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PROBLEMS AND PROSPECTS OF SIBERIAN INLAND TERRITORIES' DEVELOPMENT IN THE CONTEXT OF RUSSIAN MARINE ECONOMIC ACTIVITY

PROBLEMY I PERSPEKTYWY ROZWOJU SYBERYJSKICH TERYTORIÓW ŚRÓDLĄDOWYCH W KONTEKŚCIE ROSYJSKIEJ MORSKIEJ AKTYWNOŚCI GOSPODARCZEJ

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Abstract

In the 21st century, not only is Siberia the most important macroregion of Russia, the most extensive in its territory and significant in terms of natural resource potential, it is also one of the key objects of Eurasian geopolitics. The article shows the “sea factor’s” significance in its influence on the formation of ideas about the external borders of Siberia, as well as substantiates the conjugation of the socio-economic development of Siberian regions with the markedly increased maritime activity in the Russian Federation since the beginning of the 2000s (first of all, with the port economy and extraction of hydrocarbons on the sea shelf). Based on the application of statistical, comparative-geographical and cartographic research methods, it is shown that it is precisely due to the post-Soviet geo-economic and geopolitical processes (including Russia’s accelerated entry into the global “oceanic” economy) that the duality of Siberia’s position in the “continental-oceanic dichotomy” is more clearly manifested. This is characterized by the continuing

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“stratification” of Siberian territories into the “continental” ones (including those that were in the sphere of influence of the hinterlands of the largest seaports) and the coastal ones (both with historically established and newly formed centers of marine economic activity). Particular attention is paid to the possibilities and priorities of the conjugation of Russia’s “maritime” strategies (primarily in the Arctic) and efforts to mitigate the negative economic effects of the “continentality” of Siberian territories.

Keywords: marine economic activity, inland territories, socio-economic development, geopolitics, Siberia, Arctic, Russia.

Streszczenie

W XXI w. Syberia jest nie tylko najważniejszym makroregionem Rosji, terytorialnie najrozleglejším i znaczącym pod względem potencjału surowcowego. To także jeden z kluczowych przedmiotów geopolityki eurazjatyckiej. Artykuł ukazuje znaczenie „czynnika morskiego” i jego wpływ na kształtowanie się wyobrażeń o granicach zewnętrznych Syberii oraz przedstawia powiązania rozwoju społeczno-gospodarczego regionów syberyjskich z wyraźnie wzmożoną aktywnością morską Federacji Rosyjskiej od początku lat 2000 (przede wszystkim z gospodarką portową i wydobywaniem węglowodorów na szelfie morskim). Wykorzystując metody statystyczne, porównawczo-geograficzne i kartograficzne, wykazano, że z powodu postsowieckich procesów geoekonomicznych i geopolitycznych (w tym przyspieszonego wejścia Rosji do globalnej gospodarki „oceanicznej”) uwidacznia się dwoistość pozycji Syberii w dychotomii kontynentalno-oceanicznej. Proces ten charakteryzuje się trwającą „stratyfikacją” Syberii na część kontynentalną (obejmującą tereny, które znajdowały się w strefie wpływów zaplecza największych portów morskich) i przybrzeżną (związaną zarówno z historycznymi, jak i nowo powstałymi ośrodkami morskiej działalności gospodarczej). Szczególną uwagę zwrócono na możliwości i priorytety sprzężenia rosyjskich strategii „morskich” (przede wszystkim w Arktyce) z wysiłkami na rzecz złagodzenia negatywnych skutków gospodarczych kontynentalizmu terytoriów syberyjskich.

Słowa kluczowe: morska działalność gospodarcza, terytoria śródlądowe, rozwój społeczno-gospodarczy, geopolityka, Syberia, Arktyka, Rosja.

INTRODUCTION

Dividing the earth’s surface into “Land” and “Sea” is not only a spatial reality, but also a basic element of the geographical picture of the world. Since the end of the 19th – the beginning of the 20th century, not only has the dominant idea of the importance of the “sea factor” in the life activity of both Humanity as a whole and individual states taken root in science (Metchnikoff, 1889; Mahan, 1890; Mackinder, 1904; Semenov-Tyan-Shanskiy, 1915 et al.; Savitskiy, 1921; Braudel, 1979), there has also been a separation (with elements of opposition that have reached their maximum manifestations in publications on geopolitics) of “ocean-

ic" countries and regions from the actual "intra-continental" territories (Spykman, 1944; Dugin, 2012). The latter traditionally includes Russia (Kolosovskij, 1925), which indeed historically (since the 16th century) possessed vast land areas, in its overwhelming part located beyond the Urals, in the east of the country, on conjugated (although, at the same time, quite heterogeneous in natural landscape, resource, ethnolinguistic, economic relations) territories, for which it is customary to use a single toponym – Siberia.

In today's globalized world, human activity in the oceans and coastal regions is expanding on an unprecedented scale (Kildow, McIlgorm, 2010; Won, 2012; Stojanovic, Farmer, 2013). The universal process of "shift to the sea" (Cori, 1999; Bowen et al., 2006; Martínez et al., 2007; Chaberek-Karwacka, 2017) of population, production and infrastructure has been taking place in the Russian Federation in the last two and a half decades (Radvanyi, 2017; Druzhinin, 2019). The purpose of the article is to identify the degree and main directions of the influence of maritime economic activity in post-Soviet Russia on the regions of Siberia, to show the possibilities and priorities of combining the "maritime" strategies of the Russian Federation (primarily in the Arctic) with the extremely necessary (for socio-demographic, economic-structural and geopolitical reasons) efforts to stop the negative economic effects of the "continentality" of the Siberian territories.

MATERIALS AND METHODS

The spatial structure of Siberia is characterized not only by its super-large size, but also by its multidimensional, polycentric, and non-static external boundaries. The latter characteristic is especially important for identifying the inland part of the region and determining the boundaries within which the marine economic factor influences the socio-economic development of Siberia. The concepts of Siberian borders are extremely variable, and not only in historical retrospect. Due to geopolitical, economic and other influences, the borders of the region (and ideas on those) have undergone significant changes in the past and continue to change in the present.

In the works of a significant part of international researchers, Siberia has been identified with the Asian part of Russia from the time of its development by the Russians to the present. A widespread description of the region, as a territory from the Urals to the Pacific Ocean, is found not only in the works on history of Siberia (Lincoln, 2007), but also in the articles on cultural studies (Haywood, 2010), geo-resource studies (Mueller et al., 2016) and geopolitics (Hill, 2004; Rousseau, 2013). Even scientific studies devoted to the regional features of Siberia rarely consider the region within the territory of a smaller area, most often in such cases, the Far East or parts of it are "cut off" (Groisman et al., 2013).

A similar view of the definition of Siberian boundaries in Russian scientific works prevailed even before the second decade of the 20th century. At the same time, an approach that originated in the late 19th century, which assumed the separation of an independent Far East, is gaining popularity (Minakir, 2006). The allocation of the new region was primarily due to the increased marine economic activity. Already in the middle of the 20th century, such a separation of the coastal zone (i.e., the study of the Far East outside the Siberian context) was fully established in the Russian scientific literature (Sochava, Timofeyev, 1968).

However, the separation of the territory of the Far East from Siberia was only the first stage of the “truncation” of the previously unified space. The gradual creation of the Northern Sea Route infrastructure has led to the formation, in the minds of the authorities and researchers, of the Arctic space, isolated from the rest of Siberia, gravitating towards the sea by the type of economic development and logistics.

The reduction of the territory of Siberia also occurred from the west: the Urals, economic development of which began much earlier than Siberia, became the center of economic gravity for the oil and gas fields of Western Siberia developed since the 1960s. Over time, the oil and gas province became critically important for the economy of the whole country, but the connection with the Ural Economic Region did not lose its importance and even acquired administrative formalization when the system of federal districts (Federal Okrugs) was created in 2000, according to which the Tyumen region with the Khanty-Mansiysk and Yamalo-Nenets autonomous okrugs became part of the Ural Federal Okrug.

Administrative reforms did not stop the process of transferring the territories of Siberia to other districts – another reduction took place in 2018, when the Republic of Buryatia and the Zabaikalsky Krai were transferred to the Far Eastern Federal District. As a result, the territory, understood by the federal center as Siberia, is currently only slightly more than 25% of the territory of Russia (with the area of the Asian part of the country being 3/4 of the total Russian).

This kind of age-old restructuring and reformatting Siberian spaces allows us to simultaneously define both the actual “mini-Siberia” (within the borders of the Siberian Federal District), and “Siberia mini plus” (the same structure, but with Buryatia and Zabaikalsky Krai transferred to the Far Eastern Federal District), and “Siberia medium” in its borders identified by Siberian geographers from the Tyumen Region in the west, to Yakutia in the east inclusive (Bezrukov, Korytny, 2009), which occupies, in total, 56.7% of the country’s territory. The perception of Siberia Maxi as the entire Russian territory east of the Ural Mountains, a gigantic territory with an area of 12.4 million km², also continues to be cultivated (Ryzhkov et al., 2012). There is still a traditional correlation of the spaces of Siberia (“Siberia maxi plus”) with the entire Asian part of the country (Semenov, 2018), with Eastern Russia (Dets, 2015).

In this study, we did not set out to determine the “fair” or final borders of Siberia, moreover, we do not stop at only one of their options. When making calculations and comparisons based on official statistics, the borders of Siberia in the article include the smallest variant covered by the Siberian Federal District in 2021. The regions included in it are also the most continental, if we do not take into account the Arctic coast. However, the general patterns deduced in the course of the analysis generally correlate with Siberia, which stretches from the Urals to the Pacific Ocean, as an extremely differentiated territory, but at the same time practically everywhere demonstrating weak indicators of economic and infrastructural development in comparison with the European part of the country.

It is also important to note that the dependence of Siberia on the marine factor is not limited only to the physical distance to the seas. Export opportunities are undoubtedly one of the main limiting factors for the economic development of Siberia. Currently, relying also on the possibilities of maritime logistics, Siberia sends abroad 87% of Russian coal exports, 2/3 of oil, etc. (Bezrukov, 2013). The inclusion of Siberia in the global (“oceanic”) economy inevitably leads to its general “marinization”, and, at the same time, to the further “stratification” of Siberian spaces into “ultracontinental” (in the terminology of L. A. Bezrukov, who noted, in particular, that the distance of the regional centres of the Siberian Federal District from the main domestic seaports is 3–4 thousand km or more in the shortest railway directions (Bezrukov, 2013)) and coastal, directly gravitating to the Arctic Ocean. At the same time, most of the Arctic coast of Siberia can be attributed to the coastal territories rather conditionally: in municipalities of huge area, even a strip of land adjacent to the sea has only spot economic and infrastructural development. At the same time, all logistics operations are limited by the seasonality factor and the possibilities of icebreaking ships.

At the same time, the continentality growing inland is also uneven. Despite the fact that the distance of even tens of kilometres from the infrastructure of seaports in conditions of low transport accessibility practically isolates the territory from world markets, the main railway communications (first of all, the Trans-Siberian Railway) form a kind of inversion in terms of “continentality”. In a situation where the coastal position in the transport-geographical sense is defined by the time spent on communication with seaports, the territories located in the strip up to 40 kilometres from the railway lines are much closer to the “sea” (Bezrukov, 2013). In this context, the main zone of settlement and economic development located in the south of Siberia in the process of incorporating the economy of the Siberian regions into global value chains demonstrates pronounced “quasi-coastal” characteristics.

RESULTS AND DISCUSSION

The marine factor for the Russian economy

The vast territory of the state for many years determined the formation of Russia as a continental power. Individual examples of the development of large port cities had practically no effect on the general trends in the distribution of the population and production facilities. In Soviet times, many economic ties and supply chains were purposefully closed within the country, which also did not contribute to changing the current structure of the economy. However, with the gradual inclusion of the Soviet Union in the growing world trade since the 1960s, the country's economy began to turn towards the World Ocean (Gorshkov, 1976).

Along with the collapse of the Soviet Union, which brought not only geopolitical and ideological changes, but also catastrophic consequences for the Russian economy, the country's coastal position changed dramatically. Formally, Russia has become a more oceanic state, since most of the breakaway territories belonged to the inland. However, after 1991, 96% of all maritime boundaries began to belong to the Arctic and Pacific waters, while the main part of the coastal infrastructure before the collapse of the USSR was concentrated on the seas of the Atlantic Ocean basin. In general, 15 strategic port cities, 9 of the 17 shipping companies of the Soviet Union and 25 of its 67 seaports remained outside the borders of the new Russia (Alkhimenko, 2005).

In these circumstances, the new sea vector of Russia had a pronounced compensatory, "restorative", adaptive character. The accelerated development of its own ports has become a guarantee of independence from the transit tariffs of new border countries, as well as an opportunity not only for a more reliable inclusion of the country in the world trade chains, but also a chance to develop its own coastal regions (23 regions of the Russian Federation are located on the sea shores) and municipalities (183 of them account for more than 27% of the entire territory of the country).

The explosive development of the port economy in Russia manifested itself not only in an increase in the turnover of seaports (8 times over the period 1994–2020), but also in the general restructuring of the Russian economic space. The new balance of interaction between inland and coastal territories was also reflected in the change in the vast areas of influence of large seaports (hinterlands), which included the leading export-oriented regions of Siberia (Dets, 2017; Druzhinin, 2017).

The development of Russia's coastal zones since the early 2000s has also been complemented by the active construction of oil and gas transportation infrastructure, some of which was brought to seaports, and some in the form of underwater pipelines was built to the territories of importing countries. The construction of trunk pipelines, often perceived as part of Russia's geopolitical strategy

(Pototskaya, 2018), has had a positive impact on the overall transport and logistics capabilities of the Russian Federation (Radvanyi, 2017; Druzhinin, 2021). At the same time, the high cost of these infrastructure projects, together with the unavailability of data on their payback, raise many questions regarding the need for their implementation in general and their routes in particular (Dets, 2020).

The main driver of the “sea-orientation” of modern Russia is its clearly manifested energy and raw materials specialization (according to the Federal Customs Service, almost 65% of Russian exports in recent years have been accounted for by fuel and energy goods), which contributes not only to the advanced development of seaports and cargo transportation (stimulated also by the export of coal, metals, mineral fertilizers, grains), but also the growing interest of Gazprom and other specialized structures of large business (Lukoil, Novatek, Rosneft, etc.) in oil and gas fields in the coastal and shelf zones of the country. In recent years, there has also been a progressive trend in the Russian fishing industry, localized primarily in the waters of Pacific Russia (Kamchatka provides about 38% of all catches, Sakhalin – 22%).

Siberia's distinct specialization in resource exports (see Figure 1) also reinforces Russia's overall “pivot” to the sea. It should be borne in mind that the Federal Customs Service distributes goods by region in accordance with the data provided by the exporting company, and this leads to the registration of more than half of the country's raw materials exports in the capital (at the location of the headquarters of the companies). Nevertheless, the remoteness of the main exporting regions of southern Siberia from the sea remains obvious. And while pipelines for the export of liquid hydrocarbons have already been put into operation or are currently being built, the position of coal exporters remains extremely dependent on access to the limited resources of the railway infrastructure.

The multidirectional growth of most types of marine activity observed in the last two decades has also contributed to the growth of the shipbuilding industry, which unites more than 150 enterprises. This circumstance, as well as the general strengthening of Russian economy's orientation towards the development of coastal territories, has led, among other things, to a noticeable “shift” of the population to the largest coastal cities and the agglomerations formed by them. To a greater extent, this affected the St. Petersburg, Rostov and Kaliningrad agglomerations, to a somewhat lesser extent – Vladivostok and Arkhangelsk. The formed seaside economic centres not only represent “facades” and act as “outposts”, but also become the most important nodes of “communication corridors”.

Economic effects for Siberian regions

In the existing system of international trade, it is Siberia that forms and provides the most important components of the economic “profile” of Russia. At the same

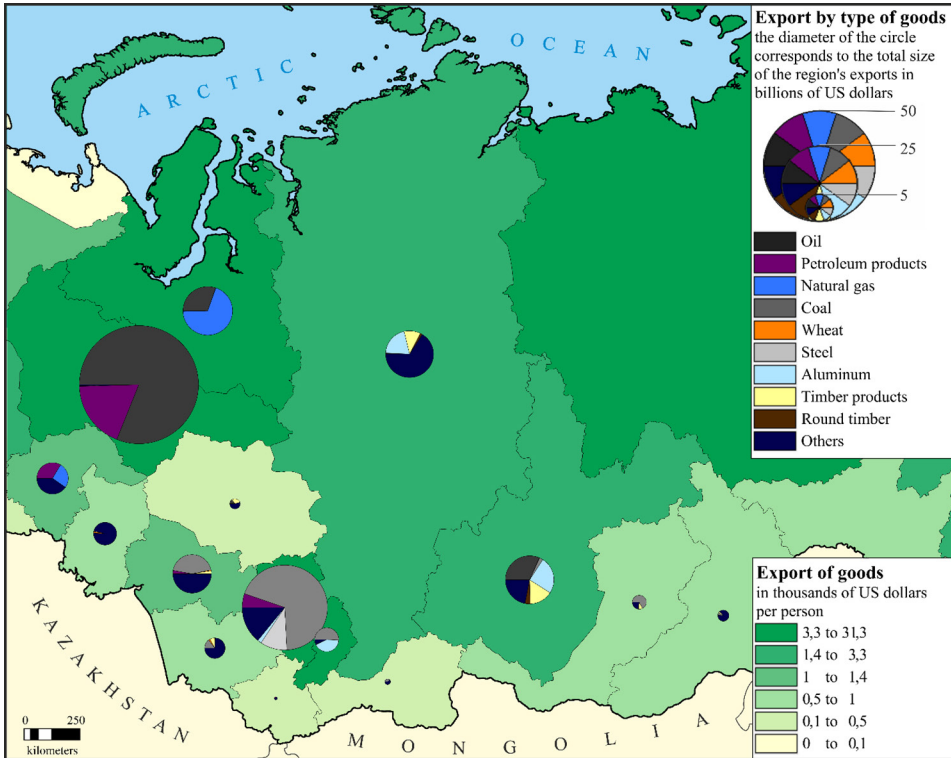


Fig. 1. Exports per capita and by type of goods in the regions of Siberia in 2019
Source: own work based on Federal Customs Service.

time, practically the entire post-Soviet period has been steadily consolidating the raw material specialization of the Siberian economy, as the most competitive (Lomakina, 2015) and demonstrating steady growth (Bezrukov, 2020) in comparison with other sectors of the region's economy. The key position of Siberia for the Russian economy to some extent allows us to balance the prevailing centripetal vectors directed to the metropolitan agglomerations.

At the same time, the general strengthening of the geoeconomic and geopolitical positions of the Russian Federation due to the accelerated development of its own coastal zones (often to the detriment of previously existing transit routes to ports of the countries of the former USSR) has little effect on the position of Siberian territories themselves. Inland territories continue to generate the main flow of export resources, while the natural resource rent created here is redirected not only to the federal metropolitan cities, but also to resonant, geopolitically motivated "seaside" infrastructure and production projects. The huge costs of creating new and expanding the capacity of old export routes cannot be compared with the costs of developing transport, social and other infrastructure in

the inland regions of Siberia. Such long-term risks for the economy functioning of Siberia's regions will continue to grow in the near future, since the growing geopolitical tension in recent years dictates the consolidation of the vector for the development of "offshore" projects and strategies, which will continue to limit the country's overall investment opportunities.

In general, it can be noted that the unfavourable socio-economic position of Siberia is characterized by many negative aspects (see Table 1). At the same time, the GDP indicator, which acts as an integrated measure of economic development, demonstrates the low development of the financial sector and other sectors of the economy in Siberia that are not related to the extractive and manufacturing industries. In general, we can note the lag of the regions of Siberia from the average Russian levels for most of the main socio-economic indicators.

The official statistical "backwardness" of Siberia is caused by many reasons, only part of which is directly related to the actual inland position of the region, its remoteness from seaports and oceanic waters. Estimation of transport costs for certain types of products produced in Siberia can reach 50–70% (Bezrukov, 2008), however, in most cases, transportation costs are not so high (Bardal, 2015) and the degree of geographic factors' influence on the efficiency of Siberian territories' economy should not be exaggerated (Bezrukov, 2020). According to a number of researchers, a more significant role is played by the institutional factor, namely, the entry of all major enterprises in Siberia into large vertically integrated companies, which are the main (along with the federal budget) beneficiary of economic activity in the region (Nefedkin, 2017; Sysoeva, Violin, 2019; Ershov, Tarasova, 2020; Minakir, 2021).

Another important way in which Siberian economy influences the state is embodied in its structural features: the dominance of raw materials industries combined with the stagnation of manufacturing, as well as limited opportunities for the development of the service sector, including trade (in Siberia, its share in the total GRP structure is 10.3%, while in Russia as a whole – 16.7%), construction (including housing, concentrated mainly in the largest regional centres).

Table 1. The share of the regions of the Siberian Federal District in the all-Russian indicators (%)

Indicator	2005	2010	2013	2019
Land area	25.5	25.5	25.5	25.5
Population	12.2	12.0	12.0	11.7
GDP	10.0	10.2	9.5	10.4
Housing construction	9.4	10.4	9.6	8.8
Retail trade turnover	11.6	10.7	10.8	8.7
Fixed capital investments	8.8	9.9	10.0	8.9

Source: own work based on RosStat.

Since the crisis of 2008–2009, the geo-economic factor has increasingly exerted its influence on the Siberian territories. Its main component – volatility in global commodity markets – manifested itself most strongly here. The crisis of the raw materials economy took place on the background of increasing heterogeneity of the economic, social, technological and information space of the country. This was reflected in territorial concentration and an increase in interregional differences, an increase in the “east-west” gradient, and deepening regional inequality in terms of economic activity (Bufetova, 2016). One of the consequences was a reduction in investment in the regions of Siberia, so of the 261 plants built in Russia by foreign investors in 2012–2018, only 29 were built within Asian Russia (Gurkov, 2019).

At the same time, large investment projects being implemented often have a very limited impact on the economy of specific regions. Due to the fact that such economic development is “out of territory”, the opportunities for socio-economic growth for Siberia are extremely limited and are directly dependent on the interests and strategies of large corporations, as well as the state regional policy. As a result, the regions of Siberia continue to maintain their function as financial “donors” with an ever-increasing dependence not only on the global economy as a whole, but also on infrastructure capacity and transport tariffs.

The latter factor of dependence on transport infrastructure has a negative impact on the interaction of Siberia with China, one of the largest economies in the world. The absence of the need for sea transportation of goods does not become an advantage in this case. A small number of border crossings and weak capacity of cross-border highways lead to the fact that Siberia is only one of the few suppliers of resources for a rapidly developing neighbour. In a situation where China in 2020 began to purposefully restrict coal imports from Australia, coal exporters from Siberia could not sharply increase coal supplies due to the exhaustion of the Trans-Siberian Railway capacity, and Mongolia gradually began to occupy the position of the main supplier of coal to China (Sokolov et al., 2020). At the same time, the constructed and projected transport infrastructure (a branch of the ESPO oil pipeline, the Power of Siberia and Power of Siberia-2 gas pipelines) can also create an ambiguous effect. Ensuring a large volume of supplies is accompanied by dependence on a single buyer, and in the case of the second gas pipeline being designed, also dependence on a transit country (Mongolia), which Russia has been trying to avoid in the European direction of export in recent years.

The very fact of the presence of such a large neighbour in all respects is also important for Siberia. The development of China, whose demographic and economic potential is not comparable to that of Siberia, not only creates a field of gravity for economic activity in Siberia, but also returns the Siberian borders of Russia to the quality of the most important frontier for the country. A certain ambiguous situation is created, in which the desire to trade with China more and more actively is

combined with the desire to prevent a complete sale of resources to the dominant neighbor, to protect oneself from its “economic expansion”.

With all the shortcomings and distortions of statistical data inherent in the corporate economy, Siberia's net exports turn out to be significantly larger than household consumption and fixed capital investment. According to the latest available comparable data, in 2017, the excess in Siberia of “production” (net exports) over “consumption” (investment and household spending) amounted to more than 1.6 trillion rubles. Almost 39% of this amount (exceeding the GRP of the Rostov Region and quite comparable with the same indicator for the entire North Caucasus Federal District) was provided by the Krasnoyarsk Territory, another 23% – by the Irkutsk Region (see Figure 2).

In the current situation, the issues of Siberia's “continentality” are only a component in the general problem of the region's periphery, which has become aggravated in the post-Soviet period, in the sea-oriented Russian and global economy. At the same time, the idea of glaring, excessive inequality of Russian regions is partly exaggerated, mythologised (Zubarevich, 2019), and the seaside position in

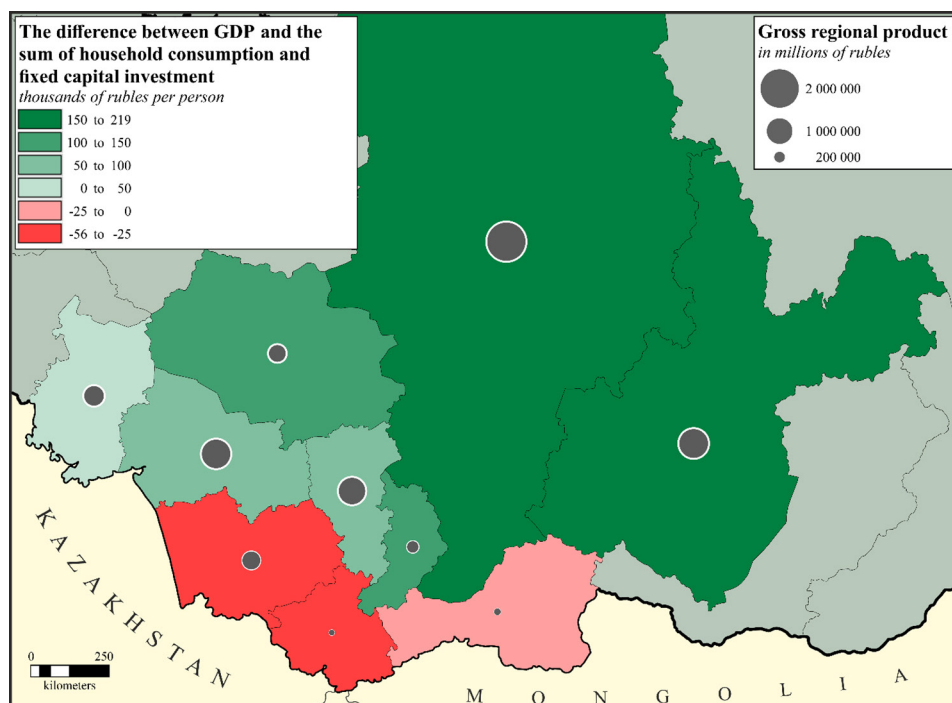


Fig. 2. GRP of Siberian regions in 2017 and the difference between net exports and the amount of investment in fixed assets and household consumption per capita

Source: own work based on RosStat.

the existing centre-peripheral structures, however, also does not guarantee in itself a privileged socio-economic position (Druzhinin, 2021). It is indeed incorrect to identify modern Siberia with a colony (Zubkov, 2019), however, in a number of aspects, comparison with a raw material province, a raw material appendage (Klistorin, 2019) can be quite justified. Overcoming the existing peripherality of Siberia requires, in this regard, systematic, strategic approaches and solutions, including those associated with the increasing marine economic activity of the Russian Federation.

Prospects and opportunities of Russia's "marine" strategies for Siberia

According to forecasts, the economic significance of Siberia as a "resource storehouse" may remain high in the coming decades (up to 30–50 years) (Kryukov, 2015), which, together with other circumstances, including foreign and domestic politics, will ensure the attention of the Russian authorities to the socio-economic situation of the Siberian territories. At the same time, there will be a persistent shortage of state and corporate resources directed at smoothing the negative effects of continentality and levelling imbalances in territorial development.

The combination of these trends will provide Siberia with an inertial development scenario based on the natural resource potential, existing production structures, logistics and the conjugation of the most important regional "growth poles". At the same time, it will be important for Siberia to adapt not only to the regional consequences of global processes, but also to the results of the implementation of large economic and infrastructure projects in the Arctic and Pacific coastal territories.

Marine economy projects can directly affect, first of all, 11 municipalities of Siberia located on the coast of the Arctic Ocean in the Yamalo-Nenets Autonomous District, the Krasnoyarsk Territory, as well as in Yakutia. However, against the background of the regions themselves, coastal municipalities have significant shares in the population and investments in fixed assets only in the Yamalo-Nenets Autonomous Okrug (see Table 2), where in recent years, projects for the construction of terminals for the liquefaction of natural gas have been actively implemented.

Given the nature of the development of these territories (the initial focus on the maximum possible compactness in the placement of infrastructure, industrial and social facilities: shift settlements, offshore platforms, alluvial islands (Pilyasov, Putilova, 2020), the main task is not only the implementation of large investment projects in the coastal zones of Siberia, but also the positive impact of them on neighbouring territories, as well as other (primarily "non-resource") sectors of the Siberian economy.

Table 2. Coastal municipalities (CM) of Siberia: demographic potential and investment activity (2019)

Region	Number of coastal municipalities (CM), units	Total population of CM, thousand people	CM's share in the total population of the region, %	CM's share in the total volume of investments in fixed assets in the region, %
Yamalo-Nenets Autonomous District	5	165.0	30.7	90.2
Krasnoyarsk Region	1	32.0	1.1	6.0
Republic of Sakha (Yakutia)	5	26.0	2.7	0.8

Source: own work based on RosStat.

This task turns out to be especially difficult, given the negative experience of the formation of such positive effects in the more populated territories of southern Siberia, where the successful experience of the centralized planned formation of territorial-production complexes could not be reproduced in a competitive economy. Cluster support programs, which included tax incentives, lending and direct financing of infrastructure, helped to create separate extractive industries or complete individual large Soviet construction projects (for example, the Boguchanskaya hydroelectric power station). However, they did not form stable additional production chains or supporting industries, nor did they help create new production facilities for the creation of high-value-added products in Siberia.

The northern coastal territories in other countries have similar problems. The example of the Quebec coastal maritime cluster shows that a more than fifteen-year strategy to try to stimulate employment growth, especially in the knowledge-intensive and highly skilled, has failed (Doloreux et al., 2016). All the efforts of the authorities have led to the fact that jobs in the cluster are becoming less knowledge-intensive, and the target sectors of the economy in it are growing more slowly than in other territories of Canada.

However, in the situation with Siberia, it is important to form stable links with the continental part of the region, where many of the most important export-forming areas are located (see Figure 3). The need to develop the links between the Arctic north and the inland south of Siberia was discussed back in the 1920s (Mirotvortsev, 1923), but now, when the Arctic is acquiring the features of a priority coastal zone for Russia, this task is becoming even more urgent. At the same time, with the development of transport infrastructure and the localization of new resource-producing industries, the border of the Arctic coastal zone will

tend to shift to the south, which in parallel will probably be accompanied by the expansion of the economic development zone along the Trans-Siberian Railway.

The importance of this highway in the development of Siberia (including for overcoming the negative effects of its “inland”) is increasing many times over, given the undoubted invariance and unpredictability of not only the future long-term consequences of climate change, as well as the global demand for the resource potential of the Arctic zone. The unstable geopolitical situation, which de-



Fig. 3. The Arctic zone of the Russian Federation and the main existing and projected routes of communication with it of the main exporting territories of inland Siberia. The numbers indicate the projected railway lines: 1. Northern latitudinal railway; 2. Northern latitudinal railway – 2; 3. Ural Industrial – Ural Polar; 4. North Siberian Railway

Source: own work.

termines the prospects of Siberian cross-border relations (primarily with China), will continue to exert its influence too.

It will be all the more important to strengthen the existing links between the continental part of Siberia and its coastal zone. The proposals already made by the authorities of Yakutia on the reversal of the northern delivery (these strategic supplies of food and resources for the local population of remote villages of the Far North were traditionally carried out from the south of Siberia along the railway and further along the rivers to the north) suggest the beginning of annual deliveries along the Northern Sea Route and further along the Lena River to the south. A similar scheme could be used on the Yenisei River in the Krasnoyarsk Territory. However, such changes will require significant investments in river shipping companies that have been repeatedly underfunded since the Soviet era, whose worn-out fleet can no longer provide the former levels of transportation.

The modernized river fleet could create the necessary connection between the continental export-forming territories and the coastal zone of the Arctic, but the seasonality of the use of river routes in Siberia will continue to be an insurmountable obstacle on this path. In such circumstances, the main railway connecting the southern regions with the ports of the Arctic could significantly reduce the transport and geographic costs of the inland regions. However, the construction of a railway along the Yenisei was never considered among the priority state projects of transport infrastructure, and the construction of the North-Siberian Railway (SevSib), which has been discussed for many years, has now been postponed indefinitely. SevSib could create an alternative to the main export route in the direction of the Pacific ports and expand the range of goods transported along the Northern Sea Route, which is now increasing its turnover almost exclusively thanks to the transportation of LNG. How stable this cargo flow will be and whether the state's investment in the modernization of Arctic ports and the construction of a new icebreaker fleet is justified, will only be clear in the future, while the authorities are prioritizing financing the expansion of the BAM and Trans-Siberian Railway, and the creation of any additional link between the south of Siberia and the Arctic is not yet planned.

Nevertheless, it should be noted that the development of Russian economy (and Siberian, in particular) requires the implementation of multiplicative projects that provide multi-vector strategic benchmarks and partnerships, as well as multimodality of transport and logistics solutions and schemes. It is only on this basis that it is possible to ensure the progressive dynamics of the economy and its necessary restructuring, the socio-economic development of Siberian spaces, which confirms the importance of Siberia as a "pivotal", "middle" macro-region of Russia.

CONCLUSION

Siberia (as well as the whole of Russia), following a prolonged intellectual tradition, is usually perceived (and characterized) as a predominantly “intra-continental” territory. The rapid intensification of port activities in the Russian Federation over the past two decades, the construction of large underwater gas transmission systems, the significant growth of oil and gas production on the offshore shelf, as well as the recovery dynamics in shipbuilding, nevertheless indicate that the post-Soviet Russia (its economy, infrastructure, and settlement systems) has actually already taken a “turn” to the sea, to the World Ocean.

This process is essential not only for coastal, but also “inland” territories; it is equally significant for Siberia, whose vast areas throughout the country, demonstrating unconditional exclusivity, “specialness”, along with this, their structure, factors and development trends are in many ways typical, representative of the Russian Federation. In the future, in the coming years and decades, when, due to changing geopolitical, geo-economic and geodemographic circumstances, the focus of Russian national interests will inevitably begin to shift further not only to the East (and along with this – to the Arctic, to the many-sided Eurasian South), but to the “core” Russian regions as well (Druzhinin, 2021), the “Siberian theme” (including its “maritime” aspect), of course, will only be updated.

The issues of the socio-economic situation of the Siberian regions, the degree, ways and effects of their inclusion in international (including cross-border) economic ties, the activity of large corporations on the territory of Siberia, the relationship between Siberian regions and the federal centre, at the same time, will not only acquire an even greater actual priority on the domestic Russian political and economic agenda, but they will continue to internationalize, they will act as an increasingly important aspect of Eurasian geopolitics.

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