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PREFACE

This issue of the *Baltic Region* is timed to celebrate a landmark date — the 70th anniversary of our esteemed colleague, committed professional, talented researcher, and successful scientific manager Prof. **Gennady M. Fedorov**.

A graduate of Leningrad (today, Saint Petersburg) State University, Prof. Fedorov has dedicated himself to research, Kaliningrad, and its university, where he has worked for the past forty-eight years. He has held the important and responsible positions of Head of the Department of Socio-economic Geography and Geopolitics, Vice-rector for Research, Rector, Director of the Institute of Environmental Management, Urban Development and Spatial Planning, and, finally, Director of the Institute of Regional Studies.

The contribution of Prof. Fedorov to social geography is diverse and substantial. It includes multiscale geodemographic studies and analyses of trends and priorities in the development of the Kaliningrad region, which has been an exclave since the early 1990s. He has collaborated with colleagues from Poland, Germany, Lithuania, and other Baltic region states to study transboundary regionalisation in the Baltic amid rapid geoeconomic and geopolitical changes. He has authored a series of works focusing on the effect of the sea factor on the socio-economic development of territories. Overall, Prof. Fedorov has contributed to over 500 publications, including thirty-five monographs. In 1977, he defended his doctoral thesis on *The economic-demographic situation in the rural areas of the Kaliningrad region*. His postdoctoral thesis *A research framework for the concept of the geodemographic situation* followed in 1988. Some of the works of Prof. Fedorov have gained him recognition from both the academic community and the general public. In particular, he contributed to the Comprehensive urban planning scheme for the Kaliningrad region, which was awarded first prize by the State Committee for Construction of the Russian Federation.

In responding to ever-emerging socio-geographical challenges and constructing research designs for the teams he heads, Prof. Fedorov has continuously developed the original Kaliningrad (Baltic) school of socio-economic geographical thought, which is successfully functioning at the Immanuel Kant Baltic Federal University. He has supervised over two dozen doctoral and postdoctoral theses, as well as numerous projects that have been supported by national and international science funding bodies, including the Russian Science Foundation and the Russian Foundation for Basic Research. The research team built by Prof. Fedorov is recognised and respected. They have created a prominent Russian centre for socio-economic geography, which is visible in the international arena. The team stands out for its

publication activities. The Kaliningrad researchers have held a range of conferences. They have set up a dissertation committee, which is famous for its both demanding and friendly attitude to candidates.

Prof. Fedorov, a respected authority in his field, has successfully performed many high-profile functions. He is the chair of the dissertation committee; a member of the Academic Council and the Council of Regions of the Russian Geographical Society (RGO); the chair of the Kaliningrad branch of the RGO, a vice president of the Russian Human Geographers Association; the editor-in-chief of the natural and medical sciences series of the *Vestnik* of the Immanuel Kant Baltic Federal University (RSCI-indexed); and the deputy editor-in-chief of the *Baltic Region* (Scopus, Web of Science, the Higher Attestation Commission of the Russian Federation[HAC]) and the *Regionalnye issledovaniya* (HAC) journals.

This issue of the *Baltic Region* brings together leading Russian and international experts on issues that are thematically relevant to the research interests of Prof. Fedorov and the Kaliningrad school of socio-economic geographical thought. The contribution of Tadeusz Palmowski and Gennady M. Fedorov explores the formation of a Russian—Polish transboundary region as well as the role of the Kaliningrad region and the Tricity (Gdansk—Gdynia—Gdansk) in that process. Vladimir A. Kolosov and Aleksandr B. Sebentsov focus on regionalism in Nordic Europe and the Northern Dimension programme as interpreted in the Russian political discourse. Alexey V. Kuznetsov and Olga V. Kuznetsova investigate the changing role of border regions in the regional policies of the EU and Russia. Alexander I. Kostyaev explores the problems and development prospects of rural areas in Russia's north-western borderlands. Alexander G. Druzhinin analyses the factors and features of the localisation of large businesses in Russia's coastal zones. Andrey P. Klemeshev, Elena V. Kudryashova, and Sergey E. Sorokin examine the stakeholder approach and the ways to implement the 'third mission' of universities. Joachim von Braun and Alisher Mirzabaev explore the possibilities of bioeconomics in the Baltic region in the context of regional and global climate changes. Anatoly A. Anokhin, Ksenia D. Shelest, and Marina A. Tikhonova investigate trends in population change and stability in the socio-economic development of Russia's north-western cities.

We would like to express our sincere gratitude to Prof. Fedorov for his many years of professional communication and cooperation. We wish him ever-new creative breakthroughs and achievements for the good of the Immanuel Kant Baltic Federal University and Russian social geography.

Kind regards,
Prof. Aleksandr G. Druzhinin, President of the Russian Human Geographers Association; and
Prof. Vladimir A. Kolosov, Past President of the International Geographical Union, Vice President of the Russian Geographical Society.

THE DEVELOPMENT OF A RUSSIAN-POLISH CROSS-BORDER REGION: THE ROLE OF THE KALININGRAD AGGLOMERATION AND THE TRI-CITY (GDANSK — GDYNIA — SOPOT)

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Until 1991 ties between entities located on either side of the Russian-Polish border were virtually non-existent. There were, however, favourable physical, geographical, economic, social, and ekistical conditions for the development of a cross-border region. Since the early 1990s, cooperation between administrative units and municipalities, businesses, and non-governmental organisations has been developing on an institutional basis. Euroregions and cross-border cooperation programmes have become major contributors to cross-border region-building. On either side of the border, there are socio-economic nodes between which axes of cross-border interaction are emerging. The most powerful axis is the Tri-City (Gdansk-Gdynia-Sopot) — the Kaliningrad agglomeration. A systemic approach is used to analyse a variety of relationships, reflected in a map showing the diversity of geographical areas of cooperation. The University of Gdansk and the Immanuel Kant Baltic Federal University are playing an important role in the development of Russian-Polish relations. Although the intensity of cross-border ties has decreased in recent years amid tensions between Russia and the West, there is hope that bilateral socio-economic benefits will encourage the restoration and development of collaborations and the Russian-Polish cross-border region will continue to evolve.

Keywords: cross-border cooperation; cross-border region, Kaliningrad, Kaliningrad agglomeration, Tri-City, Gdansk, University of Gdansk, Immanuel Kant Baltic Federal University

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Introduction

The emergence of cross-border regions is a process facilitated by the development of socio-economic and / or political ties between countries or regions of different countries. The interaction of countries encourages the formation of transnational regions — international regions of mega-and macro-levels. The interacting regions of different countries, depending on the hierarchical level of cooperation, form cross-border meso- or micro-regions. They can be complex [4, 5, 22, 23] or industry-specific (for example, tourism) [1, 6]. Euroregions are one of the most developed forms of coordinated cooperation [11, 23, 29].

Economic, political, cultural ties have long been connecting many neighboring regions of different countries and their peoples. Their emergence and development at a certain stage led to the formation of transnational and transboundary regions, within which we can identify some common features of economic activity, cultural life, as well as political unions and international economic systems.

The area around the Baltic Sea has traditionally been a zone of close cultural and economic cooperation. Here, trade and transportation across the Baltic started developing. Since then, good neighborly relations and many similarities between towns and settlements have always been present. The Iron Curtain between the capitalist and socialist bloc after the end of the World War II weakened these ties. After the demise of the USSR and the socialist camp, a new Baltic structure of international cooperation appeared on the European stage under the auspices of the Council of the Baltic Sea States. Countries located on the shores of the Baltic Sea created a dense network of numerous links, institutions and programs of international cooperation, self-government bodies and non-governmental organizations. Despite the nature and forms of early integration, these new international structures, organizations and unions strengthened ties between the entities that make up Baltic Europe.

The countries of the Western and Northern Baltic are economically developed, competitive and sustainable market economies having significant achievements in advanced technology sectors. In the countries of the Eastern and Southern Baltic a complex process of market transformation and changes in old structures and simultaneous integration into the global economy began only in the early 1990s. These countries have always been determined to bridge the existing gap, they also represent a closely located attractive investment and consumer market for the countries of the Western Baltic.

Baltic Europe in a general sense can be associated with stability and passivity the traits attributed to northern peoples. In reality, this region is currently the territory of the most dynamic economic, civilizational and geopolitical changes in Europe. Despite the peripheral location in relation to the traditional European center, rather unfavorable climatic conditions, low population density and large

external differences (especially between the western and eastern parts), the unified Baltic Europe looks most openly into the future, and is ahead of other parts of Europe in many respects.

Along with the active development of various forms of cooperation and the creation of new ties due to the political changes of the 1990s, border contacts began to intensify. Their role is very important, as they led to eliminating mutual barriers and various prejudices, creating formal and informal ties, especially between local communities. The common historical heritage is often supported by structural and functional similarity of territories establishing cooperation, gradual weakening of the impact of state borders, as well the revitalization of the economy of border regions. Cross-border contacts allow overcoming various barriers and economic restrictions, this also pertains to maritime borders.

Cooperation initiatives on the borders of European countries are developing at three levels: local, regional and state. Euroregions, as well as other structures of cross-border cooperation (associations, unions, partnerships) have formed on the borders of the EU member states. Joint infrastructure, cultural, educational and environmental programs are brought into line with the concept of spatial development of these territories.

The agglomeration of the Tri-City (on the west coast) and the Kaliningrad agglomeration (on the east coast) are located on the opposite sides of the Gulf of Gdansk. The Gdansk and related Kaliningrad / Vistula bays, as well as the adjacent land, are separated by the state border between the Russian Federation and the Republic of Poland. For more than fifty years, both centers have not maintained almost any contacts (except for separate exchanges of delegations and creative groups), despite the fact that they are only 130 kilometers from each other.

The new geopolitical situation that arose at the end of the 20th century, European integration processes, geographical proximity, coastal location, relatively good communication infrastructure, the development of border crossings, both land and sea, were forerunners pointing to the special opportunities for the development of cross-border cooperation between the northeast voivodeships of the Republic of Poland (Pomeranian and Warmian-Masurian) and the Kaliningrad Region of the Russian Federation. A positive factor is also the long-term, fruitful development of contacts between Poland and Russia at the government level. Since 1991, after the signing of the first agreements, cooperation has been developing both at the official level and also in a broader sense — between individual gminas and cities, enterprises and non-governmental organizations.

The purpose of the article is to show the objectivity, features and prospects of the Polish-Russian cross-border region development.

To do this, the authors set the following tasks:

— To assess the factors that contribute to and hinder the development of multilateral cooperation of the border regions of Poland and Russia;

— To consider the achieved level of interaction along the Polish-Russian border;

— To establish the nature of the ties between the Tri-City and the Kaliningrad agglomeration as the nuclei of the transboundary region;

— To identify and evaluate trends in the development of mutual relations.

Research methodology

The study choses a systematic approach to its object (the Polish-Russian cross-border region) and the subject (economic, political, cultural, tourist and other ties within the region that determine its functioning and development as a territorial socio-economic system). Types of cross-border ties and factors contributing to or hindering the formation of the Polish-Russian cross-border mesoregion, as well as microregions in its composition, are identified and analyzed. The authors have carried out a historical and geographical analysis of the development of Polish-Russian relations in the period after the collapse of the USSR. Similarly, the institutional factors affecting the development of mutual relations in various fields of activity are characterized.

Analytically, the study is backed up by official statistics, scientific publications on a selected topic, materials from international research projects and applied research (primarily projects implemented as part of the Baltic Sea and Poland-Lithuania-Russia cross-border cooperation programs). The issues considered in the article were discussed by the author at numerous international conferences on international cooperation in the Baltic macroregion and directly along the Polish-Russian border.

Institutional Framework for Collaboration

Bilateral cooperation between the Kaliningrad region and the voivodships of Poland since the 1990s has relied on two levels of international legislation:

— Intergovernmental agreements defining cooperation between the Republic of Poland and the Russian Federation[1].

— Intergovernmental agreements regarding cooperation between the border regions of neighboring countries. These include the Intergovernmental Agreement on Cooperation between the Kaliningrad Region of the Russian Federation

[1] The agreement between the Government of the Republic of Poland and the Government of the Russian Federation on cross-border cooperation (Warsaw, October 2, 1992) // Guarant. URL: http://base. garant. ru/2564565/ (access date: 15.06.2019).
Agreement between the Republic of Poland and the Russian Federation on friendly and good-neighborly cooperation (Moscow, May 22, 1992 (enforced on May 8, 1993) // Guarant. URL: http://base.garant.ru/2540869/ (access date: 12.07.2019).
Traktat między Rzeczpospolitą Polską a Federacja Rosyjską o przyjaznej i dobrosąsiedzkiej spółpracy z dnia 22 maja 1992 roku // ISAP. http://prawo.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU19930610291 (access date: 25.05.2019).

and the northeastern Voivodeships of the Republic of Poland, signed on May 22, 1992[2]. An International Council has been set up to ensure its implementation. It consists of Russian and Polish national units formed on an equal footing. In Poland it is called the "Polish-Russian Council for Cooperation between the Regions of the Republic of Poland and the Kaliningrad Region" while in Russia it is the "Russian-Polish Council for Cooperation between the Kaliningrad Region of the Russian Federation and the Regions of the Republic of Poland". The Council includes 11 commissions that cover all areas of cooperation. Both countries pay great attention to this agreement. On the Russian side, the authorized person for the implementation of the Agreement and the organization of the Council's work is the Governor of the Kaliningrad Region, and on the Polish side, the same responsibility lies on the First Deputy Minister of the Interior of the Republic of Poland. Meetings have been held since 1994 (Svetlogorsk, Kaliningrad region), alternately in Russia and Poland, the last one took place in 2016 in Gdansk, Kaliningrad is being agreed to be the host in 2019[3].

— Intergovernmental acts relating to multilateral international cooperation between countries, including relations between the EU and Russia, the countries of the Baltic region. At the interstate level, the Council of the Baltic Sea States has been formed.

— Multilateral cooperation agreements at the inter-municipal level. Euroregions — associations of municipalities, in particular, are regulated by such acts. Russian and Polish entities are jointly represented in the Euroregions Baltika, Neman, Lyna-Lava, and Shesupe.

— Agreements signed directly by separate administrative-territorial units (Kaliningrad region and Polish voivodships), municipalities, institutions and companies. Thus, at the end of 1991, an agreement was signed between the Kaliningrad region and the Olsztyn Voivodeship, and in 1992 — with the Elblag, Suwalki and Gdańsk Voivodeships. Under this agreement, interaction was supposed to cover the fields of economics, trade, agriculture, banking, maritime transport, international communications, environmental protection, culture, science, sports and tourism.

An important role in partnerships with the Kaliningrad region is played by the voivodships formed in 1999 as a result of the new administrative division of Poland: Pomeranian and Warmian-Masurian. The interest in cooperating with

[2] The agreement between the Government of the Russian Federation and the Government of the Republic of Poland "On cooperation of the Kaliningrad region of the Russian Federation and the northeastern voivodships of the Republic of Poland" dated 22.05.1992 // Consultant Plus. URL: http://www.consultant.ru/document/cons_doc_LAW_124416/ (access date: 12.06.2019).

[3] The Russian-Polish Cooperation Council of the Kaliningrad region of the Russian Federation and regions of the Republic of Poland. URL: https://id.gov39.ru/agency/activities/tips/russia-poland.php (access date: 12.06.2019).

the exclave is evidenced by the agreements signed by the Kaliningrad Region with local governments of the Warmian-Masurian Voivodeship (2001) and the Pomeranian Voivodeship (2002). The agreement on cooperation of the Pomeranian Voivodeship focuses on the development of partnerships in local self-government, including the experience and information exchange, regional and local legislation governing the basics of economic activity, including trade and tourism, investment, and free economic zones mechanisms. The agreement also included the joint organization of visits, training for employees of local governments and mutual assistance in building a civil society.

In an agreement between the Pomeranian Voivodeship and the Administration of the Kaliningrad Region, the parties agreed on cooperation with the aim of establishing and developing economic and socio-cultural contacts, as well as creating the necessary conditions to support cooperation at the level of cities, districts, counties, communes, economic entities, organizations and institutions. The main areas of partnership included economy, in particular industry, agriculture, transport, as well as spatial planning and environmental protection, healthcare and social assistance, culture, art, education and science, sports, tourism and the further development of civil society. It was also decided to exchange information related to the development of border infrastructure, public utilities, the prevention of natural disasters, and the elimination of the their consequences.

The Consulate General of the Republic of Poland was opened in Kaliningrad in 1993, and in 1994 its activities were expanded to include the Trade and Economic Department. The Consulate General of the Russian Federation has long existed in Gdansk[4]. Since 1993, mutual visits, conferences, and exhibitions began in Kaliningrad and Gdansk, Elblag, Olsztyn, and Suwalki.

One of the elements of cooperation with the Kaliningrad region was the Representative Office of the Kaliningrad Region in Poland, which functioned in Gdansk in 1992—2007. Its activity, as noted by D.A. Mironyuk and K. Zhengota, was aimed at supporting local relations (in contrast to the Consulate, which performs a state mission and solves foreign policy tasks) [7]. In mid-2019, the Kaliningrad region was said to be reopening a representative office in Gdansk[5].

On the whole, we can assume that at present there is a sufficient institutional background for the development of mutual relations, which may result in building-up a cross-border Russian-Polish region.

[4] July 11, 2017 Gdansk hosted a reception on the 300th anniversary of the Consulate General of the Russian Federation in Gdansk. URL: https://gdansk.mid.ru/istoria-general-nogo-konsul-stva (access date: 06.15.2019).

[5] Promotions on barges: 5 questions about electronic visas to the Kaliningrad region // New Kaliningrad. June 27, 2019. URL: https://www.newkaliningrad.ru/news/politics/23520614-promo-na-barkakh-5-voprosov-ob-elektronnykh-vizakh-v-kaliningradskuyu-oblast.html (access date: 25.07.2019).

Spatial nodes and geographical axes of the formation of the cross-border Russian-Polish region

In our study, we rely on the provisions of the emerging theory of transboundary regional formation, which is based on the study of the emergence and development of relations between the border territories of neighboring countries. Their composition, structure and development factors, stakeholders and territorial levels of functioning began to be studied in detail at the end of the 20th — beginning of the 21st centuries, when globalization processes began to stimulate cross-border regionalization [3, 5, 13, 16, 17, 19, 27, 30].

The main factor in the formation of cross-border regions is economic relations: foreign trade, foreign investment and cooperation of enterprises. Unfortunately, in 2015- 2016 the volumes of all three of these ties types decreased, although in 2017—2018 in mutual trade, a certain increase was again observed. Polish entrepreneurs are interested in the Kaliningrad (and consequently Russian) market, and Russian ones are interested in the Polish market. This is manifested in the active participation of both parties in international (both multilateral and bilateral) conferences held in Russia and Poland, especially in Kaliningrad, Svetlogorsk, Tri-City and Olsztyn.

The bordering Russian and Polish regions are actively participating in joint projects of cross-border cooperation programs. The Baltic Sea Cross-Border Cooperation Program is currently operating and projects that will be implemented by Poland-Russia program for the period of 2014—2020 are being identified, they are focused on the issues of historical heritage, promoting economic development (including innovative economy), environment, transport and tourism. The program budget is 62.3 million euros, which makes it an important tool for the development of Russian-Polish relations[6].

An important role is played by cross-border population movement — shopping trips, educational and health tourism. Such activity was at its peak under the Agreement on Local Border Movement, the territory of which covered almost the entire emerging cross-border region [14, 24]. A new positive factor is the introduction of electronic tourist visas in the Kaliningrad region from July 1, 2019. Visas are issued for 30 days, during which it is allowed to stay in the region up to 8 days[7].

Large-scale cities of the border territories of Russia and Poland are the cross-border nodes that form both production and social ties. The larg-

[6] Cross-border cooperation program Poland — Russia 2014—2020. URL: https://www.plru.eu/ru/pages/11 (access date: 05.04.2019).

[7] A free e-visa to Kaliningrad: URL: https://www.kurier.lt/v-kaliningrad-po-besplatnoj-elektronnoj-vize/ (access date: 25.07.2019).
The first holders of electronic visas arrived in Kaliningrad // Russian newspaper, 04.07.2019. URL: https://rg.ru/2019/07/04/reg-szfo/pervyj-obladatel-elektronnoj-vizy-priehal-v-kaliningradskuiu-oblast. html (access date: 25.07.2019).

est of them are Kaliningrad, Tri-City, Olsztyn and Elblag (Fig. 1). Their interaction most strongly affects the development of the cross-border Russian-Polish region (mesoscale region, mesoregion). Cities with checkpoints across the Russian-Polish border are also of high importance. They are the growth nodes of less powerful axes around which transboundary microregions are formed. Dotted lines in the map indicate promising axes, which are likely to develop in the future.

Fig. 1. Development axis of the cross-border Polish-Russian region

Kaliningrad agglomeration and Tri-City as socio-economic nodes that grow the main axis of the Russian-Polish cross-border region

The main socio-economic nodes of the emerging Russian-Polish cross-border region are Tri-City (Polish Trójmiasto) in Poland and the Kaliningrad agglomeration in Russia. Relations between them form its main socio-economic axis.

The development of the urban agglomeration of Tri-City is determined by two indicators that speak of its development: a geographical indicator, which is specified by the coastal position, and a historical indicator of the independent development of the three large cities that make up the core of the agglomeration: Gdansk — the historical, central city of Pomerania, Gdynia — a young city established in 1926 as a port base and a rival to Gdansk, which has dominated since German times, as well as Sopot, a small town founded in the late nineteenth — early twentieth centuries. After World War II, very close ties arose between the Tri-City located on the Gulf of Gdansk, resulting in the agglomeration called Tró-

jmiasto (Tri-City), which expanded as the Baltic coast was developing, absorbing neighboring cities. In a broader sense, Elblag, a direct neighbor of Kaliningrad, also belongs to this agglomeration area.

The geographical location of Kaliningrad is unique both from a historical, economic and geopolitical point of view. This former part of East Prussia, owned by Russia, is separated from the main part of the state by 600 km. In addition, the region is located relatively close to the highly developed regions of Western Europe. The collapse of the USSR made the region, until 1991 completely isolated from the West, to open up and establish contacts with its neighbors. But, at the same time, after Lithuania left the USSR, the region became Soviet, and after the collapse of the USSR, it became a Russian exclave in the Baltic. However, its land neighbors, Poland and Lithuania, are members of NATO and the EU (Poland joined NATO in 1999, Lithuania in 2004, and then in 2004 both countries became EU members).

The Kaliningrad agglomeration is determined by geographical, historical and geopolitical factors, which are very different, however, from those that characterize Tri-City. The main city of the region is Kaliningrad concentrates almost half of the population and two thirds of the industrial potential of the region. Kaliningrad is a historic city located above the Pregel close to its confluence with the Kaliningrad / Vistula Bay. The Kaliningrad agglomeration covers almost the entire western part of the region, where there are also small coastal towns and villages located near the sea bays. On the Baltic coast in Svetlogorsk, Zelenogradsk, Pionersky, Ladushkin and Yantarny (amber extraction and processing center), resort and tourist facilities are developed. Svetly, located on the shores of the bay, is a fairly large industrial and transport center. Baltiysk is a naval base and maritime port. Checkpoints across the Russian-Polish border are located in Bagrationovsk and Mamonovo. Guryevsk is an industrial satellite, a suburb of Kaliningrad.

Kaliningrad and Tri-City are now mainly connected through tourist and social (cultural, educational, scientific) ties, though they maintain certain contacts of regional and municipal authorities. Joint research and practical conferences are held to discuss issues of cooperation. Thanks to the partnership between Gdansk and Kaliningrad within the framework of the Euroregion Baltic program it became easier to establish not only interpersonal contacts, but to bring youth closer together. The cooperating parties became more aware of the history and modern life of the neighbors, which contributed to the reduction of historical prejudices, influenced positively the living conditions of people in these areas. Such interaction also had an impact on the planning of work aimed at achieving sustainable economic development, cooperation in the field of public utilities, environmental protection in the border areas, creating favorable conditions for cooperation in healthcare, social welfare and the fight against crime.

There are prerequisites for the development of economic relations, industrial (in the field of shipbuilding and ship repair, oil production and refining, construction materials production, etc.), agricultural cooperation, coordination of sea, rail, and air transport. Here, international sectoral and intersectoral clusters can arise. Moreover, the bipolar socio-economic and resettlement system "Tri-City — Kaliningrad" is about to develop [8].

Gdansk and Kaliningrad have cooperated for many years and continue to cooperate in the framework of many initiatives and Baltic programs, such as the Baltic Sea States Subregional Cooperation (BSSSC), the Union of Baltic Sea Cities, VASAB 2010, the Association of Baltic Ports (BPO), the Baltic Association of Regional Development Institutions (BARDI), the Interrreg program, etc.

One of the forms of such contacts both in the past and at present is the academic ties established between the University of Gdansk and the Immanuel Kant Baltic Federal University in Kaliningrad. The first cooperation agreement between the two universities was signed back in the USSR in 1990. On December 16, 2003, in Gdansk, the rectors of the two universities signed another agreement. University cooperation includes the implementation of joint projects, research activities, joint conferences, seminars and other academic events, the expansion of cooperation between the two universities in educational activities and in the field of culture, the exchange of scientific and teaching staff. Research results are published in joint scientific journals. Joint conferences and seminars held by universities, in which representatives of local and regional authorities located on both sides of the border take part, resulted in new models and forms of cooperation between marine and land networks around the Gulf of Gdansk. An important result of the joint work is a number of articles and a series of publications issued by both parties on the challenges of Russian-Polish cooperation [2, 7, 9, 12, 15, 18, 20, 21, 25, 26, 28]. University cooperation is expanding through an increasing number of institutes and departments interested in developing scientific and educational interaction. Universities and innovation research institutes are building up their networking opportunities [10]. The results of joint research and the potential areas for further cooperation identified by scientists are an important step towards the successful development of very difficult Polish-Russian relations and building strong ties between the European Union and Russia.

Conclusion

Cross-border cooperation corresponds to the integration processes characteristic of the era of globalization and the formation of cross-border regions, which are especially characteristic of Europe. It contributes to the eliminating of borders between individual states and facilitates economic exchange, affects the emergence of closer interpersonal, social and political contacts. Thus, there is a rapprochement between states and regions separated by a state border.

The formation of the Russian-Polish cross-border region is facilitated by the absence of physical-geographical barriers, for instance, mountains or deserts on the border between the countries, a high population density and good economic development of the territory, an extensive transport network, the interest of both parties in cross-border cooperation in various socio-economic areas and solutions to environmental issues. Subjective foreign policy problems that arise contrary to objectively existing factors for the development of cooperation negatively affect such development. The authors hope that such barriers will be removed over time, and the process of cross-border regionalization on the Russian-Polish border will accelerate.

A special role in the formation of the cross-border region in the southeast of the Baltic is played by the Polish Tri-City and Kaliningrad with the agglomeration formed around it. Their coastal location on both sides of the Gulf of Gdansk naturally favors both cross-border nodes for the development of mutual contacts and cross-border cooperation. Though political conditions are not always favorable, the cases of interaction between cities and universities described in the article can serve a good prerequisite of progress.

Further positive changes in mutual relations on the coast of the Gulf of Gdansk are possible provided that good-neighborly relations between the European Union and Russia are developed and political tensions are eliminated. This also depends on whether Kaliningrad and Tri-City can take advantage of the favorable situation in Baltic Europe and geographical benefits: the proximity of a neighbor, the common Kaliningrad / Vistula Bay, the common Baltic / Vistula Spit, the Lynu / Lava River and the Masurian Canal, border forests, geographical interconnection of voivodeships of North-Eastern Poland with the Kaliningrad region of the Russian Federation. There are many problems that could potentially be solved in cross-border cooperation for the promotion of both parties. In addition to cooperation between urban agglomerations and universities, this may refer to further partnerships between cultural institutions, research institutes, the protection and re-evaluation of cultural heritage, the protection and rational development of the environment, the development and prosperity of tourism, youth contacts, self-government initiatives, cooperation between non-governmental organizations, etc.

The cross-border location of the Russian-Polish border region, in particular its agglomeration cores, Tri-City and Kaliningrad, is a huge advantage for the Baltic and European international cooperation in this area. The interaction of the Tri-City and the Kaliningrad agglomeration, two parts of the cross-border Russian-Polish region as a whole, is of great international importance and has a great impact on the system of balance and security in Europe. The development of this international territorial system also contributes to the sustainable development of a network of cities located in the southern Baltic. The willingness of both sides to support inter-regional cooperation can be an important step towards deepening integration processes in the Baltic.

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THE DEVELOPMENT OF BIOECONOMY OF THE BALTIC REGION IN THE CONTEXT OF REGIONAL AND GLOBAL CLIMATE CHANGE

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Climate change is projected to have a profound effect on natural ecosystems, biodiversity, and societies both in the Baltic region and globally, particularly so through agriculture and food systems. The Baltic region has a vast potential for the development of bioeconomy due to the existing opportunities for biomass production and advances in microbiology leading to process- and product innovations in biomass production and utilization. The development of sustainable bioeconomy in the Baltic region, however, requires a flexible and timely adaptation to climate change. Based on an overview of the relevant state-of-the-art literature, the article explores the implications of the development of bioeconomy for the adaptation to and the mitigation of climate change in the Baltic region. The paper elaborates on actions that may facilitate the sustainability of bioeconomy in the region. It concludes that scientific collaboration across borders in the Baltic region can accelerate innovations to successfully adapt bioeconomy to climate change. Sustainable development of bioeconomy can provide considerable opportunities for mitigating climate change.

Keywords:
climate change, adaptation, mitigation, bioeconomy, geography, Baltic region, sustainable development

1. Introduction

The impact of climate change is becoming more dramatic in many parts of the world, including the Baltic region. Compared to the pre-industrial period (1850—1900), the global mean temperature (over land and oceans) has currently increased by 0.87°C. The mean temperature over land alone has grown almost twice as fast and is now 1.53°C higher than during the pre-industrial period [1].

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These seemingly small changes in temperature have a profound effect on the functioning of natural ecosystems, on biodiversity and societies, agriculture and food systems [1].

Climate change is projected to have considerable effects on the Baltic Sea region, including a rise in land and sea temperatures, increased frequency and intensity of adverse climate events (such as storms, extreme precipitation, heat waves, floods), a drop in crop and fish yields, forest fires, and a rise in the number of infectious diseases [1—3]. The available literature shows that the temperatures in the Baltic Sea have been rising two to four times faster than the global average. Only between 1982—2006, the recorded increase was 1.35°C [4—6]. The rising seawater temperatures are leading to an increase in Vibrio infections resulting in foodborne disease outbreaks [7]. Simultaneously, the water salinity in the Baltic Sea decreased between 1975 and 2000 [4; 8; 9], which had important implications for marine ecosystems. Fish production in the region is being negatively affected by decreasing numbers of phytoplankton [10; 11].

The Baltic region has a substantial potential for the development of bioeconomy due to good conditions for biomass production, as well as rapid advances in microbiology leading to process and product innovations in biomass utilization. However, the sustainable development of bioeconomy in the region can be constrained by climate change impacts. The objective of this paper is to review the latest literature to explore the implications of the development of bioeconomy for climate change adaptation and mitigation in the Baltic region. Based on this assessment, the paper intends to elaborate on actions that may facilitate the sustainability of bioeconomy in the region.

2. Bioeconomy Concept

Changes in land use and unsustainable land management practices have led to soil and land degradation affecting from 3 % to 43 % of the land area in different parts of the Baltic region, leading to significant economic losses in terms of land ecosystem services [12]. Climate change and land degradation combined can pose significant challenges to the sustainable development of agriculture, fisheries and food systems in the Baltic Sea region. Borders in the Baltic region, of course, do matter for economic geography, as it is highlighted by Fedorov [13]. And yet, using bioeconomy and addressing climate change can benefit only from trans-border cooperation, research and actions.

The principles of the emerging bioeconomy are being rapidly introduced in agriculture and food systems both globally and regionally. Bioeconomy is "the production and utilization of biological resources (including knowledge) to provide products, processes and services in all sectors of trade and industry within the framework of a sustainable economy"[1]. Thus, bioeconomy aims for sustainable production and use of biological resources, processes and principles. Bioeconomy belongs to a family of new terminologies, but is not synonymous with circular economy and green economy, and these three notions should not be used interchangeably [14;15]. As defined above, bioeconomy is basically circular if it is based on sustainable use of natural resources and processes, and thus it can significantly contribute to a circular economy, which also includes the re-use of any materials. Both bioeconomy and circular economy must keep environmental externalities (often simplified as environmental footprints) of processes and products (over lifecycles) in mind. Bioeconomy and circular economy are to facilitate intelligent, sustainable and inclusive growth that allows transition toward green economy, the latter being a broader and fuzzier concept than bioeconomy and circular economy. Bioeconomy is not solely about a more optimal use of resources. Rather it seeks societal transformations and a "biologization" of industrial and agricultural processes and of the economy as a whole to achieve sustainable development.

Bioeconomy is key for coping with climate change and it is also becoming an essential component of the transformation of economic systems, which is aimed at sustainability in general [1;16;17]. On the other hand, the negative impact of climate change and land degradation on the development of bioeconomy is clearly visible in the reduced availability of biomass and increased competition for it in the region. There is a broad agreement — also articulated in the Sustainable Development Goals [18] — that renewable resources should preferably be used and sustainably produced and processed materials should play a more important role. The Paris Agreement on climate change adds impetus to investing in a sustainable bioeconomy. A knowledge-based sustainable bioeconomy contrasts with the excessive use of biological and other natural resources and adverse environmental effects caused by it. This paper aims to explore the opportunities for the development of bioeconomy for economic transformation and climate change adaptation and mitigation in the Baltic Sea region. The paper also elaborates on actions that may facilitate the sustainability of bioeconomy in the region.

[1] What is Bioeconomy? URL: http://biooekonomierat.de/en/bioeconomy/ (access date: 13.07.2019).

3. Mitigating and Adapting to Climate Change through Bioeconomy

3.1. Synergies and Trade-offs of the Development of Bioeconomy

Sustainable bioeconomy development facilitates response to climate change by reducing greenhouse gas emissions and increasing climate change adaptive capacities. For example, limiting a rise in temperature between 1.5°C- 2°C requires land-based mitigation and land-use change, including reforestation, afforestation, reduced deforestation, and bioenergy [3]. Afforestation and reforestation help sequester carbon, increase the availability of biomass for the development of bioeconomy and can provide with a wide range of ecosystem services. However, getting these benefits takes time [1]. From this perspective, the Baltic region has experienced an impressive growth in the forested area over the past few decades. Between 2001 and 2009, the extent of forests in the Baltic region increased by 5.7 million hectares (representing an 18 % growth), while during the same time, the area of grassland, woodland and shrubland decreased by about 60—75 % [12].

On the other hand, the wide-scale application of land-based climate change mitigation options through afforestation, reforestation, and expanded biofuel production can jeopardize food and fodder supplies. Sustainable forest management, improved management of cropland and grazing lands allow for reducing land conversion for food production [1]. Sustainable forest management is particularly important for the Baltic region, where several countries — Sweden, Latvia and Estonia — are among the top global wood pellet producers and exporters [19]. It is well-known that bioenergy provides an important share of the total primary energy supply in these countries and Finland [19]. The need for expanding agricultural land could be reduced by a higher crop and livestock productivity, shifting to more plant-based diets, and reducing food waste and losses. Besides, using organic waste for bioenergy production could lessen the tradeoffs associated with bioenergy development [1]. Bioeconomy helps adapt to limitations in fossil resources by providing substitutes, including modern bioenergy, and creating markets for carbon and ecosystems services [20; 21].

As with any strategy for climate change mitigation and adaptation, the consequences of bioeconomy development for economic development need to be carefully considered. There are certainly tradeoffs among the goals of food security, environmental sustainability, and energy security that need to be considered. Large-scale utilization of biomass for bioenergy generation could help with

climate change mitigation but may reduce food production and negatively affect biodiversity. Many newly planted managed forests are often made up of only a few tree species and can harbour much less biodiversity than natural forests. On the other hand, bioeconomy development can boost agricultural growth, strengthen energy security and provide new jobs both in rural and urban areas, thus considerably aiding climate change adaptation.

Agricultural production and energy systems are intricately linked. Fossil fuels are used both as a direct input in agricultural activities (e.g. for operating agricultural machinery) and indirectly when they are used for producing chemical fertilizers for crop production [22]. Agricultural biomass is also used for bioenergy production, with biofuels often competing with food production for land, water and other resources [23; 24]. Rapid biofuel expansion has been found to shift price volatility from energy markets to agricultural markets [25; 26]. Technological and institutional innovations in bioeconomy that increase agricultural productivity and reduce food waste and losses could help mitigate these tradeoffs between food and energy uses of biomass, while also reducing CO2 emissions.

Reducing food loss and waste also requires shifts in consumption and diets, i.e. changes in socioeconomic behaviour. Policies that influence consumption choices through providing access to information, education, setting price incentives need to be coordinated with broader bioeconomy policies. The ultimate purpose of bioeconomy policies is to provide long-run incentives for sustainable farming, sound bio-resource management and industrial development. Facilitating collective action at the regional and international level is a priority, especially in terms of sharing new bioeconomy-related knowledge and best practices between the Baltic region and other European regions and countries.

3.2. Enabling Bioeconomy for Climate Action

The key elements for enabling bioeconomy to contribute to climate change mitigation and adaptation in the Baltic region are, firstly, through appropriate policies, institutions and governance systems of all scales and mutually supportive climate and land policies. Secondly, it can be done through policies that operate across the food and energy systems, and thirdly, by strengthened multilevel and cross-sectoral governance with flexible policies. The ultimate goal of these policy and governance approaches is to stimulate climate-smart technological, social and organisational innovations within bioeconomy (Fig. 1).

Fig. 1. Innovations for sustainable Bioeconomy development

The development of bioeconomy is warranted by the need to ensure a more sustainable use of resources and tackle climate change. Moreover, technological and scientific innovations, changing consumer preferences and social innovations (e.g. sharing economy), as well as organisational innovations (e.g. improved monitoring and assessment of bioeconomy) are currently facilitating the rapid development of bioeconomy in many regions of the world, including in the Baltic region. It is expected that bioeconomy development will help societies to address such major environmental challenges such as decreasing biodiversity, land degradation, and air pollution. Specific characteristics of bioeconomy development depend on local conditions and vary from one region to another, depending on their comparative advantages such as resource endowment, economic specialisation and the state of development [27].

Currently, more than 40 countries worldwide pursue the development of bioeconomy in their policy strategies. These bioeconomy strategies seek to make use of available biological resources to promote environmental sustainability [28],

climate-friendly economic growth and creation of new jobs. Some Baltic countries such as Finland, Latvia, Lithuania have already developed their bioeconomy strategies, while Russia has bioeconomy-related elements in some of its strategies. The European Union as a supranational organisation released a bioeconomy strategy in 2012 [29]. The Baltic region can connect, in this regard, to the neighbouring Nordic countries and Germany. Russia would benefit from a comprehensive dedicated bioeconomy strategy of its own. Similarly to other regions of the world, the Baltic region as a whole could elaborate a joint trans-border bioeconomy. This would be in line with suggestions for more integration rather than divergence in the region [30].

3.3. Bioeconomy — Agriculture Linkages

As the IPCC Special Report on Climate Change and Land demonstrated, achieving climate change mitigation targets is extremely challenging without comprehensively including agriculture and food systems into mitigation strategies [1]. This is also true for the Baltic region. The demand for food, fodder, fibre and energy is growing due to population and income growth. Meeting this demand by relying on fossil fuels is no longer environmentally feasible, and it requires a shift to cleaner sources of energy. The use of renewable and sustainable biomass has an important role to play in the energy transition away from fossil fuels. In 2011, about 14 % of the total biomass produced globally were used for food, 58 % for fodder, 10 % for bio-based chemicals and materials, 17 % for fuel and the rest for other purposes [31].

Animal production is among the major source of greenhouse gas emissions from agriculture. Moreover, there is a growing consumption of animal products (for instances, meat) which are biomass intensive. Therefore, animal production needs to be included in efficient value networks as part of bioeconomy development to reduce CO2 emissions from the food systems.

Achieving synergies among bioeconomy development, climate action and food security in the Baltic region requires increased efficiency and innovativeness across the entire value network rather than its individual components alone, such as crop production or livestock production separately [32]. Some examples of such efficiency gains include new bio-based industrial fibres (e.g. artificial spider fibres and milk-protein based fibres) [33], developments in modern industrial biotechnology (the use of vegetable oils in industry by integrating fatty acid profiles, the use of succinic acid plants[2] in the chemical industry), innovations

[2] Succinic acid is a diprotic, dicarboxylic acid with chemical formula $C_4H_6O_4$. More recently, succinic acid is being produced through the fermentation of glucose from renewable feedstock. As chemical industries transform from petro-based to environmentally sustainable materials, succinic acid is emerging as one of the competitive new bio-based chemicals.

related to dedicated lignocellulosic crops converted into ethanol in bio-refinery [34], new bioplastics, bio-based synthetic meat, etc.

Cutting across these innovations is a process innovation, called a cascade approach. This means that resources are used in steps (cascade) for manufacturing different products: the most valuable resources are used first, followed by intermediate products, and finally, the least valuable products, for instance, biomass leftovers, are used for biofuels. This approach to production and consumption states that energy recovery should be the last option, and only after all higher-value products and services have been exhausted. There are numerous examples of cascading from modern wood processing and wood building construction apply here.

To sum up, a food security-sensitive and climate-friendly bioeconomy requires new biomass types with low resource requirements, cascading re-use systems, as well as end-product innovations, even unrelated to existing biomass production, such as indoor farming using hydroponics.

4. Bioeconomy and Structural Transformations

Bioeconomy is no longer driven by rising price expectations for fossil fuels. The main drivers are climate and resource conservation and the potential for bio-based innovations [35]. In the following section, a set of approaches is discussed to frame, model and analyse bioeconomy, its role in climate action and related challenges from global perspectives, which are also highly relevant for the Baltic Sea region.

4.1. Sector perspective

Bioeconomy is not a sector, but actually is a part of and cuts across various sectors of the economy. The traditional approach of studying economic transformation takes a sectoral perspective of changing (GDP) shares of agriculture, industries and services in the economy. Nowadays, agriculture represents only about 4 % of GDP and provides 20 % of employment globally, where employment may include significant shares of part-time jobs in the sector. This concept of structural transformation based on sectoral change has outlived its relevance to depict economic change almost everywhere except the least developed countries. This is not only due to the limitations of GDP accounting, but also to the very concept of ‘sectors’, whose diversity changes mainly within rather than between sectors.

Agriculture is a case in point, combining industrial and service features to a growing extent, both at farm level and in value chains originating from primary production. Remote sensing and digital-based precision agriculture is an

example, as are complex service contracts and cooperation arrangements for produce marketing. It would be tempting to overcome the problem of inadequacy of sectoral approaches by simply disaggregating sectors as far as possible and proceeding with bioeconomic analyses under a sector concept. Its characteristic of cutting across sectors, however, would get partly lost [36], and depicting process innovations, recycling efficiencies, and technical changes in production functions would require approximation [32]. As a result, a sector perspective will give a rather fragmented view of bioeconomy's contributions to climate change mitigation and adaptation.

4.2. Firms' perspective

Firms can be a useful unit of the analysis of bioeconomy, as this would integrate the role of the demand side, issues of the optimal size of firms and locational advantages. According to Coase [37], people organise their production in firms when the transaction costs of coordinating production through the market exchange, given imperfect information, are greater than within the firm. This basic theory also applies to bioeconomy, and it depends upon the nature of products, processes — such as the abovementioned cascade use — and input supply chains and locations of output demand and input supplies that define firms' size and locations. The demand for bioeconomy originates in markets for sustainably provided bio-based products. These markets may be shaped not only by household demand, but also by the demand of government sectors for product acquisitions. The latter may be the outcome of political markets of environmental transformative policies, such as tax reductions for bio-products purchased by the public sector or carbon pricing, and can be distorted by rent-seeking of political actors and industries.

Given the considerable involvement of government initiatives and new interlinkages among industries, "industrial organization" approaches may be helpful to guide a business strategy and a public policy [38]. Joint innovation efforts across firms to reduce environmental pollution pursued recently in the pulp and paper industry are an example of a coordinated industrial organisation [39]. To evaluate bioeconomic change for an industry's performance, a usual set of criteria is applied, i.e., allocation efficiency, production efficiency, equity, and technological advancement [32]. Bioeconomy can be part of a new industrial strategy in which sustainability and climate action are considered. Industries' competitiveness in a bioeconomy context will depend on innovations around bio-based products and processing technologies. They will be in demand only if they are competitive in the market and perceived as better than non-bio-based products by consumers.

4.3. A systems perspective

At the core of the economics of bioeconomy are systems thinking with a comprehensive attention to externalities and transaction costs. Figure 1 presents a systems perspective of the bioeconomy with clusters and interlinked value chains. Key elements are primary production, health and other services, and transforming bio-based industry clusters, all clusters being integral with and impacted by bioscience and other innovations, at the centre of the systems graph.

In a systems analysis approach, drivers of the bioeconomy are related to changes in system components, and impacts on growth, distribution, and ecology are derived in the context of policy interventions. Competition among goals and complementarities of instruments should be explicitly modelled. Such an approach would best include lifecycle analyses of inputs and outputs. However, the usual limitations of systems modelling apply—for instance, selective capture of causal relations, difficulties of systems boundary definition, and dynamics of technological change. The above-discussed industry clustering perspective can be usefully combined in the narrative of bioeconomy systems modelling and may even be integrated.

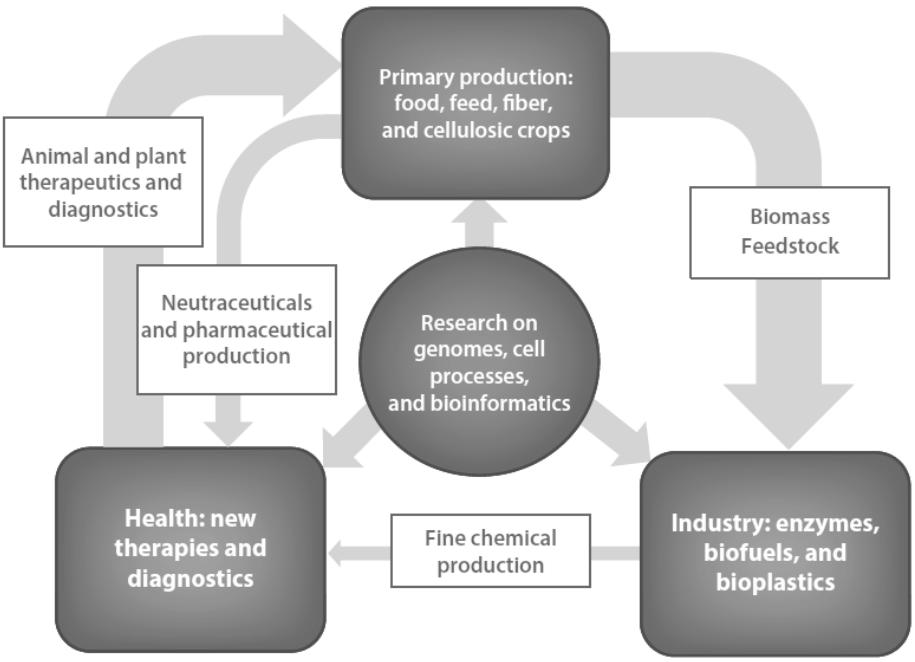

Fig. 2. The emerging bioeconomy: clusters with interlinkages

Source: adapted from the German Bioeconomy Council, 2018.

4.4. An innovation economics perspective

The basic theoretical underpinnings of bioeconomy can be explored through the lens of the economics of induced innovation [41], where innovations result from factor scarcities and related expected price changes (i.e., prices of land, water, carbon dioxide (CO2), and energy). As in Hayami and Ruttan [41], a conceptual framework for the development of bioeconomy must take into account the key role of knowledge components and their endogenous nature. New thinking about innovation systems is relevant here. Hekkert et. al [42] point out that it is necessary to provide more insight into the dynamics of innovation systems. They propose a framework that focuses on a number of processes important for well-functioning innovation systems. These processes are labelled by Hekkert et. al [42] as 'functions of innovation systems'. The authors propose a method for systematically mapping the processes taking place in innovation systems, thus resulting in technological change. This analysis of processes and event history analysis are also appropriate and relevant for the innovation systems of bioeconomy.

Combining the four approaches mentioned above — sector, firms, systems, and innovation perspective — with innovation storylines may provide insights into the opportunities and constraints of bioeconomy. This combination may identify conflicting goals, for example, those related to climate action, may offer a broader resource use, facilitate development, and enhance food security. Bioeconomy and its relation to climate action presents new challenges, requiring economists to go beyond the limitations of an isolated value chain, sectoral and commodity analyses. It brings economists to the need to learn more about a much broader set of relevant technologies, intermediate and final demands related to bio-based processes and products. There is also a need for close collaboration with other disciplines (nutrition, ecology, biotechnologies, biochemistry, etc.), if they want to serve as "bioeconomists".

4.5. Measuring Size, Value and Outcomes of Bioeconomy in the Baltic Region

It will be difficult to assess the contribution of bioeconomy to the climate change agenda without an appropriate measurement of bioeconomy. It is related to the measurement of sustainability and climate consequences of actions by economic agents, such as investors, policymakers, and consumers. Several approaches may be used for measuring bioeconomy, but each needs to be scruti-

nized from the perspective of what should be measured and how it can be done [32]. One widely used approach is based on using the system of national accounts to provide an overview of the contribution to the regional or national economy, and employment and consumption shares. This might not provide a comprehensive picture of future opportunities. Other approaches are related to bioeconomy clusters, or the emergence of key technologies and innovations, their application as well as private and public sector investments. Furthermore, the contribution of bioeconomy to environmental sustainability and people's well-being would need to factor in health and ecological effects as bioeconomy outcome measurement. To capture spatial dimensions, the economic geography approach for measurement of bioeconomy is called for. We also need to improve empirical methods for causal inference (including the opportunities of using big spatially referenced ecology data) to actually learn about causal links between size, type, and outcomes of bioeconomy policies and programmes.

In general and for the Baltic region in particular, outcome-based measures rather than sectoral measurement or measurement of products' bio-contents is desirable. Outcomes would include reduced carbon emissions, sustainability of water, soil and biodiversity improvements, measured in both technical and economic ways, including non-price measurement approaches, but also in well-being outcomes such as health improvements (e.g., reduced air pollution, people's actual health related to environmental factors) and improved amenities, such as greener cities.

5. Conclusions

The development of bioeconomy provides new opportunities for responding to the challenges posed by climate change in the Baltic Sea region. The generation of bioenergy and other renewable energy sources can significantly reduce greenhouse gases emissions. Bioeconomy will, however, not unlock its transformational potential if pursued in isolation by regions. The Baltic region as a whole could elaborate and implement a joint trans-border bioeconomy strategy, as other regions of the world did. Sharing new bioeconomy knowledge from science systems and support for adaptation to local circumstances is a necessary collective action, particularly for promoting action on climate. To successfully adapt the bioeconomy to climate change, science policy in the Baltic region must generate accelerated innovations, and resource protection policies need to enhance sustainable utilization of land, water and biodiversity. Sustainable bioeconomy development, in its turn, can provide with considerable opportunities for climate change mitigation.

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TRENDS IN POPULATION CHANGE AND THE SUSTAINABLE SOCIO-ECONOMIC DEVELOPMENT OF CITIES IN NORTH-WEST RUSSIA

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The Northwestern Federal District is a Russian macro-region that is a unique example of a model region. It accounts for 10 % of the country's total area and 9.5 % of its population. This article aims to trace the patterns of city distribution across the region, to assess the conditions of differently populated cities and towns, and to identify sustainability trends in their socio-economic development. Population change is a reliable indicator of the competitiveness of a city. As a rule, a growing city performs well economically and has a favourable investment climate and high-paid jobs. The analysis revealed that population change occurred at different rates across the federal district in 2002— 2017. A result of uneven socio-economic development, this irregularity became more serious as globalisation and open market advanced. The study links the causes and features of growth-related differences to the administrative status, location, and economic specialisation of northwestern cities. The migration behaviour of the population and the geoeconomic position are shown to be the main indicators of the sustainable development of a city.

Keywords:
cities, urban population, Northwestern Federal District, city classification, population, city sustainability

Introduction

When studying the urban population distribution and its dynamics over the past decades, it is necessary to take into account the territorial heterogeneity of

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the socio-economic and demographic processes taking place in the Russian Federation. For analysis at the macroregional level, it is advisable to use a geodemographic typology and economic zoning schemes developed back in the Soviet period for the purposes of spatial planning [1, p. 32—34; 2—4, p. 92—98], although the population and economy of Russia have undergone significant changes since their development more than 30 years ago.

At present, the validity of identifying macro-regions (economic regions), the list of which is given in the All-Russian Classifier of Economic Regions[1] within the former borders, is attracting considerable criticism. Nevertheless, there has been no other generally accepted and substantiated option for zoning the territory of the country proposed. In 2000, the country's territory was quite roughly divided into seven federal districts: Central, Northwestern, Southern, Volga, Ural, Siberian, and Far Eastern. This study considers the Northwestern Federal District (NWFD) as this macro-region occupying almost 10 % of the territory of Russia with about 9.5 % of its population living there is a good example of a model territory.

The current geodemographic situation in Russian cities, including those in the subjects of the RF in the Northwestern Federal District, as well as the polarization of the subjects of Russia, were studied in detail by A.A. Anokhin, G.M. Fedorov, D.V. Zhitin, V.M. Razumovsky, S.S. Lachininsky, A.G. Druzhinin [5—10]. They investigated current trends in the urban population dynamics in Russian cities, including cities of the Leningrad region and coastal cities of the Baltic region, the polarization of the settlement system, and other aspects associated with the demographic processes occurring in the regions of the country.

Geodemographic development trends in the Baltic region at the national and regional levels were described in detail by T. Yu. Kuznetsova [11; 12] who has identified and analyzed the components that determine population dynamics in various administrative-territorial units and factors that have a significant impact on demographic processes. The evolution of the system of urban settlements and the dynamics of natural and socio-economic processes in the Russian Arctic are considered in the study by V.L. Baburin and S.P. Zemtsov [13].

[1] *The All-Russian Classifier of Economic Regions.* OK 024—95. Approved by Decree of the State Standard of Russia dated 12/27/1995 No. 640 (as amended on 02/13/2018). URL: www.consultant.ru/document/cons_doc_LAW_115583/ (access date: 08.15.2018).

The UN report on the world urbanization prospects[2] indicates that although the problem of the outflow of population from large, medium and small cities and the growth of the largest cities are typical for most countries, they are especially relevant for countries of Eastern Europe and low-income countries with significant differences in the conditions and standards of living of the population. International researchers emphasize that the main path of development for cities and rural settlements is the compliance with the principles of sustainability in the economic and social spheres as well as in environmental development [14; 15]. The development of indicators for assessing the sustainability of urban development has been the subject of a large number of international[3] and Russian studies [16].

At present, in many cities across the world, "sustainability is the dominant paradigm of urban development and is a factor in the growth of competitiveness," while in Russia "there is a transition from a stochastic to strategic implementation of the sustainable development approach while preserving formal imitation moments" [17, p. 95].

Swedish researchers have studied in detail the feasibility of implementing the UN-Habitat Agenda in terms of developing and applying sustainability indicators in cities of different sizes in Sweden and Russia, taking into account citizens' interest and actual participation in urban development [18].

The studies of Chinese scientists on the increase in the population of the largest cities in China and the opportunities for their sustainable development are of particular interest. The rapid growth and globalization of the domestic economy have dramatically accelerated urbanization in the country leading to significant environmental consequences and challenging its sustainable development. Using a multi-stage model that takes into account the age, gender, education and migration distribution in rural and urban areas, the paper assesses the development of the urbanization process in China until 2030 and addresses the main issues of urban sustainability. The results show that, according to some assumptions, the urban population of China will almost double from 2000 to 2030; labour force will make up a larger share of the total population in urban

[2] *World* Urbanization Prospects: The 2018 Revision // Population Division of the UN Department of Economic and Social Affairs. URL: https://www.un.org/development/desa/publications/2018-revision-of-world-urbanization-prospects.html (access date: 12.09.2018).

[3] *Indicators* for Sustainable Cities. European Union. 2018. URL: ec.europa.eu/environment/integration/research/newsalert/pdf/indicators_for_sustainable_cities_IR12_en.pdf/ (access date: 24.08.2018).

areas than in rural areas due to internal migration of young workers, especially in Beijing and Shanghai, which may put pressure on China's industrial structural transition from an agricultural to a service-based economy [19].

In the Baltic region, there is an increase observed in the number of large cities and a decrease in small cities. The growth of large cities in the Baltic States is analyzed mainly in the context of urban development in the post-Soviet space in Central and Eastern Europe. Recently, local researchers, mainly urban geographers and urban planners, have also shown interest in this topic [20; 21]. Generally, the emphasis of the studies is on capital cities and metropolitan regions undergoing major transformations: Vilnius, Riga and Tallinn. Research on modern urban development in the Baltic States allows for further discussions on the growth of large cities to identify the specific causes and consequences of this phenomenon from the standpoint of urban sustainability.

Despite a large number of studies conducted, the identification of negative factors affecting the geodemographic dynamics in Russia's subjects, and ongoing state federal and regional programs, the situation does not change in many cities and regions as they continue to lose population. This indicates the need for further research on the dynamics of the population of Russian cities, factors in their development and key areas for increasing sustainability.

The aim of this article is to identify patterns of distribution of urban settlements across the region and to detect trends in sustainability of their socio-economic development, as well as to assess the condition of cities of different size.

Research Methods and Information Basis

To analyze the evolution of urban settlements in Northwest Russia, the research uses the *method of spatio-temporal analysis* of urban system emergence and development, as well as the methods of comparative, statistical analysis and systematization. A study of the dynamics of urbanization made it possible to identify several stages and the most significant trends in the process that influenced the change in the spatial distribution of cities in Northwest Russia. To determine the role of population migration in ensuring sustainable development of the northwest regions, the Spearman's rank correlation coefficient was calculated.

The study uses the data of the Federal State Statistics Service, its territorial divisions in the Northwestern Federal District, as well as materials from the SGM rating agency, which calculates the sustainable development rating of cities of the Russian Federation [4].

Statistical research materials for this study are presented mainly in absolute terms allowing to demonstrate the significance of population growth dynamics in St. Petersburg and the Leningrad Region, as well as to identify demographic prerequisites for sustainable urban development.

Urban population trends in the Northwestern Federal District

Currently (in 2019), there are officially 147 cities in the Northwestern Federal District, including:

— 1 city with a population of more than 1 million people;

— 6 major cities (250,000 to 500,000 inhabitants);

— 3 large cities (100,000 to 250,000 inhabitants);

— 13 medium cities (50,000 to 100,000 inhabitants);

— 124 small cities (less than 50,000 inhabitants).

Table 1. presents the distribution of cities by regions of the NWFD and the change in the number and share of the urban population in the total population of the district in 2002—2017[5].

As follows from the data in Table 1, the Leningrad and Kaliningrad regions hold leading positions in the number of cities (32 and 22, respectively). This is due to historical and geographical reasons, their long-standing development, as well as the influence of St. Petersburg on the territorial development and growth of cities in the Leningrad region and the border position of the Kaliningrad region, an exclave of the Russian Federation. The specific features of the urban settlement structure of the Northwestern Federal District include the presence of a city of federal significance, Saint-Petersburg, which is a subject of the Russian Federation, and the fact that there is only one city in the Nenets Autonomous Okrug. The lowest share of the urban population in the total population is observed in the Leningrad Region (64 %), which is explained by its proximity to St. Petersburg.

[4] Sustainable development rating of Russian cities for 2016. SGM Rating Agency, 2017. URL: www.agencysgm.com/projects/sostavlenie-reytinga-gorodov-rossii-v-oblasti-ustoychivogo-razvitiya / (access date: 09.12.2018).

[5] *Population of the Russian Federation by municipalities* as of January 1, 2018: Stat. Sat / Rosstat. — M.: 2018. URL: www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/afc8ea004d56a39ab251f2bafc3a6fce (access date: 21.11.2018).

Table 1

Distribution of cities by region of the NWFD and changes in the urban population in the total population of the NWFD in 2002—2017

NWFD's subject	Number of cities in 2017	Population in 2002, thousand people	Population in 2017, thousand people	Population change in 2002—2017, thousand people	Urban population in 2002, thousand people	Urban population in 2017, thousand people	Urban population change in 2002—2017, thousand people	Urban population change in 2002—2017, %	Share of urban population in total population in 2002, %	Share of urban population in total population in 2017	Change in the proportion of urban population in total population in 2002—2017
Republic of Karelia	13	717	627	– 90	538	503	– 35	– 6.5	75.0	80.2	5.2
Komi Republic	10	1.019	850	– 169	767	663	– 104	– 13.6	75.3	78	2.7
Arhangelsk region	13	1.295	1.122	– 173	973	875	– 98	– 10.1	75.1	78	2.9
Nenets Autonomous Okrug	1	41	44	3	26	32	6	23.1	63.4	72.4	9.0
Vologda Region	15	1.270	1.184	– 86	877	854	– 23	– 2.6	69.1	72.2	3.1
Kaliningrad region	22	955	986	31	742	767	25	3.4	77.7	77.8	0.1
Leningrad region	32	1.671	1.792	121	1.110	1.148	38	3.4	66.4	64	– 2.4
Murmansk region	16	893	757	– 136	824	700	– 124	– 15.0	92.3	92.4	0.1
Novgorod region	10	695	613	– 82	485	434	– 51	– 10.5	69.8	70.8	1.0
Pskov region	14	761	642	– 119	503	454	– 49	– 9.7	66.1	70.7	4.6
St. Petersburg	1	4.669	5.282	613	4.669	5.282	613	13.1	100.0	100	0.0
Total	147	13.986	13.899	– 87	11.514	11.712	198	1.7	82.3	84.3	2.0

Source: calculated by the authors based on data from Rosstat (2002—2018).

From 2002 to 2017, the population of the subjects of the RF in the NWFD, with the exception of the Nenets Autonomous Okrug, the Kaliningrad and Leningrad regions as well as St. Petersburg, decreased. A similar trend was observed in the urban population dynamics (Fig. 1).

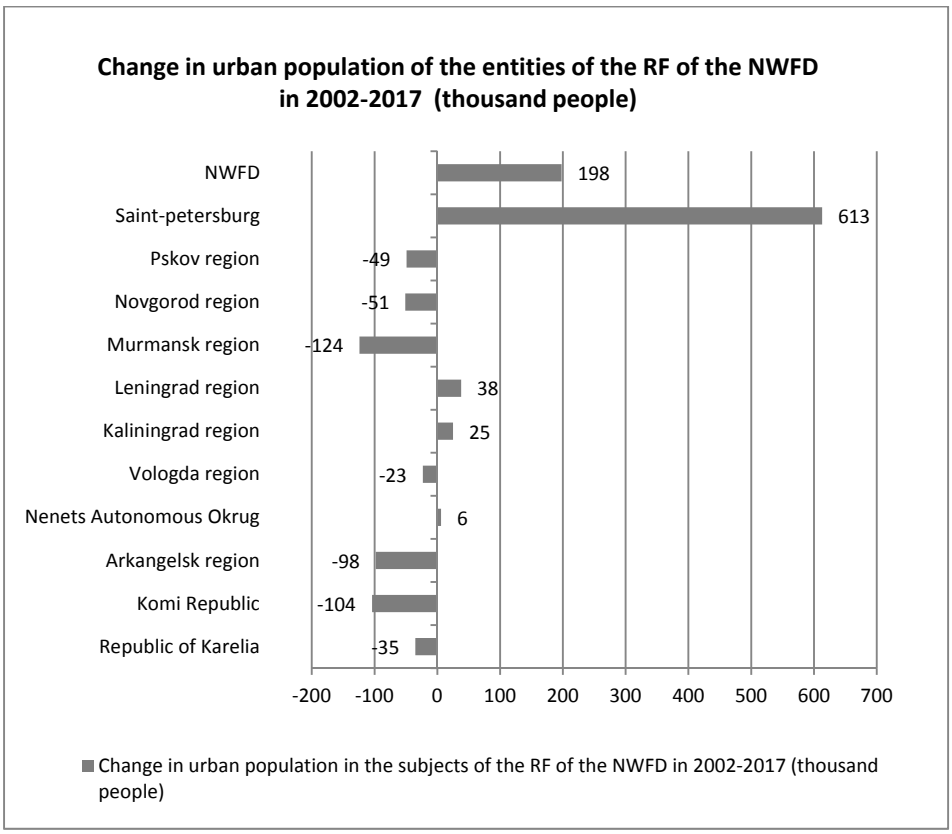

Fig. 1 Changes in the urban population in the subjects of the RF of the NWFD in 2002—2017, thousand people

Source: calculated by the authors based on data from Rosstat (2002—2018).

The greatest loss of urban population was observed in the northern subjects of the RF (more than 10 % in 2002—2017), as well as in the Novgorod and Pskov regions.

The study includes the analysis and compilation of classification of the data on the urban population of the NWFD in 2017 presented in Table 2. The most numerous cities (those with a population of less than 50 thousand people) were examined in more detail. They were divided into three separate subgroups (minor, lesser and small). Major and large cities are represented by industrial and administrative centres of the subjects of the RF. They are the major nodes of the settlement system in the northwest.

Table 2

Classification of the NWFD's cities by population (for 2017)

NW NWFD's subject	Up to 10,000 people *(small)*	10,000—20,000 people *(lesser)*	20,000—50,000 people *(minor)*	50,000—100,000 people *(medium)*	100,000—250,000 people *(large)*	250,000—500,000 people *(major)*
Leningrad region	*Total — 5* Novaya Ladoga Vysotsk Kamennogorsk Primorsk Lyuban	*Total — 9* Ivangorod Boksitogorsk Volosovo Syasstroy Svetogorsk Shlisselburg Lodeynoye Pole Podporozhye Priozersk Kudrovo	*Total — 10* Pikalevo Volkhov Communard Kingisepp Kirovsk Otradnoe Luga Shales Tosno Nikolskoye	*Total — 7* Vsevolo-zhsk Sertolovo Vyborg Gatchina Kirishi Tikhvin Sosnovyi Bor	—	—
Vologda region	*Total — 8* Belozersk Kadnikov Krasavino Kirillov Nikolsk Totma Ustyuzhina Kharovsk	*Total — 3* Babaevo Vytegra Gryazovets	*Total — 2* Velikyi Ustyug Sokol	—	—	*Total — 2* Vologda Chere-povets
Novgorod region	*Total — 2* Soltsy Holm	*Total — 5* Okulovka Valdai Malaya Vishera Pestovo Chudovo	*Total — 1* Staraya Russa	*Total — 1* Borovitchi	*Total-1* Nizhnyi Novgorod	—
Pskov region	*Total — 8* Gdov Dno Novorzhev Novosokolniki Porkhov Pustoshka Pytalovo Sebezh	*Total — 3* Nevel Opochka Pechory	*Total — 1* Ostrov	*Total — 1* Velikie Luki	*Total — 1* Pskov	—

The end of Table 2

NW NWFD's subject	Up to 10,000 people *(small)*	10,000—20,000 people *(lesser)*	20,000—50,000 people *(minor)*	50,000—100,000 people *(medium)*	100,000—250,000 people *(large)*	250,000—500,000 people *(major)*
Kaliningrad region	*Total — 10* Ladushkin Mamonovo Ozersk Krasnoznamensk Pravdinsk Slavsk Bagrationovsk Primorsk Nesterov Polessk	*Total — 6* Gvardeysk Guryevsk Zelenogradsk Pioneer Svetlogorsk Neman	*Total — 5* Gusev Svetlyi Sovetsk Baltiysk Chernyakhovsk	—	—	*Total — 1* Kaliningrad
Republic of Karelia	*Total — 4* Lahdenpohja Olonets Pudozh *Suojärvi*	*Total — 5* Kem Medvezhyegorsk Sortavala Belomorsk Pitkäranta	*Total — 3* Kostomuksha Kondopoga Segezha	—	—	*Total — 1* Petrozavodsk
Komi Republic	*Total — 1* Mikun	*Total — 2* Emva Vuktyl	*Total — 4* Inta Usinsk Pechora Sosnogorsk	*Total — 2* Vorkuta Ukhta	*Total —1* Syktyvkar	—
Nenets Autonomous Okrug	—	—	*Total – 1* Naryan-Mar	—	—	—
Arhangelsk region	*Total — 3* Solvychegodsk Mezen Shenkursk	*Total — 2* Onega Kargopol	*Total — 5* Koryazhma Peaceful Novodvinsk Velsk Nyandoma	*Total —1* Kotlas	*Total —1* Severodvinsk	*Total — 1 Arkhangelsk*
Murmansk region	*Total — 3* Zaozersk Island Kolas	*Total — 6* Polarnye Zori Kovdor Polarnyi Gadzhievo Snezhnogorsk Polarnyi	*Total — 4* Kirovsk Monchegorsk Olenegorsk Kandalaksha	*Total — 2* Apatity Severomorsk	—	*Total — 1 Murmansk*
Total	44	42	36	14	4	6

Source: compiled on the basis of Rosstat data (2002—2018).

The study of the evolution of urban settlements in Northwest Russia is based on the method of spatio-temporal analysis of emergence and development of the urban system. The analysis of the urbanization dynamics in Northwest Russia allowed distinguishing two stages. By the middle of the 19th century, a core network of "historic cities" had emerged. These were the centres of settlement in the European part of Russia in the pre-industrial period. Early Industrialization period saw the emergence of a new trend to develop new territories by founding mostly primary producing cities.

There are several urbanization trends having considerable influence on the spatial distribution of cities in Northwest Russia.

St. Petersburg as a city of federal significance and the centre of the macroregion dominates in all socio-economic spheres (industry and services, transport, innovation, financial and credit, and scientific and cultural ones).

The centres of republics and regions with a population of over 100,000 people play an important role in the district settlement system. The largest regional centre is Kaliningrad with a population of 459,000 people, which is 50 % of the region's population. One of the largest and oldest major nodes in the North is the Arkhangelsk agglomeration accounting for 25 % of the total urban population of the Russian Arctic. The second largest is Murmansk (14 %). Although during the period of booming economic activity it had bypassed Arkhangelsk, with the onset of the crisis of the 1990s, it turned out to be the leader in population and production potential losses. Large cities of the Vologda region (two industrial centres of Vologda and Cherepovets) have a population of more than 300,000 people each. It is also necessary to highlight such cities as Petrozavodsk (277 thousand) and Syktyvkar (243 thousand), the centres of the Republic of Karelia and the Republic of Komi respectively, having great regional significance in the NWFD. The city of Severodvinsk, the expression of the third stage of development of the Russian Arctic, concentrates about 8 % of its urban population.

The next group is urban settlements with a population of 50,000 to 100,000 people. The largest cities are also located in the north. They are characterized by the most considerable decline in population in the post-Soviet period. These are primarily single-industry towns with prevailing mining and metallurgical specialization (Vorkuta — coal, Ukhta — oil and gas production, Apatity — apatites and nepheline ore) [22].

The most numerous group of urban settlements is cities with a population of 10,000—20,000 people. This group includes historic settlements in the North of Russia, for example, Kem, Anadyr, Kola, Belomorsk, as well as industrial

settlements (Polyarnye Zori — nuclear power plants, Kovdor — iron ore production, Urengoy — natural gas production). In the Murmansk region, most of them are closed administrative-territorial entities (ZATOs). These are the entities with local governments as well as military and other facilities located on their territory. They have a special regime established for the secure functioning and protection of state secrets, including special living conditions for citizens. The Ministry of Defense's ZATOs include naval submarine bases in the Murmansk region: Zaozersk (10 thousand), ZATO Aleksandrovsk, consisting of three cities: the city of Gadzhievo (12.9 thousand), the city of Polarnyi (17.5 thousand), the city of Snezhnogorsk (12.7 thousand). The largest ZATO in the Murmansk region is Severomorsk (51.2 thousand), where the base of surface ships of the Northern Fleet is located. The smallest is the city of Ostrovnoy (1,876 people) rapidly losing its population over the past decade. It has decreased eightfold since 1996. This is the location of the Gremikha Naval base of the Northern Fleet, and one of the smallest cities in Russia.

Ostrovnoy is a part of the group of urban settlements with the smallest population. Formally, these are cities, although they have more than halved in size to have less than 10,000 inhabitants. The bulk is single-company settlements and regional centres with difficult accessibility. This is the largest group in Northwest Russia, the majority of these cities are in the Kaliningrad (10), Vologda (8) and Pskov (8) regions. These are majorly the most vulnerable cities in terms of socio-economic sustainability. However, there are also dynamically developing cities with large port complexes, for example, Primorsk and Vysotsk in the Leningrad region.

The studies of the factors and conditions of economic differentiation of urban settlements and the research on their correlation with the distribution of productive forces allowed to develop a structural-functional typology of urban and rural settlements of the Northwestern Economic Region [23]. This work analyses urban settlements of the Leningrad, Novgorod and Pskov regions.

The spatial heterogeneity of the regions of Northwest Russia is the result of the formation of a vast peripheral area with stable stagnation of its population and production. The city of St. Petersburg acts as an external factor in this case. Being the largest socio-economic as well as scientific and technical centre in the northwest, it has a steady impact on the development of cities in the suburban areas of the Leningrad region forming the modern boundaries of the St. Petersburg metropolitan area. Moreover, the city indirectly affects the manufacturing industry in the urban settlements of the Novgorod and Pskov regions, as it is the largest sales market in the northwest.

Internal factors enhancing the polarized development of the regions of the NWFD include weakly diversified economies of the Novgorod and Pskov regions, heavy concentration of industrial production in the regional centres, law-quality basic, core, research and technological infrastructure, as well as insufficiently developed engineering, social and transport infrastructure in peripheral areas, concentration of skilled labour in large cities and a decrease in the share of economically active population in peripheral territories, the single-industry structure of the economy and weak organizational and economic relations of most of the regional centres of the Novgorod and Pskov regions.

In order to study the factors and conditions of economic differentiation of urban settlements and to determine their correlation with the distribution of productive forces, the authors developed a structural and functional typology of urban settlements of the Leningrad, Kaliningrad, Novgorod, Pskov regions, as well as regional and republican centres of the NWFD. It is presented in Table 3 along with indicators of population dynamics for 2002—2017.

The economically powerful city of St. Petersburg has stimulated the development of territories with high investment and industrial potential, developed transport infrastructure and sufficient labour resources in the suburbs of its agglomeration, in the areas with developing port facilities and in those situated close to international transport corridors (Kingisepp, Primorsk, Vyborg, Vysotsk), as well as in old industrial areas (Kirishi, Tikhvin, Volkhov).

The Novgorod and Pskov regions are characterized by a high concentration of industrial production in regional centres (Novgorod, Pskov, Velikiye Luki). The key "growth points" of the second order are diversified industrial hubs (Borovichi, Staraya Russa, Chudovo) and cities with developed economic specialization (Malaya Vishera, Pestovo, Valdai, Okulovka, Ostrov, Nevel, Porkhov, Dno).

In the Novgorod region, the territorial differentiation of economic development seems more dispersed. The key territories with sufficient potential for economic growth and balanced development of the region as a whole include the regional centre Veliky Novgorod, as well as industrial hubs with advanced engineering (Staraya Russa), woodworking industry (Chudovo, Malaya Vishera) and the production of refractories and building materials (Borovichi). In the Pskov region, prosperous areas include Pskov, Velikiye Luki, Ostrov and other centres of diversified economic activities, specializing in the manufacturing of engineering products.

Table 3

Structural and functional typology of the NWFD cities and their population dynamics in 2002—2017

Structural-functional type	Cities	Population, thousand people (2002)	Population, thousand people (2017)	Population change,%
City of federal significance	Saint-Petersburg	4,661.2	5,281.6	+ 13.3
Centres of regions/ of subjects of the RF that are multifunctional industrial hubs with sectoral specialization	Arkhangelsk	356.0	351.5	— 1.3
	Velikiy Novgorod	216.8	222.6	+ 2.6
	Vologda	293.0	313.0	+ 6.8
	Kaliningrad	430.0	467.3	+ 8.7
	Murmansk	336.1	298.1	— 11.3
	Naryan-Mar	18.6	24.6	+ 32.5
	Pskov	202.8	209.8	+ 3.5
	Petrozavodsk	266.1	278.5	+ 4.6
	Syktyvkar	230.0	244.6	+ 6.3
Centres of administrative districts that are multifunctional industrial hubs with industrial and economic functions	Gatchina	88.4	95.2	+ 7.6
	Vyborg	79.2	78.4	— 0.9
	Vsevolozhsk	45.3	70.3	+ 55.1
	Borovichi	57.7	50.9	— 11.9
	Kirishi	55.6	51.9	— 6.6
	Tosno	38.7	37.9	— 2.1
	Staraya Russa	35.5	29.0	— 18.3
	Chernyakhovsk	44.3	36.4	— 17.8
Centres of administrative districts that are cities with a diversified economic structure with industrial and economic functions	Sosnobyi Bor	66.1	68.0	+ 2.9
	Tikhvin	63.3	57.9	— 8.6
	Kingisepp	50.3	47.3	— 5.9
	Volkhov	46.6	45.2	— 3.0
	Luga	40.4	35.8	— 11.5
	Kirovsk	24.4	25.9	+ 6.6
	Chudovo	17.4	14.7	— 15.5
	Baltiysk	33.3	33.2	— 0.2
	Gusev	28.5	28.3	— 0.7
	Sovetsk	43.2	36.4	— 17.8
	Pionerskyi	11.8	11.3	— 3.9
	Svetlyi	21.7	22.1	+ 1.8
	Slantsy	37.4	32.8	— 12.1
	Ostrov	25.1	20.6	— 18.0
	Lodeynoe Pole	22.8	19.7	— 13.8
Centres of administrative districts that are local centres with economic and recreational functions	Priozersk	20.5	18.6	— 9.2
	Podporozhye	20.3	17.7	— 13.0
	Boksitogorsk	18.1	15.4	— 15.0
	Pestovo	16.0	15.5	— 3.3
	Valdai	18.7	14.4	— 23.1
	Nevel	18.5	15.1	— 18.4
	Volosovo	11.6	12.1	+ 4.2
	Malaya Vishera	14.2	11.0	— 22.3
	Okulovka	14.5	10.5	— 27.6
	Porkhov	12.3	8.9	— 27.2
	Dno	10.0	7.8	— 21.8
	Gvardeysk	14.6	13.2	— 9.5
	Zelenogradsk	12.5	15.5	+ 23.8
	Neman	12.7	10.9	— 14.0
	Svetlogorsk	10.9	13.0	+ 19.0

The end of Table 3

Structural-functional type	Cities	Population, thousand people (2002)	Population, thousand people (2017)	Population change,%
Centres of administrative districts that are cities with process manufacturing being the biggest industry	Opochka	14.0	10.3	— 26.2
	Pechora	13.0	10.0	— 23.1
	Soltsy	11.2	9.0	— 20.1
	Guryevsk	10.9	16.3	+ 49.5
	Pravdinsk	4.5	4.2	— 6.9
Centres of administrative districts that are single industry cities with administrative economic the functions	Novosokolniki	9.7	7.4	— 24.4
	Sebezh	7.1	5.4	— 23.6
	Gdov	5.2	3.5	— 31.5
	Novorzhev	4.1	3.3	— 20.1
	Holm	4.3	3.4	— 20.3
	Pytalovo	6.8	5.3	— 21.6
	Pustoshka	5.5	4.0	— 25.9
	Bagrationovsk	7.2	6.4	— 11.2
	Krasnoznamensk			
	Nesterov	3.7	3.2	— 13.7
	Ozersk	5.0	4.0	— 19.0
	Polessk	5.8	4.1	— 29.2
	Slavsk	7.7	7.0	— 8.3
		5.1	4.1	— 19.8
Local industrial centres and single-industry cities	Sertolovo	38.4	51.3	+ 33.5
	Otradnoe	21.6	25.3	+ 17.5
	Pikalevo	23.3	20.4	— 12.9
	Nikolskoye	17.3	21.9	+ 26.5
	Communard	17.2	21.9	+ 28.0
	Svetogorsk	15.7	15.7	+ 0.1
	Syasstroy	14.0	13.0	— 6.9
	Ivangorod	11.2	10.5	— 5.9
	Novaya Ladoga	9.9	8.4	— 15.2
	Kamennogorsk	6.0	6.7	+ 10.0
	Shlisselburg	12.4	14.7	+ 19.0
	Lyuban	4.6	4.6	— 0.1
	Primorsk (Leningrad region)	5.3	5.7	+ 7.6
	Vysotsk	1.6	1.1	— 33.0
	Ladushkin	3.8	4.0	+ 5.5
	Mamonovo	7.4	8.0	+ 9.0
	Primorsk (Kaliningrad region)	2.1	1.9	— 8.8

Source: calculated on the basis of Rosstat data (2002—2018).

In the Kaliningrad region, cities with a population of less than 50,000 include administrative centres specializing in mechanical engineering, fish processing and food industry, ship repair and those performing port functions (Baltiysk, Svetly). In addition to industrial functions, a number of cities perform recreational functions. These are resort cities (Svetlogorsk, Zelenogradsk).

The main indicator of urban sustainability in the NWFD is the migration behaviour of the population and geo-economic development. Tracing the general results of population migration by the subjects of the district in 2016 and 2017 (Table 4.), one can note the significant migration increase in the Kaliningrad region (9.9 thousand and 9.8 thousand, respectively), the Leningrad Region (21.6 and 30.8 thousand) and St. Petersburg (44.7 and 64.5 thousand) [6].

Table 4

General population migration by subjects of the NWFD for 2016—2017

NWFD entity	Net migration, people		Internal migration, people		International migration, people	
	2016	2017	2016	2017	2016	2017
Republic of Karelia	– 1.008	– 1.916	– 1.247	– 1.584	239	– 332
Komi Republic	– 6.932	– 9.470	– 7.618	– 8.977	686	– 493
Arhangelsk region	– 6.266	– 8.045	– 7.245	– 8.410	979	365
Nenets Autonomous Okrug	– 320	– 231	– 393	– 279	73	48
Vologda Region	– 1.742	– 3.660	– 2.373	– 3.432	631	– 228
Kaliningrad region	9.926	9.839	3.670	4.635	6.256	5.204
Leningrad region	21.659	30.859	17.536	23.463	4.123	7.396
Murmansk region	– 4.343	– 3.503	– 5.149	– 4.383	806	880
Novgorod region	362	– 1,871	– 1.240	– 1.842	1.602	– 29
Pskov region	177	– 548	– 1162	– 1.375	1.339	827
St. Petersburg	44.709	64.546	43.758	46.977	951	17.569
Total	56.222	76.231	38.537	45.072	17.685	31.159

Source: Rosstat database (2016—2017).

[6] *The number and migration of the population of the Russian Federation in 2016* // Rosstat database. URL: www.gks.ru/bgd/regl/b17_107/Main.htm (access date: 10.15.2018); The number and migration of the population of the Russian Federation in 2017 // Rosstat database. URL: www.gks.ru/bgd/regl/b18_107/Main.htm (access date: 08.17.2018).

These regions leading in terms of inward internal migration show positive dynamics, while in the other regions internal migration results in population losses. In 2016, the Novgorod and Pskov regions showed insignificant positive dynamics stemming from considerable migrant quotas for the citizens of other countries, including refugees from Ukraine who, after receiving a residence permit and citizenship of the Russian Federation, move to St. Petersburg. In 2017, there was an internal outflow resulting in negative migration balance in both regions. The other regions of the NWFD saw a significant internal outflow by far exceeding the size of positive international migration both in 2016 and 2017. Such dynamics is the reason behind the change in the urban population in the NWFD cities at the regional level.

Sustainability of socio-economic development of the cities of the Northwestern Federal District

The sustainability of the socio-economic development of a modern city is a current challenge that requires the engagement of all its residents and management in order to ensure a high quality of the urban environment, life, as well as the balance between urban and natural environment. Sustainable development of the city should satisfy the needs of its residents [24]. It was at the end of the 20th century that the cities of the world started moving towards sustainability. The UN has created certain institutions to assist this process (HABITAT — UN Centre for Urban Settlements, UEF — Urban Environment Forum, UNEP — UN Environment Program, etc.) [25].

With the development and adoption of sustainable urban development programs, there are hopes for achieving long-term sustainable development of urban settlements. Their difference from any known programs is that they are built around the central idea of ensuring sustainability. This allows for the comprehensive understanding of sustainable development and for prompt counteraction against any negative trends in the evolution of the city.

Urban sustainability requires minimizing the consumption of space and resources, optimizing the urban form to facilitate urban flows, protect both the ecosystem and human health, ensure equal access to resources and services, and maintain the cultural and social diversity and integrity of the urban environment. “The most remarkable thing about cities is that, even with urban sprawl, they take up merely 3 % of the earth’s land surface, but accommodate more than half the world’s population. Cities have lower per capita costs of providing clean water, sanitation, electricity, waste collection, and telecommunications, and offer better access to education, jobs, health care, and social services.” [26, p. 2].

As a rule, socio-economic programs for urban development consider social, economic, industrial, energy, agricultural, tax, transport and other problems separately and in isolation from environmental factors. The current international trend is the increase in strategies and programs for sustainable development, approved and recommended by the UN Rio-92 Conference for governments and peoples of all countries. In 1995, the Russian Federation also approved the Concept of Russia's Transition to Sustainable Development. Such sustainability strategies and programs are the most advanced documents in which for the first time all policies in social, economic, environmental and other spheres are put together. It is the task of any government to facilitate the drafting of sustainable development legislation based on sound economic, social and environmental principles.

In 1994, the participants of the European Conference on Sustainable Cities and Towns (Aalborg, Denmark) adopted the Charter of European Cities & Towns Towards Sustainability. It set forth the following aspects of sustainable socio-economic development of cities:

— Sustainable development as a creative, local, balance-seeking process at the city level;

— Urban economy towards sustainability;

— Social equality for urban sustainability;

— Sustainable land-use planning;

— Sustainable urban mobility patterns;

— Involvement of local government as a necessary precondition for the transition to sustainability, etc.

In 2015, the UN Member States adopted the 2030 Agenda for Sustainable Development outlining 17 goals and 169 targets for sustainable development. Goal No. 11 is ensuring the inclusiveness, security, resilience and environmental sustainability of cities and settlements. One of its targets is "by 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency."[7]

Many European Commission legal documents and reports, as well as UN international programs, speak of the need for sustainable urban development and the formation of a "sustainable urbanization policy."[8] Urban sustainability requires an active, focused local strategy that must be both realistic and effective[9].

[7] *Transforming* our world: the 2030 Agenda for Sustainable Development. Resolution adopted by the General Assembly on 25 September 2015. URL: undocs.org/en/A/RES/70/1 (access date: 14.10.2018).

[8] *Sustainable* urbanization policy brief: Proliferation of urban centres, their impact on the world 'senvironment and the potential role of the GEF. Report to the 5th GEF Assembly, México May 2014. URL: http://www.thegef.org/sites/default/files/publications/Sustainable-Urbanization-Policy-Brief_2.pdf (access date: 17.10.2018).

[9] *Promoting* sustainable urban development in Europe: Achievements and opportunities // European Commition, 2009. URL: https://ec.europa.eu/regional_policy/sources/docgener/presenta/urban2009/urban2009_en.pdf (access date: 14.10.2018).

According to Russian researchers, "the main obstacles to the implementation of the principles of sustainable development in Russian cities include the difficulty in perceiving the topic of sustainable development, lack of experience and expertise, and low qualifications of personnel in municipalities, as well as short-term planning horizons" [28, p. 80].

On the way to sustainable development, a city must make the following strategic choice:

1) Avoid industrial production and develop creative technologies;

2) Diversify the existing industrial cluster;

3) Create a new industrial cluster that meets the current needs of the economy [29, p. 298].

These strategies are not in opposition, but it is important to choose the key strategy based on the city's competitive advantages. In 2018, the Ministry of Economic Development of the Russian Federation developed a new system for assessing Russian cities, the urban development index. It was to become a unified tool for identifying problems and priorities in the development of all types of cities. The index is needed for a spatial development strategy, in which the largest cities are considered as centres of social and economic growth [30; 31].

The choice of sustainability indicators is also of great importance, as they can be included in strategies and state programs for the development of the subjects of the RF, as well as municipal strategies and programs.

Given the vast territory of the NWFD and the low population density in comparison with Western Europe, as well as the imperfect transport routes, cities have always been key elements linking agricultural zones and industrial centres, ensuring the development of the regional economy and the preservation of cultural and historical heritage. To maintain this role in an open market economy and ongoing globalization processes, each city regardless of its category needs to create a comfortable and attractive living environment. The main indicator of the attractiveness of the city is the migration behaviour of the population. The simplest calculation done using the Spearman's rank correlation coefficient (r_s) on the data on the regional centre's sustainability (according to the annual sustainability rating of cities of the Russian Federation[10]) and the migration growth rate per 1,000 people in the subject of the RF[11] indicates a fairly high degree of correlation ($r_s = 0.6$) (Table 5).

[10] *Sustainable cities rating of the Russian Federation for 2016* // SGM Rating Agency, 2017. URL: www.agencysgm.com/projects/sostavlenie-reytinga-gorodov-rossii-v-oblasti-ustoychivogo-razvitiya/ (access date: 09.12.2018).

[11] *Regions of Russia.* Socio-economic indicators. 2017: stat. Sat / Rosstat. M., 2017.

Table 5

Rating of the regional centres of the subjects of the RF according to the sustainability index and migration growth rate per 1,000 people

NWFD's region	Rating of the regional centre according to the sustainability index in 2016	Migration growth rate per 1,000 people in 2016	Rating of the subject according to migration increase per 1,000 people in 2016
Kaliningrad region	1 (Kaliningrad)	101	1
Vologda region	2 (Vologda)	– 15	4
Novgorod region	3 (Velikiy Novgorod)	6	2
Komi Republic	4 (Syktyvkar)	– 81	8
Murmansk region	5 (Murmansk)	– 57	7
Republic of Karelia	6 (Petrozavodsk)	– 16	5
Pskov region	7 (Pskov)	3	3
Arhangelsk region	8 (Arkhangelsk)	– 56	6

Source: compiled according to the Federal State Statistics Service (2016—2017) and the rating agency SGM (2017).

However, in the rating of sustainable urban development compiled by the rating agency SGM, the data were analyzed only for the cities with a population of more than 100,000 people. As follows from the data given in Table 3, the situation in this category of cities in the NWFD is the most favourable. The main outflow of the population is observed in medium and small cities, which are the biggest contributors to the negative values of the migration growth coefficient of most subjects of the NWFD of Russia.

Conclusion

The Northwestern Federal District is one of the highly urbanized regions of Russia. The reason behind it is the long-standing development of the area and the emergence of cities, primarily St. Petersburg that has evolved into a large agglomeration and exerts a versatile influence on the socio-economic development of not only the suburban areas but also more remote territories. The trend towards an increase in the urbanization of the region remains at present, although the share of the urban population in the total population is growing insignificantly. At the same time, differences in the dynamics of the population of regions and republics, as well as urban settlements, are likely to intensify. The northern regions (with the exception of the Nenets Autonomous Region) and the old industrial regions (Novgorod and Pskov) lose their populations. This decrease is a result of natural decline. The factor is especially pronounced in the southern regions with the large share of the older population and growing outward domestic migration of working-age population. The population in the Kaliningrad and Leningrad regions is increasing. At the same time, a peculiar situation has developed in the Leningrad Region where, unlike in other northwest regions, in 2002—2017, the

share of the urban population has decreased from 66.4 % to 64 %. The reason for this phenomenon is that not only urban settlements, but also rural settlements in the suburbanized zone of St. Petersburg are attractive to migrants. A similar situation, although in a milder form, has developed in the Kaliningrad region.

Of particular note is St. Petersburg, as in 2002—2017 its population increased by 613,000 people. After the decline of the 1990s, the city managed not only to restore the previous population but also to increase it. It is important to note the intensification of the agglomeration ties of the city.

As for the centres of the regions, the subjects of the RF, only Arkhangelsk and Murmansk, both located in the Arctic zone, saw a decline in population. A unique situation for this group developed in Naryan-Mar, where the population increased by 32.5 %, which in absolute terms is an increase of 6,000 people.

Significant differences in population dynamics are demonstrated by cities that have a lower administrative status or do not have one. The highest dynamics were shown by Vsevolozhsk, Sertolovo, Kommunar, Nikolskoye, Otradnoye and Shlisselburg. All of them are part of the St. Petersburg agglomeration. Their growth rates range from 17 % to 55 %. The similar dynamics is shown by the cities of the Kaliningrad region: Guryevsk, Zelenogradsk and Svetlogorsk. The rest of the cities, as follows from the above study, demonstrate either small population growth or negative dynamics. The latter clearly prevails.

Data on the dynamics of the urban population allow us to draw the following conclusions: polarization is increasing in the south-north direction, the Arctic territories are losing their population, and however, there is further concentration within the agglomeration of St. Petersburg and in the exclave of the Kaliningrad region. The population dynamics clearly captures the nature of sustainable development of the cities of the Northwest Federal District.

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THE DEVELOPMENT OF BORDER AND TRANSBORDER REGIONS

THE CHANGING ROLE OF BORDER REGIONS IN THE REGIONAL POLICIES OF THE EU AND RUSSIA

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This article analyses how the role of border regions has changed in the regional policies of Russia and European countries since the early 1990s. The study aims to estimate the efficiency of Russia's regional policy with regard to border regions (its completeness, a focus on actual problems, etc.) and to compare it with that of European counterparts. The article relies on publications on the experience of EU countries, earlier contributions from Russian researchers, federal regulations, and statistics on the regional distribution of federal investment in fixed assets. It is shown that the federal border region policy is largely a reflection of the features and problems of Russia's regional policy as a whole. Currently, the development of cross-border cooperation is affected more strongly by national security concerns than by economic growth considerations. Cross-border cooperation is no longer part of the regional policy. Border regions, however, have received an increasing proportion of federal investments in recent years, particularly, amid the reunification with the Crimea. The study calls for better coordination between different areas of the federal socio-economic policy on border regions and closer attention to border regions' foreign economic ties, particularly, within the implementation of the Strategy for the Spatial Development of the Russian Federation.

Keywords:
border regions, coastal regions, regional policy, EU, Russia, Euroregions, cross-border cooperation, spatial development strategy

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Introduction. Problem setting

The border regions of Russia and other countries are often the focus of academic publications, including monographs [1—3] and collections of papers [4; 5]. The literature pays particular attention to the effect of a border position on the socio-economic development of regions, gives assessments of the contact and barrier functions of borders, and explores cross-border cooperation. A plethora of works consider the features and problems of the socio-economic development of frontier regions (Russia's Far East, the North Caucasus, the Kaliningrad region, Crimea) in a context broader than their border position.

In our opinion, the place of border regions in the regional policies of states is insufficiently studied. One of the few studies into the problem is [6].[1]

National governments can support cross-border cooperation within both regional and foreign economic policies. This dual-policy approach may result in a lack of coordination between different areas of government regulation of the economy in border regions as well as in flawed assessments of the role of these areas in the national policy on regional development. However, only some border regions can develop cross-border cooperation. These are the regions that do not suffer from their position on the periphery and require a different type of national support for socio-economic development. This support may be aimed at compensating for the border position or solving border regions' actual economic and social problems indicated by statistics. In other words, it is important to understand to what degree national authorities use support for the economic component of cross-border-cooperation (which goes beyond the economy and is usually developed by regional and municipal authorities) to create favourable conditions for economic growth in border regions. There is also a need for examining what solution (if any) regional policies have to the problems of border regions.

In this article, we explore how Europe and Russia include border regions into (or exclude them from) their regional policies. We also examine the incentives of authorities (federal in Russia and both national and supranational in the EU) to support border regions and the tools they use to that end. It is necessary to realise whether government support for the development of these territories is well-planned, whether it takes into account regional specifics, and whether border territories receive sufficient attention from national governments.

[1] The article explores regional policy in its classical interpretation, i.e. understood as the regional policy of national authorities or supranational bodies in the case of the EU, seeking to reduce regional imbalances in socio-economic development (see [7; 8]).

EU experience

The history of Europe created enormous potential for transboundary cooperation. In the many centuries of feudal fragmentation, the borders were almost transparent. When nation-states were emerging, the continuous revision of political borders following endless wars created many divided communities [9]. During the long peaceful development after World War II in 1945, all the above could not but translate into a multitude of economic, social, cultural, and academic initiatives in border areas. In Western Europe, these processes have bolstered successful regional integration since the 1950s. After the Cold War, the integration project, which had grown into the European Union, included the countries of Central and Eastern Europe (CEE).

Euroregion projects are a major element of transboundary cooperation in Europe. The first euroregion, Enschede-Gronau, emerged as early as 1958 at the FRG—the Netherlands border. Today, the number of these cooperation structures, which have very different legal forms, exceeds one hundred. A euroregion, in the broad sense, is an instance of voluntary mid- or long-term transboundary cooperation that brings together municipalities or even districts of neighbouring countries. The legal framework for euroregions is the European Outline Convention on Transfrontier Co-operation between Territorial Communities or Authorities, which was signed in 1980 [10].

Euroregion structures have long transcended the borders of the EU and its candidate countries. Moreover, euroregions were integrated into the supranational regional policy of the EU as late as the 1980s. Border areas were considered earlier within regional policies of Western European countries. At the time, bordering a third state was viewed as a disadvantage (the border between the countries of the West and the Socialist camp performed the barrier function). The most explicit example was the FRG, which provided support for all the territories bordering on the GDR and Czechoslovakia, regardless of how developed those regions were. In many countries, even such prosperous as the Netherlands, border districts were considered as the most likely candidates for support, because of their position on the periphery, underdeveloped infrastructure, and unbalanced industrial structure. National regional policies, however, did not contain any special programmes [11].

The increased attention to the supranational regional policy of the EU (it was dubbed later ‘cohesion policy’), which was observed in the 1980s, was not random. At the time, Jacques Delors’s reforms prompted the establishment of

a single market and an economic, and later monetary, union within the European Community, which then comprised twelve members. The free movement of goods, services, people, and capital required both the elimination of the barriers created by national borders and the emergence of a single economic organism in the EU. In the 1990s, the process was ideologically supported by the then-popular idea of a Europe of the regions. It turned out, however, that nation-states were not ready to disappear. In the institutional structure of the EU, the smallest member state has a greater influence than such large regions as Bavaria or Catalonia despite the considerable economic potential and pronounced regional identity of the latter.

The 1990s, nevertheless, witnessed a boom in euroregion-based cooperation; cross-border cooperation received at the time particular attention within the supranational regional policy of the EU. In 1989, the Interreg initiative was launched to create new specialisation for the industrial structures of border areas in the face of a single market emerging in the Union. The four years' budget for the programme was 1.1 billion ECU. The programme was extended to 1999 in 1994 and to 2006 in 2000. Despite the continuing reduction in the number of special initiatives within the Union's supranational regional policy (from thirteen to four), the Interreg III programme was launched. Its budget totalled 5.3 billion euros, which comprised 2 % of the total seven-year budget for Cohesion Policy. The first successes of Interreg included infrastructure projects: the bridge across the Guadiana River at the Spanish—Portuguese border and state-of-the-art lorry checkpoint at the junction of the borders of Belgium, France, and Luxembourg.[2]

In the 1990s, Interreg II focused on three aspects: transboundary cooperation (A), power grids (B), and cooperation in regional planning (C). In 2007—2013, these issues were promoted into the major targets of the Union's supranational policy (the number of targets, or key areas, reduced from six to three). The policy received 8.7 billion euros or 2.5 of the total seven-year budget of Cohesion Policy. The resultant European Territorial Cooperation was not transboundary in the narrow sense of the term. It comprised both transboundary projects and sub-regional partnerships in Europe (including Russia) and on other continents where the member states have overseas territories [12]. Non-European transnational cooperation projects were, of course, a product of lobbying from Atlantic and South European countries of the Union. Many experts believed that that

[2] *EU* Cohesion Policy 1988—2008: Investing in Europe's future (2008) Inforegio Panorama. No. 26. URL: https://ec.europa.eu/regional_policy/sources/docgener/panorama/pdf/mag26/mag26_en. pdf (access date: 10.09.2019).

was against the spirit of the 1999 European Spatial Development Perspective [13]. The overseas projects, however, accounted for only 21 % of the Interreg III budget. Thus, the Cohesion Policy stayed true to its intent.

A specific feature of EU support for cross-border and other types of transboundary cooperation in the 1990s and the 2000s was the hierarchy of areas receiving assistance. The funding relating to the first two goals was granted to NUTS-2 regions, whereas European Territorial Cooperation financed NUTS-3 regions within 150 km border and coastal zones (home to 37.5 % of the population of the Union) as well as within thirteen large areas of transnational cooperation. Moreover, the latter goal was the only one of the three, for attaining which all EU countries received support [12].

In the late 1990s, at least those CEE countries that were preparing for accession to the EU considered Interreg and euroregions as an important tool for regional economic growth in the narrow sense. Interreg made a major contribution to the regional development of candidate states, whose national regional policies were weak. Moreover, the Cohesion Policy did not extend to those states before their official accession to the EU. Moreover, the participation of NUTS-3 regions made it possible to involve municipal authorities of former socialist countries, where political powers had been highly centralised in making decisions on spatial development and thus contribute to the economic efficiency of national (and supranational) regional policies [14].

Although European Territorial Cooperation has increased in importance at the current stage of the development of the Union's supranational regional policy, it will receive on 3 % of the Cohesion Policy budget in 2014—2020. An important trend in the income structure is the growing significance of environmental projects: 41 % the European Territorial Cooperation budget coming from the European Regional Development Fund (ERDF) will be allocated to sustainable development and only 10 % to transport initiatives.[3] The fact that the ERDF is the only EU structural fund that finances cross-border cooperation gives European Territorial Cooperation an edge in terms of organisation over the other goals of Cohesion Policy.

[3] *Annex I*: European Territorial Cooperation/INTERREG, *Communication from the Commission. Investing in jobs and growth — maximising the contribution of European Structural and Investment Funds*. Brussels, 2015.

By the end of the 2010s, the EU had prepared documents outlining the Cohesion Policy for 2022—2027.[4] They contain many red tape reduction measures and upgrade the mechanisms for submitting applications for regional development support. For purposes of this article, the most important is that transboundary cooperation remains on the agenda of the Union's supranational regional policy. The novelties of Interreg include increased attention to cluster initiatives. The programme's proportion in the total Cohesion Policy budget will drop once again, by 2.5 % to 8.43 billion euros.

Although the EU is somewhat disappointed with the overall results of socio-political cross-border cooperation (it has not created a transboundary society with an identity stronger than the consolidation typical of old border area communities), the economic successes are evident. Among the latter are large transboundary infrastructure projects, which were the starting point of Interreg and later became its hallmark. The most successful were euroregions built on large transport projects that would have been unfeasible without transboundary cooperation. These projects completely overhauled economic ties between the border areas. A good example is a combined motorway and railway bridge across the Øresund strait, which was built in 1995—2000. Not only did it connect Sweden's Malmö and Denmark's Copenhagen, but it also turned the two cities into an agglomeration. Even today, when selective passport checks are being conducted at the border as a response to the migrant surge, Copenhagen and its suburbs and Malmö comprise a single transport hub. Many residents of the two cities commute. Nevertheless, thorough economic evaluations of the whole package of the Cohesion Policy measures, including those relating to transboundary cooperation, have caused many experts to criticise current methods and produce recommendations on the improvement of the latter [15].

[4] *Proposal* for a Regulation of the European Parliament and of the Council laying down common provisions on the European Regional Development Fund, the European Social Fund Plus, the Cohesion Fund, and the European Maritime and Fisheries Fund and financial rules for those and for the Asylum and Migration Fund, the Internal Security Fund and the Border Management and Visa Instrument // COM/2018/375final-2018/0196 (COD). Strasbourg, 29.05.2018.

Russian experience

The way border regions are treated in Russia's regional policy is determined by the history and current state of regional policy per se (for a detailed account see [16]). If one were to give a brief description of regional policy in Russia, the following landmarks would identify the following major landmarks or periods:

— in the early to mid-1990s, there were attempts to adopt the best Western practices in regional policy. Although having failed, they led to the signing of presidential decree of June 3, 1996, No. 803 A framework for Regional Policy in the Russian Federation. That period witnessed the creation of short-lived[5] special ministries responsible for regional policy as well as the rise of federal targeted programmes for regional socio-economic development. The latter became the major tool of the country's regional policy;

— in the late 1990s—early 2000s, Russia's federal authorities held liberal views and denied the need for regional policy. There were no ministries for regional affairs; national strategies and programmes for socio-economic development mentioned regional problems only in the context of inter-budget relations. Federal targeted programmes for regional development, however, kept running and they became better organised at the time;

— in the mid-2000s, attention to regional problems was growing. The Ministry of Regional Development of the Russian Federation was established in 2004. Strategy 2020,[6] which was adopted in 2008, contained a large 'Regional development' section; tools for territory-specific investment policy were introduced (special economic zones, the Investment Fund of the Russian Federation). A legal and programme framework for regional policy, however, was not created;

— the current stage of regional policy development (the 2010s) is associated, on the one hand, with the liquidation of the Ministry of the Regional Development (2014) and, on the other, with growing attention to regional problems, particularly, within the emerging strategic planning system. Presidential decree

[5] The Ministry of Regional Policy of the Russian Federation per se existed less than six months. It was created by presidential decree of September 22, 1998, No. 1142 and liquidated by presidential decree of May 25, 1999, No. 651.

[6] On the Concept of the long-term socio-economic development of the Russian Federation 2020: decree of the Government of the Russian Federation of November 17, 2008 No. 1662-r. Accessed via the ConsultantPlus legal information system.

of January 16, 2017, No. 13 On the Approval of a Framework for State Policy on Regional Development 2025 was signed; Strategy for the Spatial Development of the Russian Federation 2025 (SSD) was adopted. Special federal policies were developed to deal with the Far East, monotowns, and Crimea. New tools were developed to support regional investment.

In line with the best international practices, the presidential decree of 1996 viewed border areas as objects of regional policy. One of the objectives of regional economic policy was 'the development and adoption of a research-based policy towards regions that have unfavourable conditions for the economy and require special regulation measures (territories in the Arctic, the Extreme North, and the Far East, border regions, and others)'. The document urged to 'develop economically and technologically feasible industrial ties between the organisations of Russian border regions and the neighbouring countries, which create a single industrial-technological system'. The decree, as is known, turned out to be a mere declaration of intent: it was hardly put into practice. It was not clear what federal body was responsible for the development of cross-border cooperation (the structure of federal ministries was much more complicated in the 1990s than it is today; there were ministries for foreign economic ties and cooperation with the CIS).

Technically, cross-border cooperation became part of regional policy after the establishment of the Ministry of Regional Development of the Russian Federation.[7] The attempts to formulate a thorough policy towards border regions failed similarly to those aimed at creating a comprehensive regional policy. The dedicated department of the Ministry functioned in some isolation from the general ministerial structure. The other departments responsible for regional development did not pay sufficient attention to border areas [17]. It was not surprising that Strategy 2020 mentioned border territories in sections on foreign economic ties rather than in those on regional development.

The current precarious stage in the development of regional policy is a product of the unclear role that border regions play in the latter. On the one hand, the SSD introduced a special type of areas that merited increased governmental attention, that is, the geostrategic border territories of the Russian Federation. These are the Russian border regions that were not classified as 'priority geo-

[7] Provisions on the Ministry of Regional Development of the Russian Federation: regulation of the Government of the Russian Federation of January 26, 2005, No. 40. Accessed via the Garant legal information system.

strategic territories of the Russian Federation'. Preference is given to exclaves (the Republic of Crimea and Sevastopol, the Kaliningrad region) and the regions of the North Caucasus, the Far East, and the Russian Arctic, i.e. primarily to border and coastal areas.[8]

On the other hand, as of today, federal support for cross-border cooperation cannot be considered as part of regional policy: it is an element of foreign economic policy. After the liquidation of the Ministry of Regional Development, both regional development and border cooperation became the province of the Ministry of Economic Development of Russia.[9] The two areas, however, are supervised by two different vice-ministers. Cross-border cooperation is overseen by the Department for the Development and Regulation of Foreign Trade, whereas regional policy is the responsibility of the Department for Spatial Planning and Regional Development.

There is no easy answer to the question as to whether federal support for border cooperation is part of foreign economic or regional policy. Since cross-border economic ties have idiosyncratic features [18], it might be wise to let experts deal with regulation in the field. A border position has a significant and diverse influence on the economy and social sphere of border areas [19]. Cross-border cooperation may contribute significantly to the economic growth of border regions. We believe that border areas should be an object of regional policy, whereas federal support for the development of cross-border cooperation should be part of this policy.

Federal support for the Far East is considered as an independent area of federal policy: a special Ministry for the Development of the Far East was established to that end.[10] The ministry tried to take over the responsibilities of its federal counterparts in the Far East. The number of tools of federal support for the socio-economic development of the Far East has increased in recent years. Among them is the Concept for the Development of Border Areas of Russian Regions in the Far Eastern Federal District.[11]

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[8] The 2017 presidential decree on the governmental regulation of regional development does not mention cross-border cooperation.

[9] On the liquidation of the Ministry of regional development of the Russian Federation: Decree of the President of the Russian Federation of September 8, 2014, No. 612. Accessed via the ConsultantPlus legal information system.

[10] Initially the Ministry for the Development of the Far East of the Russian Federation, it is called today the Ministry for Development of the Russian Far East and Arctic. There is also the Ministry of North Caucasus Affairs. Less active than its Far East counterpart, the latter ministry has more limited federal support.

[11] Approved by Decree of the Government of the Russian Federation of October 28, 2015, Np. 2193-r (garant.ru/products/ipo/prime/doc/71139078/).

Another important feature of Russia's regional policy has been federal support for certain territories even in the absence of a legal or programme framework for regional policy. Therefore, it is important not only to consider the inclusion of border areas and cross-border cooperation into regional policy (vesting necessary powers in dedicated federal ministries and incorporating the border agenda into regional policy regulations) but also to analyse the actual steps made by the federal authorities to facilitate the development of border areas. Let us begin with the regional policy measures that were motivated by the border position of the concerned territories (i.e. the cases when conscious decisions were made to support those areas).

As mentioned above, federal targeted programmes (FTP) for regional socio-economic development were the first regional policy tool embraced in Russia. In the 1990s, FTPs were often adopted erratically (for more detail, see [16]); target regions were chosen without a proper rationale. As a result, among the FTPs was a programme for the Comprehensive Development of the Border Settlement of Zabaikalsky of the Chita Region.[12]

Another example of an isolated decision is the governmental regulation of October 12, 1995, No. 1000 On Emergency Measures to Stabilise the Socio-Political and Economic Situation in the Southern Border Districts of the Russian Federation within the Republic of Dagestan. Although the regulation was not technically an FTP (the instrument was still a novelty at the time), it addressed the same issue — federal investment in the 'construction and reconstruction of industrial and public structures'.

In the early 2000s, regional FTPs were given a clear structure. Their number diminished. A new important document was the programme for the Reduction of Socio-Economic Regional Imbalances in the Russian Federation (for 2002—2010 and until 2015).[13] The programme identified three priorities: support for social development projects, construction of utility infrastructure, and projects run in border regions. Eligible regions were divided into three groups: those lacking public infrastructure, those in need of utility infrastructure, and border areas. One region could fall into more than one category.

[12] Approved by Regulation of the Government of the Russian Federation of January 8, 1998, No. 17 (http://pravo.gov.ru/proxy/ips/?docbody=&nd=102051118).

[13] This programme, which was approved by Regulation of the Government of the Russian Federation of October 11, 2001, No. 717, drew heavily on international experience in regional policy. Because of its many flaws, it was terminated prematurely: the programme did not receive funding from 2007 [16].

Since the early 1990s, the federal regional policy has paid special attention to the Kaliningrad region, which stands out for its unique exclave position. There is ample literature on the socio-economic situation in the region, which is often considered in the context of the border position [20; 21]. In the case of the Kaliningrad region, the rationale behind federal support for the regions is the concerns about its exclave situation rather than border position, albeit both factors are very closely connected. The goal of federal support for the territory is region-specific: to ensure standards of living and economic growth rates comparable to (or higher than) those in the neighbouring EU countries. This phrasing can be found today in the SSD; earlier, it was used in the FTP for the socio-economic development of the Kaliningrad region.[14]

In the context of the Kaliningrad region (and other regions too), it is important to analyse why federal authorities are interested in border areas. International experience suggests that most usually a state seeks to take advantage of border ties to accelerate economic growth (if the border has the contact function) or to support the periphery (the barrier function). Russia has yet another motive — the need to ensure national security. According to the SSD, the spatial development of the Russian Federation aims 'to ensure balanced and sustainable spatial development of the Russian Federation in order to reduce regional imbalances in the standards of living, to accelerate economic growth and technological development, and to ensure national security'. Cross-border cooperation is viewed primarily not as a means to solve economic problems but as a tool to ensure national security: 'to ensure the national security of the Russian Federation by stimulating the socio-economic development of the geostrategic territories of the Russian Federation, it is proposed to:

strengthen cross-border cooperation between the border regions of the Russian Federation and the neighbouring states…'

The FTP 2020 for the Development of the Republic of Karelia is a vivid illustration for this thesis[15]. Although the level of the socio-economic development of Karelia is not very low, the territory has a special FTP (until recently, the Kaliningrad region was the only one with a dedicated programme). The FTP

[14] One the federal targeted programme for the development of the Kaliningrad region until 2020: regulation of the Government of the Russian Federation of December 7, 2001, No. 866. Accessed via the Garant legal information system.

[15] Approved by Regulation of the Government of the Russian Federation of June 9, 2015, No. 570 (garant.ru/products/ipo/prime/doc/70978216/).

holds that 'a periphery border region, the Republic of Karelia has a strategic significance for the national security of the Russian Federation. The region has an almost 800 km border with the EU, which is the longest in Russia'.

While placing emphasis on national security, federal authorities approach different aspects of the socio-economic development of border areas very differently. They both encourage cross-border cooperation (seeking to benefit from the border position) and provide border-unrelated support for the economy and the social sphere of these regions. At the same time, the SSD does not consider either the integration of Russian regions into the world economy or their international economic ties. The situation is very similar at the regional level: regional authorities underestimate the benefits of a border position [22].

Is this position of federal authorities justified? To an extent, it is. Researchers have recently noted that the barrier function of the border is strengthening [23]; this has become particularly evident amid anti-Russian sanctions and tensions in Russian—Ukrainian relations. The literature has also explored Russia's geostrategic interests [24] and economic security [25]. We believe, however, that the economic component of cross-border cooperation deserves greater attention from federal authorities. At least, this problem has been tackled in research. There are conceptual works [26; 27] as well as studies analysing the development of different types of border territories [28—30] and examining various forms and mechanisms of cross-border economic cooperation [31].

To be clear, neither official federal documents nor the literature offers a uniform approach to delineating the boundaries of border regions and areas. In some cases (the SSD), border areas are the border regions of the Russian Federation. In other cases (the Concept for the Development of the Far Eastern Border Areas), these are border municipalities. This situation mirrors changes in Russia's regional policy: although it has always been aimed at regions, municipalities are starting to play an increasing role in it (for instance, monotowns are receiving federal support).

Federal policy towards border regions may be improved through solving another problem that is common to all the areas of Russia's federal socio-economic policy, i.e. the coordination of different aspects of the federal regulation of the economy at the regional level. For many years, researchers have emphasised the need for open region-specific statistics on federal budget implementation (that is, on all non-secrete expenditure rather than on inter-budget transfers only) and the monitoring of the so-called regional implications of non-regional decisions [8, p. 32]. In practice, however, such coordination is

absent. Border areas are covered by apparently non-coordinated governmental programmes for socio-economic development (such programmes have been adopted for the Far East, the Arctic, the North Caucasus, Crimea, and the Kaliningrad region), whereas cross-border cooperation efforts are governed by international agreements signed by Russia.

According to the Ministry of Economic Development of Russia, the European dimension of the country's cross-border cooperation remains the most progressive and advanced.[16] The scope of this cooperation is impressive. According to the Ministry, over 200 joint projects were carried out within the Estonia—Latvia—Russia, Lithuania—Poland—Russia, Karelia, Kolarctic, and South-East Finland—Russia programmes in 2007—2013. These were initiatives aimed to encourage small and medium entrepreneurship, to support local cultures and customs, and to improve the living standards of border areas' residents. Over fifty large infrastructure projects were completed. They focused on border and transport infrastructure and environmental protection. There are seven Russia—EU cross-border cooperation programmes for 2014—2020: Karelia, Kolarctic, Russia—Latvia, Russia—Poland, Russia—Estonia, and Russia—South-East Finland.[17]

There is, however, some information on the distribution of federal funds across the country. These data, which have been published since 2005, make it possible to evaluate how the proportion of border regions has changed in federal fixed-asset investment (see Table). Border and coastal regions will be analysed separately: although a coastal position is a type of border position, it has some specific features [33]. The table shows the regions that accounted for above 4 % in the federal fixed-asset investment (this figure represents a 'natural gap' for most of the years). For comparison, the population of the border regions comprised 41.6 % of the national total in 2005 and only 41.4 % in 2012—2013 (the proportion reached 42 % in 2014—2018 after the incorporation of Crimea). Coastal regions were home to 7.8 % of the country's population in 2005—2010, 7.9 % in 2011—2013, 8.1 % after Crimea, and 8.2 % in 2016—2018. Thus, over half of Russia's resident population lives in border and coastal regions.[18]

[16] Ministry of Economic Development of the Russian Federation. Russia—EU cross-border cooperation programmes. URL: http://economy.gov.ru/minec/activity/ sections/mps/programs (access date: 30.09.2019).

[17] Ibid.

[18] These figures are our calculations based on Rosstat data.

The distribution of federal fixed-asset investment across Russian regions

Year	Proportion in federal investment,%			The largest federal investment recipients (the proportion in% is given in parentheses)
	Border regions	Coastal regions	Border and coastal regions	
2005	38.2	18.5	56.8	Saint Petersburg(13.8), Moscow (11.6), Republic of Tatarstan (5.8)
2006	41.7	17.0	58.7	Saint Petersburg (11.7), Moscow (10.8), Krasnodar region (5.6), Leningrad region (4.4), Chechen Republic (4.1)
2007	42.2	21.3	63.5	Saint Petersburg (16.4), Moscow (8.0), Chechen Republic (6.6), Krasnodar region (4.6)
2008	47.5	16.6	64.1	Saint Petersburg (8.4), Moscow (5.4), Chechen Republic (5.4), Krasnodar region (5.4), Rostov region (4.2)
2009	47.3	14.9	62.2	Saint Petersburg (6.6), Moscow (6.3), Primorsky region (5.6), Krasnodar region (4.8), Krasnoyarsk region (4.0)
2010	51.1	15.4	66.4	Primorsky region (11.1), Moscow (7.7), Krasnodar region (7.0), Saint Petersburg(6.8), Voronezh region (4.5)
2011	52.2	14.1	66.2	Primorsky region (13.1), Krasnodar region (8.8), Moscow (8.6)
2012	49.9	12.5	62.4	Krasnodar region (12.6), Moscow (6.4), Primorsky region (4.4), Leningrad region (4.3), Moscow region (4.2)
2013	49.5	11.1	60.6	Krasnodar region (14.0), Moscow (9.8), Moscow region (6.2), Amur region (4.5)
2014	41.7	11.8	53.4	Moscow (15.6), Moscow region (5.8), Voronezh region (4.2), Krasnodar region (4.2), Primorsky region (4.0)
2015	48.2	9.6	57.8	Moscow (12.8), Krasnodar region (4.8), Voronezh region (4.5), Moscow region (4.4), Saint Petersburg(4.3)
2016	48.9	9.4	58.3	Moscow (10.0), Krasnodar region (7, 9), Rostov region (5.4)
2017	52.5	12.1	64.6	Republic of Crimea (8.2), Krasnodar region (7.2), Rostov region (6.8), Moscow (6.0)
2018	55.5	11.2	66.7	Republic of Crimea (12.9), Krasnodar region (8.4), Moscow region (7.4), Moscow (6.5)

Source: calculated by the authors based on Rosstat data (fedstat. ru).

The table shows that, with the exception of 2005 and 2014, border regions accounted for a greater proportion of federal fixed-asset investment than of total national population. For coastal regions, this excess was continuous, reaching the highest values in the pre-crisis period. The distribution of federal investment across the country is not stable. The proportion of coastal and border regions was changing over the study period. The receivers of most fixed-asset investment (often coastal and border regions) were changing too. The role of border regions in federal investment has increased since 2015, reaching its maximum in 2018. It is still not clear whether this trend is long-term. Probably, the increase is an effect of the incorporation of Crimea. The above data, however, suggest an evident conclusion: the distribution of federal funds across the country is often a result of isolated decisions rather than a thought-through federal policy for regional development regulation

Conclusions

There is a need to provide special support to European border regions since many of them are lagging behind. At the same time, tools for exploiting the contact function of state borders, i.e. for developing EU countries' external ties in the single market, were introduced later than required. In the 1990s, the focus was on infrastructure projects, whereas today particular attention is paid to diverse initiatives, including environmental programmes (transboundary co-operation is crucial to environmental protection). The EU's eastward enlargement and openness to third-country participation in Interreg-financed projects within the supranational regional policy made it possible to increase Russia's presence in cross-border cooperation in Europe (albeit this presence in mostly institutional and Russia finances activities on its territory itself).

In Russia, the role that border regions play in the federal regional policy is largely a product of the overall problems, including the unstable distribution of regional regulation powers among ministries, changing approaches to regional development regulation, the lack of transparency and regional-level coordination between different areas of federal socio-economic policy, and the focus on regions rather than municipalities.

In 2004—2014, when there was the Ministry for Regional Development, cross-border cooperation was supervised by that structure and thus was technically part of regional policy. After the liquidation of the ministry, regional development and cross-border cooperation became the province of the Ministry

of Economic Development of Russia. They constitute, however, different areas of the ministry's works. We hold that there is a need for closer cooperation between, and harmonisation of, regional development and cross-border cooperation. Both will contribute to the development of border regions as well as the emergence of a system for the monitoring and coordination of different aspects of federal policy at the regional level.

An important feature of Russia's federal policy towards border regions is that the regulation of their socio-economic development is guided by national security considerations rather than economic feasibility concerns. Although federal support for federal border areas is growing, it bears risks associated with the untapped potential of external economic ties. In particular, the SSD does not consider the integration of Russian regions into the global economy. This oversight has to be remedied in the future.

Unlike previous documents, the SSD pays special attention to border regions (the document introduced the term 'geostrategic border areas of the Russian Federation). Another proof of the growing federal attention to border regions is that the proportion of these territories in federal fixed-asset investment has been increasing since 2015. It reached the fourteen-year maximum in 2018.

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REGIONALISATION IN NORTHERN EUROPE AND THE NORTHERN DIMENSION IN RUSSIAN POLITICAL DISCOURSE

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The progress and sustainability of international cross-border region formation is a major concern for Russia, a country bordering sixteen states. In the early 2000s, the development of regions with Russian participation was at its height in northwestern Europe. Cross-border regions arise both naturally, stemming from various functional relations, and as a result of political decisions. In the latter case, political discourse is an important factor in successful region-building. The Northern Dimension (ND) programme, which was launched in 1997, embodied the principle of depoliticised cooperation — Europe's 'new regionalism'. This article aims to evaluate the role of the ND in the federal and regional political discourse of 1997—2016, to determine its place among other cross-border cooperation projects, and to follow changes in the understanding of its goals. The study relies on data from the Integrum agency, which has built up the most comprehensive digital archive of federal and regional printed and online media. The federal discourse on the ND reflected the whole set of relations between Russia and the EU. The idea about the crisis of the programme came from the discrepancy between the expectations aroused by political discourse and the actual results of cooperation. The study shows the ND-related discourse changed over the study period and stresses profound differences between federal and regional discourses.

Keywords:
supranational regions, Russia, EU, Northern Dimension, political discourse

Introduction

A key theme running through the works of Gennady M. Fedorov, his students and followers is the idea that the formation of international regions of different levels, i.e. regionalisation, is a manifestation of globalisation [1; 2]. The global

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space is a set of regions forming in response to the challenges of international competition calling for market consolidation, cross-border cooperation and new territorial structure of the economy. Another impetus for regionalisation is the need to align efforts to solve pressing cross-border problems, the scale of which is beyond the capabilities of a single state.

The analysis of regionalisation has become highly relevant for Russian social studies. Being the largest country in terms of territory, Russia has over 22 thousand kilometre land border; thus it also has the largest number of neighbouring states (16, recognising the independence of Abkhazia and South Ossetia). Naturally, the Russian Federation participates in the activities of a number of regional organisations at the intergovernmental level. As Europe has seen a particularly active formation of cross-border regions, Russia's engagement in these processes is an essential part of its relations both with the EU as a whole and with its member states. In northwest Europe, the Russian Federation and its regions take part in several international organisations with overlapping areas and intersecting spheres: the Barents Euro-Arctic Council (BEAC), the Council of the Baltic Sea States (CBSS), the Arctic Council, the Nordic Council of Ministers (NCM), the Northern Dimension program (ND). Initially, both European capitals and Moscow saw regional projects with the participation of Russia as a depoliticised cooperation based on "common interests".

The European practice of regionalisation was based on "soft power" [3] and the well-known principle of border crossing facilitation at internal borders aligned with a considerable strengthening of the barrier functions of external borders. Such practice ran against the regionalisation involving third countries. Political geography interpreted this discrepancy as "reterritorialisation", i.e. differentiation of functions of political and socio-cultural borders at different spatial levels according to certain criteria, involving identity, division of neighbours into friends, partners and geopolitical rivals, selfish economic interests, and security [4; 5]. This view on regionalisation was opposed by "new regionalism" building on clear legal and institutional framework and co-development (multilateral and mutually beneficial cooperation).

The key principle of "new regionalism" is the multi-level governance (decentralisation of competencies), which implies the transfer of all possible powers from the central government to subnational and supranational authorities. Supposedly, the application of this principle significantly broadens the range of participants in cooperation including international financial and non-governmental organisations, partnerships, government agencies of member states, regional authorities and non-governmental organisations, et cetera. The agenda in the created system of actors is distributed in such a way that each of its elements corresponds to the competence of institutions of a certain level. While each of the actors performs a relatively narrow set of functions, together they can develop enough interaction potential to smooth out contradictions between countries preserving the spirit of cooperation even in a situation of political confrontation

[6]. The inability to agree on any issue does not become an obstacle to decisions on other agenda items distributed among many actors, which allows the relative autonomy of the regional organisation from "high politics" [7].

The Northern Dimension program, which has existed for more than two decades, was to become an innovative model of cooperation, the embodiment of the European "new regionalism". This initiative holds a special place among regional cooperation programs between Russia and the EU countries. Academic literature considered the ND at certain stages a successful model that could be transferred to the entire range of EU-Russia relations. At the same time, program failures were repeatedly recognised as typical, i.e. determined by general issues in Russia-EU interactions.

Approaches to the analysis of regionalisation in Human Geography

Conventionally, human geography applies a functional approach (the study of the intensity and structure of relations between various actors) to assess the course and results of regionalisation. This approach was successfully applied by Gennady M. Fedorov and researchers of his scientific school who used data on agreements between various partners, investment and foreign trade statistics to study cross-border regionalisation. They proposed a "taxonomy" of coherent (internally related) cross-border regions [1]. Many international researchers use a functional approach to identify "informal" regions, i.e. those not enshrined in any political or legal acts (see, for example, [8]).

However, that is not the only approach to regionalisation studies; there are two more. The first one is an institutional approach aimed at analysing the internal structure and "connectivity" of regional associations. The second is a geopolitical approach. Among other things, it studies the composition, configuration and dynamic borders of supranational regions depending on the interests of their partners and ratio between their political and economic potentials, shifts in the regime and functions of internal and external borders, the ratio between regionalisation and the intensity of cross-border cooperation. The geopolitical approach also aims at exploring the ways and means for forming cross-border regions.

Practice has shown that regionalisation processes do not develop only due to "objective" reasons. In other words, they are the result of the interactions of many actors guided by their economic or political interests influenced, inter alia, by a cultural, historical, linguistic and religious community. Regionalisation can be initiated from above by political decisions later provided with underpinning economic, cultural and other reasons. The interpretation of the controversial history of bilateral or multilateral relations emphasises the periods of successful interaction between partners.

An effective concept for studying regionalisation initiated "from above" is critical geopolitics that considers the creation of these meanings in social practice and political discourse. L. Fawcett, professor at Oxford University, once wrote:

"Regionness, like identity, is not given once and for all: it is built up and changes" [9, p. 26]. Territorial identities also affected by geopolitical discourse and social practice, play a key role in successful regional construction [10].

Geopolitical discourse is a discursive practice, in which international relations issues are associated with certain ethnocultural communities, points, ranges and other elements of the political space as well as historical events that took place there [11]. The concepts and meanings underpinning foreign policy actions are determined by the interaction between discourses initiated and developed by different political forces and social groups. Their influence on the results of such interaction differs and depends on the groups' power relations, political and socio-cultural resources and social practice [12]. The virtual political space formed during the discourse becomes more important than the real one. The scientific literature has repeatedly shown that its mythologisation often causes bitter controversies between individual countries and regions [13—15].

The analysis of the discourse's elements in statements, speeches and interviews of leaders, publications of experts, electronic and printed media, as well as fiction literature, films, advertisements, cartoons, including the language used in them, contributes to a better understanding of this process as well as linking it to political practice [16], public opinion and perceptions of different social groups reflected in social surveys [17]. Due to developing communications, foreign affairs and policymakers' geopolitical worldview in general increasingly need the legitimation in public opinion, which is also the task for political discourse.

This work aims to evaluate the ND as a model of cross-border cooperation in federal and regional discourse. How important is this mode of cooperation for Russia and its northwest regions bordering Europe? What is the place of the ND among cross-border cooperation projects? How did the goals and objectives of the project change, and most importantly, how were they understood? The answers to these questions are essential for assessing the ND prospects and the possibility of its activation in the current situation.

Research Methodology

The work is based on a quantitative and qualitative analysis of the Russian discourse on the ND of 1997—2016. The study is based on data from the Integrum agency, which has built up the most comprehensive digital archive of federal and regional printed and online media.

Federal media usually cover the most momentous developments. For a more detailed analysis, we selected five socio-political publications targeted at various groups of Russian society. The Nezavisimaya Gazeta (NG, Independent Gazette) positions itself as a "high-quality" "newspaper of independent opinions" providing considerable coverage of Russia's relations with the outside world. The Rossiyskaya Gazeta (RG, Russian Gazette) is an official media of the Russian government. The Zavtra (Tomorrow) represents the "national-patriotic" part of

the political spectrum. The Sovietskaya Rossiya (Soviet Russia) is known as an unofficial media of the Communist Party, while the Novaya Gazeta (New Gazette) criticises the domestic and foreign policy from the liberal and pro-European perspective.

Regional media usually pay little attention to international policy, focusing only on those aspects of foreign political and economic affairs that are directly related to local problems. The study of regional discourses relies on materials from the most popular regional printed media of the Northwestern Federal District selected based on the Medialogia ranking. The incompleteness of the electronic archives of many regional newspapers has prompted the need to supplement the collected database with materials from other regional media outlets, including regional news agencies.

The quantitative assessments rely on the Comparative Mention service of the Integrum base. The frequency of mentions was calculated for the entire array of federal mass media (201 titles), the Nezavisimaya Gazeta, and 19 northwest regional media. Such calculation made it possible to establish the proportion of documents mentioning the studied object in the total number of documents in Integrum for each year. Each document was counted only once, regardless of the number of mentions of the search words. The analysis of the NG and the RG articles mentioning the Northern Dimension considered the number, context and tone of references to individual countries.

The Northern Dimension as an innovative model of cooperation

The ND initiative was put forward by the Prime Minister of Finland, Paavo Lipponen, in September 1997 and was to become "an integral part of relations between Russian and other neighbours of the EU in the region." In June 2000, the European Council adopted the first "Action Plan for the Northern Dimension with external and cross-border policies of the European Union 2000—2003" which provided for joint measures to develop infrastructure, education and science, healthcare, cross-border cooperation and trade, to promote environmental protection, to ensure nuclear safety and to fight cross-border crime. However, reaching agreement on specific projects turned out to be an impossible task for both parties. Russia was dissatisfied with the form of interaction with the EU, as the country was an object rather than a subject of EU policy, and it had only limited authority in setting a common agenda [18—21]. Practically the only significant achievement of the initial phase of the program was the establishment of the Northern Dimension Environmental Partnership (NDEP) in 2001. It is the most prominent of its currently existing institutions.

Adopted in 2003, the second Action Plan was aimed at specifying previously announced fields of cooperation. It identified five priority sectors: economy, human capital, environment, cross-border cooperation, security and justice, as well as priority actions and two special territories for cooperation, the Arctic

and the Kaliningrad region. However, most of the Russian proposals were not accepted, so the country did not actively participate in its implementation. In 2003, The Northern Dimension Partnership in Public Health and Social Well-being (NDPHS) was established aiming to support cooperation and, among other things, to combat the major communicable diseases.

In 2006, Finland, supported by Russia, initiated fundamental changes in the mode of the program. ND has evolved from the EU policy in Northern Europe to the joint policy of the EU, Russia, Norway and Iceland. Russia expressed its willingness to co-finance the program making the cooperation equal. In 2009 and 2010, new Partnerships were established on Transport and Logistics, and Culture (respectively).

Nevertheless, the active institution-building and best European practices did not lead to a breakthrough in cooperation within the ND framework. Several studies attribute this to the lack of unified funding and governance mechanisms. Initially, the programme's implementation was to be supported by existing financial instruments (TACIS, PHARE, INTERREG, SAPARD, ENPI, et cetera.) [22]. It mainly relied on loans from the European Bank for Reconstruction and Development, the Nordic Investment Bank, and the Nordic Environment Finance Corporation.

The second most noted problem is the duplication of cooperation institutions in Northern Europe (CBSS, BEAC, the Arctic Council, NCM). The ND originally aimed at creating "added value" within these institutions that formally were the actors of the programme. However, in reality, the ND competed with them [21] turning into a kind of "umbrella" with projects already being implemented within other institutes [23]. As a result, the authorities of the northwest border regions chose to engage more actively in the work of those cooperation institutions that had a reliable source of funding in the form of neighbourhood programs.

The third problem of the ND was the strong focus on Russia, which caused frustration among the Baltic States and Poland [21]. They lobbied for an exclusively European instrument that would mainly support the initiatives of the new EU members. Such an instrument appeared in 2009 when the EU Strategy for the Baltic Sea Region (EUSBSR) was approved. It was viewed as a long-awaited opportunity to exclude Russia from resolving "intra-European issues" in the Baltic Sea Region [24]. Besides, to the dissatisfaction of Russia and Finland, the ND was increasingly perceived by the Baltic States as an external pillar of this strategy [25].

Due to the accumulated problems, the ND seemed to be in crisis [26]. After 2014, the situation has even worsened. Although EU sanctions against Russia have relatively little impact on regional and cross-border cooperation, due to the stand of the Baltic States, the regular meetings of the Northern Dimension ministers did not resume. This has considerably narrowed the possibilities for strategic planning and development prospects as well as for receiving international institutions' funding. Negotiations with partners were difficult. There were also

problems with coordinating actions between Russian participants. The Foreign Ministry's task was to provide a conducive political environment for cooperation. However, specific projects were to be proposed and implemented by experts from the relevant departments who often displayed reluctance.

Nevertheless, the program kept working and producing concrete results. It was agreed that Russian funds allocated for the ND were to be spent on the territory of Russia. Almost all of the NDEP projects were implemented in the country. They aimed at protecting the Baltic Sea basin through the construction and reconstruction of wastewater treatment facilities and their elements in the largest cities of Northwest Russia: Syktyvkar, Murmansk, Vologda, Novgorod, Kaliningrad, and others. The largest projects were carried out in St. Petersburg and the Leningrad Region (South-Western Wastewater Treatment Plant, Flood Prevention Facility Complex, et cetera). Partnerships in Public Health and Social Well-Being and Culture were also quite successful. Thus, there is a discrepancy between the results of cooperation and the negative image of the ND developed by the media.

Federal discourse: national interests and European values.

The characteristics and structure of the federal media discourse on the ND largely stem from the most significant features of the policy. Since the ND is just one of the numerous manifestations of complex relations between Russia and the EU, it is mainly viewed in the general context of this relations and has a low mention rate (Fig.).

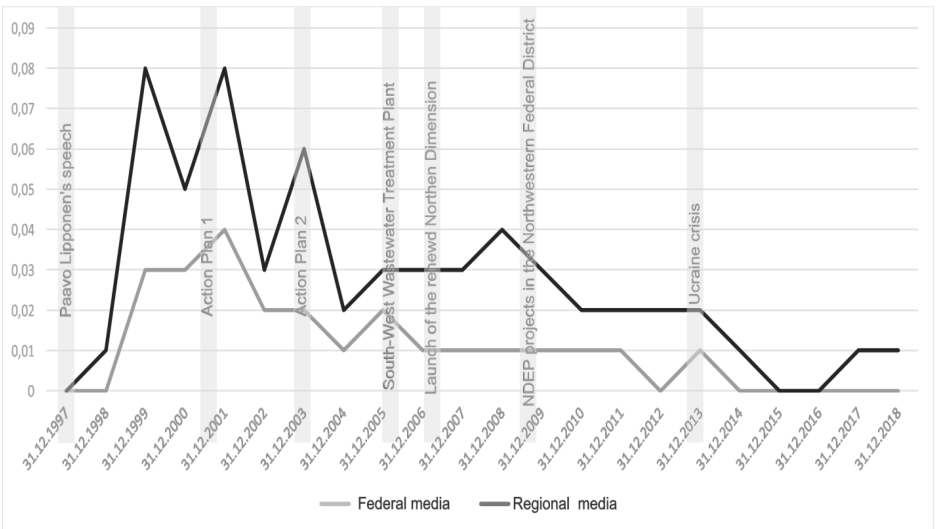

Fig. Relative mention rate of the ND policy in the federal and regional press,%

Another feature of this discourse is that it is relatively low politicised. Therefore, the traditional for Russia division of the discourse into communist, national-patriotic, liberal and official ones, in this case, is hardly relevant. Only a few articles by the Novaya Gazeta and the Sovetskaya Rossiya and none by nation-

al-patriotic the Zavtra mentioned the policy. These media tend to cover topics that are familiar to general readers. The project gained much more attention in the RG and the NG with 47 and 36 articles, respectively. The Rossiyskaya Gazeta presented information on the ND in the coverage of official functions or interviews with officials. Along with reports and interviews, the NG published expert articles, although, for the most part, the discourse coincided with the official one presented in the RG.

The changes in the mention rate of the ND in the federal press correlated with the project's major stages and events. At the first stage, 1997 through 2005, when the ND was the EU policy in Northern Europe, there were three key events: the launch of the project in 1997, the adoption of the first (2000) and second (2003) action plans. During this period, the interest to the ND was peaking.

The second stage (from 2005 to date) is associated with the launch of the "renewed" ND, which has become the joint policy of the EU, Russia, Norway and Iceland in Northern Europe. At this stage, the only significant "marker" event was the signing of the Framework Document and the Political Declaration in 2006. Interest in the project was gradually declining (Fig.).

Discursive events and their changing context created two main storylines for the representation and interpretation of the ND. The main one was based on the wide interpretation of the goals and objectives of the policy initially presented as a project for full-scale EU-Russia cooperation. Within its framework, the ND was seen both as a part of the EU-Russia relations and an "innovative alternative" to them. The other storyline considered the ND as a particular mode of cooperation solving various subregional issues in Northern Europe and the bordering regions of Northwest Russia.

At the first stage, the main storyline dominated both in the official and in the media discourse. The federal media viewed the project's objectives from the perspective of its importance for Russia: the ND aimed at developing economic EU-Russia relations primarily in the fields of infrastructure, energy, and environment[1]. They saw the obvious advantages of the new format in its result- and project-oriented approach allowing to consider the ND as an alternative to the established practice of geopolitics-dependant cooperation outside the discussion on Russia's compliance with "European values" and "standards" of democracy. Strengthening economic integration framework gave hope for the development of the political dimension of the ND[2].

The limited area of the program covering only Northern Europe and Northwest Russia was not inconsistent with the ND's interpretation as a channel for a broad dialogue with the EU. On the contrary, the emphasis was placed on the historical role of Northwest Russia. Once again it had to serve as a "window to

[1] Ten years were not in vain, 2003, *Nezavisimaya gazeta* [Independent Gazette], no. 195 (in Russ.).

[2] Winds of Change in Northern Europe, 2001, *Nezavisimaya gazeta* [Independent Gazette], no. 5 (in Russ.).

Europe"[3], while the country's relations with the closest neighbours in Eastern Europe (Ukraine, Poland and the Baltic States) were quite controversial[4]. The most mentioned in the ND context of the eleven northwest regions were Karelia and the Kaliningrad region (over 70 % of references to Russian territories involved in cooperation). The first region was seen as the "wicket gate to Europe" and the territory important for cooperation with Finland, the second as a potential "laboratory for cooperation" between Russia and the EU. St. Petersburg accounted for no more than 15 % of references. As a result, the ND was seen as a kind of "new Hanseatic League". It was to play the "role of an instrument for the development of the entire Northwest"[5] of the country, contributing to deeper integration of Russia with the European Union.

The neighbouring countries of Northern Europe also had a significant place in the structure of the ND discourse (40 % of references to foreign territories involved in cooperation). General appreciation of their role in the development of cooperation stemmed from several reasons. Firstly, it was a high standard of living and a specific social and economic structure of the countries largely perceived in Russia as an exemplary model. Secondly, they were assigned with the role of a source of innovation for Russia's modernisation[6]. Thirdly, it was their image of a potential investor[7] into and consumer of the goods produced in the Northwestern and Arctic regions of Russia. Finland was the most prominent figure in the discourse. It was the direct initiator of the project guiding Russia "into Europe". The reasons behind the country's "reliability" were successful non-political interactions in the Soviet period and its possible role of the "expert on Russia" in the EU.

However, from the outset, the program was not only highly appreciated but sharply criticised. It came under criticism for the eternal ambiguity of EU-Russia relations showing in the agenda of those years that included the bombing of Yugoslavia, support for Chechen separatism, and difficulties in maintaining the energy dialogue. Such an attitude formed the central idea of critical materials, the distrust in the declared goals and objectives of the ND. A cause for serious concern was the possibility of complete or partial loss of Russian sovereignty over certain northwest territories, as in the course of the program they could become oriented towards neighbouring EU countries. Some ND critics predicted weakening ties between the regions and the federal centre, which in the long run

[3] Partnership with Finland opens us another "window to Europe", 2001, *Nezavisimaya gazeta* [Independent Gazette], no 86 (in Russ.).

[4] Winds of Change in Northern Europe, 2001, *Nezavisimaya gazeta* [Independent Gazette], no. 5 (in Russ.).

[5] Baltic countries need Russia, 2003, *Nezavisimaya gazeta* [Independent Gazette], no. 157 (in Russ.).

[6] Partnership with Finland opens us another "window to Europe", 2001, *Nezavisimaya gazeta* [Independent Gazette], no. 86 (in Russ.).

[7] North Experience, 2001, *Nezavisimaya gazeta* [Independent Gazette], no. 44 (in Russ.).

would jeopardise the country's territorial integrity[8]. Others believed it possible that there would be direct territorial claims made against Russia or that some northwest regions would see intensified separatism. For instance, the "Karelian question» became the topic of the very first article devoted to the ND in the NG[9]. Some also assumed that at first, the ND could contribute to the creation of a "fairly prosperous buffer zone" in border areas, which in the future could receive the status of "self-governing territories akin to the Åland Islands". In such a context, even a joint project with Finland on Karelian land registry was perceived as the preparation for its possible annexation[10]. In the case of Kaliningrad, the ND was also first mentioned when there were concerns expressed over the loss of Russian sovereignty over the territory[11].

Another line of criticism hinged on the lack of tangible results — at first, newspapers explained it by the divergence of interests in most of the programme's components between the key participants and by the resistance of the Baltic States and Poland preparing for EU accession. They stated that there was no progress made even on the energy issue, the most urgent for all participants. The development of oil and gas fields was held up by the lack of European investors, while some EU members did not support projects for the development of transport infrastructure (primarily the North European gas pipeline)[12].

By the beginning of 2002, in the lead-up to the adoption of the second Action Plan, the causes of the ND failures were seen not in individual technical issues but the very foundation of EU-Russia relations. Firstly, the program became increasingly dependent on political claims. Some of them verged on interference in Russia's domestic affairs. Thus, the Chechen factor was "not only leverage over Moscow in negotiations on the economic future of the Kaliningrad region, but also became an obstacle to the implementation of the ND." [13] At the same time, it showed growing resemblance to other institutions of EU-Russia that «looked like roses but felt like thorns". Therefore, the program "was closing down, with its scope narrowing down to solving local environmental problems". [14]

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[8] Aberdeen is seen better, 1999, *Nezavisimaya gazeta* [Independent Gazette], no. 4 (in Russ.).

[9] Ladoga — land of discord, 1998, *Nezavisimaya gazeta* [Independent Gazette], no. 19 (in Russ.).

[10] On the scale of the Northern Dimension, 1999, *Nezavisimaya gazeta* [Independent Gazette], no. 77 (in Russ.).

[11] See for example: Kaliningrad integrate into the EU, 2001, *Nezavisimaya gazeta* [Independent Gazette], no. 29 (in Russ.); Euronakat to Kaliningrad, 2001, *Nezavisimaya gazeta* [Independent Gazette], no. 12 (in Russ.).

[12] Where will the Gazprom pipe lie? 1999, *Rossiiskaya gazeta* [Russian Gazette], no. 249 (in Russ.).

[13] Does Denmark play with flint? 2002, *Rossiiskaya gazeta* [Russian Gazette], no. 205 (in Russ.).

[14] They softly lay us, but sleep hard, 2002, *Nezavisimaya gazeta* [Independent Gazette, no. 213 (in Russ.).

Secondly, experts voiced concerns that "the initiative has produced much weaker results than expected". [15] Due to the lack of specific organisational and financial mechanisms for the implementation of the plans «there was no real progress within the framework of the ND, and this term was more of a political slogan than a guide to action».[16]

At the second stage, the ND was increasingly represented as one of the elements of subregional cooperation in Northern Europe, primarily in the Barents Region and in the Baltic Sea region. This trend is most noticeable in the RG with almost half of the articles of the period devoted to individual issues such as partnership's organisation and funding as well as the implementation of the most successful projects[17]. The discourse was being "regionalised". A large number of articles looked at the construction of treatment facilities in the cities of the Baltic Sea basin (St. Petersburg, Kaliningrad, Pskov and Vologda)[18] and "nuclear" projects in the Barents Sea basin. This new representation of the program as a subregional one explains the general decrease in the number of articles focusing fully or partially on the ND. The NG saw the renewed policy as obviously successful. However, it was noted that although the transformation of the policy into a regional expression of the four Common Spaces gave the ND a new status, it did not provide for a strategic perspective or specific agenda. Uncertain objectives of the Common Spaces' roadmaps have made them a sort of inventory of possible areas of cooperation.[19]

Another important issue was the "value factor" in EU-Russia relations.[20] «Shared values» were one of the key topics of the dialogue between Moscow and Brussels, which was not the case for the bilateral dialogues between Russia and individual EU countries. Most authors recognised that Russia's views of citizens' rights and liberties were the source of disappointment for Europe. The ND was one of the few cooperation institutions with no value discussions held. However,

[15] Northern dimension will help us, 2003, *Nezavisimaya gazeta* [Independent Gazette], no. 27 (in Russ.).

[16] Russia's interests in the North of Europe: what are they? 2001, *Nezavisimaya gazeta* [Independent Gazette], no. 5 (in Russ.).

[17] Heat comes from the North, 2011, *Rossiiskaya gazeta* [Russian Gazette], no. 123 (in Russ.); Friendship in the endless North, 2011, *Rossiiskaya gazeta* [Russian Gazette], no. 280 (in Russ.); Fresh wind from the Baltic, 2013, *Rossiiskaya gazeta* [Russian Gazette], no. 75 (in Russ.); Baltic emotions, 2013, *Rossiiskaya gazeta* [Russian Gazette], no. 122 (in Russ.).

[18] See, for example: Grant into the water, 2008, *Rossiiskaya gazeta* [Russian Gazette], no. 158 (in Russ.); Step out of the vicious circle, 2014, *Rossiiskaya gazeta* [Russian Gazette], no. 74 (in Russ.); They inherited before us — we clean, 2015, *Rossiiskaya gazeta* [Russian Gazette], no. 246 (in Russ.).

[19] Without strategic vision, 2006, *Nezavisimaya gazeta* [Independent Gazette], no. 270 (in Russ.).

[20] The media has paid little attention to specific "Nordic values", unlike the scientific community that has been discussing the issue extensively (for details, see [27])

this does not mean that the question of values did not affect it. As a result, neither the status of the ND nor the equality of its participants allowed for discussing any significant issues bypassing the issue of values[21].

Due to the "discussion on values", negative connotations in the discourse affected a much wider range of countries than in the previous period. Sweden and Lithuania were considered primarily as the initiators of the Eastern Partnership project, which was regarded as hostile to Russia[22]. It was Sweden that most often raised the issue of Russia's compliance with "European values". The attitude to Norway was also mostly negative as in the discourse it has turned from a "stronghold of northern values" into a "stronghold of the United States in the Arctic".[23]

At the same time, attitude to Finland remained positive as it was seen as a partner seeking to maintain pragmatic cooperation with Russia even in the context of geopolitical turbulence. The RG authors believed that it was Finland that having put its negative past with the USSR behind it could manage to persuade European countries that depoliticised cooperation with Russia was beneficial.[24]

Viewing the ND in the general context of Russia's relations with the EU, Finland and other individual European countries made the major difference between federal and regional discourse.

Regional discourse on the Northern Dimension

The northwest regional media paid much attention to the ND, unlike the other foreign affairs matters. Naturally, the number of articles on the ND in regional media was 2—4 times higher than that in the federal ones (see Fig.). Northwest was a platform for cooperation; both regional authorities and non-profit organisations here were the ND actors and major lobbyists for cross-border cooperation development. Most regional media saw international financial support for acute local problems to be the major motive for it. They also saw Russia and its regions as aid recipients rather than full participants in cooperation. Such an attitude did not involve the strategic vision of the ND or understanding of the role of the region in subregional cooperation.

The early 2000-s saw the change in attitude to the ND. Media of Karelia (the Karelia-Petrozavodsk), Saint-Petersburg and the Leningrad region (the Delovoy Peterburg (Business Petersburg), the Kaliningrad region (the Kaliningradskoe nezavisimoe informatsionnoe agentstvo (Kaliningrad independent information

[21] Russia is trying to keep in the "value" field, 2008, *Nezavisimaya gazeta* [Independent Gazette], no. 77 (in Russ.).

[22] See, for example: Buffet menu, 2009, *Nezavisimaya gazeta* [Independent Gazette], no. 129 (in Russ.).; Swedish season in the EU, 2009, *Nezavisimaya gazeta* [Independent Gazette], no. 132 (in Russ.).

[23] See for example: North discord 2011, *Nezavisimaya gazeta* [Independent Gazette], no. 215 (in Russ.).

[24] See for example: Forest, shipyards and technology parks 2009, *Rossiiskaya gazeta* [Russian Gazette], no. 99 (in Russ.).

agency) and the AIF v Kaliningrade (AIF in Kaliningrad)) discussed the goals and objectives of the project following the views of local authorities. Saint-Petersburg media traditionally considered the city to be the "window to Europe", and welcomed the regional authorities' idea of it being the Russian "capital of the Northern Dimension".[25] Kaliningrad media fitted the ND's goals and objectives into the framework of the idea of creating "the laboratory for Russia-EU cooperation".

Karelian media promoted similar ideas. Following V. Shliamin, the local minister of economic affairs, they discussed the need for regional cross-border cooperation. As neighbouring Finland was the initiator for the ND, Karelia hoped for special treatment and for turning the practice of cooperation with it into a model for other Russian border regions and the EU. The transport infrastructure development proposed in the first action plan raised hopes for the expansion of the transit potential of the republic, as well as for integrating new mineral deposits into the economy. Finally, according to local experts, by becoming a part of the emerging "belt of good neighbourliness", Karelia could benefit from joint spatial planning without renouncing the changes in the existing state border regime[26].

However, not all local experts shared this position dominating the regional discourse. Following the federal media, some local articles voiced concerns for Finland's possible territorial claims[27], while others expressed dissatisfaction with the lack of practical focus of the program[28] and the inequality of partners[29].

Since 2005 there have been no analytical publications on the ND in the regional media. The program was mentioned in the local context in articles on regional environmental issues or the reconstruction of urban water supplies. The main focus was on cross-border cooperation programs, which, unlike the ND, received reliable financing tools and comprised of multiple projects with specific outputs.

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[25] The ND initiative has been the subject of much debate in St. Petersburg's academic community, which, however, had no apparent effect on discourse in the media in question (for details, see [27—29]).

[26] See for example: Shlyamin, V. 1999, Window to Europe through Karelia, *Petrozavodsk*, no. 39 (in Russ.); Shlyamin, V. 1998, To the concept of social economic development of the Republic of Karelia for 1998—2001, *Petrozavodsk*, no. 48 (in Russ.); Gnetnev, K.V. 2001, Spatial thinking. Cross-Border Cooperation: A Political Aspect, *Petrozavodsk*, no. 11 (in Russ.).

[27] Farutin, A. 2003, What bitter experience teaches us... *Petrozavodsk*, no. 4 (in Russ.); Farutin, A. 2003, The borders are unbreakable. The Karelian question haunts, *Petrozavodsk*, no. 10 (in Russ.); Backman, J. 2003, Reasons for creating a "buffer zone", *Petrozavodsk*, no. 79 (in Russ.); Farutin, A. 2003, Partnership experience in three degrees. What will we share with the Finns — the "common pie" of resources or the skin of an unkilled bear? *Petrozavodsk*, no. 11 (in Russ.).

[28] Mosunov, A. 1999, Euroregion "Karelia": questions remain, *Petrozavodsk*, no. 69 (in Russ.).

[29] Matchmakers for the Northwest, 2001, *Petrozavodsk*, no. 67 (in Russ.).

Conclusion

Many works on critical geopolitics note the influence of discourse on political decisions. The cross-border regions created "from above" in Northwest Europe with the participation of Russia proved to be resistant to geopolitical crises and have existed for almost 30 years. Various international programs have resulted in the formation of partnership networks with mutually beneficial cooperation established between them. Thus, the cross-border regions that have arisen as a result of political decisions are gradually becoming "functional". At the same time, the experience of the ND shows that the boundaries of such regions are mobile, vague and depend on the general political climate and the interest of member countries in the activities of a regional organisation.

Determining the influence of the discourse on political decisions on the ND program in its early years was not easy due to its multidimensional nature. It was not always clear which or whose discourse was dominating. To date, the ND has almost completely disappeared from the federal media more interested in much larger issues: the "eastward shift", relations between Russia and the EU, Russia and the West in general.

The ND discourse reflects the complex functional and institutional nature of the program. It has always been part of a complex set of relations between Russia and the EU. For this reason, the ND and the EU relations' discourses have much in common, including their evolution from "romanticism" to pragmatism, from association to sectoral cooperation, from the motives of Europeanization to sovereignty and "turning to the East».

At the same time, throughout its existence, the ND was an "alternative channel of communication" between Russia and the EU which had to lead to a breakthrough in relations and provided the basis for full-scale cooperation. Due to such a perception, the expectations of the ND soared, leading to disappointment with its mediocre results. This discrepancy between the expectations formed by the discourse and the results of cooperation can be a reason behind the common belief that the project is in crisis.

However, if there is a crisis of format, its nature is also discursive in many respects. Since 2006, the ND has officially become the regional expression of the four Common Spaces. Such an approach could at least partially explain the difference between interaction within the framework of the ND partnerships and cooperation in four regional councils, as well as the basis for uniting partnerships. Nowadays, national institutions framing the ND policy by setting guidelines for other levels are concerned with general issues of EU-Russia relations, security, energy, et cetera. However, it is the contacts at regional and local levels, as well as between individual participants in cooperation, that play a key role in strengthening trust between the parties, trust that is based on rational choice, common socio-cultural background and personal relations [27]. Trust, in turn, is essential for sustainable cooperation.

The crisis in the-Russia relations has not only buried the idea of four Common Spaces, but it has also frozen cooperation in the highest governing bodies of the ND. As a result, national and supranational actors suffer from strategic uncertainty, and the program turns into a set of weakly connected institutions.

This is not to say that the ND has no future. However, it depends on the general prospects of EU-Russia relations. The program is valuable now as together with other regional cooperation programs it creates a "safety net", which, on the one hand, does not allow interstate relations to fall below a critical level, and on the other hand, serves as a platform for informal dialogue maintaining a positive interaction potential, a pillar for future political rapprochement.

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RURAL AREAS OF RUSSIA'S NORTH-WEST BORDERLAND: PROBLEMS AND DEVELOPMENT PATHS

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This article focuses on the rural areas of Russia's North-West borderlands, particularly, the municipal districts and towns that are closest to the national border. The study aims to identify problems in the development of these territories and provide solutions to them. The methodological framework employed is the neo-endogenous approach, which suggests the maximal multifunctionality-driven use of internal resources, bottom-up initiatives supported by the authorities, extensive use of innovations, the Internet, and scientific knowledge. The study takes into account and assesses the heterogeneity of rural areas by producing a typology of districts built on the structure of agricultural production, using the Hall-Tideman index.

The study used several indicators to identify the role and place of border districts in their respective regions. Three types of districts were distinguished according to the structure of agricultural production: districts dominated by agricultural organisations, districts dominated by small farms, and mixed-type districts. Cross-district differences in output dynamics were described. The socially essential functions of rural areas and the economic entities performing those functions were identified. The analysis of the recreational resources of border districts helped to determine the directions in which the transformation of rural areas into consumer spaces was moving. The major development trajectories of rural areas were plotted using the non-endogenous approach and differentiated by the district types. The rural areas of the North-West borderlands were confirmed to have a unique and diverse resource potential that is sufficient to ensure their sustainable development based on the non-endogenous approach.

Keywords:
rural development, functions, multifunctionality, geographical image, image, brand, neo-endogenous approach

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Introduction

Most rural areas of border districts are on the periphery, distant from the district centres or large industrial hubs. These areas have a low population density and their economic engagement is limited. They differ from mainland territories in various ways, including in terms of demography. Most border districts are depressed despite their numerous development resources.

A spate of recent articles [1—5, and others] has studied the borderlands of the Russian Federation. Most of these works, however, consider the phenomenon at the meso-level and thus do not give a full picture. Few works examine the development of rural border areas at the micro-level, particularly, in North-West Russia. As for the other regions, the literature focuses on transboundary cooperation mechanisms [6; 7].

Nowadays, when intergovernmental relations are complicated, and Russian borders are losing their contact functions, transboundary cooperation can hardly be considered as a factor in the development of rural border areas. Transboundary region-building at Russian borders is occurring rather slowly [8, p. 86]. For this reason, the study concentrates on the search for internal micro-level factors affecting the development of borderlands. To this end, it employs a range of available research approaches.

Rural studies are carried out in Russia by experts in various fields, including agricultural economists [9—15], sociologists [16—20], and social geographers [21—24].

Agricultural economists link the problems of rural development with agricultural production, while sociologists link them with the formation of human and social capital. At the same time, geographers view rural areas through the lens of settlement patterns evolution paying attention to urban residents' exurb gardening communities, rural recreation, and 'dacha studies' [21—23]. An interesting case is *Ugorskiy Proekt* (the Ugric Project), which monitors rural life with immersion in the social environment of the village [22]. Many geographical studies are interdisciplinary [17; 20; 22], which proves to be beneficial. Nevertheless, the majority of rural studies are discipline-specific with specialists in different fields using different methodological approaches as well as incompatible terminological and conceptual frameworks.

Rural development is systemically studied across the world with a plethora of articles published on the subject. The *Rural Planning and Development* collection provides an overview of 'the key concepts of rural development with

a broad range of representative published sources included' [25]. In recent decades, international literature has discussed the paradigm shift in rural development and the search for new avenues within the discipline [26]. This trend has been, to some extent, embraced by Russian researchers [15; 16]. Many of them insist on replacing the exogenous approach, which relies on external factors, with the endogenous one, which makes maximum use of local resources. The latter places emphasis on spatial planning rather than on industrial rural development, with all that that entails [27].

The scientific search for new avenues for rural development continues. The earlier concept of non-endogenous development is being revised [28]. Special attention is being paid to place branding [29], the multifunctionality of rural areas [30; 31], the 'rural web' concept [26; 32], and the role of social capital in rural development [32; 33].

The literature also considers other aspects of rural development addressed below. Emphasis is put on agricultural production, which remains the key industry in the territory that is home to 80 % of the population of the north-western borderlands.

This study aims to identify problems in rural development in Russia's north-western borderlands and search for ways to solve them in the near future.

It aims to achieve the following objectives:

1. to determine how border districts perform on selected key indicators at the regional level;
2. to identify the socially significant functions of rural areas;
3. to explore the inhomogeneity of rural areas as regards their production performance;
4. to search for marketing decisions aimed to unlock the non-productive functions of rural areas;
5. to outline promising avenues for rural development in the near future.

Methodology

The study employs a non-endogenous approach to rural development, which suggests bottom-up mobilisation of border districts' internal resources and top-down support for local initiatives. It views rural areas as consumer spaces, employs the concepts of multifunctionality and place branding, as well as exploits innovations, the Internet, and scientific knowledge.

The study relies on Rosstat data, the author's previous research results, information available online, and theoretical findings of Russian and international experts.

In describing agricultural production inhomogeneity across rural areas, the study uses a district typology based on the Hall-Tideman index measuring the concentration of agricultural production for agricultural organisations, farms, and private households [34].

Another method employed along with the method of typology is the generalisation. The resultant index, which demonstrates the effect of inhomogeneity on rural development, comprises the coefficients of average annual agricultural production growth rate in constant prices.

North-western border districts and their regional role

The rural borderlands of Russia's North-West comprise twenty-nine districts of five regions (the Republic of Karelia and the Kaliningrad,[1] Leningrad, Murmansk, and Pskov regions) that border on Norway, Finland, Estonia, Latvia, Lithuania, Poland, and Belarus.

Border districts account for over one-third of the area and 24 % of the population of their regions. Their population density is below the regional average (table 1).

Table 1

The regional ranking of border districts by area, rural population, and its density, as of January 1, 2019

Russian region	Border districts as a proportion of the regional total,%		Rural population density, people per km^2	
	Area	Population	Region	Border districts
Republic of Karelia	41.9	28.1	0.7	0.4
Kaliningrad region	50.3	40.6	14.8	12.0
Leningrad region	15.7	15.3	7.9	7.6
Murmansk region	37.9	42.9	0.4	0.4
Pskov region	27.3	26.8	3.3	3.2
Total	34.7	24.0	2.6	1.8

Prepared by the author based on Rosstat data.[2]

[1] I do not consider the Zelengoradsk and Mamonovo distrcits of the Kaliningrad region because they have some special features.

[2] Rosstat. Municipal database. URL: http://www.gks.ru/free_doc/new_site/bd_munst/munst.htm (access date: 08.08.2019).

The Kaliningrad region stands out, as its border district accounts for half of its territory and over 40 % of its rural population. The region's rural population density is the highest in Russia's North-West.

As to agricultural production, the ranking of border districts is determined by arable land, crop area, and agricultural output (table 2).

Table 2

The share of border districts in the regional arable land area, crop area, and agricultural production across all types of economic entities,%

Region	Arable land		Crop area		Agricultural output	
	2006	2016	2006	2016	2008	2017
Republic of Karelia	31.9	23.4	22.1	6.2	18.7	17.4
Kaliningrad region	58.3	63.2	61.9	65.5	48.4	50.7
Leningrad region	18.4	16.2	17.7	16.7	15.7	17.0
Murmansk region	92.4	44.8	47.1	47.7	59.4	59.9
Pskov region	26.5	20.8	20.9	19.1	20.0	56.6
Total	32.9	29.4	35.2	33.8	24.9	32.8

Calculated by the author for 2006 and 2016 based on data from[3] and for 2008 and 2017 based on data from[4]

[3] The results of the 2006 Russian agricultural census. The Republic of Karelia. URL: http://krl.gks.ru/wps/wcm/connect/rosstat_ts/krl/ru/census_and_researching/census/national_census_2006/score_2006/35; The results of the 2016 Russian agricultural census. The Republic of Karelia. URL: http://krl.gks.ru/wps/wcm/connect/rosstat_ts/krl/ru/census_and_researching/census/national_census_2016/score_2016; The results of the 2006 Russian agricultural census in the Kaliningrad region. URL: https:// kaliningrad.gks.ru/All_Russian_Agricultural_Census_2006; The final results of the 2016 Russian agricultural census in the Kaliningrad region. URL: https://kaliningrad.gks.ru/All_Russian_Agricultural_Census_2016; The results of the 2006 Russian agricultural census. The Leningrad region. URL: http://petrostat.gks.ru/wps/wcm/connect/rosstat_ts/petrostat/ru/census_and_researching/census/national_census_2006/score_2006; The final results of the 2016 Russian agricultural census in the Kaliningrad region. The Leningrad region. URL: https://petrostat.gks.ru/folder/33448; The results of the 2006 Russian agricultural census. The Murmansk region. URL: http://www.gks.ru/news/perepis2006/totals-osn.htm; The final results of the 2016 Russian agricultural census in the Kaliningrad region. The Murmansk region. URL: http://murmanskstat.gks.ru/wps/wcm/connect/rosstat_ts/murmanskstat/ru/census_and_researching/census/national_census_2016/score_2016; The results of the 2006 Russian agricultural census in the Pskov region. URL: https:// pskovstat.gks.ru/vshp2006; The final results of the 2016 Russian agricultural census in the Pskov region. URL: https://pskovstat.gks.ru/vshp2016.

[4] Rosstat. The municipal database. URL: http://www.gks.ru/free_doc/new_site/bd_munst/munst.htm (access date: 08.08.2019).

In the regions under study, border districts account for about a third of arable land, crop area, and agricultural output in their respective regions. The Kaliningrad region makes the greatest contribution to this proportion. It comprises 63 % of all arable land and a third of agricultural output in North-West Russia.

When comparing tables 1 and 2, it is clear that, while home to 24 % of the rural population, border districts produce a third of regional agricultural goods. Therefore, rural border areas have an important role in regional agricultural production. The indices demonstrate a tendency towards a growing contribution of border districts to agricultural output in their regions and a reducing share of the arable land and crop area. At the same time, land use is becoming increasingly efficient.

The multifunctionality of rural areas

The term 'place function' was coined by the eminent geographers Aleksey Mints and Vladimir Preobrazhensky in 1970. They defined the 'place function' as a part of geographical space that has or can have a certain function in the life of society and thus meets, or is capable of meeting, a certain need of a society, its part, or a person [35, p. 120]. According to Mints and Preobrazhensky, a place can perform a variety of functions either simultaneously or consecutively [ibid], i.e. it can be multifunctional.

In the USSR, the idea of multifunctionality was first applied to rural areas in 1980 by Tatyana Zaslavskaya, Rozalina Ryvkina, and other researchers. They proposed to distinguish the functions of population replacement and control over the territory along with the production function of rural areas [36].

The contemporary non-endogenous approach to rural development uses the concept of multifunctionality when exploring rural areas: these territories are viewed from the perspective of productive and social functions. At the same time, rural areas are considered as consumer spaces, whose products have use-value and can be sold.

Russian researchers have considered in detail the problem of agriculture and rural areas [11—13]; one of the publications summarises the existing approaches [15, p. 7].

In this research, rural border areas are deemed to have production, demographic, social, recreational, and ecological functions; they also fulfil the functions of control over the territory, of maintaining natural and cultural landscapes, and of preserving the historical and cultural heritage in rural areas.

For borderlands with border-zone restrictions on movement and economic activities, the control function has both special features and a particular significance.

The agricultural production function of rural areas is fulfilled by the traditional categories of economic entities: agricultural organisations (AO), farms (F), and private households (PH); whereas the forestry production function is carried out by logging companies (LC). This function is also performed by business structures across various fields of material production that rely on local resources.

Forest management units (FMU), forestry enterprises and conservation areas (CA) fulfil a range of important functions: control over the territory, maintenance of natural and cultural landscapes, as well as the recreational and ecological functions (table 3).

Table 3

The distribution of rural area functions by economic entities

Function	AO, F, PH, etc.	LC	FMU, FE, CA	Municipal organisations	Business structures
Production	+	+	–	–	+
Demographic function	–	–	–	+	–
Territory control	+	–	+	+	–
Natural and cultural landscape maintenance	+	–	+	–	–
Social function	+	+	+	+	+
Historical and cultural heritage preservation	–	–	–	+	–
Recreation	+	–	+	+	+
Ecological function	+	–	+	+	–

The performance of the production function by economic entities depends on both the demand for the relevant products and the availability of resources in rural areas.

The production function of rural areas. Border district differentiation

To study the production function of rural areas, there was a typology of border districts developed based on production concentration indices for each economic entity type and the structure of agricultural production.

This typology is the key to evaluating the situation and providing a rationale for rural development options. Each of the categories has a particular set of characteristics: scale, intensity, marketability, and production competitiveness. The concentration of a category in a certain territory determines how people live and how production and the social sphere are organised there.

Calculation of the Hall—Tideman index and generalisation of the results allowed to identify three types of districts depending on the parameters of agricultural production: AO-dominated (type I); F and PH-dominated (type II); mixed (type III).

This district typology shows that the areas of rural territories and the rural population are divided almost in equal proportions between types I and III, which account for 31.5 % and 84.5 % of the total respectively (table 4).

Table 4

A typology of north-western border districts by agricultural production structure as of January 1, 2019*

District type	Number of districts	Average rural population density in the group, people/km^2	Area		Rural population	
			1,000 km^2	Proportion of the total,%	1,000 people	Proportion of the total,%
I	6	7.5	15.1	14.0	113.5	41.6
II	8	1.5	76.0	70.7	42.5	15.6
III	10	7.1	16.4	15.3	117.0	42.9
Total	24	2.5	107.5	100	273.0	100

*The Murmansk region is not taken into account

Prepared by the author based on data from[5].

Agricultural production in the districts under study has different development trends (see figure).

[5] Rosstat. The municipal database. URL: http://www.gks.ru/free_doc/new_site/bd_munst/munst.htm (access date: 08.08.2019).

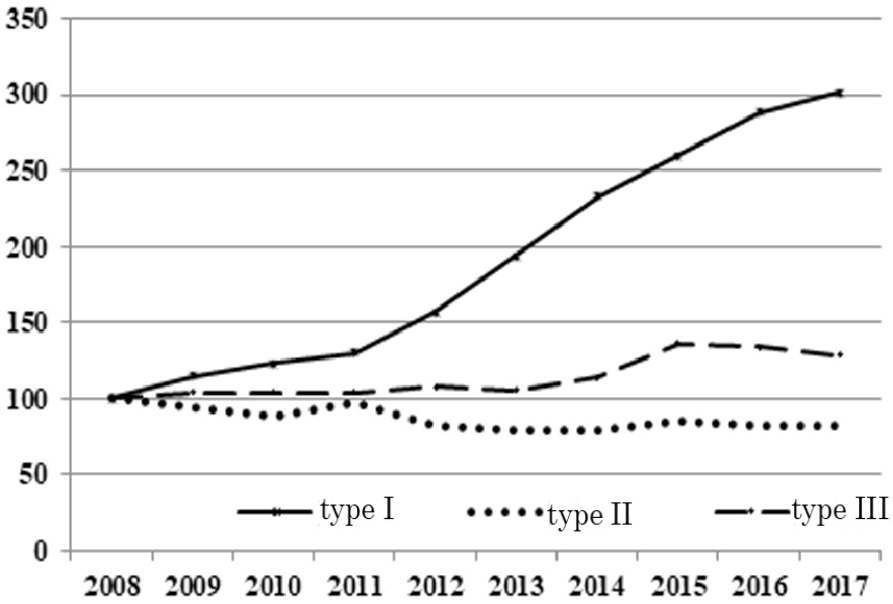

Fig. Changes in agricultural output across all the categories of economic entities in North-West Russia by border district types identified based on production structure, 2008 = 100 %

Prepared by the author based on data from [6].

In type I districts, agricultural output increased threefold over the study period. Their contribution to the borderland total shifted by 21 percentage points, whereas the specific weight of type III and II districts decreased by 5 percentage points.

Most of the output growth in type I districts was accounted for by large holding companies specialising in pig breeding and fattening as well as egg production. Unfortunately, high output growth rates achieved through economies of scale have an adverse effect on rural areas as production concentrates locally.

1. Large livestock breeding facilities harm the environment and create an alarming social situation.

2. Measures to prevent outbreaks of infections (bird flu, African swine fever) include slaughtering private households' livestock near large agricultural facilities; sustainable development of rural areas depends heavily on private households.

[6] Rosstat. The municipal database. URL: http://www.gks.ru/free_doc/new_site/bd_munst/munst.htm (access date: 08.08.2019).

3. In the North-West, large pig and poultry breeding companies use concentrated feed with most of its grain components produced outside the region. Local lands are not involved in economic circulation; this impedes the development of contiguous rural areas.

Agricultural production in type II districts, most of which are found in the Republic of Karelia, is declining. Without targeted measures, small farms, which constitute the core of agricultural production and have a prominent role in creating jobs and providing rural residents with incomes, will continue to reduce their output.

In type III districts, agricultural production is slightly increasing; most of this growth is accounted for by the agricultural organisations that are the backbone of private households and farms. The literature suggests that AO-dominated type III areas are associated with greater development opportunities for smaller economic entities than type II districts, where AOs are almost absent. A rational combination of AO, F, and PH in the production structure creates good conditions for rural areas to perform production functions as well as generates an environment for the development of these territories.

The border districts of the Republic of Karelia and the Murmansk and Pskov regions have a low potential for development through agricultural production. These districts, however, have various resources that can transform under certain conditions into a powerful impetus for rural development attained by implementing non-productive functions.

Non-productive functions of rural areas

Most non-productive functions involve the same resources and organisations. The recreational function, which includes spa treatment, tourism, amateur sports, amateur fishing, dacha recreation and gardening, takes advantage of the consumer properties and/or historical and cultural objects.

Most natural tourist attractions are conservation areas, which perform the ecological function as well as the functions of natural landscape maintenance and of control over the territory. Rural areas are home to many historical and cultural objects, some of which are cultural heritage sites (CHS).

The key function is the recreational one. It binds together all non-productive functions and introduces natural and historical-cultural values into the consumer space. Therefore, this function should utilise the geographical image of a territory.

When discussing a territory as a consumer space, contemporary authors (particularly economists) employ the concepts of image and brand without exploring the geographical image.

However, such studies should adopt the following scheme: the geographical image → image → brand.

In responding to the absence of the first element, Irina Vazhenina proposed a category of 'territorial individuality', which she defines as 'the general sum of characteristics that distinguish one territory from another' [37, p. 149].

In my opinion, this new category is superfluous since it falls within the scope of the concept of the geographical image, which is defined as the sum of characteristics that clearly and concisely describe a territory and are expressed in signs, symbols, stereotypes, and key ideas [38; 39].

Vazhenina defines the place image as a 'totality of feelings and figurative, emotional ideas that people have about nature, climate, history, ethnography, socio-economic, aspects, politics, mentality, and other characteristics of that territory' [37, p. 154].

In their definition of the image, Ovchinnikov et al. [40, p. 102] refer to qualitative characteristics of a territory (along with its distinctive features). This understanding is very close to the concept of geographical image accepted in the general system of place branding.

Some works identify the geographical image with the image [41]. This approach does not seem justified.

The definitions of the geographical image and the place image suggest that these concepts are not to be confused: the former reflects an objectively described reality, whereas the latter is an IT-induced subjective perception of that reality. The place image does not turn a territory into a consumer space albeit contributes to such a transformation.

The next stage is the place brand, which is a 'generalised image that is clearly identifiable among other territories; it is based on actual advantages positioned in the image field' [40, p. 103].

This and other definitions suggest that the brand is a product of a positive place image that reflects the originality and uniqueness of a territory and serves as a stereotype affecting the consumer's choice of tourism, recreation, and other services.

The north-western border districts boast substantial natural and historical-cultural resources. These resources are necessary for rural areas to perform non-productive functions, develop image-building tourism and recreation infrastructure, create place brands, and generate consumer spaces that reflect certain aspects of the geographical image of rural areas (Table 5).

Table 5

Conservation areas and cultural heritage sites in the rural areas of Russia's north-western borderlands

Rural areas	CA	CHS[1]
	total/including those of federal significance	
Republic of Karelia, total	32/7	373
including Kalevala district	4	23
Kostomuksha district	3/2	40
Lakhdenpokhya district	7/1	35
Loukhi district	3/2	40
Muezerskoe district	4/1	57
Sortavala district	4/1	39[2]
Suoyrvi district	7	139
Leningrad region, total	15/1	171/6
including Vyborg district	12/1	66/4
Kingisepp district	3	82/2
Slantsy district	—	23
Murmansk region, total	29/3	26/1
including Kandalaksha district	9/1	1/1
Kovdor district	2	—
Kola district	11/1	6
Pechegsky district	7/1	19
Kaliningrad region, total	18/1[3]	42[4]
including Bagrationovsk district	5	11
Krasnoznamensk district	1	—
Neman district	1	5
Nesterov district	7	13
Pravdinsk district	—	12
Slavsk district	4	1
Pskov region, total	11/3	475/32
including Gdov district	4/2	60/5
Krasnogorodsk district	—	16
Nevel district	1	73/2
Palkino district	1	37/2
Pechory district	3	210/22[5]
Pytalovo district	1	31
Sebezh district	1/1	36/1
Usvayty district	—	12

[1] Archaeological heritage sites are not taken into account; [2] Valaam Island and the Valaam Archipelago, which are home to 260 CHS, ten of them are of federal significance; [3] The Curonian Spit is part of the Zelenogrask district; [4] In the Kaliningrad region, war graves of regional significance were not considered as CHS; [5] Excluding the nineteen elements of the architectural ensemble of the Pskov-Pechory Monastery.

Prepared by the author based on data from[7].

[7] The state register of cultural heritage sites (historic-cultural monuments) of the peoples of Russia. URL: https://kartarf.ru/dostoprimechatelnosti_(access date: 10.08.2019); The list of conservation areas of Russia. URL: http://oopt.aari.ru/oopt (access date: 10.08.2019).

Table 5 provides a general idea of the non-productive image of rural areas. The aggregate measures relating to natural and cultural-historical objects say nothing about the inner inhomogeneity of the latter. The structuring of aggregate measures makes place images even more multi-faceted.

Apparently, the geographical image of rural areas comprises both zonal and azonal phenomena. As a rule, the former are of natural and the latter of historical-cultural origin. This provided the basis for juxtaposing the geographical images typical of border districts with current image characteristics and thus facilitated the first step towards analysing emerging place brands. Table 6 shows some of the results obtained.

Table 6

The geographical images, image-building objects, and emerging brands of the borderland rural districts of North Karelia and Lake Peipus districts in the Pskov region

Geographical image	Image	Place brand
Loukhi, Kalevala, Kstomuksha, and Muezerskoe disrcits, Republuc of Karelia		
Uplands with mountain regions up to 300—500m and higher, covered with forests and northern taiga-vegetation. The region's many rivers have numerous rapids and waterfalls. There are plenty of small, medium, and large lakes as well as remarkable historical villages.	The Kalevala, Paanajärvi, Kostomuksha national parks; conservation areas; protected marshlands, river rapids; the rivers Keret and Pistojoki; Lake Kuyto; rune-singing villages; the Kalevalatalo ethnocultural centre	Ecological; ethnographic; water and agricultural tourism; fishing and hunting
The Gdov and Pechory districts of the Pskov region		
The territories bordering Lake Peipus in the west and east; mixed forests with natural sites, historical fortifications, religious monuments, and recreational and agricultural tourism infrastructure	Lake Peipus; the Remdovsky conservation area; natural sites: the Sorokovoy forest, the Izborsk-Malskoe valley, Semsk Island, the Western shore of Lake Peipus, the Izborsk open-air museum; the Izborsk and Gdov fortresses, the Malskoe Monastery, the Truvor fortress, the Trutnevo Caves, the Chernovo and Khalalhalnya manors, the Seto Museum, and an eco-farm	Historical and cultural; religious; ethnographic; agricultural tourism; family tourism; dacha-focused recreation

Prepared by the author based on[8].

[8] The state register of cultural heritage sites (historic-cultural monuments) of the peoples of Russia. URL: https://kartarf.ru/dostoprimechatelnosti_(access date: 10.08.2019); The list of conservation areas of Russia. URL: http://oopt.aari.ru/oopt (access date: 10.08.2019).

Many borderland districts of Russia's North-West (both those included in Table 6 and those not included) have a sufficient image potential to fulfil the non-productive functions of rural areas causing them to evolve into consumer spaces with specific place brands.

Dacha-focused recreation may have an important role here. Its principal objects are dacha communities and villages with urban residents' 'second homes'. The data of the 2016 Russian agricultural census (2016 RAC) suggest that, in the north-western borderlands, gardening and dacha communities are strongly localised (table 7).

Table 7

Key characteristics of non-profit gardening and dacha communities in Russia's north-western borderlands

Border district	Number of communities, units	Total area, ha	Including that in private use	Number of land plots in private use, units	Average plot area, ha
Non-profit gardening communities					
Vyborg	382	6477.6	5226.4	60074	0.087
Kingisepp	71	1678.9	1375.9	19110	0.072
Bagrationovsk	53	1600.7	1239.9	16103	0.077
Total	506	9757.2	7842.2	95287	0.082
Oter	96	1048	742.6	9104	0.082
Total	602	10805.2	8584.8	104391	0.082
Non-profit dacha communities					
Vyborg	164	3124.7	1440.8	6860	0.210
Kingisepp	20	198.7	58.6	170	0.341
Gdov	60	616.1	501.5	135	3.715
Total	244	3939.5	2000.9	7,165	0.279

Prepared by the author based on[9].

[9] The final results of the 2016 Russian agricultural census in the Kaliningrad region. URL: https://kaliningrad.gks.ru/All_Russian_Agri cultural_Census_2016 (access date: 10.08.2019). The final results of the 2016 Russian agricultural census in the Leningrad region. URL: https://petrostat.gks.ru/folder/33448 (access date: 10.08.2019). The final results of the 2016 Russian agricultural census in the Pskov region. URL: https://pskovstat.gks.ru/vshp2016 (access date:10.08.2019).

The dacha and gardening infrastructure is localised in the Vyborg and Kingisepp districts, which are home to 75 % gardening and 98 % dacha plots of the north-western borderlands. There are also dacha communities in the Gdov district of the Pskov region. Most of them fall into the premium category with two-three members per community and 3.7 ha per member. In the Kaliningrad region, gardening communities concentrate near the regional capital, in the Bagrationovsk district, whose gardening plots comprise 86 % of the regional total.

Borderland districts account for 28.6 % of dacha recreation objects in the Leningrad and 100 % in the Pskov region. When allowing for the area, the localisation coefficients are 1.82 and 2.88.

The area of dacha plots in border districts accounts for 15.1 % of the regional total in the Leningrad region, 17 % in the Kaliningrad region, and 8.7 % in the Pskov region. The localisation coefficients are 0.96, 0.34, and 0.25 respectively.

The north-western borderlands have pronounced areas of dacha-focused recreation. Most other recreation activities are also localised in these limited territories. Most rural areas remain dacha-free, probably, because of the traffic and economic activity restrictions of border zones. Another reason may be the remoteness of borderlands from urban agglomerations.

Major rural development trajectories

Rural development through local resources is possible when these resources (land, forests, recreation infrastructure, etc.) are available to be commercialised by the local population. To this end, it is necessary to establish local communities according to the national law on municipalities. The existing legal framework should be extended to include the whole range of rural economic activities with corresponding local resources ascribed to each activity.

A sine qua non is social capital, that is, the 'ability of individuals, groups, organizations and institutions to engage in networks, cooperate, employ and use social relations for the common purpose and benefit' [32, p. 87]. The formation of social capital in mostly depressed rural areas is a difficult but solvable problem. This hypothesis has been proven in practice by Gleb Tyurin in the Arkhangelsk region, the Republic of Komi, and other Russian regions [42].

The formation and acceleration of social capital require a greater engagement of local community foundations (local initiative support funds) as well as Internet and mobile access throughout rural areas. The formation of social capital and

creation of an environment favourable for solving some other problems of rural development will contribute to the emergence of rural webs, which bring together companies, organisations, rural communities, entrepreneurs as well as research, academic, and public institutions active in various fields in the territory of border districts. Information exchange, search for innovations and partners, the creation of a place image, and the promotion of a place brand within a single information space makes it possible to reduce substantially the transaction costs associated with the incompleteness of information and its dispersion across websites representing various sectors of the border districts' rural economy.

An important tool for the development of remote rural areas of border districts is local production networks (local markets) with short supply chains. They enable farms, individual entrepreneurs, private households, small and medium agricultural organisations, and co-operatives to sell their produce.

When applied to a concrete border district type, general trajectories of rural development assume specific characteristics.

In *type I districts*, there is a need for environmental protection and conservation measures. It is necessary to prevent further concentration of production facilities and create conditions for the development of small and medium agricultural organisations, farms, and private households.

Type II districts have to tackle unemployment associated with reduced logging and agricultural activities. There are two possible solutions to the problem. One is the comprehensive use of forest resources, including timber, wild plants (mushrooms, berries, herbs) and commercial animal species. The other is the creation of place images and brands based on the non-productive functions of rural territories.

T*ype III districts* should pay special attention to the agricultural organisations that do not produce sufficient agricultural output growth rates. Agricultural organisations create important social goods: they contribute to the development of smaller economic entities (particularly, farms) and the fulfilment of such functions as control over the territory, agricultural landscape maintenance as well as social functions. Therefore, in type III districts, agricultural organisations require full support. The role of farms in the development of these territories will be growing. An increase in the number of farms creates conditions favourable to the emergence of agricultural consumer co-operatives, which are an important rural development institution.

In the districts that have major recreational facilities, it is important to promote a corresponding image. Such areas with the already existing image should build a place brand facilitating the evolution of rural territories into consumer spaces. The above has particular significance for the districts that have been losing their productive functions.

Bottom-up initiatives may appear and succeed in border districts if the federal and regional authorities create necessary conditions. The rural areas of those districts require special regimes for investment attraction, innovation, and business development. These regimes should be adopted using a procedure similar to free economic zone mechanisms.

Conclusion

The article provides a microlevel-overview of rural development in the north-western borderlands to identify possible trajectories of locally-driven development.

The results obtained suggest that the areas under study have a versatile and unique resource potential that is sufficient for their sustainable development based on a non-endogenous approach.

The 'frontline' districts of the north-western borderlands account for a third of their regions' areas, 24 % of the regions' population, over 30 % of the arable lands, and a third of the total agricultural produce. Rural areas fulfil a number of non-productive functions: recreation (including tourism), environmental protection, control over the territory, and others.

Rural areas differ in the structure of agricultural production. Three types of districts are distinguished: those dominated by agricultural organisations (25 %), by smaller economic entities (33 %), and by both (42 %). The study identified the problems characteristic of each type and outlined the ways to solve them.

To activate the non-productive functions of the rural areas, it was proposed to explore their geographical images, identify image-building objects and potential brands, and take measures to promote the latter. All of the above will facilitate the transformation of rural areas into consumer spaces.

The article deliberately did not consider transboundary cooperation, which requires a special investigation. Nor did it consider the demographic function of the rural border areas: a meso-level study was carried out by Gennady M. Fedorov [1], whereas the available information is insufficient for micro-level research.

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REGIONALISATION

STAKEHOLDER APPROACH TO THE IMPLEMENTATION OF THE 'THIRD MISSION' OF UNIVERSITIES

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The implementation of the 'third mission' by universities is a significant area of research that has been explored by many Russian and international experts. The 'third mission' means engaging with society. Alongside education and research, it is an important factor in the successful development of a contemporary university. In this article, we explore how stakeholder theory, which is successfully employed in the management of large organisations, may be applied for the development of mechanisms for effective implementation of the 'third mission' by universities. We identify the main problems in organising stakeholder interactions at Russian universities and analyse possible strategies to improve the situation. We use the examples of Polish, Swedish, and Russian universities to illustrate the practical aspects of interactions at different levels between universities and stakeholders., forms, and methods in the field. Further, we propose a classification of key stakeholders of universities, describe their mutual relations, interests, and resources available to them as well as reflect on stakeholder participation models in educational management. Our findings may contribute to better management at Russian educational institutions and benefit national education authorities.

Keywords:
stakeholder, university, third mission, university management, Baltic region

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Introduction

Ssuccessful development of a contemporary university requires active collaboration with many organisations, communities, groups, and individuals, all of which have a certain relationship to the university, depend on it, make demands to it, can influence it or benefit from it. All of them have their own interests. Bound to be taken into account, these interests can translate into a competitive advantage or even create a framework for university's daily operations. They may be differently aimed and often conflicting; they may affect the trajectory of a university's development from different sides and with varying intensity.

It is becoming evident that, alongside the two traditional missions of a university (education and research), a third one has emerged to play an important role. It has to do with a university's contribution to the development of its surroundings. Thus, the analysis of interactions between a university and its key internal and external stakeholders is of major significance. In conducting such analysis, one may rely on the tenets of stakeholder theory, which has been successfully applied to strategic management of enterprises. Many Russian authors (Artemiy Patrakhin [1], Vasily Strekalovsky and Vasily Savvinov [2], Vitaly Nagornov and Olga Perfilyeva [3; 4]; Elena Popova [5], and others) believe that stakeholder theory can be applied to higher education, and that university governance can be viewed as stakeholder management.

According to the fundamental ideas of stakeholder theory, company management should identify groups and stimulate processes that contribute to the business development. The central concern is to leverage the relations and interests of shareholders, employees, clients, communities, and other groups in such a way as to ensure the long-term prosperity of the company. Leadership passes to the company that can best suit the interests of stakeholders and whose public relations strategy rests on a communications policy that is common to all the stakeholder groups. Thus, stakeholder relations management is a key administrative objective that is in line with the interest of both stakeholders and the organisation itself.

In this paper, we seek to produce recommendations for universities on how to adopt stakeholder management practices used by for-profit companies to make universities more efficient in accomplishing the 'third mission', that is, their engagement in comprehensive development of their regional communities.

The tenets of stakeholder theory

When stakeholder theory emerged in the 1960s, its initial postulate held that companies are not only economic agents established for generating profits but also important components of their environments as well as systems that affect and are affected by the environment. R. Edward Freeman, professor of business administration at the Darden School of the University of Virginia, formulated the key principles of stakeholder theory in his book Strategic management: A stakeholder approach, where he defined stakeholders as 'any group or individual who can affect or is affected by the achievement of the organization's objectives' [6, p.15].

Taken literally, the word 'stakeholder' means a company or a person who has invested in a business and owns a share in it. This word is also used to refer to someone who is interested in the success of a plan or a project. Other definitions include phrases, like 'interest holder', 'involved party, 'pressure group', 'coalition members', 'target audience', and 'interest group'.

In his exploration of Freeman's theory, M. A. Petrov defines a stakeholder as 'a community or an individual who is capable of both short-term and long-term influence on the performance of a company or is affected by an organisation' [9, p. 8]. Igor Gurkov believes that 'stakeholders are not mere "groups or people" affected by a firm but they are "contributors" of a certain resource' [10, p. 29]. Vitaly Tambovtsev defines stakeholders as 'organisations, individuals, or groups of individuals who consume (experience) positive and negative contact and external effects produced by the performance of a firm and are capable of affecting such performance' [11, p. 3—26].

The AA1000 Stakeholder Engagement Standard (SES) issued by the Institute of Social and Ethical Accountability (AccountAbility) stipulates that stakeholders are 'those individuals, groups of individuals or organisations that affect and/or could be affected by an organisation's activities, products or services and associated performance'.[1] The standard distinguishes three types of interaction with stakeholders:

1) interaction with a view to alleviating a problem that has resulted from pressure and has a local effect;

2) systematic engagement towards risk management and a better understanding of stakeholders;

3) comprehensive strategic cooperation aimed at sustainable competitiveness.

[1] Stakeholder Engagement Standard AA1000SES. URL: http://www.urbaneconomics.ru/sites/default/files/2526_import.pdf (access date: 15.03.2019).

James E. Post, Lee E. Preston, and Sybille Sachs further developed stakeholder theory in their book Redefining the Corporation: Stakeholder Management and Organizational Wealth. They maintain that organisational wealth is 'the summary measure of the capacity of an organization to create benefits for any and all of its stakeholders over the long term' [12, p. 52]. In other words, organisational wealth is a long-term social accountability policy. Popov and Fomina take this further, stating that 'stakeholder theory is the theory of a special company model that views organisations as socially accountable institutions in contemporary (capitalist) society' [13, pp. 60—65].

In exploring Freeman's ideas, Michael E. Porter and Mark R. Kramer propose the concept of shared values, which they define as 'policies and operational practices that enhance the competitiveness of a company while simultaneously advancing the economic and social conditions in the communities in which it operates' [14, p. 67]. They argue that the activities that are in line with the values of society are not a burden on business but rather its very essence. They distinguish between the concept of shared values and the policy of corporate social accountability. The latter, for instance, requires additional spending, whereas shared value creation is inseparable from generating revenues. Social accountability can result from both internal and external pressure, while shared value creation is intrinsic in business competition. Thus, pursuing the interests of involved parties fits very well with doing business and becomes part of the latter.

Russian and international researchers have proposed various approaches to stakeholder classification. Freeman believes that stakeholders constitute the environment, both internal (employees, shareholders, suppliers, and customers) and external (NGOs, government bodies, mass media, competitors, special groups) [6]. Jeffrey S. Harrison and Caron H. St. John distinguish three regions in the stakeholder environment: broad, operating, and external. The first one comprises socio-political and economic phenomena affecting a company; the second — customers, communities, lenders, trade unions, competitors, and the state; the third consists of shareholders and employees [15]. Grant T. Savage et al. consider stakeholders from the perspective of their capacity for threat or cooperation and classify them into supportive, mixed blessing, nonsupportive, and marginal [16]. Ronald K. Mitchell et al. identify stakeholder types based on the attributes of power, legitimacy and urgency, and propose a classification that uses a combination of these characteristics [17]. The existing literature divides stakeholders into real stakeholders, stakewatchers, and stakekeepers [18, p. 122]; financial stakeholders, the management team, officials and employees, and economic partners [19, p. 29]; company manager, workers, stockholders, vendors, and suppliers [20, p. 239], etc.

Russian researchers have produced the following classifications: financial interest stakeholder, management, employees, intellectual capital, and social group stakeholders [21, p. 167]; leading, 'to-be-notified', and external stakeholders [22, p. 67]; normative, functional, and diffusive stakeholders, and consumers [23, p. 101], etc. Oleg Zilbershteyn et al. attempted at an exhaustive classification of stakeholders: among internal stakeholders, they distinguish employees (board members, top managers, managers, employees, ex-employees); investors (shareholders); suppliers (subcontractors, consultants, outsourced staff); business partners (R&D partners); universities and the academic community (researchers, postgraduate and undergraduate students doing an internship at the company). They classify external stakeholders into the categories of employees (prospective employees); investors (credit institutions, investment fund managers and analysis, rating agencies); customers (end consumers, intermediaries, influencers); suppliers (raw materials suppliers, service and infrastructure providers); competitors (direct competitors, substitute goods manufacturers), the government and regulators (line ministries, departments, and committees); business partners (licensees, universities); local communities (neighbours, local authorities, charities, volunteer organisations); universities and the academic community (research centres, researchers and professors); the media (radio, TV, printed media, the Internet), NGOs and pressure groups (human rights and environmental organisations) [24, p. 98].

Stakeholder theory and higher education

Russian researchers have applied the principles of business stakeholder identification to devise approaches to stakeholder classification in the sphere of education. According to Nagornov and Perfilyeva, education stakeholders are regional authorities, fellow educational institutions in the region, organisations, business community, and civil society institutions [3, p. 60—86.]. Popova supplements the list with the state, which regulates the activities of universities and generates demand for graduates [13, p. 47—54]. Marina Rakhmanova distinguishes five groups of stakeholders: the business community, employees, customers, the state and society, and external partners [25, pp. 141—145]. Savvinov and Strekalovsky classify university stakeholders into external (the state, regional and municipal authorities, employers, applicants and their parents, educational institutions, NGOs) and internal (students and their parents, researchers, professors, university administration) [2, pp. 87—89].

The central issue in stakeholder management is the creation of effective stakeholder interaction mechanisms to stimulate organisational development. University—stakeholder interactions have multiple stages. The first one is the identification of a university's stakeholders; this includes both compiling a list of relevant actors and analysing the relations between them and the university. In his analysis of stakeholder types, Gerald Vinten describes intra-stakeholder relationships, stakeholder groups, and the nature of their interests. He also urges one to examine the sources of stakeholder powers, to explore associated threats and opportunities, to trace changes in stakeholder grouping, to determine the economic, legal, and ethical responsibilities of each group, and consider what strategies are best for managing a certain stakeholder group [26]. The next stage involves the analysis of stakeholders expectations and interests as regards the university, as well as identification of relevant communication channels. Then, a stakeholder interaction model is chosen that takes into account the degree and nature of the influence of each stakeholder on the university. When the selected model starts to operate, its efficiency is evaluated, strengths and weaknesses are identified, and calibration is performed. Then, a strategy for interactions with stakeholders is developed. It includes a list of development areas that seem promising in the long run. Patrakhin describes three major strategies for interactions with university stakeholders. The first one, which is applied to high-profile groups, suggests regular control and maximum involvement of stakeholders. The second strategy consists in organising consultation meetings to develop long-term decisions that will keep stakeholder groups continually satisfied. Key to the third strategy is raising awareness of the university's plans to win support from the groups in question [1].

Which stakeholder interaction strategy to choose depends on the university's general development strategy and the university's perception of its role and place in the development of its region. Most universities embrace the need for a social accountability policy within the third mission agenda. Here, effective interactions with stakeholders are a sine qua non and central element of success.

According to Marko Marhl and Attila Pausits, the third mission of a university entails the development of specific services — actions and opportunities contributing to the good of society [27]. Rendering such social services means catering for the needs of those who have connections to the university, that is, its stakeholders. Thus, stakeholder approach to university governance is a two-way, and even multi-way, street that has room for exchange of resources between universities and stakeholders as well as among various stakeholders, whose interactions are mediated by a university.

The third mission at Baltic region universities

The third mission in Poland: the Pomeranian voivodeship

Polish universities are facing many problems, including population decline, a lack of trained specialists, and growing competition in the markets of educational services and R&D (particularly, a struggle for public funding). There is a pressing need for a strategy that universities will offer to a wide range of stakeholders: students, faculty, local communities, the state, business, professional associations, religious and ethnic communities, and international organisations [28]. Interactions between a contemporary university, the state, and the market are increasingly the focus of research; their influence on national socio-economic development is growing. In implementing the third mission, universities will contribute to the popularisation and commercialisation of research; this will strongly affect social development in its economic, ethical, and civilizational aspects.

In their work The Third Sector in the Universities' Third Mission, Anna Maria Kola (Nicolaus Copernicus University) and Krzysztof Leja (Universit of Gdansk) stress that an exclusive loyalty to neoliberal values (the market, the labour market, financial performance, economic profit) creates a situation where society sees the university only as a tool for development [29]. The implementation of the third mission by universities will, however, affect the growth of earlier underestimated social capital. There are numerous examples of successful collaborations between NGOs and universities in Poland. They demonstrate how universities can use NGO tools to enhance research, upgrade the competencies of the staff, ensure the most competitive position in the world, improve financial standing, etc. A good example is the Collegium Invisibile association, which seeks to unlock the potential of students of all Poland's universities. The association offers academic and research support programmes for students, who can choose a tutor for themselves. The programme provides financial aid, thus giving students an opportunity to gain experience at the best universities worldwide. It helps to build social capital and upgrade students' competencies. Collegium students choose a tutor — usually, a world-renowned professor (not necessarily a Pole) who has high social capital and is an authority in a certain field. Each year, students report under his or her supervision on their research progress. Collegium is an association that is managed by its members, i.e. students; whereas responsibility for its research component rests with the Academic Council consisting of professors. Traditionally, the rector of the University of Warsaw is a member of the Council. An undisputed advantage

of the association is that working closely with professors creates an environment for intellectual exchange driven by responsibility for the new generation of researchers. This way, science and education are becoming something of an assembly line for the transfer of humanistic values, which lie beyond business relations.

Alumni associations established by either universities or their graduates have an important role of connecting various sectors of the economy with the university. The prime objectives are to support student culture, which facilitates academic integration, and to raise awareness of achievements by people affiliated with the university. Associations make it possible to create endowments — funds that finance research, education, and exchange programmes as well as aid student financially via scholarships.

Although significant changes have taken place in Poland after the educational reform of 2010—2011, the limited scope of activities, a focus on research and publications, and the dominant model of linear knowledge transfer still complicate the implementation of the third mission and adversely affect universities' relationships with industry and society. Poland's higher education and research policy concentrate primarily on technology transfer and commercialisation. It is unlikely to achieve success because it is ignoring both the non-linear nature of knowledge exchange and the role that universities play in solving social problems. The current policy neither focuses on the third mission nor pays significant attention to the principal role students have in knowledge transfer. Since 2018, the third mission activities of universities will receive support from the European structural and investment funds.

The city and the environment provide most Polish universities with a natural framework for industrial partnership. In particular, the government of the Pomeranian voivodeship actively cooperates with universities when it comes to regional development, doing so via the Council for Entrepreneurship and Education and the Council of Rectors. Key tools to mobilise universities to further regional development are as follows:

— Strategy 2030 for the development of the Pomeranian voivodeship lists regional goals. One of them is to ensure the competitiveness of higher education by recruiting students and professors, consolidating universities and encouraging their cooperation with business, vocational education, and international partners. Another goal is to create a network of professional educational institutions meeting the needs of the regional labour market.

— Six regional programmes, including Pomorski Port Kreatywności (Pomeranian Port of Creativity), which acts in place of a regional innovation strategy. These programmes support The 2030 development strategy.

— Cluster policy and smart specialisation: over the past ten years, the region has been responsible for coordinating regional cluster policy, which became a framework for a new regional economic policy in 2013. Four specialisations were identified; within each, a council was established and projects launched. The results of these activities are expected to have a profound effect on the implementation of the third mission by universities.

— The EU-funded initiatives of 2007—2013: doctoral scholarships (268 PhDs specialising in innovative areas); thirteen infrastructural R&D projects (20 million euros); six higher education projects (17 million euros); the TriPOLIS project promoting cooperation between businesses and science parks and aimed to strengthen collaborations between business and research. The region is developing a mechanism for supporting R&D efforts and encouraging cooperation in international smart specialisation projects.

— Regional funds are supporting higher education programmes. In particular, there is an initiative aimed to attract international students to Pomeranian universities (it is co-funded by eight out of ten state universities in the region. Best students receive scholarships (forty students a year since 2002); since 2018, Marshal's award has been given for the best dissertation on a region-related topic.

The third mission in Lithuania: Vilnius University

According to Giustina Secundo et al. [30], the mission of Vilnius University stated in its strategic plan for 2013—2020 is to become a leading CEE research university (a centre for internationally competitive studies), to promote partnership, and to encourage the development of a stable open society. To assess how Vilnius University is accomplishing the third mission, the authors compare the performance indicators found in the 2013—2020 strategic plan with a classification of 'third mission' goals [30]: 1) technology transfer and innovation (including intellectual property management and the creation of R&D opportunities); 2) lifelong learning and continuing education (aiming to develop business competencies and recruit talents for incubation; 3) social engagement (integration into regional, national, and international communities and networks) (table 1).

Table 1.

Third mission indicators at Vilnius University

Aim	Activities	Strategic plan indicators
Technology transfer and innovation	Intellectual property management and the creation of R&D opportunities	Number of start-ups and spin-offs built on the university's research
	R&D promotion	R&D revenue Number of international projects Total income from innovation activities
Continuing education and lifelong learning	Development of business competencies	Number of students in advanced training courses Income from continuing education Number of top professionals Number of employees of Lithuanian companies enrolled in advanced training courses
	Talent recruitment and incubation	Proportion of university employees taking advanced training courses Proportion of postgraduate students, PhDs, and researchers of international standing
Social engagement	Engagement with the community	Number of open access events Number of socially engaged alumni Amount of private donations
	Internationalisation	Proportion of doctoral students, PhDs, and researchers engaged in international mobility Number of dual degree programmes Number of programmes taught in foreign languages Number of prestigious international research events Number of international collaborations

Our analysis of the performance indicators from the strategic plan shows that there is a need to develop entrepreneurship. Some of the indicators point to internationalisation initiatives. They give little information, however, on how the university interacts with the community. Overall, 58 % of the performance indicators from the 2013—2020 strategic plan of Vilnius University fall within the third mission goals.

Here are some examples of how Vilnius University is pursuing the third mission agenda:

1. The Developing Talent for Innovative Economy programme, launched by the university a year ago, is a case of active cooperation between Vilnius University and businesses.

2. Collaborations between the university and Thermo Fisher Scientific Baltics, a company offering biotechnology students an opportunity to take business administration courses.

3. Cooperation with the ESADE Creapolis innovation centre, whose mission is to support companies and encourage cooperation within research projects. The centre has brought together seventy companies to create an innovative platform for exchanging ideas.

4. Collaborations with DTU Skylab, an interdisciplinary centre and community for student innovation and entrepreneurship, supported by the Technical University of Denmark. The centre attracts 5,000 students annually. Involved in networking, DTU Skylab encourages companies and students to cooperate. Talented students often find employment after an internship with the centre.

5. Business—university collaborations within the Erasmus+ PROMOTE project, which seeks to develop and confirm key competencies obtained via initiatives to enhance student mobility. The project uses an original approach to bridging business and academia.

Thus, Vilnius University is rapidly approaching the third mission goals in internationalisation and the development of entrepreneurial competencies. Little attention, however, is being paid to interactions between the university and the local community. Effective R&D cooperation between the industry and the university is also lacking.

The third mission in Sweden: Uppsala University

Sweden's innovation policy supports the third mission initiatives of national universities [31]. Some institutions and programmes are particularly worth mentioning here. Vinnova, Sweden's innovation agency established in 2001, funds studies of university needs and seeks to encourage cooperation between business, universities, and public authorities. Each year, new and ongoing projects receive 220 million euros total funding. Vinnova is changing academic culture by contributing to universities competitiveness and to the development of entrepreneurship. The agency has already launched several initiatives, including the Key Actors national programme, which has been running since 2006, aimed at streamlining interactions among universities, stakeholders, and other agents

as well as to commercialise research. Another initiative, VINN Excellence, supports the creation of excellence centres at universities. Regional competitions held within the Vinnväxt initiative, seek to stimulate regional development by promoting cooperation between academia, business, and government.

Another major contributor to the implementation of the third mission is the Swedish Agency for Economic and Regional Growth (NUTEK). Among its many initiatives, the most prominent is the Regional cluster programme, which supports clusters with strong academic participation. In 2005, Swedish government launched the Innovationsbron (Innovation Bridge) initiative, which pursues the expansion, commercialisation, and effective use of state-supported R&D. At an early stage of company development, Innovationsbron acts as a seed investor. Annually, it funds from thirty to forty companies. KK-stiftelsen (The Knowledge Foundation) supports studies at young Swedish universities, i.e. those established after 1977. The Foundation's key initiatives are the HÖG and KK programmes, which facilitate knowledge dissemination and the development of cooperation between universities and industry. Since its foundation in 1994, KK-stiftelsen has invested approximately SEK 7.8 billion into more than 2,100 projects. Although there is a long-standing tradition of cooperation between universities and large enterprises, research commercialisation efforts (spinoffs, patenting, licensing) are relatively new. In recent years, Swedish universities have expanded their business support opportunities by creating and bolstering auxiliary structures.

Uppsala University, Sweden's oldest institution of higher education is a good example. Data for 2018 shows that the university actively cooperated with private and public actors as well as with civil society institutions. Uppsala University is engaged in dynamic cooperation with the business community and public organisations, such as, for example, Swedish National Veterinary Institute, Medical Products Agency, Geological Survey of Sweden, the Uppsala municipality, or the Gotland region. The university is part of a life sciences cluster initiative, which brings together five more universities, hundreds of companies, university clinics, and supporting departments. The university has launched the UU Innovation programme to support commercialisation and cooperation with the business community. The university's successful integration with the real sector of the economy is largely a result of its efficient spinoff projects. In 2018, forty-two students of Uppsala University founded their own companies, whereas the number of alumni in Uppsala's global graduates network exceeded 24 thousand people. As a co-owner of companies specialising in biotech, life science, space technology, renewable energy, social science, and the humanities, Uppsala University is an impressive example of a university pursuing the third mission agenda.

Stakeholder interactions at Russian universities: the Immanuel Kant Baltic Federal University

The third mission suggests broadening the social functions of a university as a social institution as well as its engagement in the regional, national, and global agenda through innovation, socio-cultural projects, and training specialists for industry. Basic documents of an institution of higher education should incorporate stakeholder interests.

Since 2010, the Immanuel Kant Baltic Federal University (IKBFU) has pursued a policy of developing the socio-economic potential of its region. This policy was reflected in the Development Programme for the Immanuel Kant Baltic Federal University from 2011 to 2020 established by the resolution of the Government of the Russian Federation. According to this document, the strategic goal of the university is to contribute to the socio-economic development of both the Kaliningrad region and Russia's North-West by offering high-quality graduate training and developing research potential. The socio-economic development of the region focuses on creating an intellectual economy, the key to which is human capital spurring the development of innovation infrastructure. The university's participation in that process is considered in terms of academic mobility and the development of priority research and technology areas. A 2011 cooperation agreement between the IKBFU and the Government of the Kaliningrad region, which is the key stakeholder, lists the following shared interests: creating a favourable social, innovative, and business climate; making the Kaliningrad region competitive in the Baltic region; working towards a stronger tourism and recreation industry; pursuing an effective industrial policy; building an adequate transport and energy infrastructure; ensuring access to state-of-the-art information technology and communications infrastructure; improving the efficiency of public administration in the region; promoting the federal university in Russia's exclave.

The R&D departments of the IKBFU are cooperating with forty large and small enterprises. Among them are regional companies (Miratorg-Zapad, Khrabrovo Airport, Kalinigradgazavtomatika) and industrial research organisations (Android Technology, Technopolis GS-Group, and the Observer group specialising in technology for people with special needs). The two latter companies have collaborated as industrial partners with the Functional Nanomaterials centre and the Laboratory for Neurobiology and Medical Physics to apply for mega-grants. In 2016, the IKBFU completed 45 tasks under contracts with regional enterprises (R&D efforts are totalling 11.5 million roubles).

The university is a leader in technological and infrastructural support for the innovative development of the Kaliningrad exclave. It has a major role in training specialists for education, tourism, law, healthcare, spatial planning, nature management and environment protection, information technology, sports, translation and interpreting, transport logistics, the media, etc. The key goals of the university are closer integration into the regional space, stable interaction channels between the university and public, non-governmental, and for-profit socially responsible organisations, as well as innovation and technology transfer.

Stakeholder engagement platforms include regular and ad hoc popular science events (science picnics, popular science lectures) ensuring communication between the IKBFU's researchers and the local community; debate clubs set up by the university in collaboration with the media and NGOs, including those focusing on political problems formulated by external partners; resource centres at schools and companies for training the personnel and organising student internships; law and other clinics where students practice in assisting community members; education and culture committees and councils comprising the university administration and university experts (Culture Committee under the Government of the Kaliningrad region, College of Educators, Rectors Council); platforms for communication between the regional administration and members of business associations (Kaliningrad Chamber of Commerce and Industry, Baltic Business Club); society-focused events (Civil Forum, regional conferences).

Projects are an efficient tool to ensure stable interactions between the university and the regional community. One of them is the Welcome centre, which acquaints students from other countries and regions with the university and the city. There are social collaborations with foundations, foster care institutions, and centres for teaching retirees computer skills, legal literacy, and basics of healthy lifestyle; volunteer rehabilitation projects offering art and drama therapy to children with special needs; cultural projects focusing on the Soviet past; patriotic civil projects commemorating the victory in the Great Patriotic War; environmental projects on the Curonian Spit; contests for gifted children (school media awards held in collaboration with the West Press media group). To turn such projects into life, the university established a student initiative centre, which seeks to bring together best social innovation practices and streamline interactions between academia, industry, and government in line with the triple helix model.

The university's interactions with stakeholders are guided by three core principles: project orientation; commitment to openness and dialogue; computerisation and IT literacy. These three pillars create the space of technological and

social innovation in the Kaliningrad region, contribute to a comfortable environment for fostering human capital, and build public confidence in the intensive development of the university.

Stakeholder interactions at Russian universities: Lomonosov Northern (Arctic) Federal University

An effective mechanism for university—stakeholder interactions should take into account common interests and available resources. Stakeholder interests should be included in the programme documents of educational institutions. The development programme of the Lomonosov Northern (Arctic) Federal University (NAFU) sets the goals that are well in line with the interests of its key stakeholders: the advancement of Russia's interests in the Arctic; the preparation of trained specialists for Russia's European North and the Arctic; comprehensive interdisciplinary Arctic research in collaboration with national and international partners.

The law of the Arkhangelsk region On Governmental Support for the Northern (Arctic) Federal University lists interests shared by the university and its major stakeholder, the region: to create the industry's demand for research; to encourage civil officers of Arkhangelsk executive authorities to hold theoretical and practical classes with NAFU students of relevant fields; to create opportunities for NAFU students and staff to take internships at the executive bodies of the Arkhangelsk region and other organisations.[2]

The shared interests of the university, prospective employers, and NGOs are the foundation of over 140 agreements concluded between the university and regional organisations and NGOs. Among university's partners are such large companies, as the Arkhangelsk Pulp and Paper Mill, the Zvyozdochka shiprepair facility, Rosneft, AGD Diamonds, the Arkhangelsk Algae Processing Plant.

Relationships between the university and its employees are regulated by employment contracts and a collective agreement between the NAFU administration and staff. Students sign agreements with the university administration.

To advance the common shared interests of the university and its stakeholders it is necessary to build a model of stakeholder participation in university administration.

A decision-making mechanism that takes into account the influence of key stakeholders (an external advisory body, administration, faculty, students, and alumni) has been proposed in a study focusing on stakeholder engagement in university governance [32].

[2] On Governmental Support for the Northern (Arctic) Federal University: law of the Arkhangelsk region No. 295-22-OZ of My 20, 2011. *Volna.* June 2, 2011.

There is an external supervisory board that has the role of a 'voice from the outside'. Neither the university staff nor its students can be members of this body. Committed to the development of the university, the board takes into account the needs of society and the market as well as deals with strategic and financial issues. The administration solves the current university problems and decides how to use financial resources. It brings together the rector and vice-rectors for priority areas.

The faculty determine most academic quality parameters: the content of curricula, requirements for dissertations, and training and assessment standards. Members of that group take an active part in framing institutional and payment policies.

Students and alumni discuss various aspects of student life at the university: teaching standards, food, and accommodation. Alumni are welcome to weigh in on key changes taking place at the university and participate in university governance.

According to the federal law On Education in the Russian Federation, educational institutions set up collegiate administrative bodies: the employee conference and the academic senate. Other possible collegiate governance bodies are supervisory boards, advisory councils, boards of overseers, etc.[3] The most influential stakeholders get engaged in university administration this way, for instance, by including their representatives into the supervisory boards.

The NAFU Supervisory Board includes the governor, the deputy minister of education and science of the Russian Federation, the head of the Union of Industrialists and Entrepreneurs of the Arkhangelsk region, directors of the largest regional companies, a representative of the Moscow school of management (Skolkovo), and the head of a major broadcasting company. By participating in the work of the Supervisory Board, stakeholders may directly influence decisions relating to the university development strategy (particularly, changes to the charter), opening of new branches, and financial and property issues.

Russian laws regulate the participation of student and staff associations in university governance. In particular, broad rights are vested in trade unions, which can influence the adoption of local regulations on employment relationships, payment, the learning environment, and student accommodation. These functions are performed by the unions of the NAFU faculty and students.

The law On Education in the Russian Federation permits the creation of student councils, which represent the interests of students. The NAFU Student

[3] On Education in the Russian Federation: federal law No. 273-FZ of December 29, 2012 (amended on February 19, 2018). Accessed via the ConsultantPlus assistance system.

Council discusses the prospects of university development. It has a voice at the university's annual public forum, which seeks faculty, student, alumni, and veteran engagement in identifying and pursuing priority development areas, finding and supporting promising ideas and projects, creating conditions for professional, artistic, and social self-fulfilment.

The NAFU Alumni Association provides financial assistance to the university, contributes to streamlining interactions with applicants and employers, and influences the framing of corresponding university policies.

A remarkable new tool to articulate the interests of the academic staff is the NAFU Assembly of Professors. Its meetings discuss strategic problems of the university and make proposals on educational, research, and social policies. NAFU is a good example of employing various approaches to coordinate stakeholder engagement models with university governance.

Conclusions

Although most universities have embraced the need for stakeholder engagement, there are certain problems that complicate the implementation of the third mission, i.e. the participation of universities in developing the spaces of their regions. In Russia, the tradition of university—community engagement is severely lacking. Universities remain closed to society and focus solely on research and education [33, p. 119]. For many universities, contributing to community development is a new baffling area, which is perceived as an additional burden rather than a growth opportunity.

In our opinion, the major problems in organising effective university—stakeholder interactions are as follows:

- lack of systemic approach to stakeholder engagement, where systemic work is replaced by ad hoc contacts and formal procedures;
- rigidity, or the inability to adapt to stakeholder interests;
- lack of continuous analysis of stakeholder relationships; no room for discussion and calibration;
- absence of mechanisms for stakeholders to influence university governance (this can be done only the state and, sometimes, large companies).

Based on our analysis, we constructed a matrix of external and internal university stakeholders with their mutual connections and shared interest taken into account (table 2).

Table 2

A matrix for the system of university networking with key stakeholders

Stakeholder	Resources sought by the stakeholder	Resources available to the stakeholder	Stakeholders, whose interactions can be mediated by the university
External			
State	New graduates for the national economy Basic and applied scientific knowledge Student socialisation	The status and the right to perform educational activities Infrastructure and finances Infrastructure and funding for the functioning of the university (buildings, tangible assets, funds, grants)	Students University staff Alumni Local community Employers NGOs
Regional authorities	Graduates for the regional economy Assistance to regional development (expert evaluations, consulting) Jobs for local residents Participation in community projects	Funding (contracts for research, expert evaluations, advanced training) Assistance in approaching employers Assistance in recruiting applicants in the region Improving the image of the university in the region	Students University staff Alumni Former university employees (veterans) NGOs
Municipality	Jobs for local residents Contribution to urban infrastructure development Participation in community projects	Tangible (land, buildings, premises) Financial (contracts for research, expert evaluations, advanced training) Improving the image of the university in the region	Students University staff Alumni Former university employees (veterans) NGOs
Employers: organisations interested in collaborations with the university	Graduates Innovations and research for organisations	Financial (contracts for research, expert evaluations, advanced training) Assistance in employment Improving the image of the university in the region	Other organisations Other educational institutions (within the region and beyond it) Students University staff Alumni
Other educational institutions (in the region and beyond it)	Networking and participation in educational and research projects Participation in joint community projects Advanced training (for schools and secondary	Networking and participation in educational and research projects Assistance in recruiting applicants (for schools and secondary vocational education institutions)	Other educational institutions Regional authorities Municipality

The end of Table 2

Stakeholder	Resources sought by the stakeholder	Resources available to the stakeholder	Stakeholders, whose interactions can be mediated by the university
External			
NGOs	Tangible and financial (using university resources in joint projects) Membership in faculty and student associations Raising the awareness of the public and the authorities of the work done by NGOs	Assistance in recruiting applicants Improving the image of the university in the region	Regional authorities; Municipality Students University staff Alumni Former university employees (veterans)
Mass media	Information about the university Joint community projects	Assistance in recruiting applicants Improving the image of the university in the region	Other educational institutions Students University staff Alumni
Local community	Education services for various groups Social services	Local applicants University staff recruited regionally	State
Internal			
Students	Educational services Learning environment and accommodation Assistance in employment	The essence of the principal activity Improving the image of the university in the region	State Regional authorities Municipality Employers NGOs
Staff	Employment, salary, social security Advanced training and development opportunities	Participating in education Improving the image of the university in the region	State Regional authorities Municipality NGOs
Alumni	Assistance in employment Postgraduate support (advanced training and retraining, PhD programmes)	Improving the image of the university in the region Funding	State Regional authorities Municipality NGOs
Former employees (veterans)	Social security Recognition	Improving the image of the university in the region	NGOs

Baltic region universities have been implementing the third mission with varying success. While overall the third mission performance of Polish universities may not seem impressive, their active participation in the regional development of the Pomeranian voivodeship has brought about a shift in the situation. The same holds true for Vilnius University, where the third mission agenda is more visible in collaborations with the business community than in regional engagement. Sweden has achieved the best results among the analysed states, since the country has long been committed to the entrepreneurial university model, and there are many institutions and programmes concerned with the third mission. Uppsala University is a good example of how a university's social engagement translates into regional development. The lack of experience in social engagement is what prevents Polish and Lithuanian universities from attaining better education quality and organising continuing education. Social engagement translates into technology transfer, which benefits both the university and the regional community. The above model can be applied to contemporary approaches to managing Russian organisations of higher education in terms of third mission implementation. The sooner the universities embrace the need for a clear stakeholder interaction policy, the more resources for development they will have.

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LARGE BUSINESS IN THE COASTAL ZONES OF RUSSIA: FEATURES AND FACTORS OF LOCALISATION

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Russia's evident 'turn to the sea' as regards the economy, the infrastructure, and population distribution patterns is very much in line with the interests and projects of large businesses. This change manifests itself in the development of port and logistics complexes, the port industry, the construction of offshore pipelines, more active offshore oil and gas production, the growing demographic potential of coastal cities, etc. This article aims to explore the localisation of large businesses in Russian coastal zones and to analyse the 'coastalisation' of the country's largest companies. It is shown that 'coastalisation' has taken place in forty-two of Russia's top 100 companies, as rated by the Russian Business Channel. Another objective of the study is to identify large businesses' industrial and regional priorities in the maritime economy and investigate how they are transformed under the influence of geopolitical and geo-economic factors. Amid active Eurasian integration, which includes the Greater Eurasia project, big businesses are spurring the development of maritime economic complexes and the formation of sea-land economic structures, including cross-border ones. The study identifies which national coastal zones are most attractive to Russian large businesses. Special attention is paid here to the Baltic Sea and the exclave of Kaliningrad where both local (Sodruzhestvo and Avtotor) and interregional/transnational companies (United Shipbuilding Corporation, Gazprom, LUKOIL, etc.) are benefitting from the coastal factor in the socio-economic development.

Keywords:
coastal zone, coastal cities, Russia, large business, maritime complex, regional development, Baltic region

Introduction

With their resource potential the oceans have invariably exerted and continue to exert a fundamental influence on the development of mankind and its spatial organization, and this phenomenon is fully accentuated and comprehended by Russian social and geographical science [1—5]. The post-Soviet period saw not only a large-scale reformation of Eurasia [6; 7], but also a transformation of

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the global positioning of Russia herself, a permanent adaptation of the country and her regions to new geo-economic and geopolitical realities being the result of increased maritime activity. This "turn to the sea", apparent in the economy, infrastructure and settlement systems in the Russian Federation [8; 9] observed in the recent years is not only supported by a generally consistent state policy[1], but also correlates directly with business interests, especially those of the largest enterprises. The conceptual analysis and assessment of the "sea orientation" of Russian large-scale companies, the identification of factors, features and formats of their localization and activity in coastal zones are the main goals of this study.

Large business in contemporary Russia: marine attraction and interests

'Large business' as a special phenomenon with its peculiar national (Russian) features has been the subject of quite a few studies since the late 1990s [10; 11]. In conceptualizing large-scale enterprises formed in post-Soviet Russia but responding to global economic realities, the researchers note the presence of a fairly stable grouping of influential business structures, record their dynamics and variability [12], emphasize the spatial character of their functioning and their strongly marked localization priorities [13; 14]. The continuing awareness of the non-trivial nature of attributing an economic agent as 'large' [15] is combined with the desire to develop statistically reliable criteria for identifying business as such[2], and with the established practice of delimiting large companies based on numerous (inter)national rankings (RBC, Forbes, Expert, Kommersant).

According to the Federal Service for State Statistics (Rosstat)[3], there are more than 4.5 million enterprises and firms registered in Russian. Yet if rankings (such as the RBC ranking of the top 500 Russian companies) are to be believed, only 195 companies have an annual revenue of more than 60 billion rubles and thus can be described as large. According to the author's calculations, by the end of 2017 their share in economy accounted for more than 36 % of the total output of goods and services in the Russian Federation, with the top ten companies of the ranking providing almost 44 % of the gross revenue of all large enterprises (Table 1).

[1] The priorities of state policy are recorded in such normative acts as the Federal Ocean-wide Federal Target Program (1998), the Russian Marine Doctrine for the Period until 2020 (2001), the Strategy for the Development of the Russian Federation Maritime Activities until 2030 (2010), and the Federal Target Program "World Ocean" for 2016—2031 (2015) et al.

[2] Two decades ago, Y. Sh. Pappe [10] proposed considering structures with a sales volume of more than $ 1 billion as large and this approach is believed to remain relevant [16].

[3] *Regions of Russia.* Social-economic performances. 2017. Moscow, 2018

Table 1

Concentration of economic activity in Russia (including gross revenue of enterprises and organizations), 2017[4]

Ranking	Total gross revenue, billion rubles	Share in the total Russian release of goods and services,%
Top 10 (gross revenues)	29 897	16,1
Top 50 (gross revenues)	49 001	26,4
Top 100 (gross revenues)	58 797	31,7
Top 200 (gross revenues)	68 231	36,8

Compiled by the author on the basis of RBC data (500 Largest Russian Companies in 2018. RossBusinessConsulting. URL: https://www.rbc.ru/rbc500/) and Rosstat.

There are relatively few large business entities in Russia. All of them are fundamental to the economy, often integrated among themselves (often, through complex business partnership arrangements [12]) and substantially affiliated with the state or with public economic entities (Gazprom, Rosneft, Sberbank, etc.). A significant number of them is transnational (LUKOIL, for example, operates in 30 countries, Rosneft in 25) and is therefore dependent on foreign economic operations and access to global markets. Of the top hundred companies, 17 are oil and gas producers, eight specialize in metals, five operate in chemical and petrochemical industry. This corresponds to the current structure of Russian export, where almost 65 % of total output falls on fuel and energy products, 10.1 % — on metals and 5.2 % — on agricultural raw materials, primarily grain). One and a half decades ago N.V. Zubarevich [13] clearly showed in her analysis how these companies formed in purely 'intracontinental' territories, but then following the logics of both market and globalization they gradually developed as integral parts of 'ocean economies' (to borrow a concept from P.N. Savitsky), having carried out expansion campaigns into the coastal regions and having engaged in cross-border transcontinental exchanges. While only two of the top 100 companies can be righteously classified as *marine economic*[5] ones (United Shipbuilding Corporation and Sakhalin Energy, the operating company of the Sakhalin-2 Project), the analysis allows us to emphasize a significant and multi-aspect *marine orientation* of the leaders of Russian business (Table. 2).

[4] 500 Largest Russian Companies in 2018. RossBusinessConsulting. URL: https://www.rbc.ru/rbc500/ (access date: 09.07.2019).

[5] Following the usage established by the Russian scholarship on the subject, marine economy encompasses port logistics and marine modes of transport, shipbuilding and ship repair, extraction and processing of marine biological resources, extraction of mineral raw materials on the sea shelf, coastal types of recreation, and related research and education infrastructure.

Table 2

Grouping of the largest companies in Russia (top 100 companies as ranked by RBC in 2018) according to the degree and nature of their marine orientation

Degree of "marine orientation"	Business profile	Names of companies (brands)	Share in the total gross revenue of the top 100 companies, %
Very deep Pure marine companies	Defense industry and engineering, oil and gas	United Shipbuilding Corporation, Sakhalin Energy	1.1
Deep. Marine-dependent (transport-dependent) companies with divisions oriented to certain types of marine economy	Oil and gas, infrastructure construction	Gazprom, LUKOIL, Rosneft, NOVATEK, Stroygazmontazh, StroyTransNefteGaz, Zaroubezh-Neft, Arktikgaz, UCL Holding, ROSATOM	33.0
Significant. Other marine-dependent (transport-dependent) companies	Oil and gas, metals and mining, chemistry and petrochemistry, automobiles, defense industry and engineering	Surgutneftegas, Transneft, "Tatneft", "Evraz", NLMK, RUSAL, Severstal, SIBUR, Magnitogorsk Iron & Steel Works, UMMC Group, Metalloinvest, SUEK, Mechel, EuroChem, Toyota Motors, TMK, Slavneft, Volkswagen Group Rus, Avtotor Holding, CSN Group, United Engine Corporation, PhosAgro, Independent Oil and Gas Company, Kia Motors Rus, Mercedes-Benz Rus, Uralkali, Sodrugestvo Group, Hyundai Motor CIS, Tomskneft VNK, RussNeft	18.6

The end of Table 2

Degree of "marine orientation"	Business profile	Names of companies (brands)	Share in the total gross revenue of the top 100 companies, %
Moderate. Companies that take into account the phenomenon of 'attraction to the sea' of the economy and population, and partly relying on marine logistics	Finance, transport, trade, oil refining, distribution, oil and gas	Sberbank of Russia, Russian Railways, VTB, X5 Retail, Magnit, AFK Sistema, Megapolis, Gazprombank, Lenta, Philip Morris, Alfa-Bank, Otkritie, Vnesheconombank, Auchan, Dixy, Rosselkhozbank, Metro Cash, Leroy Merlin Vostok, AvtoVAZ, Novy Potok, Merlion, Red and White, Mostotrest, MUMT Ltd, M-Video, Rolf, O'KEY Group, Nizhnekamskneftekhim, United Metallurgical Company, GAZ Group, SNS Group, TAIF -NK, Ch TPZ, KamAZ, Transmashholding, LSR, Major, ForteInvest, Irkutsk Oil Company, Uralvagonzavod	30.0
Insignificant.	Investments, defense industry and engineering, telecommunications, electricity, pharmaceuticals	Rostec, Rosseti, InterRAO, Aeroflot, United Aircraft Corporation, RusHydro, MTS, MegaFon, T Plus, Alrosa, VimpelCom, Rostelecom, J.T.I. Russia, Protek, Russian Helicopters, TNS Energo Group, Katren, Tactical Missile Weapons Corporation, PIK Group, EuroSibEnergo, Russian Post, Rusenergosbyt, Tashir, National Computer Corporation, Polyus, Euroset, SOGAZ, Apple Rus, FC Pulse, Moscow Credit Bank, Procter and Gamble, Mosinzhproekt	17.3

Compiled by the author on the basis of RBC data (500 Largest Russian Companies in 2018. RossBusinessConsulting. URL: https://www.rbc.ru/rbc500/) and resources of the leading Russian companies.

The proposed structuring is an expert evaluation accounting for logistics prevailing for particular sectors of the economy, the actual activity of the largest Russian companies in the maritime sector, their real and potential focus on investment and consumer demand concentrated in coastal zones. It can serve as a framework and is conceptual in its nature, since full-format differentiation according to the degree of marine orientation of any kind of economic structures (especially big companies with their multiple divisions, each having their distinct profiles and assets) is very complicated. The 58 most identifiable and statistically dominant business structures are characterized by *insignificant* or *moderate* orientation to the marine factor. Only 12 out of top 100 companies have *very deep* (shipping companies proper) or *deep* marine factor orientation, yet they are the true leaders of big business in Russia: state-owned companies that set the general trend. Their spatial behavior activates the economic dynamics of coastal zones, turning said zones (along with globalization, cross-border regionalization and socio-economic concentration) into a priority area of localization of interests and activity of other business structures.

Localization of big business in the coastal zones of Russia: factors, features, trends

Coastal zones are social-geographical taxa of a special kind, confined directly to the sea coast and characterized by a pronounced projection of the marine factor on the residential and economic structure [17; 18]). The activity of large enterprises in these zones is *selective* and determined by the resource and positional characteristics of a territory. Generally, this activity correlates with post-Soviet trends in maritime dynamics, globalization, European integration and geo-economic and geopolitical changes in Eurasia.

Since the mid-1990s, when Russian economy was rapidly gaining openness and at the same time developing a pronounced raw material and comprador profile, it has primarily been the port industry that attracted marine interests of the emerging Russian big business; cargo turnover of Russian seaports grew more than 8-fold from 1998 to 2018, having exceeded 948 million tons. It gained its highest progressive dynamics amid extremely favorable conditions on global energy markets in the early 2000s, when cargo transshipment in the country's seaports increased by 25 % almost annually. By building logistics focused on port terminals, large enterprises became marine-dependent, and their strategies at the time were Euro-oriented to the extreme. Probably the best example of the trend is Ust-Luga Port, now the largest in the Baltic, realizing export interests of leading companies such as Rosneft, NOVOTEK, SIBUR, Uralkali and others

[19]. Still, the investments concentrated in the most important logistic centers and transport corridors, so this generally led to clustering of coastal divisions of large business and, in turn, resulted in a significant enhancement of the status and attractiveness of a few coastal regions with developed foreign trade infrastructure (in the form of new regionalization of Russia [20]). The only exception to the rule was commissioning of an oil terminal in the Barents Sea near the village of Varandey in 2000 by LUKOIL, though the terminal is still export-oriented. Against this background, stevedoring companies were incorporated into larger business structures (like Rosneft, provider of more than 40 % of all Russian oil production and controls the terminals in the ports of Tuapse, Nakhodka and Murmansk[6]), a move complemented by the consolidation of port assets within separate specialized corporations, such as UCL Holding, for example, a company that takes its 92nd position in the RBC ranking and incorporates Sea Port of St. Petersburg, Container Terminal St. Petersburg, Universal Transshipment Complex, as well as Tuapse and Taganrog Seaports.

Gazprom, the 40th company in the Forbes global ranking, which provides 12 % of the world and 69 % of Russian natural gas production introduced such transport and transit policy at the turn of the 21st century that allowed marine economy of Russian Federation to gain new momentum thanks to system of offshore pipelines often perceived as the most important tools of 'gas diplomacy' [21]. The total throughput capacity of these facilities in the Baltic and Black Sea regions, representing the configuration of the country's main export-import corridors and equally oriented to Europe, since 92 % of natural gas is exported by Gazprom to European consumers, is 157.5 billion m³ per year, which is equivalent to 65 % of the supply of Russian natural gas to foreign markets in 2018. It is symptomatic that in 2008 Gazprom also launched a partially offshore gas transmission project in Pacific Russia, which resulted in the organization of natural gas supply via the Sakhalin — Khabarovsk — Vladivostok pipeline launched in 2011; the design capacity of its first start-up complex being 5.5 billion m³ of gas per year.

Since the early 2000s, the attractiveness of coastal zones for all large businesses, not only marine-dependent ones, has been increasingly determined by the lengthy and still ongoing [22; 23] processes of 'pulling' the demographic and economic potential into several leading urban centers. Spatial organization of contemporary Russia is such that the centers of 31 constituent entities of the Federation are localized on the coast (up to 50 km from the sea), in the coastal zone (up to 200 km), as well as in the zone of direct, or efficient, transport and economic accessibility from it (up to 500 km). Together, these territories account

[6] *Rosneft.* 2018 Annual Report. URL: https://www.rosneft.ru/upload/site1/document_file / a_report_2018.pdf (access date: 07.19.2019).

for almost 27 % of the population of all regional centers (including the federal one). From 2002 to 2019, the population of St. Petersburg grew by 15.5 %, Sochi — by 11.8, Kaliningrad — by 10.5; and the entire population of coastal cities of the country saw an overall growth of 8.1 %. The capacity of these and other nodal coastal settlements (Table 3) predetermine an additional incentive to 'shift' a particular business (including large) to the sea and the most highly developed segments of coastal zones.

Table 3

The proportion of the largest cities (250 thousand people or more) of the coastal zone on the scale of the Russian Federation by main socio-economic indicators

City	Share in the population,%		Share in Russia,%		
	Russia	Russian coastal cities	In investments in fixed assets	In housing commissioning	In retail turnover
St. Petersburg	3.6	39.1	0.95	4.6	4.44
Rostov-on-Don	0.77	8.3	0.22	1.41	0.40
Makhachkala	0.49	5.3	0.01	1.50	0.01
Vladivostok	0.43	4.6	0.06	0.13	0.22
Astrakhan	0.36	3.9	0.16	0.36	0.14
Sochi	0.35	3.7	0.06	0.15	0.21
Kaliningrad	0.32	3.5	0.09	0.57	0.19
Sevastopol	0.30	3.2	0.04	0.22	0.21
Arkhangelsk	0.24	2.6	0.02	0.17	0.10
Murmansk	0.20	2.2	0.08	0.03	0.13
Total	7.06	76.4	1.69	9.00	6.05

Compiled by the author on the basis of Rosstat data[7].

There are 17 'thalassocentered' regions in Russia, that is, those characterized by a shift to the sea coast of their most important nuclei of socio-economic activity [24]. About 20 % of the country's population is concentrated there, and by the end of 2017, 23.9 % of the total new housing commissioned in Russia was constructed there. Almost 21 % of the country's retail trade accounts for these territories. This proportion, with a distinctive shift towards urban agglomerations, is essential for large retail, construction and development companies, and leading financial institutions. It is characteristic that large retail chains Lenta and O'KEY originate from St. Petersburg, and that the largest coastal cities are quite attractive for other leaders of network trade (Table 4).

[7] *Regions of Russia*. The main socio-economic indicators of cities. 2018. Statistical Digest. Moscow: Rostat, 2018.

Table 4

Localization of Metro, O'KEY and Auchan retail centers in the coastal zone

Company	Retail centers in Russia	Retail centers in coastal areas	Localization (and number) of retail centers in coastal areas
Metro	92	10	Saint Petersburg (3), Rostov-on-Don (3), Astrakhan (2), Arkhangelsk (2), Kaliningrad (2), Novorossiysk (1)
O'KEY	77	29	Saint Petersburg (23), Astrakhan (2), Rostov-on-Don (2), Murmansk (1), Sochi (1)
Auchan	314	13	Saint Petersburg (8), Rostov-on-Don (4), Simferopol (1)

Compiled by the author on the basis of corporate websites.

The increased effective demand complemented by good logistics capabilities predetermines the reinitialization of coastal zones started by large enterprises through the location of car assembly plants (Toyota Motors, Hyundai Motor CIS, etc.) and food industry companies (like the Sodrugestvo Group in the Kaliningrad region). The establishment in 2007 of the United Shipbuilding Corporation, which included four dozen enterprises, design and research centers, including those located in the east of the country, was one significant aspect of marine-oriented reindustrialization. The overwhelming majority of large business entities continue to focus their interests on a limited set of coastal urban centers, mainly in the European part of the country [16]. Even Russian retail giants such as X5 Retail and Magnet, ranked 7th and 9th in the RBC-500 list, respectively, do not have divisions in Pacific Russia. Apart from Auchan, largest Russian retail chains are not represented in the Crimea, where 96 % of the territory is coastal [19]; the branch network of leading transnational banks with Russian headquarters (Sberbank, VTB, etc.) does not operate in this area either, and there are no Perekrestok superstores in Dagestan.

Geo-economic and geopolitical reasons determine attractors and the framework of coastal localization for big business and modify its spatial priorities[8]

[8] There is growing awareness of the failure of "West-centric Russian foreign policy" [25], intensification of global rivalry between corporations and powers [26], as well as of the shift of the center of economic activity to the east of Eurasia, primarily to China [27].

contributing to the formation of a multi-vector geostrategy (especially so in state-owned corporations), multiplying the number of poles, or points, of growth in coastal zones in Russia, expanding their influence into the Arctic, as well as to the coast of the Russian Far East. This megatrend is driven by a motivated shift of emphasis of oil and gas production in favor of the offshore both through the localization of energy resources and geopolitical interests, as well as the development of the liquefied natural gas (LNG) market.

Since 1995, LUKOIL has been exploring and developing hydrocarbon deposits in the northern part of the Caspian Sea. In 1999, energy production began off the shore of the Sakhalin island, as of 2007 — under the control of Gazprom. In 2006, the construction of the first Russian LNG production facility launched off Sakhalin, and in 2018, its share amounted to 4.8 % of the total LNG demand in the Asia-Pacific region and about 3.6 % of the global LNG demand[9]. Offshore gas production centers are formed by Gazprom in Kamchatka, as well as on the shelf of the Sea of Okhotsk and the Kara Sea; Gazprom also began oil production at the Prirazlomnoye field in the Pechora Sea, and a project for the LNG plant in Vladivostok is also in the pipeline. Rosneft, which currently holds 55 licenses for plots in the Arctic, Far Eastern and Southern seas of Russia, is also demonstrating maritime activity. A large marine-oriented project based on LNG technologies is implemented in the north of the Yamal peninsula by NOVATEK: in 2018, the company produced 68.8 billion m^3 of natural gas. NOVATEK is also developing the supporting bases for its business, i.e. LNG storage and transshipment terminals in the Murmansk region and in Kamchatka.

The real proportion of the offshore oil and gas production in Russia is still insignificant. Thus, in 2018, Gazprom extracted 0.73 billion m^3 of gas and 3.19 million tons of oil on the shelf, compared to the company's total gas and oil production of 497.6 billion m^3 and 40 million tons, respectively[10]. Offshore development for less than 3 % of Rosneft[11] total oil production. Nevertheless, according to the sometimes contested [28] estimates, by the middle of the 21st century the Arctic shelf alone will provide from 20 to 30 % of all Russian oil production. Motivated by the dynamics of global energy markets and geopolitics, offshore projects of the Russian business (especially those in the Arctic zone) are long-term, costly and carry high risks. On the one hand, their promotion is achieved through state participation, with the government not only boosting the development of the Northern Sea Route [29], but also initiating additional localization of military

[9] *PJSC Gazprom annual report* for 2018. M., 2019.223 s. URL: https://www.gazprom.ru/f/posts/01/851439/gazprom-annual-report-2018-ru.pdf (access date: 07.10.2019).

[10] *PJSC Gazprom annual report* for 2018. M., 2019.223 s. URL: https://www.gazprom.ru/f/posts/01/851439/gazprom-annual-report-2018-ru.pdf (access date: 07.10.2019).

[11] *Rosneft.* 2018 Annual Report. URL: https://www.rosneft.ru/upload/site1/document_file/a_report_2018.pdf (access date: 07.19.2019).

and other infrastructure throughout the country's coastline; on the other, it can be attributed to the established practice of transnational partnerships including the involvement of such significant geo-economic actors, as Exxon Mobil, Royal Dutch Shell, Eni, Statoil, Total and others, which has led to the internationalization of most important segments of Russian marine economy.

Energy projects, the perspective of which directly correlates with the capabilities of maritime transport [29, 30], are aimed at the development of new shipbuilding centers in the coastal zones. Thus, together with Rosneftegaz and Gazprombank, Rosneft is implementing a project for the production of large-tonnage vessels in the city of Krasnyj Kamen in Primorsky Krai; and a specialized shipyard is being built by NOVATEK in the Murmansk region. This process determines the possibility of increasing the material and technical base of Russian fisheries within the framework of the investment quotas mechanism. Against this background, the contours of the large-scale companies (and alliances) generated by the national and transnational structures of aquatic-territorial complex formation are becoming more prominent, as is the further clustering of priority areas of maritime activity; most consistently so — on the Russian coast of the Baltic Sea.

Maritime activity of large companies in geopolitical and geoeconomic turbulence: the Russian Baltics

Only 7 % of the coast of the Baltic Sea, or about 500 km [31], are under the jurisdiction of the Russian Federation; this small segment of the coastal zone is not only the most densely incorporated into the European integration processes (including the format of the Baltic region [32]), but it is also densely populated in comparison with other coastal territories of the country: 12 urban settlements are located directly on the coast with almost 6 million population, which constitutes 43 % of population living on the country's coasts. As this area is economically and infrastructurally developed, it is attractive to people and businesses. Being integrated by the water area in the status of the 'open sea', in spatial terms it is bistructural, where the westernmost Kaliningrad region has developed its specific economic conditions and practices by virtue of being an exclave since 1991. Apart from being bistructural, the area is also asymmetric and almost monocentric, with a pronounced dominant of the St. Petersburg coastal region [41], the country's second-largest focus of socio-economic activity and migration attractor (in 2017, the absolute migration value was only half that of the Moscow region). It is here, within the Russian Baltic, that the headquarters of the 14 out of 200 major Russian companies are located, which is significantly inferior to the 'intracontinental' Moscow and Moscow region (119 and 15, respectively), but at the same time much higher than for the other coastal areas of the country (3).

Since 2008, the operating conditions of large business structures in the Russian segment of the Baltic coastal zone have undergone systemic changes, accompanied by the effects of turbulence increasing in its amplitude. Following the rules of economic cyclicality [37], the volatility in the primary commodity markets, which are the most important for Russia and its coastal transport corridors, has deepened; the markets are changing, and access to them is complicated, which requires more and more investments. The crisis in the Russia-West relations system crucial for the transboundary territories of the Baltic borders of Russia, especially for the Kaliningrad exclave, erupted in 2014 and has manifested itself ever since, not only generating geopolitical demarcation, including the formation of a component of its own autonomous communication structure and life support in the Baltic Sea by the Russian Federation, but also increasingly turning the north-western 'facade' of our country into its 'facade outpost'. Under the influence of global and macro-regional dynamics, which is intensifying cross-country and inter-port competition for Russian goods flows [38] and for Chinese transit [39], the entire Baltic region as a whole is gradually losing its former geo-economic significance. In 2000 the total share of countries (except Russia) accessing the Baltic Sea in the world GDP at the official exchange rate reached 8.1 %, in 2017 this was only 6.6 %. It is significant that already in 2011 there was a notable (8.7 percentage point) decrease in the proportion of Baltic ports in the total sea freight turnover of Russia; in the subsequent period, this indicator, showing a wave-like fluctuation, generally decreased; in 2008—2018, the share of the Baltic in the country's sea freight turnover, according to the Russian Seaports Association, decreased from 47.3 to 33.3 %. Against this background, the presence of large companies in coastal zones and their systemically important economic role persists and even intensifies, and the Russian Baltic Sea itself becomes a nodal, central element of the country's entire marine economic activity.

In particular, the 'marine-dependent' clusterogenesis in shipbuilding and car assembly, which, in turn, attracts tire production, auto glass production, electric steel smelting [40] and food industry, taking place in the region is being supplemented by the formation of a LNG production cluster: Gazprom complex in Ust-Luga region, as well as the LNG project Kriogaz-Vysotsk implemented by NOVATEK and Gazprombank. Yet, the trend of increasing transshipment capacity, including the construction of several new ports (universal loading complex in the Primorsky, Leningrad Region; cruise terminal in Pionersky in the Kaliningrad Region and others) shows signs of path dependency. The creation of a marine economic mega-cluster with a clear foreign trade orientation localized mainly on the Gulf of Finland by large business structures with significant state support[12] not only strengthens the competitive position of the entire transport and

[12] The federal target program "Development of the transport system of Russia (2010—2020)." URL: http://fcp.economy.gov.ru/cgi-bin/cis/fcp.cgi/Fcp/ViewFcp/View/2014/264 (access date: 24.07.2019).

logistics corridor of the Russian Federation in the Baltic, but also more clearly emphasizes the status of St. Petersburg as an absolute 'marine capital' of Russia. Further development of St. Petersburg's port-industrial-innovative complex (the decision to relocate the headquarters of the United Shipbuilding Corporation to St. Petersburg from Moscow made in 2019 is symptomatic in this context) suggests its conjugation with the Kaliningrad exclave. The latter's turn to the sea is logical [31] and at the same time allows to gain additional functionality oriented directly towards large companies in connection with the government's decision to establish a financial offshore on Oktyabrslij island in the city of Kaliningrad.

Conclusion

As they enter global markets and incorporate into transnational reproduction chains, Russian largest companies become more and more marine-oriented, which is accompanied by their multifaceted, increasing and, at the same time, selective activity in the coastal zones of the country. The drivers of this trend, to a large extent inherent in shipbuilding, oil and gas production, chemistry and petrochemistry, metallurgy, individual engineering industries and, to a lesser extent, retail, construction and financial sectors, are not only the imperatives of logistics or the increasing competition for using the resource potential of the world ocean, but also a prolonged concentration of consumer and investment demand in leading coastal centers, acquiring the properties of development corridors. The most significant are the positions of the largest Russian companies in offshore oil and gas production, shipbuilding, and in the port sector — the sectors that are now the main drivers of marine economic complex formation, as well as the formation of aquatic-territorial economic structures, including cross-border entities. The multi-vector strategy of localizing production, carried out by leading energy-resource companies giving impetus to the development of coastal territories, including in the Arctic zone, in Pacific Russia is consistent with the Eurasian geo-economic dynamics (including the formation of Greater Eurasia) and is combined with a stable focus on the interests of large businesses on leading urban agglomerations and transport corridors gravitating towards them in the West and South-West of the Russian Federation. The coastal areas in the Baltic Sea are of special priority for large enterprises; even in the conditions of increased geopolitical turbulence post 2014 they retain their communication, market, infrastructure and innovative potential.

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ENTREPRENEURIAL CAPITAL OF THE REGION: THE CONCEPT, MANIFESTATIONS AND SPATIAL LOCALISATION

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An important element of the explanation why an entrepreneur carries out high-risk transactions is the evaluation and analysis of her or his inner qualities. Thus, there is a need to identify the connection between entrepreneurial risk and capital. At the regional level, there is an ongoing academic discussion as to who the carrier of entrepreneurial capital is and how this capital can be measured and evaluated in view of its direct influence on the business environment and economic growth opportunities of a certain territory. This article presents the findings of a study into the complex structure of the concept of regional entrepreneurial capital and establishes how this concept is connected with such categories as entrepreneurial spirit, entrepreneurial substance, and entrepreneurial ability. Using an estimate of the number of economic entities (individual entrepreneurs and farmers; small, medium, and large enterprises) per 1,000 population, the study demonstrates cross-regional differences in entrepreneurial activity as a manifestation of entrepreneurial capital, including those in the Northwestern Federal District.

Keywords:
entrepreneur, risk, lifecycle, evlution of entrepreneurial properties, entrepreneurial spirit, entrepreneurial capital

Introduction

The theory of entrepreneurship has been developing for several centuries and many of its provisions are considered to be established. However, while the economy is growing, entrepreneurship itself is changing, revealing some new forms and properties. In response to such dynamics, the theory of the entrepreneurship is developing, though its fast expansion through new elements is not always reflected on sufficiently.

The concept of entrepreneurial capital today is one of the most rapidly growing research areas. At the same time, many of its provisions remain the subject of numerous academic debates. In particular, there is no unanimity regarding

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what constitutes entrepreneurial capital, what its structure is, and what factors influence it. Scientists and researchers are not certain on who constitutes the entrepreneurial capital, i.e. personally an entrepreneur or a set of entrepreneurs. In the latter case, it is more about the entrepreneurial capital of the region.

If the entrepreneurial capital is to be taken for the background of entrepreneurial activity, then its assessment becomes the most important task for the regional administration through developing a high level of entrepreneurial capital; significant economic growth can be achieved in the region. However, measuring entrepreneurial capital is a challenge since its essential characteristics are poorly defined in modern studies.

Recognizing the relevance of studying the entrepreneurial capital in the region, the author presents the results of a study of its nature and essential characteristics while establishing a connection and hierarchical subordination with individual concepts of the entrepreneurial economics theory. The novelty of the author's study lies in identifying the connection between entrepreneurial capital and such categories as "entrepreneurial spirit", "entrepreneurial substance", "entrepreneurial strength", "entrepreneurial ability", etc.

Based on the established semantic connection and categorical conditionality of entrepreneurial capital, the author's approach to its assessment and measurement has been developed within the framework of the regional management concept. The hypothesis of sufficiency of entrepreneurial capital quantitative assessment is tested with indicators of fixed assets and investments in fixed capital to identify its impact on the regional socio-economic development. The Kaliningrad region was chosen as the object of study, the border and special geopolitical position of which determines its proximity to European markets, thereby stimulating entrepreneurial activity in the region. This enables to both best describe the entrepreneurial capital of the region and evaluate its structure. The compactness and size of the economy quickly reflect the efforts taken and the impact of the increment of various forms of capital on the regional economic growth and development.

Based on the results of a comparative quantitative assessment and analysis of the entrepreneurial capital of the Kaliningrad region and other Russian regions, the author empirically proves and concludes that its quantitative measurement, given the complexity and interdependence with other categories of the entrepreneurial economy, requires specially developed qualitative metrics. Time has been defined as the key factor that affects the interdependence of entrepreneurial risk and capital.

The evidence base which could have been strengthened with the results of a series of organized expert interviews and sociological surveys still limits the study. However, this requires a typological sampling of regions, as well as certain focus groups. Despite the indicated restriction of the evidence base which relies on open-source statistical data, the research conclusions are of great importance for the further development of the theory of regional entrepreneurial economics.

Research methodology and data

Having analyzed the relevant sources, the author continues developing theoretical provisions of the entrepreneurial development in the Russian Federation. The article introduces and tests the indicators of measuring entrepreneurial activity in the regions. For this, the extensive statistical data of Rosstat has been processed, it is presented as a combination table, cartogram and diagram; entities of the Russian Federation (and separately of the North-West Federal District) have been compared by the level and structure of entrepreneurial activity.

The theoretical justification of the entrepreneurial capital of the region

The theory of the entrepreneur economics has been actively studying both the very concept of entrepreneurship, first introduced by R. Cantillon [1], and its relation to risk. Although it was initially assumed that entrepreneurs work under risk conditions, many researchers later began to argue that the desire for risk is the main feature of an entrepreneur [2—4]. Practical entrepreneurial activity shows that risk-prone individuals are not that many among entrepreneurs, while risk disposition is a property of some particular entrepreneurs [1; 5, p. 243]. At the same time, uncertainty is an objective condition for entrepreneurial activity.

So what does it take to be an entrepreneur? R. Cantillon considered that the population of the country, in addition to the "sovereign and other owners of the land," is divided into two classes: entrepreneurs and employees. The class of entrepreneurs is comprised of people who, with or without their own capital and only via the application of labor, carry out entrepreneurial activity with the view of receiving wages. They all exist and operate in conditions of uncertainty [1, p. 27].

Within the context of modern terminology, his idea can be formulated as follows: the more entrepreneurs are in the region, the more actively the region is developing. It is this very position, which is shared today by all economists, that brings about the connection between entrepreneurial activity in the region, entrepreneurial capital, and entrepreneurial potential for entrepreneurship.

A special role is given to the entrepreneurial spirit, the nature and origins of which were examined first by M. Weber [6], and only later by W. Sombart [7, p. 67], who pointed out that this is a "set of spiritual qualities" necessary for the implementation of an entrepreneurial project, while the abilities of a conqueror, organizer, and merchant should be fundamental to successful entrepreneurship.

The concepts of entrepreneurial spirit and entrepreneurial capital are very closely connected, but identifying their relations is getting more difficult due to complexity and vagueness of the boundaries of such a fundamental economic category as capital [8]. There are ideas about capital as exclusively formed by objects involved in commodity-money circulation (see, for example, [9]), since

many things, services, and even relations are taken as goods. The opposite view [10, p. 6] sees capital is a single whole, including such elements as industrial capital (buildings and cars), human capital (knowledge, skills, experience and health), social capital (relations and institutions), financial capital (monetary wealth) and natural capital.

The concept of entrepreneurial capital has evolved from different research approaches to the category of "capital" in relation to certain of market economy.

T. Erickson [11] was among the first scientists to identify conceptual provisions on "entrepreneurial capital" formulated on the dichotomy "financial capital — non-financial capital". It is the latter part that modern authors define as entrepreneurial capital. This is "the physical, organizational, technological, human, cultural, social and symbolic capital of business owners and their companies" [12, p. 150]. But until now, some scientists have doubted this: "In many cases, investors rightly deny the presence of entrepreneurial capital, because entrepreneurs lack the managerial skills necessary for the development of rapidly growing enterprises" [13, p. 9].

If we turn to modern Russian research, many people even consider that "entrepreneurial capital is an investment in enterprises, both new and existing [14, p. 354], and we can distinguish between the two types of investment — portfolio and direct ones. However, if we consider that entrepreneurial capital is the capital used by an entrepreneur, and then it remains unclear, why should the word "entrepreneurial" be added to the word "capital" in the definition of the capital? Indeed, in this case, its difference from any other capital becomes insignificant.

In our opinion, the key element to the definition of "entrepreneurial capital" is an indication that capital is used for generating profit. The founder of neoclassical economics A. Marshall was the first to indicate that the entrepreneur uses hired labor and (most often) borrowed capital in his activities [15]. His idea was supported by other economists, who concluded that the entrepreneur's profit was the payment to him for being able to combine labor and capital together and set up production and sales. But hired labor and capital are used by other participants in the economic system, and not just by entrepreneurs, therefore, it is necessary to highlight the distinctive features inherent in entrepreneurial capital.

We will distinguish between two concepts: capital used by an entrepreneur, and entrepreneurial capital.

Capital used by an entrepreneur is a combination of financial, tangible and intangible assets that an entrepreneur attracts for production. It is no different from the capital used in any other business.

Entrepreneurial capital — this is such an element of the management system that is inherent only to the entrepreneur and no one else, using which the entrepreneur derives additional profit. Of course, entrepreneurial capital is closely related to the systemic properties of the entrepreneur and the entrepreneurial spirit.

V. Sombart [7] defined the entrepreneurial spirit as the totality of all the spiritual qualities of an individual. Therefore, you should highlight and consider those that relate to business — business qualities or entrepreneurial substance.

Entrepreneurial substance is that combination of inner qualities of an entrepreneur that distinguishes him from other individuals and pushes him under certain conditions to engage in entrepreneurial activity. Entrepreneurial substance consists of two elements — entrepreneurial forces and entrepreneurial abilities.

The phrase "entrepreneurial power" is rarely found in the academic literature. Thus, D. Grau uses it as some alternative to the "power of profit": "If you use only the power of profit in business and nothing but it, you will receive profit and pay a lot more for it than if you used a combination of entrepreneurial power and power of profit" [16, p. 20]. M. Lu and H. Pan argue that "entrepreneurial power reflects the "power" of the resources of the economic system" [17, p. 63]. But the authors do not disclose the essence of the concept of "entrepreneurial power," therefore we will especially focus on it.

We propose to consider entrepreneurial power as a measure of the entrepreneur's influence on the economic system in which they operate. That is, entrepreneurial power is that part of the entrepreneur's inner spiritual capacities that allow them to make people work, while financial capital owners are made to loan this capital to the entrepreneur.

In our opinion, the very entrepreneurial powers that make up the entrepreneurial substance include: 1) the instinct of a millionaire, 2) will power, 3) accuracy, 4) curiosity and 5) responsibility.

The instinct of a millionaire. The entrepreneur instinctively understands the opportunities that open for him after making any business decision related to making a profit. He does this intuitively, bypassing all stages of a thorough analysis while working out the best solution in a situation. Intuition is understood as comprehension of truth without comprehensive analysis. Instinct as a manifestation of inner commitment is formed through intuition. This allows the entrepreneur to quickly make decisions ahead of his competitors.

Will power. Regardless of the psychological type of the entrepreneur, any of them is distinguished by a strong character. Actually, without this special perseverance, adherence, and resistance to difficulties, an entrepreneur cannot grow as an individual. The willpower becomes the background for the freedom of the entrepreneur, the freedom to create and the courage to take risks being the primary ones. This willpower brings about the charisma of a leader. Out of any connection with the external implications, willpower and special conscious courage manifest themselves in concrete actions and are recognized by other people. Any entrepreneurial talent will perish, if it wasn't for entrepreneur's willpower and methodology to deal with internal and external threats.

Accuracy. Chinese wisdom, based on many hundreds of years of practice, states: "Speed is more important than strength, but accuracy is more important than speed." Indeed, it can be argued that the speed with which the business is developing is not as important, as the accuracy of the strategy and the main goal. A characteristic feature of the leader is the simplicity and clarity of the plans, combinations and decisions to which he came. Therefore, accuracy is a special

technique of competitiveness, which reflects the connection of intelligence with willpower through a special concentration, which gives insight into details, without which an entrepreneurial step into the unknown is impossible.

Curiosity in the information age is an instrument for introducing knowledge into the economy. Entrepreneurship is not taught at school, and curiosity is the main quality that an owner should have. Curiosity is a pioneer tool. D. Trump, as a well-known major and successful entrepreneur, believes that "entrepreneurs have an intrapersonal type of intelligence that helps them to fall, get up and, having learned another lesson, move on with interest and gratitude for new experience" [18, p. 112].

Responsibility. Entrepreneurship is always associated with risk, and the adoption of risky decisions raises the question of responsibility for failure. Liability is considered to be a social concept, but for an entrepreneur it becomes a character trait that allows it to be a business owner. "Taking responsibility for everything, you infuse yourself with new energy... this serves as a catalyst for success" [18, p. 187]. Even the best management decisions cannot ensure success — only responsible professional team work gives the result.

These five components of entrepreneurial power let the entrepreneur carry out independent economic activity. Such entrepreneurial powers must be complemented by the ability to apply them. Many can use the five entrepreneurial powers to set up a business, but not all of them become successful entrepreneurs, many never grow further than self-employment or small business.

Entrepreneurial abilities should be understood as a set of personal qualities, abilities and talents of a person that allow him to successfully utilize their entrepreneurial powers. Entrepreneurial abilities are determined by the age and sex of the entrepreneur, the education level, experience of independent activity, etc. Since talent is a person's outstanding ability that manifests itself with the acquisition of experience, forming a certain skill, entrepreneurial talent is an outstanding entrepreneurial ability.

The combination of entrepreneurial powers and entrepreneurial abilities is the entrepreneurial substance of the individual. Individuals with "entrepreneurial powers" but not having fulfilled their "entrepreneurial abilities" become "strong business executives" and organizers of large business projects. Therefore, in order for the entrepreneurial substance to be fully disclosed and the person to have an entrepreneurial spirit, it is necessary that society has the opportunity for the entrepreneur to participate in economic activity and the conditions that are created to conduct this entrepreneurial activity. In other words, entrepreneurial potential must be fostered in society, which will allow entrepreneurial abilities to unfold.

If an entrepreneurial substance is a set of properties intrinsic to an entrepreneur, then an entrepreneurial potential is the result of the influence of the external environment, under the influence of which an entrepreneurial substance creates an opportunity (or impossibility) for entrepreneurial activity.

Entrepreneurial potential is determined by the openness of the economy to setting up a new business, the infrastructure of this business, the attitude of society towards business and entrepreneurship, etc.

Social entrepreneurial potential is shaped by people with an entrepreneurial spirit, and the presence of entrepreneurial potential in the society. In other words, entrepreneurial capital is this or that degree of practical application of entrepreneurial substance in the practice of economic life, determined by its degree in a society. If a society has all the conditions for conducting potential entrepreneurial activity, then entrepreneurial capital in it will be at maximum. If entrepreneurial activity is suppressed in society, then entrepreneurial capital will be extremely small and manifest itself exclusively in the shadow business.

The entrepreneurial potential, that is, the ability of an entrepreneur to participate in economic activity, is determined by the presence or absence of the necessary resources at his disposal, that is, their availability. For over a hundred years, the economic science has considered that an entrepreneur manages only two types of resources: the money capital that is attracted for business, and the labor that the entrepreneur hires in the market. This is the basic model, which is a mere simplification, acceptable in idealized constructions of economic theory and unacceptable in theoretical and applied sciences, which, of course, include the economics of entrepreneurship.

The author's personal experience and numerous in-depth interviews conducted with hundreds of successful entrepreneurs have shown that the main resources used by the entrepreneur include labor, capital, information, technology and time. These five resources only will allow the entrepreneur to reveal his potential. Their lack or abundance in society supports different levels of entrepreneurial potential.

Since economists have written much on labour and capital that an entrepreneur uses in his activities, we will dwell on the resources that we have singled out, i.e. information, time and technology. A hundred years ago, the importance of these resources in entrepreneurial activity, and in the business environment as a whole, was not as great as today, so they did not receive enough attention.

Economists wrote about the importance of information for economic decisions. But at the same time, researchers mainly focused on the need to search for information and compared the costs of information search with the outcomes of decisions in the conditions of uncertainty. The importance of information as a resource was mentioned in 1961 by J. J. Stigler [19, p. 221], when he determined the value of information as a resource while searching for the necessary data. But today, in the context of the digitalization of the economy, an entrepreneur is faced with a different situation, some information redundancy.

We live in an era of growing influence of the digital economy. When making an attempt to perceive the information, the person's attention gets scattered, and a certain paradox arises — the more information surrounds the person, the more uncertainty grows. The essence of the paradox is that, by definition, information is a tool for eliminating uncertainty. An overabundance of information opens up such a large number of decision options for the decision maker that he is not able to process the data sets and again faces a situation of uncertainty. If an entrepreneur has information about some event, he can easily absorb it and give it

a sensible assessment. When this information embraces two simultaneously occurring events, the entrepreneur can absorb it and make the right decision. But in conditions of the information overabundance, the entrepreneur is not only unable to make the best decision, but often is not able to do it at all. Therefore, information is the most important resource that an entrepreneur should dispose of at his discretion. Only the availability of modern information technologies will help the entrepreneur to efficiently use it as a resource.

In the framework of digital economy, when production technologies are impossible without the use of IT, it is getting obvious that time is turning into the most important resource of entrepreneurial activity besides information. To be the first to make an important decision and take the advantage of it in an effort to maximize the profits creates the instance when entrepreneurial substance relates to this resource. It is the very case when the entrepreneur really manages time, and the entrepreneur's risk appetite is manifested. Making a decision under risk is an important step that only someone who has mastered the talent for using time as a resource can dare. To manage time, an entrepreneur should be freed from the situation to spend it on solving routine tasks.

Of course, delegating authority to your subordinates is good tool of time management, but in reality there are many tasks that can't be solved by anyone but for the entrepreneur, since they are vital for his business. Numerous business regulations issued by government force the entrepreneur to spend his time following such regulations and personally completing the tasks. As a result, it reduces the time spent on developing your own business. If we compare the time that a Russian entrepreneur spends on managing his business with such in Western countries, the difference does not favor a domestic entrepreneur. The survey and personal meetings with both domestic and Western European partners proved that a Russian entrepreneur spends at least a third less time on doing business than a foreign colleague. This expert assessment can be amended, since the author did not carry out thorough measurements.

The rapid diversification of the world economy, which began in the 70s of the twentieth century, contributed to a significant increase in possible production technologies. The modern world provides each business executive with the opportunity to use a great variety of technologies. A great number of technologies determine the need to choose one of them by each entrepreneur. Technology today is also a resource that an entrepreneur uses.

Each technology has its own advantages and disadvantages and the information about them is extremely voluminous. In order to make the right decision, the entrepreneur uses the instinct of a millionaire. This instinct allows him almost instantly, bypassing the numerous stages of reasoning, comparison and preliminary selection, to "feel" the importance of the technology that he takes as a background. But a mistake in choosing and using a resource can be fatal.

Thus, the degree of entrepreneur accessibility to these five resources determines the entrepreneurial potential of the region.

Moreover, entrepreneurial capital brings together two interrelated components: 1) a set of properties inherent only to an entrepreneur (entrepreneurial substance), and 2) a set of conditions and factors that allow a potential entrepreneur to decide on independent entrepreneurial activity (entrepreneurial potential).

The above-mentioned statements on the interconnection of many theoretical economic concepts make it possible to understand how entrepreneurial capital should be managed at the regional level. These provisions are divided into two main areas: a) developing an entrepreneurial spirit in society as a whole and for each person individually; b) creating conditions for the realization of that part of the entrepreneurial substance of the individual, which was called "entrepreneurial abilities", through the growth of the entrepreneurial potential of the region.

The entrepreneurial spirit of the region can be best revealed in the case when the company does not just support entrepreneurial activity, and its occupation becomes as honorable as activities in the field of science or art, the fulfillment of duties to protect the life and safety of citizens, etc. For the implementation of spiritual society and regional authorities should increase the entrepreneurial potential of the qualities of individuals in the region. This potential is determined by the availability of the five main discussed types of resources for any entrepreneur.

Regional differences in the level | of development and use of entrepreneurial capital

Entrepreneurial capital is increased through the activities of individual entrepreneurs, farmer households and due to the emergence and development of enterprises created by entrepreneurs: microenterprises, small, medium and large enterprises. In different regions of the Russian Federation, their ratio is not the same and depends both on the regional society and on the socio-economic characteristics of the region. A common trend in recent years is a more intensive development of individual entrepreneurship, however, the bulk of the goods and services are created by large enterprises, according to the ongoing research (see, for example, [20]). The strategy for the development of SMEs in the Russian Federation up to 2030 poses the following tasks: "Increasing the share of the employed population in the SMEs sector out of the total population up to 35 percent. A strategic guideline is to double the share of small and medium enterprises in GDP (from 20 to 40 %), which will correspond to the level of developed countries"[1].

[1] The development strategy of small and medium-sized enterprises in the Russian Federation for the period until 2030. Approved by order of the Government of the Russian Federation of June 2, 2016 No. 1083-r. URL: http://pravo.gov.ru/proxy/ips/?docbody=&nd=102400738 (access date: 15.09.2019).

Figure 1 and Table 1 show the territorial differences in entrepreneurial activity (which the author estimates using indicators of the number of citizens involved in the management of both legal entities and individuals, per 1000 population) by regions of the Russian Federation.

Figure 1 indicates in which parts of the country organizing the activities of large enterprises is more or less vigorous. First of all, Moscow, St. Petersburg and neighboring subjects of the Russian Federation, oil and gas producing autonomous districts and the Novosibirsk region in Western Siberia, and a number of regions of the Far East are characterized by high indicators. The fewest number of large enterprises per 1000 inhabitants are located in the subjects of the Russian Federation adjacent to the southern border of the country, in Eastern Siberia and some republics of the Volga and Urals.

Table 1 distinguishes between the groups of regions according to the activity of individual entrepreneurs, on the one hand, and SMEs emergence on the other. In both cases, the most economically developed entities of the Russian Federation classified as type 1A are distinguished. These are Moscow and St. Petersburg, the Novosibirsk region, one of the most advanced Siberian regions, as well as the Kaliningrad region, where the economic and geographical position, resettlement patterns and the regime of the Special Economic Zone contribute to the development of small business. Regions of 2A and 3A types are characterized by a high level of individual entrepreneurial activity (the differences between these types are that the number of small enterprises per 1000 population is higher in 2A).

The indicators for 2B regions are close to the national average. Type 3B differs from 2B in the smaller number of SMEs per 1000 inhabitants. Type 3C includes regions in which the number of individual entrepreneurs and the number of small enterprises per 1000 people are the lowest in the country. These are some republics of the North Caucasus, Mordovia in the Volga region, as well as the Kemerovo and Amur regions in the east of the country.

Figure 2 shows a more detailed comparison of inter-regional differences in entrepreneurial activity, which reflects the number of business entities of various types per 1000 population in the regions of the North-West Federal District. This area is characterized by a generally higher level of business development compared to the average for the Russian Federation. All regions of the district (especially western ones) per 1000 inhabitants have a relatively high number of large enterprises. The indicator of individual entrepreneurship in most regions is close to the national average. And only the numbers of small enterprises per 1000 people is higher than the average in four regions and lower in six. St. Petersburg and the Kaliningrad Region which are among the leaders in both indicators, belong to the coastal “international development corridors” [22] (and the first one, according to the classification of J. Friedman [23], to “core regions”, to subjects — leaders of the socio-economic development of the country).

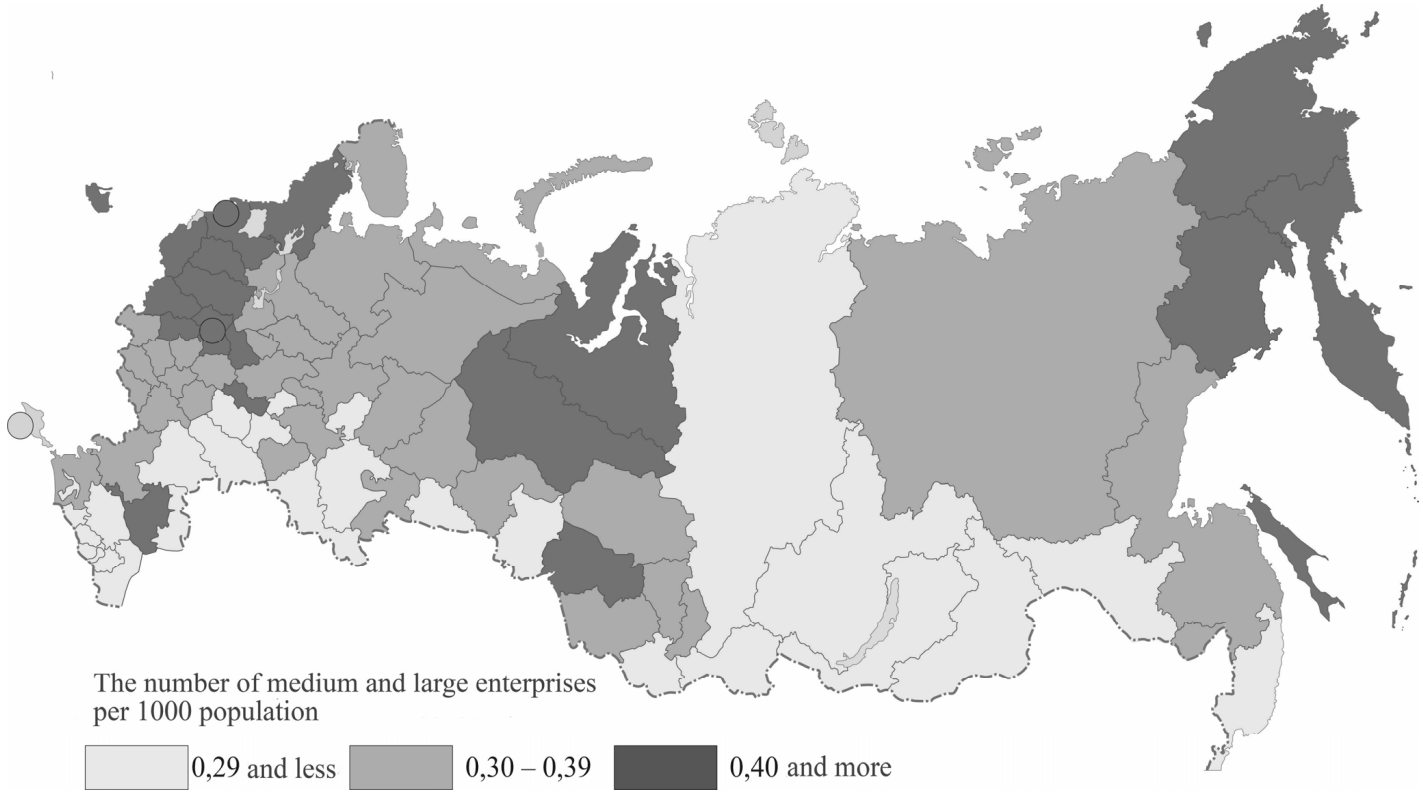

Fig. 1. The number of medium and large enterprises per 1000

population Based on Federal State Statistics Service data. URL: https://www.gks.ru/ (access date: 09.15.2019).

Table 1

Prevalence of SMEs

Type of the region	Per 1000 population		Regions
	Individual entrepreneurs and farmers	SME	
1A	25,0 and more	25,0 and more	Moscow, Saint Petersburg; the Kaliningrad Novosibirsk region
2A	30,0 and more	15,0—24,9	Sevastopol, the Kamchatka Krai; the Belgorod, Moscow, Magadan, and Sakhalin regions
3A	30,0 and more	14,9 and fewer	Republic of Adygea, Kalmykia, Crimea, Altai, Sakha (Yakutia); Yamalo-Nenets, Khanty-Mansi Autonomous Okrugs; Krasnodar, Stavropol Territory; Kaluga, Rostov region
2B	14,0—29,9	15,0—24,9	Republic of Karelia, Tatarstan, Udmurtia; Perm, Krasnoyarsk, Primorsky, Khabarovsk Territories; Vologda, Murmansk, Pskov, Ivanovo, Kostroma, Ryazan, Smolensk, Tver, Yaroslavl, Nizhny Novgorod, Kirov, Samara, Ulyanovsk, Sverdlovsk, Tyumen, Chelyabinsk, Irkutsk, Omsk, Tomsk regions
3B	20,0—29,9	14,9 and fewer	Komi Republic, Kabardino-Balkaria, Karachay-Cherkess, Bashkortostan, Chuvash, Buryatia, Tuva, Khakassia; Altai, Transbaikal Territories; Arkhangelsk (with the Nenets Autonomous Okrug), Leningrad, Novgorod, Bryansk, Vladimir, Voronezh, Kursk, Lipetsk, Oryol, Tambov, Tula, Astrakhan, Volgograd, Penza, Saratov, Orenburg, Kurgan regions; Jewish Autonomous Region; Chukotka Autonomous Okrug
3C	19,9 and fewer	14,9 and fewer	Republic of Mari El, Mordovia, Dagestan, Ingushetia, North Ossetia — Alania, Chechen; Kemerovo, Amur region

Based on data: Federal State Statistics Service. URL: https://www.gks.ru/ (access date: 09.15.2019).

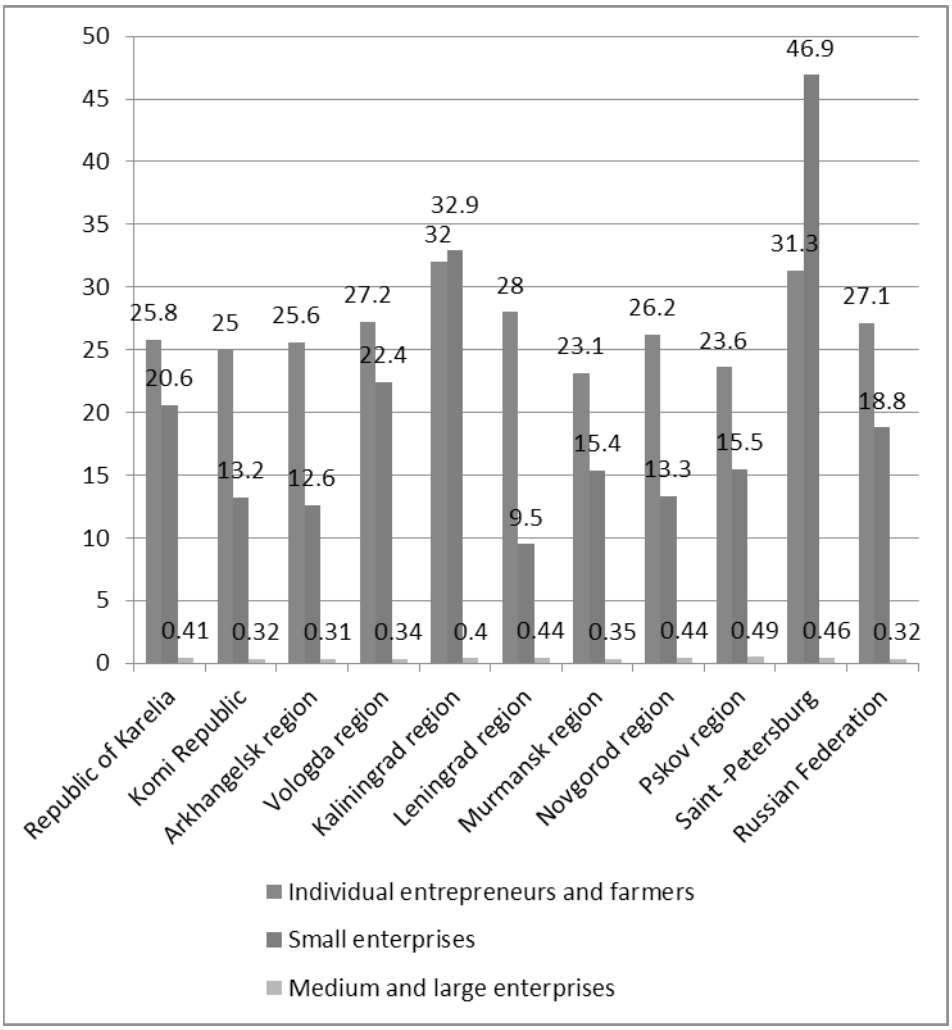

Fig. 2. The number of business entities of various types per 1000 population in the constituent entities of the Russian Federation, North-West Federal District

Based on Federal State Statistics Service data. URL: https://www.gks.ru/ (access date: 09.15.2019).

Conclusion

The study found out that the entrepreneurial capital of the region is one of the elements of the management system, which is connected and determined by the entrepreneurial spirit.

In a broad sense, the entrepreneurial spirit is understood as business qualities, and the entrepreneurial substance is its main component. The entrepreneurial spirit is an inherent quality of the entrepreneur and a set of properties, formed by such components as entrepreneurial strength and entrepreneurial ability.

Possessing entrepreneurial forces in order to realize the existing entrepreneurial abilities, society must create the conditions for growing entrepreneurial potential. It is supported by the availability and accessibility of resources such as capital, labor, information, technology and time.

Thus, the entrepreneurial capital of the region expresses different degrees of entrepreneurial substance in the everyday economic life, due to the varying degree of entrepreneurial potential in society.

In addition to the categories of entrepreneurial capital highlighted in this article in the section "Theoretical justification of entrepreneurial capital of the region", as well as previously reviewed by the author [24], it is proposed to use indicators of entrepreneurial activity such as the number of business entities (individuals and legal entities) based on 1000 people. These indicators, reflecting the situation in the entities of the Russian Federation, are presented in the article in the figures and in the table. Very significant inter-regional differences in relative indicators, reflecting the activity of individual entrepreneurs, farmer households, small, medium and large enterprises, were revealed and clearly reflected. It is advisable to take them into account in the development of federal regional policy documents and in strategies for the socio-economic development of regions.

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REVIEW

N.M. Mezhevich, I.N. Novikova

Kisseljova, L.N. *Estonsko-russkoe kulturnoe prostranstvo [The Estonian—Russian cultural space]*. Moscow : Vikmo-M, 2018.

The end of 2018 saw the release of a book by Ljubov Kisseljova, professor of the University of Tartu. The Federal Agency for Press and Mass Communications supported the publication under the targeted programme The Culture of Russia 2012—2018. Let us start with the obvious. There are few books by Estonian professors written in Russian. Strictly speaking, there are few Tartu professors, regardless of what language they write their works in. There are obvious reasons for the death of Russian-language academic contributions. Although famous among specialists across various fields, the University of Tartu is a small establishment. There are few Russian, or more precisely, Russian-writing professors. Moreover, Russian-Estonian relations, which are not at their best today, do not create a favourable environment for academic collaborations.

Fortunately, the reviewed study was published in Moscow by the Vikmo-M publishing house. The book makes an interesting and effective attempt at formulating the question about cultural contacts between two neighbouring peoples — Russians and Estonians. The Russian—Estonian cultural space is such a significant phenomenon that it is recognised even by those who deny the very need for Russian—Estonian interactions, i.e. those who see their country, Estonia, as bordering on something big and familiar in the west and by a different world, a different civilization in the east [1, p. 185].

Not only it is denying the significance of the Russian—Estonian cultural space; but it works against the very logic of how the Estonian people and language develop. *Keeled suus — teed lahti* [roads are open to those who has mastered languages] is, after all, an Estonian proverb. It seems short-sighted to replace this century-tested wisdom with the motto 'Blocked roads for those without a language',

Having busied herself with an ambitious task, Prof. Kisseljova achieved much more in her monograph. Her book is an anthem for multilingualism, which emerged within the borders of today's Estonia throughout the burdensome history of the country. In the preface to her monograph, the Estonian-born author writes that for as long as she can remember herself she has been hearing Estonian, Ger-

man, and Yiddish along with Russian, which was spoken in her family [p. 11]. Although most of the study focuses on the Russian—Estonian cultural space, it also examines the Estonian—German, Russian—German, Russian—Jewish, and other cultural spaces. The contribution of each to the culture of contemporary Estonia is invaluable.

The monograph is deliberately de-politicised. It could not be different. Otherwise, it would be a work in a different field of study. There are political and economic strands in the study since cultural spaces develop hand in hand with political evaluations made not by researchers but by the members of those spaces.

The monograph opens with a chapter devoted to the great Estonian writer Jaan Kross. It juxtaposes his characters with real public figures in the 19th-century Estonia, who were Kross's inspiration. The central motifs of the writer's works examined in Kisseljova's research are nation-building in Estonia as well as Estonians becoming aware of themselves as such and starting to perceive their native tongue as not the peasant language (*maakeel*) but as the Estonian language (*eesti keel*).

The processes that led to nation-building and the rise of national identity in Estonia in the 19th century are often invoked by the adherents of the so-called modernist theory of nationalism. According to that teaching, European nations appeared in the 18th—19th centuries following the Industrial Revolution, urbanisation, and modernisation; later, nationalism spread across the world together with modernisation [2, pp. 11—12].

The emergence of the Estonian nation in the form that it took in the 19th century would have been impossible without contacts between Estonians and members of other ethnic groups living in the country, first of all, the Russians and the Germans. Those interactions helped Estonians to understand that the Estonian-born peasant Jakob, son of Peter, does not cease to be an Estonian even after having obtained an education and having moved to a mansion. Therefore, the Russian—Estonian, Estonian—German, and other cultural spaces played an important role in nation-building in Estonia.

Prof. Kisseljova examines the biographies of ethnic Estonians, such as Friedrich Nikolaus Russow, who belonged by birth to Estonian German culture. A state counsellor and a holder of Russian orders of chivalry, Russow was a member of the St Petersburg circle of Estonian patriots and fought for better conditions for Estonian peasants. Most representatives of the first generation of Estonian intelligentsia were in the same situation. Aware of the severe and irremediable deficiencies of the Russian emperor's rule, they had good reasons to see St Petersburg as an inhibitor of orthodox German influence.

Prof. Kisseljova offers a new perspective on familiar faces. She tells the story of Thaddeus Bulgarin, who wrote fascinating essays about Estland and Liefland,

lived in Tartu (at the time, Derpt) for a long time, and settled permanently in the city. Bulgarin was an ethic Pole with a well-known political background. At the same time, he left copious notes on the nature and culture of the region [p. 135].

Remarkable are the facts collected by Kisseljova on the perception of Estland and Lieflan by wealthy and influential travellers from Petersburg. Their travel logs tell plenty about the lives of people and contain reflections that have an immediate bearing on the topic of the monograph. An informative piece of travel literature is the memoirs and essays of Stepan S. Zhykovsky (pp. 162—164).

Prof. Kisseljova shrewdly juxtaposes Zhukovsky's and Bulgarin's travel logs to the memoirs of those who saw in Estland and Liefland nothing but German lands. The latter view was supported by Nikolai I. Rozanov, the author of the first Revel travel guide in Russian.

Rozanov mentioned many positive aspects and emphasised the learnedness and family virtues of Estonians, yet he described Estland as a purely German land. All the travellers in the region, eastern and western, were asking themselves whether they were in a German, Russian, or some other land.

Written at the Department of Russian Philology of the University of Tartu, the reviewed book could not ignore the figure of Yuri M. Lotman and his work at the Departments of Russian Literature, Foreign Literature, and Semiotics. The influence of Lotman goes beyond his home university. His work is a good example of a researcher's contribution to the whole rather than the division of the particular.

In Soviet Estonia, Lotman (especially when he headed the Department of Russian literature at the Univerity of Tartu) was advancing the development of multilingualism, the anthem for which is Kisseljova's monograph. As she writes, 'everyone born in Estonia was gaining the experience of multilingualism long before the onset of globalisation' (p. 11).

In the era of globalisation, multilingualism remains a distinctive feature of Estonia and its cities. This is how Narva looked at the beginning of the 21st century: 'A primarily Russian-speaking city at the border between the European Union and Russia, Narva is a place were multilingualism, cross-cultural communication, and inter-ethnic interactions are entering into a new phase' [3, c. 152—153].

Prof. Kisseljova concludes the narration with an account of the untimely death of Lotman. He had passed away before globalisation, whose fruits we are witnessing today, began in Estonia. The history of the Russian—Estonian cultural space, however, did not end there. A new chapter in the 21st-century history is, for example, the restoration of St John's Church (*Jaani kirik*) in St Petersburg. We can only hope that this and all the following chapters in the history of the Russian—Estonian cultural space will be covered in the literature, the level of which will be as high as that that one can enjoy when reading Prof. Kisseljova's book.

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