UDC 332.13(985)(045)

DOI: 10.17238/issn2221-2698.2019.37.51

Entrepreneurial activity in the Russian Arctic territories compared to the all-Russian situation*

© Tatiana P. SKUFINA, Dr. Sci. (Econ.), Professor, Chief researcher

E-mail: skufina@gmail.com

Kola Science Centre of the Russian Academy of Sciences (KSC RAS), Apatity, Russia

© Ekaterina A. BAZHUTOVA, postgraduate

E-mail: eabazhutova@mail.ru

Kola Science Centre of the Russian Academy of Sciences (KSC RAS), Apatity, Russia

© Vera P. SAMARINA, Dr. Sci. (Econ.), Senior Researcher

E-mail: samarina vp@mail.com

Kola Science Centre of the Russian Academy of Sciences (KSC RAS), Apatity, Russia

Abstract. The paper considers the entrepreneurial activity of the Russian Arctic territories and reveals its specificity compared to the all-Russian situation. The relevance of the scientific task is determined by the fact that ensuring economic growth and social development of the Russian Arctic is impossible without the necessary strengthening of entrepreneurial activity. The search for a mechanism for managing Arctic entrepreneurship is currently an urgent scientific task. The paper presents the authors' estimates of the entrepreneurial activity of the Russian Arctic territories compared to the all-Russian situation. The authors present the classification of the territories of the Russian Federation and the Russian Arctic by the principal business activity related to the subject of the market manifesting it. It is argued the Arctic specificity, and local conditions determine the development of entrepreneurial activity in the Arctic for such market actors as business and the state. This feature allowed us to offer and justify recommendations to stimulate entrepreneurial activity regarding the belonging of the Arctic to a classification group.

Keywords: Russia, regions, Arctic, development, entrepreneurial activity, comparative assessments, public administration.

Introduction

The scientific understanding of the phenomenon of the manifestation of entrepreneurial activity in certain territories is extremely relevant, diverse and multi-faceted. This is due to the fact that ensuring the economic growth of any country and any territory is not possible without the functioning of entrepreneurship [1, Minniti M., Levesque M., pp. 603-604; 2, Autio E., Kenney M., Mustar P. et al., p. 1098; 3, Sciascia S., De Vita R.]. Moreover, the features of doing business vary significantly not only between countries, but also between regions and even municipalities of one country [1, Minniti M., Levesque M., p. 607; 4, Stenholm P., Acs Z. J., Wuebker R., p. 179-190; 5, Verkhovskaya O.R., Alexandrova E.A., Bogatyreva K.A. et al.; 6., Skufina T.P., Bazhutova E., p. 77]. Therefore, issues related to entrepreneurial activity cannot be discussed outside the context of territorial particularities. The Arctic zone of the Russian Federation (AZRF) is a zone of priority development [1, Minniti M., Levesque M., p. 607; 4, pp. 179-190; 5, Verkhovskaya O.R., Alexandrova E.A., Bogatyreva K.A. et al.; 6., Skufina T.P., Bazhutova E., p. 77] and the corresponding increased

_

^{*} For citation:

Skufina T.P., Bazhutova E.A., Samarina V.P. Entrepreneurial activity in the Russian Arctic territories compared to the all-Russian situation. *Arktika i Sever* [Arctic and North], 2019, no. 37, pp. 51–68. DOI: 10.17238/issn2221-2698.2019.37.51

attention of public administration [9, Zaikov K.S., Kondratov N.A., Kudryashova E.V. et al., pp. 184-185; 10, Porfiryev B.N., Leksin V.N., p. 630; 11, Samarina V.P., Samarin A.V., Skufina T.P., Baranov S.V., pp. 388–391], caused not only by geopolitical tasks, but also by the asymmetry of socioeconomic development [9, Zaikov K.S., Kondratov N.A., Kudryashova E.V. et al., p. 187; 12, Baranov S.V., pp. 45–47], determining the specifics of entrepreneurship development [6, Skufina T.P., Bazhutova E., pp. 79–84; 13, Pilyasov A.N., Zamyatina N.Yu., pp. 14-15; 14, Toskunina V.E., Karmakulova A.V., pp. 34–35]. It is obvious that it is entrepreneurship that largely determines the conditions and prospects for the socio-economic development of this territory [6, Skufina T.P., Bazhutova E., pp. 77–79; 15, Suopajärvi L., Ejdemo Th., Klyuchnikova E. et al., p. 39]. In this regard, the identification of the specifics of the entrepreneurial activity of the Russian Arctic is significant both from the point of view of the development of the theory and from the point of view of the scientific support of the processes of territorial management.

The purpose of the study is a comparative assessment and identification of the specifics of the manifestation of entrepreneurial activity in the regions of the Russian Arctic in the context of the all-Russian situation and the determination of the corresponding management mechanisms.

On the problem of entrepreneurship development in the Arctic zone of the Russian Federation

The territorial diversity of Russia determines the feasibility of diagnosing the phenomenon of entrepreneurial activity in a regional context. One of the most interesting territories from the standpoint of considering entrepreneurial activity is the regions of the Arctic zone of the Russian Federation (AZRF). This is due not only to unique economic and geographical conditions, but also to the declared strategic management goal, aimed at increasing the level of socio-economic development of the Russian Arctic [10, Porfiryev B.N., Leksin V.N., pp. 629-639; 11, Samarina V.P., Samarin A.V., Skufina T.P., Baranov S.V., p. 388]. This "Arctic" research context determines the feasibility of considering the problems of the development of Arctic entrepreneurship from two perspectives: first, from the perspective of the theory of entrepreneurship; secondly, from the standpoint of modern conditions for the development of the Russian Arctic. Consider the first component - the theory of entrepreneurship. For a long time, world scientific thought has been actively involved in the theory and practice of entrepreneurship. Classical representations of the theory of entrepreneurship define entrepreneurial activity through the term "entrepreneurial activity", considering these concepts to be identical [1, Minniti M., Levesque M., p. 604; 16, Moura M.G., p. 280]. Then the term "entrepreneurial activity" evolves into the category of personality traits, which in this case can have different types of manifestation [2, Autio E., Kenney M., Mustar P., Siegel D., et al., pp. 1098-1106; 17, Edoho F. M., pp. 280-293]. Further, the idea of the qualitative characteristic of entrepreneurial activity takes the form of an integral quantitative indicator combining the synthesis of the results of entrepreneurship [2, Autio E., Kenney M., Mustar P., Siegel D. et al., pp. 1098-1106; 5, Verkhovskaya O.R., Alexandrova E.A., Bogatyreva K.A., et al.; 6,

Skufina T.P., Bazhutova E., pp. 77–85; 15, Suopajärvi L., Ejdemo Th., Klyuchnikova E. et al., pp. 31–39; 16, Moura M. G., pp. 285-300; 17, Edoho F. M., pp. 279–294].

The activity and multidimensionality of studies of the phenomenon of entrepreneurial activity predetermined the versatility of this concept, its ambiguity. Therefore, questions of the essence of the category of "entrepreneurial activity" remain controversial, respectively, the composition of the main indicators, allowing to assess the level of entrepreneurial activity, is also debatable.

One of the most interesting and recognized research in the field of entrepreneurship is the Global Entrepreneurship Monitoring (GEM) project. Russia joined the project as early as 2006. In this project, entrepreneurial activity is the percentage of the population aged 18 to 64 years involved in entrepreneurial activity [5, Verkhovskaya O.R., Alexandrova E.A., Bogatyreva K.A. et al.]. However, even such a universally recognized definition within the GEM project contains a contradiction. So, on the one hand, all researchers note the versatility of the concept of "entrepreneurial activity," on the other hand, the treatment under discussion characterizes it more as an entrepreneurial activity of the population. Numerous studies (both Russian and foreign) indicate a change in the approach to the study of entrepreneurial activity.

So, in most modern studies, entrepreneurial activity is considered as a property that is inherent in all business entities, regardless of ownership or job status [2, Autio E., Kenney M., Mustar P., Siegel D. et al., pp. 1098-1106; 15, Suopajärvi L., Ejdemo Th., Klyuchnikova E. et al., p. 39; 17, Edoho F. M., pp. 279–294]. Therefore, any entity of the market that functions to generate income from the use of emerging opportunities in the market can exhibit entrepreneurial activity [6, Skufina T.P., Bazhutova E., pp. 79–84]. Thus, entrepreneurial activity can manifest itself as a property of each market entity. That is, it can be shown both by households (population), and business (existing enterprises), and the state.

The prevailing approach to the study of entrepreneurial activity from the point of view of only the population leads to a unilateral consideration of the quantitative indicators that form the basis of its calculation methods [5, Verkhovskaya O.R., Alexandrova E.A., Bogatyreva K.A. et al.]. This approach does not allow a complete diagnosis of the manifestation of entrepreneurial activity in a certain territory. As a result, a decrease in the efficiency of the use of resources aimed at enhancing entrepreneurship.

In the framework of this study, we suggest entrepreneurial activity as a comprehensive indicator that reflects the intensity of participation in entrepreneurial activity of all business entities: households, business, the state, the synergistic effect of which will determine the level of development and the specifics of entrepreneurial activity in a particular territory.

- 1. This interpretation of entrepreneurial activity allows you to:
- 2. 1. comprehensively characterize the manifestation of entrepreneurial activity;
- 3. 2. determine the level and identify trends in the activity of a specific market participant in the territory of a region;

4. 3. classify the regions of the country according to the criterion of the manifestation of any type (specificity) of entrepreneurial activity.

Consider the second component - modern conditions for the development of the Russian Arctic. As rightly noted in a series of studies on current conditions and strategic priorities for the development of the Russian Arctic, "the search for answers to the challenges of the development of the Arctic is complicated by the high degree of uncertainty of the changes taking place in this region, due to the lack of our knowledge about their nature and consequences" [7, Zaikov K.S., Kondratov N.A., Kudryashova E.V. et al., p. 10]. This primarily concerns environmental factors, including both the natural-geographical component and the foreign policy [18, Skufina T.P., Samarina V.P., Krachunov H., Savon D., p. 18, 20; 19, Hamilton L.C., Saito K., Loring P.A., Lammers R.B. et al., pp. 115-117; 20, Hamilton L.C., Lammers R.B., pp. 120-123]. As for the internal factors of the development of the Russian Arctic, the processes and prospects here are naturally more defined [11, Samarina V.P., Samarin A.V., Skufina T.P., Baranov S.V., pp. 388–391; 18, Skufina T.P., Samarina V.P., Krachunov H., Savon D.Yu., pp. 18-21], scientific tasks are also more specific [9, Zaikov K.S., Kondratov N.A., Kudryashova E.V., Tamitskii A.M., pp. 184-185; 10, Porfiryev B.N., Leksin V.N., pp. 629-630]. So, the overwhelming majority of researchers, "north-scientists", take a pragmatic position - to provide scientific support for management in order to achieve the declared task of the comprehensive socio-economic development of the Russian Arctic, based on the development of quality of life factors and the formation of conditions for the accumulation of human capital. It should be noted that the most multidimensional, having absorbed the scientific experience of the main schools of north science in Russia, modern ideas about Arctic management are presented in a collective monograph [21, Porfiryev B.N., p. 802].

Significant attention in modern studies is given to the task of ensuring the management of the Russian Arctic as a single system through the development of support zones. It emphasized that such a task as the development of the Russian Arctic as a single macro-project, as a single object of planning, has not been set and has not been set in any country in the world. Ensuring the effective management of the Russian Arctic is the most important task, in fact, the level of national security. This is since the resources of the Russian Arctic are decisive for the Russian economy, and the task of the comprehensive socio-economic development of the Russian Arctic is set by the management by virtue of ensuring the necessary synchronization with global processes.

The pragmatic position of providing scientific support for the management of the Russian Arctic is the only possible and actively implemented. The significance of such support and its relevance to practice is beyond doubt [9, Zaikov K.S., Kondratov N.A., et al., pp. 184–201; 22, Laverov N.P.]. Now the management tasks have been concretized to the practice of implementing the Arctic mega-project, the formation of support development zones is underway, the implementation of which determines not only economic development, but also an increase in the quality of life of the population of the Russian Arctic and the associated development of entrepreneurship as a factor in ensuring economic growth and social stability.

Despite the lack of official recognition in the state documents of the Russian Arctic policy, Arctic entrepreneurship is already an established phenomenon, due to the regional features of doing business and developing entrepreneurship in the Arctic.

Today, entrepreneurship in the Russian Arctic is a small share of small enterprises and a small number of able-bodied people employed in small and medium-sized enterprises (hereinafter referred to as SMEs), regarding the situation in Russia as a whole [5, Verkhovskaya OR, Alexandrova EA . et al., p. 66; 6, Skufina T.P., Bazhutova E., p. 85; 13, Pilyasov A.N., Zamyatina N.Yu., p. 4-15].

It is due to several reasons, most of which are interlinked. First, the dominance of large, including city-forming, enterprises in the system of regional economy of the Arctic, which determines the concentration of all types of resources, including human resources, in the system of large enterprises [6, Skufina T.P., Bazhutova E., pp. 77–85; 8, Samarina V.P., Skufina T.P., Samarin A.V., p. 705-716; 9, Zaikov K.S., Kondratov N.A., et al., pp. 184–201; 11, Samarina V.P., Samarin A.V., Skufina T.P., Baranov S.V., pp. 388–398; 13, Pilyasov A.N., Zamyatina N.Yu., pp. 4-15; 15, Suopajärvi L., Ejdemo Th., Klyuchnikova E., Korchak E. et al., pp. 31–32]. Studies show that it is large investment projects of large enterprises that determine the specifics of production processes and GRP production in the regions of the Arctic [7, Zaikov K.S., Kondratov N.A. et al., pp. 5-24; 12, Baranov S.V., p. 21].

Secondly, high salaries and the relative stability of work, the absence of the acuteness of the problem of the "turnover" of personnel of city-forming enterprises, when choosing the areas of labor activity, determine the preference for work in a large enterprise, rather than in the field of small and medium-sized enterprises [6, Skufina T.P., Bazhutova E., pp. 77–85; 9, Zaikov K.S., Kondratov N.A., et al., pp. 184–201; 13, Pilyasov A.N., Zamyatina N.Yu., pp. 4-15; 14, Toskunina V.E., Karmakulova A.V., pp. 27–35].

Thirdly, the lack of historically developed developed entrepreneurship in the Arctic (compared to the all-Russian situation, starting from the period of the collapse of the USSR) and, at the same time, the orientation of a significant part of the population to migration to more climate-friendly regions of the country [8, Samarina V.P., Skufina T.P., Samarin A.V., pp. 705–706; 9, Zaikov K.S., Kondratov N.A., Kudryashova E.V., Tamitskii A.M., pp. 184-185; 12, Baranov S.V., p. 21]. Fourth, the increased costs of doing business in the Arctic lead to higher risks of doing business [12, Baranov S.V., p. 21; 13, Pilyasov A.N., Zamyatina N.Yu., pp. 4-15].

At the same time, the development of the mineral and raw materials sector of the Russian Arctic on the basis of modernization of production limits the employment opportunities at large mining enterprises. The same trends are also characteristic of the transport industry, services, etc. The growing unemployment problem, exacerbated by increased living costs in the Arctic, can initiate an increase in outflow of the population, which leads to a deepening of the problem of "empty space" [8, Samarina V.P., Skufina T.P., Samarin A.V., pp. 705-716; 9, Zaikov K.S., Kondratov N.A. et al., p. 184–201; 12, Baranov S.V., p. 21]. We note that the migration problems of the Arctic are

characteristic of all states that include Arctic territories [19, Hamilton L.C., Saito K., Loring P.A. et al., pp. 115-133; 20, Hamilton L.C., Lammers R.B., pp. 107-108]. Therefore, to ensure a comprehensive study of the trends and prospects of socio-economic development of the Russian Arctic, it is necessary to consider the specifics of the manifestation of the phenomenon of entrepreneurship as a factor and result of the development of this territory. The relevance of such a study is also determined by the strategic management goal declared in Russia, aimed at increasing the level of socio-economic development of the Russian Arctic.

In addition, the listed regional features of entrepreneurial activity in the Arctic, which have developed today, determine the need to find the appropriate management mechanism, which, undoubtedly, due to the indicated Arctic specificity, will differ from the all-Russian tools to support and stimulate entrepreneurial activity.

Methodical specifics of reserach

To develop an integrated indicator of assessing entrepreneurial activity, the present study used the simple multidimensional average method. This method makes it possible, on the basis of dimensionless quantities, to carry out a comprehensive quantitative assessment of the entrepreneurial activity of a particular territory. The method allows considering a set of statistical indicators that characterize various types of manifestations of entrepreneurial activity. The properties of the method fully correspond to the revealed essence of entrepreneurial activity, understood as a complex property distributed between the entities exhibiting it (entrepreneurial business activity (EA business), entrepreneurial activity of the population (EA population), entrepreneurial activity of the state (EA state).

$$\bar{p}j = \frac{\sum_{j=1}^{k} p_{ij}}{k} = \sum_{j=1}^{k} \left(\frac{x_{ij}}{\bar{x}_i}\right) : k$$
, (1)

где

 \overline{p}_{i} multidimensional average for i-unit;

x_{ii} _ sign value x, for i-unit;

 x_{i} average value of x_{i} ,

k — amount of signs;

j — number of signs;

i — aggregate unit number.

The feature under study is entrepreneurial activity, considered as a set of indicators characterizing the forms of manifestation of entrepreneurial activity for each distinguished type: EA population, EA business, EA state.

EA of the population - the integral value of the following indicators: 1) the number of registered individual entrepreneurs and legal entities belonging to the category of small and mediumsized businesses; 2) the participation of individuals as founders in the total authorized capital of organizations.

EA business - the integral value of the following indicators: 1) participation of legal entities in the authorized capital of organizations; 2) the creation of entrepreneurial structures as a result of the processes of separation, separation, merger, acquisition, etc.

EA state - the integral value of the following indicators: 1) creation of state-owned unitary and municipal enterprises, as well as the number of business companies created as a result of the transformation of state and municipal unitary enterprises, units; 2) state participation in the authorized capital of organizations.

The calculation algorithm includes calculating the level of entrepreneurial activity for each selected type at the regional level and comparing the obtained values with each other within one region to identify the prevailing type of entrepreneurial activity in it. The calculation is carried out for all regions of the Russian Federation, therefore, further research consists in comparing the group of regions included in the Russian Arctic, by the type of entrepreneurial activity prevailing in them relative to the overall Russian situation. Based on the identified features of the manifestation of entrepreneurial activity in the regions of the Russian Arctic, recommendations will be made for managing it in order to increase it in order to stimulate their socio-economic development.

The territories of the regions included in the Russian Arctic are normatively fixed by Decree of the President of the Russian Federation dated May 2, 2014 No. 296 "On land territories of the Arctic zone of the Russian Federation" (with subsequent amendments). So, the Arctic zone includes regions that are completely located in the Arctic (the Murmansk Oblast, the Yamal-Nenets Autonomous Okrug, and the Chukotka Autonomous Okrug), as well as regions whose territories are partially located in the Arctic zone (the Arkhangelsk Oblast, the Republic of Karelia, the Komi Republic, the Krasnoyarsk Krai, the Republic of Sakha (Yakutia)). In Russia, according to prevailing management and regulatory practice, all these territories are considered areas of the Russian Arctic.

Results and discussion

As a result of calculations of the level of entrepreneurial activity by types of its manifestation in the regions of the Russian Federation and subsequent comparison of the results to identify the prevailing type of entrepreneurial activity in each particular region (Table 1), all regions of the Russian Federation were divided into the corresponding groups according to this criterion (Table 2).

Table 1
Summary results of calculations on the distribution of entrepreneurial activity (EA) depending on the market entity in the territories of the Russian Federation ¹

Territory	EAS	EAB	EAP	Common EA	Prevailing EP
Belgorod Oblast	0.558	0.494	0.717	1.77	EA population
Bryansk Oblast	0.492	0.266	0.891	1.65	EA population
Vladimir Oblast	0.418	0.523	1.014	1.96	EA population
Voronezh Oblast	0.687	0.585	1.170	2.44	EA population
Ivanovo Oblast	0.333	0.623	0.443	1.40	EA business

¹ Source: developed by the authors.

_

Kaluga Oblast	0.566	0.699	0.850	2.12	EA population
Kostroma Oblast	0.312	0.247	0.358	0.92	EA population
Kursk Oblast	0.538	0.234	0.400	1.17	EA state
Lipetsk Oblast	0.378	0.365	0.515	1.26	EA population
Moscow Oblast	3.142	4.384	3.554	11.08	EA business
Oryol Oblast	0.232	0.225	0.351	0.81	EA population
Ryazan Oblast	0.467	0.351	0.495	1.31	EA population
Smolensk Oblast	0.488	0.271	0.440	1.20	EA state
Tambov Oblast	0.354	0.232	0.322	0.91	EA state
Tver Oblast	0.686	0.444	0.732	1.86	EA population
Yaroslavl Oblast	0.382	1.001	0.994	2.38	EA business
Moscow	32.333	22.862	13.326	68.52	EA state
Republic of Karelia	0.300	0.248	0.271	0.82	EA state
Komi Republic	0.430	0.325	0.340	1.10	EA state
Arkhangelsk Oblast and the Nenets Autono- mous Okrug	0.937	0.444	0.646	2.03	EA state
Vologda Oblast	0.554	0.465	1.054	2.07	EA population
Kaliningrad Oblast	0.356	0.465	0.741	1.56	EA population
Leningrad Oblast	0.514	0.949	1.182	2.65	EA population
Murmansk Oblast	0.366	0.384	0.275	1.03	EA business
Novgorod Oblast	0.236	0.232	0.248	0.72	EA population
Pskov Oblast	0.234	0.206	1.198	1.64	EA population
St. Petersburg	2.276	7.044	4.338	13.66	EA business
Republic of Adygeya	0.142	0.065	0.199	0.41	EA population
Republic of Kalmykia	0.175	0.095	0.084	0.35	EA state
Krasnodar Oblast	1.985	1.771	3.860	7.62	EA population
Astrakhan Oblast	0.314	0.200	0.359	0.87	EA population
Volgograd Oblast	0.923	1.055	1.013	2.99	EA business
Rostov Oblast	1.239	1.325	2.106	4.67	EA population
Republic of Dagestan	1.273	0.466	0.532	2.27	EA state
Republic of Ingushetia	0.152	0.054	0.071	0.28	EA state
Kabardino-Balkarian Republic	0.250	0.190	0.446	0.89	EA population
Karachay-Cherkess Republic	0.162	0.143	0.507	0.81	EA population
Republic of North Ossetia - Alania	0.244	0.193	0.239	0.68	EA state
Republic of Chechnya	0.744	0.097	0.220	1.06	EA state
Stavropol Oblast	0.629	0.717	2.172	3.52	EA population
Republic of Bashkortostan	1.307	1.172	1.563	4.04	EA population
Mari El Republic	0.226	0.187	0.277	0.69	EA population
Republic of Mordovia	0.496	0.122	0.313	0.93	EA state
Republic of Tatarstan	1.452	2.078	2.231	5.76	EA population
Udmurt Republic	0.520	0.512	0.854	1.89	EA population
Chuvash Republic - Chuvashia	0.528	0.323	0.563	1.41	EA population
Perm Oblast	0.880	0.856	1.565	3.30	EA population
Kirov Oblast	0.609	0.830	0.681	1.71	EA population
Nizhny Novgorod Oblast	0.009	1.764	1.195	3.91	EA business
Orenburg Oblast	0.721	0.449	0.622	1.79	EA state
Penza Oblast	0.721	0.346	0.622	1.79	EA state
Samara Oblast	0.970	1.469	1.710	4.15	EA population
Saratov Oblast	0.784	0.608	0.963	2.35	EA population
Ulyanovsk Oblast	0.784	0.482	0.653	1.56	EA population
Kurgan Oblast	0.422	0.482	0.033		EA state
· ·				0.80	
Sverdlovsk Oblast	1.825	2.606	2.592	7.02	EA business
Tyumen Oblast without autonomous districts	0.485	1.012	0.751	2.25	EA business
Khanty-Mansiysk Autonomous Okrug - Yugra	0.488	2.751	1.050	4.29	EA business
Yamal-Nenets Autonomous Okrug	0.276	1.019	0.234	1.53	EA business
Chelyabinsk Oblast	0.875	1.627	1.765	4.27	EA population
Altai Republic	0.165	0.100	0.104	0.37	EA state

Republic of Buryatia	0.503	0.115	0.315	0.93	EA state
Tyva Republic	0.262	0.070	0.069	0.40	EA state
Republic of Khakassia	0.255	0.230	0.254	0.74	EA state
Altai Oblast	0.663	0.577	1.014	2.25	EA population
Transbaikal Oblast	0.552	0.317	0.284	1.15	EA state
Krasnoyarsk Oblast	1.389	1.586	1.699	4.67	EA population
Irkutsk Oblast	1.047	1.414	1.050	3.51	EA business
Kemerovo Oblast	0.672	0.846	1.520	3.04	EA population
Novosibirsk Oblast	0.871	1.921	1.689	4.48	EA business
Omsk Oblast	0.626	0.552	0.971	2.15	EA population
Tomsk Oblast	0.272	0.586	0.472	1.33	EA business
Republic of Sakha (Yakutia)	1.247	0.504	0.593	2.34	EA state
Kamchatka Krai	0.240	0.174	0.151	0.57	EA state
Primorsky Krai	0.889	0.760	1.250	2.90	EA population
Khabarovsk Oblast	0.406	1.361	0.577	2.34	EA business
Amur Oblast	0.266	0.287	0.323	0.88	EA population
Magadan Oblast	0.098	0.250	0.151	0.50	EA business
Sakhalin Oblast	0.330	0.309	0.320	0.96	EA state
Jewish Autonomous Oblast	0.089	0.046	0.060	0.20	EA state
Chukotka Autonomous Okrug	0.130	0.060	0.012	0.20	EA state
Republic of Crimea	0.988	0.269	1.117	2.37	EA population
Sevastopol	0.160	0.068	0.212	0.44	EA population
Tula Oblast	0.428	0.621	0.742	1.79	EA population

Table 2 Classification of regions of the Russian Federation by type and level of entrepreneurial activity (EA) manifestation

EA Level			
EA type	Low EA	Middle EA	High EA
EA population	Karachay-Cherkess Republic Astrakhan Oblast Amur Oblast Kabardino-Balkarian Republic Kostroma Oblast Lipetsk Oblast Ryazan Oblast Chuvash Republic - Chuvashia Ulyanovsk Oblast Kaliningrad Oblast Pskov Oblast Bryansk Oblast Bryansk Oblast Bryansk Oblast Uldmurt Republic Vladimir Oblast Vologda Oblast Vologda Oblast Kaluga Oblast Altai Oblast Saratov Oblast Republic of Crimea Voronezh Oblast Leningrad Oblast Leningrad Oblast Primorsky Krai	Kemerovo Oblast Perm Oblast Stavropol Oblast Republic of Bashkortostan Samara Oblast Chelyabinsk Oblast Rostov Oblast Krasnoyarsk Krai Republic of Tatarstan Krasnodar Oblast	
EA business	Magadan Oblast Murmansk Oblast Tomsk Oblast Ivanovo Oblast Yamal-Nenets Autonomous Okrug Tyumen Oblast without autonomous districts Khabarovsk Oblast Yaroslavl Oblast Volgograd Oblast	Irkutsk Oblast Nizhny Novgorod Oblast Khanty-Mansi Autonomous Okrug - Yugra Novosibirsk Oblast Sverdlovsk Oblast Moscow Oblast	St. Petersburg

	Jewish Autonomous Region	Moscow
	Chukotka Autonomous Okrug	
	The Republic of Ingushetia	
	Republic of Kalmykia	
	Altai Republic	
	Tyva Republic	
	Kamchatka Krai	
	Republic of North Ossetia - Alania	
	The Republic of Khakassia	
	Kurgan Oblast	
	Republic of Karelia	
a	Tambov Oblast	
EA state	Republic of Mordovia	
A	Republic of Buryatia	
ш	Sakhalin Oblast	
	Republic of Chechnya	
	Komi Republic	
	Transbaikal Oblast	
	Kursk Oblast	
	Smolensk Oblast	
	Penza Oblast	
	Orenburg Oblast	
	Arkhangelsk Oblast and the Nenets Au-	
	tonomous Okrug	
	Republic of Dagestan	
	Republic of Sakha (Yakutia)	

The results of calculations and comparison of the obtained values by the prevailing type of entrepreneurial activity in each of the Arctic territories are presented in Table 3.

Table 3
Consolidated Entrepreneurial Activity Assessment (PA) Results
in the regions of the Russian Arctic

Territory	EAS	EAB	EAP	Common EA	Prevailing EP
Republic of Karelia	0.300	0.248	0.271	0.82	EA state
Komi Republic	0.430	0.325	0.340	1.10	EA state
Arkhangelsk Oblast and the Nenets Autonomous Okrug	0.937	0.444	0.646	2.03	EA state
Murmansk Oblast	0.366	0.384	0.275	1.03	EA business
Yamal-Nenets Autonomous Okrug	0.276	1.019	0.234	1.53	EA business
Krasnoyarsk Krai	1.389	1.586	1.699	4.67	EA population
Republic of Sakha (Yakutia)	1.247	0.504	0.593	2.34	EA state
Chukotka Autonomous Okrug	0.130	0.060	0.012	0.20	EA state

A review of data for all Russia indicates that the largest group is the group of territories where EA population prevails (it includes 42 territories of Russia). Common features of the economies of these territories: developed manufacturing industry, wholesale and retail trade, transport and communications, real estate operations, construction and agriculture. In the Arctic, only the Krasnoyarsk Krai was included in this group. Despite its pronounced industrial character, which makes it related to other territories of the Russian Arctic, today the Krasnoyarsk Krai is one of the leading Russian areas in terms of investment activity. It is one of the top ten subjects of the Russian Federation for the GRP production. The territory is distinguished by a high level of devel-

opment of agriculture, processing and food industries, a developed construction and fuel and energy complex, and transport and communication infrastructure.

The next largest is the group with a predominance of EA state (it includes 26 territories of Russia). Common features of their economy are metallurgy, mining of minerals, woodworking, and the fuel and energy complex predominate. Most territories of the Arctic belong to the lower segment of this group, which is determined by the participation of the state in large entrepreneurial structures that carry out activities in the main sectors of the economy of these regions.

The smallest group of Russian territories is dominated by EA business (it includes 15 territories of the Russian Federation). The economies of this group are diverse, qualitative assessments indicate that these regions are characterized by favorable business conditions. Two regions of the Arctic - the Murmansk Oblast and the Yamal-Nenets Autonomous Okrug - entered the lower segment of this group.

The prevailing influence of the entrepreneurial activity of business and the state corresponds to the above-mentioned specific features of the development of the Russian Arctic, which consists in a high degree of corporatization of the Arctic economy and the active participation of a state with deep historical roots in the formation and development of the economy of the northern territories. The emphasis on this feature of the territories of the Russian Arctic makes it possible to comprehensively consider the specifics of its socio-economic situation and development trends and form an appropriate management mechanism.

Suggestions for the state management

The mechanism for managing entrepreneurial activity in specific territories should depend on the type and level of entrepreneurial activity manifestation of in the territory. It is generally recognized that it is the population that should become the driver of the economic growth of the country's economy and ensure the growth of small and medium-sized enterprises. Therefore, strategies for the development of entrepreneurship in the regions should be aimed not only at enhancing entrepreneurial activity, but also at redistributing entrepreneurial activity in favor of an increase in the EA population. A striking example of this is the advantageous difference between the Krasnoyarsk Krai and other regions of the Russian Arctic. In it, entrepreneurial activity of the population predominates. The Krasnoyarsk Krai was able to achieve this situation through the implementation of an active policy of supporting investment activity, which emphasizes the implementation of public-private partnership mechanisms, the provision of state guarantees, subsidies, budget investments and tax benefits to existing businesses.

Thus, the mechanism of managing entrepreneurial activity in the Russian Arctic economy is based on the redistribution of the current prevailing types of entrepreneurial activity of the state and business in favor of entrepreneurial activity of the population through the implementation of interconnected management concepts involving the joint participation of business and the population, the state and the population, or all entities market at the same time.

So, it can be concluded that for the territories of the Arctic characterized by the predominance of EA states (Chukotka Autonomous Okrug, Republic of Karelia, Komi Republic, Arkhangelsk Oblast and Nenets Autonomous Okrug, and Republic of Sakha (Yakutia)), an effective tool for the implementation of the "conjugate activities" of the state and business is a public-private partnership. Moreover, the forms of manifestation of partnership can be the most diverse: service contracts (outsourcing), management contracts, lease and temporary transfer of rights, concession agreements (various types). The transfer of EA state to EA population is possible due to support and incentive to implement the concepts of social outsourcing, investment in the creation of small and medium-sized businesses, and the development of state franchising. Investments in the innovation sphere are especially important and fruitful.

In the regions of the Arctic with a predominant EA business, to redistribute it to the side of the EA population, it is necessary to implement state policy aimed at stimulating business to involve entrepreneurial initiatives of the population. The forms and tools of this policy may include the application of concepts of intra-coaching by large businesses, support and stimulation of private business investment in newly created entrepreneurial structures, outsourcing and the creation of subsidiaries and affiliates based on the parent company, incl. franchise network development.

Conclusion

It is proved that entrepreneurial activity is an important factor in ensuring the integrated, balanced socio-economic development of the Russian Arctic.

The analysis of entrepreneurial activity of the Arctic territories in the all-Russian context is carried out. Based on the estimates obtained, the regions of Russia are classified by the type of entrepreneurial activity prevailing in them, and the place of the Arctic territories in this classification is established. It was revealed that entrepreneurial activity in the regions of the Arctic differs not only in the level of its manifestation, but also in the prevailing type of entrepreneurial activity in them both with respect to the overall Russian situation and between the Arctic territories.

Thus, it was revealed that the dominant force of influence in the regions of the Russian Arctic is the entrepreneurial activity of business and the state, which meets the current features of the development of the Russian Arctic, which consists in a high degree of corporatization of the Arctic economy and the active participation of the state in it. Since the Arctic belongs to a certain classification group, recommendations on the management of entrepreneurial activity and its stimulation are proposed.

The emphasis on this regional feature made it possible to form a mechanism for managing Arctic entrepreneurship, which comprehensively considers the specifics of the socio-economic situation and development trends of the Arctic territories. It consists in enhancing the entrepreneurial activity of the population in the Arctic as a target and ensuring its stable socio-economic development through the implementation of state policy aimed at stimulating business and the state to

involve entrepreneurial initiatives of the population in the contour of their management zones. In regions classified as belonging to territories with a predominant entrepreneurial activity of the business, this is achieved by applying management concepts such as intrapreneurization, support and stimulation of private business investments in newly created entrepreneurial structures, outsourcing and the creation of subsidiaries and dependent companies based on the parent company, including the development of networks of franchising companies. For regions with a predominant influence of state entrepreneurial activity, support and incentive to implement the concepts of social outsourcing, investment in the creation of small and medium-sized businesses, and the development of state franchising are necessary.

The application of the recommendations will strengthen and redistribute the current entrepreneurial activity in favor of revitalizing the population, which will become the basis for the development of entrepreneurship as a factor in ensuring economic growth and social stability in the Arctic.

Acknowledgements and funding

The study was funded by a grant from the Russian Science Foundation, project No. 19-18-00025.

References

- 1. Minniti M., Levesque M. Recent developments in the economics of entrepreneurship. *Journal of Business Venturing*, 2008, vol. 23, no. 6, pp. 603–612.
- 2. Autio E., Kenney M., Mustar P., Siegel D., Wright, M. Entrepreneurial innovation: The importance of context. *Research Policy*, vol. 43, no 7, pp. 1097–1108.
- 3. Sciascia S., De Vita R. *The development of entrepreneurship research*. Università Carlo Cattaneo, 2004, 37 p.
- 4. Stenholm P., Acs Z.J., Wuebker R. Exploring country-level institutional arrangements on the rate and type of entrepreneurial activity. *Journal of Business Venturing*, 2013, vol. 28, no. 1, pp. 176–193.
- 5. Verhovskaya O.R., Aleksandrova E.A., Bogatyreva K.A., Dzhelepova M.V., Shmeleva E.V. *Natsional'niy otchet «Global'niy monitoring predprinimatel'stva. Rossiya 2016 / 2017* [National report «Global entrepreneurship monitoring. Russia 2016 / 2017»]. Graduate School of Management (GSOM SPbU) Publ. Saint Petersburg, 2016. 66 p. (In Russ.)
- 6. Skufina T.P., Bazhutova E. Innovatsii gradoobrazuyushchih predpriyatiy v proyavlenii predprinimatel'skoy aktivnosti v usloviyah Arktiki (na primere g. Kirovska Murmanskoj oblasti) [Innovations of city-forming enterprises in the manifestation of entrepreneurial activity in the Arctic (on the example of Kirovsk, Murmansk region)]. *Innovatsii* [Innovations], 2019, no. 3, pp. 77–85.
- 7. Zaikov K.S., Kondratov N.A., Kudryashova E.V., Lipina S.A., CHistobaev A.I. Stsenarii razvitiya arkticheskogo regiona (2020–2035) [Scenarios of development of the Arctic region (2020-2035)]. *Arktika i Sever* [Arctic and North], 2019, no. 35, pp. 5–24. DOI: 10.17238/issn2221-2698.2019.35.5
- 8. Samarina V.P., Skufina T.P., Samarin A.V. Russia's North Regions as Frontier Territories: Demographic Indicators and Management Features. *European Research Studies Journal*, 2018, vol. 21, no. 3, pp. 705–716.
- 9. Zaikov K.S., Kondratov N.A., Kudryashova E.V., Tamitskii A.M. Potrebnost' sub'ektov Arkticheskoy zony RF v trudovykh resursakh [The need for workforce in constituent entities of the Arctic Zone of the Russian Federation]. *Ekonomicheskie i social'nye peremeny: fakty, tendencii, prognoz* [Economic and social changes: facts, trends, forecast], 2018, vol. 11, no. 6, pp. 184–201. DOI: 10.15838/esc.2018.6.60.11

- 10. Porfir'ev B.N., Leksin V.N. Rol' tekhnologicheskoy modernizatsii v formirovanii social'no orientirovannoy ekonomiki i obespechenii ustoichivogo razvitiya Rossiyskoy Arktiki [The role of technological modernization in the formation of a socially oriented economy and ensuring the sustainable development of the Russian Arctic]. *MIR (Modernizaciya. Innovacii. Razvitie)* [MID (Modernization. Innovation. Development)], 2017, vol. 8, no. S4 (32), pp. 629–639.
- 11. Samarina V.P., Samarin A.V., Skufina T.P., Baranov S.V Social and Economic Development Of Russia's Northern Regions: Lessons, Trends And Decisions. *The European Proceedings of Social & Behavioural Sciences EpSBS: GCPMED 2018 International Scientific Conference "Global Challenges and Prospects of the Modern Economic Development"*, 2019, vol. LVII, pp. 388–398. DOI: https://dx.doi.org/10.15405/epsbs.2019.03.39
- 12. Baranov S.V. Statisticheskaya otsenka asimmetrichnosti ekonomicheskogo razvitiya regionov Severa i nesevernoy chasti RF [Statistical assessment of the asymmetry of the economic development of the regions of the North and the non-northern EArt of the Russian Federation]. *Voprosy statistiki* [Statistics Issues], 2010, no. 4, pp. 44–48.
- 13. Pilyasov A.N., Zamyatina N.YU. Arkticheskoe predprinimatel'stvo: usloviya i vozmozhnosti razvitiya [Arctic entrepreneurship: conditions and development opportunities]. *Arktika: ekologiya i ekonomi-ka* [Arctic: ecology and economics], 2016, no. 4 (24), pp. 4–15.
- 14. Toskunina V.E., Karmakulova A.V. Zhenskaya zanyatost' v regionakh Severa Rossii: problemy i puti resheniya [Women's employment in the regions of the North of Russia: problems and solutions]. *Ekonomika regiona* [The economy of the region], 2013, no. 4 (36), pp. 27–35.
- 15. Suopajärvi L., Ejdemo Th., Klyuchnikova E., Korchak E., Nygaard V., Poelzer G.A. Social impacts of the "glocal" mining business: case studies from Northern Europe. *Mineral Economics*, 2017, vol. 30, no. 1, pp. 31–39. DOI: 10.1007/s13563-016-0092-5
- 16. Moura M. G. Schumpeter on the integration of theory and history. *The European Journal of the History of Economic Thought*, 2003, vol. 10, no. 2, pp. 279–301.
- 17. Edoho F.M. Entrepreneurship paradigm in the new millennium: a critique of public policy on entrepreneurship. *Journal of Entrepreneurship in Emerging Economies*, 2016, vol. 8, no. 2, pp. 279–294.
- 18. Skufina T.P., Samarina V.P., Krachunov H., Savon D.Yu. Problems of Russia's Arctic Development in the Context of Optimization of the Mineral Raw Materials Complex Use. *Eurasian Mining*, 2015, no. 2, pp. 18–21. DOI: 10.17580/em.2015.02.05
- 19. Hamilton L.C., Saito K., Loring P.A., Lammers R.B., Huntington H.P. Climigration? Population and climate change in Arctic Alaska. *Population and environment*, 2016, vol. 38, no. 2, pp. 115–133.
- 20. Hamilton L.C., Lammers R.B. Linking pan-Arctic human and physical data. *Polar Geography*, 2011, vol. 34, no. 1–2, pp. 107–123.
- 21. Sotsial'no-ekonomicheskaya problematika Rossiyskoi Arktiki v issledovaniyah institutov Rossiyskoy akademii nauk: istoriya, sovremennost', perspektivy [Socio-economic problems of the Russian Arctic in the research of institutes of the Russian Academy of Sciences: history, modernity, prospects]. Moscow, Nauchny konsul'tant Publ., 2018, 802 p. (In Russ.)
- 22. Laverov N.P. O vklade Rossiyskoi akademii nauk v sovremennoe osvoenie i razvitie Arktiki [On the contribution of the Russian Academy of Sciences to the modern development of the Arctic]. *Arktika: ekologiya i ekonomika* [Arctic: ecology and economy], 2014, no. 1, pp. 4-9.