayer) already far exceeds the national level (1.2 million rubles). Regionally, this difference is even higher: 57.7 million rubles per individual entrepreneur in the Kaliningrad Region; 54 million rubles in the Magadan Region; 33 million rubles in the Sakhalin Region. With the transition to progressive taxation, more attention should be paid to schemes for reclassifying business owners’ earned income as dividends.

Proposals to exempt dividends from taxation would not only result in forgone revenues of 905 billion rubles annually, including 98 billion rubles from the federal budget, but would additionally stimulate tax avoidance schemes. For example, encouraging individuals to create shell companies to channel their, in fact, earned income into corporate profit and then distribute it as tax-exempt dividends.

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## Issues of Introducing a Basic Income into the Russian National Pension System



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**Abstract.** This study aims to develop the provisions of the basic income concept for its application within the pension system of the Russian Federation. The research is grounded in a theoretical and methodological framework for applying basic income instruments, necessitated by the system's loss of financial equilibrium. This imbalance stems from demographic challenges, shifts in employment patterns, and the proliferation of benefits not underpinned by insurance-based entitlements, which collectively underpin the relevance of this inquiry. The study identifies and analyses regular and other allowances within the current pension system that exhibit characteristics of basic income. It advances a rationale for segmenting the domestic pension system into three distinct tiers: a solidarity-based (distributive) tier (basic pension income), an occupational insurance tier (insurance pension), and a supplementary tier (allowances for specific categories of beneficiaries). A key proposal is the separate administration of the basic pension income within the pension system. This consolidated component would encompass: within compulsory pension insurance – the fixed payment to the insurance pension; and within state pension provision – the social pension for disabled citizens alongside a range of social allowances. Furthermore, it is proposed to integrate into this basic pension income the social supplement that raises a pensioner's total material security to the level of the pensioner's subsistence minimum established for the Russian Federation as a whole. The universal nature of the basic pension income would ensure its provision to all pensioners, including those previously engaged in precarious forms of employment who have not fulfilled the minimum criteria for qualifying for an insurance pension. The study also puts forward potential funding sources for the basic pension income and explores the feasibility of reallocating the freed-up portion of the insurance tariff within the occupational insurance tier of the pension system. Cumulatively, the payment of the basic pension income, alongside these structural changes, would enhance the purchasing power of recipients of an average insurance pension. This would bring it into alignment with both the national strategic objectives of the Russian Federation in pension provision and internationally recognized social security standards.

**Key words:** compulsory pension insurance, state pension provision, insurance pension, insured persons, pension system, basic income, basic retirement income.

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### Introduction

Russia's modern model of the national pension system (hereinafter referred to as the PS)<sup>1</sup> is a multi-tier provision of citizens with social guarantees in certain life circumstances (old age, disability, loss of breadwinner, long service, etc.) with multiple forms of implementation of government obligations,

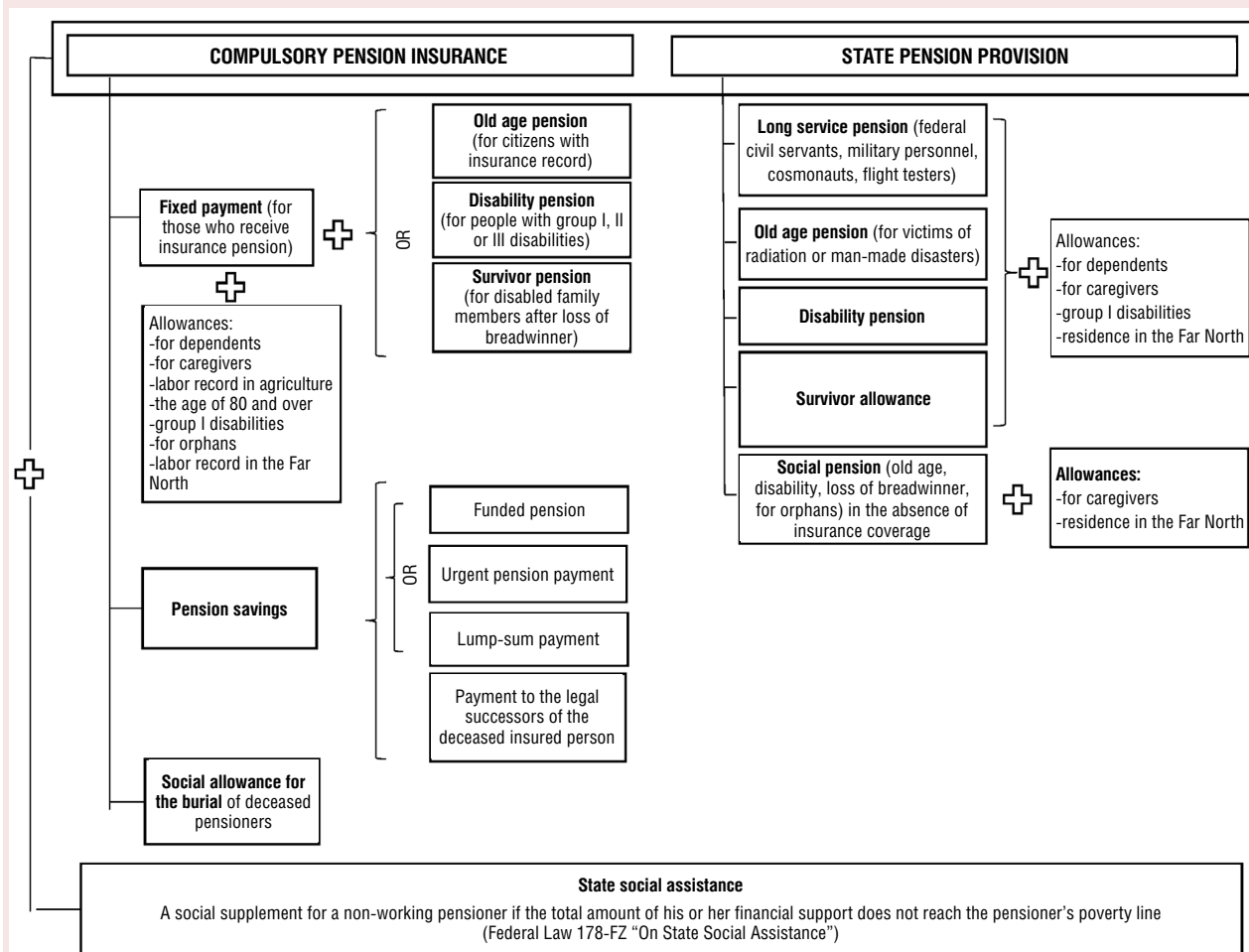
protection from absolute monetary poverty in accordance with international standards (*Fig. 1*).

This model is based on a solidary distribution of financing state pension obligations among the economically active and able-bodied population of Russia<sup>2</sup>. The PS is focused on fulfilling the

<sup>1</sup> The national pension system of a country is understood by the authors as a multi-level set of public institutions, laws and regulations that guarantee the establishment and payment of pensions and other related benefits in certain life circumstances, taking into account demographic, economic, national characteristics and strategic social goals of the country. In this publication, it is considered as part of compulsory pension insurance and public pension provision.

<sup>2</sup> The principle of PAYG (pay-as-you-go) is to redistribute the income of today's workers directly to pay current public pension obligations.

Figure 1. Multitier model of the Russian national pension system



Compiled based on: On insurance pensions: Federal Law 400-FZ, dated December 28, 2013. Available at: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_156525/](http://www.consultant.ru/document/cons_doc_LAW_156525/) (accessed: May 26, 2025); On state social assistance: Federal Law 178-FZ, dated July 17, 1999. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_23735/](https://www.consultant.ru/document/cons_doc_LAW_23735/) (accessed: May 26, 2025); On state pension provision in the Russian Federation: Federal Law 166-FZ, dated December 15, 2001. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_34419/](https://www.consultant.ru/document/cons_doc_LAW_34419/) (accessed: May 26, 2025); (Zakharov, 2024).

constitutional guarantees of the welfare state (social justice, financial security of the population, protection from absolute monetary poverty), ensuring the standard of living of citizens in accordance with international standards<sup>3</sup>. It is a macroeconomic model of budgetary and financial redistribution of monetary resources between generations (Solovyev, 2023).

<sup>3</sup> On the ratification of the Social Security (Minimum Standards) Convention No 102: Federal Law 349-FZ, dated October 3, 2018. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_308157/](https://www.consultant.ru/document/cons_doc_LAW_308157/) (accessed: June 5, 2025); Social Security (Minimum Standards) Convention. International Labour Organization. Available at: [https://www.ilo.org/wcmsp5/groups/public/---ed-norm/---normes/documents/normativeinstrument/wcms\\_c102\\_ru.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed-norm/---normes/documents/normativeinstrument/wcms_c102_ru.pdf) (accessed: June 6, 2025).

The sources of financing in the current PS model are differentiated into insurance premiums, federal budget funds, voluntary contributions from individuals and organizations, income from investing citizens' pension savings, and other sources not prohibited by the legislation of the Russian Federation<sup>4</sup>.

Pension reforms of recent decades<sup>5</sup> aimed at transforming the institutional parameters of the Russian pension system<sup>6</sup> were intended to strengthen its financial balance<sup>7</sup> (Sedova, 2018) and improve the standard of living of all categories of the disabled population<sup>8</sup> (Solovyev, 2014). The ratification of the ILO Social Security (Minimum Standards) Convention No 102<sup>9</sup> by the Russian Federation has consolidated the increasing social orientation in the field of compulsory pension insurance and state pension provision of Russia.

In the current pension system of Russia, state social assistance in the form of a social supplement to a pension (SS) is important, as it guarantees protection from absolute monetary poverty to pensioners who do not have a paid job<sup>10</sup>. It is provided as part of both compulsory pension insurance and state pension provision. The total amount of the pension recipient's financial support cannot be less than the pensioner's poverty line (PPL). The amount of the social supplement to the pension is determined so that the total amount of pensioner's financial provision, including this supplement, reaches the value of the regional PPL. The federal social supplement (FSS) is paid if the total amount of a non-working pensioner's financial provision does not reach the value of the PPL, in case it is lower than the general value of the PPL

<sup>4</sup> On the procedure for financing payments by pension savings: Federal Law 360-FZ, dated November 30, 2011 (revised December 25, 2023). Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_122348/](https://www.consultant.ru/document/cons_doc_LAW_122348/) (accessed: May 26, 2025); On insurance pensions: Federal Law 400-FZ, dated December 28, 2013. Available at: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_156525/](http://www.consultant.ru/document/cons_doc_LAW_156525/) (accessed: May 26, 2025); On public social assistance: Federal Law 178-FZ, dated July 17, 1999. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_23735/](https://www.consultant.ru/document/cons_doc_LAW_23735/) (accessed: May 26, 2025); On public pension provision in the Russian Federation: Federal Law 166-FZ, dated December 15, 2001. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_34419/](https://www.consultant.ru/document/cons_doc_LAW_34419/) (accessed: May 26, 2025).

<sup>5</sup> On labor pensions in the Russian Federation: Federal Law 173-FZ, dated December 17, 2001. Available at: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_34443/](http://www.consultant.ru/document/cons_doc_LAW_34443/) (accessed: May 24, 2025); On insurance pensions: Federal Law 400-FZ, dated December 28, 2013 (revision No 8, May 26, 2021). Available at: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_156525/](http://www.consultant.ru/document/cons_doc_LAW_156525/) (accessed: May 26, 2025).

<sup>6</sup> On amendments to certain legislative acts of the Russian Federation on the appointment and payment of pensions: Federal Law 350-FZ, dated October 3, 2018. Available at: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_308156/](http://www.consultant.ru/document/cons_doc_LAW_308156/) (accessed: June 05, 2025); On the suspension of certain provisions of the legislative acts of the Russian Federation, amendments to certain legislative acts of the Russian Federation and the specifics of increasing the insurance pension, fixed payments to the insurance pension and social pensions: Federal Law 385-FZ, dated December 29, 2015. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_191264/](https://www.consultant.ru/document/cons_doc_LAW_191264/) (accessed: June 05, 2025); On amendments to Article 17 of the Federal Law "On Compulsory Pension Insurance in the Russian Federation" and Article 26.1 of the Federal Law "On Insurance Pensions": Federal Law 173-FZ, dated July 8, 2024. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_480364/](https://www.consultant.ru/document/cons_doc_LAW_480364/) (accessed: June 05, 2025); Proposals to improve the pension system. Available at: <http://duma.gov.ru/news/27342/> (accessed: June 05, 2025).

<sup>7</sup> On the approval of the Strategy for the Long-term Development of the Pension System of the Russian Federation: RF Government Resolution 2524-r, dated December 25, 2012 (revised October 24, 2018). Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_139981/](https://www.consultant.ru/document/cons_doc_LAW_139981/) (accessed: June 07, 2025); The forecast of the long-term socio-economic development of the Russian Federation for the period up to 2030 (developed by the Ministry of Economic Development of Russia). Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_144190/](https://www.consultant.ru/document/cons_doc_LAW_144190/) (accessed: June 05, 2025).

<sup>8</sup> On the Concept of long-term socio-economic development of the Russian Federation for the period up to 2020: RF Government Resolution 1662-r, dated November 17, 2008 (revised September 28, 2018). Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_82134/](https://www.consultant.ru/document/cons_doc_LAW_82134/) (accessed: June 05, 2025).

<sup>9</sup> On the ratification of the Social Security (Minimum Standards) Convention No 102: Federal Law 349-FZ, dated October 3, 2018. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_308157/](https://www.consultant.ru/document/cons_doc_LAW_308157/) (accessed: June 05, 2025); Social Security (Minimum Standards) Convention. Available at: [https://www.ilo.org/wcmsp5/groups/public/---ed\\_norm/---normes/documents/normativeinstrument/wcms\\_c102\\_ru.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---normes/documents/normativeinstrument/wcms_c102_ru.pdf) (accessed: June 06, 2025).

<sup>10</sup> The fact of working as a self-employed is not considered.

in the Russian Federation. The regional social supplement (RSS) is paid if the pension in a constituent entity of the Russian Federation is higher than the same indicator in the Russian Federation (in 2025, 15250 rubles)<sup>11</sup>. From January 1, 2026, the authority to administer the RSS was transferred to the Social Fund of Russia (SFR)<sup>12</sup>. In 2025, FSS was implemented in 59 regions of the Russian Federation and the city of Baikonur, and RSS was implemented in 30 regions. The annual number of recipients of the social supplement has shown unstable trend and ranged from 5.2 to 6.2 million people<sup>13</sup>. In general, from 2015 to 2024, the number of recipients of FSS increased to 2.9 million people<sup>14</sup>, the number of RSS recipients increased to 3.2 million people<sup>15</sup>. The share of citizens with incomes below the absolute monetary poverty line among non-working pensioners increased to 14.9% in 2024, which is 2.4 percentage points higher than in 2015. The average size of the regional social supplement was 5180.0 rubles<sup>16</sup>, the FSS was 3050.0 rubles<sup>17</sup>. It is worth noting that over the past 10 years, the average size of the SS has increased by 40.24%.

With the current structure of pension recipients and insurance premiums payers, characterized by a significant excess in the number of employees over the self-employed and other categories working for themselves, the cost ratio for paying insurance pensions through insurance premiums and inter-budget transfers is approximately 80:20 (in %)<sup>18</sup>. The share of the inter-budget transfer was 19.83% in 2024. Federal budget funds were transferred to the PS for the payment of pensions (including state pension provision), other pension supplements, benefits and compensations financed from the federal budget (36.53%); to compensate for the shortfall in budget revenues to the Social Fund of Russia due to the establishment of reduced insurance premiums for compulsory pension insurance, temporary disability insurance and maternity insurance (27.73%); for valorization (increase) of the estimated pension capital (20.16%); for compulsory pension insurance (13.21%); for reimbursement of expenses for payment of insurance pensions due to the inclusion of non-insurance periods in the insurance record (2.29%); for the advance payment of pensions to citizens recognized as unemployed, and payment of funeral grants (0.08%).

<sup>11</sup> The poverty line in the Russian Federation in 2025. Social Fund of Russia. Available at: [https://sfr.gov.ru/grazhdanam/pensionres/soc\\_doplata/~10279](https://sfr.gov.ru/grazhdanam/pensionres/soc_doplata/~10279) (accessed: August 24, 2025); Social supplement up to the level of the pensioner's poverty line. Available at: [https://sfr.gov.ru/grazhdanam/pensionres/soc\\_doplata/](https://sfr.gov.ru/grazhdanam/pensionres/soc_doplata/) (accessed: June 15, 2025).

<sup>12</sup> On amendments to Article 12.1 of the Federal Law "On Public Social Assistance": Federal Law 39-FZ, dated March 20, 2025. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_501232/](https://www.consultant.ru/document/cons_doc_LAW_501232/) (accessed: August 25, 2025).

<sup>13</sup> The amount of the pensioner's poverty line in order to establish a social supplement to a pension in the Russian Federation. Available at: [https://rosstat.gov.ru/storage/mediabank/SP\\_2-8.xlsx](https://rosstat.gov.ru/storage/mediabank/SP_2-8.xlsx) (accessed: June 15, 2025).

<sup>14</sup> Federal social supplement to the pension of non-working pensioners up to the poverty line of a pensioner in a constituent entity of the Russian Federation. Available at: [https://sfr.gov.ru/files/id/open\\_data/2025/Forma\\_Prilojenie9\\_p-38\\_FSD.csv](https://sfr.gov.ru/files/id/open_data/2025/Forma_Prilojenie9_p-38_FSD.csv) (accessed: June 15, 2025).

<sup>15</sup> Information on the implementation of social support measures for the elderly at the expense of the consolidated budget of the constituent entity of the Russian Federation. Available at: [https://rosstat.gov.ru/storage/mediabank/sp\\_3.4.xls](https://rosstat.gov.ru/storage/mediabank/sp_3.4.xls) (accessed: June 15, 2025).

<sup>16</sup> Information on the implementation of social support measures for the elderly at the expense of the consolidated budget of the constituent entity of the Russian Federation. Rosstat. Available at: [https://rosstat.gov.ru/storage/mediabank/sp\\_3.4.xls](https://rosstat.gov.ru/storage/mediabank/sp_3.4.xls) (accessed: June 15, 2025).

<sup>17</sup> Own calculation. The average size of the federal social supplement to a pension in Russia is not explicitly stated in open data.

<sup>18</sup> Execution of the SFR budget by revenue. Available at: [https://sfr.gov.ru/files/id/open\\_data/2025/dohodyi.csv](https://sfr.gov.ru/files/id/open_data/2025/dohodyi.csv) (accessed: June 13, 2025).

The expansion of various social guarantees provided by the state<sup>19</sup>, aimed at improving the standard of living of certain categories of pensioners, increases the imbalance of compulsory pension insurance. A supplement to the fixed payment (FP) being 100% of the FP<sup>20</sup> was paid in 2024 to 4.5 million pensioners aged 80 and over (20.0% of the total number of pensioners): 946.1 thousand men and 3.59 million women<sup>21</sup>. A similar supplement is paid to recipients of insurance pensions with group I disabilities. In 2024, there were 1236.2 thousand people with a group I disability registered in the SFR<sup>22</sup>. Since 2025, a compensation payment to unemployed able-bodied persons caring for disabled citizens<sup>23</sup> has also been introduced into the pension in the form of an additional increase in the fixed payment to the insurance pension and the retirement allowance under the state pension provision<sup>24</sup>. In 2024, care was provided for 2.6 million people<sup>25</sup> and compensation was 1200 rubles. Since 2025, the allowance for caregivers has been indexed along with the pension. The share of its recipients in the total number of all pensioners is 6.3%.

For persons who have worked in agriculture for at least 30 calendar years, a 25% increased fixed payment to the old age insurance pension

and disability insurance pension has been established. In 2024 there were 732.5 thousand such people<sup>26</sup>.

The 50 and 30% increased fixed payment, respectively, is appointed after reaching the insurance record in the Far North and equivalent areas. For residents living in areas with severe climatic conditions that require additional financial and physiological costs, the pension (fixed payment) is increased by the appropriate regional premium rate, depending on the area of residence. In 2024, there were 3.03 million people pensioners living in the Far North and equivalent areas, of which 2.78 million<sup>27</sup> are recipients of insurance pensions.

Demographic problems and changes in the nature and structure of employment in Russia pose significant threats to PS, leading to an increase in its imbalance. They are also prerequisites for its transformation and will be described below.

The research issue is to find a way to resolve the contradiction between demographic and structural threats to the pension system and the standard of living of pensioners, due to its increasing imbalance, and the possibilities of overcoming them by separating the tools for developing and managing the non-insurance and insurance parts of the pension system.

<sup>19</sup> On amendments to certain legislative acts of the Russian Federation: Federal Law 313-FZ, dated August 8, 2024. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_482577/ad890e68b83c920baeae9bb9fdc9b94feb1af0ad/#dst100049](https://www.consultant.ru/document/cons_doc_LAW_482577/ad890e68b83c920baeae9bb9fdc9b94feb1af0ad/#dst100049) (accessed: June 13, 2025); On amendments to certain legislative acts of the Russian Federation: Federal Law 153-FZ, dated May 26, 2021. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_384908/](https://www.consultant.ru/document/cons_doc_LAW_384908/) (accessed: June 13, 2025).

<sup>20</sup> On insurance pensions: Federal Law 400-FZ (paragraph 1, article 17), dated December 28, 2013. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_156525/c612f399f6d03238d3be5a83fe9fe6ad073e436e/](https://www.consultant.ru/document/cons_doc_LAW_156525/c612f399f6d03238d3be5a83fe9fe6ad073e436e/) (accessed: June 15, 2025).

<sup>21</sup> More than 4.4 million pensioners over the age of 80 receive increased payments. The Social Fund of Russia. Available at: [https://sfr.gov.ru/press\\_center~2024/04/24/263035](https://sfr.gov.ru/press_center~2024/04/24/263035) (accessed: June 15, 2025).

<sup>22</sup> Open SFR data. Available at: [https://sfr.gov.ru/opendata/sfr\\_opendata/](https://sfr.gov.ru/opendata/sfr_opendata/) (accessed: June 15, 2025).

<sup>23</sup> On compensation payments to persons caring for disabled citizens: Presidential Decree 1455, dated December 26, 2006 (revised December 31, 2014). Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_64919/](https://www.consultant.ru/document/cons_doc_LAW_64919/) (accessed: June 15, 2025).

<sup>24</sup> On amendments to certain legislative acts of the Russian Federation: Federal Law 313-FZ, dated August 8, 2024. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_482577/ad890e68b83c920baeae9bb9fdc9b94feb1af0ad/#dst100049](https://www.consultant.ru/document/cons_doc_LAW_482577/ad890e68b83c920baeae9bb9fdc9b94feb1af0ad/#dst100049) (accessed: June 15, 2025)

<sup>25</sup> SFR 2024 Annual Report. Available at: [https://sfr.gov.ru/files/id/press\\_center/godovoi\\_otchet/GodOtchet\\_2024\\_web.pdf](https://sfr.gov.ru/files/id/press_center/godovoi_otchet/GodOtchet_2024_web.pdf) (accessed: June 15, 2025).

<sup>26</sup> SFR 2024 Annual Report. The Social Fund of Russia. Available at: [https://sfr.gov.ru/files/id/press\\_center/godovoi\\_otchet/GodOtchet\\_2024\\_web.pdf](https://sfr.gov.ru/files/id/press_center/godovoi_otchet/GodOtchet_2024_web.pdf) (accessed: June 15, 2025).

<sup>27</sup> Information on the number of unemployed pensioners living in the Far North and equivalent areas who have received compensation for the cost of travel across the territory of the Russian Federation to their vacation destination and back. The Social Fund of Russia. Available at: [https://sfr.gov.ru/files/id/open\\_data/2025/Svedeniyaochisl-KSO\\_31.csv](https://sfr.gov.ru/files/id/open_data/2025/Svedeniyaochisl-KSO_31.csv) (accessed: June 15, 2025).

The object of the study is the pension system, which includes compulsory pension insurance and state pension provision in the Russian Federation. The subject of the study is a set of economic relations that will develop in the process of introducing the basic income (BI) tools into the PS.

The aim of the work was to develop the provisions of the BI concept in relation to the development of the theoretical and methodological foundations of its introduction into the Tax Code of the Russian Federation.

The following tasks were solved in the course of the study: 1) description of the results of scientific discussions and experience of using the BI in social systems; 2) assessment of the risks of developing the PS in the medium and long term without making changes to it; 3) identification of regular payments in the current PS that correspond to the concept of the BI, and justification for dividing the PS into three tiers: solidarity-based (distributive) tier (basic pension income), occupational insurance tier (insurance pension), and supplementary tier (for certain categories of beneficiaries); 4) determination of ways to introduce BPI into the PS.

The hypothesis of the study is that the proposed model of introducing the BPI into the PS has real

grounds, corresponds to the national goals<sup>28</sup> of Russia and international standards in the field of social protection of pension recipients.

The novelty of the research lies in the development of theoretical and methodological foundations and specific practical approaches to the introduction of BPI in the Russian Federation in the medium term, meeting modern threats and opportunities in the field of social policy.

### **Theoretical and methodological foundations of the research**

In the context of increasing challenges for national social institutions<sup>29</sup> (Stepanova, 2021; Nemtsova et al., 2025), the issue of their adaptation to rapidly changing socio-economic conditions<sup>30</sup> (Gorlin, Lyashok, 2022; Voronin, Stolyarov, 2020) and the search for alternative social security measures for pensioners (Safonov et al., 2023) are of increasing scientific interest.

Researchers are actively raising the issue of the expediency of combining in national pension systems their main theoretical models: the Bismarck insurance model<sup>31</sup> and the non-insurance Beveridge model<sup>32</sup>. Publications note the expediency in modern conditions to use a more efficient basic income system<sup>33</sup> in non-insurance pension systems

<sup>28</sup> On the national development goals of the Russian Federation for the period up to 2030 and for the future up to 2036: Presidential Decree 309, dated May 7, 2024. Available at: <https://www.kremlin.ru/acts/news/73986> (accessed: August 22, 2025); On the ratification of the Social Security (Minimum Standards) Convention No 102: Federal Law 349-FZ, dated October 3, 2018. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_308157/](https://www.consultant.ru/document/cons_doc_LAW_308157/) (accessed: June 05, 2025); Social Security (Minimum Standards) Convention. International Labour Organization. Available at: [https://www.ilo.org/wcmsp5/groups/public/---ed\\_norm/---normes/documents/normativeinstrument/wcms\\_c102\\_ru.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---normes/documents/normativeinstrument/wcms_c102_ru.pdf) (accessed: June 6, 2025).

<sup>29</sup> World social protection report 2024–2026. Available at: [https://www.ilo.org/sites/default/files/2024-09/SOCPRO\\_WSPR\\_2024\\_Executive\\_Summary\\_RU\\_Web.pdf](https://www.ilo.org/sites/default/files/2024-09/SOCPRO_WSPR_2024_Executive_Summary_RU_Web.pdf) (accessed: May 24, 2025); World Social Protection Report 2020–22: Regional Companion Report for Central and Eastern Europe and Central Asia (2021). Moscow: ILO; Vishnevskii A.G. (Ed.). (2017). Demograficheskie vyzovy Rossii: ekspertno-analiticheskii doklad [Demographic Challenges in Russia: Expert and Analytical Report]. Moscow: National Research University Higher School of Economics, Center for Strategic Research. Available at: <https://www.csr.ru/upload/iblock/704/704bb820549b28a50039d37b02efccd9.pdf> (accessed: August 24, 2025).

<sup>30</sup> Factors in ensuring financial stability of the pension system in the context of growing macroeconomic risks. Available at: [council.gov.ru/media/files/41d453c1281b7ed05257.doc&ved=2ahUKewi\\_t5X2luaNAxXkJxAIHVofMsE4ChAWegQIKBAB&usq=AOvVaw0Bki-wB68-voMe5NQGyiXU](https://council.gov.ru/media/files/41d453c1281b7ed05257.doc&ved=2ahUKewi_t5X2luaNAxXkJxAIHVofMsE4ChAWegQIKBAB&usq=AOvVaw0Bki-wB68-voMe5NQGyiXU) (accessed: May 24, 2025).

<sup>31</sup> The system was developed in Germany in the 1880s by Otto von Bismarck. This is a system of compulsory insurance for illness, old age, disability and accidents at work. Its main principles include provision of pension payments through contributions from employees and employers, creation of public-law pension system management bodies, and the separation of insurance and national budgets.

<sup>32</sup> The system was developed in the 1950s by British economist William Beveridge. It provides universal social protection and free medical services funded by taxes. Beveridge W.H.B. (1942). Social insurance and allied services. Available at: [http://news.bbc.co.uk/1/shared/bsp/hi/pdfs/19\\_07\\_05\\_beveridge.pdf](http://news.bbc.co.uk/1/shared/bsp/hi/pdfs/19_07_05_beveridge.pdf)

<sup>33</sup> Basic income: Sufficient evidence, now politics. Available at: <https://basicincome.org/news/2023/09/basic-income-sufficient-evidence-now-politics/>

rather than the Beveridge comprehensive social protection model<sup>34</sup> (Beck et al., 2024; Furmańska-Maruszak, 2019; Hoynes, Rotshtein, 2019; Reed et al., 2022).

Numerous studies are being conducted in the international scientific community on the possible introduction of the concept of basic income (or its elements) into national social security systems. The basic income is defined as a universal monetary payment (to all citizens – a universal BI), regularly received by an individual without condition (unconditional BI) or in accordance with certain payment conditions (transitional forms of BI). Scientific research concerns the theoretical component of this issue (Bobkov et al., 2024; Gentilini et al., 2020; Ortiz et al., 2018; Van Parijs, 1992), and its applied aspects (Bobkov et al., 2021a; Bobkov, Odintsova, 2022).

Researchers analyze both the positive and problematic effects of implementing the BI concept (Belyaeva, Remarenko, 2020; Kapeliushnikov, 2020; Cowan, 2017; Crisp, De Wispelaere, 2022; De Wispelaere et al., 2025; Widerquist, 2018). Its main achievements are a reduction in the absolute monetary poverty of certain categories of citizens, an increase in the standard of living of recipients and a decrease in inequality between different social and socio-demographic groups, a reduction in the cost of managing pensions, social allowances and other support measures, etc. Challenges include the growth of additional costs for providing payments, an increase in the tax burden on the employed, the manifestation of dependency attitudes among certain categories of the population, etc.

The various approaches proposed by the researchers to the introduction of the BI focus on the effective inclusion of this new institution in the social policy of countries and the achievement of socio-economic indicators that meet international standards with its application (Castro, West, 2022; Láin, 2022). The proposed forms of BI introduction range from radical, replacing existing payment and benefit systems<sup>35</sup> (Kolesnik, 2018; Ostapenko, 2016; Groot, 2002), to compromise, complementing and expanding existing social assistance systems<sup>36</sup> (Kvashnin, 2019).

Despite the controversy, researchers agree that the implementation of the BI concept is a necessary prospect for the future, and at the current stage it is proposed to integrate its individual elements (transitional forms) into the existing social security system and gradually neutralize the consequences of threats to public social policy (Bobkov et al., 2021a; Zakharov, 2024).

Thus, in the OECD countries, basic pensions have been introduced at the first level of pension systems. In Denmark and the Netherlands, where the cost parameters in pension systems are similar to those in Russia their amounts for residents were 35.9 and 29.1%<sup>37</sup> of average gross earnings, respectively. The possibilities of using BI in pension systems, including international experience and Russian research, are discussed in scientific papers (Bobkov et al., 2021a; Smirnova, 2024).

Demographic constraints and structural changes in employment, which serve as prerequisites for the transformation of management tools for the collection and allocation of resources in the

<sup>34</sup> Beveridge rebooted: A basic income for every citizen? Report by sir William Beveridge. Available at: <https://www.lse.ac.uk/events/lse-festival/beveridge/events/beveridge-rebooted> (accessed: 24.08.2025).

<sup>35</sup> Zwolinski M. (2013). The libertarian case for a basic income. Available at: <https://www.libertarianism.org/columns/libertarian-case-basic-income> (accessed: 24.05.2025).

<sup>36</sup> Varoufakis Y. (2016) The universal right to capital income. Project Syndicate, 31 October 2016. Available at: <https://www.project-syndicate.org/commentary/basic-income-funded-by-capital-income-by-yanis-varoufakis-2016-10?barrier=accesspaylog> (accessed: 24.05.2025).

<sup>37</sup> Pensions at a Glance 2023: OECD and G20 Indicators. Paris: OECD Publishing, 2023. Available at: [https://www.oecd.org/content/dam/oecd/en/publications/reports/2023/12/pensions-at-a-glance-2023\\_4757bf20/678055dd-en.pdf](https://www.oecd.org/content/dam/oecd/en/publications/reports/2023/12/pensions-at-a-glance-2023_4757bf20/678055dd-en.pdf) (accessed: 25.08.2025)

Russian PS and the introduction of the BPI into it, are manifested in the following. Demographic changes in Russia are the most discussed constraints (Frumina, 2023) and risks affecting socio-economic development. They are expressed in depopulation and aging, leading to a decrease in the proportion of the working-age population (Porfiriev et al., 2022). The forecast of the Institute of Economic Forecasting of the Russian Academy of Sciences in the long term indicates an inevitable decline in the population of Russia. Thus, 146.2 million at the beginning of 2024 may decrease to 142 million in 2035 and 136 million in 2050, even with optimistic assumptions regarding the birth rate, death rate and migration growth (Shirov, 2024).

Forecasts of demographic parameters of the pension system also model the depopulation in Russia and a change in population structure by 2050<sup>38</sup> (Kashepov, 2023). The share of people over 60 will increase from 27.6%<sup>39</sup> (2024) to 34% (47.1 million people) by the end of the forecast period, and over 65 – to 25% (34.8 million people) (Shirov, 2024). The demographic forecast of the Federal State Statistics Service in all its variants also shows an increase in the proportion of those over the working age to 27%<sup>40</sup> by 2046 and an increase in the dependency ratio (considering only the population over the working age) to 468 per 1000 by 2046<sup>41</sup>.

The second key threat to PS and the stimulating vector of its adaptation to new conditions is a change

in the employment structure. If in 2025 the number of self-employed citizens will amount to 13.5 million people<sup>42</sup>, then by 2050 it may grow to 29 million people. The employment structure is being transformed, the employed may make up 38.8%, and the self-employed – 61.1%<sup>43</sup> (Vashalomidze, 2024). An acute problem is that currently only 4.4% of self-employed citizens have entered into voluntary legal relationships for compulsory pension insurance, formed their pension rights and paid insurance premiums, the rest are potential recipients of social pensions paid under the legislation on state pension provision from inter-budget transfers and providing a standard of living significantly below the pensioner's poverty line.

Taking into account the fact that 95.6% of the self-employed currently remain outside the scope of compulsory pension insurance and can replenish the number of recipients of social pensions when they reach the age of disability, we can expect a significant increase in the number of recipients and, consequently, a rapid increase in the number of pensioners with a low standard of living.

In the future, with continued demographic trends, changes in the employment structure, liberalization of the responsibility of policyholders and employees for the formation of pension rights, as well as an increase in the social orientation of the state, the share of its transfer will certainly grow, strengthening both the non-insurance mechanism

<sup>38</sup> Proceedings of the 7th Moscow Actuarial Forum Russia, Moscow, May 24–25, 2023. Available at: <https://2023.maf.org.ru/>; Zakharov I.N. (2022). *Sovershenstvovanie obyazatel'nogo pensionnogo strakhovaniya v Rossiiskoi Federatsii: dis. ... kand. ekon. nauk: 08.00.05 [Improvement of Compulsory Pension Insurance in the Russian Federation: Candidate of Sciences (Economics) Dissertation Abstract: 08.00.05]*. Moscow: Federal state budgetary institution "All-Russian Research Institute of Labor" of the Ministry of Labor and Social Protection of the Russian Federation; Population prospects for Russia up to 2045. Demoskop Weekly. Available at: <https://www.demoscope.ru/weekly/2024/01015/barom01.php> (accessed: August 25, 2025).

<sup>39</sup> Calculated based on Rosstat data. Permanent population by gender and age as of January 1, 2025. Rosstat. Available at: <https://www.fedstat.ru/indicator/31548>, <https://www.fedstat.ru/indicator/33459> (accessed: June 25, 2025).

<sup>40</sup> Population by age groups. Rosstat. Available at: [https://rosstat.gov.ru/storage/mediabank/Progn\\_3.xls](https://rosstat.gov.ru/storage/mediabank/Progn_3.xls) (accessed: August 25, 2025); Demographic forecast for Russia up to 2046. Federal state statistics service. Available at: <https://demogr.hse.ru/mirror/pubs/share/943055611.pdf> (accessed: August 25, 2025).

<sup>41</sup> Dependency ratio. Available at: [https://rosstat.gov.ru/storage/mediabank/Progn\\_4.xls](https://rosstat.gov.ru/storage/mediabank/Progn_4.xls)

<sup>42</sup> Statistics for the national project "Small and medium-sized businesses and support for sole proprietors' initiatives". Available at: <https://rmsp.nalog.ru/statistics2.html> (accessed: June 10, 2025).

<sup>43</sup> Citizens who have registered their status and apply the special tax regime "Professional income tax".

for financing, forming, and exercising pension rights (Solovyev, 2025) and the non-insurance nature of the PS itself in general.

This implies the need and possibility of separating the formation and management of non-insurance and insurance payments in the pension system. In the multitier model of the Russian PS, there are regular, inherently non-insurance payments that could become parts of the BPI.

One of them is a fixed payment to the insurance pension (FP), provided by a share of insurance premiums paid by policyholders and the self-employed. In the previous legislation in 2001–2014<sup>44</sup>, it was called the basic amount of the insured part of the labor pension (BPIP). The task was to bring it to the pensioner's poverty line, regardless of the size of the insurance pension. The purchasing power of the pensioner for the basic part of the pension has been constantly increasing. In 2009, it was 62.5% of the PPL<sup>45</sup>. However, in 2010, the pension legislation was changed, the basic pension was included in the insurance pension and was called a fixed payment to the insurance pension (FP)<sup>46</sup>, which, in fact, represented the abolition of the basic pension and the task of bringing it

to the PPL. A fixed payment is established for citizens simultaneously with the appointment of an insurance pension, with the exception of certain categories of recipients<sup>47</sup> who have exercised the right to choose a pension<sup>48</sup>. In 2025, the base amount of the FP is 8,907.70 rubles<sup>49</sup> (58.4% of the RF PPL). For the people with group III disabilities and those who have lost a breadwinner, the size of the FP is 50% of its base size. We believe that, considering the above demographic trends and changes in the employment structure, it would be necessary to return to the isolation of fixed payments in the insurance part of the PS in the form of a BPI funded from sources other than insurance premiums (Nekrasov, 2020).

Another element of the regular payment, which could become a part of the BPI, is state social assistance in the form of a social supplement to the pension (SS).

In the state pension provision, the prototype of the BPI should be considered a social pension for disabled citizens who could not form the necessary amount of pension rights to enter the pension insurance system or did not have such an opportunity (for example, lifelong disabled people, children with disabilities).

<sup>44</sup> On labor pensions in the Russian Federation: Federal Law 173-FZ, dated December 17, 2001. Available at: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_34443/](http://www.consultant.ru/document/cons_doc_LAW_34443/) (accessed: May 24, 2025).

<sup>45</sup> On labor pensions in the Russian Federation: Federal Law 173-FZ, dated December 17, 2001 (revision No 19, June 30, 2009). Article 14. The size of old age labor pensions. ConsultantPlus. Available at: <https://login.consultant.ru/link/?req=doc&base=LAW&n=87265&dst=100100,3> (accessed: May 25, 2025); The social status and standard of living of the Russian population. 2011: statistical collection. Rosstat. Moscow, 2011.

<sup>46</sup> On amendments to certain legislative acts of the Russian Federation and invalidation of certain legislative acts (provisions of legislative acts) of the Russian Federation due to the adoption of the Federal Law “On Insurance Premium Payments to the Pension Fund of the Russian Federation, the Social Insurance Fund of the Russian Federation, the Federal Compulsory Medical Insurance Fund and Territorial Compulsory Medical Insurance Funds”: Federal Law 213-FZ, dated July 24, 2009. RF Government. Available at: <http://government.ru/docs/all/99229/> (accessed: May 24, 2025).

<sup>47</sup> On insurance pensions: Federal Law 400-FZ, dated December 28, 2013. Article 16. Fixed payment to the insurance pension. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_156525/457ffb46608e89e853cc77fa60fbaf1a581f61d9/](https://www.consultant.ru/document/cons_doc_LAW_156525/457ffb46608e89e853cc77fa60fbaf1a581f61d9/) (accessed: August 25, 2025).

<sup>48</sup> On pension provision for persons who have completed military service, service in law enforcement agencies, the state fire service, bodies for the regulation of distribution of narcotic drugs and psychotropic substances, institutions and bodies of the penal system, troops of the National Guard of the Russian Federation, enforcement agencies of the Russian Federation, and their families: Federal Law 4468-1, dated February 12, 1993. Article 7. The right to choose a pension. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_4436/b009292459242be893ccd817e82027deedb4d96b/](https://www.consultant.ru/document/cons_doc_LAW_4436/b009292459242be893ccd817e82027deedb4d96b/) (accessed: August 25, 2025).

<sup>49</sup> The amount of the fixed payment to the old age insurance pension. The Social Fund of Russia. Available at: [https://sfr.gov.ru/grazhdanam/pensionres/Fixed\\_payment\\_amount/](https://sfr.gov.ru/grazhdanam/pensionres/Fixed_payment_amount/) (accessed: August 25, 2025).

In the case of the formation of a BPI from the above-mentioned regular payments, the FP (its basic amount and the established allowances for certain categories of recipients) will be withdrawn from the insurance pension. This means that it will be necessary to identify a single source of financing for this payment, which differs from the existing ones, which currently also include additional insurance and non-insurance sources that do not worsen the total amount of insurance pension already paid under compulsory pension insurance. In 2023, 1,452.4 billion rubles were allocated from the federal budget for the payment of insurance pensions<sup>50</sup> (including 317.9 billion rubles for compulsory pension insurance), and 980.7 billion rubles were provided in 2022<sup>51</sup>.

In the long-term PS, the benefits provided for the payment of insurance premiums<sup>52</sup>, early and preferential pension models for professions and positions in certain sectors of the economy that are not fully provided with insurance (corporate) financing<sup>53</sup>, and the obligations assumed by the state to increase the financial security of pensioners<sup>54</sup> need to be reviewed. It is advisable to maintain insurance premium rates for certain types of activities (for example, those with harmful and difficult working conditions), and gradually reduce benefits for a number of others.

In our opinion, there are significant reserves to ensure the equivalence of pension obligations assumed by the state to citizens and the pension rights of insured persons, and to improve the standard of living of pensioners, both in the possible increase in insurance premium rates in certain types of work, and in more consistent compliance with insurance principles in the compulsory pension insurance system. Currently, it has established numerous preferential pension models for a number of categories of recipients of pension insurance payments. All this will allow balancing compulsory pension insurance in the long-term Russian PS.

Thus, as a result of increased pressure from external factors in relation to the pension system, affecting the retirement of citizens and increasing state responsibility for their financial well-being, as well as due to problems in the distribution of funds accumulated within the pension system, *prerequisites have emerged for the transformation of the current solidarity insurance model of pension insurance and state pension provision. It is advisable to divide the PS into three tiers: a solidarity-based (distributive) tier, which is protective in nature and is ensured by the introduction of a BPI, an occupational insurance tier based on the payment of an insurance pension, and a supplementary tier, which includes allowances for certain categories of pensioners*<sup>55</sup>.

<sup>50</sup> SFR budget execution by income. Social Fund of Russia. Available at: [https://sfr.gov.ru/files/id/open\\_data/2024/Ispolnenie\\_byudjeta\\_SFR\\_po\\_dohodam\\_.csv](https://sfr.gov.ru/files/id/open_data/2024/Ispolnenie_byudjeta_SFR_po_dohodam_.csv) (accessed: June 13, 2025).

<sup>51</sup> SFR budget execution by income. Available at: <https://sfr.gov.ru/opendata/7706016118-budgetd/data-20230505T121209-structure-20200227T144101.csv> (accessed: June 13, 2025).

<sup>52</sup> RF Tax Code. Article 427. Reduced insurance premium rates. RF Tax Code (part two) 117-FZ, dated August 5, 2000. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_28165/c5c16c86f95c5db63601047b1c0a5942bd77c824/](https://www.consultant.ru/document/cons_doc_LAW_28165/c5c16c86f95c5db63601047b1c0a5942bd77c824/) (accessed: June 13, 2025).

<sup>53</sup> Preferential pension provision for employees from List No 1, List No 2, teachers, medical workers and others.

<sup>54</sup> Article 30.1. Valorization of the amount of the insured person's estimated pension capital calculated during the assessment of his or her pension rights. On labor pensions in the Russian Federation: Federal Law 173-FZ, dated December 17, 2001. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_34443/e92c4aa357ea33c6be733ead20eb720aeba4ce1b/](https://www.consultant.ru/document/cons_doc_LAW_34443/e92c4aa357ea33c6be733ead20eb720aeba4ce1b/) (accessed: June 13, 2025).

<sup>55</sup> The concept proposed by the authors for the implementation of basic income in the Russian pension system is structurally similar to the current Danish pension system, which includes a state pension and an additional labor pension for working citizens. Source: Frumina S.V. (2021). The analysis of the Danish pension system. *Finansy i kredit=Finance and Credit*, 27(8), 1852–1870. Available at: <https://doi.org/10.24891/fc.27.8.1852> (accessed: August 25, 2025; in Russian).

All three tiers of the prospective model of the Russian pension system will have a separate management with interrelated conditions for the establishment and payment of various parts.

A comparison of the current and prospective PS models is presented in *Table*.

As a result, the proposed basic part of the prospective pension system of the Russian Federation is transformed from a solidarity-based insurance model into a solidarity-based distributive model founded on the principle of social solidarity of generations of

Comparison of the current and prospective PS models in Russia

	Model	Composition	Source of financing	Terms of appointment	Goal
Current model	Solidarity-based insurance (for insured persons)	FP <sup>1)</sup> IP <sup>2)</sup>	Insurance premiums, Transfers	Mandatory age Insurance record Pension rights (IPP <sup>3)</sup> )	Replacement of lost earnings and protection
	Social security (for insured persons who have not developed their labor and insurance records)	Social pension	Inter-budget transfers	Mandatory age Lack of insurance pension rights Permanent residence in Russia Lack of paid employment <sup>4)</sup>	Protection from absolute monetary poverty
	Social protection	SS <sup>5)</sup> Allowances	Inter-budget transfers Insurance premiums for individual allowances	Need Mandatory age Presence of dependents Insurance record	Protection from absolute monetary poverty
Prospective model	Solidarity-based distributive (public)	BPI <sup>6)</sup>	Taxes (including rental payments to budgets of different levels)	Payment for all citizens who have reached the mandatory retirement age, or who belong to professional or social categories who are eligible for a pension in advance	Protection from absolute monetary poverty
	Occupational insurance payment based on compulsory pension insurance	IP FP <sup>7)</sup>	Insurance premiums	Mandatory age Insurance record Pension rights (IPP)	Increased financial security depending on labor and insurance records
	Supplementary payments	SP	Inter-budget transfers	Allowances for certain categories of pensioners; Long-term savings <sup>8)</sup>	Increased financial security depending on special circumstances and long-term savings

<sup>1)</sup> Fixed payment.

<sup>2)</sup> Insurance pension.

<sup>3)</sup> Individual pension points.

<sup>4)</sup> For citizens from among the small-numbered peoples of the North who have reached age 55 and 50 (men and women, respectively) who permanently reside in areas inhabited by small-numbered peoples of the North, and citizens who have reached age 70 and 65 (men and women, respectively), foreign citizens and stateless persons who have permanently resided in the territory of the Russian Federation for at least 15 years and have reached the specified age.

<sup>5)</sup> Social supplement to the pension.

<sup>6)</sup> Basic pension income.

<sup>7)</sup> Funded pension.

<sup>8)</sup> Long-term savings program. Ministry of Finance of Russia. Available at: <https://minfin.gov.ru/ru/performance/pds/> (accessed: June 14, 2025).

Source: own compilation.

economically active population, where regular state-guaranteed pension payments are provided by general taxes or other sources and distributed among recipients in accordance with approved rules in a fixed amount.

The solidarity-based distributive model founded on the introduction of the BPI is aimed at providing constitutional guarantees for citizens, preventing absolute monetary poverty of pension recipients, which is ensured by the universality of this model, i.e. coverage of all recipients of insurance and social pensions. It is proposed to withdraw the public part of the Russian pension system from the system of compulsory pension insurance and state pension provision into a separate system of basic pension income, replacing a fixed payment, social pension and social supplement to pension. According to the authors, the management of the basic pension income system should be carried out by the Pension and Social Insurance Fund of the Russian Federation.

#### **Data and methods of their use**

The data used were departmental statistics and analytical data from the Pension and Social Insurance Fund of the Russian Federation, the Pension Fund of Russia, the Social Insurance Fund of Russia, statistical data from Rosstat, legislative and regulatory acts in the field of compulsory pension insurance, state pension provision, and social assistance.

The following methods were used in the study: analysis and comparison of indicators of the Russian state pension system, including its development strategy<sup>56</sup>; synthesis of the findings and data from other studies on the problem under study; theoretical and methodological modeling of the BI introduction in the PS.

#### **Results and their discussion**

The prospective public part of the PS with the use of the BPI allows protection from poverty for an increasing part of the employed who do not ensure their pension rights and recipients of pensions less than the pensioner's poverty line.

The introduction of the BPI assumes a monthly monetary payment to citizens who have reached the mandatory retirement age<sup>57</sup> or are classified into professional<sup>58</sup> or social categories<sup>59</sup> of citizens who are eligible for a pension in advance<sup>60</sup>.

Its size, based on its purposes, is set at least equal to the general pensioner's poverty line of the Russian Federation (RF PPL). Linking the BPI to the value of the RF PPL establishes its size significantly higher than the fixed payment and social supplement to the pension, as well as the size of the social pension. This will allow excluding the FSS and other allowances for fixed payments adopted to increase the financial security of certain categories of pensioners (allowance for labor record in agriculture, allowance for caregivers, etc.) with new pension appointments.

<sup>56</sup> On the approval of the Strategy for the Long-term Development of the Pension System of the Russian Federation: RF Government Resolution 2524-r, dated December 25, 2012 (revised October 24, 2018). Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_139981/](https://www.consultant.ru/document/cons_doc_LAW_139981/) (accessed: May 24, 2025).

<sup>57</sup> Appendix 6 to the Federal Law "On Insurance Pensions". Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_156525/cf910e14d4aaa0a72a80966dfc1ca31d7a7ce4d9/#dst151](https://www.consultant.ru/document/cons_doc_LAW_156525/cf910e14d4aaa0a72a80966dfc1ca31d7a7ce4d9/#dst151) (accessed: June 15, 2025).

<sup>58</sup> Article 30. Retention of the right to early appointment of an insurance pension. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_156525/f663a5b24001526e74be67ac795010db56c5b62a/](https://www.consultant.ru/document/cons_doc_LAW_156525/f663a5b24001526e74be67ac795010db56c5b62a/) (accessed: June 15, 2025).

<sup>59</sup> Article 32. Retention of the right to early assignment of an insurance pension to certain categories of citizens. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_156525/60bfe0cba439e58680053c0008f8689d42919d18/](https://www.consultant.ru/document/cons_doc_LAW_156525/60bfe0cba439e58680053c0008f8689d42919d18/) (accessed: June 15, 2025).

<sup>60</sup> Including persons with at least 42 and 37 years of insurance experience. About insurance pensions: Federal Law 400-FZ dated December 28, 2013 (as amended on February 28, 2025). Article 8, paragraph 1.2. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_156525/5dd27159773fa7fc92f129a4a779fecbddd0bafa5/](https://www.consultant.ru/document/cons_doc_LAW_156525/5dd27159773fa7fc92f129a4a779fecbddd0bafa5/) (accessed: 15.06.2025).

Setting the BPI minimum as RF PPL will ensure constant pensioners' payments and uniform legislation when changing their place of residence. The adopted decision will allow eliminating unnecessary administrative procedures and complicated budget planning related to the establishment of a social supplement for low-income categories of pensioners, and providing greater opportunities for pension system digitalization. In the constituent entities of the Russian Federation, where the size of the regional PPL is higher than the RF PPL, it is proposed to retain the constituent entities' powers to compensate for the PPL exceeding the BPI.

The introduced BPI will be appointed regardless of the fact of paid employment for citizens who acquire the right to an insurance pension and reside in the territory of the Russian Federation:

- old age on a general basis<sup>61</sup> – men aged 65 and women aged 60,
- disability – from the date of establishment of a persistent health disorder by the medical and social expertise bodies,
- loss of breadwinner – from the date of death of the breadwinner,
- in advance (professional and social categories of citizens) – when special insurance record<sup>62</sup> and (or) age reached<sup>63</sup>,
- in advance due to a great insurance record – from the date when the length of insurance record is 42 years for men, 37 years for women.

In case the requirements for the appointment of an old age insurance pension are not met when men reach 65 and women reach 60, we consider it advisable to establish a BPI for citizens who have been living in Russia for at least 15 years. If a citizen leaves Russia for permanent residence, it is advisable to terminate the payment of the BPI.

The issue of establishing a BPI for immigrants (Chernykh, 2020) and persons with acquired citizenship remains debatable. As an additional requirement for the latter, it is proposed to introduce the condition of living in Russia for a fixed number of years continuously.

The introduction of the BPI into the pension system, of course, raises a rather acute issue of increasing the cost of ensuring public obligations by the state<sup>64</sup> (Bobkov, 2021b; Gontmakher, 2019). In this regard, attention should be paid to the fact that the share of pension expenditures in Russia's GDP is lower than in a number of countries with similar-sized economies and similar pension systems. In 2023, the budget of the Social Fund of Russia for expenditures on pensions and other benefits amounted to 8.1% of GDP, including the share of pension payments of 5.9% of GDP. OECD countries with similar insurance contribution rates have pension costs that exceed the Russian level (Solovyev, 2025). The largest share of GDP spent on state pensions is in Greece and Italy (about 16%), then there are Austria and France – 13–13.5%, Germany, Denmark, Japan, Spain – 9.6–10.4%, the Netherlands – 5%<sup>65</sup>.

<sup>61</sup> Article 8. Conditions for the appointment of an old age insurance pension. On insurance pensions: Federal Law 400-FZ, dated December 28, 2013 (revised February 28, 2025). Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_156525/5dd27159773fa7fc92f129a4a779fecbdd0bafa5/](https://www.consultant.ru/document/cons_doc_LAW_156525/5dd27159773fa7fc92f129a4a779fecbdd0bafa5/) (accessed: June 15, 2025).

<sup>62</sup> Article 30. Retention of the right to early appointment of an insurance pension. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_156525/f663a5b24001526e74be67ac795010db56c5b62a/](https://www.consultant.ru/document/cons_doc_LAW_156525/f663a5b24001526e74be67ac795010db56c5b62a/) (accessed: June 15, 2025).

<sup>63</sup> Article 32. Retention of the right to early assignment of an insurance pension to certain categories of citizens. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_156525/60bfe0cba439e58680053c0008f8689d42919d18/](https://www.consultant.ru/document/cons_doc_LAW_156525/60bfe0cba439e58680053c0008f8689d42919d18/) (accessed: June 15, 2025).

<sup>64</sup> Universal Basic Income proposals in light of ILO standards: Key issues and global costing ESS. Geneva, 2018.

<sup>65</sup> Pensions at a Glance 2023: OECD and G20 Indicators. Paris: OECD Publishing, 2023.

Overall, the cost of state pensions is estimated to be between one quarter and one third of total government spending in OECD countries. The comparison confirms that an increase in the share of pension expenses in Russia will not be exclusive.

The occupational insurance pension will be aimed at improving the financial well-being of pensioners to the level of international standards<sup>66</sup> and approved regulatory indicators<sup>67</sup> in the Russian Federation. Due to the withdrawal of a fixed payment from pension insurance to the basic income system, the released share of the insurance tariff<sup>68</sup>, previously allocated to finance a fixed payment to an insurance pension, can be recorded in an individual personal account, and the collected insurance premiums redistributed to additional indexation of insurance pensions. As a result, the pension rights of insured persons will be fully accounted for, which will increase pensions in the future. The occupational insurance pension is a further development of the current compulsory pension insurance, where personalized accounting of the pension rights of insured persons is provided by compulsory insurance contributions from policyholders and

voluntary co-financing of the insurance tariff by the employee.

The structure of payments to pensioners after the implementation of the basic income tools in the pension system of the Russian Federation will be as follows (*Fig. 2*).

Thus, both horizontal and vertical coverage of all socio-demographic groups by state social guarantees will be ensured. The minimum protection from absolute monetary poverty will be provided by the BPI, which will avoid possible penalties in accordance with the law “On Enforcement Proceedings”<sup>69</sup> and will preserve minimal property<sup>70</sup>. The establishment of the insurance pension as the second tier of social protection will allow citizens to increase income close to the level of international standards<sup>71</sup> and targets of the Strategy for the Long-term Development of the Pension System of the Russian Federation. A higher standard of living for pensioners will be facilitated by the establishment of non-BPI allowances related to compensation for living in the Far North, areas equated to them, and supplementary social security for professional categories of workers<sup>72</sup>.

<sup>66</sup> Social Security (Minimum Standards) Convention. International Labour Organization. Available at: [https://www.ilo.org/wcmsp5/groups/public/---ed\\_norm/---normes/documents/normativeinstrument/wcms\\_c102\\_ru.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---normes/documents/normativeinstrument/wcms_c102_ru.pdf) (accessed: August 25, 2025).

<sup>67</sup> On the ratification of the Social Security (Minimum Standards) Convention No 102: Federal Law 349-FZ, dated October 3, 2018. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_308157/](https://www.consultant.ru/document/cons_doc_LAW_308157/) (accessed: August 25, 2025).

<sup>68</sup> On compulsory pension insurance in the Russian Federation: Federal Law 167-FZ, dated December 15, 2001. Article 22. Insurance premiums. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_34447/ddca2804e927f2f60299614a85f2b23a8c7d8c0c/](https://www.consultant.ru/document/cons_doc_LAW_34447/ddca2804e927f2f60299614a85f2b23a8c7d8c0c/) (accessed: August 25, 2025).

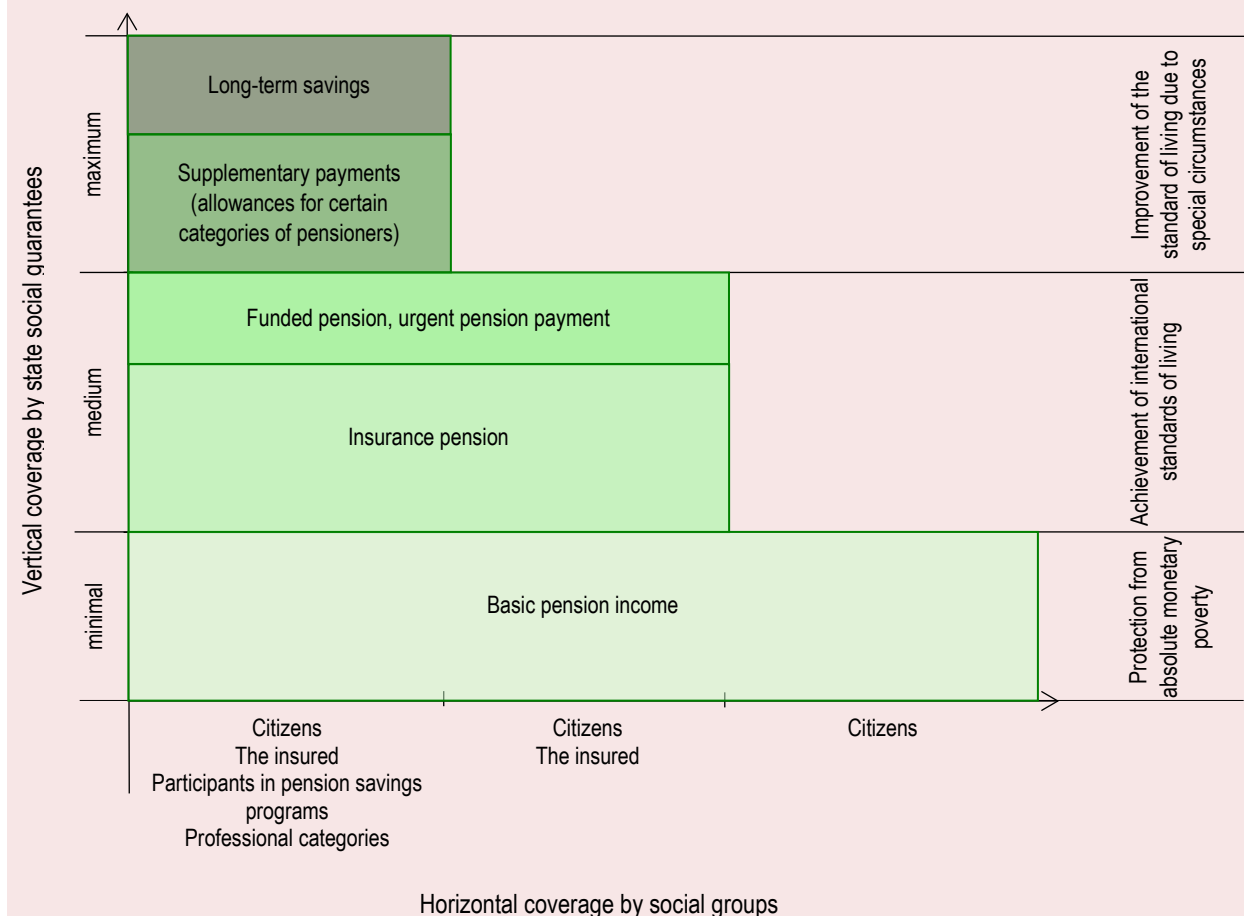
<sup>69</sup> On enforcement proceedings: Federal Law 229-FZ, dated October 2, 2007. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_71450/](https://www.consultant.ru/document/cons_doc_LAW_71450/) (accessed: June 15, 2025).

<sup>70</sup> Article 446. Property that cannot be foreclosed on according to enforcement documents. The Civil Procedure Code of the Russian Federation 138-FZ, dated November 14, 2002. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_39570/a67dde7f663104e7cfeff6d926f3a3e8ac36aa2/](https://www.consultant.ru/document/cons_doc_LAW_39570/a67dde7f663104e7cfeff6d926f3a3e8ac36aa2/) (accessed: June 15, 2025).

<sup>71</sup> On the ratification of the Social Security (Minimum Standards) Convention No 102: Federal Law 349-FZ, dated October 3, 2018. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_308157/](https://www.consultant.ru/document/cons_doc_LAW_308157/) (accessed: June 15, 2025).

<sup>72</sup> On supplementary social security for members of flight crews of civil aviation: Federal Law 155-FZ, dated November 27, 2001. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_34195/](https://www.consultant.ru/document/cons_doc_LAW_34195/) (accessed: June 15, 2025); On supplementary social security for certain categories of the employed in coal industry organizations: Federal Law 84-FZ, dated May 10, 2010. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_100191/](https://www.consultant.ru/document/cons_doc_LAW_100191/) (accessed: June 15, 2025); On measures to improve the system of social support for specialists working in the field of the nuclear weapons complex of the Russian Federation: RF Government Resolution 549, dated September 1, 2005 (revised March 24, 2023). Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_55460/](https://www.consultant.ru/document/cons_doc_LAW_55460/) (accessed: June 15, 2025).

Figure 2. Proposed multitier model of the Russian PS with the BPI institute



Source: own compilation.

## Conclusion

Summing up the results of the study, we conclude that the hypothesis put forward is confirmed: the proposed model for introducing the BPI into the PS has real grounds, meets the targets of Russia and international standards in the field of social security of pension recipients. The scientific discussion concerning the prospects for the development of the pension system, as well as the identified trends in the demographic and employment areas in Russia, emphasize the importance and relevance of examining the issues

under study now and for the future. The research clarifies the requirements for the mechanism of introducing the BPI not less than the general PPL in the Russian Federation.

The proposed structure of the Russian PS model is three-tiered, consisting of a solidarity-based distributive (basic pension income), occupational insurance (insurance pension) and supplementary parts. As a result, pension benefits will be ranged in terms of categories of recipients and the level of social security from basic protection from absolute monetary poverty

to the improvement of the standard of living of pensioners considering the special circumstances of previous employment, health status, household composition, etc.

In our opinion, the results of the conducted research, if applied in practice, allow us to get closer to achieving the key national development goals of the Russian Federation in the long term:

- ensuring the replacement rate<sup>73</sup> of old age insurance pension of up to 40% of lost earnings with a standard length of insurance record and average wages;
- ensuring an average old age labor pension at least 2.5–3 times more than the pensioner's poverty line, and in a longer term, achieving a socially

acceptable level (in 2024, it is approximately 3.7 times more than the PPL)<sup>74</sup>;

- maintaining an acceptable level of insurance burden for economic entities with a unified insurance premium rate for all categories of employers;
- ensuring the balance of pension rights generated with the sources of their financial support.

In the future, it is necessary to model the resources and pension payments required in the prospective pension system of the Russian Federation and their distribution between the non-insurance and insurance parts of the pension system and among the recipients.

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<sup>73</sup> An integral indicator of the replacement of lost earnings (income) by the appointed insurance (labor) pension.

<sup>74</sup> Bobkov V.N., Gulyugina A.A., Odintsova E.V. [et al.] (2025). Monitoring dokhodov i urovnya zhizni naseleniya Rossii – 2024 god [Monitoring of Incomes and Living Standards of The Russian Population – 2024]. Moscow: IE RAS.

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## Social Situation of Children in the Region: From International Assessment Standards to the Testing of a System of Indicators



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**Abstract.** The strategic documents of Russia's development enshrine the growth of population well-being as one of the key goals. This task is particularly relevant for the rapidly shrinking child population – the economic, labor, intellectual, moral, and reproductive reserve of society, and a significant factor in national security. Measures to improve child health and well-being yield immediate, long-term, and intergenerational benefits that are synergistically amplified. The article presents an analysis of foreign and Russian research experience in the field of child well-being. Examples of assessment tools developed within applied international and national social projects are provided. Studies on the subjective well-being of children, considering the value of their opinions, are examined separately. Based on the analysis, the authors propose an original methodology for assessing the child well-being index at the level of the microsystem in a region. The scientific novelty of the new methodology lies in its capacity to assess the well-being level of children in five age groups and to correlate it with the child's human development index during the corresponding life period. The practical results of the study can be applied in the development of state policy aimed at improving the well-being of the child population.

**Key words:** child well-being, subjective child well-being, child well-being index, life satisfaction.

### Introduction

Childhood is a time of rapid change, when trajectories for lifelong health and well-being are established (Daelman, 2017). Early investments in children's health, education, and development yield benefits that accumulate throughout the child's life, for their future children, and for society as a whole (Clark et al., 2020). Consequently, children are a central focus for researchers and practitioners, especially since the 1989 United Nations Convention on the Rights of the Child (CRC)<sup>1</sup> was integrated into the 2030 Agenda as a fundamental sustainable development goal<sup>2</sup>. A high level of child well-being is a primary indicator of a state's commitment to its citizens and should be a development priority for any country (Adamson et al., 2007; Xu, 2024). The economic rationale for investing in child healthcare and education is indisputable, characterized by a high benefit-to-cost ratio. However, a targeted, multi-sectoral approach is necessary – investing not only in health and education, but also in housing, agriculture, energy,

transport, and other sectors – because threats to child health and well-being emanate from all spheres of society (Clark et al., 2020).

Furthermore, monitoring child well-being is as important as tracking changes in economic indicators (Moore, 2020). To achieve this, indicators reflecting various aspects affecting children's quality of life are used. The task of providing evidence-based tools to capture the current state and understand changes in child well-being becomes extremely relevant (Jiang, 2013). In turn, a regional perspective is key to successfully improving child well-being, especially for large countries<sup>3</sup>.

In Russia, the Plan of Key Activities to be Carried Out within the Framework of the Decade of Childhood for the period up to 2027, approved by RF Government Resolution 122-r dated January 23, 2021, defines the main goals and objectives of the state in ensuring child well-being. It provides for the organization of scientific research to assess children's quality of life (item 128), the development of tools for assessing and comparatively analyzing the level of child well-being in Russia (Merkul, 2022), as well as the expansion of mechanisms for the participation of children and adolescents

<sup>1</sup> Convention on the Rights of the Child. General Assembly Resolution 44/25 of 20 November 1989. UNICEF, 1989.

<sup>2</sup> Transforming our world: The 2030 agenda for sustainable development. UN General Assembly, 2015. [http://www.un.org/ga/search/view\\_doc](http://www.un.org/ga/search/view_doc)

<sup>3</sup> How to Measure Child Well-being in Russian Regions: Methodological Materials. Edited by I.E. Kalabikhina. Moscow: MAKS Press, 2023. P. 5.

in decision-making affecting their interests, and for taking their opinions into account on matters concerning childhood at the federal, regional, and municipal levels (item 127).

The study of child well-being is one of the popular and sought-after research areas in the social sciences (Domínguez-Serrano, 2022). This interest arose in the context of profound changes in the understanding of children and childhood, supported by at least three processes (Bruck, Ben-Arieh, 2020): the aforementioned CRC, the development of the so-called New Sociology of Childhood (Qvortrup, 1999; James, Prout, 1997; Gaitán, 2006), and the theory of the ecology of child development, based on the biopsychosocial model of human development (Bronfenbrenner, Morris, 1998). Also contributing to this evolution was the call for research oriented toward public policy (Ben-Arieh, 2008) based on accountability – which requires more precise measurements of children’s conditions and quality of life, and of the outcomes of various programs aimed at improving them.

Literature reviews show that child well-being attracts considerable scholarly interest and is examined from various perspectives and approaches (Pollard, Lee, 2003; Amerijckx, Humblet, 2014; Libório, 2024). The term “child well-being” itself still lacks a single definition (Amerijckx, Humblet, 2014; Kislitsyna, 2018; Jiang, Ngai, 2020). Within the approach used by international organizations such as UNICEF and the OECD, child well-being is defined by a set of parameters affecting children’s lives now and in the future. Thus, child well-being is identified with the realization of their rights and the provision of optimal conditions for their fullest development. At the same time, consideration of the subjective aspect is mandatory: “children’s perceptions, assessments, and expectations regarding their own lives”<sup>4</sup> and “satisfaction with

life as a whole and with its individual aspects” (Rees et al., 2010). This approach is conditioned by the specificity of the object of study and emphasizes its multifaceted nature.

One of the relevant areas of research in the field of child well-being is its measurement (Leriu, 2023; Huseynli, Jonson-Reid, 2023). However, the multitude of competing approaches to its definition creates additional difficulties for its assessment (Anderson, 2022). In practice, the use of a multi-criteria approach to defining child well-being implies the selection of a number of parameters that are significant from the perspective of children’s current situation and that affect their future lives, as well as the selection of indicators characterizing these parameters. For example, various philosophers have attempted to develop lists of objective indicators necessary for achieving well-being (Adler, Fleurbaey, 2016; Nussbaum, 2009), while researchers in psychology have emphasized the importance of subjective experience, which shows how highly people rate their quality of life (Diener et al., 2018; Archakova, Garifulina, 2020; Bruk et al., 2022; Zaytseva et al., 2023; Semya, 2023). Within discussions on subjective well-being, further debates are conducted between the hedonic tradition, which emphasizes measurements of emotions and feelings such as happiness and life satisfaction, and the eudaimonic tradition, which focuses on activities and capabilities such as personal growth and self-actualization (Ryan, Deci, 2001). Choosing between these perspectives is no simple task, and in recent years a consensus has emerged that both perspectives make a valuable contribution to understanding well-being (Diener et al., 2018; Gurko, 2022).

In particular, research aimed at creating composite indicators that summarize various dimensions, and sub-indicators related to child well-being, is acquiring increasing significance

<sup>4</sup> Children’s Well-Being from Their Own Point of View. What Affects the Children’s Well-Being in the First Year of Compulsory Secondary Education in Spain? Madrid: UNICEF Spain, 2012. Available at: [https://www.unicef.es/sites/unicef.es/files/Childrens\\_subjective\\_well-being\\_Unicef\\_feb13.pdf](https://www.unicef.es/sites/unicef.es/files/Childrens_subjective_well-being_Unicef_feb13.pdf)

among researchers (Fernandes et al., 2012). For numerical assessment, the Child Well-being Index (CWI) is used, which represents a numerical score reflecting the quality of life of children and families with children. Within a multidimensional approach, key indicators are selected from government administration sources, national surveys, or databases to develop various domains of child well-being, to present general trends and changes, and to compare child well-being across different countries (Ling, 2025).

The majority of scholarly work addressing issues of child well-being assessment relies on national and regional statistical and sociological data, and is therefore oriented toward the macro-level. At the same time, the internal aspects characterizing the sphere of family upbringing of children, their interaction with the educational environment and social surroundings, remain poorly represented in the construction of comprehensive methodologies for assessing child well-being. Turning to the study of child well-being at the micro-level appears all the more relevant, as it allows us to understand the essence and sources of the discrepancy observed between assessments obtained using objective and subjective criteria. At the same time, it is precisely the sphere of family upbringing that is most difficult to assess using standard statistical and sociological indicators. The absence of a specially developed, valid toolkit for sociological research that would allow the assessment of child well-being at the level of the family and the child's immediate environment, taking into account age-specific characteristics and the opinions of the children themselves, against the backdrop of a high managerial demand for such a toolkit to address social policy tasks at the regional level, has become the scientific problem whose solution served as the starting point for the present study.

Our hypothesis is that, drawing on the diversity of previously developed and tested international and national comprehensive methodologies for assessing child population well-being, and considering their

strengths and weaknesses, it is possible to create a unique combination and operationalization of currently existing scientific approaches to address a specific methodological task: obtaining a detailed, age-sensitive, and subjectively verified picture of well-being in a region.

The aim of the work is to propose a toolkit for assessing child well-being at the micro-level using data from a representative sociological survey. At this stage, the work is theoretical and methodological in nature and involves the fulfillment of the following tasks:

- 1) to analyze the methods and projects for measuring child well-being globally;
- 2) to study the international experience and specific features of assessing the subjective well-being of children;
- 3) to develop an original methodology for calculating a child well-being index at the regional level, taking into account the age of children and their opinions.

The achievement of the latter task and the separate study of the possibilities of subjective assessment of child well-being constitute, in our view, the scientific novelty of the work carried out.

The approbation and implementation of the original methodology by the research team may contribute to refining our understanding not only of the external (socio-economic) factors promoting child well-being, but also of the family and social factors that affect children during different periods of growing up and with varying intensity, as well as to identifying key manageable characteristics of the family and social environment. Conducting regular monitoring of child well-being in the region will make it possible to assess the effectiveness of ongoing state programs in the sphere of family and childhood protection, improving their quality and standard of living, and strengthening health.

### **Research methodology**

At the first stage, through an analysis of scientific articles contained in the Google Scholar and PubMed databases, theoretical approaches to

assessing child well-being and various major projects for its measurement worldwide were studied. At the second stage, the history of the formation and development of research tools in the field of assessing the subjective indicator of child well-being was analyzed in greater depth. At the third stage of the work, taking into account the analysis carried out, the authors' original methodology for assessing the well-being of the child population in the Vologda Region is presented, considering the opinions of children aged 10 and older. The study employed general scientific research methods: literature analysis, study and synthesis of information, comparison, synthesis, induction, deduction, and classification.

#### **Measuring child well-being: International experience in constructing indices**

Many international organizations study the living conditions and development of children, designing original assessment methodologies and corresponding indicators. At the same time, a multi-sectoral approach to measurement, taking into account all determinants (social, economic, cultural, political, environmental, and commercial) of child health and well-being, is consistent with the promotion of a comprehensive approach to global socio-economic development (Coll-Seck, 2019).

Analyzing the foreign literature, several of the most relevant and frequently cited indices of child well-being in academic and policy discussions worldwide can be identified.

Thus, the Child Well-being Index was first presented and tested in the world in 2004 by the Foundation for Child Development (USA). The Index of Child and Youth Well-being in the USA was compiled under the leadership of Land (Land et al., 2007) using 44 key indicators, grouped into seven domains: economic or material well-being, health, safety, productive activity, community participation, closeness, and emotional well-being.

The Index of Child Well-being in the European Union, developed by Bradshaw and colleagues (Bradshaw et al., 2007), considered 43 indicators in seven domains: health, subjective well-being,

personal relationships, material resources, education, behavior and risks, as well as housing and the environment. Initially, existing data from 25 EU countries were analyzed (across eight clusters covering 23 areas and 51 indicators) using time series data as well as comparative surveys of children and young people (Bradshaw et al., 2007). Later, Bradshaw identified six priorities of child well-being that can be influenced by social policy: learning, money, relationships, leisure, environment, and self (identity) (Bradshaw, 2014). Learning implies the availability of conditions for learning and development, while money means that children are provided with everything necessary. Relationships reflect close ties with family and friends, and leisure – the opportunity to participate in positive activities to achieve success. Environment means having a safe and suitable home and surroundings. The self domain reflects a positive attitude toward oneself and respect for one's identity (Lee, Yoo, 2017).

The Child Well-being Index based on microdata by K. Moore (Moore et al., 2008) considers 69 indicators, grouped into four domains (physical, educational, psychological, and social well-being) across three contexts (family, community, and socio-demographic). Respondents were divided into two age groups: 6–11 and 12–17 years. This study made it possible to assess and analyze the well-being of each individual child (Kalabikhina, Kazbekova, 2021), but only for those aged 6 and older.

The Child Deprivation Index (Bastos et al., 2009) was designed to measure child poverty across four domains: education, health, housing, and social inclusion. The study is based on fuzzy set theory to assess the intensity of deprivation among children. Socio-demographic and economic characteristics most strongly influencing the risk of deprivation were also analyzed (using a discrete choice model), which showed that children from large families or families with a non-traditional composition of children are more susceptible to this risk. Child deprivation correlates with problems related to education, health, housing, social inclusion, and parental unemployment.

The Child Opportunity Index (COI) was created in 2014 with the support of the W.K. Kellogg Foundation and the Robert Wood Johnson Foundation<sup>5</sup>. Its goal is to improve child well-being and promote equal opportunities for children living in the USA. It covers 67% (about 49 million people) of the country's child population across 72,000 neighborhoods in the 100 largest US metropolitan areas. This index is the first national index to measure current opportunities for children by ranking a wide range of conditions that can influence child health and development.

The authors of this methodology (COI) identify three main domains of child opportunities (Ferrara, 2024): 1) educational opportunities; 2) health and environmental opportunities; 3) socio-economic opportunities, and include a total of 29 indicators within these domains. The implementation of the COI on a global scale, according to its developers, could help create a population-level monitoring system in neighborhoods that would effectively monitor children's social well-being, sense of community, and mutual respect, regardless of cultural differences (Pettoello-Mantovani, 2019; Petito, 2020).

The UNICEF Innocenti Research Centre annually publishes reports<sup>6</sup> aimed at analyzing and comparing practices for ensuring children's rights in OECD countries. In 2013, UNICEF developed a multidimensional synthetic child well-being index (UNI<sub>26</sub>), which includes 26 indicators from 5 domains: 1) material well-being: relative child poverty rate, relative child poverty gap, child deprivation rate, low family affluence; 2) health and safety: infant mortality rate, low birth weight, overall immunization rate, child mortality aged

1–19 years; 3) education: participation rate in early childhood education, participation rate in upper secondary education among 15–19-year-olds, share of 15–19-year-olds not in education, employment, or training (NEET), average scores in reading, mathematics, and science; 4) behavior and risks: overweight, breakfast consumption, fruit consumption, physical exercise, adolescent fertility rate, smoking, alcohol, cannabis, fighting, exposure to bullying; 5) housing and environment: number of rooms per person, multiple housing problems, homicide rate, air pollution. In 2013, based on the approbation of the UNICEF methodology, another report was published, devoted to a comparative analysis of the situation in 29 developed countries.

However, according to Spanish scholars A. Prada and P. Sanchez-Fernandez from the University of Vigo (Ourense, Spain), achieving a global concept of child well-being requires a broader study on a worldwide scale. For this purpose, the scholars developed a special multidimensional child well-being indicator (CWI<sub>14</sub>), synthesizing the most significant aspects and indicators from around the world at the country level. It allows covering and ranking 189 countries (and not just the 29 wealthiest ones) (Prada, Sanchez-Fernandez, 2021).

From a methodological standpoint, the main advantage of the CWI<sub>14</sub> is that it relies on a single data source – the United Nations Development Programme (UNDP) and the extended methodology for assessing the Human Development Index (HDI). Moreover, this approach, following (Casas, 2018) and Kaye-Tzadok (Kaye-Tzadok, 2017), includes a significant gender aspect (absent in the UNI<sub>26</sub> index). The authors also assess material well-being through more direct indicators related to social and labor aspects. Thus, the synthetic child well-being indicator (CWI<sub>14</sub>) by Prada includes the following four domains and 14 indicators: 1) education (gross enrollment rate in pre-primary education, gross enrollment rate in primary education, primary school dropout rate, pupil-teacher ratio in primary education); 2) health

<sup>5</sup> National Center on Safe Supportive Learning Environments. Resources. diversitydatakids.org. Available at: <https://safesupportivelearning.ed.gov/resources/diversitydatakidsorg> (accessed 03.07.2023).

<sup>6</sup> The Problem of Child Poverty in Perspective: An Overview of Child Well-being in Rich Countries. UNICEF. Available at: [https://www.unicef-irc.org/publications/pdf/rc7\\_rus.pdf](https://www.unicef-irc.org/publications/pdf/rc7_rus.pdf) (accessed: 15.09.2025); United Nations Convention on the Rights of the Child.

(maternal mortality rate, measles in unvaccinated infants, infant mortality rate); 3) social and labor aspects (young people not in education, employment, or training (NEET), child labor, maternity leave, malnutrition); 4) gender (female students in pre-primary education, female students in primary education, adolescent fertility rate).

Regarding the methodology for calculating composite child well-being indicators, most of them are constructed by normalized aggregation of equally weighted sub-indicators (sub-indices) (Cho, Yu, 2020). Some studies employ statistical methods (Fernandez et al., 2012), such as cluster analysis (Cho, 2014), principal component analysis (Mínguez, 2017), and latent class analysis (Lanza, Rhoades, 2013). Less common are methods such as the “subjective benefit” method, “Benefit-of-the-Doubt” (BoD) approach with constraints (S-BoD-C) (El Sayed, Zahran, 2020; Libório, 2024), and the ordered weighted averaging operator (Badea et al., 2011; Shu et al., 2022; Libório et al., 2022). Results show that the discriminating and explanatory power of a composite indicator constructed using the new S-BoD-C method, with sub-indicator weights ranging from 0.00 to 0.020, is on average 15 and 20% higher than that of indicators constructed with other weight ranges (Libório, 2024).

It is obvious, however, that comparing the results of different composite indices with each other is not possible, since each CWI has an individual calculation methodology and corresponding indicators. Comparison is carried out exclusively between the objects of study, where a comparison range is set (for example, 0–100 or 0–1).

#### **Subjective well-being of children: Experience of study and specific features of assessment**

As can be seen, many composite CWIs typically contain material, educational, and health domains. At the same time, indicators are selected from various surveys or databases that cannot fully measure all the needs of the children themselves.

According to Article 12 of the UN CRC, every child has the right to formulate and freely express their own views and to be heard. This document officially recorded a change in attitudes towards children at the international level, marking the emergence of the “new sociology of childhood”, within which children acquire agency and can be studied “through themselves”<sup>7</sup> (Bruk et al., 2022). In this regard, traditional methods of studying child well-being that did not involve children themselves in the research process began to be criticized (Ben-Arieh, 2014; Kalabikhina, Kazbekova, 2021). Although many works claimed that children were the unit of analysis (Gross-Manos, 2022), most surveys were based on parents’ responses rather than those of the children themselves, thus ignoring their opinions about their own well-being. There was a lack of qualitative indicators that could adequately reflect children’s perceptions of their well-being (Ling, 2025). Gradually, the child’s opinion gained increasing attention in research (Kaye-Tzadok, 2017), and indices of subjective child well-being (SCWB) began to be developed.

The very concept of “subjective well-being” belongs to the category of “umbrella terms” and is considered as a global assessment of life satisfaction, closely linked with constructs such as happiness, quality of life, life satisfaction, and positive affect (Campbell, 1976; Casas, Rees, 2015). It is generally accepted that SCWB includes three components: cognitive, affective, and psychological well-being (Rees, Main, 2015).

Well-being is always embedded in an interpersonal, socio-familial, or institutional context. Most contemporary conceptualizations of SCWB draw on socio-ecological theory, according to which four systems are crucial for child development: the microsystem, mesosystem, exosystem, and macrosystem (Bronfenbrenner et al., 2006). M. Seligman argued that a happy childhood

<sup>7</sup> How to Measure Child Well-being in Russian Regions: Methodological Materials. Edited by I.E. Kalabikhina. Moscow: MAKS Press, 2023. 98 p.

requires effective functioning at both the individual and interpersonal levels (Seligman, 2006). To understand child well-being, their family environment and broader social connections, including school, place of residence, and country, are important (Kaye-Tzadok, 2017; Noralina, Siti Hajar, 2017; Nahkur, Kutsar, 2019; Luo et al., 2021; Wang, Sohail, 2022). Children's assessments of their own happiness or satisfaction with life in general and with its specific domains (e.g., school, family, neighbors, or friends) represent one aspect of their subjective well-being (Ben-Arieh et al., 2014).

One of the main tasks in studying the well-being of children and adolescents is the search for more sensitive assessment methods that take into account the age, developmental stage, and health status of the child (Matza, 2004; Buczynski, 2008; Reppold, 2017; Ortuño-Sierra, 2020; Silva, 2023; Blasco-Belled, 2023).

Let us dwell in more detail on some projects for assessing SCWB. The first of these, "Health Behaviour in School-Aged Children" (HBSC), was launched by the WHO in 1983 and represents a large-scale, cross-national study<sup>8</sup> conducted in schools every four years. HBSC data are used at the national/regional and international levels to gain new insights into adolescent health and well-being, to understand the social determinants of health, and to develop policies aimed at improving the lives of children and youth. The latest report from 2024 focuses on the social context of the lives of adolescents aged 11, 13, and 15 in 44 countries of Europe, Central Asia, and Canada (Badura, 2024).

In the late 1990s, another widely known project was initiated by the Organisation for Economic Co-operation and Development (OECD) – the Programme for International Student Assessment (PISA). Both of these projects, centered on schoolchildren surveys, are longitudinal and continue to this day, including in Russia. HBSC

is primarily focused on health issues, while PISA focuses on education and opportunities for development.

However, these studies have some drawbacks. For instance, HBSC and PISA include single-item questions on general life satisfaction. Some scholars criticize this practice, arguing that from a psychometric perspective, scales with multiple items are more reliable, especially when measuring unobservable constructs (Casas, 2017; Savahl, 2021). Furthermore, the PISA and HBSC samples did not include children under the age of 11 (Blasco-Belled, 2023).

These shortcomings were addressed by another large-scale project, "Children's Worlds" (International Survey of Children's Well-Being – ISCWeB). It began as a small, unfunded pilot project in 2010 but now collects opinions from over 200,000 children from more than 40 countries across five continents. The target group of informants includes children aged 8, 10, and 12 (at least 1,000 respondents in each age group of the sample). In the third wave, the sample of eight-year-old respondents comprised over 20,800 children (Blasco-Belled, 2023). A total of four waves of research have been conducted. Reports on each wave for all participating countries, as well as a comprehensive comparative international report, are published and freely available on the project website (<https://iscweb.org>). During the implementation of the study, the questionnaire was continuously improved. A number of new questions were added. Non-informative questions, questions without semantic load, or those yielding unrepresentative data were also excluded. The latest version of the questionnaire was provided for discussion with the children themselves (Rees et al., 2020). The recent fourth wave of the study is devoted to assessing the subjective well-being of children during the COVID-19 pandemic (Bruk, Telitsyna, 2022). Its database includes 27,359 children from 24 countries.

<sup>8</sup> Available at: [https://www.who.int/europe/initiatives/health-behaviour-in-school-aged-children-\(hbhc\)-study](https://www.who.int/europe/initiatives/health-behaviour-in-school-aged-children-(hbhc)-study)

Comprehensive surveys and the construction of indices based solely on children's subjective perceptions of their own well-being have been expanded by the "child indicators" movement (Ben-Arieh, 2008) and other large-scale cross-cultural studies of child well-being: the Multi-national Qualitative Study of Children's Understandings of Well-being (Fattore et al., 2018) and studies conducted by The Children's Society (Rees et al., 2012) and the Research Institute on Quality of Life at the University of Girona (Casas, 2011). Another example is the World Health Organization Well-Being Index (WHO-5). The WHO-5 questionnaire was originally introduced in 1998 by the WHO Regional Office for Europe as part of the DEPCARE project on measures to enhance well-being in primary health care (Topp, 2015). It has been translated into more than 30 languages. Currently, the WHO-5 is a brief questionnaire that can be completed by children over the age of 9 in the general population, and not only within the healthcare system. It consists of five statements relating to the previous two weeks, which respondents rate on a specific scale (response options: "all of the time", "most of the time", "more than half the time", "less than half the time", "some of the time", "at no time"). In the 2010s, national indices focused solely on subjective well-being emerged, such as the British An Index of Children's Subjective Well-Being, in whose development and approbation children themselves actively participated. Another British index, The Good Childhood Index (GCI)<sup>9</sup>, was developed in 2010 and is a short questionnaire that children aged 8 and older (later the survey was conducted for children aged 10 and older) can complete independently and use to assess general well-being and 10 aspects of life. It includes a single-item measure of overall life satisfaction, a five-item measure of general life satisfaction, as

well as questions about happiness in 10 different aspects of life, including satisfaction with school and relationships with family and friends.

The results of a large-scale bibliographic analysis conducted by Chinese scholars of all SCWB projects showed that over 30% of research in this area originates from the USA, Europe, the Americas, and Australia (Xu, 2024). The top ten most cited foreign authors on the topic of SCWB include: K. Turney (University of California), F. Casas (Andrés Bello University), D.B. Jackson (Johns Hopkins Bloomberg School of Public Health), R. Giallo (Murdoch Children's Research Institute), J. Lee (Korea Institute of Science and Technology), A.J. Reynolds (Oregon State University), A. Ben-Arieh (The Hebrew University of Jerusalem), J. Bradshaw (University of North Texas Health Science Center), T.C. Cheng (Wuhan Institute of Technology), and G. Rees (University of Plymouth). Several perspectives for further study of this topic are identified, namely the impact on SCWB of public health, healthy child nutrition, relationships with father, and neighbors (Xu, 2024).

One example of the latter can be found in Russian studies devoted to children's assessment of their experience of interaction with their fathers (Shevchenko, 2019), as well as the role of involved fatherhood in shaping the subjective well-being of children and adolescents (Bezrukova, Samoylova, 2025). It has been proven that involved fatherhood serves as a basis for developing close father-adolescent relationships, which makes an undeniable contribution to the formation of a strong and psychologically healthy personality. Boys develop resilience, emotional regulation, confidence, composure in the face of criticism, and independence; girls are distinguished by a striving for self-development, positivity, kindness, and caring (Bezrukova, Samoylova, 2025).

In the Russian expert community, a unanimous opinion has not yet been formed on what the participation of children in decision-making processes affecting their interests should entail

<sup>9</sup> Available at: <https://www.childrensociety.org.uk/information/professionals/good-childhood-index>

(Abrosimova et al., 2019). Researchers note that specialists working directly with children in this area experience a deficit of informational and methodological support. Collectively, these barriers hinder the involvement of children in meaningful decision-making processes at the micro- and macro-levels (Kuchmaeva, 2020).

Often, the methodological approaches to assessing child well-being applied by Russian authors are oriented towards the macro-level (the state as a whole and its regions). Such developments have great practical significance, primarily for the informational support of social policy in the interests of children. The most elaborated domestic toolkit for assessing child well-being is the “Child Well-being Index” project, implemented jointly by the Timchenko Foundation, Lomonosov Moscow State University (MSU), RANEPa, Moscow State University of Psychology and Education (MSUPE), HSE University, the Civic Chamber of the Russian Federation, and the Ministry of Education of the Russian Federation, with the support of the Agency for Strategic Initiatives. According to the project authors, the system of child well-being indices they propose will make it possible to identify deviations, pinpoint problem areas and best practices, plan charitable programs, and adjust state policy for the protection of childhood<sup>10</sup>. The subjective and objective sides of child well-being are measured separately. The statistical (objective) child well-being index is constructed on the basis of 27 indicators from the official Rosstat data (it also includes a system of sub-indices across the domains of Health, Development, Material Well-being, and Safety). The subjective index is based on 18 indicators extracted from child survey data (consisting of 6 domains: Education, Health, Material Situation, Safety, Social Relations, and Self-realization). Depending on the age of the child (10, 11, 13, and 15 years), different

questions are proposed for assessment. The overall child well-being index summarizes the statistical and subjective child well-being indices (45 indicators). According to I.E. Kalabikhina and Z.G. Kazbekova, despite the fact that the UNICEF composite indices take into account children’s opinions on various aspects of their well-being and assess their participation in decisions affecting their interests, such areas of well-being as mental health, violence and protection, including the problem of bullying, remain underdeveloped (Kalabikhina, Kazbekova, 2021).

It should be noted that the subjective well-being of schoolchildren deserves increased attention from scholars and practitioners, as it serves as a fundamental marker of the quality of education and a factor in their quality of life, health, personal development, academic performance, and success, and hence the quality of the future (Bruk et al., 2022). The study of this topic and the development of a system for assessing the subjective well-being of schoolchildren at different educational levels have been undertaken by researchers at RANEPa (Avalueva et al., 2022). The subjective well-being of upper secondary school students has been studied to a lesser extent, although adolescence is an intensive period of development, and difficulties arising at this time have important consequences for adult life (Kuhterina et al., 2020). The study of the structure of SCWB at this stage of development is of great importance for identifying risk factors and developing an adequate system of support for adolescents (Kukuev, 2022).

In early SCWB research, scales borrowed from adult versions were used. However, rapid progress has been observed in this area. T.O. Archakova and colleagues described five suitable questionnaires: 1) the Multidimensional Students’ Life Satisfaction Scale (MSLSS); 2) the Brief Multidimensional Students’ Life Satisfaction Scale (BMSLSS); 3) the Personal Well-being Index (PWI); 4) KINDL-R; 5) TedQL, accessible even to children aged 3–4 years (Archakova, 2017; Archakova, 2020). Researchers

<sup>10</sup> How to Measure Child Well-being in Russian Regions: Methodological Materials. Edited by I.E. Kalabikhina. Moscow: MAKS Press, 2023. P. 5.

also describe a methodology for assessing SCWB, which consists of studying the degree of a child's satisfaction with their system of attitudes toward themselves, others, the environment, and their chronotope (Oslon, 2020).

Thus, the conducted literature review shows that the definition of child well-being is a multifaceted concept that varies depending on the perspective and context. In turn, virtually every study devoted to the measurement and development of a comprehensive child well-being index includes in its structure the domains of health, education, and material well-being. Just over half of the studies also include an assessment of safety and risk. However, beyond these areas, there is no uniformity (O'Hare, Gutierrez, 2012).

The situation is exacerbated by differences in the terminology and measurement instruments used, which make these indices incomparable (Žukauskienė et al., 2015). As early as 2014, there were 92 instruments for measuring the level and dynamics of SCWB (Ravens-Sieberer et al., 2014), which include about two thousand concepts operationalizing this construct (Archakova, Garifulina, 2020).

Furthermore, research is needed to assess the adequacy of available indicators in different population subgroups. Reliable but brief indicators of children's social and emotional outcomes are needed; brief indicators of contextual factors influencing children's outcomes are still lacking (Moore, 2020). Despite the growing understanding of the importance of taking children's opinions into account, studies of SCWB from the perspective of the children themselves remain limited (Ben-Arieh, Shimon, 2014). Given the differences in perception between adults and children, the level of professionalism of interviewers is important. To interpret the data, it is necessary to take into account the peculiarities of the child's psyche, the influence of the presence of parents, the time and duration of the survey, and the child's reaction to the questions.

### **Justification of the author's methodology for assessing child well-being in the Vologda Region**

Our approach is based on the aforementioned socio-ecological theory, which presupposes taking into account the opinions of the children themselves. As we have seen from analyzing numerous international and national projects, against the backdrop of the high elaboration of the scientific task of constructing child well-being assessment tools for the macro-level, the problematic of assessing child well-being at various stages of a child's development at the micro-level remains virtually untouched. In turn, microsystems (such as family, school, peers, and neighbors) are the sites of the most accessible, frequent, and close interaction for children. The microsystem, according to Bronfenbrenner's definition, is a pattern of activities, roles, and interpersonal relations experienced by the developing person in a given setting with particular physical and material characteristics (Bronfenbrenner, 1979).

The aim of the author's monitoring is a comprehensive observation of the conditions and lifestyle of families with children, and an assessment of the well-being and formation of children's human potential.

The creation of a reliable and valid toolkit for assessing child well-being at different stages of development requires the use of sociological survey and grouping methods.

Within the framework of the monitoring of child well-being assessment developed by us, the object of observation will be married couples and single parents with children aged 0–17 years residing in the Vologda Region. The start of observation is 2025. The frequency of data collection is once every 2 years.

The survey method is a hand-delivered questionnaire survey of 1,400 families at their place of residence (the cities of Vologda and Cherepovets, as well as seven municipal okrugs: Velikoustyugsky, Vozhegodsky, Babayevsky, Kirillovsky, Nikolsky, Sheksninsky, and Tarnogsky). Five types of

questionnaires have been developed for parents of children in the following age groups: 0–2 years, 3–6 years, 7–10 years, 11–14 years, and 15–17 years (Tab. 1).

When calculating the sample based on statistical data, the proportion of boys and girls in the surveyed territories was calculated and taken into account (Tab. 2).

For each of the five age groups, we developed a separate questionnaire, which consisted of three main sections.

Section 1: “Child Well-being” includes the following blocks:

- The child’s family and family upbringing;
- Family health and the healthcare system;
- Education.

For the questionnaire for families with a child under two years old, a “Family Planning” block has also been added.

Section 2: “Child Development” contains a methodology for calculating the Human Deve-

lopment Index for the Child Population (HDICP), which was previously developed and tested by members of the research team. This methodology allows for the assessment of the level of formation of a child’s intellectual, socio-cultural, and health-preserving skills (Korolenko, 2018; Leonidova, 2019; Natsun, 2020; Razvarina et al., 2020).

Section 3: “Child Well-being Factors” consists of the following blocks:

- Social environment (infrastructure, safety, trust, environmental conditions, culture);
- Policy regarding families and children;
- Time allocation;
- Parenting practices;
- Children’s self-assessment of their own lives;
- Socio-demographic characteristics of the family.

At this stage, the authors of the research team are constructing *an index methodology for assessing child well-being (at the micro-level)*. To form a criterion base for determining the well-being of

Table 1. Characteristics of the sample of the family survey in the Vologda Region, persons

Territory	0...2 years	3...6 years	7...10 years	11...14 years	15...17 years	Total	including households		
							with one child	with two children	with three and more children
<b>Region</b>	<b>276</b>	<b>284</b>	<b>291</b>	<b>279</b>	<b>270</b>	<b>1400</b>	<b>634</b>	<b>575</b>	<b>191</b>
Vologda	100	100	102	92	78	<b>472</b>	253	151	68
Cherepovets	84	88	82	80	80	<b>414</b>	179	186	49
Districts	92	96	107	107	112	<b>514</b>	202	238	74
including: urban area	39	40	44	41	55	<b>219</b>	95	99	25
rural area	53	56	63	66	57	<b>295</b>	107	139	49

Source: author’s monitoring of the assessment of the child population.

Table 2. Gender and age characteristics of the survey sample in the Vologda Region, persons

Territory	0...2 years		3...6 years		7...10 years		11...14 years		15...17 years		Total	
	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls
<b>Region</b>	<b>137</b>	<b>139</b>	<b>143</b>	<b>141</b>	<b>147</b>	<b>144</b>	<b>136</b>	<b>143</b>	<b>141</b>	<b>129</b>	<b>704</b>	<b>696</b>
Vologda	47	53	54	46	45	57	46	46	41	37	233	239
Cherepovets	41	43	43	45	42	40	36	44	40	40	202	212
Districts	49	43	46	50	60	47	54	53	60	52	269	245
including: urban area	21	18	22	18	23	21	17	24	29	26	112	107
rural area	28	25	24	32	37	26	37	29	31	26	157	138

Calculated according to: Population of the Vologda Region by age and gender as of January 1, 2024. Rosstat. Available at: <https://35.rosstat.gov.ru/storage/mediabank/Оценка%20численности%20насел%20по%20полу%20и%20возр%202024.pdf>

children at different stages of their development, methods of analysis and synthesis, induction and deduction, and mathematical modeling were used (which made it possible to develop mathematical formulas for determining the level, indices, and sub-indices of child well-being). As a result of their application, the following seven domains have been constructed: 1) family environment; 2) educational environment; 3) health-preserving environment; 4) socio-economic environment; 5) socio-cultural environment; 6) safety;

7) children's self-assessment of their own well-being (for children aged 11 and older). The age-specific characteristics of child development, as well as the specific nature of the reflected spheres of life, determine the uneven composition of the domains.

For the quantitative representation of the selected indicators, auxiliary dichotomous variables have been constructed (*Tab. 3*), where a zero value reflects a negative value of the criterion, and a unit corresponds to a situation of well-being.

Table 3. Variables for calculating the integral well-being index

No.	Domain / Sub-index	Indicator	Well-being criterion	Note
1	Family environment	Family composition	The child lives with both biological parents	
		Family relationships	Harmonious, or harmonious with rare quarrels	
		Family's educational potential	Parents devote to upbringing and communication with a child under 2 years (not attending kindergarten) more than 10 hours on weekdays and weekends; for ages 3–6 and 7–10 years – more than 4 hours on weekdays, 6 hours on weekends; for ages 11 and older – more than 4 hours on weekdays and weekends	
		Intensity of educational influence in the family	Index of educational influence from the family	From the HDICP methodology
		Quality of shared leisure time	At least two types of regular joint family leisure activities on weekdays and weekends	
2	Educational environment	Child's attendance of an educational institution (kindergarten or school)	Attends	
		Attendance of supplementary education institutions	Attends	
		Level of the child's intellectual development	Index of formation of the child's intellectual development skills	From the HDICP methodology
		Intensity of educational influence from the educational institution	Sub-index of educational influence from the educational institution	From the HDICP methodology
		Child's academic performance at school	Copes successfully	For children over 7 years old
		Extracurricular social life	Participation in the school's social life	For children over 7 years old
3	Health-preserving environment	Frequency of illness	During the last 12 months, the child has not been ill or has been ill rarely compared to children of the same age	
		Parents' medical activity regarding the child	Parents' participation in the child's vaccination, medical check-ups, preventive examinations; ensuring the child follows a diet, daily routine, and gets adequate sleep and rest	
		Parents' satisfaction with the quality of medical care for the child at the place of residence	Parents are completely satisfied with the medical care for the child at the place of residence	
		Physical development parameters	The child's BMI corresponds to the age norm	
		Presence of chronic diseases	No chronic diseases	
		Formation of health-preserving skills	Index of formation of the child's health-preserving skills	From the HDICP methodology

End of Table 3

No.	Domain / Sub-index	Indicator	Well-being criterion	Note
4	Socio-economic environment	Self-assessment of the family's income purchasing power	At least the purchase of most durable goods (refrigerator, TV) does not cause difficulties	
		Share of family expenditures on food	Less than 30% of total income	
		Share of family expenditures on the child's education	More than 10% of total income	
		Family participation in state programs	The family has received federal maternity (family) capital	
		Child's housing conditions	The child has a permanent personal place in the home: a separate room or a shared room with a same-sex sibling	
5	Socio-cultural environment	Availability of child infrastructure facilities	Availability of more than two facilities: 1) equipped playground; 2) theater, museum, library; 3) sports facilities; 4) landscaped public spaces	
		Attendance of cultural institutions	The child visits two or more cultural institutions more than twice a year	
		Teaching the child rules of conduct	Systematic teaching of the child in the family about rules of conduct and etiquette («often» or «regularly»)	
		Parents' cultivation of cultural traits in the child	Primary attention (4–5 points) given by senior family members to cultivating in the child respect for others (more than three of the following), restraint and calmness, sociability, ability to cooperate and negotiate, organization and neatness, perseverance and patience	
		Formation of socio-cultural development skills	Index of formation of the child's socio-cultural development skills	From the HDICP methodology
6	Safety	Parents' assessment of the safety level in their place of residence	Parents assess the place of residence as rather safe or completely safe	
		Sources of danger	Presence of one or more sources of danger in the child's residential area	
		Assessment of environmental conditions in the place of residence	Parents assess the environmental conditions in their place of residence as good or satisfactory	
		Shared walks	The child does not walk alone (accompanied by an adult)	For children over 7 years old
		Parents' harmful habits	Absence of risk of passive smoking (the child «does not have to be often in a room where people smoke») and/or codependency on parents who consume alcohol (parents «never» or «rarely», «on holidays» consume alcohol)	
7	Children's self-assessment of their own well-being	Presence of friends	Has friends	Only in groups aged 11–14 and 15–17 years
		Self-assessment of health	The child assesses their health as good or very good	
		Relationships with classmates	Likes all or not all of them	
		Life satisfaction	Satisfied with life (agrees with the statement)	
		Relationships with parents	The child discusses a wide range of topics (at least 5 different ones) with parents	

Source: authors' monitoring for assessing the child population.

The age-specific characteristics of child development, as well as the specific nature of the reflected spheres of life, determine the uneven composition of the domains. We assume that at the second stage, during further work with the database for calculating child well-being sub-indices, some

adjustments may be made to the structure of the indicators, indices, and criteria used.

It should be noted that children's self-assessment of their own well-being – a domain that is added to the methodology only for children who have reached the age of 11. After approbation, it may

be possible to expand the sample to include younger age groups. In the current study, the assessment of SCWB is formed on the basis of children's answers to questions about the presence of friends, their state of health, as well as the range of topics they discuss with their parents. Following the established understanding of the basic components of subjective well-being (cognitive and affective), direct questions about the level of general and partial satisfaction with life and its aspects were used. For this purpose, the questionnaires for children in the older age groups include the methodology for assessing subjective well-being using the *Satisfaction with Life Scale* (SWLS) (Diener et al., 1985), which will allow comparisons to be made between assessments obtained by different methods.

The well-being assessment is carried out for each child individually, and then the data will be aggregated by age groups of children, as well as on average for all children. For each of the designated domains, the arithmetic mean of the sum of the values of the indicator variables and their number is calculated, which corresponds to the value of the sub-index of child well-being of the same name (Formula 1).

The general form of the formula (1) for calculating sub-indices is given below:

$$I = \frac{\sum_1^n x_i}{n}, \quad (1)$$

where  $I$  – sub-indices,  
 $x$  – values of the variables,  
 $i$  – numbers of the variables,  
 $n$  – number of variables.

The value of the integral child well-being index is calculated as the arithmetic mean of the sub-index values. Weighting of the components of the integral index is not planned, since the calculation is based on the assumption of their equal significance. The range of values of the integral index is from 0 to 1. The following division into levels of child well-being has been adopted: from 0 to 0.30 – low; from 0.31 to 0.67 – medium; from 0.68 to 1.0 – high.

It should be noted that the calculation of the child well-being index can be performed both separately for each age group of children participating in the study, and for all ages together. However, in the latter case, to ensure data comparability, the sub-indices obtained in the “self-assessment of well-being” domain for the groups of children aged 11–14 and 15–17 years are not used.

The interpretation of the results of the child well-being assessment in the groups of children aged 11–14 and 15–17 years is most informative in combination with data on subjective well-being based on the SWLS methodology, which has been tested in numerous studies (Pavot, Diener, 2008; Kobau et al., 2010; Avcu, 2021; Chakrabartty, 2023).

To analyze the data obtained as a result of the study, interpretive-descriptive methods and the method of generalization and extrapolation (interpolation) of results will be used.

At the second stage of the study, it is planned to correlate the obtained indices of child well-being in various spheres with the level of their development in accordance with age (starting from 3 years), as well as to identify the most significant factors influencing the level of well-being of the child population.

The approbation and implementation of the original methodology by the research team will allow, in the future, to monitor child well-being in the region, assess the effectiveness of ongoing state programs in the sphere of family and childhood protection, improving their quality and standard of living, and strengthening health.

### Conclusion

As a result of the conducted analysis, the following conclusions can be drawn.

The topic of child well-being and quality of life arouses genuine interest among scholars and practitioners. The high level of attention paid to the material, psychological, and personal well-being of young citizens acts as a guarantor of strengthening their intellectual, labor, reproductive, and creative

potential, ensuring the proper quality of human resources, and hence the future national security of the country. To achieve this goal, specific criteria and indicators of well-being are used, reflecting information on various aspects affecting children's quality of life. In this regard, it becomes extremely important to provide appropriate and evidence-based tools to capture and understand changes in child well-being.

The analysis of international experience in developing child well-being indices allows us to conclude the following. The term itself is multifaceted depending on the scientific approach and still lacks a single definition, which causes difficulties and disagreements in the tools for its assessment. As a rule, most indices are comprehensive in nature, including indicators from the system of state statistics and sample data from public opinion surveys on various aspects of the lives of families with children. Virtually all of them include the domains of material well-being, health status, and quality of children's education. Half of the projects also address the level of safety of the child's environment.

In recent years, increasing attention has been paid to the assessment of the level of well-being directly by the children themselves. Indices of the subjective well-being of the child population also differ in the variety of aspects assessed and the diagnostic methods used. However, despite the growing understanding of the importance of taking children's opinions into account, research in this area is limited.

The conducted review and analysis of research have demonstrated that, despite the fairly high level of elaboration of the scientific task of constructing a methodology for assessing child well-being for the macro-level, the aspect of the micro-level (family) remains virtually untouched, especially for infancy, early childhood, and preschool age. Its study will allow us to refine our understanding not only of the external (socio-economic) factors of child well-being, but also of

the family and social factors that affect families during different periods of children's growing up and with varying intensity.

To this end, we have developed a project for monitoring the child well-being of the child population in the Vologda Region by means of a sociological survey of families with children and the construction of a comprehensive Child Well-being Index (CWI), including seven sub-indices: family, educational, health-preserving, socio-economic, socio-cultural, and subjective well-being, as well as the level of safety.

Although the proposed author's methodology for assessing the well-being of the child population largely synthesizes already known approaches and the conceptual foundations of previously developed comprehensive indices, the undoubted advantages of the author's toolkit include:

1) adaptation of the monitoring for:

– *the micro-level*, since it is the family, relatives, friends, educators, teachers, coaches, and others who exert the greatest influence on the child's living conditions, health, development, and well-being;

– *five age groups*: the authors are convinced that in different periods of a child's development, the significance, strength, and direction of factors from the family and immediate environment may differ, and therefore the assessment criteria must be adjusted accordingly, which is reflected in our methodology;

– *the regional community*: each constituent entity of the Russian Federation is unique, and it is necessary to identify significant manageable risk factors for child well-being in a specific region in order to effectively influence them and support families with children; the author's monitoring is planned to be conducted in Vologda Region on a regular basis;

2) despite the wide representation of the domains of education and healthcare in previously developed CWIs, they practically ignore the level of the child's own intellectual and socio-cultural

development, the formation of their skills for adequate behavior and health preservation, and their moral values; on the part of parents, the educational resources and the intensity of their application, the medical activity and medical literacy of the mother and father, and the quality of shared leisure time and relationships with children are not taken into account; we consider these indicators important for assessing a child's well-being;

3) taking into account the current trend of considering the opinions of the children themselves, we have included a subjective well-being block in the questionnaires for adolescents over 11 years old;

after approbation, we plan to expand the sample among younger categories of respondents.

The interdisciplinarity of our proposed approach to assessing child well-being influences the practice of applying the results obtained in interaction with educational and medical organizations, as well as with social welfare institutions, guardianship and trusteeship authorities, and the child's legal representatives. We assume that the approbation of our methodology will make it possible to identify key manageable risk factors for child well-being, to develop directions and measures of social policy to improve it, and to assess their effectiveness.

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## Regional Features of Foreign Labor Quotas in Russia



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**Abstract.** This study focuses on the analysis of the foreign labor quota mechanism, which is legally regulated and enables a controlled influx of migrants. Unlike the patent system, foreign nationals arriving under quotas in response to requests from regional employers generally possess a higher skill level. The aim of the study is to assess the spatial and professional heterogeneity of the labor migrant quota system in Russia from 2017 to 2024. The findings revealed four groups of regions exhibiting varying degrees of need for foreign labor in local job markets and differing patterns of demand for it. Furthermore, we conducted a comparison of the professional and skill composition of quotas across these regional groups. Although a preliminary analysis of the quota structure indicates that most allocated slots are for skilled worker and specialist professions, a diversification of positions exists across regions. The group of regions characterized by a high intensity of foreign labor recruitment with unstable demand shows a need for workers in mining and construction, and a higher share of quotas for managers at various levels of structural divisions compared to other regional groups. For the group of regions with a high intensity of foreign labor recruitment and stable demand, a service-oriented focus in attracting international specialists is more typical. Conversely, groups with a low intensity of foreign labor recruitment, regardless of the nature of demand (stable/unstable), are characterized by an indistinct professional structure for such specialists. The obtained results demonstrate the potential of the quota system as a tool for actively managing the qualitative structure of labor migration, which can be used to improve quota allocation mechanisms in the context of labor shortages in local job markets.

**Key words:** migration, labor migration, international migration, quotas, patent, regional economy.

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## Introduction

The growing shortage of labor resources, the consequences of the COVID-19 pandemic, the mobilization and “relocation” of part of the working-age population lead to an increase in the number of vacancies in all sectors and professional groups, which, in conditions of a shrinking labor supply, low unemployment, high staff turnover and stagnant wages, negatively affects the sustainable development of the economy, largely slowing the pace of economic growth. the growth of Russia (Tatarkin, Vasil’eva, 2015). At the same time, the situation is aggravated by the age structure of the working-age population. Thus, according to preliminary forecasts, by 2030 the number of people employed under the age of 40 may decrease by a quarter compared to 2020, and the share of Russians without secondary education tends to zero, while vacant low-skilled jobs remain and will be in demand in the foreseeable future (Monusova, 2021). This imbalance is exacerbated by the uneven development of various industries and territories, which creates challenges for the effective functioning of the regional economy.

In the context of attracting foreign workers to the labor market, it is important to emphasize that the study group accounts for a small proportion of the employment structure of the local, Russian population (Florinskaya, 2024). This, in turn, contradicts the results of opinion polls, in which the population expresses the opinion that migrants are present in large numbers in the country<sup>1</sup>, and the rhetoric of officials, which shows a kind of rejection of migrant workers (Mukomel’ et al., 2022). In addition, almost a third of Russians surveyed said that migrants are a source of additional injections into the economy according to VCIOM, more than

<sup>1</sup> Migrants in Russia: The effects of their presence. VCIOM. Available at: <https://wciom.ru/analytical-reviews/analiticheskii-obzor/migranty-v-rossii-effekty-prisutstviya> (accessed: 11.09.2025).

half (57%) believe that thanks to foreign labor, the local population can receive a number of services at a more attractive price (for example, services in construction and repair). However, despite this, 50% of respondents believe that migrants should live in specially designated territories, and 78% of respondents believe that entry into Russia should be restricted<sup>2</sup>. An interesting feature is that the presence of migrants is most sensitively perceived by the least affluent segments of the population, primarily those who occupy vulnerable positions in the labor market. This group of the population perceives foreign labor migrants as direct competitors for similar jobs. At the same time, the most affluent segments of the population regard foreign labor as a factor in reducing the cost of goods and services they consume (Mukomel’, 2021).

The structure of professional skills and qualifications of foreign workers often does not meet the requirements of the modern labor market, especially in the segment of highly qualified specialists. This situation is compounded by the fact that the record low unemployment rate recorded in October 2023 (decrease to 2.9%)<sup>3</sup> indicates that the demand for labor, significantly exceeding the supply, forces employers to accept applicants with lower qualifications than they require. In a number of macro-regions, there is a significant shortage of personnel caused by the introduction of new and expansion of existing restrictions on the work of foreigners on patents<sup>4</sup>. As a result, employers are forced to look for additional labor resources in already involved social groups such as students and pensioners, which indicates a systemic discrepancy

<sup>2</sup> Ibidem.

<sup>3</sup> Migration of the Russian population in 2023: Personnel shortage. Available at: [https://raexpert.ru/researches/regions/migration\\_regions\\_2023](https://raexpert.ru/researches/regions/migration_regions_2023) (accessed: 11.09.2025).

<sup>4</sup> Regional economy: Comments of the State Institution: Report of the economic divisions of the territorial institutions of the Bank of Russia with the participation of the Monetary Policy Department. March 2025. Available at: [https://www.cbr.ru/analytics/dkp/reg\\_review/0325](https://www.cbr.ru/analytics/dkp/reg_review/0325) (accessed: 11.09.2025).

between the qualitative structure of human capital and the needs of the economy<sup>5</sup>. This imbalance raises the question not only of quantitative replenishment of the shortage of personnel, but also of the need to form human resources with the required level of competencies and professional skills.

In this regard, the qualitative composition of migrants and the compliance of their competencies with the needs of the labor market are of particular importance in attracting foreign labor. The right of a foreign citizen to work in Russia is implemented through several institutionally different channels, the largest and most important of which are the patent system and work permit (Gubareva, 2021). These channels differ significantly in terms of the quality of incoming workers and their employment strategies in the domestic labor market. Foreign citizens from visa-eligible countries who have work permits are attracted to Russia through quotas, which in regulatory practice is a mechanism for targeted selection and regulation of foreign labor flows, since it allows setting its qualification parameters (Bedrina, Shaimardanov, 2010; Macaluso, 2022). Foreign migrants arriving under quotas are more likely to be more qualified and formally meet the stated needs of employers compared to categories entering the labor market through a patent.

Attracting qualified foreign labor is an urgent issue not only for the domestic, but also for the global labor market. Increased global competition for labor resources has led to a transformation of migration policy toward selective models aimed at foreign migrant workers – applicants with higher levels of education and qualifications (Macaluso,

2022). For example, such countries as Canada, Australia, and New Zealand use a points-based system: potential migrant workers are awarded points for their characteristics and competencies (work experience, qualifications, knowledge of the host country's language, education, etc.), followed by admission to the labor market only for those who have scored a threshold number of points (Sumpton, Walsh, 2023). In the countries of the European Union (EU), a selective approach is implemented through the EU “blue card scheme”, which grants the right to live and work to specialists who meet certain criteria in terms of education, experience and employment (Titova, 2015). However, such supranational selective mechanisms do not always allow taking into account the differentiated employment needs of individual EU member states. In this regard, some countries, such as Austria, supplement existing mechanisms with their own, such as the “red-white-red card”, aimed at selecting migrant workers in scarce professions where high qualifications are not necessarily required (Bešić et al., 2025). Thus, international practice demonstrates a wide range of instruments for regulating the qualitative component of foreign labor migration, which has its own characteristics depending on the characteristics of the host territory.

The work focuses on the analysis of visa migrants attracted by quotas to the Russian Federation, since it is through this channel that the regulated formation of the structure of foreign labor takes place. The aim of the study is to examine the functioning of the quota system for migrant workers in Russia, both in general and in terms of spatial and professional qualification features of quota allocation. The practical significance of the conducted research lies in the fact that the results can be taken into account when improving quota allocation mechanisms and matching them with the real needs of regional labor markets.

<sup>5</sup> Ibidem; Regional Economy: Comments of the State Institution: Report of the economic divisions of the territorial institutions of the Bank of Russia with the participation of the Monetary Policy Department. October 2023. Available at: [https://www.cbr.ru/analytics/dkp/reg\\_review/report\\_1023](https://www.cbr.ru/analytics/dkp/reg_review/report_1023) (accessed: 11.09.2025).

When considering the issues of attracting foreign labor to the labor market of the Russian Federation, it is necessary to take into account the specifics of legal regulation (*Tab. 1*). For international migrant workers, there are several regimes that differ in visa status, the procedure for employment opportunities, duration and application mechanism, which are regulated by various regulatory legal acts. These differences have not only legal, but also socio-economic significance, since foreign citizens arriving in Russia for various reasons are accounted for by different departments. This, in turn, complicates the comprehensive statistical accounting of international migrants.

The quota mechanism in Russia applies to visa-eligible foreign citizens. It is important to

understand that a work permit is the basis for legitimate employment in Russia, and a quota is a mechanism that allows you to regulate the labor market by setting a limit on foreign labor. The quota system is largely initiated by local employers, but it is still a manageable administrative tool. The annual quota campaign starts at the beginning of the year (each region has its own deadline), at the first stage, employers apply for the required number of specialists (Evtushenko et al., 2024). It is important to remember that to hire a foreign specialist next year, an employer should apply this year<sup>6</sup>. The need for foreign workers is determined by the executive authority of the RF constituent entities and is considered by an interdepartmental commission with the participation of representatives

Table 1. Basis for employment in Russia by foreign migrants\*

Basis	Definition	Countries	Validity period	Order of receipt
Patent	A document confirming the right of a foreign citizen who arrived in the Russian Federation in a manner that <i>does not require visa</i> for temporary work	Republics of Abkhazia, Azerbaijan, Moldova, Tajikistan, Uzbekistan	1–12 months	Declarative character on behalf of a foreign citizen; to apply for a patent, it is necessary apply to the territorial body of the Ministry of Internal Affairs of Russia within 30 calendar days from the date of entry into the Russian Federation with a package of necessary documents.
Work permit	A document confirming the right of a foreign citizen who arrived in the Russian Federation in accordance with the procedure <i>requiring visa</i> for temporary work	All visa countries	1 year	The nature of the application from the employer; as a general rule, the employer (customer of works, services) has the right to attract and use foreigners for employment, including if they have permission to attract and use foreign workers. To obtain such a permit, it is necessary to apply to the federal executive authority in the field of internal affairs or its territorial body.
Free access to labor market	Exemption from the need to obtain work permits in the Russian Federation under the Treaty on the Eurasian Economic Union	Republics of Armenia, Belarus, Kazakhstan, Kyrgyzstan	For the duration of the employment contract	Conclusion of employment agreement in accordance with the norms of labor law.

\* The basic forms are presented, with the exception of special modes.  
According to: On the Legal Status of Foreign Citizens in the Russian Federation: Federal Law 115-FZ, dated July 25, 2002. Konsultant Plus. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_37868](https://www.consultant.ru/document/cons_doc_LAW_37868) (accessed: 11.09.2025); The Treaty on the Eurasian Economic Union, dated 05/29/2014, as amended on 05/25/2023, with amendments and additions that entered into force on 06/24/2024. Konsultant Plus. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_163855](https://www.consultant.ru/document/cons_doc_LAW_163855)(accessed: 11.09.2025).

<sup>6</sup> Why do I need a permit to attract and use foreign workers? Gosuslugi. Available at: [https://www.gosuslugi.ru/help/faq/attract\\_foreigners/114001](https://www.gosuslugi.ru/help/faq/attract_foreigners/114001) (accessed: 11.09.2025).

of the tripartite commission for the regulation of social and labor relations of the subject, interested territorial executive authorities, including the territorial authorities of the Federal Migration Service, the Federal Tax Service, the Federal Service for Labor and Employment. The Commission may decide to grant the application in full or in part, or reject it completely. When making a decision, issues of national security, the balance of labor resources and the priority of employment of citizens of the Russian Federation are taken into account. By August 15, the constituent entities determine the final need based on the commission's decisions, and by September 1, they send a justification to the Ministry of Labor and Social Protection of the Russian Federation<sup>7</sup>, where a draft quota is being prepared and submitted for government approval. In addition, the Ministry of Labor approves a quota reserve that regions can receive, if necessary, in excess of those approved for the regions. The annual quota volume includes a 30% reserve for each region in case of changes in the need for foreign workers during the year (Komarovskiy, 2021).

After that, the migrant applies for a visa and can enter Russia, work for the declared employer in the declared position until the end of the quota and the visa period. It is the employer who fixes the quota, and the migrant has the right to work only within a specific company and a specific specialty. But it is also important to note that obtaining a quota does not oblige an employer to hire a foreign employee (Evtushenko et al., 2024).

<sup>7</sup> On approval of the rules for determining by the state authorities of a subject of the Russian Federation the need to attract foreign workers: Order 27n of the Ministry of Labor and Social Protection of the Russian Federation, dated January 23, 2014. Consultant Plus. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_160058](https://www.consultant.ru/document/cons_doc_LAW_160058) (accessed: 11.09.2025).

According to various estimates, the duration of the full cycle from submitting an application to actual employment of a foreign citizen ranges from 4–6 months<sup>8</sup> (Evtushenko et al., 2024) to one and a half years (the quota application is submitted 1 year before the start of registration for a foreign employee)<sup>9</sup>, which creates obstacles to responding quickly to changing labor market conditions.

Despite the fact that an employer has the opportunity to obtain a guaranteed employee of the required specialty and qualifications, nevertheless, the employment of foreigners under a patent is more common and preferable. For instance, according to the Ministry of Internal Affairs, more than half of employment contracts are issued on the basis of a patent (from 54% in 2021 to 61% in January – June 2023), while only 3–4% of foreign migrants use work permits, and from 36 to 42% work without permits<sup>10</sup>. The patent system is preferable due to the relative simplicity of the registration procedure (Ryazantsev, 2015) due to the absence of additional bureaucratic burden (Evtushenko et al., 2024), and this option of migrant employment does not require payment of a state fee (in the case of employment on the basis of a work permit, the employer pays a state fee of 12,000 rubles for each attracted foreigner)<sup>11</sup>.

<sup>8</sup> Work permit for citizens from abroad. Visa-Delight. Available at: <https://www.visa-workpermit.ru/ru/work-permit/for-foreign-nationals> (accessed: 11.09.2025).

<sup>9</sup> Documents of the employer of visa foreigners. Migratsionnyi ekspert. Available at: <https://all-migration.com/journal/trudoustroystvo-inostrantsa-oformlyayem-pravilno/dokumenty-rabotodatelaya-vizovykh-inostrantsev> (accessed: 11.09.2025).

<sup>10</sup> Shcherbakova E.M. (2023). Foreign labor in Russia, 2022–2023. Demoscope Weekly, 1005–1006. Available at: <http://demoscope.ru/weekly/2023/01005/barom01.php>

<sup>11</sup> How to issue a permit for the recruitment and use of foreign workers. Gosuslugi Available at: [https://www.gosuslugi.ru/help/faq/attract\\_foreigners/114003](https://www.gosuslugi.ru/help/faq/attract_foreigners/114003) (accessed: 11.09.2025).

A patent, unlike a work permit, provides a migrant with the opportunity not to be tied to a specific employer, which increases their labor mobility. However, an employer who relies on foreign labor is not immune from the departure of migrants who have received a patent to another employer, since they can offer more competitive working conditions<sup>12</sup>. For migrants themselves, the patent also carries risks, since unlike workers who come with a work permit, they do not have a pre-guaranteed place of employment and are forced to look for work on their own.

It is important to note that the composition of foreigners working under a patent and on the basis of a work permit is qualitatively different. For example, for foreigners who come for patents, there is no legally fixed requirement for any specific qualifications. Employment under a patent does not require a certain professional level from a foreign employee, which leads to the predominance of low-skilled migrants with insufficient education, mainly from Central Asian countries, and poses a serious challenge to the state and migration policy (Krasinets, 2020), while the quota system for foreign citizens with a work permit involves the selection of specialists in specific professions and qualifications that meet the demands of the labor market and national interests. Visa-based foreign migrants arriving under a quota are always qualified labor, since qualifications are one of the main conditions for confirming the quota<sup>13</sup>. The qualifications of such international migrants can be very diverse: most of the quotas are directed to specialties in demand in industry, but there are also

<sup>12</sup> We cannot do without migrants: Experts named the pros and cons of migration policy in Russia. Available at: <https://ngs.ru/text/politics/2025/08/04/75790425> (accessed: 10.09.2025).

<sup>13</sup> The government has set a quota for attracting workers from abroad at the request of companies. Ministry of Labor России. Available at: <https://mintrud.gov.ru/employment/migration/648> (accessed: 11.09.2025).

positions that include both managerial personnel (for example, in 2025 there was a position of chairman of the board of the Russian-German Chamber of Commerce), heads of industrial groups, chief geologists, and seamstresses, livestock fighters, etc. Accordingly, the remuneration of foreign workers varies depending on the intended position – from 20 to 380 thousand rubles per month<sup>14</sup>.

In addition, there is a special regime for foreign citizens that does not require such a lengthy procedure, as is the case with those migrants who are employed under a quota. For example, there are highly qualified specialists outside the quota system, who are registered according to a separate procedure<sup>15</sup>. The system for attracting highly qualified specialists has a simplified format, it does not require a quota, but, unfortunately, because of this, it is used as a tool for formal simplified temporary access of foreign citizens to the Russian labor market (Chudinovskikh, Kharaeva, 2020). Previously, the residence permit for this category of citizens had a three-year limit, but since 2023 there has been no such restriction. However, it is worth mentioning that highly qualified specialists rarely apply for a residence permit<sup>16</sup>, do not transport their families to the country, and prefer a temporary stay in the Russian Federation for the duration of their work (Mukomel' et al., 2022).

Russia's competitiveness as a host country has been declining in recent years, but despite this, Russia still remains one of the major centers of

<sup>14</sup> The Ministry of Labor revealed the highest salaries of migrants. What positions attract qualified personnel from abroad. RBK. Available at: <https://www.rbc.ru/economics/16/12/2024/675c11489a79475d38c7ef0e> (accessed: 11.09.2025).

<sup>15</sup> On the Legal status of Foreign Citizens in the Russian Federation: Federal Law 115-FZ, dated July 25, 2002. Garant. Available at: <https://base.garant.ru/184755> (accessed: 11.09.2025).

<sup>16</sup> Chudinovskikh O.S. (2024). Major legislative changes in the field of international migration and acquisition of citizenship of the Russian Federation, 2023-2024: New legal norms, draft laws and discussion. Demoscope Weekly, 1021–1022, 21–30.

migration attraction. For instance, in 2024, it ranked 10th (7.6 million people)<sup>17</sup> among the countries with the largest number of international migrants, whereas, for example, in 2020 (12 million people)<sup>18</sup> and 2017 (11.7 million people)<sup>19</sup> it was consistently in fourth place (after the United States, Saudi Arabia and Germany). As a percentage of the permanent population, the share of international migrants is small – in 2017 and 2020 it was 8.1 and 8%, respectively, and in 2024 – 5.3%<sup>20</sup>. We can conclude that the decline in migration volumes could be caused by external causes, such as the pandemic, political and economic changes after 2022.

Despite international statistics that have shown a decline in migration interest, domestic statistics recorded a record migration increase in 2024. This circumstance is due to a change in the methodology

of data transmission from the Ministry of Internal Affairs to Rosstat in connection with the transition to electronic interaction between structures, which made it possible to more fully keep records of migrants. The statistically reported increase almost completely (by 95%) compensated for the natural decline of the population (596.2 thousand people), which is significantly higher than in previous years, when the increase offset 41% of the decrease a year earlier and 10% in 2022, and the last time net migration fully compensated for the decrease in 2017<sup>21</sup>.

Every fourth foreign citizen who has indicated the reason for their arrival on the territory of the Russian Federation comes for the purpose of carrying out work. Such a visit is often temporary, when a migrant, having achieved an improvement in their financial situation<sup>22</sup>, leaves (Fig. 1). The influx of international migrants of foreign citizens for educational purposes ranges from 11.1–18.7% of all arrivals, although they are of considerable interest and the program documents set an indicator for an increase in this category of citizens by 2030 (Komlev, Kostyleva, 2025). International migrants who have arrived in the country and have received education here can potentially realize their labor potential in Russia. However, there may be another approach when branches of Russian universities that train qualified personnel are opened in the donor countries of migration resources (Grebenyuk, Aver'yanov, 2025), which will also change the qualitative composition of the foreign workforce in the country in the future.

<sup>17</sup> United Nations (2024). International Migrant Stock 2024: Key facts and figures. UNDESA/POP/2024/DC/NO. 13. Available at: [https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/undesa\\_pd\\_2025\\_intlmigstock\\_2024\\_key\\_facts\\_and\\_figures\\_advance-unedited.pdf](https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/undesa_pd_2025_intlmigstock_2024_key_facts_and_figures_advance-unedited.pdf) (accessed: 11.09.2025).

<sup>18</sup> United Nations Department of Economic and Social Affairs, Population Division (2020). International Migration 2020 Highlights (ST/ESA/SER.A/452). Available at: <https://www.un.org/development/desa/pd/sites/www> (accessed: 11.09.2025).

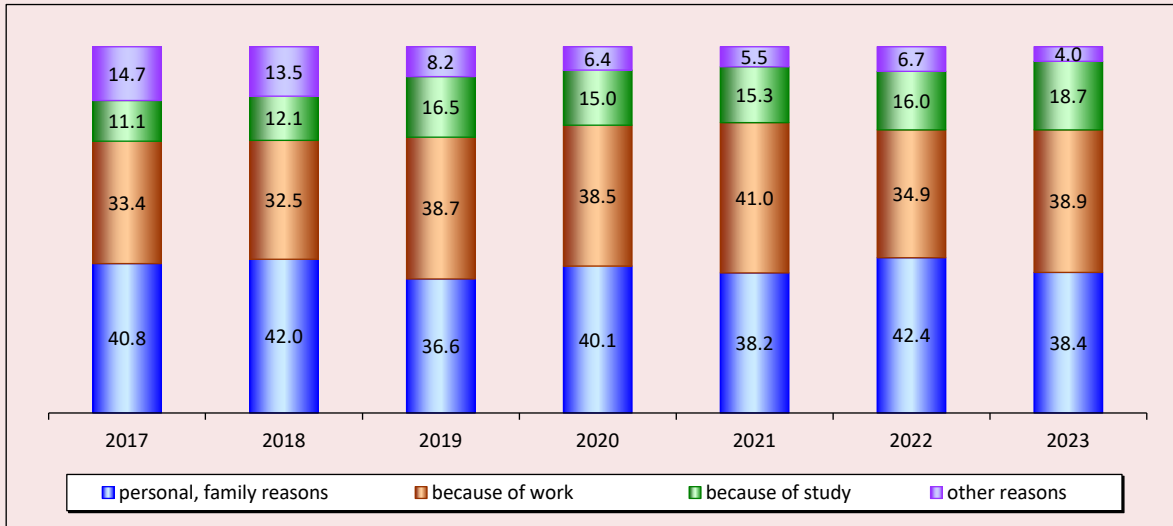
<sup>19</sup> United Nations Department of Economic and Social Affairs (2017). International Migration 2017 Highlights (ST/ESA/SER.A/404). Available at: [https://www.un.org/en/development/desa/population/migration/publications/migrationreport/docs/MigrationReport2017\\_Highlights.pdf](https://www.un.org/en/development/desa/population/migration/publications/migrationreport/docs/MigrationReport2017_Highlights.pdf) (accessed: 11.09.2025).

<sup>20</sup> United Nations Department of Economic and Social Affairs (2017). International Migration 2017 Highlights (ST/ESA/SER.A/404). Available at: [https://www.un.org/en/development/desa/population/migration/publications/migrationreport/docs/MigrationReport2017\\_Highlights.pdf](https://www.un.org/en/development/desa/population/migration/publications/migrationreport/docs/MigrationReport2017_Highlights.pdf); United Nations Department of Economic and Social Affairs, Population Division (2020). International Migration 2020 Highlights (ST/ESA/SER.A/452). Available at: <https://www.un.org/development/desa/pd/sites/www>; United Nations (2024). International Migrant Stock 2024: Key facts and figures. UNDESA/POP/2024/DC/NO. 13. Available at: [https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/undesa\\_pd\\_2025\\_intlmigstock\\_2024\\_key\\_facts\\_and\\_figures\\_advance-unedited.pdf](https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/undesa_pd_2025_intlmigstock_2024_key_facts_and_figures_advance-unedited.pdf) (accessed: 11.09.2025).

<sup>21</sup> Rosstat has reported a nominal migration record since 1995. It was the result of a new format for collecting statistics. RGB. Available at: [https://www.rbc.ru/economics/05/03/2025/67c847189a79473e13f2971b?utm\\_source=amp\\_full-link](https://www.rbc.ru/economics/05/03/2025/67c847189a79473e13f2971b?utm_source=amp_full-link) (accessed: 11.09.2025).

<sup>22</sup> It is impossible without migrants: Experts named the pros and cons of migration policy in Russia. NGS. NOVOSTI. Available at: <https://ngs.ru/text/politics/2025/08/04/75790425> (accessed: 10.09.2025).

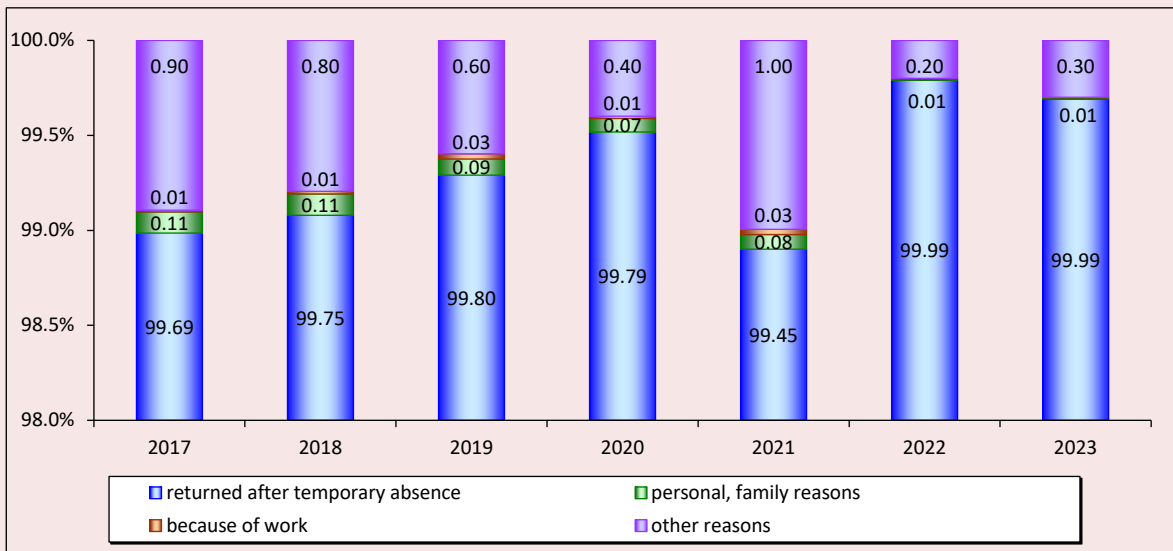
Figure 1. The structure of the share of international migrants of foreign citizens aged 14 years and older due to reasons of change of residence, % of the number of international migrants who indicated the reason for migration



Note. The chart shows the three most common causes of migration among international migrants who have arrived, and all other causes of migration are included in the “other reasons” column.

Source: Statistical bulletin “Migration and population of the Russian Federation”.

Figure 2. The structure of the share of international migrants of foreign citizens aged 14 years and older who left due to reasons of change of residence, % of the number of international migrants who indicated the reason for migration



Note. The chart shows the three most common causes of migration among international migrants who have left, and all other causes of migration are included in the “other causes” column.

Source: Statistical bulletin “Migration and population of the Russian Federation”.

The structure of departures of foreign migrants from the Russian Federation is strikingly different from the structure of arrivals. In the vast majority of cases, the reason for departure is the return after a temporary absence, which emphasizes the temporary nature of the stay of citizens of other states on the territory of the country and introduces an element of instability in the domestic labor markets (*Fig. 2*).

The fluctuating ruble exchange rate makes international labor migration to Russia not as attractive as it used to be. For instance, since the second half of the 2010s, other countries with more competitive financial conditions have been applying for the entry of migrants from Central Asia<sup>23</sup>.

The countries of the Middle East, the Persian Gulf and East Asia are becoming new points of attraction, and in the near future only an increase in competition for labor from Central Asia is predicted (Grebenyuk, Aver'yanov, 2025). The growth of per capita GDP in neighboring countries, such as Kazakhstan and China, turn them into direct competitors of Russia for human capital. At the same time, traditional sources of labor migrants, primarily from Central Asian countries, are gradually losing their potential, which forces Russia to look for new directions to attract foreign specialists (Yumaguzin, Vinnik, 2023). The qualitative composition of incoming migration flows is also influenced by the fact that after 2020, the most educated and skilled migrants from Ukraine, Belarus and Moldova left the Russian labor market (Mukomel' et al., 2022).

<sup>23</sup> In 2023, the influx of migrants to Russia dropped to its lowest levels. This may be the fourth wave of migration decline since the late 2000s, but so far it is less than expected. *Esli byt' tochnym*. Available at: <https://tochno.st/materials/v-2023-godu-pritok-migrantov-v-rossiiu-upal-do-minimalnyh-znachenii-eto-mozet-stat-uze-cetvertoi-volnoi-spada-migracii-s-konca-2000-x-no-poka-ona-mense-cem-ozidalos> (accessed: 10.09.2025).

The situation is also aggravated by a series of amendments to migration legislation. In general, since February 2025, the supervision of violations in the field of migration has been tightened and the procedure for “expelling” migrants has changed: previously, the decision on deportation was made in court, whereas now the police service has received such powers<sup>24</sup>. In addition, since the beginning of 2025, the length of stay of visa-free migrants has been halved (90 days during the year, previously for six months)<sup>25</sup>, and in the spring of 2025, the list of fields of activity where migrants cannot work under a patent was expanded in a number of regions, which aggravated the situation on the labor market in some regions<sup>26</sup>. In addition, by 2025, limits on the employment of foreign migrants by type of economic activity have increased in some regions<sup>27</sup>. These innovations reflect only a part of the steps being taken, but they indicate a tendency to strengthen control over the flow of incoming international migrants, and are also aimed at reducing the number of migration offenses.

Traditionally, labor migrants from the CIS countries account for the majority of migration growth in Russia (*Fig. 3*). In particular, in 2024, up to 80% of labor migrants were from Central Asia,

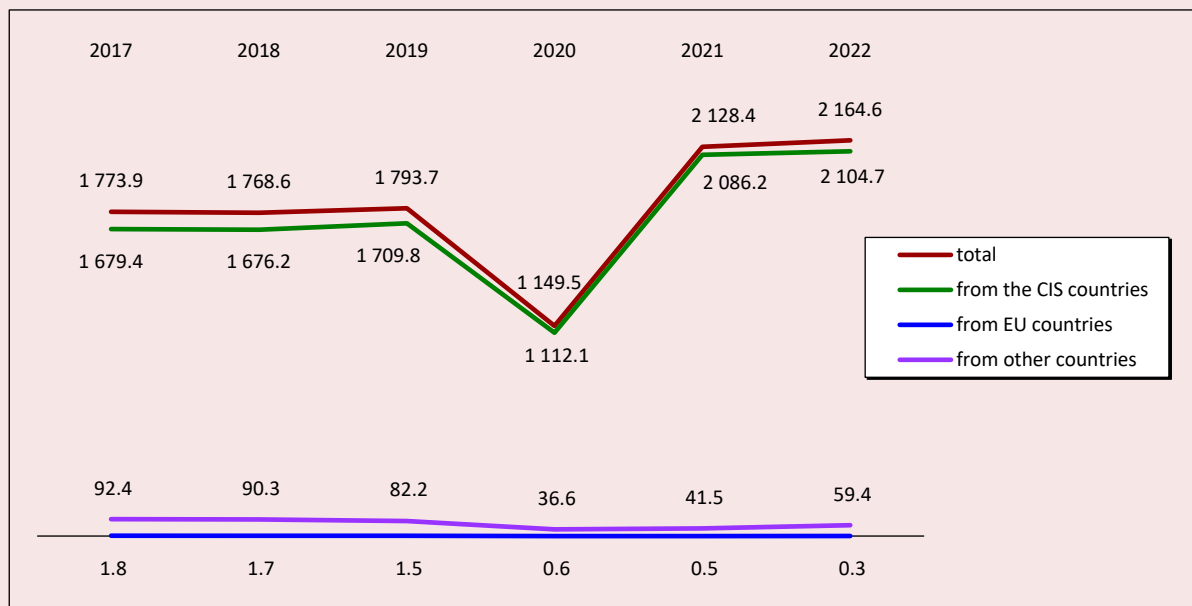
<sup>24</sup> On Amendments to the Code of Administrative Offences of the Russian Federation: Federal Law 248-FZ, dated 08.08.2024. *Konsultant Plus*. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_482497/3d0cac60971a511280cbba229d9b6329c07731f7/](https://www.consultant.ru/document/cons_doc_LAW_482497/3d0cac60971a511280cbba229d9b6329c07731f7/) (accessed: 12.09.2025).

<sup>25</sup> New Migration Rules for 2025: What businesses need to know. *Rosmigrant.rf*. Available at: <https://росмигрант.рф/press-center/news/novosti/novye-migratsionnye-pravila-2025-goda-chto-nuzhno-znat-biznesu> (accessed: 12.09.2025).

<sup>26</sup> The Kaliningrad Region cannot fully replace migrant labor. *RG.ru*. Available at: <https://rg.ru/2024/10/08/reg-szfo/v-kaliningradskoj-oblasti-ne-mogut-polnostiu-zamestit-trud-migrantov.html> (accessed: 16.09.2025).

<sup>27</sup> On the establishment for 2025 of the permissible proportion of foreign workers employed by Economic entities Engaged in Certain Types of Economic Activities on the territory of the Russian Federation: Government Decree 1796, dated 12/16/2024. *KonturNormativ*. Available at: <https://normativ.kontur.ru/document?moduleId=1&documentId=494331> (accessed: 16.09.2025).

Figure 3. The dynamics of the number of foreign citizens who received permits to work in Russia during the year, thousand people



Source: Labor and Employment in Russia 2023; Labor and Employment in Russia 2021.

namely, the largest number of citizens entered from the republics of Tajikistan, Uzbekistan and Kyrgyzstan<sup>28</sup>. Representatives of these states work in Russia mainly under a patent (the Republic of Tajikistan, Uzbekistan) or in accordance with concluded agreements (the Republic of Kyrgyzstan) without registration of additional documents, as citizens of the Russian Federation.

China, Vietnam, India, Turkey, and Serbia became the largest suppliers of visa labor from non-CIS countries in the first quarter of 2023 (Shcherbakova, 2023). In addition, light industry and trade enterprises from Central Russia have begun to consider South Asia as a source of labor, and due to restrictions on migration flows from neighboring

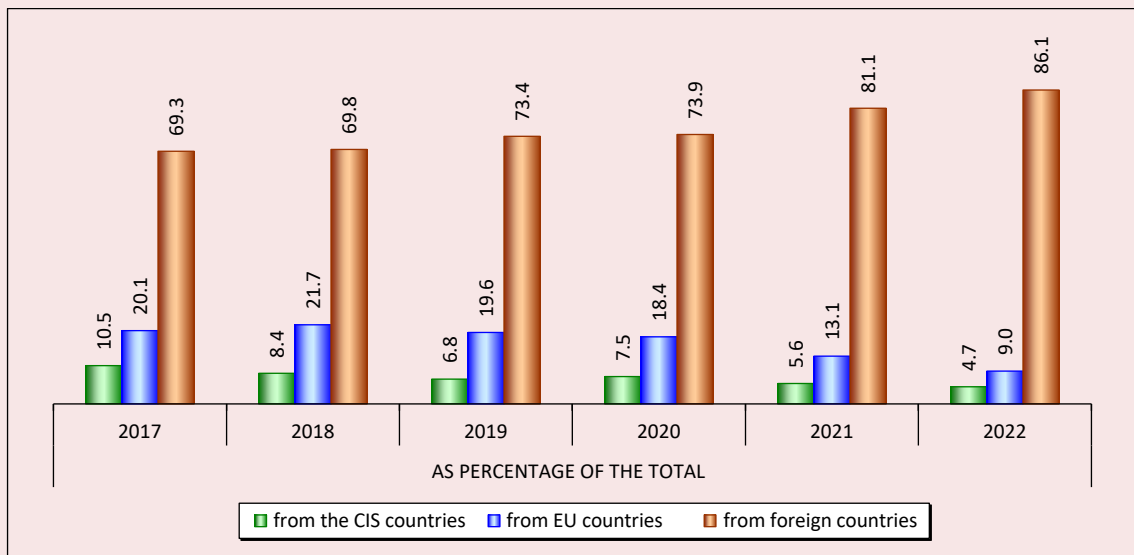
countries, some enterprises are exploring the possibility of attracting labor from Africa and Latin America<sup>29</sup>. An important characteristic of attracting foreign citizens on a visa is their qualifications, which, as a rule, meet the requirements of employers.

Citizens of EU countries have traditionally accounted for a small proportion of foreign workers in Russia. Labor resources from European countries may prefer employment in Western Europe and America, as these countries offer more favorable working conditions. But the opposite perspective is also possible here, since specialists from European countries have a higher labor price, which reduces the demand for European workers compared to labor resources from Central Asia. The decrease in the number of foreign labor migrants from these countries actually reduces the migration of

<sup>28</sup> Gurevich V.S., Drobyshevsky S.M., Mau V.A., Sinelnikov-Murylev S.G. (Eds). (2022). Monitoring the Economic Situation in Russia: Trends and Challenges of Socio-economic Development. (2022). Gaidar Institute of Economic Policy, Russian Presidential Academy of National Economy and Public Administration, 6(160). 28 p. Available at: [http://www.iep.ru/files/text/crisis\\_monitoring/2022\\_7-160\\_June.pdf](http://www.iep.ru/files/text/crisis_monitoring/2022_7-160_June.pdf) (accessed: 16.09.2025).

<sup>29</sup> Regional economy: Comments of the State Institution: Report of the economic divisions of the territorial institutions of the Bank of Russia with the participation of the Monetary Policy Department. February 2025. Available at: [https://www.cbr.ru/analytics/dkp/reg\\_review/0225](https://www.cbr.ru/analytics/dkp/reg_review/0225) (accessed: 16.09.2025).

Figure 4. Number of foreign citizens – highly qualified specialists who had a valid work permit (at the end of the year), % of the total



Source: Labor and Employment in Russia 2023; Labor and Employment in Russia 2021.

highly qualified personnel to a minimum, since the majority of such specialists arrive in Russia from non-CIS countries.

The largest share of highly qualified foreign citizens with a valid work permit is in non-CIS countries (Fig. 4). A marked increase in the percentage of specialists from China (from 25.8 to 27.7%) and Turkey (from 20.0 to 34.1%) over the period 2017–2022 indicates structural changes in the composition of migrants. These trends can be interpreted as evidence of an increased influx of highly qualified specialists from certain regions, which, in turn, reflects the adaptation of Russia’s migration policy to the current situation and the changing demand for skilled labor. At the same time, an increase in the share of highly skilled migrants may indicate the

desire of employers to compensate for the shortage of specialists, indicating the need for more flexible management of migration flows, taking into account their qualitative characteristics.

**Materials and methods**

The information base of the study was official data from the Federal State Statistics Service, data from the Ministry of Internal Affairs, United Nations publications, as well as analytical reports and scientific research by leading Russian and foreign experts in the field of migration processes. In addition, the work uses an analysis of the regulatory framework regarding the need to attract foreign workers arriving in the Russian Federation on the basis of a visa by professional qualification groups for 2017–2024<sup>30</sup>.

<sup>30</sup> Appendix 2 was used in relation to the following orders: On the distribution by Constituent Entities of the Russian Federation of quotas approved by the Government of the Russian Federation for 2017 for the issuance of foreign citizens arriving in the Russian Federation on the basis of visas, work permits and invitations to Enter the Russian Federation for the purpose of Employment: Order of the Ministry of Labor and Social Protection of the Russian Federation 728n, dated December 13, 2016; On the distribution by constituent entities of the Russian Federation of quotas approved by the Government of the Russian Federation for 2018 for the issuance of foreign citizens arriving in the Russian Federation on the basis of visas, work permits and invitations to enter the Russian Federation for the purpose of employment: Order of the Ministry of Labor and Social Protection of the Russian Federation 848n, dated December 15, 2017; On the distribution by constituent entities of the Russian Federation

When analyzing migration processes, it is necessary to take into account that the availability and relevance of migration data are often limited (Ryazantsev, Pis'mennaya, 2019; Chudinovskikh, Stepanova, 2020). For example, statistical sources are updated at different frequencies, which leads to time gaps in the availability of information. In this regard, we chose the period from 2017 to 2024, as it combined available data on international migration from various open sources. However, in a number of cases where data from the collection "Labor and Employment in Russia" was used, which is updated every two years, the affected period was narrowed down to 2022. The complexity of accounting for international labor migration is also due to the fact that the category of citizens in question, depending on the country of origin, has different grounds for employment in the Russian Federation. All this variety of forms generates differences in statistical accounting.

The work focuses on the group of foreign labor migrants who arrive in Russia in accordance with the allocated quotas, that is, those citizens who have a work permit in Russia on a visa.

We carried out a grouping procedure to identify differences between the regions of Russia in terms of parameters characterizing the use of mechanisms for attracting foreign labor.

The criteria for selecting groups were indicators that were reduced to a relative form to exclude distortion associated with different regional scales.

1. An indicator of the intensity of attracting foreign labor (hereinafter referred to as the IAFL). It is calculated for all regions of the Russian Federation and represents the ratio of the total number of allocated quotas for attracting foreign labor for the period from 2017 to 2024 to the total number of employees for the same time period. To ensure comparability of results between regions, the values obtained were reduced to the format – the number of quotas per 1,000 employed people. The calculations made it possible to consider how actively the region uses quotas and how much weight these quotas have in the number of employed people in the region during the study period. The use of a total number was chosen because this method smooths out sharp fluctuations in values over the study period, and also allows assessing medium-term trends in the use of labor quotas (quotas are reassigned annually).

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of quotas approved by the Government of the Russian Federation for 2019 for the issuance of foreign citizens arriving in the Russian Federation on the basis of visas, work permits and invitations to enter the Russian Federation for the purpose of employment: Order of the Ministry of Labor and Social Protection of the Russian Federation 832n, dated December 24, 2018; On the distribution by constituent entities of the Russian Federation of quotas approved by the Government of the Russian Federation for 2020 for the issuance of foreign citizens arriving in the Russian Federation on the basis of visas, work permits and invitations to enter the Russian Federation for the purpose of employment: Order of the Ministry of Labor and Social Protection of the Russian Federation 791n, dated December 16, 2019; On the distribution by constituent entities of the Russian Federation of quotas approved by the Government of the Russian Federation for 2021 for the issuance of foreign citizens arriving in the Russian Federation on the basis of visas, work permits and invitations to enter the Russian Federation for the purpose of employment: Order of the Ministry of Labor and Social Protection of the Russian Federation 878n, dated December 10, 2020; On the distribution by constituent entities of the Russian Federation of quotas approved by the Government of the Russian Federation for 2022 for the issuance of foreign citizens arriving in the Russian Federation on the basis of visas, work permits and invitations to enter the Russian Federation for the purpose of employment: Order of the Ministry of Labor and Social Protection of the Russian Federation 893n, dated December 17, 2021; On the distribution by constituent entities of the Russian Federation of quotas approved by the Government of the Russian Federation for 2023 for the issuance of foreign citizens arriving in the Russian Federation on the basis of visas, work permits and invitations to enter the Russian Federation for the purpose of employment: Order of the Ministry of Labor and Social Protection of the Russian Federation 777n, dated December 12, 2022; On the distribution by constituent entities of the Russian Federation of quotas approved by the Government of the Russian Federation for 2024 for the issuance of foreign citizens arriving in the Russian Federation on the basis of visas, work permits and invitations to enter the Russian Federation for the purpose of employment: Order of the Ministry of Labor and Social Protection of the Russian Federation 884n, dated December 22, 2023. Konsultant Plus. Available at: <https://www.consultant.ru> (accessed: 16.09.2025).

2. To analyze the variability of the need for foreign labor, the coefficient of variation in the volume of quotas was also calculated for the period 2017–2024 for each region separately. The calculated values allowed considering the nature of the demand, which could be stable (the number of allocated quotas remains approximately at the same level from year to year) or unstable (the number of quotas varies greatly). Thus, annual quota values for 2017–2024 were taken for each region, according to which the coefficient of variation was calculated.

In addition to the above characteristics, which reflect to a greater extent the quantitative side of the demand for foreign labor migrants, we attempted to consider the qualitative component, namely the diversity of professional qualification groups for which quotas were requested in the regions. In total, the analyzed regulatory documents (approved annually) identify 15 professional qualification groups, for which the Ministry of Labor and Social Protection of the Russian Federation allocates quotas. In this case, we also applied an approach in which we use the cumulative total for the study period for each of the professional qualification groups in each of the regions of the RF.

At the final stage, the regions were grouped by the IAFL values and coefficient of variation. To assess the relationship between the obtained groups and the structure of professional and qualification demand, we used the conjugacy table, calculated the chi-square and Cramer's V criteria.

In this article, we have focused on analyzing the number of quotas, which is a limitation of our research. However, it is important to understand that quotas are not really involved jobs, but only potentially involved ones, they reflect administratively fixed quota decisions. At the moment, we do not have official data on which part of the allocated quotas has actually been implemented and which has remained unclaimed.

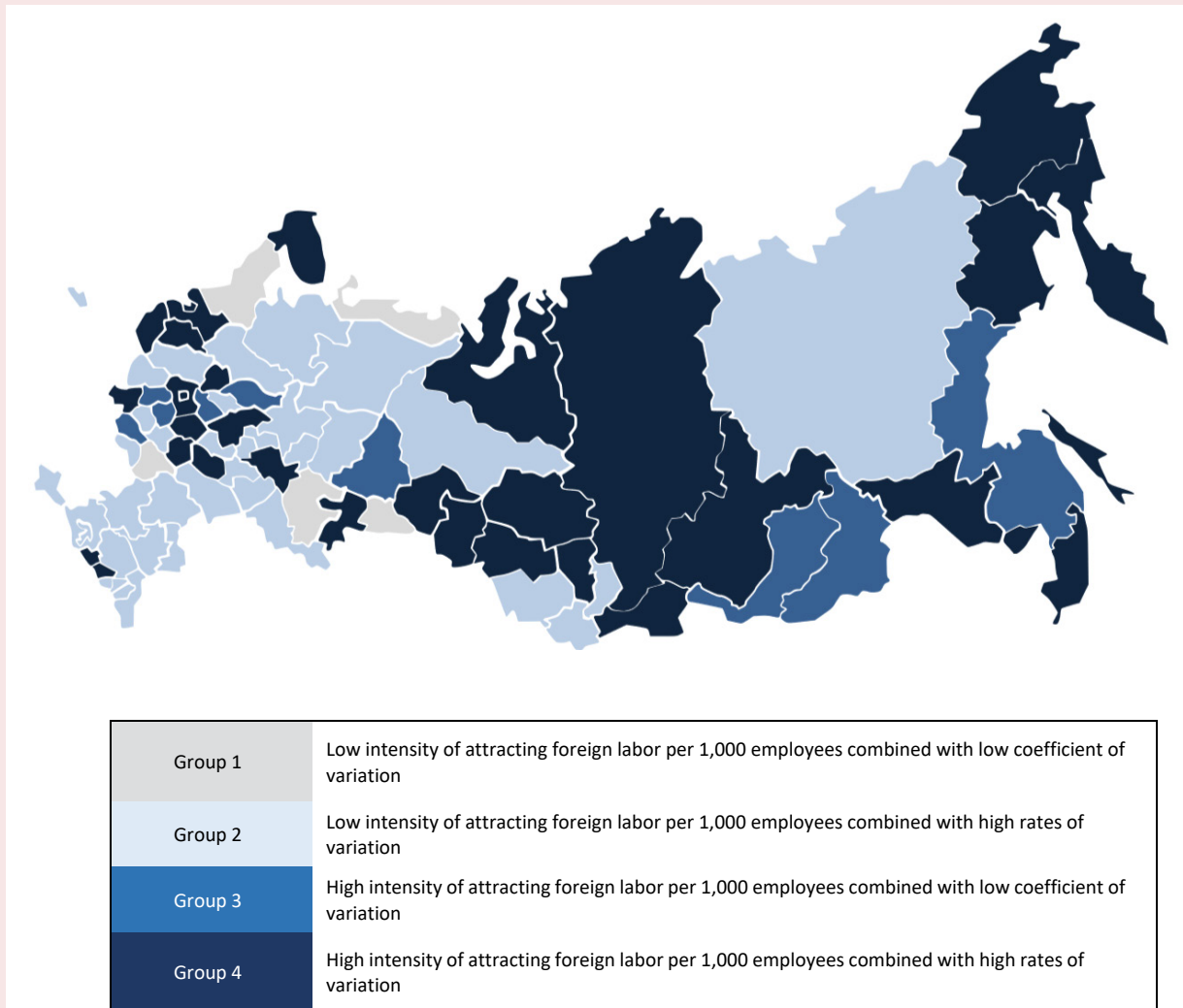
In addition, the use of cumulative totals, which gave us the opportunity to capture the long-term profile of demand for foreign labor, still hides changes within the time period under consideration. For example, in this format, we cannot consider what strategy the regions adopted to attract foreign labor during periods of instability, since the chosen time period immediately affected two major external shocks that significantly affected the parameters of international labor migration, namely the COVID-19 pandemic and the geopolitical crisis that began in 2022.

Despite the limitations, all the presented methods can demonstrate differences in the spatial heterogeneity of quota distribution and identify regions with different types of demand for foreign labor attracted through the quota mechanism.

### Results

Turning to the analysis of Russia's regions according to the selected IAFL indicators and the coefficient of variation, it is necessary to note a strong territorial differentiation. This is evidenced by the discrepancy between the average value of the IAFL index (2.22 per 1,000 employed) and the median value (0.35 per 1,000 employed), which is due to the presence of outliers in regions with high quotas (for example, in the Amur region there are more than 40.5 quotas per 1,000 employed). With regard to the coefficient of variation, there is also a strong spread of values from high, for example, in the Bryansk Region (more than 269.3%) and the Kabardino-Balkarian Republic (205.2%), to low in the Nenets Autonomous Area (0%) and in the Vladimir Region (8.1%). These observations lead us to the conclusions that the share of foreign citizens working under quotas varies greatly in the regions in the structure of the employed population, as well as that the need for foreign labor in some regions is sporadic. Based on this, the median rather than the average value was taken as the criterion

Figure 5. Grouping of regions according to the intensity of attracting foreign labor per 1,000 employed and the coefficient of variation



Source: own compilation.

for separation according to the IAFL indicator. In the case of the division of groups according to the coefficient of variation, a threshold value of 33%<sup>31</sup> was adopted, which indicated a steady, not strongly fluctuating demand for foreign labor from year to year.

We identified four groups of regions as a result of comparing the subjects according to the parameters of the IAFL index and the coefficient of variation for the period under consideration (*Fig. 5*).

Five regions of Russia belong to Group 1, namely the Nenets Autonomous Area, the Voronezh

<sup>31</sup> If the coefficient of variation is less than 33%, the studied population is considered homogeneous, stable, and regular on this basis. If the variation exceeds 33%, then the aggregate is considered heterogeneous, unstable, any processes occur in it, and trends towards changes are detected (Kirillov A.V. Statistics: Textbook. for university students. Samara: Izd-vo Samarskogo gosudarstvennogo aerokosmicheskogo universiteta, 2014. 384 p.).

and Kurgan regions, as well as the Republics of Karelia and Bashkortostan. This group is characterized by a low intensity of attracting foreign labor per 1,000 employees, combined with low coefficient of variation, which indicates a stable and insignificant demand for foreign labor. In these regions, international migrants as a labor force make up an insignificant contingent in the local labor market and do not make a significant contribution to the economy.

The low intensity of attracting foreign labor combined with high coefficient of variation is typical for 38 regions of the country, they were assigned to the 2nd group by us. They are characterized by episodic, irregular, but still weak demand for foreign labor. It is likely that in the 1st and 2nd group of regions, employers either do not experience an acute shortage of personnel, or they compensate for it through other channels, for example, through migrants who come to work under a patent, foreign citizens who do not need to obtain special permits to work in Russia, internal migrants, including pendulum and shift migrant workers. It is important to note that, despite the presence of pronounced external shocks (a pandemic, an aggravation of the geopolitical situation), in the analyzed time period, the regions from the 1st and 2nd groups demonstrated stable use of the quota mechanism, and the coefficient of variation in these subjects remained within stable values, which may indicate a well-established practice in terms of attracting foreign labor force.

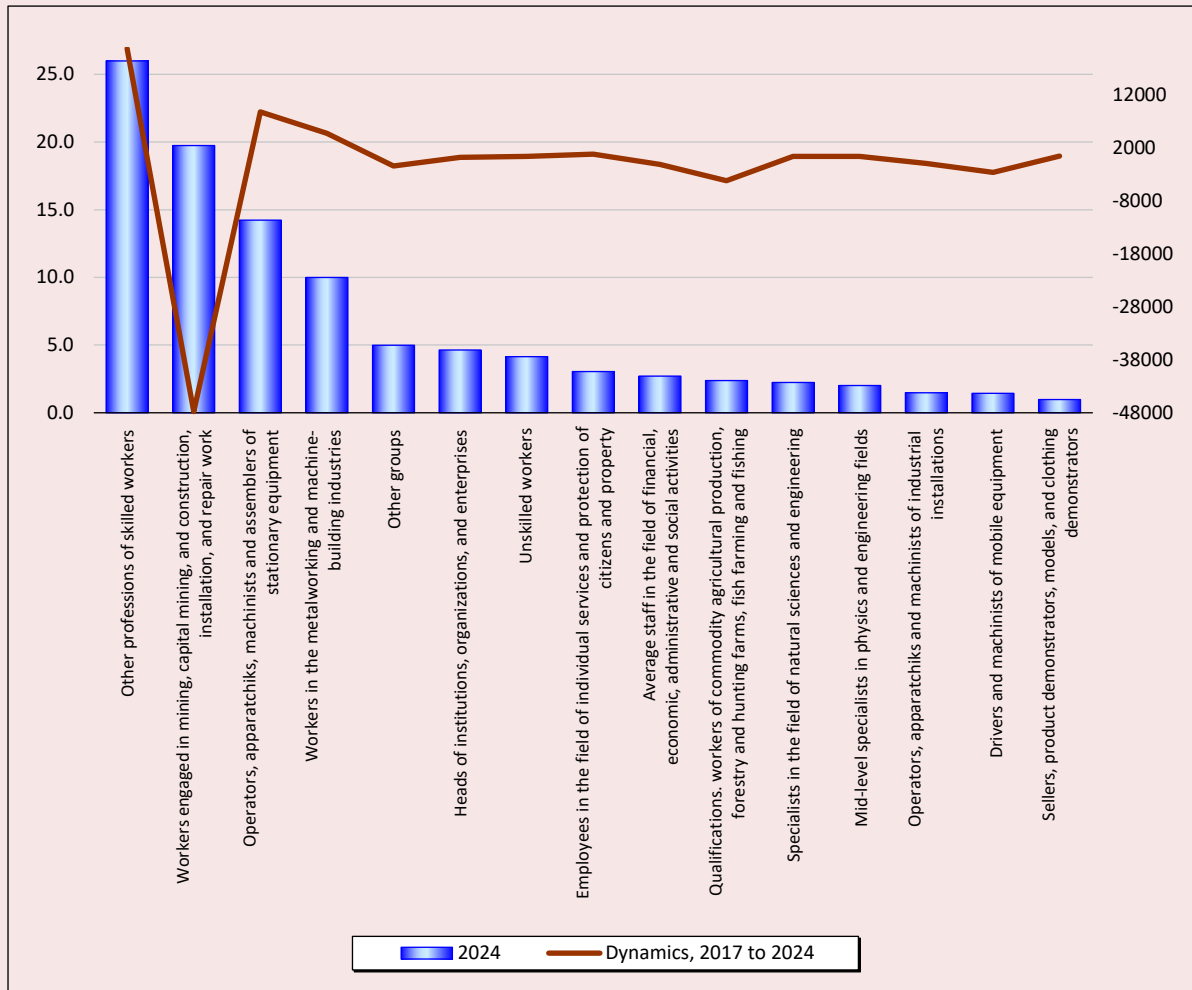
Group 3 and group 4 are characterized by high rates of intensity of attracting foreign labor relative to the local population. The group of 3 (9 subjects) is characterized by a consistently high need to attract international migrants, which may indicate the dependence of the labor market of these subjects on their labor. This includes mainly industrial and infrastructural centers in the regions of central Russia (Kaluga, Kursk, Vladimir, Tula, Kostroma

regions) and the regions of Siberia and the Far East (Sverdlovsk Region, Republic of Buryatia, Trans-Baikal and Khabarovsk territories).

The 4 groups (33 regions) are characterized by the episodic nature of attracting foreign labor. This group of regions includes those subjects that are large industrial centers (Kemerovo, Chelyabinsk, Nizhny Novgorod regions, etc.) and remote northern territories (Yamal-Nenets and Chukotka autonomous areas, Murmansk Region, etc.) specializing in mining and manufacturing industries, regions with large infrastructure projects, as well as large urbanized and metropolitan regions (Moscow, Moscow, Leningrad, Yaroslavl regions, etc.). In this case, the combination of high demand for labor, as well as the cyclical nature of the large projects being implemented, explains both the intensive and episodic use of quotas.

The Ministry of Labor and Social Protection of the Russian Federation regularly establishes, in addition to the total number of quotas for regions, a list and number of professional qualification groups for issuing work permits (*Fig. 6*). The largest number of quotas in 2024 were allocated in such professionally qualified groups as other professions of skilled workers of large and small industrial enterprises (26% of the total share of professionally qualified groups), workers employed in mining, capital mining, construction, installation and repair work (19.7%) operators, apparatchiks, machinists and fitters who assemble stationary equipment (14.2%), workers in the metalworking and machine-building industries (10.0%). The least represented categories of workers are salesmen (1.0%), drivers and machinists of mobile equipment (1.4%), operators, apparatchiks and machinists of industrial installations (1.5%). In general, the distribution demonstrated that even despite the predominance of “working” specialties in the structure of professions, these are still jobs that require qualifications and a certain specialization.

Figure 6. Distribution of the need to attract foreign workers arriving in the Russian Federation on the basis of a visa by priority professional qualification groups in 2017–2024, % and people



According to: Government Decree on determining the need to attract foreign workers arriving in the Russian Federation on the basis of a visa, including priority professional qualification groups, and on approving quotas for 2017, 2018, 2019, 2020, 2021, 2022, 2023 and 2024. Garant. Available at: <https://base.garant.ru>

In 2024, the most pronounced trends to increase quotas were observed in such professionally qualified groups as other professions of skilled workers (by 105%, or by 20,765 people compared to 2017), operators, apparatchiks, machinists and assemblers of stationary equipment (by 65%, or by 8,790 people), workers in the metalworking and machine-building industries (by 44%, or by 4,734 people). The reasons for the increase in quotas were the lack of necessary personnel in the regions, the introduction of imported equipment, as well as the need to attract additional labor for major projects such as the construction of the Power of Siberia gas pipeline and the gas processing cluster in Ust-Luga<sup>32</sup>. It is important to mention that in 2025, two new professional qualification groups were allocated, namely specialists in the field of biological, agricultural sciences and healthcare, as well as mid-level specialists and support staff of natural sciences and healthcare. The largest reduction in allocated quotas by 2024 is observed for such qualification and professional groups as workers employed in mining and construction and installation works (decreased by 47,779 people, or 61% compared to 2017), skilled workers in commercial agricultural production, forestry and hunting, fish farming and fisheries (by 53%, or 4,202 people), drivers and machinists of mobile equipment (by 54%, or 2,622 people).

We have found that the regions differ significantly from each other in terms of IAFL indicators and coefficient of variation, and assumed that the composition of professional qualification groups also differs within the groups of regions. As a result of combining the data on the selected groups and the number of quotas in the professional qualification groups, we found that there is a

<sup>32</sup> The quota for migrants from visa-eligible countries has been increased 1.5 times. RBK. Available at: <https://www.rbc.ru/economics/06/12/2024/67534adf9a7947502f17cc80> (accessed: 16.09.2025).

statistically significant relationship between the variables under consideration (chi-square criterion – 75877.017<sup>a</sup>, degrees of freedom – 42, asymptotic significance (two-sided) – 0.000). The assessment of the strength of the connection confirms the existence of a connection, but the strength of the connection between the variables is insignificant (Phi – 0.290, approximate significance – 0.000; Cramer's V – 0.168, approximate significance – 0.000).

When analyzing the quota distribution structure by professional qualification groups within the groups of regions, some differences become noticeable (*Tab. 2*). For instance, in the first group of regions, the largest shares of quotas fall on workers employed in mining, capital mining, construction, installation and repair work (30.6%) and other professionally qualified groups (17.6%). A special feature of these regions is the higher proportion of heads of institutions, organizations and enterprises and their structural divisions (9.9%, while in other groups the proportion ranges from 4.6 to 6.2%). This may indicate that there is a large proportion of foreign companies in these territories that prefer to hire compatriots for these positions (Komarovskiy, 2021). Another difference between this group of regions is a significantly lower proportion of other professions of skilled workers in large and small industrial enterprises – 7.2%, while in other groups it ranges from 19.9 to 30.5%.

In the second group of regions, mining and construction workers account for the largest shares of quotas (28.7%), other professions of skilled workers in large and small industrial enterprises (21.6%), as well as other professionally qualified groups (16.7%).

Other skilled workers in industrial enterprises (30.5%), workers engaged in mining, capital mining, construction, installation and repair work (16.1%), and operators, apparatchiks, machinists and assemblers of stationary equipment (7.9%) are among the top three in terms of shares in the 3rd a

Table 2. Distribution of professional qualification groups within regional groups \*, 2017–2024, %

Name of the professional qualification group / group of the subject	Group 1 (low IAFL combined with low coefficient of variation)	Group 2 (low IAFL combined with high coefficient of variation)	Group 3 (high IAFL combined with low coefficient of variation)	Group 4 (high IAFL combined with high coefficient of variation)
Drivers and machinists of mobile equipment	1.9	1.4	1.5	2.3
Other professions of skilled workers in large and small industrial enterprises	7.2	21.6	30.5	19.9
Other professional qualification groups	17.6	16.7	5.8	5.7
Qualified workers in commercial agricultural production, forestry and hunting, fish farming and fishing, with a market orientation	1.9	3.2	2.3	2.8
Unskilled workers, common to all sectors of the economy	2.6	2.2	3.7	2.6
Operators, apparatchiks and machinists of industrial installations	0.9	0.5	3.6	1.6
Operators, apparatchiks, machinists and assemblers of stationary equipment	5.8	4.4	7.9	9.1
Sellers, product demonstrators, models, and clothing demonstrators	0.0	1.1	2.4	0.2
Employees in the field of individual services and protection of citizens and property	7.2	3.4	5.1	2.5
Workers in the metalworking and machine-building industries	6.4	5.2	5.2	9.8
Workers engaged in mining, capital mining, construction, installation, repair and construction work	30.6	28.7	16.1	32.2
Heads of institutions, organizations and enterprises and their structural divisions (services)	9.9	6.2	4.6	4.7
Specialists in the field of natural sciences and engineering	3.0	2.3	1.1	2.6
Mid-level specialists in physical and engineering fields of activity	2.9	1.0	1.2	2.0
Mid-level staff in the field of financial, economic, administrative and social activities	1.9%	2.0%	8.8%	1.8%
* 100% by column. Source: own compilation.				

group of regions. A special feature of this group of regions is a very small, but still larger share of sales quotas than in other groups of subjects (2.4%, in the rest from 0 to 1.1%) and average staff in the field of financial, economic, administrative and social activities (8.8% vs 1.8–2.0%, respectively).

The 4th group of subjects is characterized by quotas in the mining and construction sector (32.2%), for the category of skilled workers of large and small industrial enterprises (19.9%), workers in the metalworking and machine-building industries (9.8%), as well as operators, apparatchiks,

machinists and fitters assembling stationary equipment (9.1%). This is due to the fact that some of the regions represented actively employ foreign workers to implement major investment projects, such as the Power of Siberia gas pipeline, the Amur Gas Chemical and Amur Gas Processing complexes, the gas processing and gas chemical cluster in the village of Ust-Luga, etc.<sup>33</sup>

<sup>33</sup> The Ministry of Labor revealed the highest salaries of migrants. What positions attract qualified personnel from abroad. RBK. Available at <https://www.rbc.ru/economics/16/12/2024/675c11489a79475d38c7ef0e> (accessed: 16.09.2025).

Table 3 shows which regions receive the majority of migrants of each qualification. The corresponding analysis shows that the 4th and 3rd groups of regions are “dragging over” the bulk of all quotas. In group 4, almost all professional groups have high shares. Representatives of the service sector account for the least quotas here, namely sellers (20.7%) and average staff in the field of financial, economic, administrative and social activities (43.6%), while in the 3rd group, on the contrary, a focus on the

service sector becomes noticeable (72.3% of all sellers, product demonstrators, models and clothing demonstrators, and almost half (43.6%) of the total average staff in the field of financial, economic, administrative and social activities).

The 1st and 2nd groups of regions show low shares in all professional qualification groups, which may be due to low values in terms of the intensity of attracting foreign labor in general.

Table 3. Distribution of professional qualification groups by region groups\*, 2017–2024, %

Name of the professional qualification group / group of the subject	Group 1 (low IAFL combined with low coefficient of variation)	Group 2 (low IAFL combined with high coefficient of variation)	Group 3 (high IAFL combined with low coefficient of variation)	Group 4 (high IAFL combined with high coefficient of variation)
Drivers and machinists of mobile equipment	0.4	2.8	14.1	82.7
Other professions of skilled workers in large and small industrial enterprises	0.1	4.2	26.9	68.8
Other professional qualification groups	1.2	11.5	18.0	69.3
Qualified workers in commercial agricultural production, forestry and hunting, fish farming and fishing, with a market orientation	0.3	5.0	16.0	78.7
Unskilled workers, common to all sectors of the economy	0.4	3.4	25.7	70.5
Operators, apparatchiks and machinists of industrial installations	0.2	1.2	35.7	62.8
Operators, apparatchiks, machinists and assemblers of stationary equipment	0.3	2.2	17.7	79.8
Sellers, product demonstrators, models, and clothing demonstrators	0.0	7.1	72.3	20.7
Employees in the field of individual services and protection of citizens and property	1.0	4.8	32.3	61.9
Workers in the metalworking and machine-building industries	0.3	2.5	11.6	85.5
Workers engaged in mining, capital mining, construction, installation, repair and construction work	0.5	4.3	10.8	84.5
Heads of institutions, organizations and enterprises and their structural divisions (services)	0.9	5.6	18.5	75.0
Specialists in the field of natural sciences and engineering	0.6	4.2	8.8	86.4
Mid-level specialists in physical and engineering fields of activity	0.7	2.4	13.0	83.9
Mid-level staff in the field of financial, economic, administrative and social activities	0.3	2.6	53.5	43.6
* 100% per line. Source: own compilation.				

### Discussion and conclusions

The analysis confirmed the presence of spatial heterogeneity in the need for foreign labor in the regions within the quota system. A comparative analysis of the quota structure by occupational qualification groups within each typological group confirmed a statistically significant relationship between the type of region and the composition of required professions. In this context, it is important to add that the foreign labor force acts as a tool to fill the personnel deficit, and is also a mechanism for adapting to modern challenges of labor demand.

The 1st group includes regions with low and stable demand for foreign labor. The main volume of quotas here falls on mining and construction professions and other professional qualification groups. A distinctive feature is the relatively high proportion of managers in the quota structure and the minimal participation of industrial workers. The 2nd group of regions includes subjects in which there is a low demand for foreign labor combined with a changing number of quotas from year to year. Here, foreign workers are most often employed in the construction and industrial sectors. The regularity of quotas in the face of external shocks indicates the existence of proven mechanisms for the use of migrant labor, although their contribution to the economy remains insignificant. It is possible that patent migrants or internal labor migrants, including shift workers and pendulum labor migrants, are used in the 1st and 2nd group of regions as a tool to fill the deficit in regional labor markets.

The 3rd group includes those regions where there is a high intensity of attracting foreign labor and there is a steady demand for such workers. It is noteworthy that there is a greater participation of representatives of the service sector and administrative middle staff than in other groups of

regions, which indicates an expansion of migration demand beyond the exclusively manufacturing sectors. High intensity, but occasional demand for foreign labor is typical for the 4th group of regions. This includes large industrial, metropolitan and northern territories involved in large-scale infrastructure projects. These regions accumulate a significant share of all quotas for almost all professional groups, with the exception of the service sector.

Thus, the quota system is a kind of reflection of the structural needs of the regional economy for personnel with specific competencies. In turn, insufficient attention to the migration processes of visa foreigners does not allow its effective use in solving issues on the labor market, despite the fact that it allows you to manage the quality of the workforce. It is important to note that it is the quota system that is formed according to the stated needs of employers and provides for a preliminary assessment of qualifications, allowing better management of the qualification profile of foreign workers and making the labor market more controlled compared to the patent system. Foreign specialists attracted by the quota are requested for the specific needs of the region in advance, and it is impossible to replace them promptly, unlike those who work under a patent. In addition, the quota of foreign labor becomes part of government long-term planning, since its involvement is taken into account when drafting relevant regulatory documents long before arrival in Russia. In the era of active reform of migration legislation, the results obtained in the article will allow paying attention to the issue of quotas for foreign labor, which can later be used in legislative initiatives in the field of labor market development and migration regulation.

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## Education as a Driver of Demographic Transition for Urban and Rural Populations in Post-Soviet Russia



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**Abstract.** Education is one of the most important factors determining the demographic transition to an equilibrium state of low fertility. Demographic transition is expressed in the tendency for demographic indicators to converge globally. This is often realized as a sequence of local equilibria, when countries and regions form convergence clubs. The study used an ordered logistic model and materials from the 1989 and 2020 censuses to estimate the influence of the initial level of education and its growth rate on the formation of regional age-specific fertility convergence clubs of urban and rural populations of post-Soviet Russia. The study confirmed the significant role of education in the demographic transition for urban and rural populations in the age groups of 15–19 and 20–24 years. The influence of education indicators on the formation of regional age-specific fertility convergence clubs is more pronounced and stable than that of factors of matrimonial behavior, ethnic composition, and gender and age structure of the population. Marginal effects of education indicators on the likelihood of regions achieving a local equilibrium in terms of age-specific fertility were assessed. It is shown that the level of education in 1989 and the rate of its growth by 2020 had a significant impact on the formation of regional age-specific fertility convergence clubs of urban and rural populations in post-Soviet Russia. Due to this impact, regions exited high-fertility clubs and anchored in low-fertility clubs.

**Key words:** fertility, education, marginal effects, age-specific fertility rate, urban population, rural population, convergence, ordered logistic model, convergence clubs, demographic transition, regions of Russia, post-Soviet period.

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## Introduction

The ratio between the number of children and the human capital invested in each child is a key parameter of unified growth theory, which models the transition from Malthusian stagnation to sustained growth (Galor, 2011). This typically involves a fertility-education trade-off. The existence of such a trade-off has been demonstrated for diverse societies and historical periods (Ashraf, Galor, 2011; Becker et al., 2010; Qian, 2009; Rosenzweig, Wolpin, 1980). It is indisputably an inherent feature of the demographic transition, which began in developed capitalist countries in the second half of the 19th century and intensified in Russia in the context of post-Soviet socio-economic transformations (Vishnevsky, 2014; Domnich, 2024c).

Another important pattern of the modern demographic transition is the convergence of demographic indicators as different countries and regions reach a shared long-term equilibrium (O'Connell, 1981; Gabrielli et al., 2021; Stadnik, 2023; Domnich, 2024b). This is a long-term, non-linear process involving the overcoming of numerous constraints, often implicit and hard to measure: social, economic, institutional, cultural (Papagni, 2023). Often, demographic convergence, such as fertility levels moving closer, first occurs within small “clubs” – groups of countries (regions) that are similar in some respect and thus capable of reaching local equilibrium relatively quickly (O'Connell, 1981; Dorius, 2008; Strulik, Vollmer, 2013; Nakagaki, 2019). Research on age-specific fertility across the Russian regions has proven that such clubs have also formed in post-Soviet Russia, separately for urban and rural populations (Domnich, 2025).

The link between the formation (or dissolution) of such clubs and education has not been studied previously, which defines the relevance of this research. The study aims to estimate the marginal effects of education as a factor in the formation

and dissolution of regional age-specific fertility convergence clubs in the regions of post-Soviet Russia. The objectives are to synthesize global experience in assessing the demographic effects of education, to justify a relevant methodology for evaluating the link between changes in education levels and the formation (dissolution) of regional fertility convergence clubs, and to apply it to the case of regional age-specific fertility convergence clubs among urban and rural populations in post-Soviet Russia.

The subject of the research is the marginal effects of the level of education on the formation and dissolution of regional age-specific fertility convergence clubs among urban and rural populations. The object of the research is the 79 constituent entities of the Russian Federation from 1990 to 2023<sup>1</sup>.

### Theoretical framework

For half a century, education has maintained a significant negative correlation with fertility in all world regions, except for the most developed countries where the demographic transition was generally completed by the mid-20th century<sup>2</sup> (*Tab. 1*). Often, the effect of education is even more important than the influence of economic factors, such as per capita income growth. During the demographic transition, households are forced to make a trade-off choice, first, between consumption and child-rearing expenditures, and second, within child-rearing expenditures, between the costs of upbringing and education of each child (Rosenzweig, Wolpin, 1980; Martin, 1995;

<sup>1</sup> Moscow, the city of Saint Petersburg, the city of Sevastopol, as well as the republics of Ingushetia, Crimea, and the Chechen Republic, are excluded from the sample.

<sup>2</sup> However, there was a significant negative correlation between the education of a mother and (or) children and the number of children born in Western European countries in the second half of the 19th and the first half of the 20th centuries. It is confirmed in a number of reputable studies (Coale, Watkins, 1986; Galor, Weil, 2000; Brown, Guinnane, 2002; Galor, Moav, 2002; Brown, Guinnane, 2007; Becker et al., 2010).

Table 1. Pearson correlation coefficients between total fertility rate and relevant indicators, 1960–2020

World region	Log of per capita GDP	Expected years of schooling for women	Human Development Index
World	-0.66***	-0.82***	-0.88***
Western Europe and related countries	-0.22***	0.11**	0.10***
Eastern Europe	-0.42***	-0.35***	-0.38***
Latin America and the Caribbean	-0.85***	-0.67***	-0.81***
Arab states	-0.64***	-0.81***	-0.78***
Sub-Saharan Africa	-0.73***	-0.81***	-0.84***
Asia	-0.77***	-0.79***	-0.77***
*** – 1% significance level; ** – 5% significance level. Compiled based on: (Cheng et al., 2022, p. 6).			

Galor, Moav, 2002; Monstad et al., 2008; Becker et al., 2010). The strengthening interconnection between the rate of technological progress and population size as well as its composition accelerated technological progress, laying the foundation for sustained growth. Thus, growth in human capital (education level) can suppress fertility both directly at the household level and indirectly, as a factor increasing per capita gross domestic product (GDP).

In contemporary Russia (2010–2015), women with higher education status have, on average, fewer children than women with lower education. More educated women also, on average, have a higher age at first birth and longer interbirth intervals. Among women completing their reproductive years (real cohorts), the average number of children born is 1.5 for women with higher or incomplete higher education and 1.8 for women with secondary vocational or lower education level (Arkhangelskiy et al., 2019). Thus, Russia currently converges with developing countries in Asia, Africa, and Latin America and replicates the experience of developed nations in terms of the role of education in the demographic transition of Russian society, which intensified during systemic post-Soviet transformations.

However, quantitative convergence in child-bearing intensity across different groups and populations of women is not always the case.

Dynamics of fertility can be divergent or proceed at different speeds, hindering the achievement of global (national) equilibrium (Domnich, 2024a). Education also appears to play an important role here. For example, a regional cohort study across 15 European countries showed that the negative effect of education on fertility is lower in magnitude in the most economically developed regions and among the most educated women (Nisén et al., 2021). Regional and national differences in fertility conditions give rise to numerous local equilibria (convergence clubs), which, up to a certain point, hinder the achievement of a common equilibrium (global or nationwide convergence). The existence of such clubs has been proven using data on total fertility in 190 countries for 1950–2018 (Papagni, 2023), as well as in the regions of post-Soviet Russia for 1990–2023 – using data on age-specific fertility for urban and rural populations (Domnich, 2025). Hence, the demographic transition itself can be understood as a process of sequential formation and dissolution of local clubs of demographic indicators convergence, meaning a transition from one equilibrium state to another (O’Connell, 1981; Gabrielli et al., 2021; Stadnik, 2023).

Therefore, scientific interest lies, first, in identifying the most influential factors securing countries and regions to demographic convergence clubs, and second, in estimating the marginal effects of such factors that either facilitate or hinder a

territory's exit from a specific club. Factors of the demographic transition on a global scale could include the absolute latitude of a country's capital, the percentage of arable land, the mean distance to the nearest waterway, mean annual temperature, mean precipitation, mean elevation, interpersonal genetic diversity of the population, geodesic distance from East Africa (as the presumed cradle of humanity), geodesic distance to the USA, the difference between 2000 CE and the estimated year of the transition from hunting and gathering to a sedentary agricultural economy at a country level, ethnic and religious fractionalization, the Malaria Ecology Index, index of the quality of political institutions, and the Rule of Law Index (Papagni, 2023, pp. 463–465)<sup>3</sup>.

As for the realities of the post-Soviet demographic transition, the role of education, both female and male, is hard to overestimate. As experts note, the process of systemic transformation in Russia was accompanied by a simultaneous devaluation of human capital accumulated in the previous era (Kapeliushnikov, 2005). Naturally, this was reflected in a noticeable increase in the significance and share of education, both as a direction for investing effort and resources and as a lifestyle in general<sup>4</sup>. It is logical to assume that due to unequal and uneven access to educational services across the vast country, the rate of human capital accumulation varied significantly among regions throughout the post-Soviet period, which is also reflected in regional and urban-rural differentiation in fertility levels. Therefore, it is appropriate to examine the regional fertility convergence clubs that formed in post-Soviet Russia in relation to changes in the educational level of the population.

<sup>3</sup> Education factor (schooling, human capital) in the formation and dissolution of fertility convergence country clubs was not considered in relevant studies.

<sup>4</sup> "It is no exaggeration to say that in the first half of the 1990s, the whole country turned into one huge classroom" (Kapeliushnikov, 2005, p. 46).

### **Regional age-specific fertility convergence clubs and education level in Russian regions**

Regional age-specific fertility convergence clubs among urban and rural populations in post-Soviet Russia (1990–2023) were identified using the Phillips-Sul methodology (Phillips, Sul, 2007), which corresponds to the contemporary mainstream approach to identifying such regional groups (Alexiadis et al., 2021; Zhang et al., 2019; Bartkowska, Riedl, 2009; Barrios et al., 2019; Jimenez-Moro et al., 2023; Matysiak, Olszewski, 2019). This involves clustering time series of age-specific fertility so that regions included in a particular club demonstrate a statistically significant tendency toward a common asymptote, which is determined endogenously. It is established that the number of such clubs increases with decreasing age of mothers, and decreases with increasing age of mothers (*Tab. 2*). The type of settlement also matters: the number of convergence clubs is higher in rural areas and lower in urban areas. For younger age groups (15–19 and 20–24), as well as for the rural population aged 25–29, divergent regions were identified that do not belong to any convergence club (which is mathematically justified within the method). A single club can include as few as 2 or as many as 79 regions, consistent with the experience of identifying such clubs among world countries (Papagni, 2023); the composition of clubs differs for age groups and for urban and rural populations<sup>5</sup>.

Regional convergence clubs are numbered ( $C1, \dots, CN$ ) in descending order of the club's average age-specific fertility rate in 2023. While the number of clubs depends on the age group, their composition is largely determined by the type of settlement: convergence of age-specific fertility is more active in urban areas. Thus, in the younger age groups (15–19 and 20–24), regional clubs with the highest average fertility are formed

<sup>5</sup> For the composition of regional age-specific fertility convergence clubs, see (Domnich, 2025).

Table 2. Regional age-specific fertility convergence clubs among urban and rural populations in post-Soviet Russia (1990–2023, 79 regions)

Age of mothers, years	Urban population		Rural population	
	Number of regional clubs	Number of divergent regions	Number of regional clubs	Number of divergent regions
15–19	7	2	6	2
20–24	5	2	6	2
25–29	2	0	5	2
30–34	1	0	2	0
35–39	1	0	1	0
40–44	1	0	1	0

Compiled based on: (Domnich, 2025).

fundamentally differently in cities and villages. In rural areas, they are represented by regions with initially (1990) high fertility, which converge only with each other. In urban settlements, such clubs unite regions whose initial fertility levels range from very high to extremely low. So, fertility among urban youth in traditionally high-fertility regions declined faster during the post-Soviet period than in regions with medium and low fertility, leading to their convergence.

In the 25–29 age group for the urban population, two large regional convergence clubs were identified, uniting 28 and 51 regions, respectively. For the rural population in this age group, 5 convergence clubs were identified. The composition of club *CI*, which in younger rural age groups consisted only of regions with high fertility, is half diluted with regions of medium fertility. Thus, the configuration of clubs in the rural 25–29 group is in an intermediate state between the configurations in the younger rural and urban age groups.

In the 30–34 age group for the urban population, one common convergence club was identified, indicating the achievement of a common (countrywide) equilibrium. For the rural population in this age group, two large regional convergence clubs were identified, uniting 34 and 45 regions, respectively. In older age groups (35–39 and 40–44),

age-specific fertility reached equilibrium at the country level regardless of settlement type, making these groups less interesting in the context of this study<sup>6</sup>.

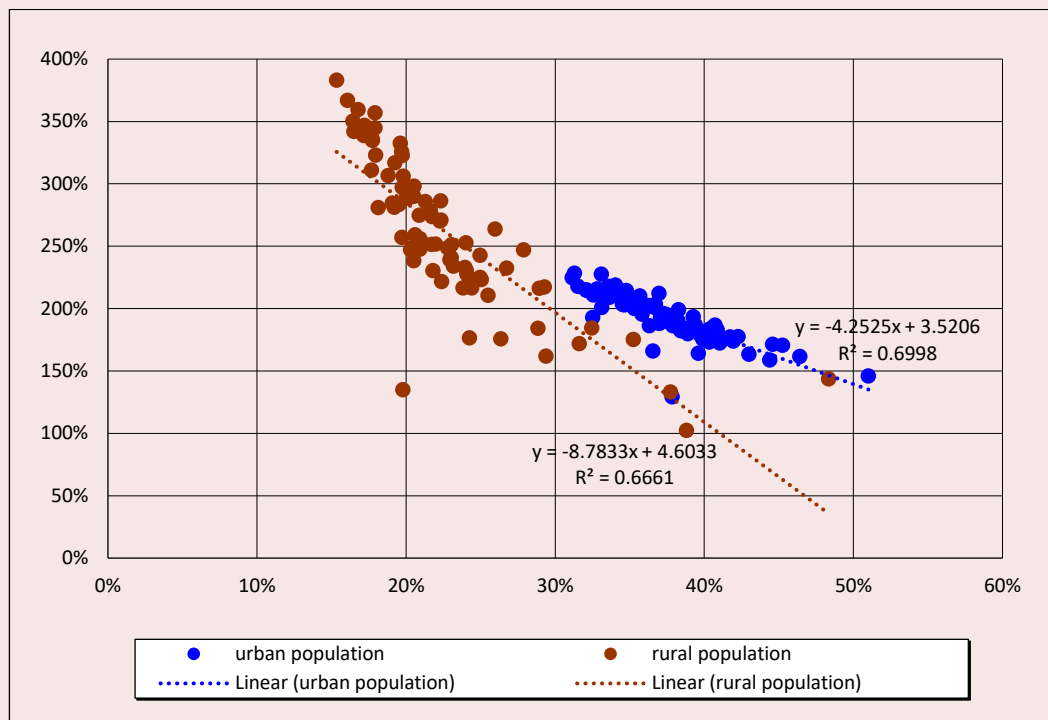
The assessment of the education level of urban and rural populations in the regions of Soviet and post-Soviet Russia can be based on the share of the population with higher, incomplete higher, and secondary vocational education, calculated based on the 1989<sup>7</sup> and 2020<sup>8</sup> population censuses. The following patterns are noteworthy (*Figure*). The initial (1989) education level was, with rare exceptions, higher for the urban population, indicating unequal opportunities for Soviet citizens to develop human capital depending on place of residence. At the same time, the growth rate of the indicator for 2020 relative to 1989 was, on average, higher in rural areas; the slope of the

<sup>6</sup> Regional fertility convergence clubs for the 45–49 age group have not been identified.

<sup>7</sup> Calculated based on: Brief Socio-Demographic Characteristics of the Population of the RSFSR (according to the 1989 All-Union Population Census). Part 1. Population, gender, age, nationalities, marital status, education level. Moscow: Republican Information and Publishing Center of the State Statistics Committee of the RSFSR, 1991, 210 p. Available at: [https://www.statmuseum.ru/ru/results/1989/?section=1989&PAGEN\\_1=1](https://www.statmuseum.ru/ru/results/1989/?section=1989&PAGEN_1=1) (accessed: 07.07.2025).

<sup>8</sup> Calculated based on: The Results of the 2020 All-Russian Population Census. Volume 3. Education. Available at: [https://rosstat.gov.ru/vpn/2020/Tom3\\_Obrazovanie](https://rosstat.gov.ru/vpn/2020/Tom3_Obrazovanie) (accessed: 07.07.2025).

Share of population aged 15 and over with higher, incomplete higher, and secondary vocational education in 1989 (X-axis) and its growth rate to 2020 (Y-axis) in 79 Russian regions, %



Source: own compilation.

corresponding linear trend is twice as steep for the rural population compared to the urban one. During the post-Soviet period, the population of Russian regions was bridging the gaps in education both between regions and between rural and urban populations. Data for rural areas show significantly greater dispersion and differentiation than in cities. Russian villages demonstrate substantially greater diversity in education levels compared to Russian cities.

#### Research methodology and hypotheses

The formation of regional age-specific fertility convergence clubs can be interpreted as the result of the differential impact of various constraints to economic development and demographic transition. Regions belonging to clubs with the highest average fertility ( $C1$ ) face the greatest difficulties in embarking on a path of significant

fertility decline, i.e., exiting this club and joining clubs  $C2, \dots, CN$  (Papagni, 2023, p. 443). As the average fertility in clubs  $C2, \dots, CN$  decreases, the constraints for regions to enter and exit these clubs also diminish.

In line with the mainstream approach to modeling constraints for regions to entry and exit convergence clubs (Zhang et al., 2019; Bartkowska, Riedl, 2009; Barrios et al., 2019; Jimenez-Moro et al., 2023; Matysiak, Olszewski, 2019; Papagni, 2023), the ordinal numbers of regional convergence clubs  $C1, \dots, CN$  within each age group are treated as ordinal nominal variables to be modeled using an ordered logistic model. The model assumes the existence of a continuous latent variable  $y_i^*$  for each region  $i$ , which depends linearly on a vector of independent variables  $X_i$ :

$$y_i^* = X_i\beta + \varepsilon_i.$$

The variable  $y_i^*$  can be interpreted as a certain equilibrium level of fertility determining a region’s gravitation toward one of the convergence clubs. When  $y_i^*$  falls within the range of specific threshold values  $\tau$ , the equilibrium fertility level in region  $i$  determines its membership in convergence club  $j$ :

$$y_i = j, \text{ if } \tau_{j-1} \leq y_i^* < \tau_j, j = 1, \dots, N.$$

Threshold values  $\tau_1, \dots, \tau_{N-1}$  are to be estimated, while  $\tau_0 = -\infty$ , and  $\tau_N = \infty$ . When the variable  $y_i^*$  exceeds threshold  $\tau_j$ , region  $i$  joins club  $j+1$ .

The ordered logistic model is defined as the probabilistic model:

$$\ln \left( \frac{\Pr(y \leq j|X)}{\Pr(y > j|X)} \right) = \tau_j - X\beta, j=1, \dots, N-1.$$

Probabilities of belonging to a specific club are estimated at the mean values of variables  $X$  and are defined as follows:

$$\Pr(y = 1|X) = \frac{e^{\tau_1 - X\beta}}{1 + e^{\tau_1 - X\beta}} \text{ for } j = 1;$$

$$\Pr(y = j|X) = \frac{e^{\tau_1 - X\beta}}{1 + e^{\tau_1 - X\beta}} - \frac{e^{\tau_{j-1} - X\beta}}{1 + e^{\tau_{j-1} - X\beta}} \text{ for } j = 2, \dots, N - 1;$$

$$\Pr(y = N|X) = 1 - \frac{e^{\tau_{N-1} - X\beta}}{1 + e^{\tau_{N-1} - X\beta}} \text{ for } j = N.$$

Significant positive values of coefficients  $\beta$  in this model mean that a region with a larger value of  $X_i$  is, on average, located in a club with a higher ordinal number  $j$  (i.e., with lower average fertility). If a significant coefficient has a negative sign, an increase in  $X_i$  statistically significantly reduces  $j$  and the region enters a club with higher average fertility.

To assess how much certain variables determine regional membership in a specific club, the marginal values of predicted probabilities (marginal effects) are also evaluated. Marginal effects estimate how the probability of club membership changes when an independent variable changes by one unit, while all other variables are fixed at their sample mean values. Thus, positive marginal effects help a region

“consolidate” in a particular club, while negative effects allow a region to leave it. In accordance with the research objectives, we are primarily interested in the marginal effects of variables measuring education levels.

The vector of independent variables  $X_i$  for modeling convergence clubs is typically formed to reflect both initial conditions and the direction (rate) of development of vector  $y_i$  (Zhang et al., 2019; Bartkowska, Riedl, 2009; Matysiak, Olszewski, 2019). Therefore, the education factor is represented by two variables in our model: the share of the population aged 15 and over with higher, incomplete higher, and secondary vocational education in 1989 (*obraz\_89*) and its growth rate to 2020 (*gr\_obraz*)<sup>9</sup>.

Demographers identify numerous social, economic, and demographic factors influencing fertility levels. The 1989 census reflects only a small part of them. Among these, changes in matrimonial behavior (Klupt, 2014; Zhuravleva, Gavrilova, 2017; Alekhin, 2023) and the ethnic composition of the population (Trynov et al., 2020; Vakulenko et al., 2023) appear to be the most important for demographic development over three decades. Accordingly, changes in matrimonial behavior are considered using the share of persons aged 16 and over who have never been married in 1989 (*single\_89*)<sup>10</sup> and its growth rate to 2020 (*gr\_single*)<sup>11</sup>, while changes in the

<sup>9</sup> All variables are calculated separately for urban and rural populations.

<sup>10</sup> Calculated based on: Brief Socio-Demographic Characteristics of the Population of the RSFSR (according to the 1989 All-Union Population Census). Part 1. Population, gender, age, nationalities, marital status, education level. Moscow: Republican Information and Publishing Center of the State Statistics Committee of the RSFSR, 1991, 210 p. Available at: [https://www.statmuseum.ru/ru/results/1989/?section=1989&PAGEN\\_1=1](https://www.statmuseum.ru/ru/results/1989/?section=1989&PAGEN_1=1) (accessed: 07.07.2025).

<sup>11</sup> Calculated based on: The Results of the 2020 All-Russian Population Census. Volume 2. Gender and age composition and marital status. Available at: [https://rosstat.gov.ru/vpn/2020/Tom2\\_Vozrastno\\_polovoj\\_sostav\\_i\\_sostoyanie\\_v\\_brake](https://rosstat.gov.ru/vpn/2020/Tom2_Vozrastno_polovoj_sostav_i_sostoyanie_v_brake) (accessed: 07.07.2025).

ethnic composition are evaluated using the share of Eastern Slavs (Russians, Ukrainians, Belarusians) in the total population in 1989 (*slav\_89*)<sup>12</sup> and its growth rate to 2020 (*gr\_slav*)<sup>13</sup>. Changes in the gender and age structure of the population are evaluated using the share of women in the corresponding age group in the total population in 1990 (*women\_90*) and its growth rate to 2020 (*gr\_women*)<sup>14</sup>.

Descriptive statistics for the variables used are presented in *Table 3*. It can be concluded that the average level of all initial (1989) indicators is systematically higher for the urban population, but its growth rate is always higher for the population living in rural areas. Means and medians differ slightly with moderate standard deviation, indicating that the distribution of independent variables is close to normal.

Table 3. Descriptive statistics of independent variables, %

Variable	Population	Gender	Age, years	Mean	Median	Std. Dev.	Min	Max
<i>obraz_1989</i>	urban	both	15+	37.4	37.1	3.8	31.1	51.0
<i>gr_obraz</i>	urban	both	15+	193.0	193.2	19.1	129.4	228.4
<i>obraz_1989</i>	rural	both	15+	22.7	21.6	5.5	15.3	48.3
<i>gr_obraz</i>	rural	both	15+	260.6	256.3	59.3	102.5	383.1
<i>single_1989</i>	urban	both	16+	16.9	16.3	2.1	12.4	23.5
<i>gr_single</i>	urban	both	16+	111.3	108.8	13.4	85.2	173.7
<i>single_1989</i>	rural	both	16+	15.3	14.5	3.2	9.8	27.3
<i>gr_single</i>	rural	both	16+	131.3	128.4	19.3	103.5	207.5
<i>slav_1989</i>	urban	both	0+	86.3	93.2	16.8	19.0	98.9
<i>gr_slav</i>	urban	both	0+	94.2	99.0	14.9	26.7	113.1
<i>slav_1989</i>	rural	both	0+	74.9	87.1	27.3	2.5	99.3
<i>gr_slav</i>	rural	both	0+	96.2	99.2	18.6	28.4	136.2
<i>women_90</i>	urban	fem./both	15–19	3.7	3.7	0.5	2.5	6.5
<i>gr_women</i>	urban	fem./both	15–19	71.9	70.0	10.9	57.6	115.3
<i>women_90</i>	urban	fem./both	20–24	3.3	3.3	0.4	2.6	4.5
<i>gr_women</i>	urban	fem./both	20–24	72.9	71.4	8.4	55.7	96.0
<i>women_90</i>	urban	fem./both	25–29	4.3	4.1	0.5	3.4	6.2
<i>gr_women</i>	urban	fem./both	25–29	61.2	60.4	7.8	43.1	90.0
<i>women_90</i>	rural	fem./both	15–19	2.6	2.6	0.5	1.9	4.8
<i>gr_women</i>	rural	fem./both	15–19	99.3	99.4	14.4	67.7	161.3
<i>women_90</i>	rural	fem./both	20–24	2.8	2.7	0.4	2.0	4.4
<i>gr_women</i>	rural	fem./both	20–24	79.5	80.0	10.9	44.9	99.8
<i>women_90</i>	rural	fem./both	25–29	3.7	3.7	0.7	2.5	6.2
<i>gr_women</i>	rural	fem./both	25–29	60.7	61.6	12.6	30.5	91.4
<i>women_90</i>	rural	fem./both	30–34	3.9	3.8	0.7	2.6	6.2
<i>gr_women</i>	rural	fem./both	30–34	80.6	78.5	18.6	29.4	127.3

Source: own calculation.

<sup>12</sup> Calculated based on: The National Composition of the RSFSR Population. According to the 1989 All-Union Population Census, Moscow: Republican Information and Publishing Center of the State Statistics Committee of the RSFSR, 1990, 747 p. Available at: [https://www.statmuseum.ru/ru/results/1989/?section=1989&PAGEN\\_1=1](https://www.statmuseum.ru/ru/results/1989/?section=1989&PAGEN_1=1) (accessed: 07.07.2025).

<sup>13</sup> Calculated based on: The Results of the 2020 All-Russian Population Census. Volume 5. Nationality and language. Available at: [https://rosstat.gov.ru/vpn/2020/Tom5\\_Nacionalnyj\\_sostav\\_i\\_vladenie\\_yazykami](https://rosstat.gov.ru/vpn/2020/Tom5_Nacionalnyj_sostav_i_vladenie_yazykami) (accessed: 07.07.2025).

<sup>14</sup> Calculated based on: Calculated based on: The number of resident female population by age as of January 1. Available at: <https://www.fedstat.ru/indicator/33459> (accessed: 01.07.2025).

The variance inflation factor (VIF) estimate, showing how much the variance of estimated coefficients increases due to independent variables multicollinearity, indicated that parameter values in all equations do not exceed 3–3.5, which is three-fold lower than the threshold level. Due to potential heteroskedasticity of residuals, robust variance estimates obtained using the Huber – White method (Huber, 1967; White, 1980) were used. Thus, the model coefficient estimates can be considered sufficiently reliable. The research strategy included estimating  $\beta$  coefficients for ordered logistic regression with education variables only (1) and with the full set of variables (2), as well as calculating marginal effects of education variables for the model with the full set.

The presented data on regional age-specific fertility convergence clubs and methodology characteristics allow formulating four working hypotheses.

*H1.* Indicators of education level are significant and positive factors of the demographic transition in terms of moving regions from clubs with relatively high average fertility to clubs with relatively low average fertility.

*H2.* Indicators of education level are more important for the demographic transition of women in younger age groups (15–19 and 20–24) than those in middle age groups (25–29 and 30–34).

*H3.* For the demographic transition in urban areas, the initial (1989) level of education is more important than its growth rate to 2020, whereas in rural areas, the growth rate of education level to 2020 is more important than its initial level in 1989.

*H4.* The marginal effects of education indicators are directed, on the one hand, at overcoming the constraints of regional convergence clubs with the highest values of age-specific fertility, and on the other, at consolidating membership in clubs with the lowest values of age-specific fertility.

Calculation results for the urban population are presented in *Tables 4 and 5*, and for the rural population they are in *Tables 6 and 7*.

### Research results

The calculations confirmed a statistically significant positive relationship between education indicators for both urban and rural populations and the latent variable  $y_i^*$ . The slightly differing estimates of  $\beta$  coefficients in specifications (1) and (2) indicate the robustness of education effects (*Tables 4 and 6*). Education indeed facilitates overcoming constraints or thresholds for transitioning from regional clubs with relatively high fertility to regional clubs with relatively low fertility, confirming hypothesis *H1*. Notably, the study did not identify a single statistically significant negative coefficient for the influence of education indicators on the dependent variable.

The effects of education are most pronounced in the younger age groups (15–19 and 20–24), also confirming hypothesis *H2*. In the younger age groups of the urban population, education indicators are the key predictors of the demographic transition, while most control variables do not have a significant influence on the reproductive behavior of young urban women. Exceptions are the growth rate of the share of never-married persons and the growth rate of the Slavic population share, which have a significant negative (restraining) influence on the demographic transition of the urban population aged 15–19. In the 15–19 age group of the rural population, education indicators stimulating the demographic transition are opposed by almost all control variables, which have a statistically significant and negative influence on the demographic transition variable<sup>15</sup>. An increase in the initial (1989) level of the share of never-married persons, the share of the Slavic population,

<sup>15</sup> Except for the growth rate of the share of never-married persons.

and the share of women aged 15–19 in the total population, as well as the growth rates of the latter two indicators, creates constraints in rural areas on regions transition to clubs with lower fertility.

Table 4. The impact of education on the intensity of demographic transition for the urban population of post-Soviet Russia

Age, years	15–19		20–24		25–29	
	(1)	(2)	(1)	(2)	(1)	(2)
<i>obraz_89</i>	51.914***	56.929***	28.011**	37.524**	-14.919	-11.581
<i>gr_obraz</i>	15.559***	16.072***	10.179***	12.054***	-1.279	0.128
<i>single_89</i>	-	-5.776	-	7.030	-	-7.462
<i>gr_single</i>	-	-8.301***	-	0.035	-	-0.280
<i>slav_89</i>	-	0.700	-	4.366	-	0.017
<i>gr_slav</i>	-	-8.703**	-	1.566	-	5.623**
<i>women_90</i>	-	-54.687	-	162.347	-	104.346
<i>gr_women</i>	-	-2.939	-	0.866	-	17.951***
$\tau_1$	48.283***	28.937***	29.179***	48.848***	-8.667	14.319
$\tau_2$	49.754***	30.634***	31.847***	51.631***	-	-
$\tau_3$	50.278***	31.224***	33.080***	52.866***	-	-
$\tau_4$	51.508***	32.565***	34.243***	54.041***	-	-
$\tau_5$	53.040***	34.190***	-	-	-	-
$\tau_6$	53.827***	35.008***	-	-	-	-
Number of observations	77	77	77	77	79	79
Wald $\chi^2$	20.59***	49.86***	19.67***	24.48***	2.03	15.38**
Pseudo $R^2$	0.116	0.172	0.105	0.136	0.025	0.152
*** – 1% significance level; ** – 5% significance level; * – 10% significance level. Source: own calculation.						

Table 5. Marginal effects of education on the intensity of demographic transition for the urban population of post-Soviet Russia

Age, years	15–19		20–24		25–29	
	<i>obraz_89</i>	<i>gr_obraz</i>	<i>obraz_89</i>	<i>gr_obraz</i>	<i>obraz_89</i>	<i>gr_obraz</i>
Club number						
1	-7.044***	-1.989***	-5.943**	-1.909***	2.169	-0.024
2	-2.708**	-0.764**	0.751	0.241	-2.169	0.024
3	0.324	0.091	2.706**	0.869***	-	-
4	2.986**	0.843***	1.533	0.493*	-	-
5	3.825***	1.080***	0.953	0.306	-	-
6	1.192	0.336	-	-	-	-
7	1.425	0.402	-	-	-	-
*** – 1% significance level; ** – 5% significance level; * – 10% significance level. Source: own calculation.						

The identified urban-rural differences in the set of significant regressors in the 15–19 group can be explained by different principles of formation of regional fertility convergence clubs in this age group in cities and villages. While the trajectory of descent of urban population fertility in the most fertile regions often converges with the fertility of much less fertile regions, in rural areas several territories with the highest fertility converge only with each other, forming small clubs with only a few regions. Convergence of age-specific fertility trajectories in urban areas between regions with initially high and low fertility is already achieved in club *C1*, whereas in rural areas, mass regional convergence of age-specific fertility is observed only in clubs *C3*, *C4*, and *C5*, which mainly consist of regions with initially medium and low fertility. Considering that regions with initially high fertility are mainly national republics, it is natural that factors related to matrimonial behavior, ethnic composition, and the gender and age structure are significant in a region's transition from one club to another.

For both urban and rural populations in younger age groups, the effect of the initial education level (1989) exceeds the effect of its growth to 2020 several-fold; thus, hypothesis *H3* was only partially confirmed.

In middle age groups (25–29 and 30–34), education as a factor of demographic transition has substantially less significance compared to control variables, as indicated by the low pseudo  $R^2$  value in specification (1) for these age groups, as well as the general insignificance of equation (1) by the Wald criterion for the urban population in the 25–29 group and for the rural population in the 30–34 group. It can be concluded that education, on average, ceases to influence fertility after the age when young people typically complete higher education. This established fact is consistent with the result obtained from data on real cohorts of women, that more educated Russian women have a

higher age at first birth (Arkhangelskiy et al., 2019). An important exception here is the influence of the initial (1989) education level on the demographic transition of the rural population in the 30–34 group; not as large as in younger age groups, but statistically significant. It can be cautiously suggested that in this case we are dealing with an echo of unequal access to education in Soviet times, as well as rural-urban migration, where former rural women became mothers after moving to cities.

The different role of education in the demographic transition of urban and rural populations are most clearly manifested in the marginal effects of education indicators. Here, the contribution of the factor within each club can be traced. The estimated marginal effects of education showed that education indicators statistically significantly help regions leave the convergence club with the highest values of average age-specific fertility and consolidate membership in clubs with the lowest values of age-specific fertility (Tables 5 and 7). This confirms hypothesis *H4*.

In the 15–19 urban age group, both the indicator of the initial (1989) education level and its growth rate to 2020 exert a statistically significant negative effect on the probability of regions membership in clubs *C1* and *C2* and a statistically significant positive effect on the probability of their membership in clubs *C4* and *C5*. For the rural population of the same group, education indicators statistically significantly “push” regions out of clubs *C1* and *C3* and “consolidate” them in clubs *C5* and *C6*.

In the 20–24 group, both the initial education level and its growth rate continue to influence the demographic transition of the urban population; they allow regions to leave club *C1* and consolidate in club *C3*. In rural areas, only the growth rate of the education level has a stable influence on the movement of regions between clubs. It helps leave clubs *C2* and *C3* and join club *C5*.

Table 6. The impact of education on the intensity of demographic transition for the rural population of post-Soviet Russia

Age	15–19		20–24		25–29		30–34	
Specifications	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
<i>obraz_89</i>	22.339***	25.070***	11.800*	15.328*	0.741	2.421	3.385*	2.431**
<i>gr_obraz</i>	3.656***	3.018***	2.891***	3.205***	1.230***	0.977	0.740	0.995
<i>single_89</i>	-	-46.233**	-	-25.196*	-	-16.903	-	-48.148
<i>gr_single</i>	-	-3.759	-	-1.648	-	0.084	-	3.135*
<i>slav_89</i>	-	-5.807***	-	1.056	-	2.003	-	-2.325
<i>gr_slav</i>	-	-7.146***	-	-1.773	-	1.000	-	-6.920
<i>women_90</i>	-	-372.450***	-	30.710	-	60.297	-	-250.783**
<i>gr_women</i>	-	-8.500***	-	2.081	-	12.085***	-	4.972
$\tau_1$	12.688***	-30.333***	5.717***	2.483	0.841	9.273	2.412	-8.605
$\tau_2$	12.915***	-30.008***	7.322***	4.208	3.098	12.369	-	-
$\tau_3$	14.299***	-28.196***	9.686***	6.833	4.250	13.985	-	-
$\tau_4$	16.159***	-25.976***	10.769***	8.047	4.385	14.154	-	-
$\tau_5$	18.899***	-22.795***	14.436***	12.024	-	-	-	-
Number of observations	77	77	77	77	77	77	79	79
Wald $\chi^2$	20.53***	34.21***	30.89***	27.67***	16.92***	39.11***	1.55	15.58**
Pseudo $R^2$	0.128	0.241	0.131	0.183	0.054	0.221	0.016	0.461

\*\*\* – 1% significance level; \*\* – 5% significance level; \* – 10% significance level.  
Source: own calculation.

Table 7. Marginal effects of education on the intensity of demographic transition for the rural population of post-Soviet Russia

Age	15–19		20–24		25–29		30–34	
Club number	<i>obraz_89</i>	<i>gr_obraz</i>	<i>obraz_89</i>	<i>gr_obraz</i>	<i>obraz_89</i>	<i>gr_obraz</i>	<i>obraz_89</i>	<i>gr_obraz</i>
1	-2.300***	-0.277***	-0.316	-0.066	-0.152	-0.061	-3.438**	-0.116
2	-0.257	-0.031	-0.690*	-0.144**	-0.238	-0.096	3.438**	0.116
3	-1.023**	-0.123**	-1.500	-0.314***	0.061	0.025	-	-
4	0.554	0.067	-0.001	0.000	0.013	0.005	-	-
5	2.403***	0.289***	2.120	0.443***	0.315	0.127	-	-
6	0.624*	0.075*	0.387	0.081	-	-	-	-

\*\*\* – 1% significance level; \*\* – 5% significance level; \* – 10% significance level.  
Source: own calculation.

In the 25–29 age group, the used education indicators are not significant factors for the movement of regions between clubs for either urban or rural populations.

The peculiarity of the 30–34 rural age group is manifested, first, in the presence of two large regional age-specific fertility

convergence clubs (see Tab. 2), and second, in the significant influence of the initial (1989) education level on regional membership in both the first and second club. An increase in the indicator statistically significantly forces a region to leave the first club (*C1*) and remain in the second (*C2*).

### Conclusions and research limitations

The trade-off between the quantity and quality of children is one of the most fundamental in nature (Becker et al., 2010, p. 180). Therefore, the education level of parents and their children is rightly considered one of the key determinants of fertility levels. This negative relationship for most countries defines the essence of the modern demographic transition. The demographic transition itself manifests in the spatial convergence of key demographic indicators. Global fertility convergence is realized in stages, through a sequence of local equilibria, also known as convergence clubs (regional and national). The study proposes a methodology and obtains quantitative estimates of the influence of the initial education level and its rate of change on the formation of regional age-specific fertility convergence clubs among urban and rural populations in post-Soviet Russia.

The proposed methodology has drawbacks. First, the time frame of the study (from the early 1990s to the 2020s) covers several periods of fertility increase and decline. This is due to the prior identification of regional age-specific fertility convergence clubs over the entire post-Soviet period (1990–2023, see Domnich, 2025), on which this study was based. For a better understanding of the relationship between education and demographic development, future research should split the time frame into shorter intervals.

The statistical data used are imperfect due to the need to ensure comparability of indicators obtained from the 1989 and 2020 censuses. As a result, the time frames of  $y_i$  (1990–2023) and  $X_i$  (1989 and 2020) do not fully coincide, and the list of control variables is strongly bounded. Moreover, the 1989 census did not disaggregate population education data by gender and age, depriving us of the opportunity to assess the demographic effects specifically of female education. These shortcomings define the potential for future research.

The study confirmed the significant role of education in the demographic transition for urban and rural populations in the 15–19 and 20–24 age groups. The influence of education indicators on the formation of regional age-specific fertility convergence clubs is more pronounced and stable than that of factors related to matrimonial behavior, ethnic composition, and the gender and age structure. At the same time, the effect of the initial (1989) education level exceeds several-fold the influence of its growth rate to 2020, which generally underlines the decisive role of initial conditions for the demographic development of regions in post-Soviet Russia.

In the youngest age group, 15–19, the initial education level and its growth rate to 2020 among both urban and rural populations facilitate the transition of regions from high-fertility clubs to low-fertility clubs. In the 20–24 group, both the initial education level and its growth rate continue to influence the demographic transition of the urban population. In rural areas, only the growth rate of education level has a stable influence on the movement of regions between clubs. In the 25–29 group, the used education indicators are not significant factors for the movement of regions between clubs for either urban or rural populations. In the 30–34 group, the initial education level of the rural population determines a region's membership in one of the two convergence clubs.

The author's contribution to the development of the topic lies in adapting econometric tools, obtaining consistent estimates of the influence of education indicators on the demographic transition for urban and rural populations in post-Soviet Russia, and providing their substantive interpretation.

The findings provide many opportunities for further demographic and economic investigations in this area. Two general directions can be indicated: refining the age and space-time characteristics of mother categories serving as turning points in

the nature of the relationship between education level and fertility, and identifying and assessing the influence of additional threshold factors for the entry and/or exit of regions from convergence clubs. The study contributes to the development of unified growth theory and the study of long-term trends in age-specific fertility change in post-Soviet Russia.

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## Resources for Growth: Young People Outside Employment and Education



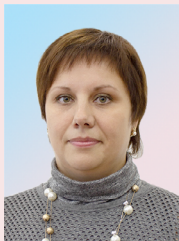
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**Abstract.** The Russian economy is experiencing an acute shortage of labor resources, which brings to the forefront the issue of seeking alternative sources for their replenishment. At the same time, both in Russia and abroad, a group of young people aged 15–24 who are not in education, employment, or training (NEET youth) has emerged. The need to study this group stems not only from exacerbated demographic problems but also from the risk of its further expansion, which may in the future negatively impact many socio-economic processes. The aim of the work is to assess the scale of NEET youth prevalence in Russian society, identify its characteristics, and substantiate recommendations of a tactical and strategic nature aimed at addressing the problem under study. Through an analysis of works by a number of foreign and Russian scholars, analytical materials from the International Labour Organization, as well as international and Russian statistics, it is substantiated that the NEET youth problem is highly relevant; the scale and features of NEET youth prevalence in Russia, including regional and gender dimensions, are identified. An empirical study of the characteristics and problems of NEET youth in the Russian Federation was conducted involving experts and determining mathematical relationships. This made it possible to clarify the structure of the NEET youth group in Russia, the main reasons for its formation, and to prove the degree of influence of the identified causes on the problem under study, as well as to assess the consequences of NEET youth prevalence for the domestic economy and forecast the size of this group in the medium term. Based on the study results, a list of tactical and strategic measures is substantiated, aimed at solving this problem and integrating NEET youth into the process of social reproduction. The scientific contribution of the study lies in the development of a methodological approach to assessing the extent of the spread of NEET youth in the Russian economy, based on a comprehensive analysis using statistical analysis and expert survey methods.

**Key words:** labor market, labor potential, NEET youth, Russian economy.

### Introduction

The global socio-economic system is currently in a state of profound transformation due to the fourth industrial revolution, which is a consequence of the high pace of scientific and technological progress, the introduction of its results into all spheres of society, primarily Internet technologies and artificial intelligence. Schwab noted: “We are at the origins of a revolution that will fundamentally change our lives, our work and our communication... The nature of the changes taking place is so fundamental that world history has not yet known such an epoch – a time of both great opportunities and potential dangers” (Schwab, 2016). The concerns expressed by K. Schwab are not unfounded. For instance, along with the obvious advantages, the most pronounced destructive consequences of the ongoing transformations are the degradation of democracy and the weakening

of statehood, a fundamental change in the model of the world order, the regression of spiritual values of society, the growing socio-economic crisis, projected on the production and institutional aspects of the economic system, including significantly transforming social and labor relations.

The social and labor sphere, which covers the entire set of social and labor relations, according to experts of the International Labor Organization (ILO), is also influenced by these negative processes. The report on global employment and social prospects for 2024, presented by ILO experts, notes the persistence of instability in the social and labor sphere worldwide, increasing inequality, with special emphasis on the problems of youth in this area. Currently, the effects of the COVID-19 pandemic remain completely insurmountable for the labor market and the employment sector.

Among the most acute problems of the social and labor sphere on global scale, experts note the following<sup>1</sup>:

- low labor productivity, which persists despite the high rates of technological renewal of production, which acts as a significant barrier to further economic growth;
- aggravation of income inequality, including labor inequality, as well as aggravation of the problem of the working poor;
- low rates of job creation with decent working conditions;
- persistence of the problem of informal employment in most countries of the world, as well as an increasing proportion of young people involved in informal labor relations;
- gender inequality in employment prospects, career growth, and labor income;
- updating the problem of NEET youth;
- increasing shortage of labor in developed and transition economies, which is a consequence, on the one hand, of the demographic crisis, on the other hand, of the lack of necessary competencies among labor immigrants arriving from developing countries.

Currently, the problem of labor shortage is one of the most discussed in the international arena: its aggravation and prospects for solving it are the subject of active scientific discourse; programs are being developed to solve this problem at the level of individual states and their associations. It is obvious that young people with high labor potential are a key source of replenishment of the labor force. However, the proliferation of such a group as NEET youth (people aged 15–24 who do not work or study), as evidenced by statistical data and research by ILO experts, as well as the work of foreign and Russian scientists, determines the need for a comprehensive study of it.

<sup>1</sup> World Employment and Social Outlook: Trends 2024. Available at: <https://researchrepository.ilo.org/esploro/outputs/report/995343385502676> (accessed: 30.08.2024).

The relevance of this problem and its cross-country specifics are reflected in the following ILO materials: “Global employment and social prospects: trends in 2024”<sup>2</sup>, “Profile of young NEET students in Portugal” (O’Higgins, Brockie, 2024), “Trends, characteristics and impact of COVID-19 on youth who do not work, do not study and do not acquire professional skills (NEET) in Thailand”<sup>3</sup>, “Promotion of employment and training of NEET youth in the Southern Mediterranean”<sup>4</sup>, “The number of young people without jobs, education or vocational training (NEET) is worrying, despite the decrease in the unemployment rate”<sup>5</sup>.

The large-scale scientific project “Youth Vulnerability in European Cities” (Paabort et al., 2023), implemented by an international group of scientists M. Beilmann, E. Geróházi, M. Medgyesi, T. Tammaru and others with the grant support of the European Union’s Horizon 2020 Research and Innovation Program, is devoted to the study of the NEET youth problem. Large-scale studies were also conducted by M. Gunnes, K. Thaulow, S.L. Kaspersky, K. Jensen, S.O. Åse, which allowed identifying a wide range of factors that lead to the formation of the NEET youth problem. The researchers structured these factors into the following groups: individual, family, and socio-economic. Scientists have proven that in the long term, the formation of NEET youth is influenced

<sup>2</sup> World Employment and Social Outlook: Trends 2024. Available at: <https://researchrepository.ilo.org/esploro/outputs/report/995343385502676> (accessed: 30.08.2024)

<sup>3</sup> Trends, characteristics and COVID-19 impact on youth not in employment, education or training (NEET) in Thailand. Available at: <https://www.ilo.org/publications/trends-characteristics-and-covid-19-impact-youth-not-employment-education> (accessed: 01.09.2024).

<sup>4</sup> Promoting employment and training for youth NEETs in the Southern Mediterranean. Available at: <https://www.ilo.org/projects-and-partnerships/projects/promoting-employment-and-training-youth-neets-southern-mediterranean> (accessed: 01.09.2024).

<sup>5</sup> Number of youth not in employment, education, or training (NEET) a cause for concern, despite falling jobless rate. Available at: <https://www.ilo.org/resource/news/number-youth-not-employment-education-or-training-neet-cause-concern> (accessed: 01.09.2024).

by a low level of education, a high risk of mental disorders and high unemployment (Gunnes et al., 2025). In turn, I. Swart, H. Hillamo, B.H. Holte's research on the practical applicability of the NEET youth concept in different countries (Northern Europe and South Africa) has proved its scientific validity and practical significance (Swart et al., 2021). The work of C. Mayombe is of great interest, where the author proposed an innovative model of interaction between social partners to employ graduates from the category of potential NEET youth (Mayombe, 2022).

In Russia, NEET youth has become the subject of scientific research relatively recently. One of the first large-scale studies on this issue is the work of E.Ya. Varshavskaya "NEET Youth in Russia: Characteristics and Typology", which for the first time assessed the extent of the spread and structure of NEET youth in Russia, as well as identified the factors determining its formation (Varshavskaya, 2016). Currently, the number of studies on this issue has increased. For example, M.B. Bulanova justified the need to expand the range of NEET youth sub-groups by identifying "those who voluntarily chose this life option", and also studied in detail the social characteristics and impact of transformational processes on NEET (Bulanova, 2019; Bulanova, 2020; Bulanova, Artamonova, 2020). In turn, S.V. Mitrukhina investigated the features of this sub-group of NEET youth in modern conditions and identified the reasons for its formation corresponding to current realities (Petrenko, Mitrukhina, 2024). A great contribution to the development of this issue was made by the research of A.A. Zudina, who not only deeply studied the social and psychological aspects of NEET youth, but also revealed the impact on them of the restrictions associated with the coronavirus pandemic (Zudina, 2019; Zudina, 2024). N.N. Shestakova and her co-authors identified the

reasons for the formation of this group of young people due to national specifics. As a result of the study, scientists proved that the main reason for joining NEET youth is a violation of family and social ties (Shestakova et al., 2019). E.A. Yakovleva, as part of an empirical study, estimated the share of young people in the Southern Federal District who have the highest risk of falling into the NEET group. Based on a sociological study, this proportion was 20% of the respondents (Yakovleva, Galakhova, 2017). The analytical materials published by A.R. Turenko characterize the national peculiarities of the spread of NEET youth in the CIS countries (Turenko, 2023).

Thus, in the presented works of Russian scientists, NEET youth is not considered as a potential labor resource for the development of the modern Russian economy, as an opportunity to reduce the shortage of young personnel in the labor market, and strategic and tactical measures aimed at including NEET youth in the process of social reproduction are not being worked out. These circumstances determine the relevance and novelty of this study. The aim of the work is to assess the extent of the spread of NEET youth in Russian society, identify its features and substantiate tactical and strategic recommendations aimed at solving the problem under study. The aim is specified by a number of research tasks: to analyze the extent of the spread of the NEET youth problem in the global and Russian economies; to identify the features of NEET youth in Russia, to determine factors and assess their impact on the problem of NEET youth; to substantiate a set of strategic and tactical measures aimed at involving NEET youth in the workforce. The hypothesis of the study is that the problem of NEET youth will remain relevant for the Russian economy in the medium term and will contribute to an increase in the labor shortage.

### Methodology and research methods

The methodological basis of this research is scientific work in the field of labor economics and the sociology of youth. The problems of forming the value structure of young people, the transformation of the model of labor behavior of this demographic group, issues of youth unemployment and employment were among the scientific interests of many Russian scientists<sup>6</sup> (Bobkov, Bobkov, 2016; Varshavskaya, 2016; Gnevasheva, 2010; Gnevasheva, 2025; Employment..., 1998; Zubok et al., 2021; Leonidova, Golovchin, 2018; Popov, 2023; Toshchenko, 2021; Roshchin, 2003; Shabunova et al., 2013).

Our study was performed using a set of methods, including general scientific (deduction, induction, analysis, synthesis, etc.), as well as private (statistical analysis, including correlation analysis, factor analysis, regression analysis; tree classification methods; expert survey).

The empirical data was obtained on the basis of an expert survey conducted using Google Forms (link: <https://forms.gle/YBabyU84BM5ArW6L7>). The experts were representatives of the scientific community engaged in research in the field of economics and sociology of labor, as well as representatives of relevant government agencies responsible for the implementation of youth policy. In total, 30 experts from eleven constituent entities of the Russian Federation were interviewed: the Republic of Bashkortostan, the Republic of Crimea, the Voronezh, Lipetsk, Novosibirsk, Rostov, Samara, Saratov, Sverdlovsk, Orenburg regions, and Moscow.

The use of correlation analysis made it possible to determine the degree of paired linear dependence between the indicators characterizing the analyzed causes and the resulting variable – NEET youth

in the total population of the corresponding age group (%). Factor analysis was aimed at reducing the dimension of the indicator space by constructing generalized factors based on them, which are linear combinations of initial indicators and preserving basic statistical information about the initial indicators. Tree classification methods are used to form classifying regression trees for the resulting variable. The regression analysis method allowed constructing a regression equation in which the role of the dependent variable is played by the resulting variable, and the role of explanatory variables is played by generalized factors.

### Research results and their discussion

The statistical information published in the ILO report “Global Employment and Social Prospects: Trends in 2024”<sup>7</sup> served as the information base for the analysis. The materials in the report, presented in 189 countries, reflect the situation both in the world as a whole and in the following groups of countries: Africa (North Africa and sub-Saharan Africa), Arab countries (Arab countries without GCC<sup>8</sup>, Arab countries of GCC), America (Latin America and the Caribbean, North America), Asia and the Pacific (East Asia, Southeast Asia, Pacific Region, South Asia), Europe and Central Asia (North, South and Western Europe, Eastern Europe, Central and Western Asia). The Russian Federation is included in the group of Eastern European countries. The ILO report covers the period from 2000 to 2022.

*Table 1* presents the situation of young people (aged 15 to 24 years) in the global labor market.

The analysis of the indicators and statistical data in table 1 allows drawing the following conclusions.

<sup>7</sup> World Employment and Social Outlook: Trends 2024. Available at: <https://researchrepository.ilo.org/esploro/outputs/report/995343385502676> (accessed: 30.08.2024).

<sup>8</sup> Arab countries without GCC: Arab countries with the exception of the countries that are members of the Cooperation Council for the Arab States of the Persian Gulf (Bahrain, Qatar, Kuwait, Oman, Saudi Arabia, UAE).

<sup>6</sup> Razumova T.O. (2009). Graduates of higher educational institutions in the labor market: Doctor of Sciences (Economics) Dissertation: 08.00.05. Moscow. 433 p.

Table 1. Dynamics of the main indicators of the global labor market, %

Indicator	Year					
	2000	2010	2019	2020	2021	2022
Labor force participation rate, % <i>of total</i>	64.2	62.0	60.5	59.2	59.8	60.3
Labor force participation rate, % <i>youth</i>	51.3	45.6	40.9	39.3	39.8	40.0
Employment rate, % <i>of total</i>	60.2	58.1	57.1	55.3	56.2	57.1
Employment rate, % <i>youth</i>	45.1	39.6	35.2	33.2	34.1	34.7
Unemployment rate, % <i>of total</i>	6.1	6.4	5.6	6.6	6.1	5.3
Unemployment rate, % <i>youth</i>	12.1	13.3	13.8	15.7	14.5	13.3
Share of NEET youth, %	-	22.3	22.4	23.8	22.4	21.7

Source: World Employment and Social Outlook: Trends 2024. Available at: <https://researchrepository.ilo.org/esploro/outputs/report/995343385502676> (accessed: 30.08.2024).

The global labor force participation rate decreased by 4.4 p.p. from 2000 to 2021. However, the labor force increased by 774.2 million people during this period. This discrepancy in the dynamics of the indicators is due to a number of reasons, including the different rate of change in the population and the workforce, the aging of the world's population, and others. In the age group of 15–24 years, the labor force participation rate decreased significantly – by 11.5 p.p. In absolute terms, there was also a decrease of 71.5 million people. In 2022, the level of population participation in the labor force increased in both analyzed groups, but this indicator did not reach the expected values.

The indicator “employment rate” for the period 2000–2020 decreased by 4.9 p.p. for the world population as a whole, and by 11.9 p.p. for the group “youth aged 15–24”. In 2021, this indicator reached a growth trajectory and in 2022 reached values of 57.1 and 34.7%, respectively. In the youth group, the indicator did not reach the level of the pre-academic period.

The indicator “unemployment rate” in 2000–2022 has constantly fluctuated in the range from 5.3% in 2022 to 6.6% in 2020 in the labor market as a whole, and in the youth segment – from 12.1%

in 2000 to 15.7% in 2020. In general, the data presented confirm the thesis about the difficult situation of young people in the labor market and their vulnerability. In 2022, the “unemployment rate” indicator decreased compared to the non-standard values for both study groups.

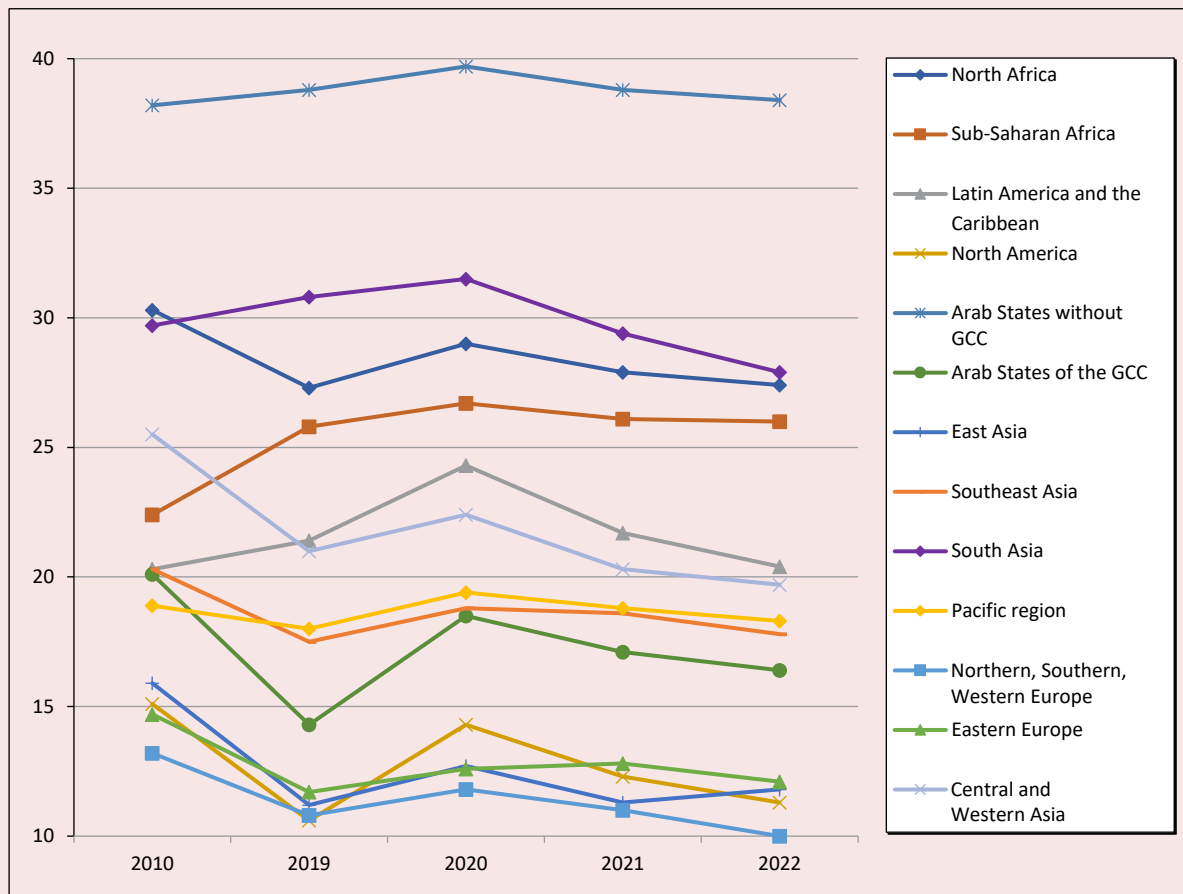
The indicator “share of NEET youth” in the ILO report has been presented only since 2010. Its values for the entire observed period were high and exceeded 20%. The indicator reached its maximum value in 2020 (23.8%), due to restrictions related to COVID-19.

Experts also provide forward-looking estimates of the main indicators of the global labor market for 2023–2025, which do not imply drastic and significant changes in the designated period.

Let us consider the dynamics of the indicator “share of NEET youth” in the groups of countries presented above (*Fig. 1*).

Based on the data presented in Figure 1, we can state that the highest level of the analyzed indicator for the entire study period is observed in the states of the group “Arab countries without GCC”, which includes Egypt, Iran, Iraq, Jordan, Palestine, Yemen. This indicator reached its maximum value in 2020, when it was 39.7%; the minimum value was 38.2% in 2010.

Figure 1. Dynamics of the indicator “share of NEET youth” by country groups for 2010–2022, %



Source: World Employment and Social Outlook: Trends 2024. Available at: <https://researchrepository.ilo.org/esploro/outputs/report/995343385502676> (accessed: 30.08.2024).

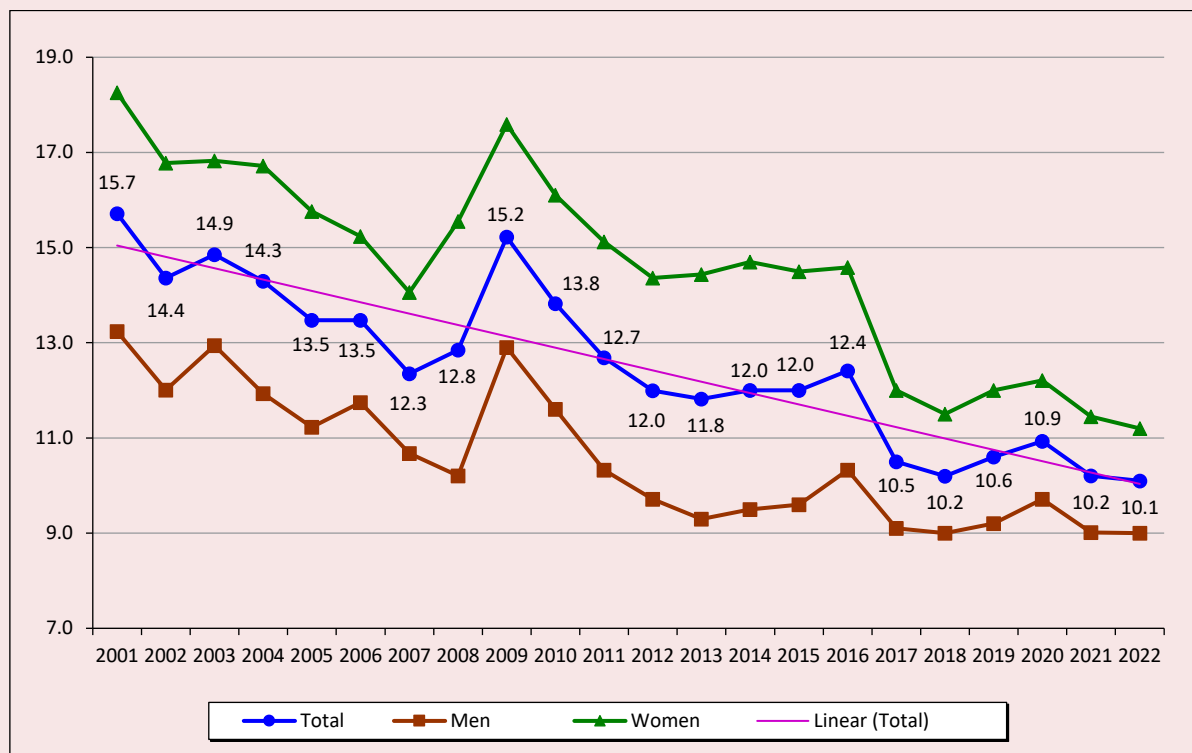
By comparing the values of the indicator for groups of countries with the global average values for the period under study, we can combine these groups into three categories:

- 1) groups of countries with a value below the global average (15% or less): North, South, Western Europe, Eastern Europe, North America, East Asia;
- 2) groups of countries with close to the global average (in the range of 15–25%): Latin America and the Caribbean, the Arab States of the GCC, Southeast Asia, the Pacific region, Central and Western Asia;
- 3) groups of countries with a value higher than the global average (25% and above): North Africa, Sub-Saharan Africa, South Asia, Arab countries without GCC.

The existence of such differentiation between the countries of the world, in our opinion, is a consequence of the influence of a wide range of factors, including the features of historical and cultural development, as well as socio-economic situation, demographic situation and political structure. Consequently, in the context of each individual country, the problem of NEET youth has its own specifics of formation and development, which determines the need for its deeper study at the level of a particular state.

In the Russian Federation, the statistical measurement of the indicator “share of young people who do not study, work or acquire professional skills at the age of 15–24 in the total

Figure 2. Dynamics of the share of youth aged 15–24 who do not study, work or acquire professional skills in the total population of the corresponding age group for 2001–2022, %



Source: Indicators of decent work. Available at: [https://rosstat.gov.ru/labor\\_market\\_employment\\_salaries](https://rosstat.gov.ru/labor_market_employment_salaries) (accessed: 10.09.2024).

population of the corresponding age group” (i.e., the share of NEET youth) has been conducted since the early 2000s (*Fig. 2*).

The share of NEET youth in the study period shows a downward trend. It reached its peak values in 2001 and 2009 (15.7% and 15.2%, respectively). In absolute terms, the reduction in the number of NEET youth in 2022 compared to 2001 amounted to 365,955 people, in relative terms – 20%. A comparison with the global averages of this indicator has led to the conclusion that the level of NEET youth in Russia is significantly lower than the global average and comparable to its values in economically developed countries.

Analyzing the structure of NEET youth in Russia by gender, we can state the differentiation in

this indicator, which is observed throughout the entire study period. The involvement of men in the NEET group is significantly lower than that of women. Among men in the analyzed period, this indicator ranged from 9.0 to 13.2%, among women – from 11.2 to 18.3%.

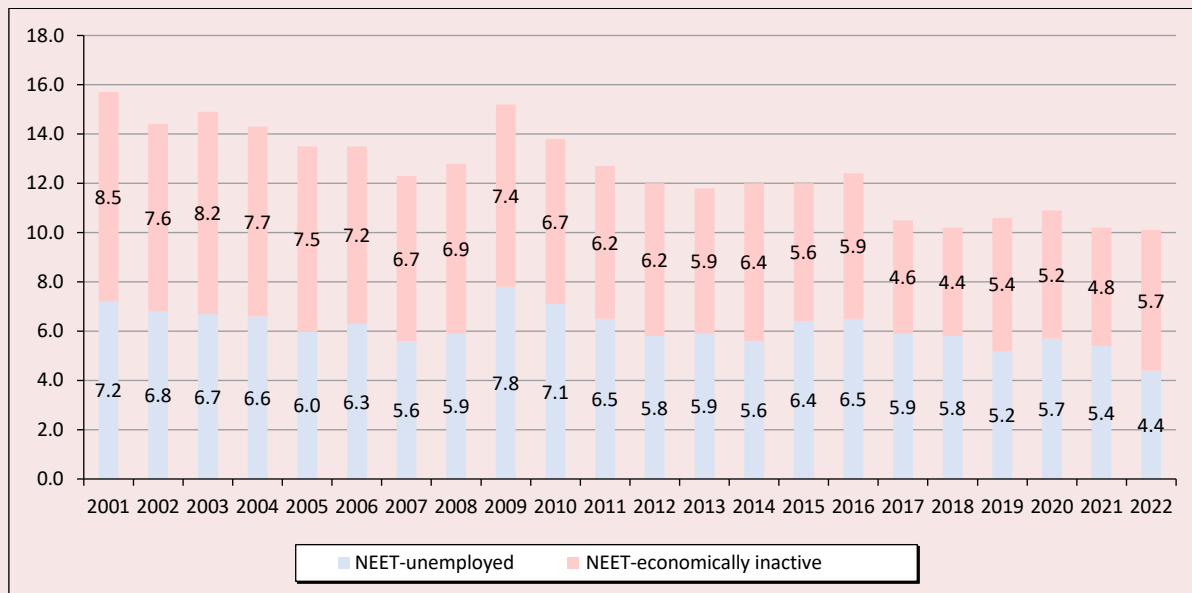
Based on statistical data, the values of indicators for the NEET-unemployed<sup>9</sup> and NEET-economically inactive<sup>10</sup> sub-groups were calculated (*Fig. 3*), and their percentage ratio was determined (*Tab. 2*).

We can draw the following conclusions based on the calculated indicators.

<sup>9</sup> NEET unemployed – young people who do not study, do not work, but are looking for a job and are ready to start it.

<sup>10</sup> NEET economically inactive – young people who do not study, do not work, and do not search for work.

Figure 3. Changes in the structure of the NEET youth group by main sub-groups in 2001–2022, %



According to: Rosstat data.

Table 2. Ratio of the main sub-groups in the structure of the NEET youth group for 2001–2022, %

Sub-group	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
NEET youth, including:	100	100	100	100	100	100	100	100	100	100	100
<i>NEET unemployed</i>	45.9	47.2	45.0	46.2	44.4	46.7	45.5	46.1	51.3	51.4	51.2
<i>NEET economically inactive</i>	54.1	52.8	55.0	53.8	55.6	53.3	54.5	53.9	48.7	48.6	48.8
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
NEET youth, including:	100	100	100	100	100	100	100	100	100	100	100
<i>NEET unemployed</i>	48.3	50.0	46.7	53.3	52.4	56.2	56.9	49.1	52.3	52.9	43.6
<i>NEET economically inactive</i>	51.7	50.0	53.3	46.7	47.6	43.8	43.1	50.9	47.7	47.1	56.4

According to: Rosstat data.

In the analyzed period, there were no pronounced trends in the ratio of sub-groups in the NEET youth structure. At the same time, from 2001 to 2008, “NEET economically inactive” sub-group prevailed in the overall structure, and since 2009 this trend has been absent. In our opinion, such a ratio of sub-groups in the NEET youth structure carries risks, since “NEET economically inactive” sub-group is extremely heterogeneous in its composition, and the motives for “inactivity”

are not always obvious, which requires additional research of this sub-group and the development of appropriate mechanisms for its reduction.

During periods of economic crises, “NEET unemployed” sub-group prevailed (2009 – 51.3%; 2015 – 53.3%; 2020 – 52.3%). NEET unemployment reached its maximum in 2018 (56.9%), and its minimum in 2022 (43.6%). Consequently, NEET unemployment increases naturally in Russia during crisis periods.

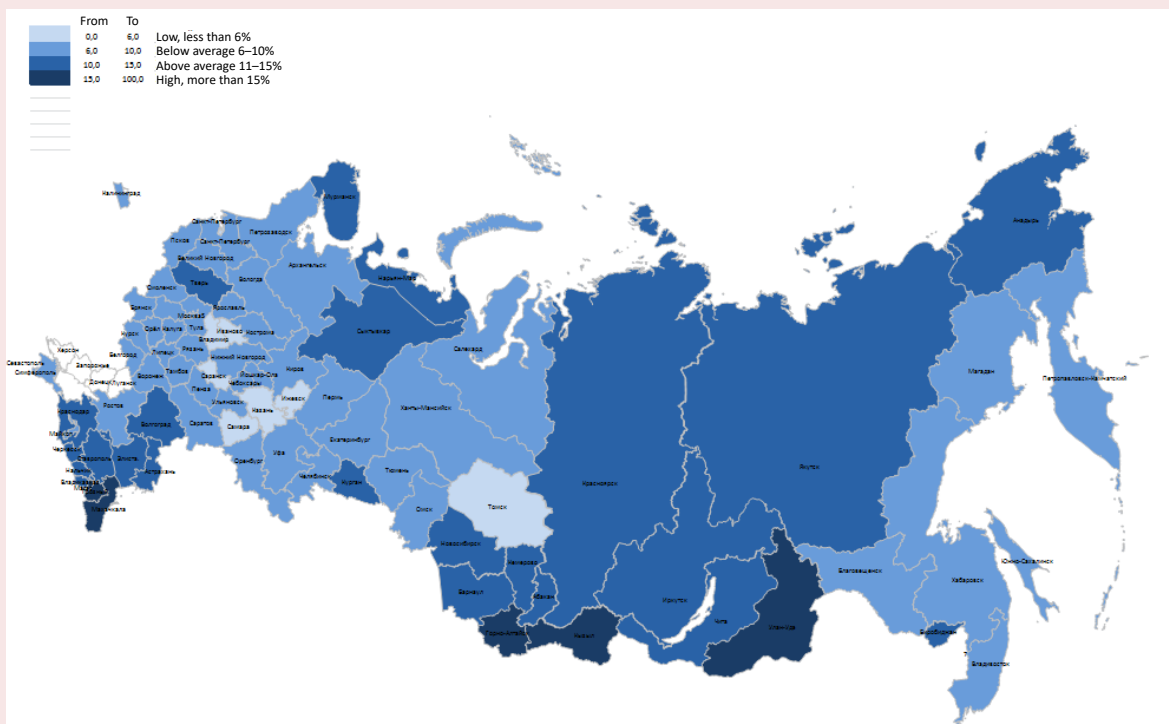
In the context of the constituent entities of the Russian Federation, the situation with the spread of NEET youth is significantly differentiated. For example, in a number of regions, as of 2022, the share of NEET youth is extremely high and reaches the following values: the Chechen Republic – 34.7%; the Republic of Dagestan – 28%; the Republic of Ingushetia – 23.9%. At the same time, this indicator in Saint Petersburg shows the lowest value among all regions of the Russian Federation – 3.2%. In this regard, all constituent entities of the Russian Federation are grouped according to the value of this indicator (*Fig. 4*).

Analyzing the grouping results shown in Figure 4, we can state that only in eight regions of the Russian Federation there is a low share of NEET youth, not exceeding 6% as of 2022. The majority of regions (49) belong to the “below average” category, where the range of values of this indicator ranges

from 6 to 10%, inclusive. The group of regions with an indicator value “above average” (11–15%) includes 24 constituent entities of the Russian Federation. In other words, almost a third of Russian regions are characterized as “disadvantaged” in terms of the extent of the spread of NEET among young people. The situation is extremely negative in six Russian regions, where the share of NEET youth is more than 15%. When analyzing the trend line for each of the RF constituent entities for the period from 2017 to 2022, only five regions revealed a steady positive trend in the decline in the share of NEET youth: the Bryansk Region, the Vladimir Region, the Kostroma Region, the Republic of Crimea, the Omsk Region. There is an increase in the indicator in the Tambov Region.

The analysis of the extent of the spread of NEET youth in the Russian Federation allows concluding that, the situation in the country is relatively

Figure 4. Grouping of the constituent entities of the Russian Federation according to the indicator “share of youth aged 15–24 who do not study, work or acquire professional skills in the total population of the corresponding age group” in 2022



According to: Rosstat data.

favorable compared with global trends. However, the problem of labor shortage in Russia, which has significantly worsened at the moment and negative forecasts of its aggravation in the future due to the difficult demographic situation, actualize the search for labor reserves, as one of which, as noted above, NEET youth can be considered.

We conducted an expert survey, which resulted in the following results to study the characteristics and problems of NEET youth in the Russian Federation.

The majority of experts (60%) consider the problem of the existence of NEET youth to be relevant for the Russian economy, only 10% deny its importance. At the same time, all experts agree that this phenomenon is currently not widespread. Thus, 20% of respondents rate the prevalence of NEET among young people as extremely low (less than 6%), 40% as low (6–10%) and 40% as average (11–15%).

Regarding the forecast of the spread of this phenomenon in the Russian economy in the medium term, 1/3 of experts indicated that it would grow (Fig. 5).

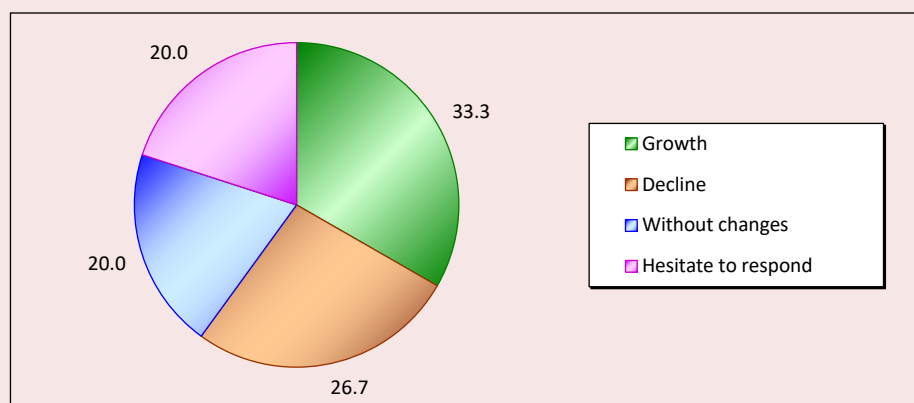
An important aspect for finding mechanisms to “remove” young people from the NEET category is to understand the internal structure of this group. The

classification proposed by M.B. Bulanova (Bulanova, 2019) was used in the survey of experts (Fig. 6).

From the point of view of experts, the most common categories in the structure of NEET youth are the temporarily inactive, who have an agreement on work and study and are going to start it in the near future (76.7%), who voluntarily made a choice in favor of this life option (60%), and other inactive people who cannot indicate the reason for their inactivity, but they deliberately refuse to work and study (46.7%). In the NEET structure, the “desperate” category has not been singled out by experts. Thus, the survey results confirm the heterogeneity of the NEET youth group structure and are consistent with the statistical data presented in Figure 3. At the same time, “NEET economically inactive” sub-group is most likely represented to a greater extent by such categories as those who voluntarily made a choice in favor of this life option and others who are inactive, and to a lesser extent economically inactive due to illness, disability and family responsibilities.

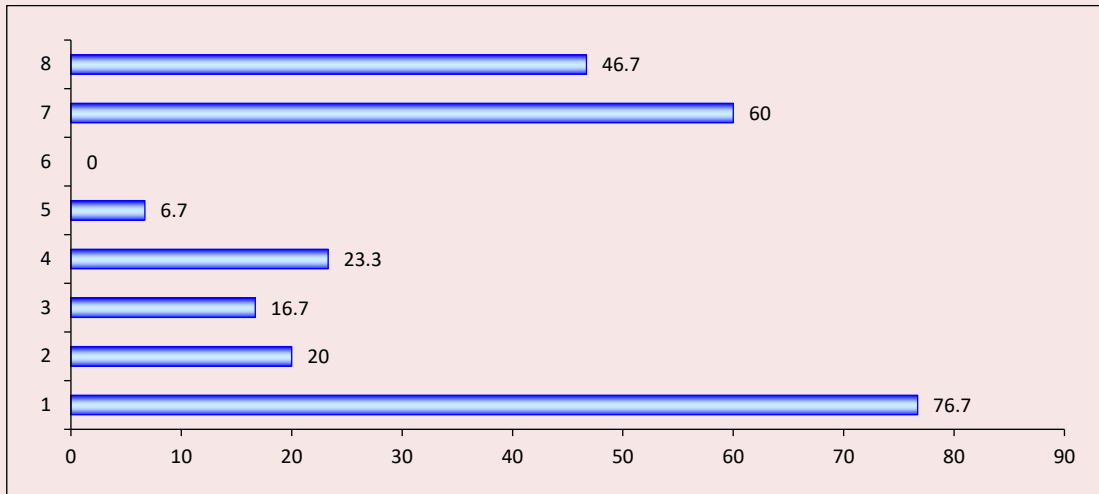
According to experts, the spread of NEET among young people is accompanied by a wide range of negative socio-economic consequences (Fig. 7).

Figure 5. Distribution of responses to the question “What is your forecast regarding changes in the prevalence of NEET youth in the Russian Federation in the medium term?”, %



According to: expert survey results.

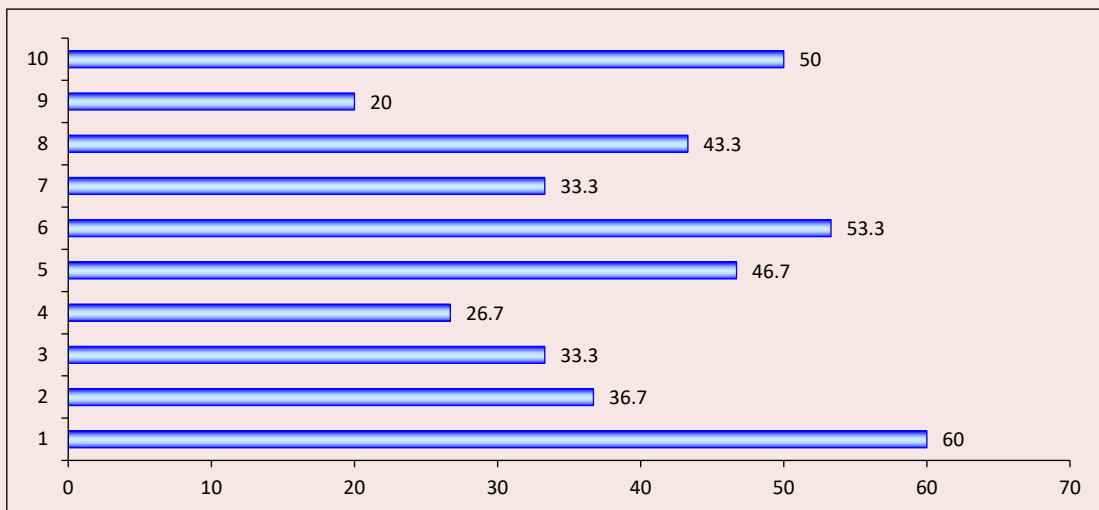
Figure 6. Distribution of answers to the question “Which three groups, in your opinion, prevail in the structure of NEET youth in the Russian Federation?”, %



1 – temporarily inactive, having an agreement on work and study, intending to start it in the near future; 2 – short-term unemployed, i.e. officially registered as unemployed and staying in this status for less than a year; 3 – long-term unemployed, i.e. unemployed for more than a year; 4 – economically inactive due to illness and disability; 5 – economically inactive due to family responsibilities; 6 – desperate, i.e. stopped actively looking for a new job; 7 – voluntarily made a choice in favor of this life option.; 8 – other inactive people who cannot indicate the reason for their inactivity, but deliberately refuse to work and study.

According to: expert survey results.

Figure 7. Distribution of answers to the question “What consequences does the increase in the number of NEET youth have for the Russian economy?”, %



1 – increasing shortage of labor; 2 – increase in informal employment; 3 – decrease in the standard and quality of life; 4 – increase in income differentiation; 5 – increase in social tension; 6 – marginalization; 7 – increase in crime; 8 – increase in drug addiction and alcoholism; 9 – increase in state budget expenditures for the maintenance of NEET-youth; 10 – reduction of tax revenues to the budget.

According to: expert survey results.

The most frequently noted consequences of an increase in the number of NEET youth for the Russian economy were an increase in labor shortages (60%), marginalization (53.3%), a reduction in tax revenues to the budget (50%), and an increase in social tension (46.7%).

The results obtained confirm our earlier hypothesis about considering NEET youth as a labor reserve. Consequently, it is increasingly important to solve the problem of finding the causes of the formation of this group to develop measures to reduce its scale.

The expert survey revealed the main reasons for the formation of the NEET youth group in the Russian Federation (Fig. 8).

According to the data obtained, the main reasons for the formation of the NEET youth group in Russia are the depreciation of the prestige of work (63.3%) and falling into the category of drug or alcohol addicts (53.3%).

Experts attributed social problems (30%), living in rural areas (26.7%), health problems (26.7%), early employment in the informal sector (26.7%), and unavailability of education (20%) to less

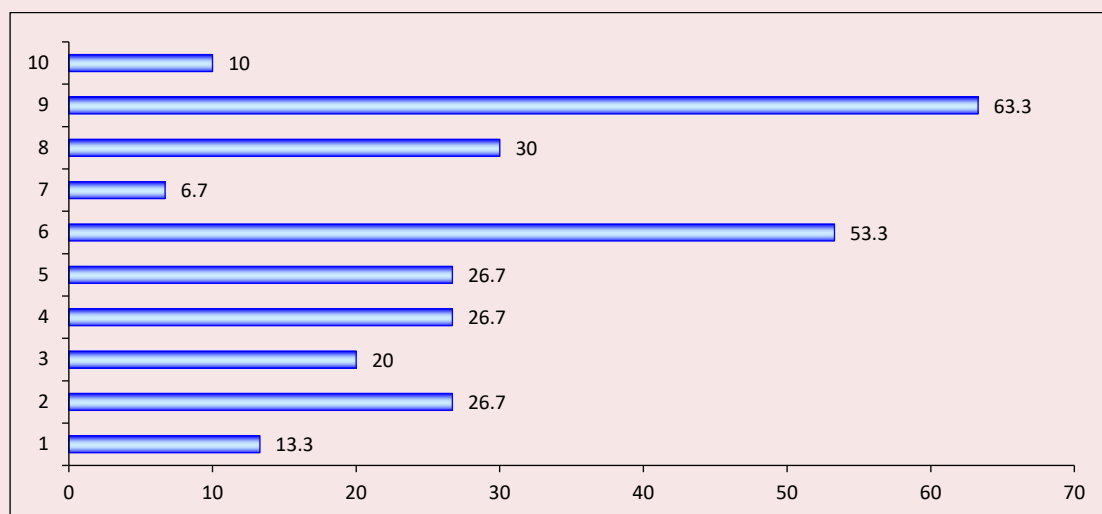
pronounced reasons. The experts supplemented the proposed list of reasons such as high family income (3.3%); unwillingness to work in their profession (3.3%); civic inactivity (3.3%).

We used methods of correlation, factor analysis, regression analysis and tree classification to determine the degree of influence of the identified causes on the problem of NEET youth.

For the implementation of these methods, only those reasons for the formation of NEET youth in the RF have been selected, which can be measured by statistical indicators and which, according to experts, have received 10% or more. Thus, we selected the following reasons as evaluated:

- early age employment in the informal sector;
- unavailability of education;
- living in rural areas;
- health problems;
- falling into the category of drug or alcohol addicts;
- social problems (early motherhood, caring for sick family members, etc.);
- low family income.

Figure 8. Distribution of answers to the question “Specify the main reasons for the formation of NEET youth in the Russian Federation”, %



1 – low family income; 2 – early employment in the informal sector; 3 – unavailability of education; 4 – living in rural areas; 5 – health problems; 6 – falling into the category of drug or alcohol addicts; 7 – spread of crime among young people; 8 – social problems (early motherhood, care for sick family members, etc.); 9 – depreciation of the prestige of work among young people; 10 – other.

According to: expert survey results.

At the next stage, a system of indicators (explanatory variables) was formed that characterize the reasons outlined above:

X1 – number of people employed in the informal sector in the age group of 15–19 years, thousand people;

X2 – number of students enrolled in mid-level, bachelor's, specialist's, and master's degree programs at the beginning of the academic year, thousand people;

X3 – number of rural population aged 15–24 years, people;

X4 – number of disabled people under the age of 18, thousand people;

X5 – number of drug addicts registered in medical and preventive organizations at the end of the reporting year, thousand people;

X6 – number of patients with alcoholism and alcoholic psychoses registered in medical and preventive organizations at the end of the reporting year, thousand people;

X7 – birth rate among adolescents (aged 15 to 19 years) per 1,000 women in the corresponding age group;

X8 – percentage of the population living below the national poverty line, %.

Table 3 shows the values of these indicators for the period from 2013 to 2022.

Table 4 presents the values of the resulting indicator Y (share of NEET youth in the total population of the corresponding age group, %) for 2013–2022.

Figure 9 shows the correlation matrix for the selected system of resultant and explanatory variables:

The analysis of the correlation matrix shows a fairly high correlation between the proportion of NEET youth (Y) and such indicators as: the number of people employed in the informal sector in the age group of 15–19 years (X1), the number of rural population aged 15–24 years (X3), the number of people with disabilities under the age of 18 (X4), the number of people with drug addiction, registered in medical and preventive organizations (X5), the number of patients with alcoholism and alcoholic psychosis registered in medical and preventive organizations (X6), the birth rate among adolescents (aged 15 to 19 years) per 1,000 women in the corresponding age group (X7).

To deepen the field of research based on the analysis of the correlation coefficient, we use the tree classification method, which allows us to build a predictive model based on the classification for the resulting variable, i.e. to identify classes of observations with its various average values.

At the first stage of constructing a predictive model based on classifying regression trees using the CHAID method, all variables X1, X2, X3, X4, X5, X6, X7, X8 were considered as explanatory variables. The results shown in Figure 10 prove that good classification quality is achieved when using only one separating variable X1, this variable it

Table 3. Data for analysis

Variable	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
X1	248	202	204	219	185	180	168	155	149	142
X2	7628.8	7312.1	6939.1	6704.3	6633.6	6626.0	6644.5	6809.1	6900.4	7113.1
X3	4300619	4153494	3971969	3872864	3849171	3858149	3876083	3460295	3469200	3344226
X4	568	580	605	617	636	651	671	689	704	729
X5	308.3	300.7	288.0	259.5	231.6	217.4	207.0	207.5	212.0	213.8
X6	1749.5	1690.0	1577.0	1444.5	1304.6	1208.6	1126.7	1102.8	1077.7	1051.4
X7	26.6	26.0	24.0	21.5	18.4	16.1	14.6	14.1	13.5	13.4
X8	10.8	11.3	13.4	13.2	12.9	12.6	12.3	12.1	11.0	9.8

According to: Rosstat data.

Table 4. Resulting indicator

Indicator	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Y	11.8	12.0	12.0	12.4	10.5	10.2	10.6	10.9	10.2	10.1

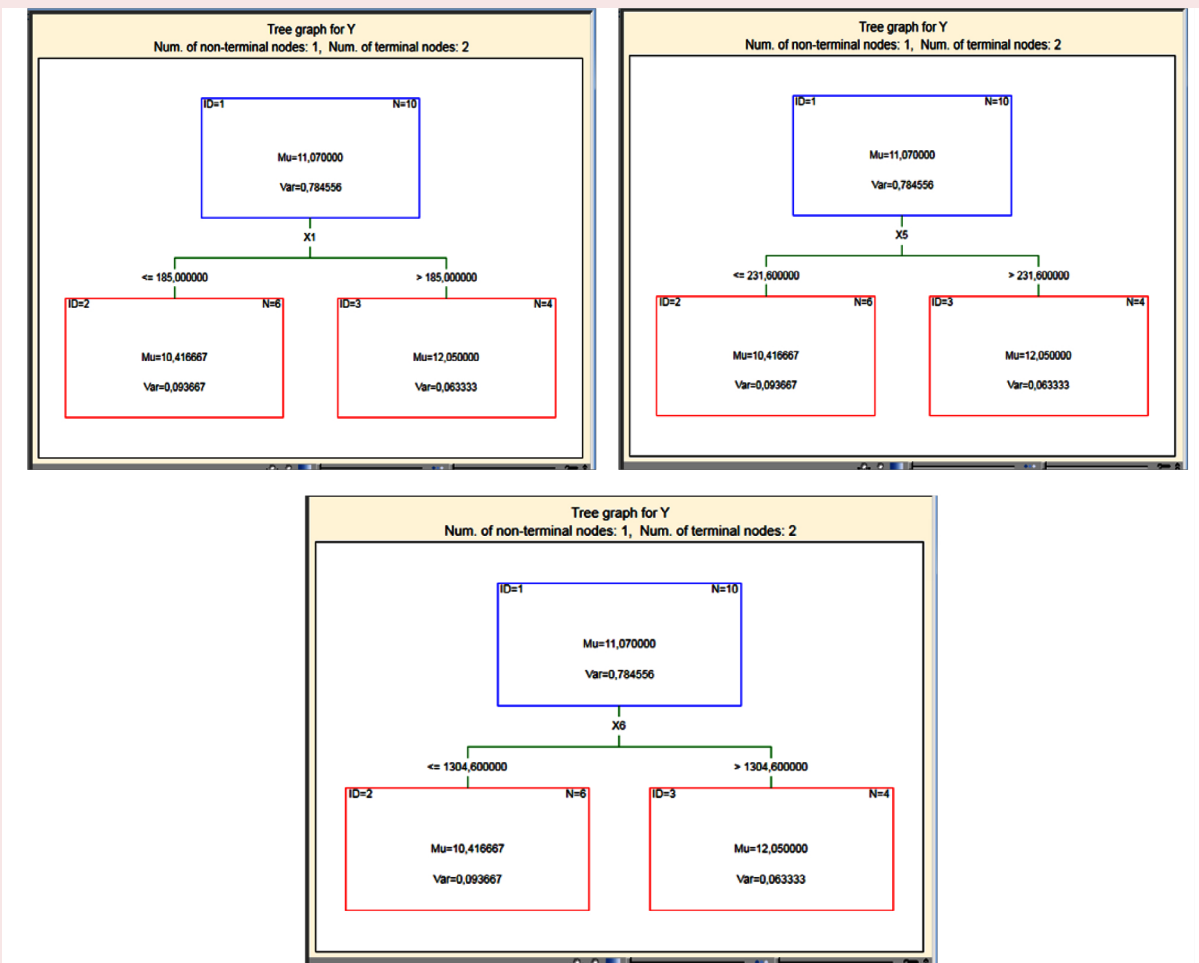
According to: Rosstat data.

Figure 9. Correlation matrix for the selected indicator system

Correlations (Федченко. sta)									
Marked correlations are significant at $p < ,05000$									
N=10 (Casewise deletion of missing data)									
Variable	Y	X1	X2	X3	X4	X5	X6	X7	X8
Y	1,000000	0,804353	0,380855	0,662176	-0,805198	0,835638	0,838340	0,854769	0,340006
X1	0,804353	1,000000	0,459932	0,897215	-0,939732	0,865992	0,915084	0,910432	0,280703
X2	0,380855	0,459932	1,000000	0,416009	-0,442560	0,700193	0,623320	0,601181	-0,649649
X3	0,662176	0,897215	0,416009	1,000000	-0,952931	0,818607	0,889618	0,878043	0,274012
X4	-0,805198	-0,939732	-0,442560	-0,952931	1,000000	-0,907752	-0,964197	-0,960715	-0,331949
X5	0,835638	0,865992	0,700193	0,818607	-0,907752	1,000000	0,986002	0,986275	0,046955
X6	0,838340	0,915084	0,623320	0,889618	-0,964197	0,986002	1,000000	0,998440	0,148757
X7	0,854769	0,910432	0,601181	0,878043	-0,960715	0,986275	0,998440	1,000000	0,171936
X8	0,340006	0,280703	-0,649649	0,274012	-0,331949	0,046955	0,148757	0,171936	1,000000

Source: own compilation.

Figure 10. Results of the use of classifying regression trees in the construction of a predictive model



Source: own compilation.

has a high separation capacity. The observations are divided into two classes according to the value of the variable X1 – the number of people employed in the informal sector in the age group of 15–19 years, thousand. people, the left class contains observations for which this indicator is less than or equal to 185, the right class contains observations greater than 185. For observations of the left class, the average value of the resulting variable is 10.42%, the standard deviation is 0.093. For observations of the right class, the average value of the resulting variable is 12.5, the standard deviation is 0.063.

When the variable X1 is excluded from the analysis, the classification tree is also built on just one variable X5 – the number of drug addicts registered in medical and preventive organizations at the end of the reporting year, thousand people. This variable has the following separation capacity in terms of power. Observations are divided into two classes according to the value of the variable X5. The left class contains observations for which this indicator is less than or equal to 231, and the right class contains observations for which this indicator is greater than 231. For observations of the left class, the average value of the resulting variable is 10.42%, the standard deviation is 0.093. For observations of the right class, the average value of the resulting variable is 12.5, the standard deviation is 0.063.

When excluding variables X1, X5 from the analysis, variable X6 has the next most powerful dividing ability – the number of patients with

alcoholism and alcoholic psychosis registered in medical and preventive organizations at the end of the reporting year, thousand people. Observations are divided into two classes according to the value of the variable X6, the left class contains observations for which this indicator is less than or equal to 1304.6, the right class is greater than 1304.6. For observations of the left class, the average value of the resulting variable is 10.42%, the standard deviation is 0.093. For observations of the right class, the average value of the resulting variable is 12.5, the standard deviation is 0.063.

Thus, using the tree classification method allowed identifying three variables that have the greatest impact on the resulting one (share of NEET youth): the first in terms of the degree of impact is the variable “number of people employed in the informal sector in the age group of 15–19 years”; the second is the variable “number of drug addicts registered in medical and preventive organizations”; the third is the variable “number of patients with alcoholism and alcoholic psychoses registered in medical and preventive organizations”.

The correlation matrix shown in Figure 9 reflects not only the strong correlation of variables X1, X3, X4, X5, X6, X7 with the resulting variable, but also their strong correlation with each other, so the use of regression analysis is hampered by the presence of multicollinearity of explanatory variables. In this regard, within the framework of our study, we carried out a factor analysis of explanatory variables, aimed at reducing the dimension of the

Figure 11. Results of the accumulated significance test to determine the number of factors

Eigenvalues (Федченко.ста)				
Extraction: Principal components				
Value	Eigenvalue	% Total variance	Cumulative Eigenvalue	Cumulative %
1	6,001582	75,01978	6,001582	75,01978
2	1,667571	20,84464	7,669154	95,86442

Source: own compilation.

space of explanatory variables and forming a small number of common factors, and then a regression equation was constructed, where common factors act as explanatory variables.

As a result of the factor analysis, we identified two common factors, which together explain 95% of the variation in the baseline indicators (Fig. 11).

Figure 12 shows the factor loads. The first factor has a strong influence on the formation of indicators such as X1, X3, X4, X5, X6, X7. This factor characterizes those employed in the unobserved, shadow economy and categories of people with problems with employment due to health, mental

health and temporary disability. The second factor has a strong influence on the indicators X2, X8. This factor characterizes the categories of young people who do not have decent incomes due to education or employment with low wages.

Figure 13 presents the results of regression analysis using factors as explanatory variables. The second factor turned out to be an insignificant variable. The model has a fairly high  $R^2 = 0.697$ , therefore, about 70% of the variation in the resulting variable is explained by the regression equation. The equation as a whole is significant ( $F = 18.422$ ,  $p = 0.00264$ ), the standard error is 0.51695.

Figure 12. Indicators forming the first and second factors

Factor Loadings (Varimax normalized) (Федченко.sta) Extraction: Principal components (Marked loadings are >.700000)		
Variable	Factor 1	Factor 2
X1	0,954314	-0,045284
X2	0,520642	0,844777
X3	0,936948	-0,071354
X4	-0,990200	0,082693
X5	0,949363	0,240891
X6	0,986267	0,129749
X7	0,983977	0,107427
X8	0,264781	-0,950072
Expl.Var	5,952483	1,716671
Prp.Totl	0,744060	0,214584

Source: own compilation.

Figure 13. Regression analysis results

Regression Summary for Dependent Variable: Y (Федченко.sta) R= ,83499927 R <sup>2</sup> = ,69722377 Adjusted R <sup>2</sup> = ,65937675 F(1,8)=18,422 p<,00264 Std.Error of estimate: ,51695						
N=10	b*	Std.Err. of b*	b	Std.Err. of b	t(8)	p-value
Intercept			11,07000	0,163474	67,71714	0,000000
фактор 1	0,834999	0,194543	0,73960	0,172317	4,29210	0,002644

Source: own compilation.

The hypotheses about the normal distribution of model errors (Fig. 14) and the absence of correlation in errors (Fig. 15) are fulfilled, which indicates the good quality of the regression model.

The analysis confirms that the indicators selected for the analysis have a significant impact on the formation of the resulting variable and allow building predictive models for its prediction.

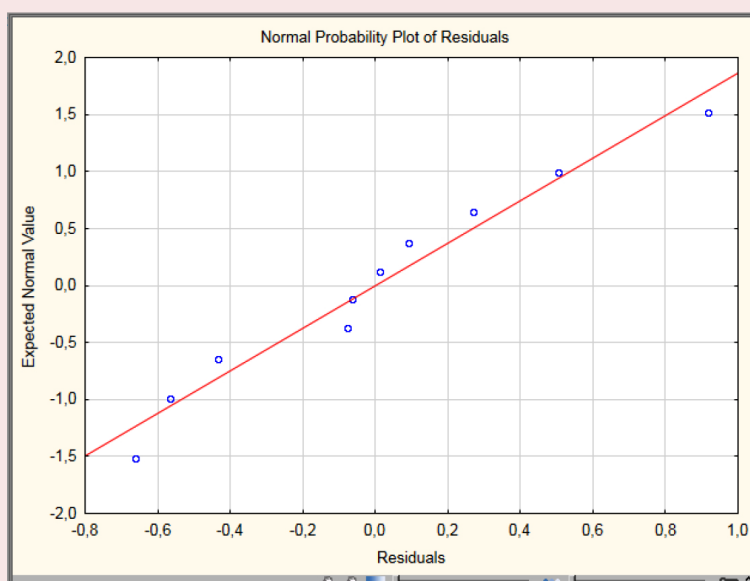
Summing up the results of the expert survey and the mathematical methods used, we have drawn the following conclusions:

- the problem of the existence of NEET youth is relevant for our state, despite the relatively small scale of its spread;
- the structure of the NEET youth group is rather heterogeneous (temporarily inactive, having

an agreement on work and study, intending to start it in the near future; voluntarily making a choice in favor of this life option; other inactive, who cannot indicate the reason for their inactivity, but deliberately refuse to work and study), which is confirmed by the results of an expert survey and statistical analysis;

- the main reasons that most influence the formation of NEET youth are the devaluation of the prestige of work among young people, early employment in the informal sector and falling into the category of drug or alcohol addicts; there is also a high correlation with such reasons as living in rural areas, health problems, social problems (early motherhood, care for sick family members, etc.);

Figure 14. An eye-based method for checking the normality of model errors



Source: own compilation.

Figure 15. Durbin – Watson statistic

Durbin-Watson d (Федченко.sta) and serial correlation of residuals		
	Durbin-Watson d	Serial Corr.
Estimate	1,855616	0,028229

Source: own compilation.

– the most dangerous socio-economic consequences of the existence of this group of youth are an increasing shortage of labor, marginalization, a reduction in tax revenues to the budget, and increased social tension, which requires the development of a set of regulatory measures in the context of the projected growth of this phenomenon.

Thus, the use of retrospective and statistical analysis, empirical research allowed us to study the features of this phenomenon in the global and Russian economies, identify the main causes of its spread and confirm the hypothesis put forward above.

### Conclusion

The problem concerning NEET youth has gained wide scientific interest among researchers around the world in recent years. This is due to the negative consequences of this phenomenon. For countries with developed economies and difficult demographic situations, NEET youth is one of the sources of replenishment of the labor force in a labor-deficient labor market environment. For developing countries with low economic development rates and an abundance of labor, the problem of NEET youth is even more significant, since the scaling of this phenomenon leads to serious social and economic consequences in the long term. Consequently, this problem has its own specifics of formation and development for a particular country, which determines the content of the relevant state policy. Based on the research results, we proposed to implement a set of tactical (mainly aimed at those who are already part of the NEET youth) and strategic (preventive) measures for the Russian Federation.

We consider it appropriate to take tactical measures:

1) the inclusion in the state youth policy of a set of measures aimed at this group of youth and differentiated for the NEET unemployed and the NEET-economically inactive; due to the fact that in recent years the share of economically inactive people has prevailed among NEET youth, it is

necessary to improve the legislative and regulatory framework concerning this group and psychological and educational work in its environment; Based on the heterogeneity of the “NEET economically inactive” sub-group and the lack of clearly defined motives for its formation, it is recommended to conduct regular studies of the causes of “inactivity”, since the turbulence of socio-economic processes does not allow the formation of such activities in the future;

2) expanding government support measures for young people during economic crises to reduce the proportion of NEET unemployed, including through job quotas in government and budgetary organizations;

3) the involvement of NEET youth from “disadvantaged” regions of the Russian Federation, where this figure is 11% or higher, in employment using a wide range of forms of non-standard employment, namely remote or virtual employment, self-employment, platform employment, shift work, temporary employment;

4) expansion of legislative support measures for young women caring for young children (to guarantee the ability to work remotely, use flexible working hours, and part-time employment); it is advisable to develop “roadmaps” for the involvement of such women in the workforce, taking into account regional and industry specifics;

5) an increase in the scale of state assistance, including the cost of identification and treatment, for drug and alcohol addicts with an emphasis on young people; activities that promote social and labor adaptation, including those focused on the formation or “rehabilitation” of labor and professional skills of such a population, should be of particular importance;

6) stepping up measures to create a barrier-free environment, expand vocational education opportunities for people with disabilities, and involve people with disabilities in the workforce, including supporting employers who provide jobs for people with disabilities.

We consider it necessary to take strategic measures:

1) large-scale transformations in educational, cultural and educational work among children and youth, focused on the formation and awareness of the value of work, its role in the life of an individual and modern society; it is important to establish correct ideas about professions and their contribution to the development of the country's economy, as well as respect for labor achievement from an early age;

2) systematic career guidance, implemented from the early stages of personality development and based on a wide range of tools, including digital ones;

3) preventive measures aimed at promoting a healthy lifestyle among children and youth, including expanding opportunities for physical education and sports, primarily on a pro bono basis,

and fostering negative attitudes toward smoking, alcoholism, and drug addiction.

Further prospects for studying NEET youth as a labor potential for development are seen in the direct connection of this problem with the digital transformation of the world and socio-economic relations at all levels – global, country, regional, as well as corporate and personal. The directions of further research of NEET youth in the Russian labor market relate to such changes as the emergence of platforms on the labor market (changing the customer-human relationship) and the expansion of the use of artificial intelligence in all areas, which affects all components of the work architecture related to the physical and social environment. The behavior of NEET youth is directly related to the change in the format of work, the growing value of human capital, the development of technology, and turbulence in some industries and spheres.

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## State Management of Idle Agricultural Lands: The Experience of China and Russia



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**Abstract.** Sustainable agricultural development is a strategic priority for nations like China and Russia. Its achievement is directly dependent on the efficiency and rationality of resource use, particularly land resources. However, both China and Russia currently face the challenge of underutilization of agricultural lands. This article aims to examine and critically assess the Chinese and Russian experiences in bringing idle agricultural lands back into economic circulation for further implementation in the practice of public administration in the field of land use. The study reveals that China's proposed solution involves reforming the separation of ownership rights, contract rights, and land management rights in rural areas (the "Three Rights Separation" reform). Key factors driving the reform of the mechanism for relinquishing agricultural land contract rights (rural land contract rights withdrawal) are identified, including the large-scale migration of surplus agricultural labor to urban areas in China and the prevalence of part-time farming. The article characterizes the differences in land relinquishment mechanisms and the specific behaviors of farmers in implementing them across three Chinese counties. It also determines the scale, trends, and factors contributing to the problem of idle agricultural lands in Russia and its northern regions. An overview of Russian state programs and those of Northwestern regions aimed at returning unused agricultural lands to circulation is provided. Based on a synthesis of Chinese and Russian experiences, the study substantiates the necessity of considering territorial specifics when developing and implementing mechanisms for land relinquishment/withdrawal, as well as when choosing prospective directions for their subsequent use (agriculture, tourism, other types of entrepreneurship, etc.). The research findings can serve as a theoretical and methodological foundation and reference material for improving state land-use policy.

**Key words:** agricultural lands, idle/unused lands, land return to circulation, land relinquishment, land withdrawal, agriculture, rural areas, China, Russia.

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### **Introduction**

When China started the reform and opening up in 1978, the household responsibility system was adopted in China's rural areas. The property rights of rural land were divided into two layers: the ownership right that was collectively owned by a rural community, and the right to contractual management of land, which was held by an individual household that contracts a piece of farmland from the village. This measure mobilized

hundreds of millions of farmers and met their basic needs, making significant achievements in rural reform. According to the National Bureau of Statistics of China, China's grain output was 695.41 million metric tons in 2023, remaining over 650 million metric tons for nine consecutive years; its per capita grain output was 493 kilograms, far exceeding the world average for many years in a row and higher than the internationally recognized 400-kilogram food security line.

In Russia, the shift toward private land use

began in the 1990s with the “Land Reform Law”<sup>1</sup>, which abolished the state monopoly on land and introduced the possibility of transferring it to private individuals for lifelong inheritable possession or leasehold. A more comprehensive and complete legislative framework for private land ownership rights was established with the adoption of the Russian Land Code<sup>2</sup> in 2001. Notably, all versions of the Code consistently contain the provision that “agricultural lands – arable land, hayfields, pastures, fallow lands, lands occupied by perennial plantings (orchards, vineyards, etc.) – within the lands of agricultural designation have priority in use and are subject to special protection”.

Land use reform in Russia, as in China, contributed to the active development of agriculture under market conditions. According to the Federal State Statistics Service (Rosstat), the gross harvest of, for example, grains and legumes after processing in 2023 amounted to 145.0 million tons: 2.2 times higher than in 2000. Concurrently, the per capita volume of this harvest increased from 446.3 to 990.9 kg per person, exceeding the food security threshold level by more than two times.

However, amid economic, social, and scientific-technological development, the agricultural sector in both China and Russia has undergone significant changes, and with it, the way of life of the rural population. Clear trends have emerged, including a decline in the employment of agricultural workers and rural residents in general within agricultural

activities. The emergence of part-time farmers and even farmers for whom agriculture has ceased to be the main activity (having been “displaced” by tourism, forestry, etc.) has led to some decrease in the perceived value and demand for land as an economic resource. A trend of migration from rural to urban areas has intensified, with migrants often retaining their land rights<sup>3</sup>. These and numerous other economic, social, and infrastructural factors have contributed to the current situation where significant areas of agricultural land are not used for their intended purpose, both in Russia (in 2023 – 41,289 thousand hectares or 11.0% of the total area of such lands) and in China. Globally, the area of abandoned agricultural land is estimated to vary between 150 and 472 million hectares<sup>4</sup>.

The issue of bringing such lands back into economic use is a focus of attention not only for the global (including Chinese and Russian) scientific community but also for public authorities. For example, in China, a rather interesting mechanism has been proposed and is being used for this purpose, based on implementing the reform of separating ownership rights, contract rights, and land management rights in rural areas. The Opinions on Improving the Measures for Separating Rural Land Ownership Rights, Contract Rights and Management Rights issued by the General Office of the Central Committee of the Communist Party of China (CPC) and the General Office of the State Council in 2016 pointed out that the paid

<sup>1</sup> Law of the RSFSR No. 374-1 “On Land Reform” dated November 23, 1990 (Gazette of the Congress of People’s Deputies of the RSFSR and the Supreme Soviet of the RSFSR, 1990, No. 26, Art. 327).

<sup>2</sup> Land Code of the Russian Federation No. 136-FZ dated October 25, 2001 (as amended on July 31, 2025) (with amendments and additions, effective from September 1, 2025).

<sup>3</sup> Thus, the Outline of the 14th Five-Year Plan for Economic and Social Development (2021–2025) and Long-Range Objectives Through 2035 of the People’s Republic of China, published in 2021, states that it is necessary to stimulate efforts aimed at helping residents with rural registration living in urban areas to obtain urban registration; and to continue promoting the new people-centered urbanization strategy. This means that more and more farmers will reside in cities and relinquish their land contract rights as the new urbanization progresses.

<sup>4</sup> Ptichnikov A.V., Kurichev N.K., Titkov A.S., Kudryavtseva A.V. New Opportunities for Increasing Economic Returns from Agricultural Lands Overgrown with Woody and Shrubby Vegetation in the Russian Federation: Analytical Report. Moscow: Faculty of Geography and Geoinformation Technology, HSE University. 2025. 37 p. Available at: <https://geography.hse.ru/mirror/pubs/share/1062628291>

withdrawal from land contract rights and other pilot projects should be actively carried out, with a view to summing up practices and experiences that can be further promoted<sup>5</sup>.

The information base of the study consisted of regulatory legal acts and strategic planning documents of the People's Republic of China and the Russian Federation; official data from China's National Bureau of Statistics and Rosstat, as well as departmental statistics from both countries.

The novelty of the research lies in the interpretation and systematization of Chinese and Russian experience in state management of unused agricultural lands.

#### **Theoretical framework of the study**

The issue of inefficient use of agricultural lands, due to its scale and national economic significance, is a focus of the global scientific community. Scholars assess the areas of unused land, identify reasons for their increase and, conversely, decrease. Works examining mechanisms for bringing unused or inefficiently used agricultural lands back into economic circulation, including through the transfer of land rights, carry particular scientific and practical significance. Such transfer of rights in countries where private land ownership exists allows low-efficiency producers to relinquish their land in favor of high-efficiency producers or other parties interested in acquiring the resource, thereby contributing to increased land and labor productivity (Yujiro, 2000). It should be noted that a number of countries have achieved significant results in implementing land rights transfer mechanisms. For instance, the American land

market is relatively well-developed. It features a model for controlling transaction costs and risks, according to which transaction costs influence land prices; the development of intermediary services in land transfer reduces transaction costs.

A significant body of work by foreign scholars is dedicated to researching land transfer mechanisms, including in connection with its value. For example, Gorton proposed creating a land valuation system and a conflict resolution mechanism over price based on studies of the influence of transaction costs on land prices (Gorton, 2001). According to (Duke et al., 2004), high fragmentation and inefficient distribution of land over large areas, resulting from the implementation of a private land ownership system, increase transaction costs for agricultural land. Van Dijk argues that factors such as farmer employment in the non-agricultural sector, the sense of security derived from land ownership, economic development, and others influence the agricultural land transfer mechanism (van Dijk, 2003). Thus, foreign scholars believe that the main factors affecting agricultural land transfer are the agricultural land property rights system, agricultural land transfer costs, macroeconomic and institutional issues, etc.

Chinese scholars are deeply engaged in studying the system for relinquishing land contract rights. For instance, Dang Guoying argues that relinquishing land contract rights helps protect farmers' rights and interests, as well as increase land productivity (Guoying, 2013).

Gao Jia notes that rapid urbanization will remain the dominant trend in China's future development, and in this context, promoting the relinquishment of land contract rights and improving monetary compensation mechanisms are pressing issues (Gao Jia, 2016). Liu Tongshan believes that with the development of urbanization, it is crucial to develop channels for the withdrawal

<sup>5</sup> Relinquishment of agricultural land contract rights, or land relinquishment (withdrawal) for short, means that farmers voluntarily and for compensation give up their contract rights to agricultural land and return the contracted land to rural collective enterprises. Their children and descendants subsequently lose the right to contract land from rural collective enterprises.

of agricultural land as quickly as possible and optimize its redistribution among farmers (Liu Tongsan, 2020). Fan Gang argues that rural migrant workers should be granted urban residency to create a new mechanism enabling them to relinquish their land and leave rural areas, as the main reason for the slowdown in urbanization is that these workers cannot fully integrate into urban space (Fan Gang, 2013). Although some experts do not deny the importance of the process, they believe that a cautious attitude should be taken to prevent the risks of leaving for cities and that farmers should not move to cities too radically (He Xuefeng, 2013).

Examining the practice of relinquishing land contract rights, Lu Chunyang and Wen Feng believe that such relinquishment was a comprehensive project, but its mechanism was insufficiently developed, particularly evident in the lack of incentives and influencing factors, which hindered the relinquishment process (Lu Chunyang, Wen Feng, 2019). Liu Jun and Wu Longjian hold the view that encouraging farmers to join land cooperatives is an important form of relinquishing land management rights, although shareholders' rights to relinquish their stakes in rural collective enterprises are not clearly regulated in the Civil Code (Liu Jun, Wu Longjian, 2021). Zhu Tianzhi believes that current land relinquishment policies are primarily aimed at ensuring the productive function of land, rather than protecting and compensating farmers' land property rights (Zhu Tianzhi, 2022). Hu Dawei and Zhao Hongwei also argue that current compensation systems for land relinquishment still lack legal safeguards, and the subject, method, and amount of compensation need standardization and clarification (Hu Dawei, Zhao Hongwei, 2024).

Based on sociological research materials from Henan Province, Han Zhanbing analyzed the willingness of elderly farmers over 60 years old to

relinquish their land rights (Han Zhanbing, 2019). Out of over 800 farmers, 72.19% were willing to relinquish land management rights, while only 9.40% of them were willing to relinquish land contract rights. Zhang Chaoyang et al. found that farmers' willingness to relinquish land contract rights varies across generations, being lower among the elderly (Zhang Chaoyang et al., 2024).

In Russia, the issue of bringing unused or inefficiently used agricultural lands back into economic circulation is also a research focus. However, one of the key directions here is assessing the current level and dynamics of changes in the area of such lands, as well as identifying the causes (factors) and consequences of their increase. For instance, researchers from the Center for Digital Technologies for Nature-Climate Projects at HSE University established that after 1991, approximately 33 million hectares of agricultural land in Russia became overgrown with forest and shrubs<sup>6</sup>. Of these, only 5.6 million hectares (17%) with a projected coverage of woody-shrub vegetation of less than 10% are a priority for return to agricultural use. Conversely, 6.9 million hectares (21%) of overgrown land with a projected coverage exceeding 80% are promising for agroforestry, experts note. Importantly, the issue of unused agricultural lands, particularly arable land, their overgrowth with shrubs and forest, and their waterlogging is especially acute in the regions of Russia's Non-Chernozem Zone (Kostyaev, Nikonova, 2022; Nikonova, 2023).

<sup>6</sup> Ptichnikov A.V., Kurichev N.K., Titkov A.S., Kudryavtseva A.V. (2025). New Opportunities for Increasing Economic Returns from Agricultural Lands Overgrown with Woody and Shrubby Vegetation in the Russian Federation: Analytical Report. Moscow: Faculty of Geography and Geoinformation Technology, HSE University. 37 p. Available at: <https://geography.hse.ru/mirror/pubs/share/1062628291>; HSE Center for Nature-Climate Projects Proposes Options for Using Abandoned Agricultural Lands for Russia's Low-Carbon Development Tasks. Website of the HSE Center for Digital Technologies for Nature-Climate Projects. 2025. Available at: <https://geography.hse.ru/nbs-center/news/1050276651.html>

The article by B.S. Dzhabrailova analyzed quantitative changes and problems in bringing unused agricultural lands into circulation in the regions of the Northwestern Federal District, providing a list of measures that should be included in the mechanism for involving such lands. It is noted that “the longer these lands remain unused, the more expensive the measures to return them to agricultural circulation become” (Dzhabrailova, 2021).

The work (Oreshkina et al., 2022) presents a classification of factors contributing to the growth of unused agricultural lands: socio-economic factors (non-targeted use of land plots, their transfer to short-term lease, etc.); natural-anthropogenic factors of land degradation (water and wind erosion, etc.). These factors act in combination, often amplifying each other. The description of the causes for the emergence of “ownerless” land plots is also the subject of works (Zhilskiy et al., 2023; Ishamyatova, Antropov, 2024; Petrikov, 2025).

A separate body of work is dedicated to the critical analysis and improvement of legal aspects related to the protection, withdrawal, and return to circulation of unused agricultural lands; to identifying and suppressing violations of land legislation that have led to the deterioration of agricultural lands or made their use for their intended purpose impossible (Turitsyn, 2012; Malyshkina, 2016; Ognivtsev, 2018; Maksimov, 2023).

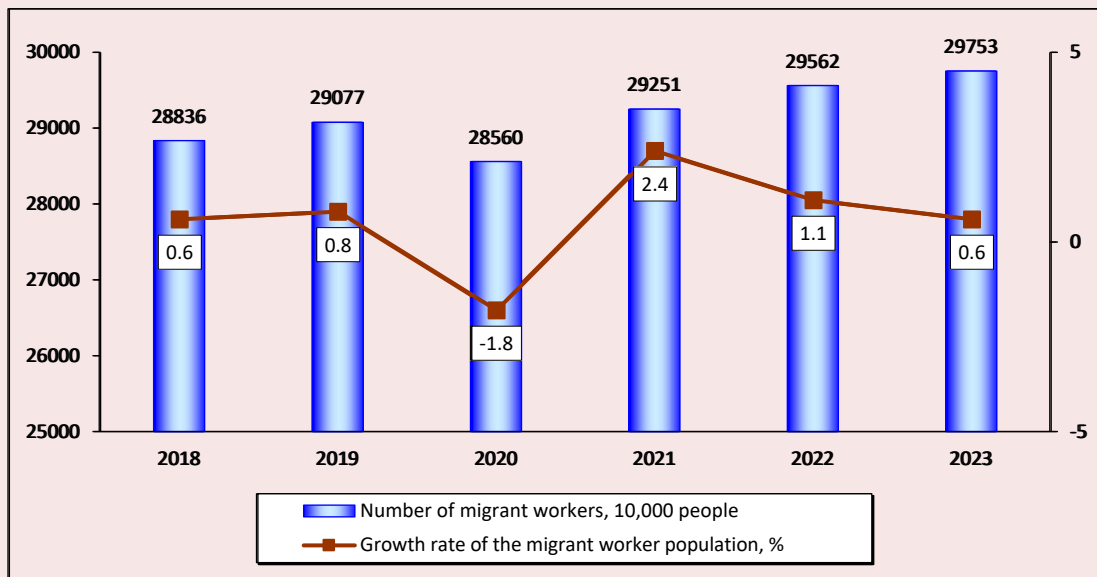
The issue of institutional regulation of the process of bringing unused agricultural lands back into economic circulation is explored in the work (Trofimova, 2024). It substantiates an original algorithm representing a four-stage mechanism for analyzing, preparing, and making decisions on choosing a method for restoring land plots (direct return to circulation after a short period of non-use; conducting land improvement measures followed by introduction into circulation;

conversion to another use category in cases of high degradation and low fertility levels) and options for their further use.

In the work by researchers from the Russian State Agrarian University – Moscow Timiryazev Agricultural Academy, it is directly stated that “the problem of bringing unused agricultural lands into circulation cannot be solved solely by free land distribution and start-up grants” (Arzamastseva et al., 2022). In their opinion, it is more rational to focus on measures to stimulate “new” demand for agricultural products to boost production and expand sown areas, given favorable conditions for this process. In turn, S.A. Lipski points to the existence of two perspectives on lands suitable for agriculture (Lipski, 2020). According to the first, it is necessary to maximize the involvement of such lands in agricultural circulation (i.e., for their designated purpose) and preserve them even in the absence of economic justification. According to the second perspective, “free use and market circulation of these and other lands based on current economic conditions” is permissible, i.e., the possibility of developing agricultural lands with residential and non-residential real estate, transport and other infrastructure facilities.

Summarizing the above, it can be concluded that the issue of bringing unused agricultural lands back into economic circulation in global scientific literature is considered through the prism of economic, social, legal, institutional, and other spheres of public life. However, these studies are primarily focused on a detailed examination of one specific territory – a country, macro-region, or region. Meanwhile, the comparison and generalization of practical experiences from different territories in solving this task can serve as a theoretical and methodological foundation and reference material for improving state land-use policy.

Figure 1. Number of migrant workers in China, 2018–2023



Source: 2023 Migrant Worker Monitoring Report published by China’s National Bureau of Statistics.

**People’s Republic of China: Relinquishment of agricultural land contract rights**

In China, a combination of factors led to the reform of the mechanism for relinquishing agricultural land contract rights. The key factors include the following:

1. Mass migration of surplus agricultural labor to urban areas in China. In the 1980s, as China was undergoing reform and opening up, coastal cities saw rapid development, and many rural laborers went to cities to work, resulting in the unique phenomenon of “migrant workers” in China. Since then, surplus rural laborers have immigrated to urban areas in large numbers, bringing about profound economic and social changes in China. According to the 2023 Migrant Workers Monitoring Survey Report released by the National Bureau of Statistics of China, there were 297.53 million migrant workers in China in 2023. 120.95 million

of them were local, and 176.58 million were from other places, with cross-regional migrant workers accounting for nearly 60 percent (*Fig. 1*). The flow of migrant workers in China is the world’s largest transfer of surplus rural labor.

2. Urbanization potential. From the perspective of international economic development patterns, a country is generally considered to have entered a period of rapid urbanization when the share of its urban population is between 30 and 70%. By the end of 2023, Chinese cities were home to 932.7 million permanent residents. Although the share of the urban population reached 66.2%, the share of the registered urban population was less than 50%. Furthermore, there were approximately 180 million migrant workers who had not obtained urban household registration. The above indicates the potential for further urbanization (*Tab. 1*).

Table 1. Urbanization rates of China's permanent residents and registered residents and the gap between the two, 2011–2020

Year	Urbanization rate of permanent residents, %	Urbanization rate of registered residents, %	Gap, p.p.
2011	51.27	34.71	16.56
2012	52.57	35.29	17.28
2013	53.73	35.93	17.80
2014	54.77	37.10	17.67
2015	56.10	39.90	16.20
2016	57.35	41.20	16.15
2017	58.52	42.35	16.17
2018	59.58	43.37	16.21
2019	60.60	44.38	16.22
2020	63.89	45.40	18.49
2021	64.72	46.70	18.02
2022	65.22	47.70	17.52
2023	66.16	48.30	17.86

Source: China Statistical Yearbook 2020 (urbanization rate of permanent residents) public data over the years (urbanization rate of registered residents).

3. The need to expand the scale of agricultural land management. The land transfer and the withdrawal of land contract rights are closely related to the development of large-scale management as the former is the prerequisite of the latter and is an important feature of agricultural modernization. According to the statistical data of the Ministry of Agriculture and Rural Affairs of China, the scale of farmland management needs to be improved as there are 232.103 million farmers managing less than 10 mu<sup>7</sup> of farmland, accounting for 85.06% of the national total (*Tab. 2*). According to the third national agricultural census, there were 64.2696 million farmland managers in central China, but only 856,100 of them are large-scale managers, accounting for 21.5% of the national total.

4. Widespread prevalence of part-time farming. Currently, the proportion of part-time farmers in China is relatively high. Their emergence and

increasing numbers are facilitated by three conditions. First, the family must have multiple working members. Second, the land allotted to them under contract must be small in size and of good quality for convenient intensive use. And finally, the land must be located near developed areas with high expected value. Some of these lands have ceased to be agricultural and have been incorporated into urban areas with subsequent transfer for use to government bodies. Under such circumstances, most part-time farmers are unwilling to relinquish their land. The rates of land transfer in Central China show that almost 2/3 of agricultural lands that have not been transferred are still managed by the farmers themselves, and most of them are part-time, as income from agricultural activities constitutes about 10% of their family income (*Fig. 2*). Part-time farmers occupy a larger share compared to other farmers in China; most of

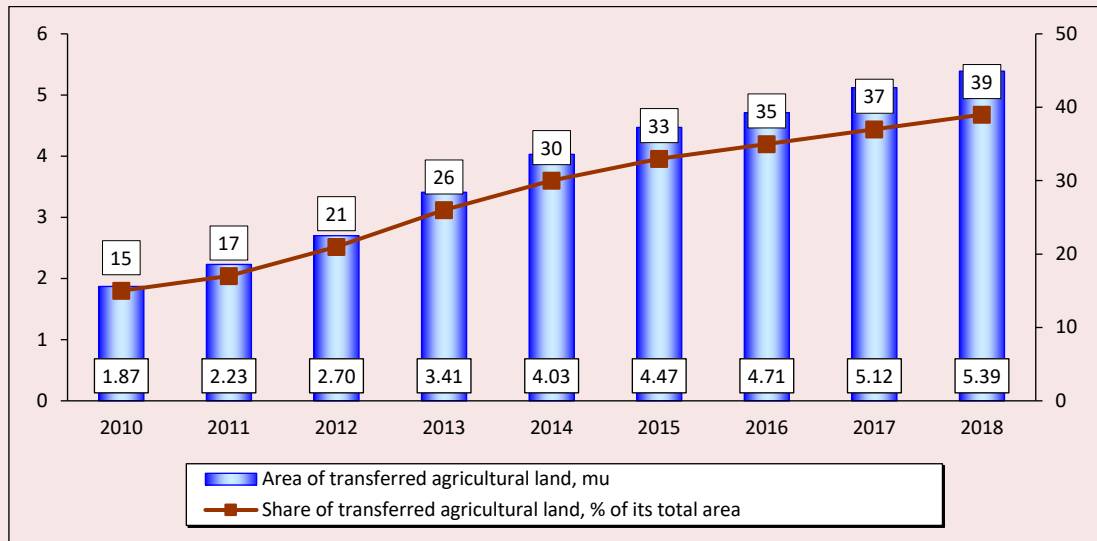
Table 2. Scale of farmland operation in China, 10,000 households

Indicator	Farmers managing farmland area					
	less than 10 mu	10 to 30 mu	30 to 50 mu	50 to 100 mu	100 to 200 mu	over 200 mu
Number of farmers	23210.3	2922.9	700.8	291.7	109.4	50.6

Source: Statistical data from the Ministry of Agriculture and Rural Affairs of the People's Republic of China.

<sup>7</sup> Mu is a unit of area measurement used in China, equivalent to 1/15 of a hectare, or approximately 666.67 m<sup>2</sup>.

Figure 2. Area and share of transferred agricultural land in China



Source: China's National Bureau of Statistics.

them meet the conditions for land withdrawal, but there are no actual mechanisms to carry out such withdrawal.

These and many other factors contributed to the spread of the practice among the population of relinquishing agricultural land contract rights, which unfolded differently in various provinces of China (especially regarding land relinquishment algorithms, farmer behavior, etc.). It appears that studying and comparing these practices could enhance the effectiveness of state regulation in the sphere of land use.

Within this framework, an empirical study of farmers' willingness to relinquish agricultural land contract rights was conducted, using the provinces of Anhui and Jiangxi in central China as examples. The study was based on the results of questionnaires and interviews conducted from February to May 2019. The survey areas meet the following conditions: a) traditional agricultural regions of China; b) many farmers work outside their hometowns, creating a need for land relinquishment. A random sampling method was

used in the questionnaire for data collection. Data was gathered in two randomly selected towns within the Yujiang District of Jiangxi Province; in each town, two villages were randomly chosen for household surveys. In each sample county (district) of Anhui Province, one town was randomly selected, and within it, two villages were randomly chosen for household surveys. With the assistance of village committees, the study obtained 671 valid questionnaires (after excluding those with missing data or incorrect completion), of which 343 were from Anhui Province and 328 from Jiangxi Province.

*Analysis of the model for material compensation in exchange for relinquishing agricultural land rights*

According to the policy guidelines of the central government, the key to protecting the land contract rights and collective income distribution rights of farmers settled in cities is to encourage lawful, voluntary, and compensated transfer. However, the gap between the costs associated with relinquishing land contract rights and the compensation farmers can receive depends on the conditions provided by

Table 3. Proportion of farmers willing to relinquish land contract rights under different types of financial compensation, % of respondents

Financial compensation method	Anhui	Jiangxi
Contracted land in exchange for cash compensation	60.12	86.23
Contracted land in exchange for collective economic equity	25.77	4.79
Contracted land in exchange for social security	14.11	8.98
Source: Survey of farmers in Anhui and Jiangxi provinces.		

the government. This study examines three types of compensation: exchange of contract land for monetary compensation; exchange of contract land for collective economic assets; exchange of contract land for social security.

Analysis of the questionnaires in Anhui Province showed that the number of farmers choosing the first, second, and third types of compensation was 196, 84, and 46, respectively. Thus, the first option was chosen by the majority of farmers in the sample, accounting for 60.12% of the total. In Jiangxi Province, the three aforementioned options were chosen by 144, 8, and 15 farmers in the sample, respectively. The first option was chosen most frequently, accounting for 86.23% of the total. Therefore, the overwhelming majority of surveyed farmers prefer monetary compensation (*Tab. 3*).

#### *Analysis of the results of the pilot reform of the agricultural land contract rights system*

Due to differences in economic development across China's eastern, central, and western regions, the mechanisms adopted in the 20–30 pilot areas for the reform of relinquishing land contract rights varied from place to place. For this study, only one typical area from each of the three aforementioned regions of China was selected for comparative analysis: Jinhu County, Jiangsu Province, Eastern China; Dingyuan County, Anhui Province, Central China; Liangping County, Chongqing Municipality, Western China.

Jinhu County in Jiangsu Province is one of the first pilot counties for rural land system reform designated by the State Council. It is a traditional

agricultural county (serving as a national commercial grain production base) and an important pilot county for the development of modern agriculture. Its economy is relatively developed due to its geographical location in the economically advanced eastern region of China. In 2023, the county's GDP per capita reached 150,940 yuan; per capita agricultural land area was 2.6 mu; the land transfer rate was 78%, and the level of mechanization in the agricultural sector was 90%. In 2016–2017, the county conducted two experiments on relinquishing land contract rights in Tanggang Village, Yintu Town. A total of 93 individuals from 31 farm households completed the procedure for relinquishing contract rights on agricultural lands, including 500.06 mu of contracted land, 24.71 mu of private plots, and 12 mu of farmsteads.

The county implemented a mechanism of complete relinquishment, where farmers voluntarily withdrew from land contract rights. Compensation was calculated based on the registered land area and a unified local land transfer compensation standard – 900 yuan per mu per year for 30 years, paid as a lump sum. The withdrawn land<sup>8</sup> was managed by creating a state-owned asset management company and the Huai'an New City Investment Company at the county level. Investments were distributed between the two parties and village-level rural collective economic organizations in a 4:4:2 ratio, granting them the legal right to dispose of the withdrawn land.

<sup>8</sup> Land from which contract rights have been relinquished.

Dingyuan County in Anhui Province is also a typical traditional agricultural county. According to 2023 data, it covers an area of 2,998 sq. km with a population of 975,000; GDP per capita is 40,300 yuan, and the area of agricultural land with confirmed rights is 2.69 million mu. Dingyuan County is among the top 100 counties in grain production; it is a commercial grain production base in China with a well-developed livestock industry.

According to the Ministry of Agriculture and Rural Affairs, it is one of the “second wave” pilot counties for relinquishing agricultural land contract rights. The county decided to introduce mechanisms for permanent and long-term withdrawal. A total of 54 individuals from 9 households agreed to relinquish their rights and signed withdrawal agreements, involving 436.5 mu of land. Nine individuals from two households owning 37.3 mu of land opted for permanent withdrawal, while the others chose the second option – land relinquishment with a 30-year withdrawal term. Compensation for permanent withdrawal was set at 600 yuan/mu/year, paid either as a lump sum or in installments. For long-term withdrawal, compensation for the first 8 years was paid as a lump sum, followed by payments every 5 years. The withdrawn land was used by the Wens Corporation to build a large modern pig farming enterprise; this same corporation provided the compensation.

In Liangping County, which is one of the “second wave” pilot areas for agricultural reform in China, there are approximately one million mu of contracted land and 720,000 farmers, more than 40% of whom work away from home year-round. As a large number of rural residents have moved to urban areas and abandoned agricultural production, many farmers indeed intended to relinquish their land contract rights. For this purpose, since 2014, the county has been implementing pilot projects for land withdrawal under two mechanisms: partial withdrawal with simultaneous input and withdrawal;

complete withdrawal with centralized use.

The first mechanism involved interested parties selecting a specific land plot for use. After the contract holder and the agricultural collective reached an agreement, the three parties (the new user, the contract holder, and the collective) discussed the amount of compensation for relinquishing contract rights, the distribution of income between the agricultural collective and the contract holder, the rights and obligations of each party, and other issues. The demanding party obtained land management rights for the contract period after paying the rent.

The second mechanism required the party relinquishing land contract rights to do so comprehensively for the entire household after receiving compensation from the agricultural collective. Subsequently, the agricultural collective managed the withdrawn land, leasing it out or including it in new contracts. The compensation was 14,000 yuan per mu, equivalent to the local land transfer price for approximately 20 years. Compensation was paid from a revolving fund for land withdrawal compensation in pilot townships, financed through self-funding by agricultural collectives, bank loans, and county/township budget loans. Annual income from the utilization of the withdrawn land was first used to replenish the revolving fund and then contributed to the income of rural collective enterprises.

A generalized characterization of the land withdrawal mechanisms in Jinhui, Dingyuan, and Liangping counties is presented in *Table 4*.

In general, the pilot areas have successfully tested the practice of relinquishing land contract rights and accumulated extensive experience that deserves active study and dissemination. For example, a principle has been identified that allows farmers who meet the withdrawal conditions to voluntarily relinquish land contract rights and receive reasonable compensation. Only by ensuring

Table 4. Characteristics of land withdrawal mechanisms from farmers in pilot areas of China

Characteristic	Jinhu County	Dingyuan County	Liangping County
General county information	As one of the first pilot counties for rural land system reform, Jinhu is a relatively developed county due to its location in economically advanced eastern China. In 2023, its GDP per capita was 150,940 yuan, per capita agricultural land area was 2.6 mu, the land transfer rate was 78%, and the level of agricultural mechanization was 90%.	Dingyuan is one of the «second wave» pilot counties for relinquishing land contract rights designated by the Ministry of Agriculture and Rural Affairs. In 2023, its population was 975,000, GDP per capita was 40,300 yuan, and the area of agricultural land with confirmed rights was 2.69 million mu. It is among the top 100 grain-producing counties and is a commercial grain production base in China with a well-developed livestock industry.	Liangping, part of the «second wave» of agricultural reform pilot areas in China, has nearly one million mu of contracted land. In 2023, its population was 906,000, with over 40% working away from home year-round, and its GDP per capita was 63,700 yuan.
Description of land withdrawal	A total of 93 individuals from 31 households completed the relinquishment procedure, involving 500.06 mu of contracted land. The withdrawn land was used for cultivating premium fruits and for organizing recreational activities on agricultural land.	A total of 54 individuals from 9 households agreed to relinquish land contract rights, involving the withdrawal of 436.5 mu of land. Nine individuals from two households owning 37.3 mu of land chose permanent withdrawal, while the others opted for long-term withdrawal with a 30-year withdrawal period.	A total of 131 farmers voluntarily relinquished 297.97 mu of land and received compensation exceeding 2 million yuan. Ten new agricultural enterprises were established to develop productive agricultural sectors such as seafood, fruit, and vegetable production.
Withdrawal mechanism	Complete withdrawal.	Permanent and long-term withdrawal.	«Whole-household withdrawal, centralized land use» and «Whole-plot withdrawal, individual land use».
Compensation	Compensation was 900 yuan per mu per year for 30 years, paid as a lump sum.	Compensation for permanent withdrawal was 600 yuan per mu per year, paid as a lump sum or in installments. For long-term withdrawal, compensation for the first 8 years was paid as a lump sum, followed by payments every 5 years.	Compensation was 14,000 yuan per mu, equivalent to the local land transfer price for approximately 20 years.
Financing	Investments were distributed between state investment companies, the Hua'an New City Investment Company, and village-level collective enterprises in a 4:4:2 ratio, granting them the right to manage the withdrawn land in accordance with the law.	Financing was covered by the Wens Corporation, and the withdrawn land was used by it to build a large modern pig farming enterprise.	Compensation was paid from revolving funds for land withdrawal compensation in pilot townships, financed through self-funding by agricultural collectives, bank loans, and county/township budget loans.
Source: own compilation based on official websites of county-level governments and relevant research literature.			

the social security of farmers can the relinquishment of land contract rights reduce social risks. At the same time, it is also necessary, under government guidance, to ensure comprehensive coordination, legal and normative regulation, etc.

However, the following aspects should be noted.

1. Under current policy, farmers' willingness to relinquish land rights is low.

One of the goals of the new urbanization is to provide housing for farmers in the cities where they work. However, the latest revision of the Land Contract Law does not require farmers to relinquish their land contract rights before obtaining urban household registration, allowing eligible farmers to retain their agricultural land rights. Current policy suggests that relinquishing land rights can help farmers mitigate risks associated with working or starting a business in urban areas, thereby maintaining social stability during reform and transformation. More importantly, farmers may have higher expectations regarding the future value of their land. A questionnaire survey conducted in the Shanghai suburbs revealed that not family income, but the expected land value and current policy are decisive factors influencing farmers' willingness to relinquish rights. The relinquishment of land contract rights may be a long-term process of historical significance.

2. The collective economic sector in central and western China is too weak to cover land withdrawal compensation.

After farmers withdrawing from their land contract rights, the land becomes the land collectively owned by the rural community as farmers may return their land to the rural community in general. However, when it comes to who should pay the compensation and whether it should be paid by rural collective economic organizations, farmers, especially those who stay in the rural areas, have different opinions. They believe that they obtained contract rights for free based on their

household registration and that the land ownership belongs to the rural community. So, it is reasonable that the land should be returned to the rural community when they no longer undertake land contracting. Moreover, the rural community usually is unable to cover the compensation, especially the one-time advance payment of 30-year contract fees, which is not allowed in terms of financial systems.

3. In some pilot areas, the withdrawn land is not used efficiently enough.

Some pilot areas have introduced competitive urban enterprises to conduct in-depth development of the withdrawn land. On the one hand, it has ensured the funding of compensation; and on the other hand, it has promoted the development of high-value-added agricultural products, optimizing the agricultural structure and increasing farmers' income. However, if it is widely promoted, when urban enterprises obtain the right to use withdrawn land, they may abandon the grain-oriented production in case of inadequate supervision, which is unfavorable for carrying forward the principle upheld by the central government that it is imperative to firmly stop any attempts to use farmland for any purpose other than agriculture and specifically grain production.

4. Pilot project plans lack a framework to balance the interests of different farmer groups.

The reform should consider interests of all parties concerned. Farmers who leave for cities should enjoy all social and welfare benefits of citizens even though they are not able to enjoy all of those benefits immediately as it takes time. The purpose of land withdrawal is to give farmers who stay in rural areas more land resources to develop large-scale agricultural operations. Such reform goals should all be considered, but they haven't been reflected in the plans yet. As a result, farmers who stay in the rural areas of the pilot areas have a sense of loss and don't understand why those who have left for cities still receive rent of contracted

Table 5. Area of agricultural lands in 2014 and 2023

Territory	2014			2023		
	Total land area, thousand ha	including unused land		Total land area, thousand ha	including unused land	
		Thousand ha	%		Thousand ha	%
RF	385532.6	28354.105	7.35	<b>374 001.660</b>	<b>41 289.437</b>	<b>11.04</b>
NWFD	34 137.9	4 490.436	13.15	<b>29 676.073</b>	<b>4 514.498</b>	<b>15.21</b>
<b>Northern part of NWFD</b>						
Republic of Karelia	210.3	18.125	8.62	209.572	87.894	41.94
Komi Republic	1 859.0	84.777	4.56	1 858.214	652.171	35.10
Arkhangelsk Region	2 329.7	201.274	8.64	2 312.363	482.501	20.87
Nenets Autonomous Area	16 710.3	638.290	3.82	15 966.381	102.450	0.64
Vologda Region	4 504.5	2 705.620	60.06	1 618.447	853.196	52.72
Murmansk Region	2 857.1	23.853	0.83	2 806.364	22.989	0.82
<b>Southern part of NWFD</b>						
Kaliningrad Region	802.3	345.896	43.11	800.199	245.245	30.65
Leningrad Region	1 703.0	112.017	6.58	823.211	184.670	22.43
Novgorod Region	916.3	331.240	36.15	914.271	385.234	42.14
Pskov Region	2 245.4	29.344	1.31	2 367.051	1498.148	63.29

Source: Report on the Status and Use of Agricultural Lands of the Russian Federation in 2023. Moscow: FSBSI «Rosinformagrotekh», 2024. 414 p.; Report on the Status and Use of Agricultural Lands of the Russian Federation in 2014. Moscow: FSBSI «Rosinformagrotekh», 2016. 188 p.

land. In some places, they even receive subsidies from governments, which is an issue remaining to be resolved.

In summary, it should be noted that the key aspects to consider when implementing reforms include adhering to the principle of voluntariness, continuous support from local authorities for monitoring the changing situation, developing and improving support measures, and increasing the level of financial support for relinquishing land contract rights.

#### **Russian Federation: Bringing unused agricultural lands back into circulation**

The problem of inefficient use of agricultural lands<sup>9</sup> is relevant for Russia, especially its northern

<sup>9</sup> According to the Land Code of the Russian Federation (Federal Law 136-FZ dated October 25, 2001, as amended on July 31, 2025, effective from September 1, 2025), lands of agricultural designation are lands located outside settlement boundaries and provided for agricultural needs, as well as those intended for these purposes. Within agricultural lands, agricultural lands – arable land, hayfields, pastures, fallow lands, lands occupied by perennial plantings (orchards, vineyards, and others) – have priority in use and are subject to special protection.

regions, characterized by complex natural, climatic, and socio-economic conditions for agriculture. As of 01.01.2024, the total area of unused<sup>10</sup> agricultural lands in the Russian Federation amounted to 41.3 million hectares, of which 4.5 million hectares were in the Northwestern Federal District (*Tab. 5*). These 4.5 million hectares constitute 15.2% of the district's total agricultural land area (a higher value – 25.3% – is observed only in the Central Federal District).

Over the 10-year period from 2014 to 2023, the area of unused agricultural lands in Russia increased

<sup>10</sup> The indicators of non-use of agricultural lands for their intended purpose are defined by RF Government Resolution 1482 dated September 18, 2020, “On Indicators of Non-Use of Land Plots from Agricultural Lands for Their Intended Purpose or Use in Violation of the Legislation of the Russian Federation”. These include, for example, the presence of weed plants from the list according to the annex to the Decree and/or woody-shrubby vegetation (except for field- and forest-protective plantations, fruit and berry plantations) on 50 percent or more of the land plot area, and/or the presence of sod characterized by interweaving of roots, shoots, rhizomes of perennial weed plants, with a depth reaching 15 or more centimeters (except for sod on land plots intended and used for grazing farm animals), and/or the spread of land degradation.

by 12.9 million hectares, and their share grew by 6.7 percentage points (p.p.). In the Northwestern Federal District, the area of such lands decreased by 24.1 thousand hectares, while their share, conversely, increased by 2.1 p.p. The area of unused agricultural land decreased in four regions of the district (by 3.6–84.0%) and increased in 6 regions (by 0.54–5105.5%); their share in the total agricultural land area decreased in 4 regions (by 0.01–12.5 p.p.) and increased in 6 regions (by 6.0–62.0 p.p.).

The problem of inefficient, irrational use is particularly acute regarding such a valuable category

of land used for sowing crops as arable land<sup>11</sup>. While for Russia as a whole, the proportion of unused arable land in its total area in 2023 was 14.6%, in the Northwestern Federal District it was 48.6% (at the regional level within the Northwestern Federal District, the maximum share was observed in the Arkhangelsk Region – 76.2%; *Tab. 6*). Such arable land becomes overgrown with woody and shrubby vegetation, experiences waterlogging, swamping, and other negative processes, which multiply the cost<sup>12</sup> and simultaneously reduce the potential for its return to agricultural use.

Table 6. Qualitative condition of unused arable land in 2023

Territory	Total arable land area, thousand ha	thereof unused arable land			
		Total, thsd ha / %	including		
			overgrowth with woody and shrubby vegetation, thsd ha / %	other negative processes, thsd ha / %	suitable for return to agricultural use, thsd ha / %
RF	116 193.437	16 937.037 / 14.6	8 233.966 / 7.1	1 536.529 / 1.3	7 578.881 / 6.5
NWFD	2 994.484	1 454.809 / 48.6	824.745 / 27.5	3.939 / 0.1	622.729 / 20.8
<b>Northern part of NWFD</b>					
Republic of Karelia	70.359	17.864 / 25.4	17.864 / 25.4	0.0 / 0.0	8.700 / 12.4
Komi Republic	74.330	40.421 / 54.4	36.565 / 49.2	0.000 / 0.0	28.019 / 37.7
Arkhangelsk Region	275.473	209.814 / 76.2	63.91 / 23.2	0	209.814 / 76.2
Nenets Autonomous Area	0.0	0.0	0	0	0
Vologda Region	715.733	337.483 / 47.2	0.0	0.0	162.610 / 22.7
Murmansk Region	17.902	5.625 / 31.4	3.331 / 18.6	2.294 / 12.8	0
<b>Southern part of NWFD</b>					
Kaliningrad Region	358.300	91.445 / 25.5	4.300 / 1.2	0	87.145 / 24.3
Leningrad Region	378.877	113.756 / 30.0	113.756 / 30.0	0	47.551 / 12.6
Novgorod Region	448.041	227.511 / 50.8	188.996 / 42.2	1.645 / 0.4	43.151 / 9.6
Pskov Region	655.469	410.890 / 62.7	396.020 / 60.4	0.000	35.739 / 5.5

Source: Report on the Status and Use of Agricultural Lands of the Russian Federation in 2023. Moscow: FSBSI "Rosinformagrotekh", 2024. 414 p.

<sup>11</sup> Domestic researchers note that one of the most important components of the development of Russia's Non-Chernozem Zone, within which the Vologda Region is also located, could in the future be the bringing of uncultivated lands into circulation and the restoration of the crop structure, necessarily including three basic areas – fodder crops, vegetables, and flax (Maklakhov et al., 2020).

<sup>12</sup> The cost of measures to bring unused agricultural lands into circulation varies depending on natural and climatic conditions, the degree of overgrowth with woody-shrubby vegetation, and the development of other negative processes. According to the Federal State Budgetary Institution "Rosselkhozland Monitoring," bringing 1 hectare of unused land into agricultural circulation in the Northwestern Federal District requires financial resources ranging from 0.81 to 78.94 thousand rubles. Source: Report on the Status and Use of Agricultural Lands of the Russian Federation in 2023. Moscow: FSBSI "Rosinformagrotekh", 2024. 414 p.

The factors contributing to the very existence and increase in the area of unused agricultural lands in Russia can be conditionally divided by level and sphere of manifestation:

1) global: social (e.g., decline and aging of the rural population, which represents the main part of the agricultural workforce), technical and economic (increased labor productivity and land yield due to land improvement works, application of innovative technologies, fertilizers, etc.), and others;

2) national: institutional and legal (unclaimed land shares following the division of a unified land-property complex into land and property shares<sup>13</sup>, transfer of rights to heirs uninterested in agricultural activity, etc.), spatial (locational contraction, economic desertification of previously developed space during the transition from a planned to a market economy model), and others;

3) local (particularly characteristic of the country's northern regions): natural and climatic (relatively low soil fertility, fragmentation of land plots due to separation by forest plantations), infrastructural (relatively weak infrastructural connectivity of territories, hindering production and product sales), and others.

The presented factors certainly do not cover the entire spectrum but demonstrate their diversity. It is important to understand that they act simultaneously.

Bringing unused agricultural lands back into circulation has been and remains an important task in achieving Russia's strategic development goals outlined in the Food Security Doctrine of the Russian Federation (approved by Presidential Decree 20 dated January 21, 2020, as amended on March 10, 2025), the Strategy for Sustainable Development of Rural Territories of the Russian Federation until 2030. (approved by RF Govern-

ment Resolution 151-r dated February 2, 2015, as amended on January 13, 2017), and the Spatial Development Strategy of the Russian Federation until 2030 with a forecast to 2036 (approved by RF Government Resolution 4146-r dated December 28, 2024). In particular, it will contribute to increasing the volume of domestic agricultural production, aimed, on one hand, at developing a supply-side economy in the country and, on the other, at exporting agricultural products abroad. It will also contribute to ensuring food security, as well as the manageability, connectivity, and economic development of the country's vast territories; preserving the traditional way of life of the rural population associated with agriculture.

At the same time, it is important to understand that not all unused agricultural land can or should be brought back into circulation. This issue should be approached from the perspective of balancing economic efficiency (cost-effectiveness of involvement, investment attractiveness of territories, etc.) and public utility (for example, land with a high degree of forest cover might be more rationally used for forestry purposes or left "untouched" in the context of implementing environmental agendas rather than being brought back into agricultural use).

It is worth noting that the transfer of ownership rights to unused agricultural lands is regulated by the legislation of the Russian Federation. Thus, according to Federal Law 101-FZ "On the Turnover of Agricultural Lands" dated July 24, 2002. (as amended on December 26, 2024), a land plot not used for its intended purpose or used in violation of the law may be seized from the owner by a court decision for sale at public auction with the aim of subsequent involvement in agricultural use or for acquiring such a land plot into state or municipal ownership. The proceeds from the sale of the plot, minus the costs of preparing and conducting the public auctions, are paid to its former owner.

<sup>13</sup> Source: Report on the Status and Use of Agricultural Lands of the Russian Federation in 2023. Moscow: FSBSI "Rosinformagrotekh", 2024. 414 p.

At the same time, according to data from the Russian Accounts Chamber, the most common methods of bringing land plots in public (state and municipal) ownership into circulation are leasing them out, granting them for permanent (perpetual) use, and transferring them to another level of public ownership<sup>14</sup>.

In 2021, the Government of the Russian Federation approved the state program for the effective involvement of agricultural lands in circulation and the development of the reclamation complex of the Russian Federation (Resolution 731 dated May 14, 2021, as amended on May 16, 2025). The program's goals, planned for achievement no later than 2030, are designated as:

- 1) involving at least 13,234.8 thousand hectares of agricultural lands into circulation;
- 2) obtaining reliable and up-to-date information on the quantitative characteristics and boundaries of agricultural lands for 100% of

agricultural lands, including quantitative and qualitative characteristics of unused arable land planned for involvement in circulation;

- 3) preserving agricultural lands in agricultural use and improving their qualitative characteristics by carrying out reclamation measures on an area of at least 7,165.4 thousand hectares.

From 2021 – the year the program began – to 2023, a total of 5,134.6 thousand hectares of agricultural land were brought into circulation across Russia (38.8% of the plan for all agricultural lands combined; *Tab. 7*), of which only 111.12 thousand hectares were in the Northwestern Federal District.

By the end of 2023, the Northwestern Federal District had the smallest share of involved agricultural land relative to the total area of unused land among all federal districts: 1.36%. Furthermore, this problem intensifies when “moving North”: while in the regions of the southern part of the Northwestern

Table 7. Involvement of unused agricultural lands into agricultural circulation in 2021–2023, thousand ha

Territory	2021	2022	2023	Total in 2021–2023
RF	1 812.060	1 902.816	1 419.729	5 134.61
NWFD	28.500	36.985	45.639	111.12
<b>Northern part of NWFD</b>				
Republic of Karelia	0.000	0.090	0.000	0.09
Komi Republic	0.736	0.844	1.483	3.06
Arkhangelsk Region	0.708	0.953	0.000	1.66
Nenets Autonomous Area	0.000	0.000	0.000	0.00
Vologda Region	3.820	4.496	4.998	13.31
Murmansk Region	0.000	0.000	0.000	0.00
<b>Southern part of NWFD</b>				
Kaliningrad Region	9.037	6.091	17.214	32.34
Leningrad Region	1.614	1.402	6.827	9.84
Novgorod Region	5.724	11.290	7.736	24.75
Pskov Region	6.861	11.819	7.381	26.06

Source: Report on the Status and Use of Agricultural Lands of the Russian Federation in 2023. Moscow: FSBSI “Rosinformagrotekh”, 2024. 414 p.; Report on the Status and Use of Agricultural Lands of the Russian Federation in 2022. Moscow: FSBSI “Rosinformagrotekh”, 2023. 372 p.; Report on the Status and Use of Agricultural Lands of the Russian Federation in 2021. Moscow: FSBSI «Rosinformagrotekh», 2022. 356 p.

<sup>14</sup> Report on the Results of the Expert-Analytical Event “Analysis of the Practice of Bringing Land Resources of the Russian Federation into Economic Circulation in 2021–2022 and the Past Period of 2023” (the results are considered within the framework of the CBA “Analysis of the Effectiveness of the Inter-Budgetary Relations System”). Website of the Accounts Chamber of the Russian Federation. 2024. Available at: <https://ach.gov.ru/upload/iblock/4cf/lsq1a5c8g8b9htso8bdmfiseu8n3aixw.pdf>

Federal District, the share of land brought into circulation varied from 15.0% (Leningrad Region) to 37.7% (Kaliningrad Region), in the regions of the northern part it ranged from 0.0% (Republic of Karelia, Arkhangelsk and Murmansk regions, Nenets Autonomous Area) to 11.0% (Vologda Region)<sup>15</sup>. A similar situation is observed regarding arable land.

In certain constituent entities of the Russian Federation, regional state programs are in effect to stimulate the involvement of unused agricultural lands in circulation. For instance, in the Vologda Region, the “Vologda Hectare” program was launched in 2019, providing for the possibility of free acquisition of land plots from the state by legal entities (up to 100 hectares for agricultural production and processing) and individuals (from 1 to 2.5 hectares for personal subsidiary farming; from 1 to 10 hectares for other purposes: vegetable growing, livestock farming, etc.). According to open data, from April 1, 2019, to October 6, 2023, decisions were made to grant 263 land plots with a total area of 2,329.3 hectares in Babayevsky, Belozersky, Vashkinsky, Vozhegodsky, Vytegorsky, Nikolsky, Tarnogsky, and Kharovsky municipal okrugs of the region<sup>16</sup>. Since 2024, the program has undergone some changes<sup>17</sup>. In particular, its geographical scope has expanded: participants have gained the opportunity to obtain agricultural lands

in all municipalities of the region, except for the major cities of Vologda and Cherepovets. The area of provided land plots is set from 5 to 100 hectares. Furthermore, the program provides for granting land plots to peasant (farm) enterprises that have completed training at the “School of Farmer” (in accordance with the procedure established by Resolution 676 of the Government of the Vologda Region dated June 6, 2024, “On Organizing Training for Citizens in Conducting Agricultural Production in Small-Scale Farming Forms in 2024”) and are registered in the Vologda Region. It appears that this will enhance the effectiveness of the “Vologda Hectare” program by developing participants’ relevant competencies, knowledge, and skills during the educational process.

In other northern regions of the Northwestern Federal District – the Arkhangelsk and Murmansk regions, republics of Karelia and Komi, and Nenets Autonomous Area – the major federal program “Hectare in the Far East and Arctic”<sup>18</sup> is being implemented. Participants of this program not only receive land plots in the Arctic and the Far East<sup>19</sup> free of charge but are also provided with ready-made solutions: “My Home” (housing construction), “My Farm” (agricultural development), and “Business on a Hectare” (entrepreneurship development) for the economic development of their plots<sup>20</sup>.

<sup>15</sup> Report on the Status and Use of Agricultural Lands of the Russian Federation in 2023. Moscow: FSBSI “Rosinformagrotekh”, 2024. 414 p.

<sup>16</sup> “Vologda Hectare” Program. O.V. Kuvshinnikov’s Website. Available at: [https://okuvshinnikov.ru/prog/programma\\_vologodskij\\_gektar/](https://okuvshinnikov.ru/prog/programma_vologodskij_gektar/)

<sup>17</sup> The Vologda Region Expands the Geographical Scope of the “Vologda Hectare” Program. Portal of the Government of the Russian Federation. Available at: [https://vologda-oblast.ru/gubernator/novosti\\_gubernatora/na\\_vologodchine\\_rasshirili\\_geografiyu\\_deystviya\\_programmy\\_vologodskiy\\_gektar/](https://vologda-oblast.ru/gubernator/novosti_gubernatora/na_vologodchine_rasshirili_geografiyu_deystviya_programmy_vologodskiy_gektar/); Website of the Legislative Assembly of the Vologda Region. Available at: <https://vologdazso.ru/actions/documents/protsessions/190186/>; [https://vologdazso.ru/actions/legislative\\_activity/draft-laws/getfile.php?fileid=TkRVNU5EZzNPVUWwVFc=&fname=%D0%97%D0%B0%D0%BA%D0%BE%D0%BD%D0%BE%D0%B4%D0%B0%D1%82%D0%B5%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F\\_%D0%B8%D0%BD%D0%B8%D1%86%D0%B8%D0%B0%D1%82%D0%B8%D0%B2%D0%B0.pdf](https://vologdazso.ru/actions/legislative_activity/draft-laws/getfile.php?fileid=TkRVNU5EZzNPVUWwVFc=&fname=%D0%97%D0%B0%D0%BA%D0%BE%D0%BD%D0%BE%D0%B4%D0%B0%D1%82%D0%B5%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F_%D0%B8%D0%BD%D0%B8%D1%86%D0%B8%D0%B0%D1%82%D0%B8%D0%B2%D0%B0.pdf)

<sup>18</sup> Website “надальнийвосток.рф”. Available at: <https://xn--80aagvgieoeoa2bo7l.xn--p1ai/>

<sup>19</sup> Permitted uses: house construction, development of a summer cottage, launching a tourism project, organizing activities in agriculture, entrepreneurship, and other permitted types of activities.

<sup>20</sup> Website “освойгектар.рф”. Available at: <https://xn--80addisixbxcr.xn--p1ai/>

In the more southern regions of the North-western Federal District., programs such as “Leningrad Hectare”. (since 2018<sup>21</sup>), “Novgorod Hectare” (since 2019<sup>22</sup>), and “Pskov Hectare” (since 2025; the support measure is also available to participants of the “Zemsky Doctor”, “Zemsky Paramedic”, “Zemsky Teacher”, and “Zemsky Municipal Employee” programs<sup>23</sup>) are in operation.

It should be noted that programs in the northern regions are characterized by greater flexibility regarding prospective land use directions: these include agriculture, rural tourism, forestry, other types of economic activity, as well as individual housing construction. This is associated, in our view, with the consideration of territorial specifics, namely the natural and climatic features of the North, which limit the potential for agricultural production and thereby necessitate the development of other types of activities within rural areas.

Despite a number of achievements in the field of bringing unused agricultural lands into circulation, the implementation of the aforementioned programs reveals problems and shortcomings that primarily require improvements in state regulation mechanisms. For instance, during expert-analytical events by the Accounts Chamber<sup>24</sup>, parliamentary hearings<sup>25</sup>, and research conducted by the scientific

and expert community (Lipski, 2018; Verzhinin, Petrov, 2015; Dzhabrailova, 2021)<sup>26</sup>, the following problems have been identified:

- absence or insufficiency of complete and up-to-date data on land and real estate (information on location, placement within special economic zones and territories of advanced development, ownership rights, etc.), and possible restrictions on the marketability of land plots, including in the Unified State Real Estate Register;

- underdevelopment or complete lack of utility infrastructure on lands transferred to citizens for free use, as well as remoteness of transport and social infrastructure facilities, which reduces the quality of life for the population; presence of ownerless inactive reclamation systems, hindering the involvement of lands in agricultural circulation;

- existence of excessive restrictions on the marketability of land plots, reducing their investment attractiveness;

- lack of legislative regulation regarding the possibilities to compel landowners to undergo state registration of rights or to carry out the procedure for changing the permitted use of a plot when necessary.

The above indicates the importance of improving the mechanism for bringing unused agricultural lands back into economic circulation in Russia.

### Conclusion

The separation of ownership rights, contract rights, and land management rights is a crucial innovation in China’s rural land system reform. Studying the mechanisms that allow farmers to relinquish land contract rights is of particular importance for Chinese society in order to promote its high-quality development, advance

<sup>21</sup> “Leningrad Hectare” Program. Website of the Committee for the Agro-Industrial and Fisheries Complex of Leningrad Oblast. Available at: <https://apk.lenobl.ru/ru/gospodderzhka/programma-leninogradskij-gektar/>

<sup>22</sup> “Novgorod Hectare” Program to Give Impetus to the Development of the Region’s Agro-Industrial Complex. Website of the Ministry of Agriculture of the Russian Federation. Available at: <https://mcx.gov.ru/press-service/regions/programma-novgorodskiy-gektar-dast-impuls-k-razvitiyu-apk-regiona/>

<sup>23</sup> Website of the Government of the Pskov Region. Available at: <https://pskov.ru/novosti/10.12.24/162279>

<sup>24</sup> Website of the Accounts Chamber of the Russian Federation. Available at: <https://ach.gov.ru/upload/iblock/9dc/zysubtj7zyj3tb769h16csg0lzvo1t5x.pdf>

<sup>25</sup> Website of the Federation Council of the Federal Assembly of the Russian Federation. Available at: <http://council.gov.ru/media/files/A8liMMTMpcjeMlfWmbbevFpAst267OTH.pdf>

<sup>26</sup> The Other Side of the Land: Why Agricultural Lands Remain Unclaimed in Russia. Website of the Ministry of Agriculture of the Russian Federation. Available at: <https://mcx.gov.ru/press-service/news/oborotnaya-storona-zemli-pochemu-v-rossii-ostayutsya-nevostrebovannymi-selkhozugoda/>

new urbanization, and modernize agriculture after the completion of building a moderately prosperous society. At the same time, considering territorial specifics is essential. The results of this study have shown that farmers in Anhui and Jiangxi provinces have similar requirements for material compensation in exchange for relinquishing land contract rights. The majority of them choose monetary compensation, while only a few farmers prefer to exchange contracted land for social security or collective economic assets. Thus, monetary compensation is the main factor motivating farmers to relinquish their land contract rights. Furthermore, the characteristics of farmers in different regions can also influence their willingness to relinquish. The reasons for the differences between Anhui and Jiangxi provinces lie in their principles of economic development, industrial structure, and other aspects.

Similarly, in Russia, territorial specificity is of great importance regarding the problem of unused agricultural lands (the pace and scale of its spread,

as well as the mechanisms for its regulation). At the same time, if in China, compared to Russia, the practices of relinquishing land rights are more differentiated, in Russia, it is the practices of bringing unused lands into economic circulation that are more varied.

The study of Chinese and Russian experience in bringing unused agricultural lands into economic circulation allows us to identify two key aspects that can be considered fundamental when implementing policy in this area:

- considering territorial specificity when developing mechanisms for land relinquishment/withdrawal of agricultural land and selecting subsequent spheres for its use;
- flexibility of mechanisms for land relinquishment/withdrawal of agricultural land to protect the rights and interests of landowners.

The practical significance of the research lies in its potential use as a theoretical and methodological foundation and reference material for improving state land-use policy.

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## Assessing the Opportunities for Expanding Trade and Economic Interactions among Countries of the Greater Eurasian Partnership



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**Abstract.** The Greater Eurasian Partnership initiative, announced by Russian President Vladimir Putin in 2015, aims to create a unified integration space in Eurasia. In this regard, assessing the opportunities and constraints for expanding trade and economic interactions within this space is highly relevant. The article presents a comprehensive analysis of trade and economic interactions among countries using cluster analysis tools. The study covers 18 partner countries over the period 2000–2024. A multilevel model was employed as a methodological toolkit, taking into account economic indicators and indices of the countries, as well as results from global rankings. The information base comprised open data from international organizations: UNCTAD, the World Bank, and others. The specificity of interactions among countries within the Greater Eurasian Partnership compared to other integration associations is identified. The scholarly novelty of the work lies in the development of a methodological approach to

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assessing integration potential based on cluster analysis, which made it possible to identify three country profiles – the core, the periphery, and external partners – and to conduct a quantitative assessment of foreign trade, investment-innovation, and institutional-technological activity of participating countries by calculating an index of foreign economic interaction. Based on the analysis conducted, differentiated strategies for enhancing interaction are proposed in accordance with the three identified country profiles, along with recommendations for increasing the level of interaction and engagement of a number of states using tools for standardizing and harmonizing their activities based on digitalization and the creation of unified platforms, joint investment and infrastructure projects, transport and logistics corridors, and others. The study confirms the need to overcome logistical and institutional constraints within the Greater Eurasian Partnership to realize its integration potential.

**Key words:** economic fragmentation, regionalization of the global economy, integration interaction, Greater Eurasian Partnership, EAEU, integration, foreign trade, investments, Global Innovation Index, balance of payments, technology readiness index.

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### Introduction

The fragmentation of the global economy and the intensification of its regionalization have intensified the search for new integration models. According to the WTO, in 2022, more than 52% of world trade accounted for countries bound by regional trade agreements (RTAs), which indicates the importance of regionalization processes (Acharya, Parajuli, 2025). The number of operating RTAs in the world has increased by more than 8 times over the previous 20 years<sup>1</sup>. The Comprehensive Regional Economic Partnership (CEP) has been consolidated in Asia, which entered into force on January 1, 2022, bringing together 15 countries<sup>2</sup> accounting for about 32.6% of global GDP (Yunshak, 2025). The African Continental Free Trade Area (AfCFTA) is being developed in Africa, which has been in effect since January 1, 2021. The agreement was signed by 54 African

countries, but by 2025 it had been ratified by 47 States<sup>3</sup>. The full implementation of the AfCFTA is capable of increasing intra-continental trade by 52% by 2035<sup>4</sup>.

Against the background of strengthening regionalization, Russia in 2015 proposed the concept of the Greater Eurasian Partnership (GEP), which was named the flagship project in the “Concept of Foreign Policy of the Russian Federation” (2023)<sup>5</sup>. Initially, the GEP was supposed to combine the Eurasian Economic Union (EAEU), the Shanghai Cooperation Organization

<sup>3</sup> Economic Development in Africa Report 2024. UNCTAD, 2024. Available at: [https://unctad.org/system/files/official-document/aldfafrica2024-overview\\_en.pdf](https://unctad.org/system/files/official-document/aldfafrica2024-overview_en.pdf) (accessed: 06.08.2025).

<sup>4</sup> Unlocking the Potential of AfCFTA for Africa’s Young Population. UNICEF, 2025. Available at: <https://www.unicef.org/innocenti/media/11251/file/UNICEF-Innocenti-AfCFTA%20Main%20Report-Report-2025.pdf> (accessed: 06.08.2025).

<sup>5</sup> The Concept of the Foreign policy of the Russian Federation: Approved by the President of the Russian Federation on 31.03.2023. Ministry of Foreign Affairs of the Russian Federation. Available at: <https://www.mid.ru/ru/detail-material-page/1860586/> (accessed: 06.09.2025).

<sup>1</sup> WTO. Regional Trade Agreements Information System (RTA-IS), 2025. Available at: <https://rtais.wto.org/ui/PublicMaintainRTAHome.aspx> (accessed: 06.08.2025).

<sup>2</sup> World Economics. Regional Comprehensive Economic Partnership (RCEP), 2025. Available at: <https://www.worldeconomics.com/Regions/RCEP/> (accessed: 06.08.2025).

(SCO), the Association of Southeast Asian Nations (ASEAN) and the Chinese Belt and Road Initiative (BRI) into a single integration space, but the level of actual connectivity remained low in 2025: institutional heterogeneity and sanctions barriers limit real unification.

At the same time, against the background of sanctions pressure, trade flows of the largest Eurasian countries are being reoriented: the mutual turnover of the Russian Federation and China reached 240 billion US dollars in 2023 and 245 billion US dollars in 2024<sup>6</sup>; and Russia's trade with India increased from 12 billion US dollars in 2021 to 49.3 billion US dollars in 2023<sup>7</sup>. The logistics map of Eurasia is being transformed: three key routes were actively developing in 2020–2025: in 2024, over 14 million tons of cargo passed through the International North–South Transport Corridor (INSTC) (Iran – Russia – India); the capacity of the Trans–Caspian International Transport Route (the Middle Corridor through the Caspian Sea and the Caucasus) increased by 63% in 2020–2024; in 2023, the China–Kyrgyzstan–Uzbekistan railway corridor project was launched, which received 4.5 billion US dollars in financing. During 2024, the Eurasian Development Bank (EDB) funded 0.5 billion US dollars in projects within the framework of the key infrastructure megaproject “Eurasian Transport Network”, while as of July 2025, 325 projects worth more than 234 billion US dollars had been initiated in the Eurasian region, 60% of which are already being implemented. Eurasian

transport corridors account for about 70% of the volume of transit traffic in the EAEU (Vinokurov et al., 2022; Petrushina et al., 2025; Vinokurov et al., 2025). These processes reflect the growing demand for new integration formats.

In this regard, it is particularly relevant to identify the specifics of the development of the Greater Eurasian Partnership (GEP), aimed at creating a single integration space in Eurasia, expanding trade and economic cooperation between the participating countries and overcoming existing constraints. 18 countries of the GEP space were taken as the research object, including the EAEU member states (the Russian Federation, the Republic of Kazakhstan, the Republic of Belarus, the Republic of Armenia, the Kyrgyz Republic), which have free trade agreements with the EAEU (Vietnam, the Republic of Serbia, Singapore, Iran), SCO members (China, India, the Republic of Uzbekistan, dialogue partner Türkiye), Eurasian BRICS members (Saudi Arabia, the United Arab Emirates, with whom the EAEU signed an Economic Partnership Agreement on June 27, 2025<sup>8</sup>), countries whose membership, despite the difficult internal situation in them, This indicates their commitment to strategic cooperation (Israel, the Republic of Moldova, Qatar, which is interested in cooperation with Russia on the North–South international transport corridor<sup>9</sup>). Relations with these countries are reaching a new level. As part of the 12th meeting of the Intergovernmental Russian-Emirati Commission on Trade, Economic and Technical Cooperation, the First Russian-Emirati Business Forum was held in Dubai on December 10, 2025, at which Anton Alikhanov, Head of the Russian Ministry of Industry and Trade, and Abdullah Bin Tuk Al-Marri, Minister of Economy and Tourism of the UAE, announced

<sup>6</sup> Tkachev I. (2025). What happened in trade between Russia and China in 2024. RBK. 23.01.2025. Available at: <https://www.rbc.ru/economics/23/01/2025/6790fa3e9a7947ca6e9d4c1c> (accessed: 06.09.2025); Tan H. (2025). Even Russia has had enough of some Chinese products. Markets insider. Available at: <https://www.businessinsider.com/russia-economy-china-trade-oil-exports-sanctions-cars-market-overcapacity-2025-8> (accessed: 06.09.2025).

<sup>7</sup> Smirnova D. (2023). Exports from Russia to India increased 4.7 times. Profil. 10.08.2023. Available at: <https://profile.ru/news/economy/eksport-iz-rossii-v-indiju-uvlichilsya-v-4-7-raza-1373535/> (accessed: 06.09.2025).

<sup>8</sup> Available at: <https://eec.eaeunion.org/comission/departament/dotp/torgovye-soglasheniya/israel.php>

<sup>9</sup> Available at: <https://ria.ru/20240517/katar-1946655504.html>

areas of cooperation in the coming years<sup>10</sup>. In 2026, it is planned to hold a forum of business circles of Russia and Qatar, which, according to the results of the 1st half of 2025, is among the top 5 foreign investors in Russia. In April 2025, a new agreement was signed on the creation of a 2 billion US dollars Russian-Qatari investment platform<sup>11</sup>. From February 11 to 13, 2026, the Days of Russian Culture in Qatar, the first major government project in the last 10 years<sup>12</sup>, were held in Doha with the support of the Ministries of Culture of the Russian Federation and the State of Qatar. “Russian-Israeli relations are also, as noted by the Russian Ambassador to Israel, A. Viktorov, they have stood the test of time and retain the potential for further development, there are serious grounds for deepening mutually beneficial cooperation in various fields”<sup>13</sup>. These and other examples indicate the high need of the countries of the Eurasian space to expand their trade and economic cooperation.

The aim of the study is to develop methodological support for assessing the opportunities and limitations of expanding trade and economic cooperation between the countries of the Greater Eurasian Partnership, as well as recommendations for strengthening integration within the framework of the GEP. To achieve this aim, we set the following tasks: the development of a methodological approach that evaluates the level of integration potential of the GEP and identifies limitations for its development; carrying out a quantitative assessment

of the foreign economic, investment, innovation, and institutional and technological activity of the GEP member countries by calculating the index of foreign economic cooperation (IFEC); developing differentiated strategies to strengthen the integration of the GEP and recommendations to increase the level of interaction and involvement of a number of countries in the partnership space.

#### **Theoretical aspects of the research**

An analysis of the surge in publications by domestic and foreign authors on economic fragmentation indicates the ambiguity of assessing its consequences for the global economy (Vishnevsky et al., 2025). Geo-economic fragmentation is understood as the division of the global economy into competing blocks (Bakhtizin, 2023; Blanga-Gubbay, Rubinova, 2024). A number of foreign researchers speak about an unambiguous change in the global supply chain (Maihold, 2022) and the emergence of new financial flows in this regard, replacing global ones (Nedumpara, 2024; Colombatto, Macey, 1996). At the same time, since the end of the previous century, it has been repeatedly emphasized that global players primarily pursue their own interests, rather than the goals of “universal welfare” (Colombatto, Macey, 1996; Dement’ev, 2018), only increasing the gap between the core and the periphery of the global economy. The unprecedented sanctions of the collective West against Russia have increased attention to the issues of the resilience of the Russian economy (Mal’tsev, Chichilimov, 2024) and the intensification of its interaction with friendly countries (Andreeva et al., 2025).

In these conditions, it is extremely important for researchers to address the problems of Eurasian integration. Leading Russian scientists note the strategic and geopolitical importance of the GEP integration initiative. As K.V. Babaev notes, “within the framework of the megatrend of Russian politics, the turn to the East, the idea of a Large Eurasian Partnership occupies a special place”

<sup>10</sup> The authorities of Russia and the UAE named eight directions. Available at: <https://www.rbc.ru/politics/10/12/2025/693968429a79470a4ed4e19f> (accessed: 17.02.2026).

<sup>11</sup> In 2026, Russia and Qatar will host a business forum. Available at: [https://www.economy.gov.ru/material/news/v\\_2026\\_godu\\_rossiya\\_i\\_katar\\_provedut\\_forum\\_delovyh\\_krugov\\_.html](https://www.economy.gov.ru/material/news/v_2026_godu_rossiya_i_katar_provedut_forum_delovyh_krugov_.html) (accessed: 17.02.2026).

<sup>12</sup> Days of Russian Culture open in Qatar. Available at: [https://culture.gov.ru/press/news/dni\\_kultury\\_rossii\\_otkryvayutsya\\_v\\_katare/](https://culture.gov.ru/press/news/dni_kultury_rossii_otkryvayutsya_v_katare/) (accessed: 17.02.2026).

<sup>13</sup> Ambassador Viktorov: Relations between Russia and Israel have stood the test of time. Available at: <https://ria.ru/20260213/izrail-2074112269.html> (accessed: 17.02.2026).

(Babaev, 2024). S.A. Karaganov calls “the general movement from the West to the East of the center of the world economy” among the driving goals of the development of the concept of a Large Eurasian Partnership (Karaganov, 2019). S.Yu. Glazyev and G.I. Osadchaya also highlights the strategic aspects of GEP formation, emphasizing the need for institutional and economic coordination to create an integration space (Glazyev, 2021; Osadchaya et al., 2025). I.F. Kefeli emphasizes the geopolitical aspects of GEP formation, but notes insufficient attention to logistics and technology (Kefeli, 2019). U.A. Abbasov notes: “Despite the lack of a clearly defined structure and specific mechanisms, the BEP project represents a promising model of regional integration that can make a significant contribution to the development of the Eurasian space” (Abbasov, 2024).

The transport and logistics component and infrastructure projects play an important role in the Eurasian integration. E. Vinokurov emphasizes the role of the EAEU transport corridors in integration with the Belt and Road initiative, noting the growth of container traffic, but points to dependence on Chinese subsidies<sup>14</sup>. V.E. Seliverstov notes the special role of the “digital connectivity of the Eurasian space” in cross-border interaction (Seliverstov, 2025). Studies by other authors, for example, A.S. Korolev, identify the limitations of the EAEU’s foreign economic policy, including non-tariff barriers (Korolev, 2023).

Thus, the scientific literature substantiates the importance of the integration initiative of the Greater Eurasian Partnership as a promising model of regional integration, outlines possible tools and mechanisms for its development, but the lack of its institutional design at the moment makes it even more important to understand the essence and specifics of Eurasian integration in the context of fragmentation and regionalization of the global

<sup>14</sup> Vinokurov E., Adakhaev A., Akhunbaev A. et al. (2024). Economic cooperation in Eurasia: practical solutions: Reports and working papers 24/2. Almaty: Evraziiskii bank razvitiya.

system, which involves assessing the integration potential in within the framework of the GEP and the development of directions for its further development.

#### **Methodological aspects of the research**

The study is based on an analysis of foreign economic indicators and ratings for 18 countries of the GEP area for 2000–2024, presented in the databases of international organizations: the World Bank (including the World Integrated Trade Solution (WITS); The annual collection of international statistics on global development by the World Development Indicators (WDI), the International Monetary Fund (IMF), the World Trade Organization (WTO), the World Intellectual Property Organization (WIPO), the United Nations Conference on Trade and Development (UNCTAD), the official international trade statistics database, created by the United Nations Statistics Division (UN Comtrade), the United Nations Development Programme (UNDP), the Eurasian Development Bank (EDB), The Economic and Social Commission for Asia and the Pacific (ESCAP) and the EU Statistical service Eurostat (Eurostat), namely:

- IMF World Economic Outlook (WEO): GDP, GDP per capita, GDP by PPP, inflation, balance of payments<sup>15</sup>;
- UN Comtrade: bilateral trade flows (exports, imports of goods)<sup>16</sup>;
- UNCTAD: trade flows, foreign direct investment (FDI) trade flows, foreign direct investment (FDI)<sup>17</sup>, Frontier Technology Readiness Index (FTRI)<sup>18</sup>;

<sup>15</sup> IMF World Economic Outlook Database. Available at: [imf.org](https://imf.org) (accessed: 01.05.2025).

<sup>16</sup> UN Comtrade Database. Available at: <https://comtrade.un.org> (accessed: 01.05.2025).

<sup>17</sup> UNCTAD’s Frontier Technologies Readiness Index 2024. Available at: <https://unctadstat.unctad.org/datacentre> (accessed: 01.05.2025).

<sup>18</sup> UNCTAD World Investment Report 2024. Available at: <https://unctad.org/topic/investment/world-investment-report> (accessed: 01.05.2025).

– the World Bank (WDI, WITS): the share of foreign trade turnover in GDP, the Logistics Performance Index (LPI)<sup>19</sup>, based on the perception of international logistics professionals of their partner countries and measuring the speed of global trade using information on supply chain tracking in 139 countries;

- WIPO: Global Innovation Index (GII)<sup>20</sup>;
- WTO: number of regional trade agreements (RTA)<sup>21</sup>;
- ESCAP, Eurostat: data on intra-group trade between ASEAN and the EU<sup>22</sup>;
- EDB: FDI and trade in the EAEU<sup>23</sup>.

The forecasts of the IMF and the EDB were used for 2024 due to the lack of final data. The data is standardized for comparability.

According to the data of 2024, cluster analysis (k-means method) based on four standardized indicators was applied to cluster the GEP countries: GDP, volume of foreign trade, FDI, GII. A quantitative assessment of the validity of the selected number of clusters and their structure is provided by the silhouette criterion, a clustering quality metric that shows how similar objects within a cluster are to each other and how different they are from objects in other clusters. A value close to 1 indicates a clear and stable division of objects into clusters. The obtained silhouette criterion (0.78) confirmed a clear division into three clusters: core, environment, and external partners. The correlation of integration coefficients

(core:  $\rho = 0.85$ , environment:  $\rho = 0.65$ , external partners:  $\rho = 0.45$ ) further confirmed the results.

A comparative analysis was also used to extrapolate the share of potential intra-group trade in GEP based on the shares of the EAEU and ASEAN in comparison with the EU and MERCOSUR based on data from the World Bank, UN Comtrade, Eurostat and ESCAP for 2000–2023.

This methodological approach makes it possible to provide comprehensive coverage of current GEP integration processes, identify groups of countries according to the degree of their participation in the GEP, and assess the impact of economic and institutional factors in the development of GEP integration. The analysis is complemented by institutional characteristics (the number of RTA), innovation indices, technological and logistical connectivity (GII, LPI). The developed methodological approach made it possible to collect and analyze an extensive array of data published by the world's leading research centers and development institutes, and to quantify the integration interaction within the emerging BEP. The next section presents the results, including the macroeconomic indicators of the analyzed countries of the FEP area, the calculation of the index of foreign economic cooperation (IFECA), the identification of profiles of GEP countries and comparison with indicators of other integration blocks.

### **The main results of the research**

#### ***Analysis of macro-economic indicators of countries***

*Table 1* presents macro-economic indicators, indices and ratings of 18 GEP countries for 2023. China leads by a wide margin in terms of GDP by PPP (34,660 billion US dollars) and GDP (17,794 billion US dollars). India's lag behind China in terms of GDP by PPP is significantly less than in terms of GDP (14,619 billion US dollars and 3,567 billion US dollars), which once again proves the importance of which indicator we compare.

<sup>19</sup> World Bank World Development Indicators. Available at: <https://data.worldbank.org> (accessed: 01.05.2025).

<sup>20</sup> Global Innovation Index 2024. Available at: <https://www.wipo.int/web-publications/global-innovation-index-2024/en> (accessed: 01.05.2025).

<sup>21</sup> WTO Regional trade agreements. Available at: <https://rtais.wto.org/UI/PublicMaintainRTAHome.aspx> (accessed: 01.05.2025).

<sup>22</sup> ESCAP. Available at: <https://www.unescap.org> (accessed: 01.05.2025); Eurostat. Available at: <https://ec.europa.eu/eurostat> (accessed: 01.05.2025).

<sup>23</sup> Monitoring of mutual investments of the EDB – 2024. The Eurasian region. Available at: <https://eabr.org/analytics/special-reports/monitoring-vzaimnykh-investitsiy-eabr-2024-evraziyskiy-region> (accessed: 01.05.2025).

Table 1. Macro-economic indicators, indices and ratings of 18 countries of the GEP area, 2023

Country	GDP by PPP (million USD)	GDP (million USD)	Export of goods (million USD)	Import of goods (million USD)	Share of foreign trade turnover (% of GDP)	Net inflow of FDI (% of GDP)	Annual inflation (%)	GII (points)	LPI (points)	RTA (number, 2025)	HHI (export)
China	34 660 138.18	17 794 783.04	3 379 748	2 556 763	37.32	0.09	0.23	55.3	3.7	20	889.46
India	14 619 765.55	3 567 551.67	431 412	672 140	45.92	0.42	5.65	38.1	3.4	19	742.12
Russian Federation	6 454 737.77	2 021 421.48	424 749	303 086	41.83	-1.03	5.85	33.3	2.6	10	1344.95
Türkiye	3 611 520.83	1 118 252.96	255 627	361 967	66.28	0.42	53.86	38.6	3.4	27	659.67
Saudi Arabia	2 032 545.22	1 067 582.93	320 018	206 940	62.13	-0.35	2.33	34.5	3.4	4	629.28
Iran	1 600 138.34	404 625.66	97 357	65 826	52.18	0.33	44.58	30.1	2.3	3	1192.55
Vietnam	1 502 662.08	429 716.97	353 078	325 444	166.32	4.53	3.25	36.0	3.3	16	807.10
Singapore	837 663.63	501 427.50	475 349	422 420	311.24	19.28	4.82	61.5	4.3	28	708.98
UAE	797 922.32	514 130.43	570 245	470 536	202.33	1.63	1.6	43.2	4.0	7	627.79
Republic of Kazakhstan	783 017.69	262 641.89	78 736	61 161	61.77	0.88	14.72	26.7	2.7	12	797.37
Israel	527 413.00	513 611.10	58 905	91 877	57.53	1.26	4.23	54.3	3.6	12	619.39
Republic of Uzbekistan	395 989.16	101 591.77	21 017	36 660	64.38	2.14	9.96	26.2	2.6	5	663.35
Qatar	342 411.79	213 002.81	97 751	31 431	100.21	-0.13	3.03	33.4	3.5	4	677.75
Republic of Belarus	282 352.16	71 857.38	39 840	43 091	133.00	2.83	5.00	26.8	2.7	6	2881.99
Serbia	190 406.42	81 342.66	30 935	39 838	114.49	5.61	12.37	33.1	2.8	10	703.26
Republic of Armenia	63 833.33	24 085.75	8508	12 474	119.71	1.62	1.98	28.0	2.5	12	1064.53
Kyrgyz Republic	50 454.31	13 987.63	3385	12 516	140.16	3.50	10.75	20.2	2.3	11	827.33
Republic of Moldova	43 249.32	16 539.44	4049	8674	95.13	2.52	13.42	30.3	2.5	10	999.47

\* HHI (Herfindahl – Hirschman Index) is calculated as the sum of the squares of the export shares of each partner country in the total exports of the reporting country for 2023. HHI < 1,500: low concentration (diversified exports); 1,500 ≤ HHI < 2,500: moderate concentration; HHI ≥ 2,500: high concentration (dependence on few partners).  
Sources: World bank, WTO, Unctad, WIPO, UNDP data.

Table 2. Index of foreign economic cooperation for the countries of the GEP area, 2023

Country	$Z_{Trade}$	$Z_{FDI}$	$Z_{GII}$	$Z_{LPI}$	$Z_{RTA}$	IFEC	IFEC (normalized)
Russian Federation	-0.89	-0.78	-0.25	-0.81	-0.27	-0.60	0.07
Republic of Kazakhstan	-0.61	-0.36	-0.85	-0.64	0.01	-0.50	0.10
Republic of Belarus	0.42	0.07	-0.84	-0.64	-0.81	-0.37	0.14
Republic of Armenia	0.23	-0.20	-0.73	-0.97	-0.00	-0.36	0.14
Kyrgyz Republic	0.52	0.21	-1.43	-1.30	-0.14	-0.46	0.11
China	-0.96	-0.54	1.73	1.01	1.07	0.48	0.38
India	-0.84	-0.47	0.18	0.51	0.94	0.07	0.27
Iran	-0.75	-0.49	-0.54	-1.30	-1.21	-0.85	0.00
Türkiye	-0.54	-0.47	0.23	0.51	2.01	0.33	0.34
UAE	1.41	-0.20	0.64	1.50	-0.67	0.55	0.40
Saudi Arabia	-0.60	-0.64	-0.14	0.51	-1.08	-0.37	0.14
Qatar	-0.05	-0.59	-0.24	0.68	-1.08	-0.24	0.18
Israel	-0.67	-0.28	1.64	0.84	0.01	0.34	0.34
Vietnam	0.90	0.44	-0.01	0.35	0.54	0.43	0.37
Singapore	2.98	3.70	2.29	2.00	2.15	2.62	1.00
Republic of Uzbekistan	-0.57	-0.09	-0.89	-0.81	-0.94	-0.66	0.06
Serbia	0.15	0.68	-0.27	-0.48	-0.27	-0.04	0.23
Republic of Moldova	-0.13	-0.00	-0.52	-0.97	-0.27	-0.39	0.13

*According to: World bank, WTO, Unctad, WIPO data.*

Singapore (311% of GDP) and the UAE (202% of GDP) are the leaders in terms of trade openness and Vietnam (166% of GDP), which confirms their high degree of involvement in foreign trade relations. Attracted FDI as a percentage of GDP is high in Singapore (19.28%), Serbia (5.61%), Vietnam (4.63%), while the Russian figure (-1.03%) was affected by sanctions. Singapore (61.5), China (55.3), Israel (54.3) have a high innovation index (GII), and they also have a high logistics performance index (LPI): 4.3 for Singapore, 3.7 for China, 3.6 for Israel, while the EAEU countries, Serbia, the Republic of Uzbekistan, and the Republic of Moldova They are almost twice as far behind the leaders. Singapore (with 28 RTA) and Türkiye (27 RTA) can be considered the most institutionally integrated.

Table 2 presents the calculation of the authors' index of foreign economic cooperation (IFECA) for the countries of the GEP area for 2023, including accounting for foreign trade, FDI, innovation (Global Innovation Index, GII), Logistics Performance Index (LPI) and regional trade agreements (RTA).

For each indicator of the z estimates, the mean ( $\mu$ ) and standard deviation ( $\sigma$ ) are calculated, on the basis of which their normalization is performed:

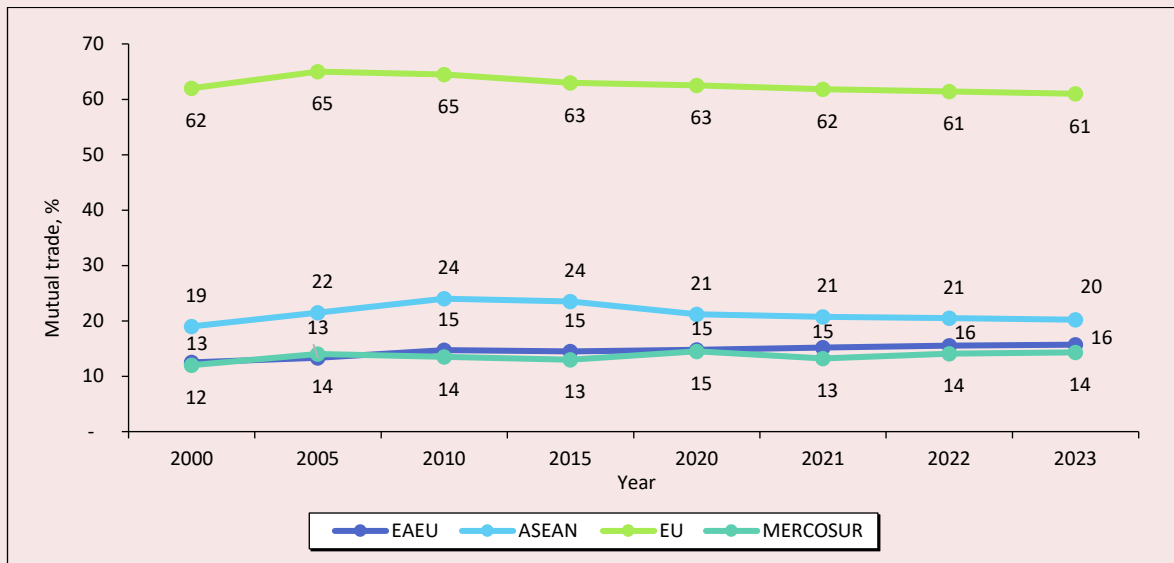
- trade share:  $\mu = 104,00$ ,  $\sigma = 69,52$ ;
- FDI:  $\mu = 0,03$ ,  $\sigma = 0,05$ ;
- GII:  $\mu = 36,09$ ,  $\sigma = 11,10$ ;
- LPI:  $\mu = 3,09$ ,  $\sigma = 0,61$ ;
- RTA:  $\mu = 12,01$ ,  $\sigma = 7,44$ .

Using the PCA method, the weights of the main factors in the composition of the IFEC were obtained, explaining the variation of the indicators:  $Z_{Trade} - 18.76\%$ ;  $Z_{FDI} - 20.64\%$ ;  $Z_{GII} - 20.83\%$ ;  $Z_{LPI} - 21.01\%$ ;  $Z_{RTA} - 18.76\%$ .

Normalization of the IFEC in the range [0; 1] ensures comparability of countries with different scales of economies, allows aggregating indicators of different dimensions, simplifies the interpretation of the level of integration involvement and ensures the correctness of subsequent clustering.

As we can see from Table 2, Singapore occupies a leading position due to its high trade openness (311% of GDP), the share of FDI in GDP – 19.28%, high innovation ( $GII = 61.5$ ) and logistics

Share of mutual trade in the total volume of foreign trade of the EAEU, ASEAN, EU, Mercosur, 2000–2023, %



Source: UN Comtrade, Eurostat, ESCAP, EEC data.

Table 3. Differentiated strategies for expanding cooperation within the GEP

Group of countries	Profile (key parameters)	Main limitations	Strategic directions for expanding cooperation in GEP
<b>1. The Core</b> (Republic of Armenia, Republic of Belarus, Republic of Kazakhstan, China, Kyrgyz Republic, Russian Federation)	High institutional connectivity (EAEU/SCO); heterogeneous IFEC: high in China, low in most EAEU countries; China has high GI/LPI values and technological positions; significant trade and transit volumes	Sanctions; insufficient logistics (LPI in some countries <2.7); low innovation in some countries; sanctions, narrow export niches	1) Modernization of logistics (“North–South”, “West – East”); 2) joint technology parks (AI, 5G); 3) diversification of export flows and reduction of dependence on major partners; 4) cooperative infrastructure funds (Russian Federation – China – UAE)
<b>2. Environment</b> (Israel, India, Iran, Qatar, UAE, Saudi Arabia, Türkiye)	Average IFEC level; high economic potential; high GI/LPI in Israel and the UAE; the significant role of raw materials and technological suppliers	Inflation and sanctions risks; weak institutional compatibility; lack of FTAs with the EAEU and inflationary risks; sanctions restrictions	1) Harmonization of standards and conclusion of FTAs with the EAEU; 2) expanding commodity and energy alliances; 3) joint R&D and digital hubs (Israel, UAE); 4) investment funds and settlements in national currencies
<b>3. External partners</b> (Vietnam, Republic of Moldova, Serbia, Singapore, Republic of Uzbekistan)	Medium or low IFEC; Singapore’s high logistics and innovation; moderate economic weight; integration through FTA or observer status	Low GI/LPI in a number of countries; narrow export specialization; limited infrastructure	1) Inclusion in the East–West and North–South corridors; 2) digital integration (customs, e-commerce); 3) support of export niches (agro, industrial cooperation); 4) institutional convergence with the EAEU

Source: own compilation.

level (LPI = 4.3), as well as the largest number of trade agreements (RTA = 28). China ranks second with an IFEC of 0.38 due to innovation (GII = 55.3), trade openness (37.32% of GDP) and logistics (LPI = 3.7), as well as a large number of RTA. The Russian Federation (IFEC = 0.07), the Republic of Uzbekistan (0.06) and Iran (0.00) have a relatively low index due to sanctions, underdeveloped innovation and logistics.

If we compare the share of intra-group trade in 2000–2023 in existing integration associations, among which, although with a downward trend, the EU (~60%), ASEAN (~21.1%), the EAEU (~14.4%) and MERCOSUR (~13.5%; *Figure*) are leading, then we can assume that the association the existing potential of the EAEU, which has a moderate level with a steady growing trend, and ASEAN, which has demonstrated 20–24% since the 2000s. against the background of a decrease in the EU's share from 65% in 2010 to 61% in 2023, it allows forming an approximate estimate of the potential upper limit of intra-group trade of the GEP countries of about 40%, possible under the condition of institutional convergence and reduction of logistical barriers.

The k-means cluster analysis allowed identifying three groups from the analyzed countries: core, environment, and external partners. The silhouette criterion (0.78) and correlations of indicators between countries within the group (core  $\rho = 0.85$ , environment  $\rho = 0.65$ , external  $\rho = 0.45$ ) confirm a clear division into three groups and suggest the development of differentiated strategies to expand cooperation in the GEP (*Tab. 3*). The core countries include Russia, China, Kazakhstan, Belarus, Armenia, and Kyrgyzstan, which is reflected in the existing integration of these countries into the EAEU and SCO and the strengthening of their economic and technological capabilities within the framework of the GEP. The role of the Russian Federation and China with exports of 476 billion US dollars and 3.54 trillion US dollars. Accordingly, in 2024, it was to form the basis of the GEP,

ensuring the development of trade (98.3 billion US dollars within the EAEU in 2024 and about 230.7 billion US dollars). mutual trade of the EAEU with China), investments and technological cooperation, including projects of Russia and China in the field of 5G, the “green” and digital economy, etc. within the framework of the GEP.

Based on the clusterization of the GEP countries, we can conclude that the GEP space is a multi-level structure with high internal differentiation in terms of integration. The core countries are characterized by higher institutional connectivity between the EAEU and the SCO, however, the actual intensity of foreign economic interaction, reflected in the values of the IFEC, remains heterogeneous, and in a number of core countries – low. The core countries are also limited by sanctions and logistical barriers, which requires priority infrastructure modernization and diversification of foreign trade and investment flows. The environment is characterized by high internal heterogeneity: from technologically advanced and institutionally open economies (Israel, the UAE) to countries with low IFEC, limited by sanctions, inflation and logistical barriers (Iran), which requires institutional harmonization and elimination of inflationary and political-economic risks. External partners perform various functions in the GEP space, from global logistics and institutional hubs (Singapore) to peripheral participants with limited infrastructure and technological base (Republic of Moldova, Republic of Uzbekistan). Nevertheless, external partners play the role of points of expansion of coverage and distribution channels, while their participation in the GEP needs the support of export specialization, the development of infrastructure nodes and inclusion in the digital interaction system. A differentiated approach to the development of each of the three groups of countries makes it possible to increase the sustainability and synergetic effect in the formation of GEP.

### Discussion and recommendations

The obtained results reveal the specifics of the foreign economic interactions of the GEP countries, offering interpretations that contribute to the understanding of integration processes. The importance of economic growth through GDP and GDP per capita highlights the important role of this indicator in integration processes, but it is necessary to take into account the structural features of the economies of the GEP countries. Countries with high GDP, such as China, India, and the Russian Federation, have the opportunity to strengthen their trade positions, while countries with low GDP, such as the Kyrgyz Republic, the Republic of Armenia, and the Republic of Moldova, face a lack of integration cooperation. GEP integration requires differentiated expansion strategies. The scientific novelty of the research lies in the development of areas of cooperation between the GEP countries in terms of their main competitive advantages. The role of innovation as the most important driver of integration, which requires bridging the technological gap between countries, is emphasized. Technological readiness is the link between short-term costs and long-term benefits, which offers a new approach to assessing innovation and technology policy within the framework of the GEP.

The calculations confirmed that logistical difficulties, measured by the LPI indicator, and limited trade agreements, taken into account through the RTA indicator, cause a slowdown in integration into the GEP. The GEP development will be facilitated by the strengthening of logistics and RTA while reducing institutional barriers, and the harmonization of standards and requirements.

The IFEC calculation quantified the leadership of Singapore (1.00), the United Arab Emirates (0.40) and China (0.38), while the foreign economic cooperation of the Kyrgyz Republic (0.11), the Republic of Kazakhstan (0.10), Iran (0.09), the Russian Federation (0.07) and the Republic of Uzbekistan (0.06), in addition to sanctions

restrictions, is characterized by a low level of transport and logistical efficiency and innovation, which can be overcome by the development of the GEP space.

Cluster analysis revealed the presence of three groups of countries: the core, the environment and external partners, which requires differentiated strategies for their interaction within the framework of the GEP. To develop the integration of the GEP countries, the core needs a phased expansion of digital infrastructure, starting with the unification of customs procedures, digital document management and basic logistics digitalization, followed by a transition to more complex technological solutions to simplify trade and diversify exports, which will reduce dependence on key partners. China, as a technology leader (GII = 55.3), can support technological exchange in the EAEU by harmonizing standards for 5G and artificial intelligence (AI), while the Russian Federation and the Republic of Kazakhstan attract foreign direct investment (FDI) in green energy and IT through the EAEU–China interaction. The countries of the Environment cluster are recommended to reduce non-tariff barriers and expand trade agreements with the EAEU, strengthen the North–South corridor, create technology parks for AI and cybersecurity, and develop settlements in national currencies. External partners can diversify commodity flows, integrate into the East–West and North–South transport and logistics corridors, and implement digital customs solutions.

### Conclusion

The study confirmed that the GEP space has the potential for integration expansion, but also has a number of limitations that hinder development, which requires a multi-level approach to GEP expansion. Core countries should pay special attention to logistics modernization, technology transfer, and institutional integration. The surrounding countries should diversify trade, upgrade technology, and integrate into transport and logistics

corridors. External partners can enhance integration into GEP through technology transfer and capital raising, facilitating digitalization and modernization processes.

The developed GEP space expansion model develops an approach to assessing integration processes in conditions of geo-economic instability. The use of the clustering method provided comprehensive coverage of the current processes of GEP integration, identification of a group of countries according to the degree of their participation in

the GEP, assessment of the influence of various factors in the development of integration within the partnership. The results obtained are of theoretical interest for further study of the specifics and prospects of the development of integration processes in the context of economic fragmentation and regionalization of the world economy, as well as practical significance in the development of strategies and models for the development of cooperation between countries within the framework of the Greater Eurasian Partnership.

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## Interaction of Non-Profit Organizations as a Factor Influencing Socio-Economic Ties among BRICS Countries



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**Abstract.** This study examines the role of non-profit organizations (NPOs) as an underappreciated instrument for strengthening socio-economic integration among BRICS countries amidst the transformation of the global architecture and sanctions pressure. The relevance of this work stems from the need to identify alternative mechanisms of economic interaction capable of offsetting the constraints imposed by formal institutions. Its scholarly novelty lies in developing a typology of mechanisms through which NPOs influence economic ties within the association, encompassing four primary forms: facilitating trade relations through business associations, shaping a common scientific and educational space, enabling technology transfer and supporting innovative entrepreneurship, and fostering social entrepreneurship and an inclusive economy. Non-profit organizations are considered instruments of soft power and public diplomacy, contributing to the formation of social capital as conceptualized by R. Putnam and J. Coleman – namely, horizontal networks of trust that lower the transaction costs of international engagement. Unlike existing research focusing on intergovernmental cooperation, this study systematizes the practices of non-state actors and quantitatively assesses their economic impact. The methodological framework integrates the institutional approach, the concept of social capital, and comparative legal analysis, employing methods of comparative, content, and statistical analysis. The empirical base encompasses data on 1,247 joint projects undertaken by non-profit organizations from BRICS countries between

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2015 and 2023, as well as official statistics from national bodies and international organizations. The findings indicate that NPOs contribute approximately 1–4% of the association's GDP, create millions of jobs, and reduce transaction costs in international engagement. A significant institutional heterogeneity in national regulatory models governing the non-profit sector is identified, creating barriers to cross-border cooperation. Study limitations include the incomparability of statistical data and the lack of transparency regarding financial flows within the alliance. Future research avenues include longitudinal analysis of NPO activities' effects and comparative studies with the experience of other regional associations.

**Key words:** BRICS, non-profit organizations, economic cooperation, international integration, civil society, technology transfer, business networks, social entrepreneurship, social capital, soft power, public diplomacy.

### Introduction

The BRICS association, comprising Brazil, Russia, India, China, and South Africa, and since 2024 expanded with the inclusion of new members (Egypt, Ethiopia, Iran, and the United Arab Emirates) into the BRICS+ format, represents a unique platform for multilateral cooperation encompassing over 40% of the world's population and a significant share of global gross product. Traditionally, scholarly attention has focused predominantly on intergovernmental cooperation, trade flows, and investment projects among the association's member states. However, the role of non-profit organizations (NPOs) as agents of economic diplomacy and catalysts for business activity remains insufficiently explored, despite growing recognition of the importance of multi-track diplomacy and the involvement of non-state actors in international relations.

The relevance of this study is underpinned by several factors. First, amid sanctions pressure and the reconfiguration of global value chains, BRICS countries have a vested interest in identifying alternative mechanisms for economic integration capable of offsetting the constraints of formal institutions. Second, the accumulated experience of developed countries demonstrates that the non-profit sector can function as an intermediary between business, government, and society,

thereby contributing to the creation of an enabling environment for entrepreneurship and innovation. Third, the specific characteristics of BRICS countries – marked by considerable cultural, institutional, and economic diversity – necessitate the development of flexible modes of interaction in which NPOs possess comparative advantages. In international scholarship, the activities of NPOs in a global context have traditionally been examined through the lens of soft power, grassroots diplomacy, and public diplomacy concepts, underscoring their role in shaping favorable country images and building horizontal linkages between societies (Nye, 2004).

A review of contemporary academic literature reveals a gradual increase in scholarly interest in the involvement of non-profit organizations in international economic cooperation. Foundational research on the role of civil society in global governance is presented in the works of Western scholars. Koch, Dreher, Nunnenkamp, and Thiele analyzed the factors shaping the allocation of aid by non-governmental organizations (Koch et al., 2008). Keck and Sikkink developed the concept of transnational advocacy networks and their influence on the international agenda (Keck, Sikkink, 1998). Risse, Ropp, and Sikkink investigated the mechanisms through which international

norms impact domestic politics (Risse et al., 1999). Anheier, Glasius, and Kaldor systematized approaches to the study of global civil society (Anheier et al., 2001). In the context of emerging economies, significant contributions include research by Banks and Hulme, which examines the institutional environment in which NPOs operate and their interactions with the state (Banks, Hulme, 2012).

Regarding the BRICS association specifically, there is a limited body of work addressing the role of non-state actors. Researchers note the emergence of parallel civil society structures, including the BRICS Civil Forum; however, their impact on economic processes remains a subject of debate (Perskaya, 2018). An important channel of public diplomacy is regular international events, such as the annual International Youth Volunteer Conference “BRICS To You”, which fosters long-term linkages between NPOs and youth organizations from participating countries. A critical review of the existing literature reveals insufficient attention to the specific mechanisms through which NPOs influence trade and investment cooperation; there is a lack of systematization regarding the forms of their activities and quantitative assessment of outcomes.

This study aims to address these gaps through a comprehensive analysis of the practices of interaction among NPOs from BRICS countries in the economic sphere. The scholarly novelty of the findings lies in developing a typology of mechanisms through which the non-profit sector influences economic ties among the association’s members, identifying specific barriers and opportunities, and formulating recommendations for the institutionalization of such interaction. The author proceeds from the hypothesis that NPOs perform functions of infrastructural support for economic cooperation, reducing transaction costs and building the social capital necessary for the development of sustainable business linkages.

### **Methodological framework and theoretical basis of the study**

The methodological framework of the study is grounded in the institutional approach, which allows for the consideration of non-profit organizations as specific institutions that structure the interaction of economic agents under conditions of institutional uncertainty and cultural diversity. As a key theoretical framework, the author employs the concept of social capital, as developed in the works of Putnam (1993; 2000), Coleman (1988), and Fukuyama (1995).

According to R. Putnam, social capital refers to the features of social organization, such as networks, norms, and trust, that facilitate coordination and cooperation for mutual benefit (Putnam, 1993, p. 167). J. Coleman defines social capital by its function: it is a resource inherent in the structure of relations between individuals and groups that facilitates the achievement of certain ends that would be unattainable in its absence (Coleman, 1988). In the context of international economic interaction, social capital manifests itself in the formation of horizontal networks of trust and reciprocity, which reduce opportunism and enhance the efficiency of economic exchange.

Within the framework of this study, NPOs are viewed as generators of social capital operating through three main mechanisms: (1) creating and strengthening networks of interpersonal and interorganizational linkages among representatives of different countries; (2) shaping shared norms and rules of interaction that reduce uncertainty; (3) enhancing cross-country trust through repeated interactions and joint projects. These mechanisms contribute to reducing transaction costs, which in Williamson’s theory (Williamson, 1985) include the costs of information search, negotiation, contract enforcement, and property rights protection.

The study employs a comprehensive set of research methods. Comparative analysis is used to juxtapose the institutional conditions under which

NPOs operate in BRICS countries, identifying commonalities and peculiarities in national regulatory models of the non-profit sector. The comparative legal method enabled the analysis of member states' legislation concerning the regulation of NPO activities, their organizational and legal forms, and requirements for international engagement, thereby ensuring the validity of statistical data comparison (Dorozhkin et al., 2023). Through content analysis of policy documents, activity reports, and publications of leading NPOs, their areas of work in economic cooperation have been systematized. Statistical analysis is applied to assess the development dynamics of the non-profit sector and its contribution to the economies of the association's member states.

The empirical base of the study includes official statistics from national government bodies of BRICS countries, data from international organizations (the World Bank, UNCTAD, the ILO, the International Monetary Fund, the World Trade Organization), analytical materials from the New Development Bank, documents from BRICS summits held between 2014 and 2024, analytical materials from research centers specializing in BRICS issues (including the National Committee for BRICS Research, the BRICS Studies Centre at HSE University, and BRICSPO), as well as the results of monitoring the activities of non-profit

organizations during the period 2021–2024. Quantitative assessments of the economic effects of NPO activities are based on an analysis of data on 1,247 joint projects implemented by organizations from different BRICS countries between 2015 and 2023, information on which was obtained from open sources.

The limitations of the study are associated with the insufficient systematization and comparability of statistical data on the non-profit sector across different countries, differences in national approaches to classifying NPOs, as well as the lack of transparency regarding financial flows and performance outcomes of individual organizations.

#### **Institutional environment of NPO functioning in BRICS countries**

Before proceeding to analyze the institutional environment in which NPOs operate, it is necessary to characterize the overall economic context of interaction among BRICS and BRICS+ countries. *Table 1* presents the key economic indicators of the association's member states, which determine the scale and focus of non-profit organizations' activities. The volume of foreign trade turnover and foreign direct investment reflects the intensity of economic ties within which NPOs perform an intermediary function. The considerable differentiation of economic indicators – ranging from China's largest economy with a trade turnover

Table 1. Key economic indicators of BRICS and BRICS+ countries

Country	Exports of goods (billion USD, 2023)	Imports of goods (billion USD, 2023)	Foreign trade turnover (billion USD)	FDI Inflows (billion USD, 2022)
Brazil	339.7	287.1	626.8	91.0
Russia	425.3	285.0	710.3	-4.1
India	451.0	677.2	1 128.2	49.3
China	3 380.0	2 560.0	5 940.0	189.1
South Africa	123.3	106.1	229.4	9.0
Egypt*	44.5	89.7	134.2	11.4
Ethiopia*	4.8	18.2	23.0	3.7
Iran*	65.2	58.9	124.1	н/д
UAE*	493.1	358.2	851.3	22.7
* BRICS+ countries that joined in 2024. Compiled from: BRICS JSP 2024 data, World Bank, UNCTAD.				

of nearly \$6 trillion to the smaller economies of Ethiopia (23 billion USD) – determines different models of NPO participation: in large economies, they focus on facilitating large-scale trade and investment projects, whereas in smaller ones, they concentrate on capacity building and resource mobilization for economic development.

The non-profit sector in BRICS countries evolves within diverse institutional contexts, reflecting the specificities of political systems, legal traditions, and historical trajectories of civil society development. To ensure the validity of comparative analysis, it is necessary to consider that the legislation of different countries defines the organizational and legal forms of NPOs differently. *Table 2* systematizes the types of organizations classified as belonging to the non-profit sector in each country.

A comparative analysis of national regulatory models for NPOs reveals both common trends and significant differences that affect the potential for these organizations to participate in international economic cooperation. It should be noted that for the purposes of this study, NPOs refer to organizations directly involved in facilitating economic cooperation: business associations, chambers of commerce and industry, development foundations, educational and research organizations, technical assistance organizations, and social entrepreneurship entities. Religious organi-

zations, political parties, and government agencies are excluded from the analysis, thereby ensuring cross-country data comparability.

According to the latest data from the Brazilian Institute of Geography and Statistics (IBGE), prepared jointly with the Institute for Applied Economic Research (Ipea), over 897,000 active non-profit organizations are registered in the country. In 2024, the total number of active organizations reached 897,054, exceeding the number registered in 2023 (879,326). A distinctive feature of the Brazilian model is the active participation of NPOs in the implementation of state socio-economic development programs, which creates prerequisites for their involvement in economic diplomacy processes. NPOs account for approximately 2.2% of total employment (roughly 2.4 million jobs), and their contribution to GDP is estimated at 1.7–2.0%<sup>1</sup>.

The Russian Federation is characterized by stricter regulation of the non-profit sector, particularly concerning organizations receiving foreign funding. Legislation provides for specific requirements for NPOs that have been granted the status of a foreign agent, including mandatory labeling of materials and additional reporting. However, it is important to emphasize that this status does not prohibit the activities of such organizations but rather establishes additional requirements for their transparency. Essentially

Table 2. Organizational and legal forms of NPOs in BRICS countries

Country	Main organizational and legal forms of NPOs
Brazil	Associations (associações), foundations (fundações), civil society organizations (OSCs), social organizations (OS), public interest organizations (OSCIP)
Russia	Non-governmental associations, foundations, autonomous non-profit organizations (ANOs), non-profit partnerships, associations and unions, Cossack societies, religious organizations
India	Societies, trusts, Section 8 companies, cooperatives
China	Social organizations (shehui tuanti), foundations (jijinhui), civil non-enterprise units (minban feiqiye danwei), GONGOs
South Africa	Non-profit organizations (NPOs), non-profit companies (NPCs), trusts, voluntary associations
Compiled from: national legislation of BRICS countries.	

<sup>1</sup> IPEA – Instituto de Pesquisa Econômica Aplicada. Mapa das Organizações da Sociedade Civil. 2024. Available at: <https://mapasc.ipea.gov.br> (accessed: 10.02.2026).

similar requirements for enhanced reporting upon receiving foreign funding exist in Brazil, India, and China (Dorozhkin et al., 2023). In recent years, Russia has seen state support for civil society development institutions, including the creation of specialized foundations and grant programs for projects aimed at strengthening international cooperation within the BRICS framework. According to the Ministry of Justice of the Russian Federation, the register of NPOs contains 221,665 organizations<sup>2</sup>. Issues related to assessing the social efficiency of the non-profit sector in the Russian economy are examined in detail in the work of A.V. Okorokov (Okorokov, 2024).

India has long-standing traditions of non-governmental organization operation, with roots tracing back to the national liberation movement. Today, over 3.3 million registered NPOs operate in India, with sector employment exceeding 12 million people (approximately 2.5% of the workforce). According to a study by the Society for Participatory Research in Asia (PRIA), 73.4% of NPOs have either one paid employee or none at all, while over 19 million people work as volunteers. The sectoral structure of India's non-profit sector includes religious activities (26.5%), community and social services (21.3%), and education and culture (17.9%)<sup>3</sup>.

The People's Republic of China exhibits a specific model of non-profit sector organization, characterized by significant state involvement. Most large non-profit organizations engaged in international activities are quasi-governmental structures (GONGOs – government-organized non-governmental organizations), closely inter-

acting with state authorities (Zhang, 2025). Nevertheless, in recent years, a gradual diversification of the sector and an increase in the number of independent NPOs have been observed, particularly in the fields of ecology, education, and social entrepreneurship. According to the Ministry of Civil Affairs of the PRC, approximately 900,000 NPOs operate in the country, providing employment for 12–15 million people<sup>4</sup>.

The Republic of South Africa is characterized by the most developed non-profit sector among African states, owing to the historical legacy of the anti-apartheid struggle and the active role of civil society in the democratization process. The legal framework governing NPO activities in South Africa is among the most liberal, ensuring a significant degree of organizational freedom and access to international resources. According to the national register, as of the end of 2024, 289,184 registered NPOs were operating in the country. NPOs account for approximately 1.5% of GDP and provide about 1.1 million jobs<sup>5</sup>.

Comparison of the data in *Tables 1 and 3* reveals certain patterns. Countries with larger foreign trade turnover (China, India) also possess a more extensive non-profit sector in absolute terms; however, the share of the population employed in NPOs in these countries is lower than in South Africa or Brazil. This may be explained both by features of their economic structure and by differences in the regulatory environment. Countries with more liberal NPO regulation (South Africa, Brazil) demonstrate higher relative employment in the sector, confirming the significance of the institutional environment for the development of the non-profit sector.

<sup>2</sup> The Ministry of Justice of the Russian Federation. Information portal about the activities of non-profit organizations. Available at: <https://unro.minjust.ru> (accessed: 10.02.2026).

<sup>3</sup> Society for Participatory Research in Asia (PRIA). Invisible, Yet Widespread: The Non-Profit Sector in India. New Delhi, 2002. Available at: [https://link.springer.com/rwe/10.1007/978-0-387-93996-4\\_445](https://link.springer.com/rwe/10.1007/978-0-387-93996-4_445) (accessed: 16.02.2026).

<sup>4</sup> Ministry of Civil Affairs of the People's Republic of China. Statistical Bulletin on Civil Affairs Development. 2024 Available at: [https://www.stats.gov.cn/english/PressRelease/202502/t20250228\\_1958822.html](https://www.stats.gov.cn/english/PressRelease/202502/t20250228_1958822.html) (accessed: 16.02.2026).

<sup>5</sup> Council on Foundations. Nonprofit Law in South Africa. 2024. Available at: <https://www.cof.org/country-notes/south-africa> (accessed: 16.02.2026).

Table 3. Comparative characteristics of the institutional environment for NPOs in BRICS countries

Country	Number of NPOs (thousands)	Share of NPOs in GDP (%)	Employment in NPO sector (million people)	% of population employed in NPOs	Degree of regulatory freedom*
Brazil	897.1	1.8	2.4	1.1	4
Russia	221.7	1.1	1.2	0.8	2
India	3,300.0	2.4	12.0	0.8	3
China	900.0	0.8	13.5	0.9	2
South Africa	289.2	1.5	1.1	1.8	4

\*On a scale from 1 to 5, where 5 denotes maximum freedom.  
Compiled from: data from national statistical offices, the World Bank, CIVICUS reports.

Thus, despite substantial differences in regulatory approaches, all BRICS countries acknowledge the importance of the non-profit sector for socio-economic development. At the same time, variations in the degree of regulatory freedom, access to resources, and opportunities for international engagement create asymmetry in the capacities of national NPOs and necessitate the development of mechanisms to harmonize legal regimes in order to facilitate cross-border cooperation (Brown, 2000).

#### **Forms and mechanisms of NPO participation in strengthening economic ties**

An analysis of non-profit organizations' practices within the BRICS space allows for the identification of four primary forms of NPO participation in strengthening socio-economic ties among the association's member states. Each of these forms is implemented through specific mechanisms of influence on economic actors and the institutional environment of interaction, while all of them contribute to the accumulation of social capital in the Putnamian sense – the formation of networks, norms, and trust that facilitate coordination and cooperation.

The first form relates to facilitating the development of trade relations through the organization of business missions, trade exhibitions, forums, and conferences. Business associations and chambers of commerce and industry perform intermediary functions between entrepreneurs from different countries, providing informational support, arranging business contacts, and lobbying

for business interests. In terms of social capital theory, these organizations create “bridging” capital, connecting representatives of different countries and cultures. As noted by A.O. Naumov and colleagues, the role of such organizations is particularly significant given the cultural and linguistic barriers characteristic of interaction among BRICS countries (Naumov et al., 2023). The Russian Union of Industrialists and Entrepreneurs (RSPP), the Confederation of Indian Industry (CII), the China Council for the Promotion of International Trade (CCPIT), and similar structures are actively developing bilateral and multilateral formats of interaction (Markov, 2024).

The second form encompasses the activities of scientific and educational NPOs and university alliances aimed at implementing joint research projects and knowledge exchange. Unlike educational exchanges, this format is focused on creating specific intellectual outputs and innovative solutions, which directly contributes to shaping a common scientific and technological space. According to a study by M.A. Lukashenko and colleagues, in 2024, just ten leading Russian universities published 998 articles jointly with foreign organizations, a significant portion of which involved partners from BRICS countries (Lukashenko et al., 2025).

The institutional framework for scientific and educational cooperation encompasses various organizational forms: joint research centers and laboratories (e.g., the Center for Fundamental Sciences at Novosibirsk State University and

Table 4. Russian-Chinese Educational Associations

No.	Russian-Chinese association	Russian participating universities	Chinese participating universities
1	Association of Classic Universities of Russia and China	20	31
2	Russian-Chinese Association of Higher Education Institutions in Culture and Arts	30	14
3	China-Russia Alliance of Agricultural Education and Innovative Research	9	8
4	Association of Technical Universities of Russia and China	39	35
5	Association of Universities "Volga – Yangtze"	49	38
6	China-Russia Union of Higher Pedagogical Educational Institutions	12	10
7	Russian-Chinese Association of Medical Universities	49	55
8	Union of Journalism Education of Universities of China and Russia	15	21
9	Association of Universities of the Far East and Siberia of Russia and Northeastern Regions of the PRC	20	73
10	China-Russia Association of Arts Universities	3	7
11	Association of Rectors of Transport Universities of Russia and China	20	100
12	Russian-Chinese Association of Economic Universities	18	20
13	Russian-Chinese Association of Tourism and Hospitality Universities	7	14

Compiled from: ruschinalliance.unecon.ru.

Chongqing University), expert councils and associations (the Expert Council on Russia's Participation in BRICS at HSE University), and major international forums (the BRICS Universities Rectors Forum). Of particular note is the system of Russian-Chinese educational associations (*Tab. 4*).

Analysis of the data in Table 4 demonstrates the formation of a deeply diversified system of scientific and educational integration. The Association of Technical Universities (39 Russian and 35 Chinese universities) and the Association of Medical Universities (49 and 55 universities, respectively) create a critical mass of participants for joint research in strategic sectors. The significant predominance of Chinese universities in the Association of Transport Universities (100 vs 20) and the regional association "Far East and Siberia – Northeast China" (73 vs 20) indicates a deliberate effort to build interaction in areas of particular geo-economic significance.

The third form encompasses the activities of NPOs in the sphere of technology transfer and support for innovative development. Technology platforms, incubators, accelerators, and venture capital funds facilitate the commercialization

of research outcomes and the dissemination of best practices. An example is the activities of the BRICS International Alliance of Strategic Projects, which in 2024 and the first half of 2025 conducted over 150 events, organized more than 19 foreign delegations to BRICS countries, and hosted 17 foreign delegations in Russia. This activity generates social capital through the creation of repeated interactions that build trust among participants (Kiselev, Nechaeva, 2018).

The fourth form is represented by socially oriented NPOs working in the fields of sustainable development, inclusive economy, and social entrepreneurship. These organizations facilitate the involvement of marginalized population groups in economic activity, the development of microfinance, and support for small entrepreneurship. The economic effect of socially oriented NPOs' activities is manifested indirectly through the expansion of the consumer market, the formation of new demand segments, and job creation (Weerawardena et al., 2010).

Based on the consolidation of data from World Bank reports, the International Labour Organization, national statistical offices, and specialized

studies of the microfinance sector, the author has derived the following estimates of the economic effects of socially oriented NPOs' activities in BRICS countries:

- microfinance coverage: socially oriented NPOs and microfinance institutions provide access to financial services for 45–60 million households not covered by the traditional banking system, with a total microcredit portfolio of approximately USD 35–42 billion (author's estimate based on data from CGAP, MIX Market, and national regulators);

- job creation: social entrepreneurship support programs facilitated by NPOs contribute to the creation of 2.5–3.2 million jobs annually, predominantly in rural areas and depressed urban territories (estimate based on data from the ILO, Rosstat, IBGE, and China's NBS);

- inclusion of marginalized groups: NPO programs on economic inclusion reach 18–25 million people from vulnerable population categories.

#### **Discussion: Contentious issues and alternative approaches**

The role of non-profit organizations in international economic cooperation remains a subject of scholarly debate. A critical analysis of existing positions allows for a more objective assessment of the prospects for NPO participation in strengthening economic ties within the BRICS framework (Nurhayati et al., 2025).

The first contentious issue concerns the very nature of the BRICS association and its capacity for deepening integration. A number of researchers view BRICS primarily as a political project and are skeptical about the prospects for developing genuine economic cooperation (Jacobs, Van Rossem, 2014). The empirical data presented in this study — 1,247 joint NPO projects in 2015–2023, over 330 universities participating in educational associations between Russia and China alone, more than 150 events organized by the BRICS International Alliance of Strategic Projects in a single year — attest to the existence of substantive

cooperation at the civil society level. The author contends that the economic interests of BRICS countries in diversifying partnerships create a genuine foundation for deepening cooperation, in which NPOs play a supportive yet significant role (Markov, 2024).

The second point of debate relates to assessing the degree of autonomy of the non-profit sector in BRICS countries (Popova, 2019). Critics point to the high degree of dependence of many NPOs on state funding and control, particularly in China, where most international NPOs are quasi-governmental structures. The data in Table 3 show that the degree of regulatory freedom varies considerably — from 2 points (Russia, China) to 4 points (Brazil, South Africa). However, even under conditions of limited autonomy, NPOs are capable of performing useful functions in facilitating economic interaction, as evidenced by the scale of their activities (Petroni, 2021).

The third controversial issue concerns the relationship between the economic and political functions of NPOs. Some researchers (Esenbaeva, Kuznetsov, 2024) focus on the macroeconomic aspects of BRICS cooperation, including de-dollarization, assigning NPOs a secondary role. The author shares the view that economic integration has a socio-cultural dimension in which NPOs possess comparative advantages. Building trust and developing business networks are areas where the non-profit sector is indispensable.

The fourth issue pertains to the optimal model for institutionalizing NPO interaction. Various approaches exist, ranging from the creation of a formalized structure to the preservation of flexible network interactions<sup>6</sup>. The author advocates a position of gradual, step-by-step institutionalization.

<sup>6</sup> Chukov R.S. (2017). Problems and prospects of global institutionalization in modern world politics: On the example of the Group of Seven, the Group of Twenty and BRICS: Candidate of Sciences dissertation. Saint Petersburg.

The fifth aspect relates to the impact of BRICS expansion on the prospects for NPO interaction. Nach and Newadi note that the inclusion of new members creates additional opportunities but complicates coordination. The author contends that expansion creates favorable conditions for NPOs by increasing the potential field for their activities (Nach, Newadi, 2024).

The sixth question concerns the relationship between the economic and socio-humanitarian functions of NPOs. V.V. Perskaya rightly notes that the BRICS partnership is aimed at ensuring not only economic growth but also improving the welfare of peoples (Perskaya, 2018). The author maintains that economic and social functions are complementary, and the most effective projects are those that integrate both.

### **Conclusion**

This study allows us to assert that non-profit organizations represent a significant, albeit underutilized, resource for strengthening socio-economic ties among BRICS countries. An analysis of the institutional environment in which NPOs operate has revealed substantial heterogeneity in national regulatory models governing the non-profit sector, ranging from relatively liberal regimes in Brazil and South Africa to considerably more restrictive ones in China and Russia. This creates structural obstacles for cross-border cooperation but simultaneously opens opportunities for developing flexible mechanisms of collaboration.

The systematization of forms of NPO participation in the socio-economic interaction of BRICS countries has demonstrated the diversity of channels through which they exert influence, encompassing the facilitation of trade relations, the formation of a common scientific and educational space, technology transfer, and support for inclusive development. The application of the theoretical

framework of social capital has allowed for the conceptualization of the mechanisms through which NPOs operate: they generate “bridging” social capital by creating cross-country networks, shaping shared norms, and strengthening trust, which leads to a reduction in transaction costs in international engagement.

Quantitative assessment of the effects of non-profit sector activities confirms its notable contribution to the economies of BRICS countries: NPOs account for 0.8 to 2.4% of GDP, create millions of jobs, and implement hundreds of joint projects annually. Of particular significance is the activity of scientific and educational NPOs, which build the intellectual infrastructure for long-term cooperation.

The expansion of BRICS to the BRICS+ format in 2024 creates both additional opportunities and new challenges for the non-profit sector. The inclusion of Egypt, Ethiopia, Iran, and the UAE increases the institutional and cultural diversity of the association, necessitating more flexible mechanisms of interaction. At the same time, the expanded geography of cooperation opens new avenues for the activities of NPOs as instruments of soft power and public diplomacy.

The findings of the study confirm the initial hypothesis that non-profit organizations perform functions of infrastructural support for economic cooperation among BRICS countries, reducing informational and cultural barriers, forming networks of trust and reciprocity, developing human capital, and contributing to innovative development. The full realization of this potential is possible provided there are concerted efforts to institutionalize NPO interaction, harmonize national regulatory regimes, and establish sustainable mechanisms for supporting joint projects.

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## Public Opinion Monitoring of the State of the Russian Society

As in the previous issues, we publish the results of the monitoring of public opinion concerning the state of the Russian society. The monitoring is conducted by VoIRC RAS in the Vologda Region<sup>1</sup>.

The following tables and graphs show the dynamics of several parameters of social well-being and socio-political sentiment of the region's population according to the results of the latest round of the monitoring (February 2026) and for the period from February 2025 to February 2026 (the last seven surveys, that is, a year of measurements).

We compare the results of the surveys with the average annual data for 2000 (the first year of Vladimir Putin's first presidential term), 2007 (the last year of Vladimir Putin's second presidential term, when the assessment of the President's work was the highest), 2012 (the first year of Vladimir Putin's third presidential term), 2018 (the first year of Vladimir Putin's fourth presidential term), 2023 (the last full year of the fourth presidential term).

The annual dynamics of the data are presented for 2007–2025<sup>2</sup>.

In December 2025 – February 2026, the President's approval rating remained unchanged and amounted to 64–65%. The share of negative judgments was 20%.

Over the past 12 months (from February 2025 to February 2026), the share of positive assessments of the activities of the head of state has decreased from 66 to 64%. The proportion of negative judgments remained unchanged.

<sup>1</sup> The surveys are held six times a year in the cities of Vologda and Cherepovets, in Babayevsky, Velikoustyugsky, Vozhegodsky, Gryazovetsky, Tarnogsky Kirillovsky, Nikolsky municipal okrugs, and in Sheksninsky Municipal District. The method of the survey is a questionnaire poll by place of residence of respondents. The volume of a sample population is 1,500 people 18 years of age and older. The sample is purposeful and quoted. The representativeness of the sample is ensured by the observance of the proportions between the urban and rural population, the proportions between the inhabitants of settlements of various types (rural communities, small and medium-sized cities), age and sex structure of the Region's adult population. Sampling error does not exceed 3%.

More information on the results of VoIRC RAS surveys is available at <http://www.vsc.ac.ru>.

<sup>2</sup> In 2020, four rounds of the monitoring were conducted. Surveys in April and June 2020 were not conducted due to quarantine restrictions during the spread of COVID-19.

How would you assess the current work of...? (% of respondents)

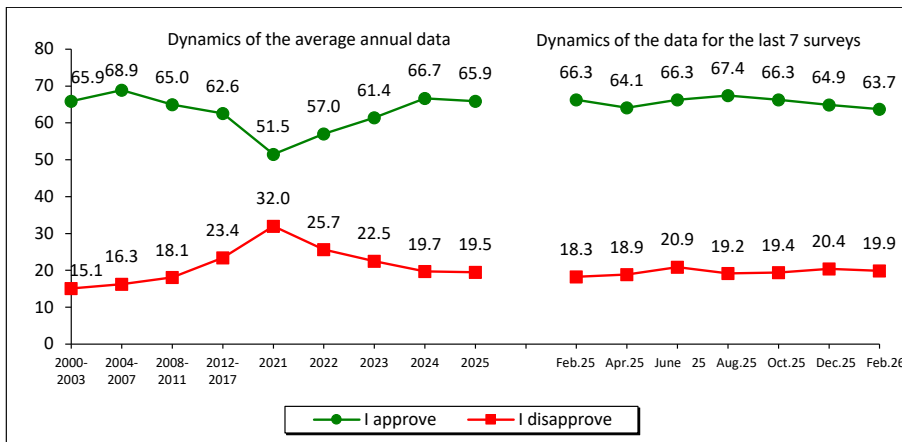
Response	Dynamics of the average annual data									Dynamics of the data for the last 7 surveys							Dynamics (+/-), Feb. 2026 to	
	2000	2007	2012	2018	2021	2022	2023	2024	2025	Feb. 2025	Apr. 2025	June 2025	Aug. 2025	Oct. 2025	Dec. 2025	Feb. 2026	Feb. 2025	Dec. 2025
<b>RF President</b>																		
I approve	66.0	75.3	51.7	66.4	51.5	57.0	61.4	66.7	65.9	66.3	64.1	66.3	67.4	66.3	64.9	63.7	-3	-1
I disapprove	14.8	11.5	32.6	21.7	32.0	25.7	22.5	19.7	19.5	18.3	18.9	20.9	19.2	19.4	20.4	19.9	+2	-1
<b>Chairman of the RF Government</b>																		
I approve	-	-	49.6	48.0	39.9	45.4	50.1	54.1	54.4	54.7	53.9	53.0	55.1	55.7	54.0	51.1	-4	-3
I disapprove	-	-	33.3	31.6	37.6	32.0	27.6	24.8	22.5	23.8	22.3	22.9	20.6	23.1	22.2	21.3	-3	-1
<b>Governor*</b>																		
I approve	56.1	55.8	41.9	38.4	36.7	40.9	48.1	51.7	42.5	46.8	42.9	39.9	41.0	41.8	42.8	40.2	-7	-3
I disapprove	19.3	22.2	33.3	37.6	40.5	35.8	30.9	28.4	37.2	31.4	34.6	37.2	39.1	41.3	39.3	39.0	+8	0

Positive changes are highlighted in green, negative changes are highlighted in red, and no changes – in blue. Due to the fact that the changes of +/- 3 p.p. fall within the limits of sampling error, they are considered insignificant and are marked in blue.

Wording of the question: “How would you assess the current work of ...?”

\* October 31, 2023 according to the Presidential Decree, Georgy Yu. Filimonov was appointed acting Governor of the Vologda Region. Following the results of the regional election held on September 6–8, 2024, Filimonov won 62.3% of the vote and became the elected Governor of the Vologda Region.

How would you assess the way that the RF President is handling his job? (% of respondents, VolRC RAS data)\*



Response	Dynamics (+/-), Feb. 2026 to	
	Feb. 2025	Dec. 2025
I approve	-3	-1
I disapprove	+2	-1

Positive changes are highlighted in green, negative changes are highlighted in red, and no changes – in blue. Due to the fact that the changes of +/- 3 p.p. fall within the limits of sampling error, they are considered insignificant and are marked in blue.

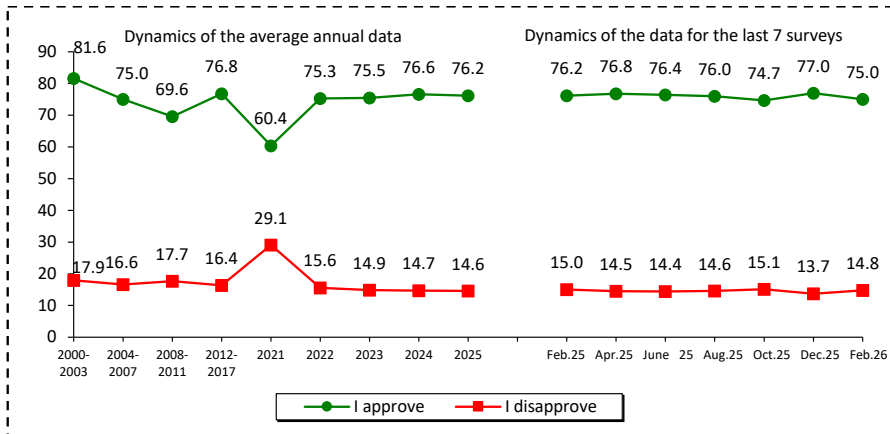
\* Here and elsewhere, all graphs show the average annual data for 2000, 2020, 2021, 2022, 2023, 2024, 2025, as well as the average annual data for the periods 2000–2003, 2004–2007, 2008–2011, 2012–2017 that correspond to presidential terms.

**For reference:**

According to VCIOM, the President’s approval rating for the period from December 2025 to February 2026 was 75–77%. The proportion of negative judgments was 14–15%.

On average, over the past 12 months, the estimates of the general population correspond to the level of support for the activities of the head of state in February 2025.

Do you approve or disapprove of the way that the RF President is handling his job?  
(% of respondents; VCIOM data)



Response	Dynamics (+/-), Feb. 2026 to	
	Feb. 2025	Dec. 2025
I approve	-1	-2
I disapprove	0	+1

Wording of the question: "In general, do you approve or disapprove of the way that the Russian President is handling his job?"

Data for February – average for two surveys: as of February 1, 2026 and February 8, 2026.

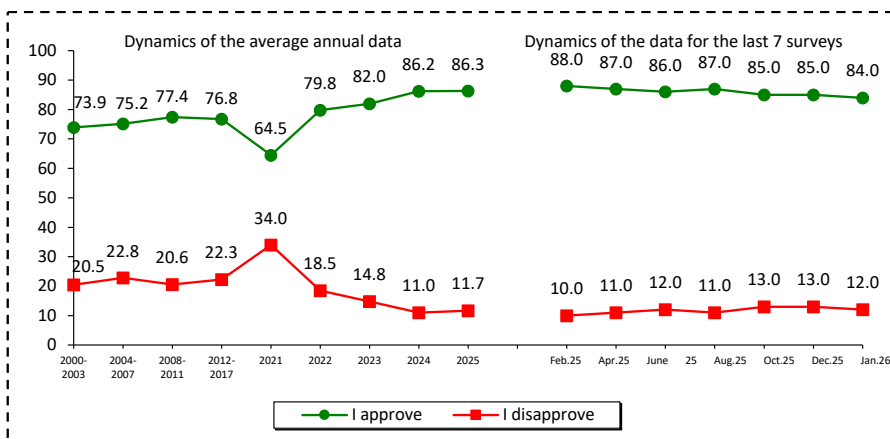
Positive changes are highlighted in green, negative changes are highlighted in red, and no changes – in blue. Due to the fact that the changes of +/- 3 p.p. fall within the limits of sampling error, they are considered insignificant and are marked in blue.

Source: VCIOM. Available at: <https://wciom.ru/>

According to Levada-Center\*, the share of positive assessments of the activities of the RF President in December 2025 – January 2026 amounted to 84–85%.

Compared to February 2025, in February 2026, the share of positive assessments decreased by 4 percentage points (from 88 to 84%).

In general, do you approve or disapprove of the way that Vladimir Putin is handling his job as President of Russia? (% of respondents; Levada-Center\* data)



Response	Dynamics (+/-), Jan. 2026 to	
	Feb. 2025	Dec. 2025
I approve	-4	-1
I disapprove	+2	-1

Wording of the question: "In general, do you approve or disapprove of the way that Vladimir Putin is handling his job as President of Russia?"

Positive changes are highlighted in green, negative changes are highlighted in red, and no changes – in blue. Due to the fact that the changes of +/- 3 p.p. fall within the limits of sampling error, they are considered insignificant and are marked in blue.

Source: Levada-Center\*. Available at: <https://www.levada.ru/>

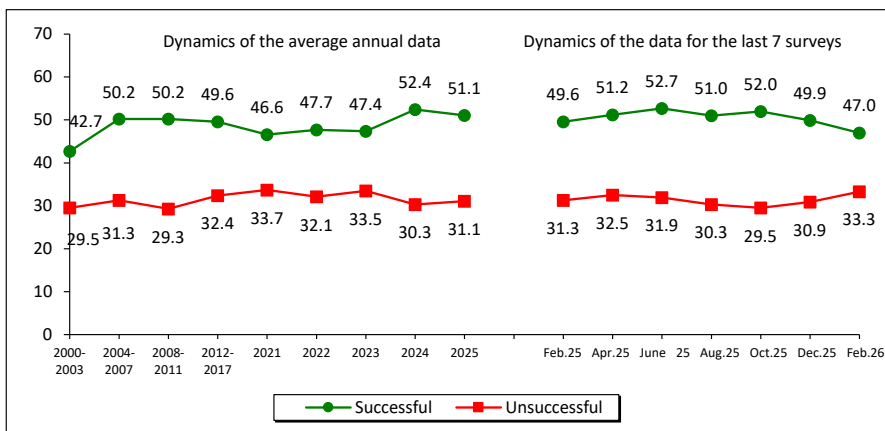
\* Included in the register of foreign agents.

In your opinion, how successful is the RF President in handling challenging issues? (% of respondents; VoIRC RAS data)

The share of residents of the region who consider the actions of the President of the Russian Federation to strengthen Russia’s international position to be successful decreased from 50 to 47% in December 2025 – February 2026. The proportion of those who adhere to the opposite point of view increased from 31 to 33%.

Over the past 12 months, the share of positive opinions about the work of the head of state on resolving international issues has decreased slightly (by 3 percentage points, from 50 to 47%).

Strengthening Russia’s international position



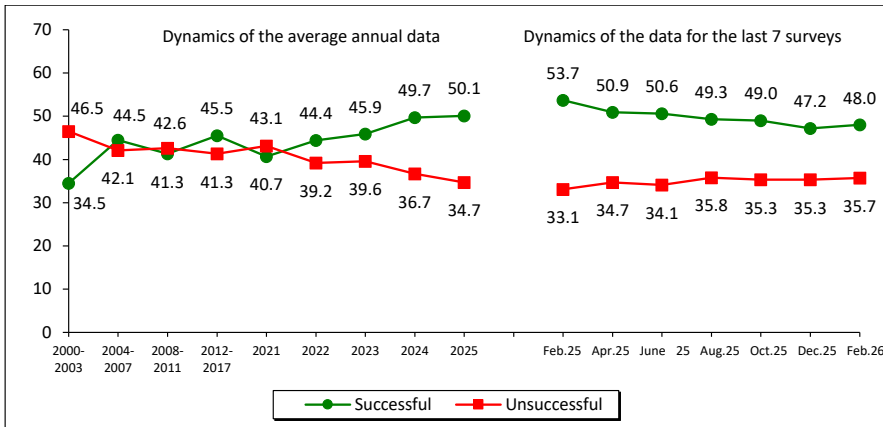
Response	Dynamics (+/-), Feb. 2026 to	
	Feb. 2025	Dec. 2025
Successful	-3	-3
Unsuccessful	+2	+2

Positive changes are highlighted in green, negative changes are highlighted in red, and no changes – in blue. Due to the fact that the changes of +/- 3 p.p. fall within the limits of sampling error, they are considered insignificant and are marked in blue.

Over the past two months, the opinion of the residents of the region about the activities of the head of state to restore order in the country has remained the same: the share of positive judgments was 48%, negative ones – 35–36%.

From February 2025 to February 2026, the proportion of those who believe that the RF President is successfully managing to restore order in the country decreased by 6 percentage points (from 54 to 48%).

Restoring order in the country



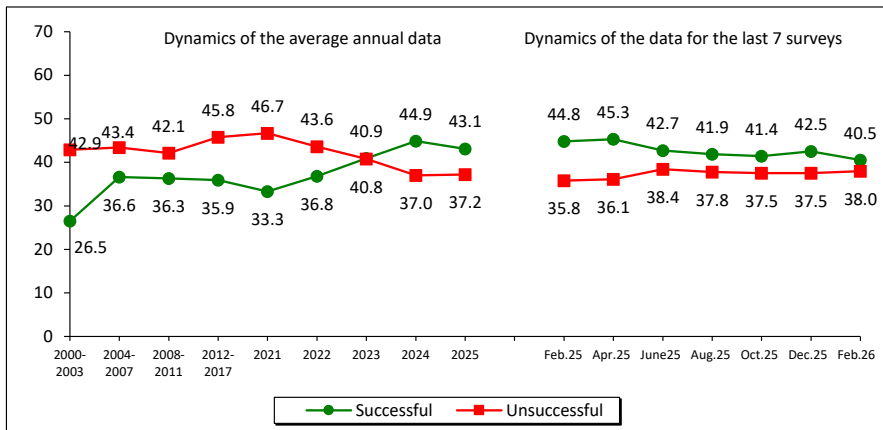
Response	Dynamics (+/-), Feb. 2026 to	
	Feb. 2025	Dec. 2025
Successful	-6	+1
Unsuccessful	+3	0

Positive changes are highlighted in green, negative changes are highlighted in red, and no changes – in blue. Due to the fact that the changes of +/- 3 p.p. fall within the limits of sampling error, they are considered insignificant and are marked in blue.

In February 2026, compared with December 2025, the share of residents of the region who positively assess the activities of the RF President to protect democracy and strengthen citizens’ freedoms decreased slightly (from 43 to 41%).

Negative changes have been observed over the past 12 months. The proportion of those approving of the head of state’s work to protect democracy and strengthen citizens’ freedoms decreased by 4 percentage points (from 45 to 41%).

Protecting democracy and strengthening citizens’ freedoms



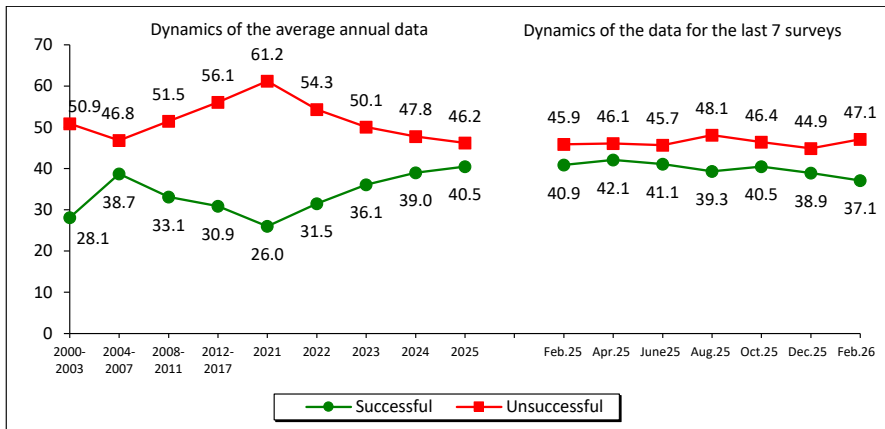
Response	Dynamics (+/-), Feb. 2026 to	
	Feb. 2025	Dec. 2025
Successful	-4	-2
Unsuccessful	+2	+1

Positive changes are highlighted in green, negative changes are highlighted in red, and no changes – in blue. Due to the fact that the changes of +/- 3 p.p. fall within the limits of sampling error, they are considered insignificant and are marked in blue.

The share of positive assessments of the success of the Russian President’s coping with the problem of economic recovery and the growth of citizens’ well-being in December 2025 – February 2026 did not change significantly and amounted to 37–39%.

From December 2025 to February 2026, the proportion of positive opinions regarding the activities of the head of state to solve economic issues decreased (by 4 percentage points, from 41 to 37%).

Economic recovery, increase in citizens’ welfare



Response	Dynamics (+/-), Feb. 2026 to	
	Feb. 2025	Dec. 2025
Successful	-4	-2
Unsuccessful	+1	+2

Positive changes are highlighted in green, negative changes are highlighted in red, and no changes – in blue. Due to the fact that the changes of +/- 3 p.p. fall within the limits of sampling error, they are considered insignificant and are marked in blue.

The structure of political preferences of the region’s residents remains stable. The majority of respondents (36–38%) support the United Russia party. This is followed by the Communist Party of the Russian Federation (9–10%), the Liberal Democratic Party (9%), the Just Russia Party (3-4%) and the New People (2–3%).

Over the past 12 months, the proportion of people who say that their interests are expressed by the United Russia Party has decreased (by 4 percentage points, from 40 to 36%).

Which party expresses your interests?  
(% of respondents; VoIRC RAS data)

Party	Dynamics of the average annual data													Dynamics of the data for the last 7 surveys						Dynamics (+/-), Feb. 2026 to		
	2011	Election to the RF State Duma 2011, fact	2012	2016	Election to the RF State Duma 2016, fact	2018	2020	Election to the RF State Duma 2020, fact	2021	2022	2023	2024	2025	Feb. 2025	Apr. 2025	June 2025	Aug. 2025	Oct. 2025	Dec. 2025	Feb. 2026	Feb. 2025	Dec. 2025
United Russia	31.1	33.4	29.1	35.4	38.0	37.9	31.5	49.8	31.7	35.2	39.5	42.9	40.3	39.9	40.5	41.6	41.2	40.5	38.1	36.1	-4	-2
CPRF	10.3	16.8	10.6	8.3	14.2	9.2	8.4	18.9	9.3	10.1	9.6	8.9	9.6	8.8	8.0	9.1	11.5	10.5	9.7	9.2	0	-1
LDPR	7.8	15.4	7.8	10.4	21.9	9.6	9.5	7.6	9.9	7.3	7.0	7.1	8.2	7.5	7.1	9.4	8.7	7.8	8.6	8.9	+1	0
Just Russia – Patriots for the Truth	5.6	27.2	6.6	4.2	10.8	2.9	4.7	7.5	4.7	4.9	4.4	3.5	3.5	2.3	2.9	3.9	4.2	3.4	4.1	3.1	0	-1
New People*	–	–	–	–	–	–	–	5.3	2.3	1.5	1.9	2.0	2.5	3.1	3.0	2.5	1.8	2.2	2.5	2.4	0	0
Other	1.9	–	2.1	0.3	–	0.7	0.5	–	0.2	0.3	0.1	0.2	0.1	0.3	0.0	0.1	0.1	0.1	0.2	0.2	0	0
None	29.4	–	31.3	29.4	–	28.5	34.2	–	33.9	30.6	26.5	25.2	25.8	28.4	27.7	24.9	23.3	24.3	26.1	29.1	+1	+3
Difficult to answer	13.2	–	11.7	12.0	–	11.2	11.1	–	10.0	10.1	11.1	10.3	10.0	9.7	10.8	8.5	9.2	11.3	10.7	11.0	+1	0

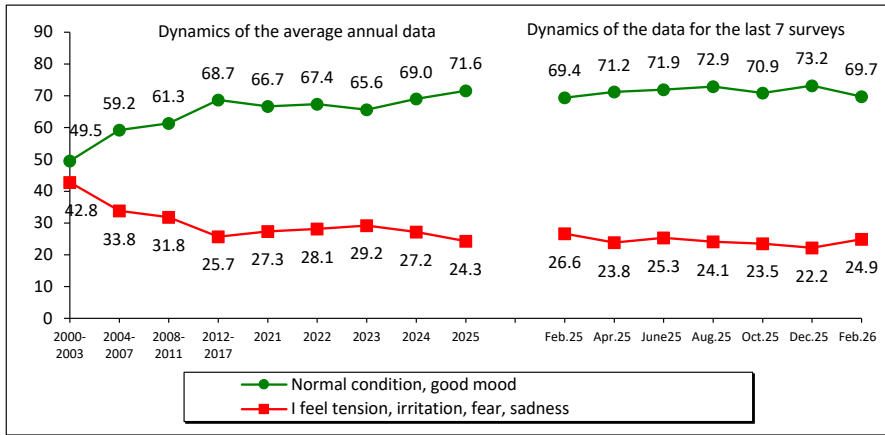
\* The New People party was elected to the State Duma of the Russian Federation for the first time following the results of the election held on September 17–19, 2021.  
Positive changes are highlighted in green, negative changes are highlighted in red, and no changes – in blue. Due to the fact that the changes of +/- 3 p.p. fall within the limits of sampling error, they are considered insignificant and are marked in blue.

Over the past two months, the proportion of positive assessments of social mood has decreased by 4 percentage points (from 73 to 69%).

Over the past 12 months, the proportion of people who describe their mood as “normal, fine” has not changed and amounted to 69%. The proportion of those who more often experience “tension, irritation, fear, sadness” was 25–27%.

Estimation of social condition (% of respondents; VoIRC RAS data)

Social mood



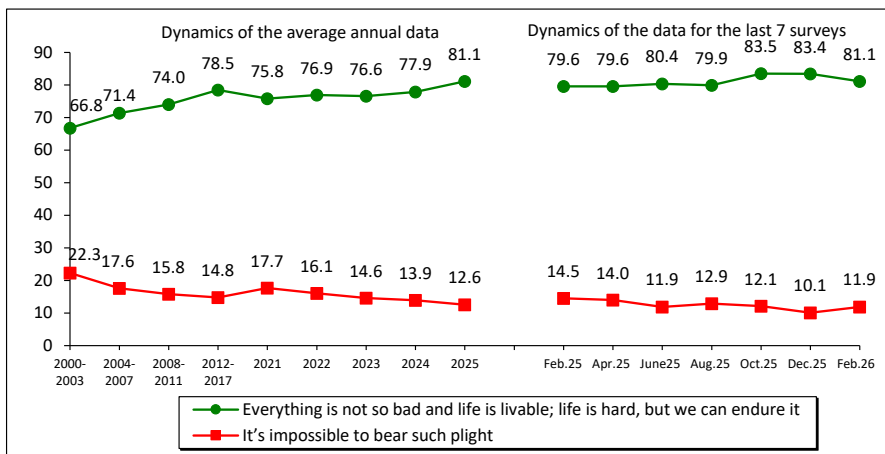
Response	Dynamics (+/-), Feb. 2026 to	
	Feb. 2025	Dec. 2025
Normal condition, good mood	0	-4
I feel tension, irritation, fear, sadness	-2	+3

Positive changes are highlighted in green, negative changes are highlighted in red, and no changes – in blue. Due to the fact that the changes of +/- 3 p.p. fall within the limits of sampling error, they are considered insignificant and are marked in blue.

The reserve of patience remains at a consistently high level: 81–83% of residents of the region in December 2025 – February 2026 noted that “everything is not so bad and life is livable”. The proportion of those who believe that it is “no longer possible” to tolerate their plight was 10–12%.

In February 2026, the index of the reserve of patience remained at the level of February 2025 and amounted to 80–81%.

Reserve of patience



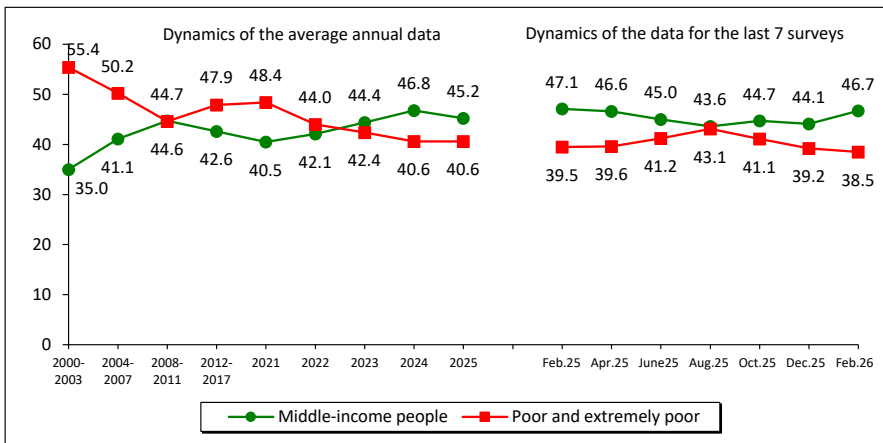
Response	Dynamics (+/-), Feb. 2026 to	
	Feb. 2025	Dec. 2025
Everything is not so bad and life is livable; life is hard, but we can endure it	+2	-2
It's impossible to bear such plight	-3	+2

Positive changes are highlighted in green, negative changes are highlighted in red, and no changes – in blue. Due to the fact that the changes of +/- 3 p.p. fall within the limits of sampling error, they are considered insignificant and are marked in blue.

In February 2026, there was a slight increase in the proportion of respondents identifying themselves as “middle-income” people. Compared to December 2025, this indicator increased by 3 percentage points, reaching 47%.

There have been no significant changes in the social self-identification of the region’s residents in 12 months.

Social self-identification



Response	Dynamics (+/-), Feb. 2026 to	
	Feb. 2025	Dec. 2025
Middle-income people	0	+3
Poor and extremely poor	-1	-1

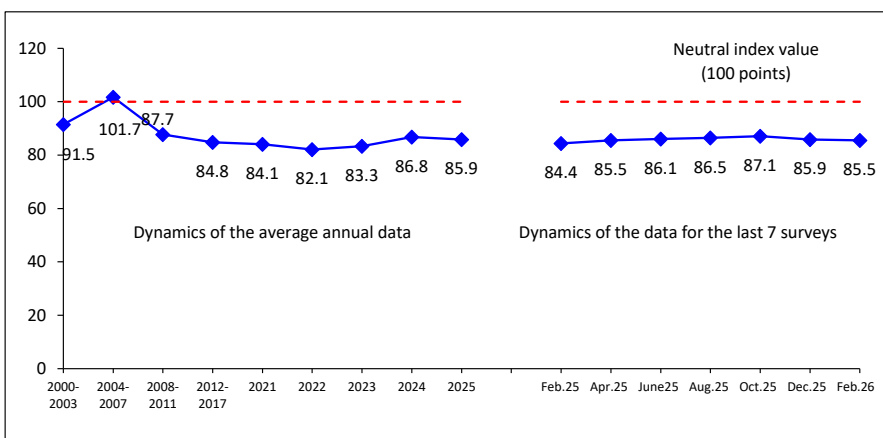
Wording of the question: “What category do you belong to, in your opinion?”.

Positive changes are highlighted in green, negative changes are highlighted in red, and no changes – in blue. Due to the fact that the changes of +/- 3 p.p. fall within the limits of sampling error, they are considered insignificant and are marked in blue.

The Consumer Sentiment Index (CSI) in December 2025 – February 2026 amounted to 86 points.

There were also no significant changes during the measurement year: the CSI was 84–86 points.

Consumer Sentiment Index  
(CSI, points; VoIRC RAS data for the Vologda Region)



Response	Dynamics (+/-), Feb. 2026 to	
	Feb. 2025	Dec. 2025
Index value, points	+1	0

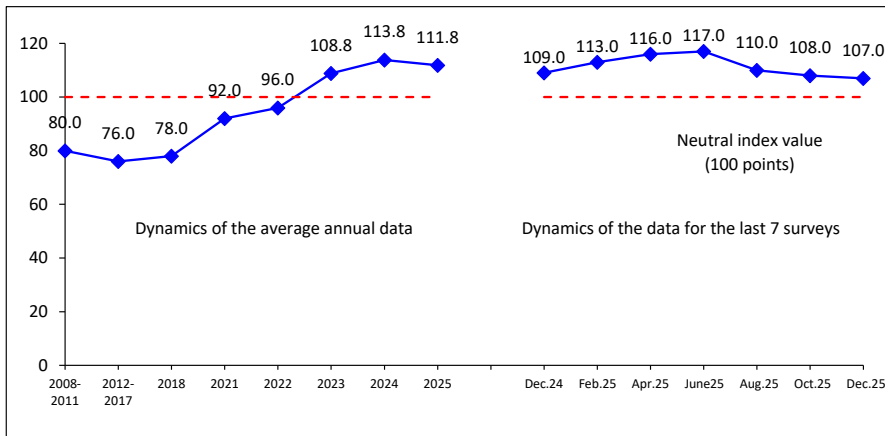
Positive changes are highlighted in green, negative changes are highlighted in red, and no changes – in blue. Due to the fact that the changes of +/- 3 p.p. fall within the limits of sampling error, they are considered insignificant and are marked in blue.

**For reference:**

According to the latest data from the all-Russian Levada-Center surveys\* (for the period from October to December 2025), the Consumer Sentiment Index amounted to 107–108 points.

From December 2024 to December 2025, the CSI has not undergone significant changes. At the same time, there was a negative trend in the second half of 2025: from June to December 2025, the CSI decreased by 10 points (from 117 to 107 points).

Consumer Sentiment Index (CSI, points; Levada-Center\* data for Russia<sup>3</sup>)



Response	Dynamics (+/-), December 2025 to	
	Dec. 2024	Oct. 2025
Index value, points	-2	-1

The index is calculated since 2008.

The latest data – as of December 2025.

Positive changes are highlighted in green, negative changes are highlighted in red, and no changes – in blue. Due to the fact that the changes of +/- 3 p.p. fall within the limits of sampling error, they are considered insignificant and are marked in blue.

Source: Levada-Center\*. Available at: <https://www.levada.ru/indikatory/sotsialno-ekonomicheskie-indikatory/>

In the period from December 2025 to February 2026, the negative dynamics of social mood affected half of the socio-demographic groups (7 out of 14). The most noticeable decrease in the share of positive ratings was recorded among respondents under the age of 30 (by 5 percentage points) and those aged 30–55 (by 5 percentage points), as well as among people with secondary education and below (by 5 percentage points). In the remaining 7 groups, the indicator remained unchanged. At the same time, there are no positive developments.

<sup>3</sup> Since March 2025, Levada-Center\* has updated data on the CSI. The CSI in Russia has been calculated since 1993 on the basis of five questions, similar to the index developed in the 1940s by the Institute for Social Research at the University of Michigan. The individual indices for each question are calculated as the difference between the proportions of positive and negative responses plus 100. The cumulative CSI is the arithmetic mean of individual indices (range 0–200, where >100 is the predominance of positive ratings). In 2009, the CSI was linked to the values of March 2008 (100% base), which was associated with a change in the methodology of surveys and the economic crisis. However, this led to the fact that the index began to reflect changes only relative to 2008. Since March 2025, it was decided to return to the original method of calculating the CSI, abandoning the link to 2008, because in 2023, many indicators exceeded the peaks of 2008 and the old version of the index ceased to adequately reflect the current situation. A return to the original methodology is intended to solve this problem. Source: Updated Consumer Sentiment Index: February 2025 Figures. Available at: <https://www.levada.ru/2025/03/26/obnovlennyj-indeks-potrebitelskhnastroenij-pokazateli-fevralya-2025-goda/>.

\* Included in the register of foreign agents.

During the year, an increase in the share of positive assessments of social mood was recorded only in one group – among the 20% of the most affluent: the indicator increased by 10 percentage points (from 78 to 88%).

Social mood deteriorated in three groups:

- ✓ among young people under 30 years of age – a decrease of 10 percentage points (from 80 to 70%);
- ✓ among the 20% of the least affluent – by 8 percentage points (from 56 to 48%);
- ✓ among people with secondary education and below – by 4 percentage points (from 65 to 61%).

In the majority of socio-demographic groups (in 10 out of 14), the indicator of social mood remained unchanged.

Social mood in different social groups (Response “Wonderful mood, normal, stable condition”, % of respondents; VoIRC RAS data)

Population group	Dynamics of the average annual data								Dynamics of the data for the last 7 surveys							Dynamics (+/-), Feb. 2026 to	
	2007	2012	2018	2021	2022	2023	2024	2025	Feb. 2025	Apr. 2025	June 2025	Aug. 2025	Окт. 2025	Dec. 2025	Feb. 2026	Feb. 2025	Dec. 2025
<b>Gender</b>																	
Men	65.9	69.1	72.8	65.7	66.8	65.5	66.5	70.7	70.1	68.8	71.6	72.1	68.2	73.3	69.1	-1	-4
Women	61.7	65.8	69.8	67.4	67.9	65.7	70.9	72.3	68.8	73.1	72.2	73.5	73.1	73.1	70.1	+1	-3
<b>Age</b>																	
Under 30	71.3	72.3	79.9	73.5	77.6	75.0	76.6	76.8	79.9	76.7	76.7	78.1	75.2	74.3	69.5	-10	-5
30–55	64.8	67.9	72.6	69.5	69.4	68.8	71.3	74.3	70.2	74.1	74.1	74.9	73.9	78.4	73.6	+3	-5
Over 55	54.8	62.1	65.2	60.5	61.1	58.2	63.3	66.5	64.6	65.8	67.6	68.6	65.9	66.6	64.9	0	-2
<b>Education</b>																	
Secondary and incomplete secondary	58.4	57.2	64.8	62.1	64.6	62.0	64.6	67.2	64.6	65.6	68.4	70.3	68.4	66.1	60.6	-4	-5
Secondary vocational	64.6	66.7	72.1	66.7	68.3	66.1	70.3	73.6	71.8	74.8	74.1	73.6	71.4	75.6	71.6	0	-4
Higher and incomplete higher	68.6	77.0	76.7	71.5	69.5	68.8	72.3	73.9	71.4	73.4	73.0	74.7	73.1	77.6	74.7	+3	-3
<b>Income group</b>																	
Bottom 20%	51.6	51.5	57.2	54.6	57.0	50.1	53.5	55.2	55.9	56.9	56.1	58.3	53.3	50.7	48.2	-8	-3
Middle 60%	62.9	68.7	72.1	67.3	68.1	67.4	70.7	73.2	70.5	72.6	74.4	73.1	73.1	75.2	72.2	+2	-3
Top 20%	74.9	81.1	82.4	79.9	78.3	73.9	77.6	83.6	77.9	81.3	84.1	83.8	84.8	89.4	87.7	+10	-2
<b>Territory</b>																	
Vologda	63.1	73.6	71.0	60.3	59.8	59.6	66.0	70.2	66.7	68.6	69.5	72.9	71.4	71.9	68.1	+1	-4
Cherepovets	68.1	76.2	75.7	71.0	71.2	68.1	69.8	73.1	69.9	71.5	72.5	75.0	73.2	76.3	73.0	+3	-3
Districts	61.6	59.8	68.6	67.8	69.5	67.7	70.2	71.6	70.7	72.7	73.1	71.6	69.3	72.2	68.7	-2	-4
Region	63.6	67.3	71.2	66.6	67.4	65.6	69.0	71.6	69.4	71.2	71.9	72.9	70.9	73.2	69.7	0	-4
Total number of groups: positive changes / no changes / negative changes															14:	14:	
															1 / 10	0 / 7	
															/ 3	/ 7	
Positive changes are highlighted in green, negative changes are highlighted in red, and no changes – in blue. Due to the fact that the changes of +/- 3 p.p. fall within the limits of sampling error, they are considered insignificant and are marked in blue.																	

## RESUME

The latest wave of public opinion monitoring was conducted in January–February 2026 against a backdrop of sustained foreign policy tensions accompanying negotiations on settling the Ukrainian conflict, the ongoing transformation of the global order architecture, and a sharpening public focus on domestic socio-economic issues. Four years into the Special Military Operation, a transition is observed from the mobilization-driven consolidation characteristic of its initial phase to a stage of “reflection.” The population is not merely adapting to current realities but is becoming increasingly demanding of authorities regarding improvements in living standards and quality of life, as well as the resolution of social justice issues.

This shift – from adaptation to crisis conditions toward a demand for enhanced quality of life and governmental accountability in this process – has been captured by monitoring data. On the one hand, approval ratings for the President of the Russian Federation remain consistently high (64–65%), as does the population’s “reservoir of patience” (81–83%). On the other hand, for the first time in a prolonged period (since February 2025), a steady decline in several crucial indicators is observable.

Thus, in February 2026 compared to February 2025, the level of presidential approval remained virtually unchanged (a marginal decrease of 2 percentage points, from 66 to 64%). However, a more pronounced negative trend is evident in assessments of his performance in specific areas:

- ✓ the share of positive assessments of the President’s work in restoring order in the country decreased by 6 p.p. (from 54 to 48%);
- ✓ regarding the protection of democracy – by 4 p.p. (from 37 to 41%);
- ✓ in boosting the economy – by 4 p.p. (from 41 to 37%);
- ✓ in strengthening Russia’s international positions – by 3 p.p. (from 50 to 47%).

While these changes are modest, they are observable across all key areas of the head of state’s activity. Concurrently, approval ratings have also declined for the Prime Minister of the Russian Federation (by 4 p.p., from 55 to 51%), the regional governor (by 7 p.p., from 47 to 40%), and support for the “United Russia” party (by 4 p.p., from 40 to 36%).

A troubling signal is the deterioration of social mood within certain population segments. Over the year, the share of positive assessments of their emotional state among youth under 30 decreased by 10 p.p. (from 80 to 70%), and among the lowest-income quintile (20% least well-off) – by 8 p.p. (from 56 to 48%). Conversely, among the highest-income quintile (20% most well-off) in the region, an increase in positive assessments of social mood was recorded (by 10 p.p., from 78 to 88%), indicating divergent trends and deepening social stratification and inequality.

The Consumer Sentiment Index (CSI) remains at the level of 84–85 points, showing no significant growth. This stagnation reflects subdued consumer activity and the persistence of cautious expectations among the population regarding the future.

Thus, the monitoring results for February 2026 record a slight decline in the proportion of positive assessments of governmental performance at both regional and federal levels. Domestic policy, including the economic agenda and citizens’ material well-being, emerges as the primary risk zone: negative shifts in evaluations of the President’s handling of economic issues and restoring order are accompanied by a worsening of well-being among low-income groups and youth. Signs of accumulating social tension are appearing, although for now, this is restrained by the high reservoir of patience and has not yet formed a sustained trend.

As noted by V. Fedorov, Director General of VCIOM, in December 2025: “The army is fighting, the people watch on TV, through Telegram channels... how our troops overcome the enemy’s resistance, and

worry about something else: about the economy, salaries, jobs, prices, children's education, healthcare..."<sup>4</sup> According to sociological surveys by the Center for the Study of Political Culture of Russia (CISPKR), Russian society today harbors three main demands:

1. "Just PEACE" (66%) – ending the Special Military Operation as the primary unspoken desire.
2. "Let us breathe" (62%) – a demand to stop rising prices and tariffs.
3. "Give me back my internet" (62%) – a demand for digital normality without an "electronic concentration camp"<sup>5</sup>.

Consequently, the data obtained in the Vologda Region largely aligns with the assessments of Russian experts and underscores the necessity of enhancing public administration effectiveness to maintain positive public sentiment and prevent its further deterioration. This requires strengthening targeted social policies and paying particular attention to people's economic expectations, aligning with the objectives set forth in state social policy and national projects.

Prepared by K.E. Kosygina and I.M. Bakhvalova

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<sup>4</sup> Alfimov V. From paycheck to victory: How Russian society has changed in a year (interview with V. Fedorov, head of VCIOM). Available at: <https://www.kp.ru/daily/27763.3/5191948/?ysclid=mkgituc55z530676123>

<sup>5</sup> Obukhov S.P., Mikhalchuk A.M., Bogachev A.M., Strelkov D.A., Khamadieva T.V., Chervontsev A.V. Results of 2025 from V.V. Putin. An Express Analysis of the Message to Russian Society and Foreign Opponents. Available at: <https://kprf.ru/politindx/239901.html?ysclid=mlhmrkgapk916136109>

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