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Spatial Structure of Investment and Population Settlement in Krasnoyarsk Region: do they Correspond to Each Other?

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The present article analyses the tendencies in the territorial structure of investments into the economy of Krasnoyarsk region by branches, kinds of activity and sources of financing. It studies to what degree the structure of investment corresponds to the developed territorial structure of population settlement over the territory of the region. The article reveals the basic tendencies, arising problems and consequences of the territorial disproportions.

Keywords: investments, population, territorial structure

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Introduction

The territory of Krasnoyarsk region situated in the valley of the river Yenisei, covers a great part of West Siberian plain, East Siberian highland, Yenisei ridge, Altai and Sayan mountains, and stretches to the shores of the Arctic ocean. The territory of the region covers 2355,8 thousand square kilometres. It extends from the north to the south for 3000 kilometres and covers several climatic zones: arctic, tundra, taiga, which is the major part of the region's territory, forest steppe and steppe zones. The vast territory is rich in various natural resources. Due to the great

extension of the territory of the region from the north to the south, its climatic conditions also vary from the most kindly for settlement in the central and southern areas till the arctic climatic zone in the northern areas. The length of the main water artery of the region, the river Yenisei, which flows from the south to the north, is 4092 kilometres. Just like the Yenisei, almost all of the rivers of the region are deep, navigable and suitable for constructing hydro power stations. According to the Krasnoyarsk Statistic Service, the population of the region is more than 2893 thousand people.

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Over a long period of time, the spatial structure of the Krasnoyarsk region economy has been developing divergently, with different factors dominating certain development stages: the need for natural and mineral resources, the need for energy resources, meeting the general needs of the population. Several main tendencies of territory development can be pointed out:

- development of the forest resources;
- development of the mineral resources;
- industrialization and development of the industrial capacity;
- agricultural development.

Development of forest resources resulted in the foundation of many settlements in the taiga area of the region. Some of the towns were formed as logistic centres of the forest resources supply. and as centres of processing the forest resources. Agricultural production is concentrated in the regions that enjoy better climatic conditions and form a farming zone in the central, western, eastern and southern parts of the region. In the 90s of the previous century, along with the intensive process of industrialization, the processing industry was developing rapidly along with the extracting industry. As the location of mining facilities usually depends on the geographic location of the mineral deposits, extracting industry enterprises have often been built in unpopulated areas without proper infrastructure. railway and other kinds of transport, along with severe climate areas like, for example, Norilsk city. Processing enterprises have always been concentrated in the cities located in better climatic conditions, like Krasnoyarsk, Kansk, Achinsk, Minusinsk, Lesosibirsk, Sharvpovo and other cities. Intensive process of industrialization, development of the extracting industry requires a stable flow of labour resources. The population of the region grows not only by means of natural increase, but also due to the labour migration of people from other regions.

This mix of various tendencies has lead to the population being distributed in the region in a spotted manner. The majority of settlements is located in the central and southern areas of the region, along the water and traffic arteries. The main cities of the region are concentrated in 10 per cent of the territory, with 82 per cent of the population living there. The exception is Norilsk city that is an isolated urban complex situated beyond the Arctic circle, with the population of about 176 thousand people. The main part of the rural population (about 95 per cent) is settled in the territory to the south from the Angara, which counts up to 21 per cent of the region territory.

The negative processes that occurred during the after-reform period also left their mark on the spatial structure of the region economy. In the beginning of the reforms in the regions of Siberia and the Far East, an intensive outflow of the population began. Since the 90s of the past century. the population of the region has been decreasing along with the change of the population settlement pattern. The decrease in agricultural production and depopulation of some rural settlements can be illustrated by the following data: according to the population census carried out in Krasnovarsk region in the year 2010, there are more than 120 disbanded settlements with the population not exceeding 10 people. The major part of the disbanded villages and small towns with the population of 1 to 10 people is concentrated in the following provinces: Birulussky (9), Yeniseisky (8), Achinsky, Yemelyanovsky, Mansky (7) and Nizhneingashsky (6). The decrease of industrial production and the close-down of industrial enterprises in the cities, the outflow of the population from the rural area and from the region as a whole, along with concentration of the working population in the capital of the region are obvious at the moment.

As we can see, the process of development of the region has a contradictory character.

Though, in its turn, it has considerably influenced the spatial structure of the population settlement that has formed itself by the year 2011. What is the future of the regional economy? How will the spatial structure of the population settlement change due to the territorial changes in the economical structure of the region? It is important to analyse, how the spatial structure of region economy development and the territorial settlement structure correspond to each other. We will try to find out whether the economic development perspectives and the present spatial structure of the population settlement match each other.

Methods

The analysis is broken down by "subregions" outlined in the territory of the region: Central, Western, Eastern, Southern, Angara (Lower Angara region) and Northern subregions; the list of the subregions is presented in the appendix, table A1. Each of the subregions has its own historically formed specialization and upcoming trends of faster growth (see table A2).

The faster growth zone in the Central subregion is the Krasnovarsk agglomeration, which includes non-ferrous metals, power industry, wood processing, machine engineering, and food industry enterprises; specialization in high technology branches of industry is developing, like in GLONASS and "Solar Silicium" projects, along with the education sector represented by SibFU. Strategic objectives of creating the Krasnovarsk agglomeration are: providing a multiple-option connection between the municipalities and provinces of the region for the sake of the growth of the public welfare; forming urban environment with comfortable living conditions, comfortable for business and attractive for workers; forming a commercially viable, innovative economy; solving geopolitical and economic problems of Russia.

We regard the "KATEK" coal mine engineering company and the Kingash ore cluster as a part of the faster growth zone of the Eastern subregion; its basic branches of industry, such as nuclear chemistry, wood processing and food industry, still do not lose their significance. The development of the Western subregion is closely connected with the development of "KATEK", along with the basic branches of thermal engineering, agriculture, machine engineering, non-ferrous metal industry and food industry. The Southern subregion traditionally specializes in agriculture and food industries, electrical engineering, thermal engineering, extracting and processing iron ores, gold extraction.

The development perspectives are connected with the construction of Kuragino-Kyzyl railway and with the development of recreation, sports and tourism areas in "Ergaki" park and "Borus" centre of winter sports. The perspectives of the Angara subregion are connected with the industrial development of the Lower Angara area, construction of Boguchany and Motygino Hydro Power Stations, construction of nonferrous metal enterprises and development of wood processing industry. The perspectives of the Northern subregion are extracting oil and gas and non-ferrous metallurgy. Development projects of the Lower Angara area and development of the Vankor basin are the most promising trends of territorial organization of the region.

Results

In the last few years, the population decrease has slowed down (see Table 1). In the years around 2010, a slight growth of the average annual population was observed.

In the subregions, the situation is less obvious. In certain subregions, considerable population growth is noticed (see Fig. 1). So, in the Southern zone the population growth in the years 2007-2010 was 7,3 per cent, in the

Year	I	Population, thousand people ²	1)
rear	total	urban	rural
1970	2512,4	1558,8	953,6
1979	2700,2	1879,1	821,1
1989	3038,6	2216	822,6
2002	2966	2245,7	720,3
2005	2925,3	2220,7	704,6
2008	2890,3	2192,3	698
2009	2889,8	2186,3	703,5
2010	2893,9	2195,5	698,4

Table 1. Dynamics of population growth in Krasnovarsk region.*

Central zone it exceeded 4,4 per cent. In other subregions the population decreased, and the dynamics of the decrease was also different. For example, in the years 2007-2010 the population of the Eastern subregion decreased for 3,6 per cent, in the year 2009 the ratio counted a 2,3 per cent increase. In the Western, Lower Angara and Northern subregions the population increased for about 5 per cent in the years 2007-2010.

At the present time the major part of the region population is concentrated in the Central subregion and is slowly increasing (Fig. 2). In the year 2010, 42,3 per cent of the resident population of the region was concentrated in the Central subregion, the second and the third places being occupied by the Western (14,8 per cent) and the Northern (14 per cent) subregions, but the ratios of these areas are inevitably decreasing. The Southern subregion, which enjoys the most kindly conditions for residence, counts up to 8,8 per cent of the population, the Eastern – around 12 per cent, and the Lower Angara – 8 per cent of the region population.

The immediate and sometimes even longrun prospects of the territories are to a great degree determined by the volume of investments made into the economy of the region; so, let us concentrate on the analysis of the territorial structure of the investments that have been made for development of the subregions in the past few years.

In spite of the crisis, the investment volume has been growing rapidly within the last five years. As witnessed by the data presented in the Table 2, the investment volume has increased both in current and comparable prices.

Within the last years, the branch structure of investments has considerably changed in favour of extracting branches and producing electric power. So, according to the types of economic activity (without regarding small business entities and unofficial activity parameters) in the year 2005 around 35,9 per cent of the investments contributed to the processing industries, construction (7,5 per cent), transport and communication (23,5 per cent). In the year 2010 the share of the listed branches in the total amount of investments dropped to 19,8, 0,6 and 9,2 per cent correspondingly. The percentage of the investments made into the sphere of mineral resources extraction has dramatically increased

^{*} Krasnoyarsk regional statistic annals (1-12) / Federal State Statistic Service. Territorial body of state statistics for Krasnoyarsk region (KRASNOYARSKSTAT). – Krasnoyarsk, 2010.

^{**} The data for the year 1970 is provided in conformance with the population census of January 15, for the year 1979, with the population census of January 17, for the year 1989, with the population census of January 12, for the years 2004-2009 it is the estimation data for the January 1 of the corresponding year.

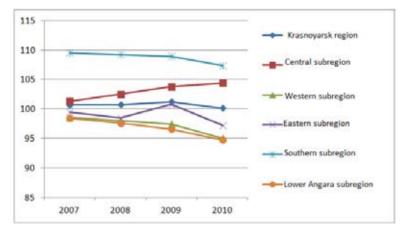


Fig. 1. The dynamics of average annual resident population in Krasnoyarsk region and the subregions, per cent (year 2006 = 100%)¹

Table 2. Investments into the permanent capital of Krasnoyarsk region*

	2005	2006	2007	2008	2009	2010
Investments into the permanent capital, million roubles (in current prices)	71387,50	92587,40	120833,20	204170,70	247788,80	245618,30
Per cent ratio in comparison with the previous year (in comparable prices)	129,50	116,60	113,00	141,40	118,50	102,00

^{*} Data provided by Krasnoyarskstat.

from 8,5 per cent up to 32,7, as the investment ratio for production and distribution of electric power, gas and water increased from 5,3 up to 19,4 per cent due to the large-scale projects on development of oil basins, construction of Boguchany hydro power station, and others. The structure of investments according to the types of economic activity has confirmed the raw material focus of the regional economy.

In Fig. 2 you can see the structure of the investments made into the permanent capital according to the subregions of Krasnoyarsk region within the years 2006 and 2010.

As we can see, several trends can be easily observed in the spatial structure of the investments:

- 1) The share and the general volume of the investments made in the Central subregion is considerably decreasing. Within the period between the year 2006 till the year 2010 the share of the investments has fallen from 37,4 till 13,2 per cent;
- 2) The share of investments made in the Northern subregion has increased, its percentage in the general structure of investments has increased from 34,7 to 53,6 per cent;
- 3) The general volume of investments made in the Lower Angara subregion made in the years 2006-2010 has grown along with the share: from 11,2 to 21,3 per cent;
- 4) The investment share for the other subregions (Western, Eastern and Southern)

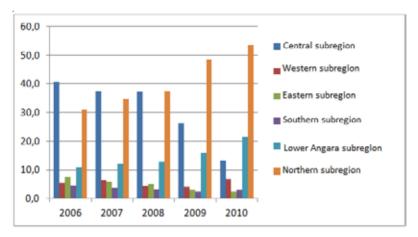


Fig. 2. The share of investements made into the permanent capital of the subregions, %

has largely dropped from 16,1 to 11,9 per cent.

The positive side of the growth of investments made in the Northern and Lower Angara subregions is the increase of these territories' contribution into the economy of the region and of the country as a whole. The negative consequences of the territorial structure of the investments are mainly connected with the considerable inconformity between the investment structure and the present settlement scheme of Krasnovarsk region area-wise. The major part of the population which counts up to 78 per cent lives in the Central, Western, Eastern and the Southern subregions that enjoy the most kindly climatic conditions for residence, while the investments are mostly forwarded to the northern areas and the areas of the Lower Angara.

The changes of the spatial investments structure are noticed in all the main spheres of the economic activities.

So, the spatial structure of the investments into the extracting sector changes from one year to another, but the capital investments are mostly concentrated in the Northern subregion and in the Lower Angara. The share of these two regions in the years 2006-2009 was more than 80 per cent of the investments (Fig. 3).

Type of activity: producing and distributing of electric power, gas and water, with multidirectional trends in the spatial distribution of the investments. The share of the Central subregion, which used to be high in the years 2006-2007 (around 45-56 per cent), in the years 2008-2009 decreased till 25-30 per cent. The Southern subregion, though receiving a considerable share of investments in the years 2006-2007 (22-28 per cent), has lost its positions, and in the years 2008-2009 the share of the Southern subregion counted around 7-13 per cent. The share of the Low Angara subregion has drastically increased, from 3 per cent in the year 2006 up to 61 per cent in the year 2009 (see Fig.4).

Since the year 2006, the share of the investments into the processing industries of the Central subregion has been steadily growing, from 27 per cent in the year 2006 till 35 per cent in the year 2009, which in general corresponds to both the processes of the spatial concentration of the population in Krasnoyarsk city situated in the Central subregion, and the specialization of the city in the area of processing industries. It is worth noticing that the population share that is settled in the Central subregion (42 per cent) is still higher than the share of the investments made in the processing industries of the Central

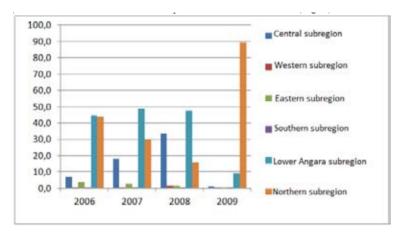


Fig. 3. The share of investments into the permanent capital with all the financing resources. Sector C. Extracting mineral resources. %

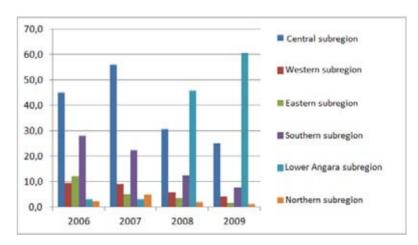


Fig. 4. The share of investments into the permanent capital for the expense of all the financing sources. – Sector E. Production and distribution of the electric power, gas and water, %

subregion among all the investments into the processing industries of the region, which count up to 35 per cent.

Comparison of the share of the population and the share of the investments made into the other subregions located in advantageous climatic conditions does not speak in the favour of the territories. The share of the population of the Western subregion is 15 per cent, while the share of the investments is 6 per cent. The figures for the Eastern subregion are 12 and 9 per cent, and for the Southern subregion they are 8 and 5

per cent correspondingly. With all that, during the whole period of the years 2006-2009 the share of the Northern subregion in the investments has always remained large (around 40 per cent), while only 14 per cent of the population is settled in the region (Fig.5).

Nevertheless, the Central subregion remains the leader in the total volume of investments into such spheres as food production, including drinks and tobacco (57-79 per cent within the period 2006-2009). The investments into the pulp and paper industry, editing and polygraphic activities

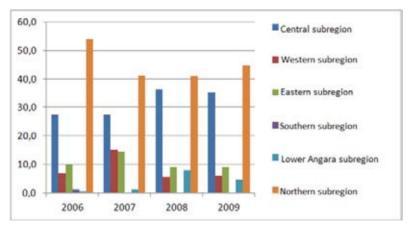


Fig. 5. The share of investments made into the permanent capital with all the financing sources – SECTOR D: processing industries, %

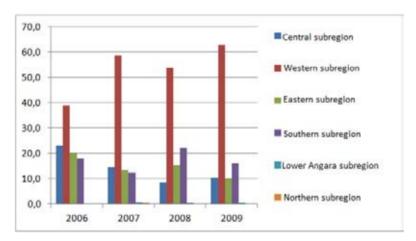


Fig. 6. The share of the investments into the permanent capital with the whole sources of financing – SECTION A-01: agriculture, hunting and services provided in these spheres, %

are distributed between the Central (from 63 to 72 per cent of the investments) and the Lower Angara subregions (from 23 to 35 per cent).

Agriculture receives around 1,6 per cent of all the investments of the region. From the territorial point of view, the investments made into the Western subregion prevail. The regional share has been steadily growing since the year 2006: in the year 2006 its share was 39 per cent, but by the year 2009 it has reached 63 per cent. However, the share of the Central and the Eastern subregions in the investments has decreased

within the same period, from 23 to 11 per cent and from 20 to 10 per cent correspondingly. The share of the Southern subregion remains stable: 16-18 per cent (see Fig.6).

It is expectable that the major part of the investments made into the development of the forest sector are concentrated in the Lower Angara subregion and counts up to more than 80 per cent of the general volume of investments for the region in this sphere of activity.

The investments made into construction are distributed in a spotty manner all over

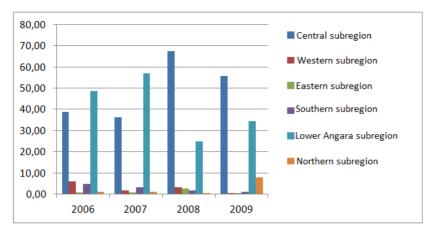


Fig. 7. The share of investments into the permanent capital with the whole sources of financing – SECTOR F. Construction. %

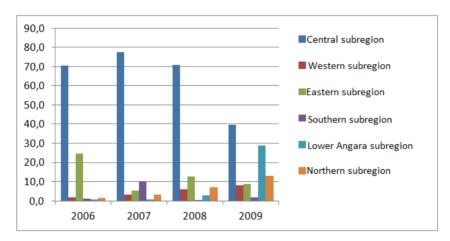


Fig. 8. Share of investments into the permanent capital with the whole sources of financing – SECTOR I: Transport and communication, %

the regional territory, the share of the Central subregion is steadily high. Due to the newly formed requirements in the development of the branch, a considerable share of the investments is forwarded into the construction of the Lower Angara subregion (Fig. 7).

Within the years 2006-2008 the domination of the Central region in the investments made into transportation and communication has been noticed; the share of the investments made into the region as a whole exceeded 70 per cent. In the year 2009 the share of the Lower Angara

grew up to 29 per cent, and the share of the Northern subregion grew up to 13 per cent, which considerably decreased the share of the Central subregion from 70 to 40 per cent, and the share of the Eastern subregion from 25 to 9 per cent (see Fig. 8).

In the branches connected with social sphere, health and education, the spatial concentration of investments is different. Education receives around 1 per cent of the general investment volume. Geographically, the major share of the investments is concentrated in the Central

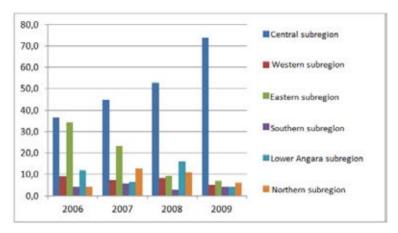


Fig. 9. Share of investments into the permanent capital with the whole sources of financing – SECTOR M: Education. %

subregion, and its share has been growing steadily, from 37 per cent in the year 2006 up to 74 per cent in the year 2009 (Fig. 9).

In the spatial concentration of the investments into health sphere along with community facilities, social and personal service the dynamics are the same. The health sphere enjoys around 1,7 per cent of the general volume of the investments made into the permanent capital. A considerable part of the investments into the health sphere is concentrated into the Central subregion, the share of which has increased from 39 per cent in the year 2006 up to 63 per cent in the year 2009. The share of investments for the sector O: providing other communal facilities, social and personal services, counts up to 1,3 per cent in the general investments' volume. The share of the Central subregion in the investments has grown from 19 up to 69 per cent within the period 2006-2009.

Conclusions and recommendations

This way, there are several trends that can be pointed out:

- 1) redistribution of the investments in favour of extracting branches;
- 2) changing the spatial structure of the investments in favour of more severe climatic

conditions of the poorly populated subregions that have no infrastructure;

3) investments into the objectives of social infrastructure, health and education are more and more concentrated in the Central subregion, the attractiveness of which has been rapidly growing, strengthening the tendency of population concentration in Krasnoyarsk city and Central subregion as a whole.

It is interesting to mark the trends in the spatial concentration of the investments in the region, forwarded from different sources of financing:

- 1) Since the year 2007, the share of the Central and Northern subregions has been decreasing due to the own funds of the enterprises. The decrease from 28 to 21,2 per cent was observed in the year 2007 in the Central subregion, and the decrease from 41,3 to 38,4 per cent was witnessed in the Northern subregion;
- 2) The share of financing with the own funds of the Lower Angara subregion has been growing, from 11,9 per cent in the 2006 up to 19,4 per cent in the 2009;
- 3) The decrease of the share of financing with the raised money in the Central district is quite obvious, as it dropped from 36 to 25 per cent,

along with the increase in the share of financing with the raised money in the Lower Angara (from 12 up to 16 per cent) and the Northern subregions (from 28 to 55 per cent);

- 4) The Central subregion is the one to develop more rapidly at the expense of the federal target programs (at the expense of all the financing sources), which is from 57 to 74 per cent of all the funds:
- 5) The funds of the region programs are distributed between the subregions in a more equal manner. In some years, the subregions have advantages in financing. In the year 2006 the priority was received by the Central subregion, and in the ear 2007 it was received by the Central and Western subregions, while in the years 2008 and 2009 the share of the Southern and the Eastern subregions in comparison with some other territories raised little bit;
- 6) The distribution of the investments into the permanent capital of the municipal property organizations looks more or less steady, while the priority of financing is enjoyed by the Central, Northern and Eastern subregions.

So, we can see that the investments are largely forwarded into the subregions in accordance with economic priorities and hardly react to the present territorial structure of the population settlement. The priority types of activities and industry branches are extracting mineral resources, producing and distributing electric power, gas and water, construction, forestry and various services provided in these fields. The exceptions are the types of activities aimed at serving the population, like education, health, social and personal services.

So are the branches of processing industries aimed at the basic needs of the population like producing food, including drinks and tobacco, pulp and paper production, publishing and polygraphy services and some other activities, the share of which is not obviously seen in the investments.

So, Krasnoyarsk region has again returned to the initial point in the development of its economy. which is priority development of natural resources against the development of processing industry and other secondary branches of economy. The developed resources basins and the raw material sources planned for developments are mostly concentrated in the hard to reach territories that do not have roads or infrastructure. New vacancies appear in the places where the climatic conditions for population settlement are contrary or unfavourable, without permanent settlements and social infrastructure. If on the early stages the resource development in the region could be regarded as a site for building up the industry and industrial branches of economy, the return to the resource focus dramatically changes the territorial structure of labour resource requirements and the territorial settlement structure. The solution is well-balanced development of extracting and processing industries in the region, in the development of modern branches of transport and communication, constructing roads and railways, development of the construction branch on the basis of the latest technologies. Regional and municipal executive organs are trying to compensate the disproportions in the development of the regional economy, but the main role in this issue is played by businesses.

Appendix

Table P1 – Subregions of Krasnoyarsk region

No	Subregions	Municipal entities
1.	Central subregion	Krasnoyarsk city, Divnogorsk city, closed administrative-territorial entity Zheleznogorsk city, Sosnovoborsk city; Berezovsky, Bolshemurtinsky, Yemelyanovsky (together with the closed administrative-territorial entity Kedrovy village), Mansky, Sukhobuzimsky municipal entities.
2.	Western subregion	Achinsk city, Bogotol city, Nazarovo city, Sharypovo city, Achinsky, Birilussky, Balakhtinsky, Bogotolsky, Bolsheuluysky, Kozulsky, Nazarovsky, Novoselovsky, Tyukhtetsky, Sharypovsky, Uzhursky (together with the closed administrative-territorial entity Solnechny village) municipal entities
3.	Eastern subregion	Kansk city, Borodino city, Zaozerny city (as a part of Rybinsky province), closed administrative-territorial entity Zelenogorsk city, Abansky, Dzerzhinsky, Ilansky, Irbeysky, Kansky, Nizhneingashsky, Partizansky, Rybinsky, Sayansky, Taseyevsky, Uyarsky municipal entities
4.	Southern subregion	Minusinsk city, Yermakovsky, Idrinsky, Karatuzsky, Kuraginsky, Krasnoturansky, Minusinsky, Shushensky municipal entities
5.	Angara subregion (Lower Angara subregion)	Yeniseisk city, Lesosibirsk city, Boguchansky, Yeniseisky, Kezhemsky, Motyginsky, Severo-Yeniseisky, Kazachinsky, Pirovsky municipal entities
6.	Northern subregion	Igarka city, Norilsk city, Turukhansky, Evenkiysky, Taymyrsky municipal entities

Table P2 – Specializations and basic functions of the subregions of Krasnoyarsk region and the faster development zones (according to the Territorial Planning Scheme of Krasnoyarsk Region)

	Faster		Specialization, basic functions and projects	ctions and project	S
Subregions of the region	development zones of federal and regional significance	Basic	Developing	Prospective	Most developing settlements (their most developing project specialization)
1	2	3	4	5	9
Central subregion	Krasnoyarsk agglomeration	Non-ferrous metallurgy, power industry, chemistry, deep wood processing, machine engineering and metal working, food industry, agriculture	High technology industries (GLONASS and Gold "Solar Silicium" projects), processing industry, extraction transport and logistics, modern consumer sector, education sector (SibFU), tourism, recreational facilities	Gold extraction	Krasnoyarsk (high technologies, consumer goods), Zheleznogorsk (high technologies); Berezovka (wood processing); Yemelyanovo (transport and logistics); Sosnovoborsk (power industry); Divnogorsk (tourism and recreational facilities); Yemelyanvsky province (transport and logistics, wood processing, ferrous metals, power industry)
Eastern	KATEK, Kingashsky ore cluster	Food industry, nuclear chemistry, deep wood processing, agriculture	Coal mining, forming a new coal mine (Kanskaya TPS), power stations and road construction, non-ferrous metallurgy (Kingashsky ore cluster), education sector, petrochemistry	Gold extraction, ore mining industries	Kansk (power industry, wood processing, education), Uyar (transport, logistics, petrochemistry), Nizhnyaya Poyma (transport and logistics), Orye (settlement centre, nonferrous metallurgy)
Western	КАТЕК	Thermal engineering, agriculture, food industry, machine engineering and metal processing, non-ferrous metallurgy	Forming a coal mining centre of federal significance (finishing construction of BGHPS nad construction of TPS-2), coal mining (Berezovsky open-pit coal mine, Sereulsky open-pit coal mine), transport machine engineering (Nazarovo), recreational facilities (Sharypovsky and Balakhtinsky provinces), construction industry, petrochemistry and petrol processing, logistics, education sector	1	Achinsk (petrochemistry, non-ferrous metallurgy), Nazarovo (agricultural and transport machine engineering, metal processing, energetic), Sharypovsky province (power industry, transport and logistics, labour resources for rotational job, recreational facilities), Bogotol (machine engineering, metal processing)
Southern subregion	"Frgaki" natural park, Yuzhny oar cluster	Agriculture, food industry, electrotechnical machine engineering, thermal engineering, extracting and	Transport and logistics (Kuragino-Kyzyl railway complex), tourism, recreational and sports facilities ("Ergaki" natural park, "Borus" winter sports centre), deep wood processing	Forming Yuzhny coal-mining centre, ferrous metallurgy	Minusinsk (wood processing), Shushenskoe (tourism and recreational facilities), Artemovsk (gold extraction), Kuragino (transport and logistics, construction complex), Krasnokamensk (iron ore dressing), Aradan (transport, tourism and recreational facilities)

Table P2 continuation

1	2	3	4	5	9
		processing of iron ore, gold extraction			
Subregion subregion	"Lower Angara" industrial centre	Ore extraction industry, gold extraction, wood processing, coal mining	, _	Ferrous metallurgy, extraction of hydrocarbons (Boguchansky, Kezhemsky, Yeniseisky, Severo- Yeniseysky provinces), rare metals' ore dressing, development of bauxites' basins,	Lesosibirsk (wood processing and resin industry, transport and logistics), Yeniseisk (wood processing), Boguchany (wood processing and resin industry, power industry, logistics), Gremuchy and Krasnogoryevsky (gas chemistry and gas processing), Tayozhny (non-ferrous metallurgy, wood processing), Angarsky (wood processing, transport and logistics), Kodinsk (power industry, wood processing, ferrous and rare metals' ore dressing), Motygino (power industry, construction complex), Razdolinsk (ferrous metallurgy, power industry, mining and chemical industry, gold extraction), Novoangarsk (non-ferrous metallurgy), Severo-Yeniseisky (gold extraction, rotational job centre), Kuchetkan (transport and logistics), Bryanka (rotational job centre, transport)
Northern subregion	Bolshekhetsky oil and gas extraction complex, Southern Evenkia oil and gas extraction enterprises	Extraction and processing of nickel, copper, platinum ores, gas extraction, transport logistics, traditional kinds of economic and environmental management	Forming centres of hydrocarbon extraction of federal significance (Bolshekhetsky cluster and South Evenkia cluster, traditional kinds of economic and environmental management	Hydrocarbon extraction (Taymyrsky province), gold extraction in the Arctic areas	Norilsk (non-ferrous metallurgy), Dudinka (transport and logistics, motor fuel production), Igarka (rotational job centre, transport), Turukhansk (transport), Khatanga (logistics, thermal engineering, venison processing), Dixon (logistics, arctic mineral resources development centre), Tura (thermal engineering, venison processing)

Пространственная структура инвестиций и расселения в Красноярском крае: соответствуют ли друг другу?

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В статье проанализированы тенденции в территориальной структуре инвестиций в экономику Красноярского края по отраслям и видам деятельности, источникам финансирования. Рассмотрено. в какой степени структура инвестиций соответствует сложившейся территориальной структуре расселения в крае. Выявлены основные тенденции и возникающие проблемы и последствия формирующихся территориальных диспропорций.

Ключевые слова: инвестиции, население, территориальная структура.

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