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ECONOMIC AND SOCIAL CHANGES: FACTS, TRENDS, FORECAST

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The formation of the scientific personnel with an active life position, a great demand for Institute's investigation, academic community's support of the new journal published by ISEDT RAS, which combined efforts of the economic institutes of RAS in the Northwestern Federal District, and furthermore development of international ties have become the main outcomes of the last years.

MAIN RESEARCH DIRECTIONS

Due to the Resolution № 96 by the Presidium of Russian Academy of Sciences dated from March 31, 2009 VolRC RAS carries out investigations in the following fields:

- problems of economic growth, scientific basis of regional policy, sustainable development of territories and municipalities, and transformations of socio-economic space;
- regional integration into global economic and political processes, problems of economic security and competitiveness of territorial socio-economic systems;
- territorial characteristics of living standards and lifestyle, behavioral strategies and world view of different groups of the Russian society;
- development of regional socio-economic systems, implementation of new forms and methods concerning territorial organization of society and economy, development of territories' recreational area;
- socio-economic problems regarding scientific and innovative transformation activities of territories;
- elaboration of society's informatization problems, development of intellectual technologies in information territorial systems, science and education.

INTERNATIONAL TIES AND PROJECTS

In order to integrate scientific activities of the Institute's scholars into global research area, international scientific conferences are held on a regular basis; they result in cooperation agreements with different scientific establishments:

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

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

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

2013 – Cooperation agreement is signed with Jiangxi Academy of Social Sciences (China, 2013).

July 2013 – The application for research performance by international consortium involving ISEDT RAS within the 7th Framework Programme of European Community.

2014 – Cooperation agreements are signed with Jiangxi Academy of Social Sciences (China, 2014), National Academy of Sciences SM TsSaiSI (Belarus, 2014). Protocols of intent are signed with the Academy of Social Sciences Jiangxi Mao Zhiyong (China, 2014), National Institute of Languages and Civilizations (France, Jean Verkey, 2014).

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

2016 – Cooperation agreements are signed with EHESS Ecole des Hautes Etudes en Sciences Sociales (Paris, France, 2016), Institute of Philosophy, Sociology and Law of NAS RA (Yerevan, Armenia, 2016), Yerevan Northern University (Armenia, 2016), Yerevan State University (Armenia, 2016). Protocols of intentions are signed with Academy of Social Sciences in province Jiangxi (China, 2016).

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PUBLIC ADMINISTRATION EFFICIENCY

Editorial

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The 2018–2019 Regional Election: Voters' Trust in the Authorities Continues to Decline



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Abstract. September 8 was a single voting day in Russia: 13 constituent entities of the Russian Federation elected deputies of state legislative bodies¹; 19 constituent entities elected their heads². This was one of the main events of 2019 for the domestic political life of Russia, because the results of the elections, in fact, reflect the socio-political agenda of today; they show people's attitude toward the political and economic course implemented by the Russian government and serve as a criterion for assessing its effectiveness. The following materials provide an analysis of the electoral preferences of Russians, manifested in the level of support for the head of state and reflecting the interests of the ruling elites of the United Russia

¹ The republics of Altai, Kabardino-Balkaria, Karachay-Cherkessia, Crimea, Mari El, Tatarstan, Tyva; Khabarovsk Krai; Bryansk, Volgograd, Tula oblasts; the cities of Moscow and Sevastopol.

² The republics of Altai, Bashkortostan, Kalmykia; Zabaikalsky and Stavropol krais, the Astrakhan, Volgograd, Vologda, Kurgan, Kursk, Lipetsk, Murmansk, Orenburg, Sakhalin, Chelyabinsk oblasts; Saint Petersburg, as well as the republics of Kabardino-Balkaria, Ingushetia and Crimea, in which the heads of constituent entities of the Russian Federation were appointed through a vote in Parliament.

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party; in the dynamics of voter turnout in Russia and in the number of votes cast for parliamentary parties representing the systemic opposition. To obtain an objective “picture” of today, we analyse the results of the previous elections (2017–2018), as well as the last three elections to the State Duma (2007, 2011, 2016) and the presidential elections in which Vladimir Putin took part (2000, 2004, 2012, 2018).

Key words: elections, electoral preferences, President, trust, public administration efficiency.

Elections are the most common form of direct participation of citizens in the political life of the country; they are a kind of marker that helps determine the extent to which the people are interested in politics, how they assess the course of socio-economic development implemented by the current government, which political agenda best meets their needs and expectations. From this point of view, the data on citizens' electoral preferences are an important empirical material for scientific analysis and understanding of public sentiment.

The elective way of formation of the most important authorities, and the regular holding of free and fair elections are among the most telling indicators of real democracy of the political system existing in the country, the main criteria of its legitimacy, i.e. recognition by society or by its majority³.

However, it would be incorrect to analyze the results of the Single day of voting held in September 2019, without making a preliminary general assessment of the situation in the country and the relations that have developed between society and the authorities at present.

First of all, we should note that the past year and a half of the current political cycle (the beginning of which can be considered the 2018 presidential election and the beginning of Vladimir Putin's fourth presidential term) were filled with many contradictory events and factors.

³ Trusov N.A. The goal, value and significance of elections in the democratic system of government. *Vestnik TsIK RF*. Available at: <http://vestnik.cikrf.ru/vestnik/publications/opinions/22508.html>

According to experts, the ruling elite includes three main groups:

- ✓ “liberal-family” (a group that “received the main benefits from privatization” and today “has an almost total control over the economic and financial policy of the country”);
- ✓ “security officials (“siloviki”) and oligarchs of the second generation, 2000s”;
- ✓ “regional elites, primarily national”, who are “more inclined to support the “security officials”, but are desperately fighting for privileges and for access to budget funds”.

All other forces in Russia (“leftists”, monarchists, Russian nationalists, etc.) are highly marginalized and have no resources to strengthen their position. The only exception is the patriotic forces, which have greatly increased following the events in Ukraine⁴.

We can say that Putin's triumphant victory in the presidential election in March 2018 once again showed that to Russian society he is the “President of hope”⁵ and that “Russian society, in essence, trusts only the President”⁶. The official results of the State Duma election and the presidential election indicate that Russian people's support for the United Russia party (which since 2016 has a constitutional

⁴ Khazin M. Putin's system of “checks and balances” begins to change in front of our eyes. *Information and analytical website “Zakon vremeni”*, 2016, June 5. Available at: <https://zakonvremeni.ru/analytics/7-3-/27227-mixail-xazin-sistema-qsdierzhek-i-protivovesovq-putina-nachinaet-menyatsya-naglax.html>

⁵ The President of hope. *Information portal Allpravda*, 2018, March 9. Available at: <http://allpravda.info/prezident-nadezhdy-59257.html>

⁶ Surkov V. Vladimir Putin's Long State. *Nezavisimaya gazeta*, 2019, February 11. Available at http://www.ng.ru/ideas/2019-02-11/5_7503_surkov.html

Figure 1. Number of votes cast for Vladimir Putin in the presidential elections in the period from 2000 to 2018, people

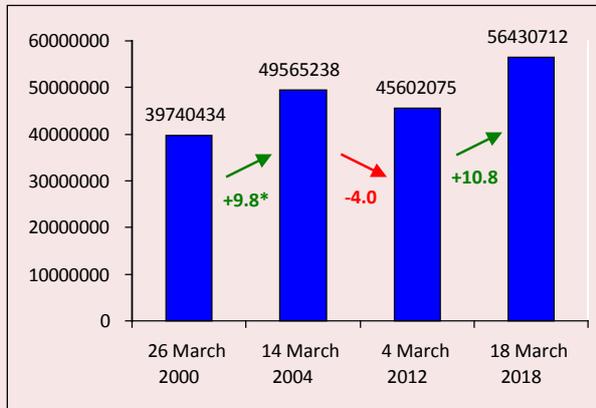


Figure 2. Number of votes cast for the United Russia party in the elections to the State Duma for the period from 2000 to 2016, people



Note. + / - show the increase / decrease in the number of people who voted for Vladimir Putin in the presidential elections and for the United Russia party in the elections to the State Duma of the Russian Federation (million people).

majority in Parliament and represents the interests of Russia's ruling elites) and their support for Vladimir Putin are completely different (*Insert 1–2*).

Thus, in the election held March 14, 2004 (that is, following V. Putin's first presidential term), support for the President increased by almost 10 million votes (from 39.7 to 49.6 million; *Figure 1; Insert 1*). And the turnout of Russians at the polling stations was 64.38%.

In March 2012 compared to the 2004 presidential election⁷, support for V. Putin fell slightly (by four million votes; from 49.6 to 45.6 million, with a turnout of 65.34%). However, this is most likely due to the fact that in the period from 2008 to 2012, Dmitry Medvedev was President, and that the world financial crisis also occurred during the same period.

⁷ Dmitry Medvedev ran for President of the Russian Federation in 2008. 52.5 million people voted for him (70.28%), voter turnout was 69.81%. Such high rates are primarily associated with the recovery of the Russian economy and living standards in the mid-2000s, with 2007 being the most successful year in this regard. However, since we are not talking about the institution of the presidency in Russia, but about the role of V. Putin's personality for the country and Russian society, we excluded the 2008 presidential election from our analysis.

In March 2018 (already at the end of V. Putin's third presidential term), the number of his supporters increased by another 10.8 million votes (from 45.6 to 56.4 million), reaching a record level for the entire period from 2000 to the present. Voter turnout in the last presidential election was also the highest: 67.54%.

Different dynamics are observed with regard to support for the United Russia party in the elections to the State Duma of the fourth – seventh convocations (*Figure 2; Insert 2*). A significant increase in the number of votes was observed only in 2007 compared to 2003 (by 21.9 million, from 22 to 44 million). Perhaps this is due to the fact that in 2007 the leader of the party was V. Putin, and in 2003 – B. Gryzlov.

Since 2007, the number of voters supporting the representation of United Russia in Parliament has been steadily decreasing: from 2007 to 2011 – by 12 million votes (from 44 to 32 million); from 2011 to 2016 – by another 4 million (from 32 to 28 million). At the same time, the turnout at the State Duma elections (especially in 2016) has always been lower than at the presidential elections (in 2003 – 55.67%,

The overall list of problems is still dominated by purely economic ones. **But the share of “political” issues of concern among citizens has been growing at the highest rate for last two decades... Russians are increasingly aware that the key to solving their financial problems lies not in the economic aspect, but in the political one.** Therefore, when citizens talk about the problems of injustice expressed in various forms, they name the signs of the current system of government and talk about the need for changes in the political model, the changes that will improve their well-being⁸.

in 2007 – 63.71%, in 2011 – 60.21%, in 2016 – 47.88%), which in itself indicates a higher interest of people in the presidential elections.

The main points of the program for strategic development of Russia for the period up to 2024, voiced by V. Putin in his Address to the Federal Assembly of the Russian Federation on March 1, 2018, found wide support in Russian society, which since 2014 has been accumulating the desire for dynamic development and change⁹ and in which there has been an increasing awareness of the fact that the solution to the most acute socio-economic issues should be sought not in the economic, but in the political sphere.

V. Putin's election campaign promises were embodied in the May 2018 decrees and national projects, the first results of which the President promised to sum up “at the beginning of the next [2020] year”.

However, the implementation of national projects faced obstacles that turned into an insurmountable barrier to the timely and comprehensive implementation of the President's decrees and, in particular, led to under-fulfillment of the May 2012 decrees.

⁸ The request for justice is getting louder. *Nezavisimaya gazeta*, 2019, September 25. Available at: http://www.ng.ru/economics/2019-09-25/4_7685_bednost.html

⁹ Petukhov V.V. Dynamics of the social attitudes of the Russia's citizens and making of a public demand for change. *Sotsis*, 2018, no. 11, pp. 40–53.

In the near future, this year, people should feel real changes for the better. It is on the basis of citizens' opinions and assessments that we will sum up the first results of work on the national projects early next year. And we will draw appropriate conclusions about the quality and results of the work of all levels of executive power¹⁰.

First, the course of independent foreign policy pursued by the President naturally faces opposition from the West, which imposes economic sanctions on Russia, cuts foreign investment, disseminates anti-Russian sentiments, etc. Second, many members of Russia's ruling elite (whose interests, in many ways, are expressed by the party that has a constitutional majority in the State Duma) are guided by the principle of “capitalism for the few”, which involves the dominance of personal interests over national development objectives. This leads to regular failure to execute the orders of the head of state, changes in the methods of calculation of targets, postponement of their implementation, etc.

If we protect the national interests of Russia, then we will have to quarrel with the West for real, and not as it is now. And in this case, a huge number of representatives of the Russian “offshore aristocracy” will lose their houses in Paris, palaces in London and castles in Austria, Scotland, etc. And what should we do with them? They will be dissatisfied and as a whole, being reasonable, vigorous and effective individuals, they will wage a very skillful war against the policy of protection of national interests of Russia threatening their property in the West¹¹.

¹⁰ Address of the President to the Federal Assembly of the Russian Federation, February 20, 2019. *Official Website of the President of the Russian Federation*. Available at: <http://www.kremlin.ru/events/president/news/59863>

¹¹ Delyagin M.G. Liberals treat Russia like a cutlet – an object of consumption. Available at: <https://www.delyagin.ru/articles/187-pozitsija/43668-liberaly-otnosjatsja-k-rossii-kak-kotle-ek-ektu-potreblenija>

Insert 1

Voter turnout and support for Vladimir Putin in the Russian Presidential elections in 2000, 2004, 2012 and 2018 (data of the Central Election Commission)

Turnout in the Russian Presidential elections in 2000, 2004, 2012 and 2018 (ranked according to the data for 2018)

Territory	Turnout, %					Turnout, people					Dynamics (+/-) 2018 to 2012
	2000	2004	2012	2018	Dynamics (+/-) 2004 to 2018	2000	2004	2012	2018	Dynamics (+/-) 2004 to 2000	
Russian Federation	68.7	64.38	65.34	67.54	-4.32	75 181 071	69581430	71780800	73624100	-5 599 641	+1843300
North Caucasian Federal District*	-	-	83.24	86.29	+3.05	-	-	4492669	4850804	-	+358135
Southern Federal District	74.14	77.82	63.53	69.77	+3.68	11054096	11052188	6875173	10747435	-1 908	+3872262
Volga Federal District	71.9	68.65	68.69	69.24	-3.25	17058364	16224425	16186857	15868095	-833 939	-318762
Central Federal District	69.78	61.54	63.9	66.16	-8.24	20036294	17519613	18353767	18687906	-2 516 681	+334139
Siberian Federal District	66.81	63.86	65.28	67.67	-2.95	22574208	9023609	9896353	8834428	-13 550 599	-1061925
Far Eastern Federal District	66.71	68.79	64.34	65.99	+2.08	3274077	3037762	3069840	3432301	-236 315	+362461
Ural Federal District	68.37	64.76	65.26	67.13	-3.61	5814556	5638954	5856857	5925663	-175 602	+68806
Northwestern Federal District	68.98	61.07	64.03	65.17	-7.91	7819362	6645479	7095082	6950195	-1 173 883	-144887

Dynamics of the share of votes cast for Vladimir Putin (ranked according to the data for 2018)

Territory	In %					People					Dynamics (+/-) 2018 to 2012
	2000	2004	2012	2018	Dynamics (+/-) 2004 to 2018	2000	2004	2012	2018	Dynamics (+/-) 2004 to 2000	
Russian Federation	51.95	71.31	63.6	76.69	+19.36	39 740 434	49563020	45602075	56426399	+9822586	+10824324
North Caucasian Federal District*	-	-	84	86.92	+2.92	-	-	3713875	4210607	-	+496732
Southern Federal District	58.34	80.27	65.49	82.49	+21.93	6319400	8344980	4382194	7007737	+2025580	+2625543
Volga Federal District	54.47	72.28	66.17	76.93	+17.81	9435625	12022837	11015125	12270602	+2587212	+1255477
Central Federal District	50.95	66.69	58.8	76.18	+15.74	9927543	11187562	10354176	14033866	+1260019	+3679690
Siberian Federal District	48.62	71.18	63.86	73.71	+22.56	4188614	5998297	5834680	6835622	+1809683	+1000942
Far Eastern Federal District	57.17	70.71	61.38	68.99	+13.54	1542987	1959738	1835252	1988542	+416751	+133290
Ural Federal District	56.98	73.13	64.91	74.67	+16.15	3244577	4117193	3862545	4440709	+872616	+578164
Northwestern Federal District	62.69	74.92	61.2	75.64	+12.23	4926581	4986428	4273033	5247840	+59847	+974807

* Here and further, Insert 2 has no data on the North Caucasian Federal District for 2000–2007 due to the fact that this federal district was created in 2010.

Insert 2

**Voter turnout and support for the United Russia party in the elections to the RF State Duma
in 2007, 2011 and 2016 (data of the Central Election Commission)**

Voter turnout in the elections to the RF State Duma in 2007, 2011 and 2016 (ranked according to the data for 2016)

Territory	Turnout, %				Turnout, people				Dynamics (+/-) 2016 to 2007	Dynamics (+/-) 2016 to 2011	Dynamics (+/-) 2016 to 2007
	2007	2011	2016	Dynamics (+/-) 2016 to 2011	2007	2011	2016	Dynamics (+/-) 2016 to 2011			
Russian Federation	63.78	60.21	47.88	-12.33	69609446	65766594	52700992	-13065602	-16908454		
North Caucasian Federal District*	–	86.46	82.22	-4.24	–	4544971	4343313	-201658	–		
Southern Federal District	63.22	61.51	48.27	-13.24	6621657	6510122	5896748	-613374	-724909		
Volga Federal District	69.13	64.30	54.44	-9.86	16043964	15100550	13083343	-2017207	-2960621		
Central Federal District	60.98	58.78	45.29	-13.49	17546326	17049621	12270883	-4778738	-5275443		
Siberian Federal District	66.45	58.19	46.70	-11.49	9351476	8212790	6599218	-1613572	-2752258		
Far Eastern Federal District	63.68	55.83	42.92	-12.91	2986327	2530907	1870528	-660379	-1115799		
Ural Federal District	65.51	59.07	48.83	-10.24	6039397	5273346	4258200	-1015146	-1781197		
Northwestern Federal District	61.23	57.65	43.18	-14.47	6520540	6234123	4378759	-1855364	-2141781		

Dynamics of the share of votes cast for the United Russia party (ranked according to the data for 2016)

Territory	In %				People				Dynamics (+/-) 2016 to 2007	Dynamics (+/-) 2016 to 2011	Dynamics (+/-) 2016 to 2007
	2007	2011	2016	Dynamics (+/-) 2016 to 2011	2007	2011	2016	Dynamics (+/-) 2016 to 2011			
Russian Federation	64.30	49.31	54.20	+4.89	44714241	32371737	28527828	-3843909	-16186413		
North Caucasian Federal District*	–	81.52	76.88	-4.64	–	3617187	3419444	-197743	–		
Southern Federal District	65.45	54.81	58.27	+3.46	4290232	3363306	3472091	+108785	-818141		
Volga Federal District	67.30	52.41	55.93	+3.52	11120950	8472634	7903534	-569100	-3217416		
Central Federal District	59.07	42.96	49.33	+6.37	10237771	7422895	5882747	-1540148	-4355024		
Siberian Federal District	66.32	46.12	46.69	+0.57	5892147	3561156	3298976	-262180	-2593171		
Far Eastern Federal District	63.96	45.61	44.58	-1.03	1830758	1020880	767917	-252963	-1062841		
Ural Federal District	62.66	44.43	44.46	+0.03	3859409	2346351	1887550	-458801	-1971859		
Northwestern Federal District	59.80	39.71	44.04	+4.33	3728556	2370660	1895569	-475091	-1832987		

In fact, these two factors impede the implementation of an independent effective domestic policy focused on national interests throughout V. Putin's entire presidential term.

The Russian economy is included in the world economy in the status of "service economy", because "industry does not produce industrial products, it produces money for shareholders"¹². Fixed assets of the country were and remain in non-state ownership (in 2000 – 75%, in 2017 – 78%¹³). Major metallurgical corporations in the country have a significant number of foreign citizens in their boards of directors. All this points to the close connection of the ruling elite of Russia with Western countries, and this forces the President to act very carefully, without crossing the line, which can lead to an uprising of the elites with the active support of the "collective West".

Therefore, Many of V. Putin's management decisions are very contradictory: on the one hand, the President regularly demands the fulfillment of his instructions on time and in full, points out to Ministers the need to achieve concrete and tangible results, reproaches them for inconsistency of actions, etc. On the other hand, he trusts the implementation of projects vital for Russia to the team that failed to fully implement the May 2012 decrees and, according to some estimates, simply "sabotages the implementation of his orders"¹⁴.

As a result, the key problems of Russia remain unresolved from year to year and are stagnant. "The Swiss research firm Credit Suisse puts Russia **on the first place in terms of property inequality**, claiming that 80% of

the assets that are located in the territory of the Russian Federation belong to 10% of the population. It means that on this indicator we have overtaken all countries of the world"¹⁵. Russia "does not catch up with other countries **in terms of the quality of medical care**, and this gap is increasing every year, as the vast majority of countries in the world are rapidly increasing the share of medicine in their GDP"¹⁶. According to experts, the course of economic policy implemented by the Government, "**cannot provide stable economic growth rates above 1.5–2%**"¹⁷...

In general, Russia has one of the lowest health care costs, if taken as a percentage of GDP. Russia spends 2.6% of GDP on medicine, while the G7 countries – **from 8 to 12%**... Russia occupies the last, 50th place in the international rating of quality of medical care.

If in 2003 in Russia there were more than **10 thousand** hospitals, in 2010 there were only **6.3 thousand**, now a little more than 5 thousand ... The number of beds in hospitals decreased **from 1.6 to 1.2 million**.

According to the Minister of Healthcare Skvortsova, **7,917** buildings of hospitals and polyclinics in the Russian Federation are in disrepair, most require demolition. **In 499** settlements of the country there are no doctors at all. In Russia, **40%** of medical equipment, that is, 20 thousand units, is worn out. Social programs for doctors have been long forgotten. In 2018, six regions of the Russian Federation provided absolutely no social assistance to doctors¹⁸.

¹² Betelin V.V. Russia needs to abandon the "economy of services" and shift to the economy of industrial production. *Ekonomist*, 2019, no. 2, pp. 3–12.

¹³ *Russian Statistical Yearbook, 2016: Statistics Collection*. Moscow: Rosstat, 2019. P. 299.

¹⁴ See, for example: interviews with S. Glazyev on the TV channel "Tsargrad" (April 5, 2018. Available at: <https://www.youtube.com/watch?v=CSMYR5a68Cg>), M. Khazin (May 14, 2018), M. Delyagin (July 9, 2019. Available at: https://tsargrad.tv/news/hazin-novoe-pravitelstvo-predprimet-tihij-sabotazh-ukazov-putina_132009)

¹⁵ The first place: according to the level of social inequality the Russian Federation is ahead of all. *News IA Regnum*, March 7, 2019. Available at: <https://regnum.ru/news/economy/2586777.html>

¹⁶ Bobylev S.N., Grigor'ev L.M. (Eds.). *The UN Sustainable Development Goals and Russia: a Report on Human Development in the Russian Federation*. Moscow, 2016. P. 40.

¹⁷ Ivanter V.V. On the opportunities for the acceleration of economic growth in Russia. *Obshchestvo i ekonomika*, 2019, no. 7, pp. 5 – 11.

¹⁸ Gurdin K. Doctors run, ministers get better. *Argumenty nedeli*, 2019, no. 33 (677), August 28. Available at: <https://argumenti.ru/society/2019/08/626823>

The level of execution of federal budget expenditures for the implementation of national projects and the comprehensive plan in the first half of 2019 was **lower than the average by 10 percentage points** and amounted to 32.4%. According to the auditors, the money allocated to the regions by the federal center was spent by 18.5%.

According to the monitoring of the Accounts Chamber (as of September 20), the indicators that measure successes or failures have not been identified for three out of nine national targets. We are literally going backwards on four goals: sustainable natural population growth, sustainable growth in real incomes, reducing the poverty rate twofold, and accelerated economic growth¹⁹.

The current political season is no exception. The composition of the Government under the chairmanship of Dmitry Medvedev remains the same, so are the risks of failure to fulfill V. Putin's election promises. If recently the doubts concerning the timely and full implementation of the 2018 national projects were expressed only by experts²⁰, then in recent years, management circles expressed their skepticism as well; and these people in fact bear the main responsibility for the implementation of the May decrees. Thus, at the Moscow Financial Forum held in September 2019, Chairman of the Accounts Chamber of the Russian Federation A. Kudrin said that the current national projects “do not contain sufficient

¹⁹ National projects become an uncomfortable topic for the authorities. *Nezavisimaya gazeta*, 2019, September 23. Available at: http://www.ng.ru/economics/2019-09-23/1_4_7683_proekty.html

²⁰ See, for example: Civic Chamber of the Russian Federation, Round Table “Discussion of the national project “International cooperation and export” October 25, 2018. Available at: <https://nangs.org/>

The ONF will seek to include its proposals in the national project “Safe and high-quality roads”. ONF road inspection. Map of bad roads. November 13, 2018. Available at: <https://dorogi-onf.ru/news/5730/>

measures for an economic breakthrough”, and Head of Sberbank G. Gref pointed out that the allegedly “enormous resources” that are invested in national projects are “a myth”, and therefore “national projects will not give the desired effect”.

The results of monitoring the achievement of national goals, posted on the official website of the Accounts Chamber of the Russian Federation, suggest that the growing skepticism about the implementation of the tasks of the President has quite good reasons²¹:

✓ Natural population decline, according to experts, continues to increase (-209.7 thousand people in January–July 2019)”.

✓ “To achieve the target value, life expectancy at birth must grow steadily by at least 0.8–0.9 years each year. In 2018, the growth of this indicator was only 0.2 years”.

✓ “There is no reduction in poverty in 2019. In the first half of the year, it exceeded the level of the same period of the previous year by 0.2 percentage points”.

✓ “Taking into account the current data (GDP growth rate of 0.7% in the first half of 2019 instead of 2.3% in January–December 2018), economic growth rate is expected to slow down in 2019 compared to 2018, which creates significant risks of not achieving the target indicator (3.2%)”.

Thus, unfortunately, so far the forecasts of experts, who in 2016 predicted that Russia would “still have the liberal model and balance on the threshold of sustainable development, are coming true”²². Today, political analysts also note that “there is no unity in the economic

²¹ Monitoring the achievement of national goals. *Official Website of the Accounts Chamber of the Russian Federation* (data as of October 3, 2019). Available at: <https://ng.ach.gov.ru/?lang=ru>

²² Sulakshin S.S., Bagdasaryan V.E. et al. *Is Russia Waiting for a Revolution? Issues of Transition to the Post-Liberal Model of Russia* (Algorithm and Scenarios). Moscow: Nauka i politika, 2016. Pp. 669–670.

Table 1. Level of trust in state and non-governmental institutions in 2018–2019 (% of respondents)*

Institution	Level of trust			Level of distrust		
	2018	2019	Dynamics + / – 2019 to 2018	2018	2019	Dynamics + / – 2019 to 2018
President of the Russian Federation	60.5	52.4	-8	9.9	14.4	+5
Church	50.0	46.5	-4	12.8	13.8	+1
Prosecutor's office	47.1	43.5	-4	16.0	18.1	+2
Federal Security Service	45.2	41.0	-4	15.4	17.2	+2
Government of the Russian Federation	47.3	40.9	-6	17.9	22.3	+4
Army	47.2	40.8	-6	14.6	18.2	+4
Police	44.4	40.7	-4	19.4	20.4	+1
Court	45.3	39.3	-6	18.7	20.9	+2
Vologda Oblast Administration	35.4	33.4	-2	25.5	27.2	+2
Federation Council	37.4	32.2	-5	19.8	24.1	+4
Local government	34.4	31.6	-3	27.4	28.7	+1
Scientific organizations	32.8	30.3	-3	15.7	18.3	+3
Trade unions	33.3	29.7	-4	23.7	25.9	+2
State Duma of the Russian Federation	33.8	28.5	-5	25.5	28.9	+3
Civic Chamber of the Russian Federation	31.0	27.4	-4	22.8	27.0	+4
Mass media	29.8	26.6	-3	33.4	34.1	+1
Civic Chamber of the Vologda Oblast	28.3	25.6	-3	25.7	27.6	+2
Non-governmental organizations	28.1	24.9	-3	26.2	27.9	+2
Directors, CEOs	25.1	20.5	-5	30.4	34.1	+4
Political parties, movements	22.3	19.6	-3	34.3	35.9	+2
Banking and business circles	20.7	17.6	-3	35.4	38.2	+3
<i>I don't trust anyone</i>	–	–	–	24.9	28.5	+4

* Ranked according to the level of trust in 2019.
Source: VolRC RAS public opinion monitoring.

team. There is a split. Obviously, the financial and economic bloc of the Government has no clear strategy for economic growth”²³. Russian society expects a completely different (“breakthrough”) course of development of the socio-economic and political situation in the country. Thus, people acutely feel that there is a possibility of non-fulfillment of the President’s election promises and react to it accordingly – their trust in virtually all state and non-governmental institutions, including the President himself, is declining (*Tab. 1*).

The situation in the current political season is aggravated by the fact that this is V. Putin’s

last presidential term and therefore, for him this is the last opportunity to implement his plans, and for society it is the last six-year period under his leadership. Who will be the successor of the current President, how they will be received by Russians, what kind of relations they will build with the West – so far, no one has any idea about this.

The dynamics of public opinion concerning the work of public authorities in 2018 (one of the main events of which was the pension reform, which affected almost all strata of Russian society) allow us to see that the opinion of the President personally is very important to Russians.

In the first half of 2018 (February – June), against the backdrop of the presidential election and V. Putin’s very encouraging Address to the

²³ National projects declared ineffective. *Nezavisimaya gazeta*, 2019, September 15. Available at: http://www.ng.ru/economics/2019-09-15/4_7676_project.html (opinion of political scientist S. Markov).

Table 2. Dynamics of the level of approval of government institutions in 2018–2019 (% of respondents)*

Institution	2018						2019						Dynamics	
	Feb.	Apr.	June	Aug.	Oct.	Dec.	Feb.	Apr.	June	Aug.	Oct.	Dec.	Oct. 2019 to Oct. 2018	Oct. 2019 to June 2018**
RF President	68.7	68.1	70.1	65.9	63.5	61.9	58.7	55.9	55.7	55.8	54.1	-7	-9	-16
RF Prime Minister	48.3	49.9	52	47.4	45.2	45.3	41.6	38.8	40.9	43.1	41.1	-7	-4	-11
Vologda Oblast Governor	39.3	39.5	40.5	37.3	35.7	38.3	36.5	34.7	35.4	36.1	35.6	-5	0	-5
RF Government	40.5	41.9	44.4	40.1	38.5	39	36	33.8	36	37.9	35.1	-6	-3	-9
Heads of local administrations	38.9	39.9	40.7	37.4	36.5	37.4	36.4	34.3	34.7	34.8	32.7	-4	-4	-8
RF Federation Council	34.6	35.3	36.9	33	32.3	33.4	31.5	29.5	31.3	32.2	29.9	-5	-2	-7
RF State Duma	32.7	33.7	35.5	31.7	30.5	31.1	29.6	27.9	29.9	30.3	28.5	-5	-2	-7
Legislative Assembly	31.6	31.9	33.9	30.9	28.6	29.4	27.2	25.8	27.9	28.0	27.7	-5	-1	-6

* Ranked according to the data as of October 2019.
** We compare the data for 2019 with those for June 2018, because it is when the indicators of the level of approval of the President's work were the highest; it is the "base point", after which the share of positive evaluations of his work began to decrease gradually.
Source: VolRC RAS public opinion monitoring.

Federal Assembly, the level of approval²⁴ of the work of all the authorities has increased or remained stable. After the upcoming changes in the pension legislation were officially announced (in June 2018), the level of approval decreased sharply (by 4–5 percentage points). In particular, the support for the President fell from 70 to 66%, for the Prime Minister – from 52 to 47%, for the Federation Council – from 37 to 33%, etc. (*Tab. 2*).

After V. Putin made a televised public statement with explanations and significant adjustments to the pension reform and then supported the reform (August 29, 2019), the decline in the level of approval of the work of the authorities stopped.

The fact that in general, during the period from June 2018 to October 2019, the level of

²⁴ We should note that the "level of approval" is an indicator that has significant differences from the above level of trust (*Tab. 1*). The difference is that the level of approval shows the current assessment of the work of state and non-governmental institutions; this indicator is quite dynamic and may depend on certain managerial decisions of the authorities (therefore, we measure the level of approval once every two months).

As for institutional trust, this indicator characterizes people's general (basic) attitude toward state and non-governmental institutions (this indicator appears in the surveys conducted by VolRC RAS twice a year, in April and October).

approval of the work of the authorities decreased significantly (and the level of approval of the work of the President himself decreased by 16 percentage points, from 70 to 54%), is explained, rather, by the "cumulative effect" – the increase in expectations for a "breakthrough" or at least tangible improvement in the quality of life, rather than by the result of any "single" reforms that Russians perceive very negatively. This is indicated by the lack of positive dynamics in the level of approval of the main institutions in Russia since June 2018. Thus, we should note that the "hands-on" approach to managing the entire system of public administration in recent years does not bring positive results.

How do Russians assess the system of public administration apart from the personality of the President of the Russian Federation? We find the answer to this question with the help of analyzing electoral preferences of citizens following the results of the State Duma election that was deprived of the "Putin factor", and the results of the elections of legislative authorities and heads of regions.

According to the findings of our calculations based on official data of the Central Election

Insert 3

Legislative elections in 2017–2019

2017*

Party, Voter turnout	For reference: elections to the State Duma of the Russian Federation (results of the respective regions, in %)										Legislative elections				Dynamics 2017 to 2012
	Fact		Dynamics		Fact		Dynamics		Fact		Dynamics		Fact		
	2007	2011	2016	2011 to 2007	2016 to 2011	2012	2017	2012 to 2017	2012	2017	2012 to 2017	2012	2017	2012 to 2017	
United Russia	65.04	52.13	55.96	-12.91	+0.98	55.50	62.27	+6.77	1923972	2774232	+850260	1923972	2774232	+850260	
KPRF	12.40	20.32	14.80	+7.93	-5.53	15.08	12.88	-2.20	300010	520939	+220929	300010	520939	+220929	
LDPR	7.75	11.53	12.31	+3.78	+0.78	7.45	8.39	+0.94	302198	369162	+66964	302198	369162	+66964	
Just Russia	7.24	10.60	4.62	+3.36	-5.98	7.54	6.00	-1.54	304849	212625	-92224	304849	212625	-92224	
All other parties						11.84	7.77	-4.07	242591	138229	-104362	242591	138229	-104362	
Turnout	61.22	62.22	51.45	+1.00	-10.77	43.16	44.59	+1.43	3390260	4127238	+736978	3390260	4127238	+736978	

* six regions: Republic of North Ossetia-Alania, Udmurt Republic, Krasnoyarsk Krai, Penza Oblast, Saratov Oblast, Sakhalin Oblast.

2018*

Party, Voter turnout	For reference: elections to the State Duma of the Russian Federation (results of the respective regions, in %)										Legislative elections				Dynamics 2018 to 2013
	Fact		Dynamics		Fact		Dynamics		Fact		Dynamics		Fact		
	2007	2011	2016	2011 to 2007	2016 to 2011	2013	2018	2013 to 2018	2013	2018	2013 to 2018	2013	2018	2013 to 2018	
United Russia	63.22	45.11	48.56	-17.99	+5.18	51.62	41.54	-10.07	4960506	3742003	-1218503	4960506	3742003	-1218503	
KPRF	11.20	21.00	16.31	+9.95	-4.69	13.78	23.14	+9.36	925607	1542165	+616558	925607	1542165	+616558	
LDPR	8.77	13.04	15.82	+3.86	+2.78	8.40	15.04	+6.64	578969	964524	+385555	578969	964524	+385555	
Just Russia	8.43	15.05	6.50	+6.69	-8.55	6.67	8.66	+1.99	435165	600149	+164984	435165	600149	+164984	
All other parties						16.27	7.79	-8.47	877282	478210	-399072	877282	478210	-399072	
Turnout	63.23	57.43	47.05	-5.54	-10.39	39.25	38.73	-0.85	7898331	7622588	-275743	7898331	7622588	-275743	

* 16 regions: Republic of Bashkortostan, Republic of Buryatia, Republic of Kalmykia, Republic of Sakha (Yakutia), Republic of Khakassia, Zabaikalsky Krai, Arkhangelsk Oblast, Vladimir Oblast, Ivanovo Oblast, Irkutsk Oblast, Kemerovo Oblast, Rostov Oblast, Smolensk Oblast, Ulyanovsk Oblast, Yaroslavl Oblast, Nenets Autonomous Okrug.

2019*

Party, Voter turnout	For reference: elections to the State Duma of the Russian Federation (in %) (results of the respective regions, in %)										Legislative elections				Dynamics 2019 to 2014
	Fact		Dynamics		Fact		Dynamics		Fact		Dynamics		Fact		
	2007	2011	2016	2011 to 2007	2016 to 2011	2014	2019	2014 to 2019	2014	2019	2014 to 2019	2014	2019	2014 to 2019	
United Russia	71.99	60.96	60.86	-11.03	-0.53	66.57	51.91	-14.65	5007455	3314596	-1692859	5007455	3314596	-1692859	
KPRF	9.51	16.79	13.24	+7.28	-2.74	10.29	17.06	+6.76	828099	1261988	+433889	828099	1261988	+433889	
LDPR	5.97	8.27	10.42	+2.30	+1.63	6.77	14.48	+8.17	460608	814033	+353425	460608	814033	+353425	
Just Russia	5.99	9.26	3.88	+3.28	-5.33	5.12	6.80	+1.57	405008	498035	+93027	405008	498035	+93027	
All other parties						9.13	9.34	+0.20	841728	1164157	+322429	841728	1164157	+322429	
Turnout	71.80	71.97	58.63	+0.17	-11.42	52.01	47.45	-4.56	7819185	7282171	-537014	7819185	7282171	-537014	

* 13 regions: Republic of Altai, Kabardino-Balkar Republic, Karachay-Cherkess Republic, Republic of Crimea, Republic of Mari El, Republic of Tatarstan, Republic of Tyva, Khabarovsk Krai, Bryansk Oblast, Volgograd Oblast, Tula Oblast, Moscow, Sevastopol.

Elections of heads of regions in 2017–2019

2017*

Party, Voter turnout	Elections of heads of regions										
	%					people					
	Fact		Dynamics		Dynamics 2017 to 2012	Fact		Dynamics 2017 to 2012		Dynamics 2017 to 2012	
2007	2011	2016	2011 to 2007	2016 to 2011		2012	2017	2012	2017		
United Russia	62.83	44.55	48.56	-18.28	+4.01	62.89	74.80	+11.91	2479087	5377972	+2898885
KPRF	11.04	20.01	14.33	+8.97	-5.68	14.44	10.19	-4.25	410060	773329	+363269
LDPR	9.40	13.25	15.03	+3.85	+1.78	8.15	6.64	-1.51	226456	424520	+198064
Just Russia	8.02	15.41	7.59	+7.39	-7.82	5.80	5.76	-0.04	33540	226394	+192854
All other parties	<i>The analysis of the data on the elections to the State Duma was carried out only for the parties that passed to the Parliament</i>										
Self-nomination, nomination by voters	64.70	59.71	47.02	-4.99	-12.69	21.48	3.19	-18.29	1228117	265384	-962733
Turnout	63.56	57.84	46.82	-5.72	-52.34	48.78	0	-48.78	1584851	0	-1584851
Turnout	64.70	59.71	47.02	-4.99	-12.69	50.65	40.54	-10.11	7630195	7229173	-401022

* 16 regions: Republic of Buryatia, Republic of Karelia, Republic of Mari El, Republic of Mordovia, Udmurt Republic, Perm Krai, Belgorod Oblast, Kaliningrad Oblast, Kirov Oblast, Novgorod Oblast, Ryazan Oblast, Saratov Oblast, Sverdlovsk Oblast, Tomsk Oblast, Yaroslavl Oblast, Sevastopol.

2018*

Party, Voter turnout	Elections of heads of regions										
	%					people					
	Fact		Dynamics		Dynamics 2018 to 2013	Fact		Dynamics 2018 to 2013		Dynamics 2018 to 2013	
2007	2011	2016	2011 to 2007	2016 to 2011		2013	2018	2013	2018		
United Russia	61.20	43.23	46.28	-17.97	+3.04	74.88	62.99	-16.53	11820982	7542935	-4278047
KPRF	12.58	21.82	15.71	+9.23	-6.10	16.29	19.58	+5.11	1548383	1748890	+200508
LDPR	9.77	14.37	16.68	+4.60	+2.31	6.77	14.82	+9.28	772237	1819064	+1046827
Just Russia	7.65	13.70	6.80	+6.05	-6.90	4.33	7.45	+2.89	489990	882723	+392733
All other parties	<i>The analysis of the data on the elections to the State Duma was carried out only for the parties that passed to the Parliament</i>										
Self-nomination, nomination by voters	63.56	57.84	46.82	-5.72	-52.34	0	61.88	+61.88	561636	789076	+227440
Turnout	63.56	57.84	46.82	-5.72	-52.34	44.79	42.95	-1.84	17353396	15734149	-1619247

* 22 regions: Republic of Sakha (Yakutia), Republic of Khakassia, Altai Krai, Krasnoyarsk Krai, Primorsky Krai***, Khabarovsk Krai, Amur Oblast, Vladimir Oblast, Voronezh Oblast, Ivanovo Oblast, Kemerovo Oblast, Magadan Oblast, Moscow Oblast, Nizhny Novgorod Oblast, Novosibirsk Oblast, Omsk Oblast, Oryol Oblast, Pskov Oblast, Samara Oblast, Tyumen Oblast, Moscow, Chukotka Autonomous Okrug.

2019*

Party, Voter turnout	Elections of heads of regions										
	%					people					
	Fact		Dynamics		Dynamics 2019 to 2014	Fact		Dynamics 2019 to 2014		Dynamics 2019 to 2014	
2007	2011	2016	2011 to 2007	2016 to 2011		2014	2019	2014	2019		
United Russia	62.83	45.98	47.20	-16.85	+1.22	74.53	71.50	-3.04	7781063	4884756	-2896307
KPRF	11.42	19.38	14.42	+7.96	-4.97	11.47	14.79	+3.33	768109	891525	+123416
LDPR	8.52	13.45	16.59	+4.93	+3.14	5.02	8.21	+3.19	364388	496782	+132394
Just Russia	9.83	15.42	7.68	+5.59	-7.75	5.45	5.27	-0.18	115357	382262	+266905
All other parties	<i>The analysis of the data on the elections to the State Duma was carried out only for the parties that passed to the Parliament</i>										
Self-nomination, nomination by voters	63.03	56.88	44.40	-18.64	-12.48	5.31	3.91	-1.41	434716	474984	+40268
Turnout	63.03	56.88	44.40	-18.64	-12.48	9.78	72.33	+62.55	59806	2301735	+2241929
Turnout	63.03	56.88	44.40	-18.64	-12.48	43.97	44.58	+0.60	9816692	9707126	-109566

* 16 regions (excluding heads of constituent entities of the Russian Federation appointed through a vote in Parliament): Altai Republic, Republic of Bashkortostan, Republic of Kalmykia, Zabaykalsky Krai, Stavropol Krai, Astrakhan Oblast, Volgograd Oblast, Vologda Oblast, Kurgan Oblast, Kursk Oblast, Lipetsk Oblast, Murmansk Oblast, Orenburg Oblast, Sakhalin Oblast, Chelyabinsk Oblast, Saint Petersburg.

Commission, this factor is common for federal and regional elections, and it affects the voting results more than their objective differences. It is known, for example, that the federal level always attracts more attention of voters, than the regional level (we can see it if we look at voter turnout). It is also known that United Russia participates in parliamentary elections under the slogan “the Party of the President”, and when it comes to the attitude toward the regional authorities, then there immediately emerge corruption scandals and all the negative stuff associated with everyday issues. According to sociologists, the greatest level of people’s discontent is focused in local governments; it is quite natural, taking into account their proximity to everyday life of citizens and the fact that their work can be observed ‘on the spot’”²⁵.

Nevertheless, judging by the results of the analysis, both in regional and federal elections, the trends of support for the ruling party representing the interests of the country’s ruling elite have largely similar and negative dynamics.

According to the results of the 2017 regional elections, support for the party dominating the Parliament increased: in general, in six regions where legislative elections were held, its representatives received by almost one million votes more than in the previous elections (*Table 3; Insert 3*)²⁶.

In 2017, the number of votes cast for the ruling party at the elections of the heads of

constituent entities of the Russian Federation (in 16 regions) increased by almost three million (*Table 3; Insert 4*). Perhaps these positive changes were connected with people’s new hopes for the next political season and the constitutional majority of United Russia in the State Duma.

Table 3. Dynamics of the number of those who voted for the United Russia party in the regional elections of 2017–2019, million people

Type of elections	2017	2018	2019
Elections to the legislative bodies of state power	+0.9 (6)*	-1.2 (16)	-1.7 (13)
Elections of heads of RF constituent entities	+2.9 (16)	-4.3 (22)	-2.9 (16)

* The number of regions in which the elections were held is given in parentheses.

However, the positive changes turned out to be short-lived. Already in 2018, the number of those who voted for United Russia in the elections to the legislative bodies of state power held in 18 constituent entities of the Russian Federation decreased by 1.2 million people, and in the elections of regional leaders (in 22 constituent entities of the Russian Federation) – by 4.3 million people (*Table 3; Insert 3–4*). In four regions (Khabarovsk and Primorsky krais, Republic of Khakassia, Vladimir Oblast), a second round was required for the final determination of the heads of these RF constituent entities.

The results of the 2019 regional elections can be interpreted in different ways. United Russia approached them in quite difficult conditions: many experts predicted a difficult course of voting for it – second rounds, protests... Riots in Moscow, associated with the non-admission of independent candidates for the elections to the Moscow City Duma, clearly show how high the “degree” of public sentiment was.

²⁵ *Russian Everyday Life in Crisis: How Do We Live and What Do We Feel?: Information and Analytical Summary of the Results of a Nationwide Study*. Moscow, 2015. P. 15.

²⁶ In the study, each region was considered separately, and the “previous elections” mean the elections to legislative bodies or to the post of head of constituent entity of the Russian Federation in this particular region. For example, in 2017 legislative elections were held in six RF constituent entities (republics of North Ossetia-Alania and Udmurtia, Krasnoyarsk Krai, Penza, Saratov, Sakhalin oblasts). Previous elections in North Ossetia were held on September 14, 2014, in the Udmurt Republic on September 13, 2015, in the Penza Oblast on October 14, 2012, etc.

A. Mukhin (Director General of the Center for Political Information): **“The processes that took place last year and led to the second round of the gubernatorial elections and the victory of opposition candidates in a number of regions – all of them are still going on”.**

N. Mironov (Head of the Center for Economic and Political Reforms): **“A high degree of unpredictability is one of the most important signs of these elections... There may emerge the necessity to organize second rounds in many regions... In any case (in the first rounds), candidates will win the election with small percentages”**²⁷.

A. Pozhalov (political scientist): “Mass protests occur when the number of critics of the government, including the President, is close to half of the population, and the majority believes that the country is moving to a standstill. **Today we are approaching very close to these indicators”.**

D. Fetisov (political consultant): **“The emergence of a wave of protests is very likely.** It can be stimulated by people’s dissatisfaction with the fact that utility bills will include costs for the removal of household waste and with a significant increase in prices for goods and services”²⁸.

However, in the end, the Single day of voting on September 9, 2019 became not only one of the most ambitious, but also one of the quietest election dates in recent years²⁹. Unlike last year’s elections, there was no need for a second round anywhere; in all regions, the elections were won either by representatives of United Russia (in 10 regions) or by self-nominees actively supported by this party (in six constituent entities of the

²⁷ Experts predict second rounds and coalitions in regional elections. *RIA-Novosti*, 2019, June 5. Available at: <https://ria.ru/20190605/1555267886.html>

²⁸ The year of desacralisation: what political scientists expect from 2019. *RBK Website*, January 5, 2019. Available at: <https://www.rbk.ru/politics/05/01/2019/5c24e8f39a7947a0658b798d>

²⁹ The results of the elections-2019: victory for the Kremlin or a failure of power? *Politonline.ru*, September 9, 2019. Available at: <http://www.polygonline.ru/interview/22894497.html>

Russian Federation)³⁰. At the meeting with the President, Chairman of the Central Election Commission E. Pamfilova pointed out that “the campaign, as never before, went quite well”³¹.

From this point of view, we cannot but admit that the ruling party managed to avoid the main problems that cause alarming fears of political scientists. Although it failed to reverse the trends that were observed in the previous federal and regional elections: the number of those who voted for United Russia in the 2019 elections to the legislative bodies of state power held in 13 regions decreased by 1.7 million people compared to the results of 2018 (*Table 3; Insert 3*), and in the elections of heads of regions (in 16 constituent entities of the Russian Federation) – by 2.9 million people (*Table 3; Insert 4*).

Thus, 52% of the votes that the United Russia party received in 2019 in the legislative elections (on average in 13 regions of the country), and 72% of the votes that it received in the elections of heads of regions (on average in 16 regions) are, of course, unattainable figures for the nearest “competitors” among the parliamentary parties (the Communist Party, whose representatives received 17 and 15% of the votes, respectively, and LDPR – 7 and 5%, respectively). **However, this result can be interpreted positively only if we do not pay attention to the dynamic changes in the electoral preferences of Russians.**

In fact, the “quietest” elections show that the alarming trends that have been observed for at least 12 years (since the 2007 State Duma election) are continuing. In the last three State Duma elections (in the period from 2007 to

³⁰ Excluding the regions in which their leaders were determined by a vote in Parliament.

³¹ V. Putin’s meeting with the Chairman of the Central Election Commission E. Pamfilova on October 9, 2019. *Website of the President of the Russian Federation*. Available at: <http://www.kremlin.ru/events/president/transcripts/61762>

2016), United Russia lost almost 17 million votes, and in the last two years (2018–2019) – almost three million supporters in legislative elections and more than seven million – in the elections of heads of constituent entities of the Russian Federation. **In other words, though Russian society supports the President directly, it has less and less trust in the ruling elite represented by United Russia, and this fact raises serious concerns about the transit of state power in the new political season.**

Only real and tangible changes in addressing key issues of concern to the population, such as overcoming excessive inequality, achieving

We have exhausted both the negative possibilities of the 1990s and the positive possibilities of Putin's rule. Everything is completely exhausted. If we want to do something good, we have to do it in a way that is different from how it is done now, or we will go back not just to the 1990s, but to nowhere...**What will happen to us after the end of Putin's term? The people will have to make a fundamental historical choice.** Even if we are denied this choice, it is our duty to break through and decide for or against the future that lies before us. The people cannot but decide – we are approaching a critical point in our history... If we do not make a decision, we will decide “not to be”. This is predetermined by the logic of our history – after a century of existence on the periphery of ourselves, we can return to ourselves. Putin did not solve this problem, but provided an opportunity to do it³².

social justice, and increasing the standard of living and quality of life, can move anything in a positive direction with regard to this issue... The results of voting in the elections devoid of the “Putin factor” indicate that people do not feel these changes yet.

At the same time, the results of the vote indicate that Russian society understands quite well the situation in which Russia finds itself today. No optimistic forecasts, pre-election promises or adjustments in the methods of calculating poverty have a significant impact on the overall outcome of the vote: the level of support for the political force representing the interests of the ruling elites continues to decline. At a meeting on the implementation of national projects Vladimir Putin noted: “People are not interested in abstract promises. The result is what matters for people, here and now, not in some distant future”³³.

In our opinion, this is an extremely important point, because a “fundamental historical choice” in building relations with the successor of the President will have to be made very soon by Russian society, which is becoming increasingly aware of its subjectivity as an actor in political relations.

The President has no more than four years left until 2024, and in many respects it will depend on him what level of tension the social situation in the country will have and how competitive the system of public administration will be in the next political cycle, in which we and our children will have to live.

³² Dugin A. The most important event of the future. *Zavtra*, 2019, May 16. Available at: http://zavtra.ru/blogs/samoe_vazhnoe_sobitie_budushhego

³³ Meeting of the Council for Strategic Development and National Projects, May 8, 2019. Available at: <http://www.kremlin.ru/events/president/news/60485>

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SPATIAL ASPECTS OF TERRITORIAL DEVELOPMENT

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Methodology for Defining Pivotal Settlements in the Russian Arctic*



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Abstract. Settlement in new regions of the Russian North, available for new economic exploitation, started at the beginning of the 20th century: the exploration of mineral deposits, its mining and shipment into southern regions commenced at the same time. Experience of building cities as trade and industrial centers, marine ports, and military settlements, which was acquired in the 18th–19th centuries, was insufficient. It was necessary to define forms of settlement, quantitative parameters of emerging communities, and convenience of the latter. Discussions and knowledge acquisition resulted in a consent to build permanently populated large cities. It was suggested to build basic cities in the North and pivotal cities, which would have infrastructural functions, in nearby areas. Quantitative guidelines on population numbers for each type of settlement were proposed: pivotal cities – 300 thousand residents, basic cities – 80–150 thousand people, industrial cities – 15–30 thousand inhabitants, watch and expeditionary villages – 3–5 thousand people. After making the Arctic Zone in the Russian North the independent management unit consisting of nine pivotal areas, it became necessary to justify settlement framework, which would meet new requirements. Thus, the purpose of this article is to develop the methodology of calculating the Index of Pivotal Settlement which would allow us to classify an urban settlement as a multifunctional pivotal settlement, a pivotal settlement, a potential pivotal settlement, and as a settlement which does not meet criteria of a pivotal one. The creation of this index is based on three methodological principles: complexity, consistency, and account of agglomeration effect. The calculation of the index of the Arctic pivotal settlements is carried out due to the concept of demographic gravitation. Acquired results would allow each Arctic pivotal area to determine pivotal settlements, and the centers of surrounding areas development.

Key words: Arctic, population, settlement, pivotal areas, pivotal and basic cities.

Introduction

It is difficult to overestimate the role of the Arctic in country's economic development. 90.4% of the whole Russia's natural gas amount was mined here, as well as 24.7% of associated gas, 17.6% of oil, and 10.8% of iron ore concentrate. Also, more than 50% of platinum, nickel, cobalt, copper, 15.0% of fish and fishery products were produced here¹.

The formation of the settlement system in Northern and Arctic regions was conducted in several steps. The period of the 1930s was experimental in terms of building cities and urban-typed settlements (UTS). The 1940s could be characterized by rapid increase in the North economic development rates. In the following years, together with industrial and

urban development, a broad geological search was continuing and new, unique deposits were discovered. The settlement of the Far North regions in 1970s was influenced by science and technology development.

The focal settlement structure, which has a pattern of territorial expansion on the basis of socio-economic relations between industrial centers and economically developed areas of the middle zone, is the characteristic of the early North exploration period [1, p. 17–20]. Due to unfavorable natural and climatic conditions, and high expenditures on all sorts of manufacturing works, social infrastructure, and personnel maintenance, continuous territorial Arctic development has never happened. Besides, it is prohibited because of the environmental reasons. Thus, the focal settlement type, which is based on large strategic mineral deposits, is and will be the only option for the Arctic [2, p. 31].

¹ Statistical information on the socio-economic development of the Arctic zone of the Russian Federation. The Russian Federal State Statistics Service. Available at: http://gks.ru/free_doc/new_site/region_stat/arc_zona.html

V.I. Kondrat'eva notes that "space characteristics typical of the Russian region of the Arctic, such as focal-dispersed settlement nature, underdevelopment of road and transport infrastructure, extremely high costs of life support, due to extreme climatic conditions, show the advantage of this territorial approach, which purpose is the resource investment into pivotal settlement and infrastructural frameworks' development" [3, p. 6].

The model of pivotal settlements based on the concept of demographic gravitation is presented in this paper. Pivotal network should contribute to Russia's economic development and comfortable life of population in the Russian region of the Arctic. Special attention is given to the study of the longtime practice of building settlements for the permanent population residence. It is different from foreign practice which is based on the building of temporary settlements.

In 2010s, approaches toward the Russian North development went through significant changes: attention was shifted to the Arctic space rather than the exploration of all Northern territories. Out of 11,931,100 sq. km of the Russian North, 3,754,600 sq. km (31.5%), which make up AZRF (Arctic Zone of the Russian Federation) land territories, were given special attention. 2,406,400 mil. people, or 24.3% (out of 9,920,920 mil. northerners) became residents of the Arctic.

Nowadays, most northern strategies and development programs are aimed at the Arctic². Authorities' attitude toward northern territories

also changed. The former strategy "from exploration to habitation" has transformed into "the transition from the residence policy to the policy of non-indigenous population staying in the Far North" approach. It makes studies on the watch-based method of labor organization, on *the network of pivotal settlements* justification, and centers of arctic space development relevant.

The research on settlement network transformation from small villages to pivotal and basic cities was analyzed within the methodology of "spatial development", which can be defined as coordinated progressive changes in the development and reproduction of natural resources, the placement and internal maintenance of productive powers, in the population settlement, and the construction of the living environment [4, p. 97; 5, pp. 22-25].

The subject of the research is the Russian region of the Arctic within borders defined by the President of the Russian Federation in his Decree 287³ dated 27.06.2017. In 2019, eight uluses of Sakha Republic (Yakutia), which are not analyzed in the article⁴, were included into AZRF. The goal of the research is to develop a methodology for calculating the Index of Pivotal Settlement which would allow relating an urban settlement: to a multifunctional pivotal settlement, to a pivotal settlement, to a potential pivotal settlement, to a settlement which does not meet criteria of a pivotal one. The following goals were set: to analyze the transformation of the settlement system in the Russian region of the Arctic, to examine

² "The Development Strategy of the Arctic Zone of the Russian Federation and National Security for the Period up to 2020" (approved by Russian President); RF Government Resolution no.366 "Socio-economic Development of the Russian Arctic Zone up to 2020" dated 21.05.2014 (amended by RF Government Resolution no. 1064 dated 31.08.2017); RF Government Resolution no. 207-p "The Spatial Development Strategy of the Russian Federation for the Period up to 2025" dated 13.02. 2019.

³ RF President Decree no. 296 "On the Land Territories of the Arctic Zone of the Russian Federation" dated 02.05.2014 (amended by the Decree of the President of the Russian Federation no. 287 dated 27.06.2017).

⁴ RF President Decree no. 220 "On amending Decree no. 296 of the President of the Russian Federation dated 2.05.2014 "On the Land Territories of the Arctic Zone of the Russian Federation", dated 13.05.2019.

the modern approaches to the settlement of the Russian North, to analyze the dynamics of population and urban settlements in the Russian region of the Arctic, to develop a method and algorithm of calculating the pivotal settlements index, and to arrange urban settlements in the Russian region of the Arctic according to criteria of pivotal settlements.

The informational basis of the study is represented by the Russian Federal State Statistics Service data, which include a database of municipalities' indicators, official websites of cities and villages, websites of authorities and state organizations, databases of geographical data, regional and federal legal acts.

Transformation of the settlement system: from small villages to pivotal and basic cities

At the early stage of the Russian North industrial development, manufacturing villages were built near employment places according to “the house within walking distance from work” principle. It was especially popular in the Far North. This practice caused emergence of separate, small, sometimes temporary, inconvenient settlements which were not connected to each other in a functional and planning way. Population in these cases included three thousand people, which led to increased urban development costs due to low building density. With the development of deposits, a significant part of the settlements were liquidated [6, p. 159]. The major problem consisted in the fact that it was impossible to create environment for meeting human needs in this region. Later, the existing settlement network was improving through gradual “involvement” of separated small villages in the process of urbanization [7, pp. 241-245]. Another problem – there is always a chance of early necrosis of the city in the North. So, after the depletion of deposits, the choice appears: to leave the settlement or artificially prolong its

life by building new city-forming objects [1, p. 61]. This problem is valid for the town of Inta in the Komi Republic. The last (out of 5 mines producing more than 5 million tons of coal) mine was closed in February of 2019. Thus, people of Inta do not know where they can find a job. The authorities of the Komi Republic do not address the issue of people's occupation.

During this time-period, the mainstream point of view was that relatively large cities should play the prominent role in newly developed Northern regions. The reason lies in the fact that it is possible to organize more cultural activities, to support people's spiritual enrichment through their contacts with other people, and to intensify scientific work in these types of cities. They also can be the centers of highly developed settlement systems: it is impossible to imagine the further construction of new and development of existing cities without them [1, p. 24].

According to V.V. Pokshishevskii, “urbanists express their idea about optimal Russian city with a population around 50-300 thousand people, in some cases, more precise – 150 thousand people” [8, p. 102]. V.K. Sveshnikov gives quantitative criteria “to certain types of cities: *pivotal* – 300 thousand people, *basic* – 80-150 thousand, *industrial* – 15-30 thousand, *watch and expedition villages* [9, p. 11].

The main types of urban Northern settlements appeared: *pivotal* (situated outside the North zone), *basic cities* (TPC centers and industrial units), and UTS (industrial, transport, organizational and economic).

Pivotal cities (population over 200 thousand people) – bases of development of adjacent Northern territories. They include enterprises of the construction, repair, light industry enterprises, as well as institutions of logistics. If possible, they will also develop a network of universities, research and design organizations,

service complexes taking into account the development of mobile forms of service deliveries to the Northern regions [7, pp. 241–245].

A *pivotal city* is usually situated in good natural and climatic environment in the southern or the central part of the Far North. It is a major center of an industrial, or administrative, region, which is the center of a highly organized settlement system and the pivotal base for the development of the North [1, p. 81].

Basic cities (50–100 thousand people) will include head enterprises of the corresponding TPC and the complex of maintenance industries. They should include the bulk of the population of the respective settlement systems within the optimal radius of accessibility, so the role of these cities as transport and distribution centers is important. In cases, when the basic city becomes home for shift staff and their families, it should have additional housing and cultural institutions. At the same time, according to the calculations of CSRDI city building, the cost of basic cities urban construction increases by 5–10%.

Industrial, transport, or administrative *settlements* (3–5 thousand inhabitants) are additional centers of development of the most remote northern areas. They are very important for initial stages of development [7, pp. 241–245].

Currently, it is possible to come across a different definition of a pivotal city. For example, O.P. Kuznetsova and E.A. Yumaev characterize a pivotal city as a basic one. They say that “shift camps employees and their families live in *pivotal cities* according to expeditionary settlement system. Nowadays, pivotal settlements of the Arctic Zone are simultaneously considered centers of industrial and cultural Arctic development and pivotal

bases of exploration of sparsely populated Arctic territories. Pivotal cities are seen as links in the technology distribution chain, increasing the diffusion of innovation speed [10, p. 117].

Thus, in the 1970s–1980s, it was proposed to regard pivotal those cities which have population around 200–300 thousand people, situated outside the North area, and basic – Northern cities with population from 50 to 150 thousand people. After studying settlement problems in the Global Arctic [11, pp. 44–46; 12, pp. 10–14], the history of urban settlements in the Russian Arctic from the 14th to 21st century, we came to the conclusion that the most part of arctic cities must have the limits of growth: their optimal population number is 50–100 thousand people [13, p. 127]. However, at the same time, Arkhangelsk, Murmansk, Norilsk and a number of other large settlements will successfully continue their development.

Modern approaches to the settlement system of the Russian North

Major attention in the 20th–21st century was given to the settlement system. the country’s defense, economic efficiency, comfort of life, and mobility of the population depended on its science-based organization.

New Russia still operates on the basis of its old territorial framework: its formation took a long time and the most active period of its developing was in the 20th century, within soviet model [14, p. 67]. At the end of the 20th century, the basic settlement principles were laid down in the prolonged “General settlement scheme on the territory of the Russian Federation”. It is noted in this document that, in Russian environment, cities with population around 100 thousand people are ready for performing functions of *pivotal interregional settlement centers*. However, certain cities with lesser population could still be *pivotal centers*. Such cities should have an advantageous transport

position, favorable background for locating industrial facilities, MTS organizations, and construction bases, appropriate conditions for the business activity development.

It was stated in the document that “*formation of permanent settlements in northern areas with unfavorable medical and geographic conditions is not advisable*”. Sub-zone of the Near North, which has more favorable conditions for living and economic activities, is proposed for placing enterprises of “northern raw materials” processing on it and developing large urban settlements – basic centers for people, who maintain Far North objects by shift methods.

Improvement of urban and rural settlements network requires consideration of zonal and sectoral features of the North, areas of existing settlements, and traditional economic activities of indigenous people. It involves: the transition *from the residence policy to the policy of non-indigenous population staying* in this region, especially in the conditions of the Far North; deepening labor division between Northern regions and the regions which contain developing *pivotal centers of the North exploration*.

The authors of the settlement scheme for Northern regions recommend “to limit the growth of cities as much as possible; to ensure a strict selection of people arriving in the Northern regions according to professional and health criteria; to organize gradual transition to the implementation of the planned employees’ shift”. It is necessary to put people in promising settlements with a stable socio-economic base, to avoid creation of new small settlements, and more actively introduce a shift method of labor organization. Close attention should be paid to the revival of the northern indigenous people’s national settlements, and the preservation of their traditional way of living. We will have to

overcome the increasing stagnation of small and medium-sized urban settlements, which determine the economic and social life of surrounding rural areas⁵.

Also, there are documents for different regions. Thus, according to “Socio-economic development of the Far East and Baikal Region until 2025”, adopted by the RF Government Resolution no. 2094-p, dated 28.12.2009, the goals of national policy in the Far Eastern Federal District are:

- to form a sustainable settlement system based on regional zones of advanced economic growth with human-favorable environment;
- to form population and labor resources sufficient for the solution of regional economic problems, and the improvement of human capital quality;
- to preserve and support traditional life of the Russian indigenous minorities⁶.

Further elaboration of the settlement system is given in the “Strategy of socio-economic development of Siberia until 2020”, which contains the development priorities: the formation of large urban agglomerations; the construction of energy saving houses for agricultural and shift employees; the construction of pivotal settlement structure, which provides professionally trained regular and shift employees for agro-industrial and mining complexes; the formation of the perspective planning framework of the settlement system and the preservation of prioritized natural management areas for northern indigenous people.

It is proposed to switch to a fundamentally new technology of infrastructural development

⁵ General settlement scheme on the territory of the Russian Federation (approved by the RF Government, protocol no. 31 dated 15.12.1994).

⁶ RF Government Decree no. 2094-p “Strategy of the socio-economic development of the Far East and the Baikal region for the period up to 2025” dated 28.12.2009.

and territorial settlement. It is noted that the prevailing forms of “spatial settlement system organization will be: urban and rural settlements as the system-building elements of the economic, cultural territorial development and the provision of necessary social services to indigenous people of the North; local settlement systems, functioning on a rotational basis, in the areas of new exploitation”⁷.

At the same time, it is necessary to take into account that projects’ implementation in the Arctic requires support of all existing basic circumpolar cities, which are suppliers of rotational employees maintaining major arctic projects [15, p. 27].

Population and urban settlements in the Russian region of the Arctic

At the beginning of 2018, population of the Arctic lived in 58 urban regions and municipal districts, which included 39 cities, 40 towns, and 150 rural settlements. Until 1989, the number of urban settlements grew steadily and reached a peak of 125 settlements. By 2018, the number had decreased to 82; the drop of UTS-numbers is especially noticeable – from 93 to 43 units. At the same time, the average and median population of urban settlements has been growing over the years, reaching 27.2 and 8.3 thousand people respectively in 2018.

Nowadays, many people hope that the Russian region of the Arctic will increase Russia’s economic potential at the expense of its natural-raw resources. However, the demographic dynamics shows some problems.

Table 1. Distribution of urban settlements of the Russian region of the Arctic according to the population number, 1939–2018

Indicator	1939	1959	1970	1979	1989	2002	2010	2018
AZRF population, thousand population,	980.8	1671.2	2209.4	2690.6	3420.2	2707.0	2480.6	2406.4
including urban	677.1	1414.6	1885.7	2325.8	3020.3	2395.9	2207.1	2147.7
rural	303.7	256.6	323.7	364.8	399.9	311.1	273.5	258.7
Number of urban settlements,	29	95	106	115	125	106	85	82
including:								
cities	13	19	25	28	32	40	39*	39
UTS	16	76	81	87	93	66**	46***	43***
Distribution of urban settlements according to population, thousand people:								
more than 100	2	3	4	5	5	4	6	6
50-100	0	2	1	3	9	7	3	3
20-50	5	7	12	15	14	13	14	13
10-20	6	15	14	15	19	18	16	13
5-10	6	15	19	16	22	15	13	11
less than 5	10	53	56	61	56	47**	33***	36***
Population-size indicators of urban settlements, people:								
average	23,349	14,890	17,790	20,224	24,163	23,038	26,915	27,186
median	8,385	4,392	4,543	4,812	5,478	5,943	8,555	8,252
standard deviation	54,556	36,787	48,222	55,763	62,677	54,022	58,441	58,660
* in 2004, Talnakh and Kayerkan became a part of Norilsk, Tarko-Sale was formed; ** including two non-populated; *** including three non-populated.								

⁷ RF Government Decree no. 1120-p “On Approval of the Strategy of Social and Economic Development of Siberia till 2020”, dated 5.07.2010. Available at: <https://rg.ru/2010/11/20/sibir-site-dok.html>

Peak population numbers were in 1989 – 3.4 million people, in 2018 the number was 2.4 million. Total loss of Arctic population is 1.0 million people (29.6%). The fastest rate of population decrease was noticed among rural people: in correspondence with 2018 numbers, 71.1% of people stayed in urban areas, while 64.7% of people remained in rural regions. According to the number of habitants criteria, there are 36 (43.9%) settlements with less than 5 thousand people (*Tab. 1*).

According to the number of population, all settlements are divided into small (less than 50 thousand), middle-sized (50–100), large (100–250), and major cities (more than 250 thousand people). We are interested in cities with population over 50 thousand people. There are not many of them: in different years, their number did not exceed 14. In 2018, 9 cities met these criteria, 4 of them became small cities, and Talnakh became a part of Norilsk.

There are two major cities in the Russian North: Arkhangelsk and Murmansk; 645.1 thousand people live there, or 30% of the whole urban population. Four cities are the large

ones: Severodvinsk, Norilsk, Novy Urengoy, and Noyabrsk. Their population is 584.6 thousand people (27.2%). Middle-sized cities are Vorkuta, Apatity, and Severomorsk – 166.5 thousand people (7.8%). Four small cities: Nadym, Monchegorsk, Novodvinsk, and Kandalaksha – 156.4 thousand people (7.3%). Since 1989, Novy Urengoy has had a positive population growth, and since 2010 – Arkhangelsk and Norilsk too (*Tab. 2*).

An important socio-economic characteristic of the settlement system is the uniformity of population settlement and distribution of the economy. The area of the Russian region of the Arctic is 3.8 million square km, or 21.9% of the country's territory.

The area of 24 UD, where 75% of the Arctic zone population lives, only occupies 0.7% of Arctic total area. The Arctic economy is also located unevenly. More than a half (58.2%) of the shipped goods, performed works and services accounts for 3.5% of the area. Almost a quarter (24.3%) of arctic economy is concentrated in Purovsky District of Yamalo-Nenets Autonomous Okrug. About 0.5% of

Table 2. Russian cities in the Arctic with population over 50 thousand people, 1939–2018

City	Year of establishment	Year							
		1939	1959	1970	1979	1989	2002	2010	2018
1. Arkhangelsk	1584	251.0	256.3	342.6	385.0	415.9	356.1	348.8	349.7
2. Murmansk	1916	119.4	221.9	308.6	380.8	468.0	336.1	307.3	295.4
3. Severodvinsk	1938	21.3	78.7	144.7	197.2	248.7	201.6	192.4	183.3
4. Norilsk	1953	–	109.4	135.5	180.4	174.7	134.8	175.4	179.6
5. Novy Urengoy	1980	–	–	–	–	93.2	94.5	104.1	114.8
6. Noyabrsk	1982	–	–	–	–	85.9	96.4	110.6	106.9
7. Vorkuta	1943	–	55.7	89.7	100.2	115.6	84.9	70.6	58.1
8. Apatity	1966	–	–	45.6	62.0	88.0	64.4	59.7	56.1
9. Severomorsk	1951	–	28.1	40.9	50.1	62.1	55.1	50.1	52.3
10. Nadym	1972	–	–	–	26.1	52.6	45.9	46.6	44.6
11. Monchegorsk	1937	28.5	45.5	46.0	51.4	68.7	52.2	45.4	42.1
12. Novodvinsk	1977	–	–	–	47.8	50.2	43.4	40.6	38.4
13. Kandalaksha	1938	22.2	38.2	42.7	45.4	54.1	40.6	35.7	31.3
14. Talnakh	1982	–	–	–	–	62.8	58.7	–*	–*

* became a part of Norilsk in 2004.

the territories with the most population density are characterized by the highest density of economic production. However, there are some differences. While the cities with the most dense population are situated in the western part of the Arctic (Murmansk, Arkhangelsk, Novodvinsk), the degree of economy concentration is distributed more equally: Murmansk, Naryan-Mar, and Anadyr.

What does it mean for the Arctic territories development? The zones of population concentration and, respectively, social systems almost completely coincide with the area of the most favored conditions for economic activities. However, the degree of the settlement system polarization is significantly lower than in the case of economic poles. Besides, the economic poles are distributed in space between the most favorable zone and extreme zones very unevenly. It creates conditions for stable expanded reproduction of relations of inequality [16, pp. 11-12]. To reduce the reproduction of inequality, the problem of determining pivotal settlements in each pivotal zone of the Arctic is being solved.

Methodology and algorithm of the Pivotal Settlements Index calculation

Let us make some methodological explanations. Terms “territories of advanced development”, “special/free economic zones” etc. are changed, in terms of Arctic territories, into “pivotal development zones”⁸. The key word is “pivotal”. However, the authors of scientific works, written in the 1970s–1980s, and legal documents use two key terms – pivotal and basic. These words have different functions, they are situated in the northern zone (or outside it) and have various population. To avoid misunderstanding and taking into account

that the Arctic area is divided into nine *pivotal zones* (PZ), we use the term “*pivotal settlements*” (PS) in relation to arctic cities and urban-typed settlements which fit certain criteria.

Nowadays, there are 82 cities and UTs (including 3 unpopulated UTs), but not all of them could be called “pivotal”. Taking it into accounts, this research presents the author’s methodology of the Pivotal Settlement Index (PSI) calculation, which allows relating urban settlement to: 1) to a multifunctional pivotal settlement, 2) to a pivotal settlement, 3) a potential pivotal settlement, 4) a settlement which does not meet criteria of a pivotal one.

The construction of PSI is based on three methodological principles. *The principle of complexity* that includes simultaneous examination of natural-geographical, transport, socio-economic factors, investment activity, and takes into account their mutual influence. According to *the principle of consistency*, the Arctic area of the RF is considered a single space, but divided into several pivotal zones. The principal of *agglomeration effect account* is that a more compact allocation of population and enterprises leads to economy efficiency increase and investment attractiveness of the territory [17; 18].

PSI calculation of the Arctic is based on the concept of demographic gravitation. According to it, the demographic behavior follows the physic law: the magnitude of the interaction between two objects in space (for example, settlements) is directly proportional to the product of their mass and inversely proportional to the distance between them [19].

In demography, the concepts of “distance” and “mass” are usually interpreted in an extended way. Geographical distances, transport accessibility, social and economic connection of settlements are taken into account. Within the “mass” of the settlement

⁸ RF Government Decree no. 1064 “On amending RF Government Resolution no. 366, 31.08.2017” dated 31.08.2017. Available at: <http://government.ru/docs/29164/>

framework, except the population numbers, its migration attractiveness, the economy volume, the situation on the labor market, and the quality of life can be analyzed. One of the most well-known options of the gravity model expansion in demography is the radiation model of population mobility, which takes into account the parameters of the entire network of settlements within a certain radius while determining the migration flow between two settlements [20].

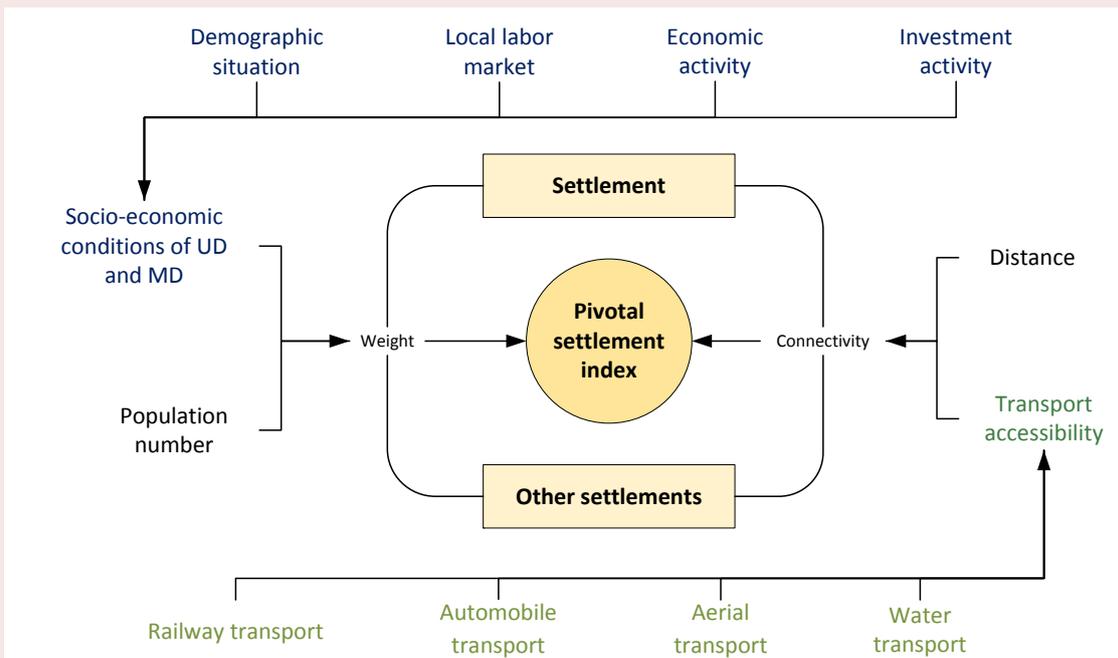
The algorithm of PSI calculation includes the following stages. First, the weights of all Arctic urban settlements are calculated. Next, the matrix of connectivity between all AZRF urban settlements, taking into account their mutual transport accessibility and the distance, is calculated. Finally, the total PSI, showing the degree of compliance of each place with the pivotal settlement requirements, is determined for every city and UTS as the sum of weights and connections' value products with all AZRF urban settlements (Fig. 1, form. 1).

$$PSI_i = \sum_j \sqrt{w_i w_j} c_{i,j}, \quad (1)$$

PSI_i – pivotal settlement index i ; w_i – the weight of the settlement i ; c_{ij} – the connectivity of the settlements i and j . The summand with $j=i$ shows the contribution of the settlement to the final index, and summands with $i \neq j$ – the contribution of the other settlements connected to it.

The weight of a settlement is determined by the size of population and its socio-economic conditions in the urban district, or municipal area, where it is located. Four factors, which define the chances of urban settlements to become pivotal, were selected. The first two factors are the demographic situation and the labor market situation because exploration of the Arctic requires labor resources. Besides, economic and investment activities are taken into account. The more developed and attractive settlement economy is, the more opportunities for accumulation of the critical mass of investment projects, sufficient for developing the settlement and its nearby areas, exist.

Figure 1. Conceptual model of the Arctic pivotal settlement index



Thus, the higher the weight of the place and its surrounding settlements, the bigger the chances that it would become one of the pivotal settlements in the Arctic. Weight depends on the number of population and socio-economic situation in the urban district or municipal district (UD and MD) the settlement belongs to:

$$w_i = p_i \cdot \frac{1}{k} \sum_{j=1}^k \frac{s_i^j - s_{min}^j}{s_{max}^j - s_{min}^j}, \quad (2)$$

p_i – number of population in the settlement i in thousands of people; s_i^j – value of socio-economic indicator of j -UD/MD the settlement belongs to i (from 0 to 1); s_{max}^j and s_{min}^j – maximum and minimum value of the indicator of all UD and MD respectively.

Eight indicators, which constitute four factors, of UD and MD⁹ socio-economic conditions are taken into account:

- demographic situation: coefficients of natural and migratory population growth rates;
- local labor market: average monthly wages of organizations’ employees, the ratio of the average number of organizations’ employees to the population numbers;

- economic activity: shipped goods of own production, own performed works and services (not including small businesses), the number of small and medium-sized businesses (per 10 thousand people);

- investment activity: the volume of investments into fixed capital (except for budget funds), investments into fixed capital at the expense of the municipal budget funds (per 1 person).

The influence that settlements have on each other is directly proportional to the coefficients of their connectivity calculated by the formula:

$$c_{ij} = \begin{cases} 1, & \text{if } i = j \\ t_{ij} \cdot (1 - 0,99 \cdot \log_{d_{max}}(d_{ij})), & \text{if } i \neq j \end{cases} \quad (3)$$

t_{ij} – transport accessibility between settlements i and j (from 0 to 1); d_{ij} – the distance between settlements i and j in kilometers; d_{max} – the distance between the most remote settlements between each other in kilometers.

Transport accessibility between settlements was calculated by summing four numerical values for different types of transport in accordance with *Table 3*.

Table 3. Table of transport accessibility assessment of cities and UTS in AZRF*

Transport type	Transport accessibility	Point
Railway	On the same railway	0.25
	On different railways of the federal network	0.15
	Connected by railway separated from federal network	0.10
	Not connected by railway	0.00
Automobile	Connected by federal auto road	0.25
	Connected by auto road	0.15
	Connected by auto road separated from federal network	0.10
	Not connected by auto road	0.00
Aerial	There are airports of federal importance	0.25
	There are airports	0.15
	There is no airport in, at least, one of the settlements	0.00
Water	Connected by sea ports	0.25
	Connected by river ports	0.15
	Not connected by water transport	0.00
* Data taken from cities and settlements’ official web-sites, schemes from the official web-site of Russian railways, aerodrome and port registers from web-sites of the Federal Air Transport Agency and the Federal Agency for Maritime and River Transport were used.		

⁹ The database of indicators of municipalities. Russian Federal State Statistics Service. Available at: <http://www.gks.ru/dbscripts/munst/>

The distance between cities and towns was determined according to their geographical coordinates using the following variant of Vincenty's formulae of arc's length on a spheroid [21]¹⁰:

$$d_{ij} = R \cdot \arctan \left\{ \frac{\sqrt{(\cos \varphi_i \sin \Delta\lambda)^2 + (\cos \varphi_i \sin \varphi_j - \sin \varphi_i \cos \varphi_j \cos \Delta\lambda)^2}}{\sin \varphi_i \sin \varphi_j + \cos \varphi_i \cos \varphi_j \cos \Delta\lambda} \right\} \quad (4)$$

$\varphi_i, \lambda_i; \varphi_j, \lambda_j$ – latitude and longitude of two settlements in radians; R – the radius of the Earth in kilometers.

According to Formula 3, the distance is converted according to a decreasing logarithmic scale. As a result, the connectivity between the most distant settlements of the Arctic zone (5551 km between Maloshuyka and Beringovsky) is equated to 1% of their transport accessibility, and 1 km distance between settlements – to 100%. The connectedness of the city with itself is assumed to be 100%.

Distribution of urban settlements of the Russian region of the Arctic according to the criteria of pivotal settlements

The algorithm of PSI calculation is implemented with the help of coding language Python 3. PSI was calculated for all 82 arctic settlements. For the following analysis, arctic settlements are grouped according to European (*Tab. 4*) and Asian (*Tab. 5*) parts of the Arctic. The following PSI scale is proposed for each group: 1) a multifunctional pivotal settlement – 60-175; 2) a pivotal settlement – 25-59; 3) a potential pivotal settlement – 10-2; 4) does not meet criteria of a pivotal settlement – 0-10.

The first group of multifunctional settlements includes Arkhangelsk, Murmansk, and Severodvinsk. Among Arctic settlements, Arkhangelsk has the highest index of pivotal settlement which is caused by the size of the city itself and high degree of its connectivity

with other settlements. It has two satellite cities – Murmansk and Severodvinsk. Novodvinsk is located 19 km away from Arkhangelsk. It is a highly specialized city, which can be attributed to the type of a monocity with natural problems of such settlements. Severodvinsk is 34 km away from Arkhangelsk. It is a special city – the citadel of MIC, the largest shipbuilding and ship repair center in the Arctic. The population within a radius of 100 km from Arkhangelsk is about 600 thousand people: it is a quarter of the total population of the Russian Arctic zone.

The population within a radius of 100 km from Murmansk, including Severomorsk and the settlements of Kolsky MD, exceeds 450 thousand people, making it the second largest pivotal settlement of the Russian region of the Arctic. Murmansk sea port is one of the largest ports in Russia, as well as the largest and ice-free port of the Northern Sea Route. The third position of Severodvinsk is caused by its advantageous geographical location near Arkhangelsk, great human potential, and the presence of a seaport.

The second group of pivotal settlements includes 6 establishments, 6 of them are situated in the European part of the Arctic. We can point out three cities: Apatity, Vorkuta, and Naryan-Mar. Apatity is one of the biggest science-centers in the Arctic, which possesses high human potential. It is situated in the center of the Kola pivotal area. Vorkuta is the only city in the Vorkuta pivotal area. It serves a center of settlement for many densely located urban settlements. Naryan-Mar is the only city in the Nenets pivotal zone: this fact explains its leading role.

The third group includes 20 urban settlements, 13 of which are located in the European part of the Arctic. The largest of them in population numbers are Novodvinsk, Olenegorsk, and Kem. The latter city has the

¹⁰ Geographic coordinates of cities and settlements are obtained from the database GeoNames.org.

highest PSI in the Karelian pivotal zone, which makes it a local center of the development.

The fourth group is the largest. It consists of settlements that do not meet the criteria of a pivotal settlement – 50. 30 of them are located in the European part of the Arctic. In terms of population, Polyarny, UTS Vorgashor, Iskateley, Loukhi, Mezen stand out (*Tab. 4*).

There are 31 urban settlements in the Asian part of the Arctic (39.7%).

The first group of multifunctional settlements includes three cities: Novy Urengoy, Noyabrsk, and Norilsk. Novy Urengoy and Noyabrsk are two outposts of the oil and gas industry in Western Siberia. Norilsk is one of the largest centers of non-ferrous metallurgy in the world.

Table 4. Pivotal Settlement Indices of the European part of AZRF, 2017

IOP rank	City or UTS	Pivotal Settlement Index	including:		Population, thousand people	Socio-economic condition of UD and MD
			center	other settlements		
Arkhangelsk pivotal zone						
1	Arkhangelsk	174.8	89.3	85.5	351.5	0.25
3	Severodvinsk	92.4	43.0	49.4	184.0	0.23
20	Onega	16.9	2.4	14.5	19.4	0.12
28	Novodvinsk	11.7	6.6	5.1	38.7	0.17
43	Mezen	5.2	0.7	4.5	3.3	0.20
47	Maloshuyka UTS	3.8	0.3	3.5	2.5	0.12
51	Belushya Guba UTS	3.2	0.7	2.5	2.4	0.29
62	Camenca UTS	1.8	0.4	1.4	2.1	0.20
Kola pivotal zone						
2	Murmansk	169.7	79.7	90.0	298.1	0.27
7	Apatity	42.8	10.4	32.3	56.4	0.19
8	Monchegorsk	36.4	8.7	27.7	42.6	0.20
11	Kandalaksha	31.7	5.4	26.3	32.0	0.17
15	Olenegorsk	23.8	4.1	19.7	21.0	0.20
16	Severomorsk	23.4	5.1	18.3	51.2	0.10
17	Kovdor	23.4	4.6	18.8	16.9	0.27
18	Polyarnye Zori	22.6	3.9	18.7	14.6	0.26
22	Murmashi UTS	16.2	2.7	13.5	13.8	0.19
24	Kola	16.2	1.9	14.3	9.7	0.19
25	Zapolyarny	15.4	2.9	12.4	15.2	0.19
26	Nikel UTS	12.9	2.2	10.7	11.6	0.19
29	Kirovsk	11.3	5.8	5.5	26.7	0.22
35	Zelenoborsky UTS	8.2	1.0	7.2	5.7	0.17
42	Polyarny	5.3	1.8	3.5	17.6	0.10
44	Revda UTS	4.5	1.5	3.0	7.9	0.19
45	Gadzhiyev	4.3	1.3	3.0	12.9	0.10
46	Snezhnogorsk	4.3	1.3	3.0	12.7	0.10
49	Molochny UTS	3.6	1.0	2.6	4.9	0.19
50	Zaozyorsk	3.5	1.0	2.5	10.0	0.10
55	Umba UTS	2.8	0.8	2.0	4.7	0.17
56	Safonovo UTS	2.6	0.6	2.1	5.6	0.10
58	Pechenga UTS	2.4	0.6	1.8	2.9	0.19
59	Kildinstroy UTS	2.0	0.4	1.6	1.9	0.19
65	Verkhnetulomsky UTS	1.5	0.2	1.2	1.3	0.19
66	Ostrovnoy	1.2	0.2	1.0	1.9	0.10
72	Tumannyy UTS	0.9	0.1	0.8	0.6	0.19

End of Table 4

IOP rank	City or UTS	Pivotal Settlement Index	including:		Population, thousand people	Socio-economic condition of UD and MD
			center	other settlements		
	Vorkuta pivotal zone					
9	Vorkuta	32.3	13.5	18.8	58.1	0.23
33	Vorgashor UTS	9.1	2.4	6.7	10.3	0.23
37	Severny UTS	8.0	1.9	6.0	8.4	0.23
53	Zapolyarny UTS	3.1	0.4	2.7	1.5	0.23
60	Komsomolsky UTS	2.0	0.2	1.9	0.7	0.23
64	Yeletsky UTS	1.6	0.1	1.5	0.5	0.23
80	Mulda UTS	0.0	0.0	0.0	0.0	0.23
81	Oktyabrsky UTS	0.0	0.0	0.0	0.0	0.23
82	Promyshlennyi UTS	0.0	0.0	0.0	0.0	0.23
	Nenets pivotal zone					
12	Naryan-Mar	25.2	9.2	15.9	24.7	0.38
38	Iskateley UTS	6.7	2.9	3.8	7.2	0.40
	Karelian pivotal zone					
27	Kem	12.9	1.8	11.0	11.6	0.16
31	Belomorsk	10.2	1.3	9.0	9.9	0.13
40	Loukhi UTS	6.1	0.4	5.7	4.1	0.11
48	Chupa UTS	3.8	0.2	3.5	2.3	0.11
54	Pyaozersky UTS	3.0	0.2	2.8	1.7	0.11

The second group of pivotal settlements includes only one city – Nadym, which is situated 290 km away from Salekhard – the center of Yamalo-Nenets AO. The area of the settlement is 185 sq. km. The basis of the economy is gas-oil production and gas transportation enterprises.

The third group includes seven urban settlements: Tarko-Sale, Salekhard, Labytnangi, Muravlenko, Gubkinsky, UTS Urengoy in Yamalo-Nenets AO, and Dudinka in Taymyr-Turukhansk PZ. The importance of Dudinka is largely caused by its connection with Norilsk, and Yamalo-Nenets settlements have high socio-economic characteristics, which increase the potential to become pivotal settlements.

The fourth group includes 20 urban settlements that do not meet the criteria of PS. Although many of them currently play a key role in the development of their pivotal zone by having a high intellectual potential [22; 23],

or comparative advantages in certain areas, important for the economy of the Arctic [24, p. 11; 25]. They include: Igarka, Anadyr, and Pevek, Tiksi UTS (Tab. 5).

Thus, by using PSI and taking into account the importance of certain settlements for local settlement system, formation of pivotal development areas and their maintenance, creation of opportunities for accelerated AZRF socio-economic development, it is possible to suggest pivotal settlements for each arctic pivotal zone.

Arkhangelsk will be a pivotal settlement for the Arkhangelsk PZ, including Severodvinsk. Cities and UTSs were included in one PS if the distance between them was less than 50 km. There are two places of the development in the Kolsk PZ: Murmansk and Apatity-Monchegorsk. In the Vorkuta PZ – Vorkuta, including UTS Vorgashor. In the Nenets PZ – Naryan-Mar, including UTS Iskateley. In the Karel PZ – Kem-Belomorsk. In the Yamalo-

Table 5. Pivotal Settlement Indices of the Asian part of AZRF, 2017

IOP rank	City or UTS	Pivotal Settlement Index	including:		Population, thousand people	Socio-economic condition of UD and MD
			center	other settlements		
Yamalo-Nenets pivotal zone						
4	Novy Urengoy	75.0	39.0	36.0	113.3	0.34
6	Noyabrsk	64.0	32.5	31.5	106.9	0.30
10	Nadym	32.1	16.5	15.6	44.7	0.37
13	Tarko-Sale	24.1	10.9	13.2	21.7	0.50
14	Salekhard	24.0	17.0	7.0	48.5	0.35
19	Labytnangi	19.6	7.9	11.7	26.3	0.30
21	Muravlenko	16.6	9.3	7.2	32.5	0.29
23	Gubkinsky	16.2	9.0	7.2	27.2	0.33
30	Urengoy UST	11.1	5.1	6.0	10.1	0.50
34	Pangody UST	9.0	4.0	5.0	10.7	0.37
39	Kharp UST	6.5	1.5	5.0	6.1	0.26
63	Zapolyarny UST	1.8	0.3	1.5	0.9	0.37
Taymyr - Turukhansk pivotal zone						
5	Norilsk	71.0	60.4	10.6	178.0	0.34
32	Dudinka	10.1	5.5	4.6	21.5	0.26
41	Igarka	5.4	1.7	3.7	4.8	0.36
68	Dikson UST	1.2	0.1	1.0	0.6	0.26
78	Snezhnogorsk UST	0.2	0.2	0.0	0.6	0.34
Chukotka pivotal zone						
36	Anadyr	8.0	6.0	2.0	15.5	0.39
57	Pevek	2.6	1.2	1.4	4.5	0.27
61	Bilibino	1.9	1.2	0.7	5.3	0.23
67	Ugolnye Kopi UST	1.2	0.7	0.5	3.7	0.18
71	Egvekinot UST	1.1	0.6	0.5	2.8	0.20
73	Provideniya UST	0.9	0.4	0.6	2.1	0.18
76	Beringovsky UST	0.5	0.1	0.4	0.8	0.18
79	Cape Schmidt UST	0.1	0.0	0.1	0.1	0.20
North-Yakutsk pivotal zone						
52	Tiksi UST	3.1	1.3	1.9	4.6	0.28
69	Chersky UST	1.2	0.6	0.5	2.6	0.25
70	Chokurdakh UST	1.1	0.6	0.5	2.1	0.28
74	Deputatsky UST	0.9	0.9	0.0	3.0	0.31
75	Ust-Kuyga UST	0.6	0.2	0.4	0.7	0.31
77	Nizhneyansk UST	0.3	0.1	0.2	0.2	0.31

Nenets PZ – Novy Urengoy, Noyabrsk, and Nadym. In the Taymyr-Turukhansk PZ – Norilsk, Dudinka, and Igarka. In the Chukotka PZ – Anadyr, Pevek, and Bilibino. Also, there are three settlements in the northern Yakutsk PZ – Tiksi, Chersky, and Chokurdakh (*Tab. 6*).

Using graphical and cartographic methods, we illustrate the impact of two factors: the

potential of the settlements to serve as pivotal centers for the Arctic development and their connectivity with other settlements in the existing settlement system. Settlements with a high impact from the first factor are located on the right side of the plane, those with a high impact from the second factor – above. The size of the circles in the scattering diagram is proportional to the index value (*Fig. 2*).

Table 6. Impact of connectivity on the definition of pivotal settlements according to PZ of Russian region of the Arctic

Pivotal zone	Settlement	Distance, km	Settlement
Arkhangelsk	Arkhangelsk	34	Severodvinsk
	Arkhangelsk	19	Novodvinsk
	Severodvinsk	50	Novodvinsk
Kola	Murmansk	158	Apatity
	Murmansk	116	Monchegorsk
	Apatity	47	Monchegorsk
Vorkuta	Vorkuta	15	Vorgashor UTS
Nenets	Naryan-Mar	8	Iskateley UTS
Karelian	Kem	49	Belomorsk
Yamalo-Nenets	Novy Urengoy	327	Noyabrsk
	Novy Urengoy	197	Nadym
	Noyabrsk	296	Nadym
Taymyr -Turukhansk	Norilsk	80	Dudinka
	Norilsk	220	Igarka
	Dudinka	217	Igarka
Chukotka	Anadyr	633	Pevek
	Anadyr	615	Bilibino
	Pevek	240	Bilibino
North-Yakutsk	Tiksi UST	1248	Chersky UST
	Tiksi UST	691	Chokurdakh UST
	Chersky UST	557	Chokurdakh UST

Figure 6. Distribution of urban settlements of the Russian Arctic according to PSI

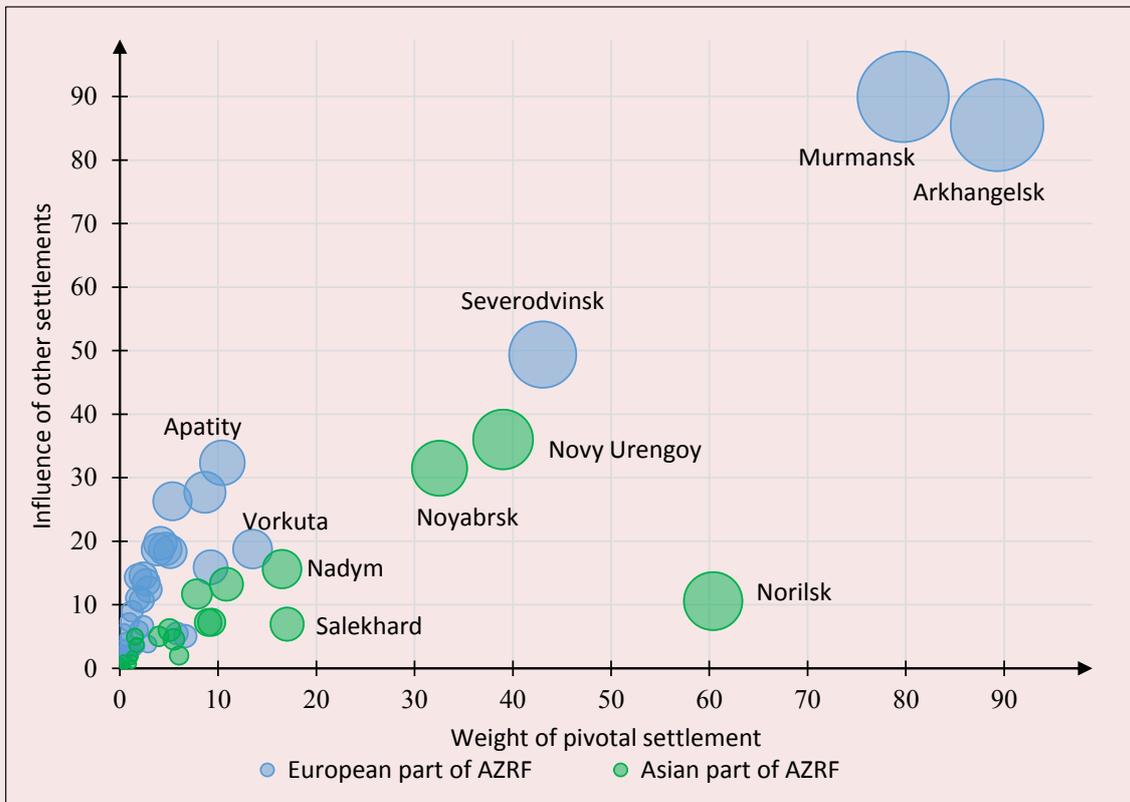


Figure 3. Pivotal settlements of the Russian region of the Arctic



The diagram shows that Asian settlement indices are negatively affected by a more sparse settlement system. The most striking example is Norilsk, which has extremely low transport accessibility and is remote from other major centers. European settlements receive more cumulative effect from the neighboring villages and better transport infrastructure.

On the map we see the main pivotal settlements of the Russian region of the Arctic, the size of the circles is also proportional to the indices of settlements (Fig. 3).

Conclusions

A number of conclusions and suggestions can be drawn from the analysis:

1. It is proved that Arctic cities should have limits of growth: the optimal size of urban settlements is in the range of 50–100 thousand inhabitants; it is recommended not to form new permanent settlements in areas with unfavorable medical and geographical conditions;
2. For the future, authorities suggest the transition from the residence policy to the policy of non-indigenous population staying in the Far North;

3. It is necessary to improve the division of labor between the Northern regions and the main settlement areas, to develop the pivotal centers of Northern development in them; the procession of the “Northern resources” is available in basic settlements, located in the middle North;

4. Taking into account the new role of the Arctic in socio-economic development of Russia, the negative trends of decreasing number of settlements’ population, we grouped arctic cities and UTSs according to the pivotal settlement criteria with the help of suggested algorithm of PSI calculation. It allowed us to suggest development centers for each pivotal zone of the Arctic. The basic settlements, having special value, but meeting the criteria of basic settlements, are proposed for several PZ (Igarka, Tiksi, Anadyr, and Pevek).

The scientific and practical relevance of the work is the formalization of the “pivotal settlement” concept, which can be used in the development of strategic documents on the Arctic territories exploration and the spatial development of Russia.

Further studies should focus on the formation of public policy measures for the optimal management of the demographic and labor potential of each analyzed settlement group.

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Overcoming Socio-Economic Inequality as a Condition for Sustainable and Balanced Spatial Development of the Region*



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Abstract. As the spatial structure of the economy is undergoing transformation, we observe the aggravation of a number of problems that hinder sustainable development of constituent entities of the Russian Federation; and a special place among them belongs to significant intraregional differences in socio-economic parameters. Overcoming spatial disparities should become an imperative for the development of the country and its regions in the long term. This confirms the need for further scientific understanding of the complex of issues related to the improvement of regulation of spatial development of regions; this determines the goal of our paper. In the course of the study conducted on the materials of the Vologda Oblast, we have found out that the majority of municipalities have an asymmetrical type of development

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with increasing differences between the areas of concentration of economic activity near major cities in the region and the rest of the territory; this indicates the process of compression of space. The paper proposes an approach to state regulation of spatial development of the region, based on its representation, on the one hand, as a complex system, and on the other hand, as a socio-economic area. Scientific novelty of the approach lies in the fact that it is based on principles and methods that help promote the development and self-development of municipalities, take into account their features and patterns of functioning, and orient municipalities toward solving strategic problems. The study is based on methods such as system analysis and system synthesis, generalization, comparison, and comparative analysis. The results of the study can be used in the activities of regional authorities and local government. Theoretical generalizations contained in the article can be used as materials for scientific discussion.

Key words: uneven socio-economic development, spatial development, region, municipalities, Vologda Oblast.

Introduction

Uneven socio-economic development, which is observed at all levels – from the global to the municipal – is one of the most important issues in the world economy. Against the background of the rapid spread of digital technologies that are radically changing economic, social and political systems, the aggravating inequality, according to K. Schwab, is not just an economic phenomenon, but a system-wide challenge [1]. The complexity and scale of the problem has spurred wide discussions among scientists, government, business representatives, etc.

The Russian Federation is the largest country in the world, occupying 1/8 of the land area; it is characterized by significant differences in all spheres of life; this predetermines the heterogeneity of its socio-economic space. Over the last quarter of a century, Russian regions have faced considerable difficulties on the way toward establishing a market economy: the system transformation of the 1990s led to fundamental changes in interregional economic ties and relations; the weakening of the role of the state led to a sharp decline in social investment; the crises of the 2000s aggravated socio-economic problems; all this made territorial disparities even more pronounced.

Taking into account the huge size of the country, its demographic and national heterogeneity, sharp natural and climatic contrasts, we can assume that the further growth of socio-economic inequality will threaten Russia's national security.

Today, Russia is facing the following task set by President V.V. Putin: to join the five largest economies of the world and to achieve changes not only quantitative, but also qualitative indicators. This, in turn, necessitates finding a solution to the issues of spatial development of the country and its regions. An important step in this direction was made when the Spatial Development Strategy of the Russian Federation for the period up to 2025 was developed and adopted. This document focuses on the problems associated with the high level of interregional socio-economic inequality and significant intraregional differences that are growing due to the following trends: transformation of the spatial organization of the economy, infrastructural constraints and the increasing impact of scientific and technological progress¹. Overcoming spatial

¹ Spatial Development Strategy of the Russian Federation for the period up to 2025. Available at: <http://static.government.ru/media/files/UVA1qUtT08o60RktoOXI22JjAe7irNxc.pdf>

disparities has become an imperative for the development of the country and its regions in the long term. This confirms the relevance of studying regional socio-economic inequality in order to determine ways to reduce it and ensure equal conditions and relatively equal opportunities for the development of territories and achievement of decent social standards and quality of life throughout Russia.

It is important to note that Russian regions have accumulated extensive experience in regulating spatial development; they use a wide range of methods and tools, and implement state programs aimed at enhancing the development of regions and municipalities. However, the results of the work of authorities at all levels do not give reason to believe that a threat to the integrity of economic space has been overcome; differences in important socio-economic indicators between regions and especially within regions remains significant. This makes it necessary to provide scientific substantiation for the directions and methods to regulate spatial development of the region, which is the goal of this article. To achieve this goal, we address the following tasks: to determine trends in the socio-economic development of municipalities in the region and to identify factors that cause the deepening of territorial inequality; to propose an approach to state regulation of spatial development of the region, taking into account the laws of development of the region as a complex system and as a socio-economic space; to substantiate directions for regulation of spatial development of the region aimed at reducing inter-municipal socio-economic inequalities and promote the effective use of the potential of municipalities; to propose spatial development regulation mechanism that combines the methods and their support systems that take into account the extent of the differences of the municipalities according to socio-economic parameters.

Theoretical approaches to the study of spatial development of the region

In the scientific literature, the understanding of spatial development as being uneven was progressing gradually, which was due to the development of productive forces and the emergence of new factors affecting the stratification of economic space [2–4, etc.]. In the second half of the 20th century, against the background of intensifying internationalization of economic life and integration, the interest in the problem under consideration increased, which was reflected in a wide discussion related to scientific research carried out by representatives of the theory of cumulative development [5–8]. It is important to note that such works prove that innovation plays a special role in spatial development. In the late 20th – early 21st century, great interest was aroused by the work of Paul Krugman, which laid out the foundations for the theory of new economic geography [9; 10] and substantiated the fact that the uneven development is largely determined by second nature causes created by human activity. In domestic science the study of problems of socio-economic inequality covers a wide range of tasks, but the focus is on issues related to the study of spatial manifestations of uneven development, elaboration of tools to analyze and assess socio-economic development disparities, and the formation of mechanisms to regulate and study methods aimed at reducing unevenness and overcoming its negative implications [11–15, etc.].

Taking into account the importance of the problem of uneven socio-economic development and its complex nature, we embark on the study of theoretical approaches to the interpretation of the category “region”. According to the analysis of scientific works, we see that the consideration of the region from the positions of systemic and spatial approaches allows us to focus on those of its properties,

which largely determine its uneven development [3; 16–18]. This determined our views that the region, on the one hand, is a complex system with the properties of openness, nonequilibrium and nonlinearity, and on the other hand, a part of space with its inherent properties (density, location, mutual arrangement of space objects, structurality, hierarchy, etc.).

In the course of the theoretical study we have found that in the process of analyzing uneven socio-economic development different concepts are used (“differentiation”, “asymmetry”, “polarization”, “imbalance” etc.); this complicates the understanding of the processes under consideration and the reasons these differences occur, and also leads to the inconsistency of approaches to territorial development regulation. In our previously published article [19] based on the scientific works of V.N. Leksin, A.N. Shvetsov, B.L. Lavrovskii, A.V. Perov and V.A. Popov we prove that socio-economic development inequality, which is an objective property of any territory, goes through three stages: differentiation – asymmetry – polarization; and their change is due to a combination of objective and subjective factors that reinforce the differences in this direction.

In order to identify the causes of socio-economic inequality and to substantiate methods for its reduction, it is necessary to assess the extent of unevenness in the development of territories. The analysis of scientific works has shown that there are various methods that differ in approaches, and in techniques for evaluation and interpretation of results [20–22, etc.]; but, despite their certain advantages, most of them are aimed at solving local problems. Thus we find it necessary to develop a methodological approach to assessing socio-economic development inequality; such an approach should provide a solution

to the following set of tasks: determining the extent of inter-municipal differences and the corresponding stage of inequality; identifying the main factors, the influence on which can help the authorities and management to turn the socio-economic development of territories in the direction of reducing inequality. The main provisions of this approach are given in [23], and the updated results of its approbation will be presented below.

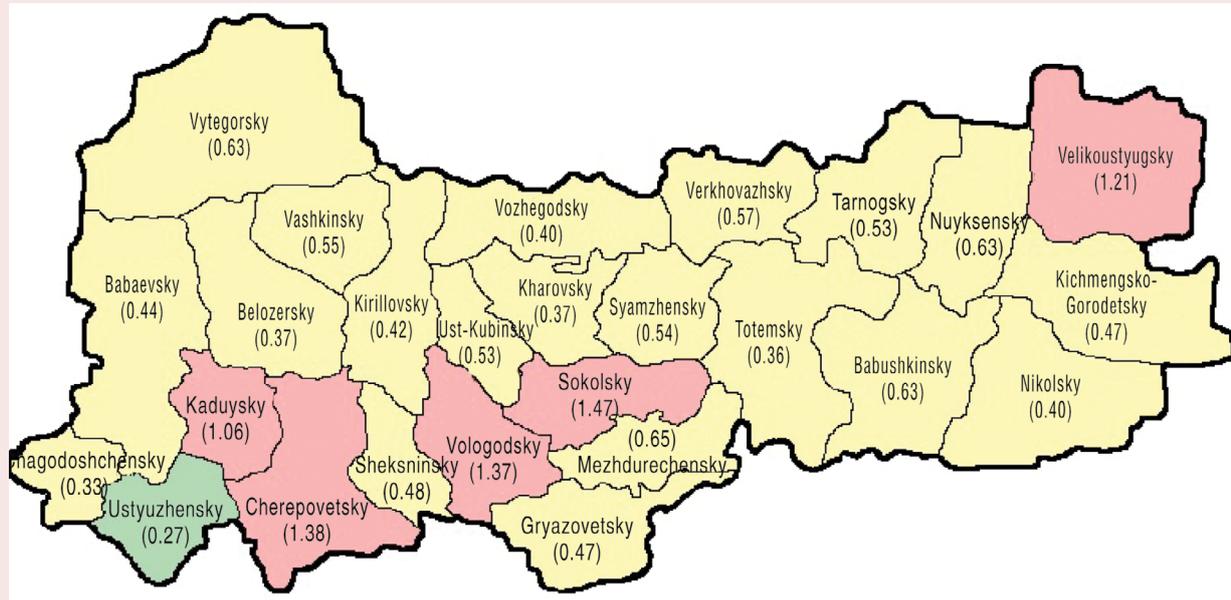
When developing the conceptual scheme for regulating socio-economic development in order to reduce its unevenness, we relied on a number of provisions of the system and synergetic methodology, which combines the principles of consistency and development. The reliability of the conclusions is ensured by the use of general scientific and special methods of economic research.

Research results; analysis and explanation of the results

The works published by scientists from Vologda Research Center of RAS emphasize that the Vologda Oblast has a pronounced intraregional differentiation [24; 25], due to which the stratification of socio-economic space of the territory is going on. This is reflected in the increasing concentration of economic activity and population in two urban districts (Vologda and Cherepovets) and adjacent districts (Vologodsky, Cherepovetsky, Sheksninsky, Sokolsky and Gryazovetsky). However, we find practical interest in studying territorial inequality of municipalities in the region in order to establish their stage of unevenness (differentiation, asymmetry, polarization) and its changes to identify the severity of the problem for the region as a whole and for individual municipalities.

Based on the provisions of the above-mentioned methodological approach [23], we assessed the unevenness of socio-economic

Figure 1. Uneven socio-economic development of the Vologda Oblast (the value of deviation of the level of socio-economic development of municipal districts from the optimal level is given in brackets)



a) 2000



b) 2017

— differentiation stage — asymmetry stage — polarization stage

Note. The optimal value of the indicator is understood as its average value [Baranov V.S. Comparative estimates of socio-economic dynamics of the subjects of the North of the Russian Federation. *Sever i rynek*, 2014, no. 2 (39), pp. 2-6; Evchenko A.V., Stolbov A.G. *Managing Economic and Social Development of a Constituent Entity of the Russian Federation Taking Into Account Intraregional Asymmetry: Theory and Practice*. Apatity: KNTs RAN, 2006. 245 p.]

Source: own compilation.

development of municipal districts of the Vologda Oblast. The results of the analysis not only confirm the conclusions of the Vologda scientists, but also expand the understanding of the processes of intra-territorial socio-economic inequality (*Fig. 1*).

The main conclusion, following from the assessment of uneven development, the study period of which falls on the years 2000–2017, is that in the region there is an increase in territorial inequality, and the asymmetric type of development remains in the majority of municipalities. Thanks to the social policy pursued by the federal and regional governments, it became possible to restrain the growth of differences in social indicators. However, the differences in economic indicators increased more rapidly; thus, two pole areas were formed, which concentrated the main industrial and agricultural potential of the region: the Vologda–Cherepovets agglomeration and the city of Veliky Ustyug. The first pole was gradually expanded due to the construction of industrial enterprises on the territory of Sheksninsky and Gryazovetsky districts. We should note the increase in the differences between the areas where the most important enterprises of the regional economy are established and the areas adjacent to these territories. This fact is to some extent caused by the increased outflow of labor, financial and other types of resources from underdeveloped areas in the direction of actively developing territories. The situation in Mezhdurechensky, Ust-Kubinsky, Ustyuzhensky, Chagodoshchensky, Vashkinsky, and Syamzhensky districts looks especially depressing. In the 2000–2017 period, these areas experienced the most severe population decline compared to other municipalities; it was due mainly to population migration from these areas. The reasons for the migration are obvious: decline in the standard of living and

quality of life, rising unemployment, and lack of prospects for development. It should be emphasized that the transport and geographical location of some of these areas can be assessed as quite advantageous: they are close to the cities of the region, and to major highways. Nevertheless, the development potential of these territories is decreasing, which leads to a sharp decline in investment attractiveness and to the shutdown of a number of industrial and agricultural enterprises that make up the economic core in these municipal districts. All this proves that the socio-economic space is undergoing compression processes, which are widely discussed at the present time by domestic and foreign scientists [26–28], because these processes are typical of most Russian regions.

The scale and severity of territorial inequality makes it necessary to search for approaches to the regulation of spatial development in order to reduce its disproportions that impede balanced development of regions. As scientific theories in the field of spatial development were evolving, special attention was paid to the study of factors that caused this process, which determined the priority directions of regional policy. In the domestic practice of Russian regions in the framework of the policy of alignment, polarized development, formation of clusters and so-called corridors of development, various tools were used, the theoretical foundations of which are presented in [29–31, etc.]. However, many Russian researchers believe that the policy of alignment has reached its limit of effectiveness, and the course of polarized development has not removed many spatial contradictions, especially at the level of municipalities. According to domestic scientists, in the Spatial Development Strategy of the Russian Federation for the period up to 2025, the issues related to inter-municipal inequality have not

been reflected adequately, although the problem itself has been raised. We agree with the author [32], who argues that the concentration of state efforts on the development of large cities and agglomerations is unlikely to contribute to the preservation of the integrity of space; the author also points out the uniqueness of medium-sized and small Russian towns that serve as a foundation for the development of regional economies that ensures a vital property of space – its connectivity.

Measures used by regional authorities and management to reduce inequalities are often fragmented; they do not fully take into account the features of spatial development of territories and their potential; we also observe a lack of coordination of actions between different levels of government. We believe that one of the significant reasons for the low effectiveness of measures of state influence is the lack of accounting for the regularities of development of regions as complex systems that are strongly influenced by the external environment at each point, which causes a change in the behavior of the system and the emergence of unexpected changes in the direction of the processes caused, among other things, by random factors [33]. The impact of the external environment together with the influence of internal factors can transform the existing system of relations between participants of reproductive process and may lead to the violation of the coherence of socio-economic space. Taking into account the above, we can formulate requirements for state regulation of spatial development of the region:

1. State influence should be based on the laws of the functioning of the system.
2. Regulation must be scientifically substantiated and timely.
3. The regulatory system should have a feedback mechanism so as to prevent disruptive and reinforce creative trends.

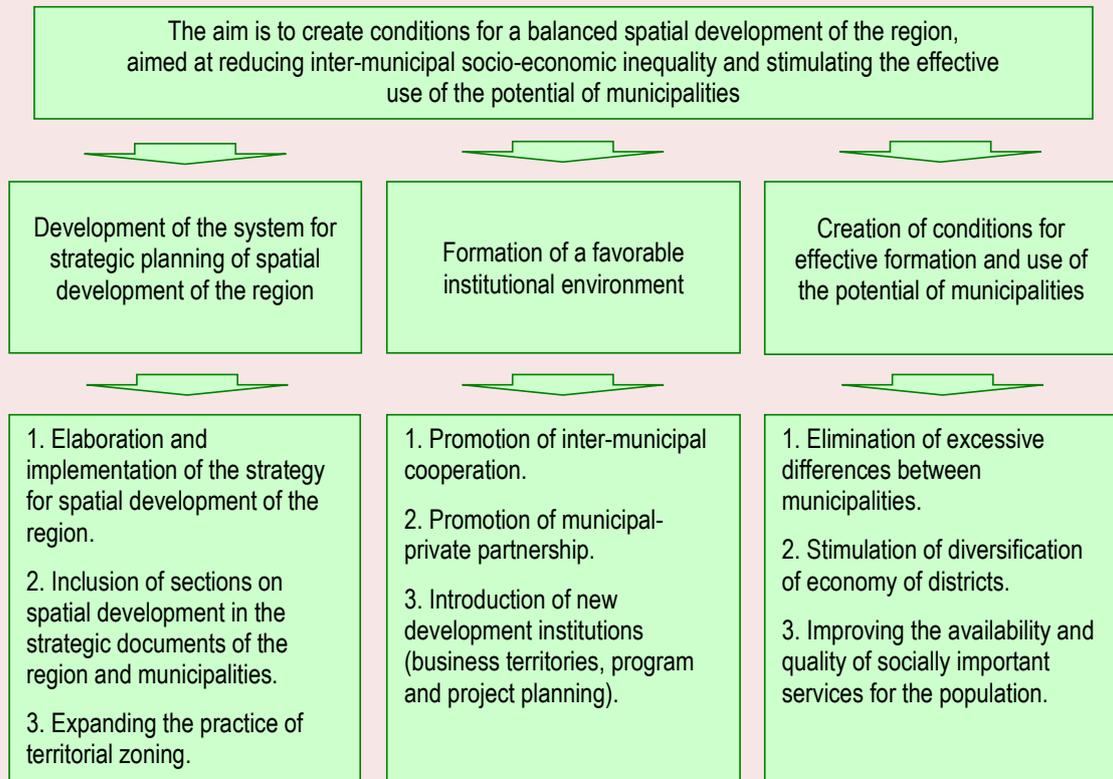
4. The choice of regulatory actions should correspond to the features and nature of the system; this determines the use of a combination of methods and tools.

5. State regulation should initiate the emergence of a synergistic effect.

Based on these requirements, we believe that the foundation of spatial development regulation should rely on the following principles: purposefulness, consistency, effectiveness, focus on strategic objectives, promoting the potential of the territory, differentiated approach, partnership, increasing the role of the local community, promoting inter-municipal cooperation, and feedback.

Public authorities of a constituent entity of the Russian Federation and local authorities represent the subject of regulation; the role of the main coordinator of the process should be assigned to the Department for Spatial Development and Project Management under the Strategic Planning Department of the Government of the Vologda Oblast. These subjects have a direct impact on the development processes through the implementation of the following functions: formation and maintenance of the institutional environment; creation of conditions that stimulate the development of municipalities; ensuring equal opportunities for the development of territories and the lives of their inhabitants. However, we should note that a significant influence on management decision-making is exerted by representatives of business, political parties, trade unions, associations and unions established according to the sectoral and territorial principle, and also by institutional structures designed to assist the participants in the reproduction process. The experience of many Russian regions, including the Vologda Oblast, shows that the regions' inhabitants have become more actively involved in the management of socio-economic processes

Figure 2. Directions of regulation of the region's spatial development



Source: own compilation.

by establishing both formal and informal associations. The economic interests of the population, the business community and the authorities are characterized by a significant diversity and divergence, which requires their identification in order to take into account and harmonize regulatory impacts in the course of substantiating the directions and methods.

The starting point in the regulation of spatial development, which is of great practical importance, is goal-setting, during which the image of the future state of the object and methods of achieving it are determined. Understanding the content of the problem to be solved and identifying the needs and interests of participants in socio-economic processes are the basis for the formulation of the goal of regulation of spatial development – creating

conditions for balanced spatial development of the region, aimed at reducing inter-municipal socio-economic inequality and promoting the effective use of the potential of municipalities.

Achieving the goal based on the above principles involves finding a solution to a number of interrelated tasks grouped in the following areas (*Fig. 2*).

A necessary condition for sustainable socio-economic development of the region in an unstable external and internal environment should be further improvement of the system of strategic management of the region, which involves the development and implementation of the strategy for spatial development of the Vologda Oblast. This document, integrated into the strategic planning system, becomes a link both in the development of industries

and municipalities of the region, and in the interaction of different hierarchical levels of management related to territorial inequality issues. The importance of this strategic document is also determined by the fact that it should become the basis for the system of regulation of spatial development in the region. The need to strengthen the coordination of actions of regulation subjects and to take into account the specifics of socio-economic processes in municipalities requires that strategic documents of the region and municipal districts should contain the sections that reflect spatial development issues. The most important methods of strategic management and analysis include territorial zoning, the effectiveness of which is confirmed by domestic and foreign practices [34–37, etc.]. There are different approaches to the allocation of zones; it is determined by the goals and relevant criteria, but in most works the authors focus on the allocation of two mutually dependent targets for zoning: the differentiated approach to regional policy and the reduction of inter-territorial differences. We believe that for the Vologda Oblast the problem-resource approach to zoning is the most acceptable one, since it helps not only allocate similar areas according to their socio-economic problems, but also take into account the resource provision of municipalities; this will contribute to the concentration of resources on addressing the most important tasks. In addition we can note that the use of territorial zoning will strengthen the coordination and interaction between the authorities, business community and inhabitants, and will help respond quickly to the changes in the internal and external environment.

Territorial economic and social contrasts, depopulation, polarization of human capital,

low-quality management, according to the author [38], represent serious barriers to the further development of many Russian regions, including the Vologda Oblast; thus, the author emphasizes the need to improve the institutional environment, activate the local community, and find an optimal combination of leveling and stimulating regional policy. Taking into account these circumstances and a number of problems identified during the assessment of the existing system of regulation of spatial development in the region, we believe that an important condition for improving the effectiveness of management actions in the region should be the formation of a favorable institutional environment.

The state of the institutional environment has a significant impact on the behavior and interaction of participants of socio-economic processes, because institutions organize their relations, providing them with certainty and consistency. In the conditions of heterogeneity of the space, limited resources and aggravation of socio-economic problems, the institution of inter-municipal cooperation has a great potential for the development of territories. We should add that the processes of interaction within the Oblast are slow, although heads of municipalities note the expediency and importance of this form of relationship. To overcome the barriers to more active development of cooperation between municipalities, it is necessary to do the following: further improve the legal framework; improve the skills of management personnel by organizing training seminars and exchanging experience with regions that have achieved success in the organization of horizontal ties; create methodological support that helps find a reasonable approach to the choice of forms and methods of inter-municipal cooperation.

Limited financial resources required for the development of territories necessitate the search for new sources and ways to attract them. Russian and foreign experience shows that such a tool is provided by municipal-private partnership (MPP), which helps not only attract private capital in the development of the municipality, but also enhance the role of local community in addressing territorial problems, increase the motivation of business to create a comfortable space for living and development, and create the foundation for long-term partnership of business, government and the public. The objects of MPP agreement are the most important elements of industrial and social infrastructure, the development of which creates favorable conditions for people's lives, thereby creating prerequisites for progressive development of the territories. The widespread use of MPP requires the elimination of administrative barriers, reduction of legislative and regulatory risks and use of project financing to increase the availability of credit resources and reduce financial risks for project participants.

The formation of a polycentric spatial structure of Russia's economy in general and its regions in particular gives impetus to the development of small and medium-sized cities and raises the question concerning the formation of new development institutions, among which a special place belongs to the creation of business territories and program and project planning of spatial development [39]. We believe that the experience of Yekaterinburg in the implementation of the program and project approach can be used in the Vologda oblast; this will increase the interest of residents in the development of territories, strengthen partnerships between business, the population and the government, and will focus on the solution of strategic tasks.

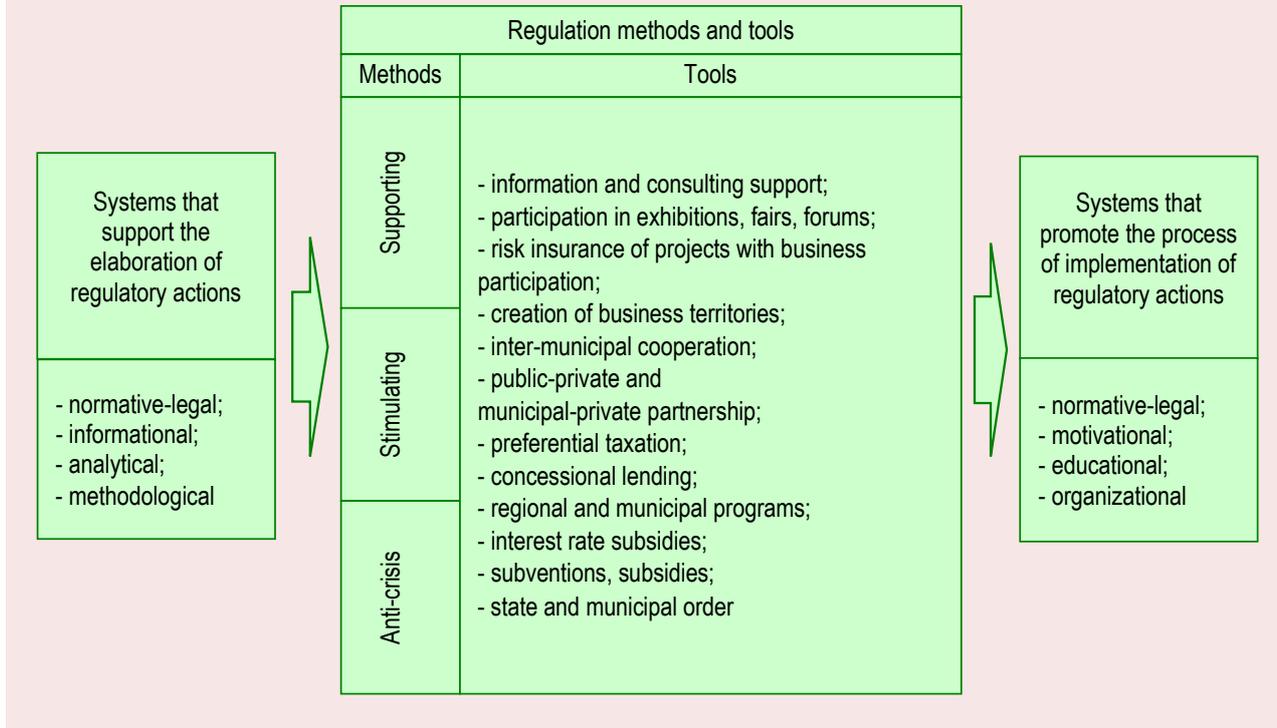
One of the significant features of regional complex systems is the ability to change their behavior through self-organization; this ability occurs due to the interaction of its components without external influence. Taking this into account and based on the provisions of the concept of self-development of territorial socio-economic systems [18], we believe that the most important direction for regulation of spatial development of the region should be the creation of conditions for more effective formation and use of the potential of municipalities. Implementation of this direction assumes the following:

- first, elimination of excessive differences between municipalities through further development of infrastructure, especially in the field of information and communication technologies, strengthening of inter-municipal relations and increased investment in human capital;
- second, stimulating the diversification of regional economies through the support of small businesses in industries with significant resources for their development, strengthening educational and human resources, the development of new institutions of spatial development;
- third, increasing the availability and quality of social services provided to people by supporting the renewal of the material base and young professionals in the fields of healthcare and education, developing lifelong learning, and improving the forms and methods of social partnership with business.

The central place in the system of regulation of spatial development of the region is occupied by the mechanism that unites a set of methods of influence and the systems providing the performance of its main functions (*Fig. 3*).

Interaction of all the participants of socio-economic processes in the territories occurs

Figure 3. Spatial development regulation mechanism



within a legal field, the rules of behavior within which are developed by regulation subjects. The system of normative and legal support is designed to create an institutional framework for the activities of all participants: it includes normative acts adopted by the constituent entity of the Russian Federation and municipalities, and a package of strategic documents defining the directions of regulation of spatial development of territories.

The development of regulatory impacts is preceded by the collection, systematization and analysis of information, which is represented by the data of state statistics, questionnaires, expert assessments, monitoring, ratings, reporting of municipalities and the constituent entity of the Russian Federation, and scientific works of domestic and foreign publications. Processing of huge information arrays requires methodological support, allowing the analysis

to reveal the features of spatial development and contributing factors, trends, threats, challenges and opportunities to overcome them, i.e. to form the basis for the choice of methods and instruments of state influence. In the process of implementing the regulatory impact, an important role belongs to the support system that forms the motives in the triad: administration bodies – population – business and is aimed at establishing partnerships in the course of addressing strategic tasks to reduce the socio-economic development inequality. We also highlight the educational support of spatial development regulation, which contributes to the improvement of qualification and development of new knowledge and skills. The role of the link between these supporting systems is played by organizational support, which includes a set of institutional structures that form a favorable environment for

interaction between both regulatory entities and representatives of business and people.

The key component of the mechanism for regulating spatial development of the region is a set of methods and tools, the choice of which is determined by the following fundamental principles that we highlight: promotion of the potential of the territory, the differentiated approach, and focus on strategic objectives. A distinctive feature of the mechanism aimed at reducing socio-economic inequalities in the development of municipalities is the fact that the choice of impact tools depends on the stage of non-uniformity corresponding to the degree of fragmentation between districts according to socio-economic parameters. As the differences increase and the stages of unevenness change (differentiation – asymmetry – polarization), the nature of the instruments used (supporting – stimulating – anti-crisis) also changes. We should also note that intraregional socio-economic inequality is influenced by a significant number of factors that differ in content, nature, duration and direction of impact. Therefore, in conditions where the external environment is characterized by instability and the presence of random phenomena, the use of some methods cannot be specified for a long period of time. This emphasizes the need to create a flexible and mobile regulatory system that can respond quickly to any changes by choosing such tools that take into account the properties and features of the regional socio-economic system and the laws of its functioning.

Conclusion

Summing up, we point out that the regulation of spatial development of the region,

aimed at reducing socio-economic inequality, should be considered as one of the priorities for the authorities and management. It is obvious that each region has its own features and problems, which lead to the use of various tools and methods of state influence. However, this does not exclude the development of such an approach to the formation of a system for spatial development regulation, which could be used in different regions. In developing the approach, we proceeded from the understanding of unevenness as a process that goes through three stages in its development, changing under the influence of objective and subjective factors; and by influencing these factors it is possible to reduce the differences between territories. The approach to the regulation of spatial development is based on the principles which help regulation subjects stimulate the development of municipal entities while taking into account their specific features and regularities of functioning and focusing on the solution of strategic tasks. When choosing the methods and tools of regulation, it is necessary to take into account the stage of uneven socio-economic development of the municipal entity; this will help achieve the greatest effect.

The results of our study contribute to the development of theoretical science, because they clarify the concept of “uneven socio-economic development” and substantiate the approach to the regulation of spatial development of the region. The practical significance of our work consists in the fact that it provides an opportunity to use the proposed approach in the activities of regional authorities and local self-government to address the issue of reducing intraregional socio-economic inequality.

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Regional Policy on the Development of Municipalities: Efficiency Assessment and Implementation Specifics in the Current Context*



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Abstract. After the adoption of the Strategy for Spatial Development of the Russian Federation until 2025 in February 2019, special importance was attached to the issues concerning the formation of the coherent system of the RF entity's regional policy on the development of municipalities, which takes into account socio-economic and geographical features of different territories. In this regard, the goal of this article is to develop methodological tools for efficiency assessment and for analyzing the specifics of interregional policy in the RF entity (on the materials of the Vologda Oblast). Scientific novelty of the research consists, first, in the fact that it uses expert opinions, which were obtained during a questionnaire survey of the Vologda Oblast municipalities heads, and second, in the analysis based on our own criteria of spatial (territorial) aspects reflection in strategies for development of constituent entities within the Northwestern Federal District. The research uses methods such as analysis, synthesis, comparison, generalization, methodological tools based on economic and statistical, comparative analysis, and expert survey. We reveal that, despite the efforts of state authorities of the Vologda Oblast to develop municipalities, the number of problems, concerning interregional policy implementation, still exist. They are: insufficient consideration of specifics and features of certain municipalities' development; bureaucratic obstacles in the cooperation between state and local authorities; limited powers of local authorities, etc. The results of the conducted research might be used in the activities

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of state authorities of the Russian Federation entities. Also, the research might serve as the foundation for further scientific studies on the ways to improve the forms, methods, and tools of the interregional policy implementation.

Key words: regional policy on municipalities' development, socio-economic development strategy, Northwestern Federal District, Vologda Oblast, questionnaire survey, assessment methodology.

Introduction

For Russia, the world's largest country, of great importance are the issues of effective governance of the development of its constituent entities (85) and municipalities, which are different in size, population number, resource potential and economic development: Russia, the largest country in the world (as of January 1, 2019, there 21,501 municipal institutions, including 1,731 municipal regions, 611 urban districts, 3 urban districts with internal urban division). The importance of formation and implementation of the wholesome and systematic federal state regional policy (the RF entities development) and interregional policy (the RF entity's policy on developing municipal institutions) is currently being discussed at the highest level.

Thus, in accordance with the RF President's Decree 13 "On the approval of the fundamentals of the state policy of regional development of the Russian Federation for the period up to 2025" dated 16.01.2017, this policy means the system of priorities, aims, purposes, measures, and actions of federal authorities on political and socio-economical development of the RF entities and municipal institutions. Its key principle is the implementation of incentive measures of regions and municipalities' state support. There is one condition: public federal and local authorities of the entities should self-implement powers, granted by the Constitution of the Russian Federation and federal laws, and differentially approach implementation of state measures in order to support regions and

municipalities according to its socio-economic and geographical features.

Goals of regional development policy are the provision of equal opportunities for implementation of citizen's economic, political, and social rights, granted by the Constitution and federal laws, life quality improvement, the security of sustainable economic growth, as well as scientific and technological region's development, the improvement of country's economy competitiveness on global markets, which should be based on balanced and sustainable socio-economic development of entities and municipalities, and population's maximum involvement in solution of regional and local goals. The list of policy's goals also includes the improvement of mechanisms of RF entities and municipalities stimulation to growing of its own economic potential; clarification of powers of public federal authorities, entities' public authorities of the Federation, and local authorities, improvement of its financial support and the organization of effective execution of the specified powers (with the maximum involvement of the population to participation in the state and municipal management).

The goal of Russia's spatial development, written in "The strategy for spatial development of the Russian Federation until 2025" (approved by the RF Government Resolution 207-r dated 13.02.2019), is the provision of sustainable and balanced country's spatial development, aimed at the reduction of interregional differences

in levels and quality of people's life, and the guarantee of national security. In the context of entities' socio-economic differentiation reduction, there is the principle of differential approach to the selection of directions and measures for state support of socio-economic territorial development in the Strategy. It takes into account demographic situation, peculiarities of the settlement system, the level, and dynamic of economy's development and specific natural conditions.

The importance of systematic state policy formation on territories' development is indicated by many countries. Thus, the following priorities, which touch upon territorial (spatial) development, of European Union's regional policy until 2020 are underlined in the EU key documents [1; 2]: the polycentric and balanced territorial development, the promotion of complex development in cities, rural areas, and certain regions; the consideration of unique characteristics in the development of different rural areas; the development of different types of territorial integration; the provision of the global regional competitiveness on the basis of a strong local economy; the improvement of the territorial connection between individuals, communities, and enterprises; the consideration of environmental, landscape, and cultural values of the regions in the management process. Many foreign scientists [3; 4; 5; 6; 7] review these issues within the process of the country and its regions' spatial development management. Russian scientists focus on different aspects of interregional policy implementation and the management of regions' spatial development. Thus, A.S. Novoselov and co-authors [8] analyzed primary features and implementation

problems of Russia's spatial policy and developed the scheme of the regional spatial development management. They proved that the sectoral approach in the system of management and disposal of public resources requires a significant counterweight in the forms of the system of regional development management and the system of the municipalities in the Russian entities, as well as its associations.

Other domestic scientists review the features of formation and implementation of interregional policy within existing model of federalism in Russia. For example, V.V. Klistorin [9] drew a conclusion about existence of the contradiction between the diagnostic of a regional problem and practical solutions in the given sphere. He also showed that the decentralization of resources, instead of increasing efficiency of the regional economy, would lead to the strengthened position of federal center in decision-making matters. E.M. Bukhval'd [10; 11] pays attention to the necessity of limited inclusion of municipal management link into a single vertical of the country's strategic planning. The author underlines that this initiative stumbles upon economic obstacles in the process of implementation. The primary one is the negative situation with the system of local finances: it is characterized by the deficiency, serious donation dependence, and, as the result, instability and poor predictability of any long-term plans and programs. In the works by A.N. Shvetsov [12], A.Ya. Trotskovskii [13; 14], M.P. Shchetinin [15], T.V. Uskova [16; 17; 18], B.S. Zhikharevich [19], V.B. Zotov¹ and other

¹ The system of municipal management: textbook for universities. Ed. by V. B. Zotov, 4th edition. SPb.: Piter, 2008, 512 p.

scientists [20], the issues of interregional policy are reviewed from the perspective of transformational processes in regions, the formation of a single and coherent system of regions and their municipalities' development management, the system of strategic planning and local self-governance, the mechanism of effective interregional and inter-municipal cooperation. In this article, the regional policy on the development of municipal institutions is seen as the activity of regional authorities on defining and implementing goals and priorities of the territorial development, the mechanism of stimulation, support and promotion of the municipalities' development in order to ensure comprehensive and sustainable development of the region.

At the same time, the development of methodological tools for assessing the efficiency and the analysis of the peculiarities of the implementation of interregional policy in each particular entity of the Russian Federation (including its conceptual reflection in the Strategy of the Russian Federation's entity development) remain unresolved issues. Finding a solution to these problems became the goal of this article.

Description of the research methodology and the reasons for its selection

We used methods of economical, statistical, and comparative analysis, methods of synthesis and the expert survey, and the monographic method to achieve the discussed goal. The methodological basis included the works of domestic and foreign economists studying regional economy, public and municipal management.

As the conducted analysis has shown, the existing methodologies for assessing the effectiveness of regional policy aimed at territory's development could be divided into

two groups. The first group allows assessing the efficiency of regional territory's management; the second group – the efficiency of regional authorities functioning, including the assessment of management efficiency in one sphere or another: budgetary, investment, tax, social, economic, natural, etc.

The efficiency of interregional policy is manifested in the extent to which the actions conducted by relevant organizations implementing it, and in the spheres of inter-budgetary relations and stimulation of the municipalities' development, lead to the improving parameters of socio-economic territorial development, and raise the quality of the provision of public and municipal services.

In GOST R ISO 9000-2015 “The systems of management quality: basic provisions and vocabulary”, the following definitions are given: quality is the degree of compliance of the set of object's inherent characteristics with the requirements; efficiency is interrelation between achieved results and used resources; effectiveness is the degree of planned activities' implementation and planned results' achievement. At the same time, it is quite difficult to assess the effectiveness, or efficiency, of public policy: it is caused by the difficulty of assessing specific final result of its implementation, formed under the influence of various resources, factors and authorities' actions on different levels (federal, regional, local). The quality of public policy is the most difficult to assess because it is an integrated feature. In this regard, various indirect indicators and/or the results of expert assessments (sociological surveys), which are carried out by various state and non-state structures, are used to assess the effectiveness of the state policy implementation or authorities' activities.

During the survey, which has been conducted by the VolRC RAS in the Vologda Oblast since 2007², heads of municipalities were invited to answer three questions about the efficiency of cooperation between regional, municipal authorities, and their actions for the territories' development. It is obvious that such surveys in the RF entities and the use of their results will help make a general assessment of the regional policy effectiveness in the process of municipalities' development [21]. We used the following research algorithm: 1) each answer option has a score (from 0 to 2, or 3), corresponding to the degree of specific component of the efficiency; 2) the average score for each efficiency component is determined by, first, multiplying the proportion of those who chose particular answer option and the score of this option, and, second, summing the obtained values for the answer options; 3) based on the average score, the level of specific efficiency component is determined. Respectively, the assessment is carried according to three components of efficiency: 1) efficiency and effectiveness of interaction between public authorities and local governments; 2) efficiency of regional authorities' actions aimed at supporting municipalities; 3) efficiency of sectoral regional policy.

It should also be noted that the basic principles, directions and mechanisms of spatial and territorial development management of the region should be conceptually reflected

² To research the problems and perspectives of the reform of local self-government, Vologda Research Center of the Russian Academy of Sciences (VolRC RAS, previously – ISEDT RAS), since 2007, conducts a questionnaire survey of the heads of municipalities of the Vologda Oblast. 30-40 questions of the survey are annually answered by 160-210 heads of municipal institutions (out of 218-372), which allows 4-5% sampling error. The heads provide an assessment based on the results of the previous calendar year: for example, the 2018 survey is based on the results of 2017.

in its socio-economic development strategy. Therefore, it is important to conduct a scientific analysis of these documents in order to state the availability of relevant information and sections in these papers.

B.S. Zhikharevich [19], a famous Russian specialist on strategic planning, suggests methodological approach to assessing the quality of spatial factor reflection in regional strategies (the methodology of the identification of interrelation between strategic planning and territorial development of regions; according to it, 19 federal subjects were analyzed with the purpose of identifying consistency of the valid documents on socio-economic and territorial planning). By relying on the ideas of the scientist, we propose three criteria that show the presence of spatial and territorial aspects in the Strategies of socio-economic development of the RF entities: the analysis of the current situation, conceptual provisions, and the guidelines for the municipalities' development.

Results, analysis, and explanation of obtained data

By relying on the provisions of the discussed approach to the analysis and assessment of interregional policy, we first present the results of the analysis of the current strategies of socio-economic development which function in the Northwestern Federal District's entities (NWFD). The purpose is the identification of spatial and territorial aspects inside of them (*Tab. 1*).

In the most strategies of NWFD entities, which were analyzed, spatial (territorial) aspects are reflected only partially: it usually does not include any detailed qualitative and systematic analysis of municipal regions and urban districts' development, clear guidelines, priorities, directions and mechanisms, development institutions. "The strategy for socio-economic development of the Republic of Karelia for the

Table 1. The presence of spatial and territorial aspects in the strategies of socio-economic development of the subjects of the Northwestern Federal District

RF entity	Criterion 1*	Criterion 2*	Criterion 3*
Republic of Karelia	+ (a detailed analysis of spatial development of a region and key indicators of municipalities is presented)	+ (a separate strategic direction – “Sustainable spatial development”, zoning, pivotal zones, growth points, specialization and brands of municipalities, single-industry towns, rural areas, strategic directions of development of regions and urban districts)	+ (clusters, SEZ, investment projects within regional context, TLC, Development Corporation and Center of cluster development)
Komi Republic	+ (typology, integrated evaluation and specialization of municipal areas and urban districts, territories, zones of priority development)	+ (section “Balanced developed space of life and business”, basic complexes in municipal economy; single-industry towns, prospects of individual municipalities development, growth points)	+/- (clusters, TASED, TLS)
Arkhangelsk Oblast	- (only some features of regional districts’ development in area of education are presented)	+ (zoning, rural areas as growth points)	+/- (clusters, TLC)
Nenets Autonomous Okrug	+/- (features of spatial development of the district, differentiation of separate indicators on municipalities and their specialization is shown)	+ (section “Main directions of spatial development of Nenets Autonomous Okrug Districts”, zones, development corridors, centers of economic growth, priorities of development of municipalities, prospects of fusing settlements, transport and infrastructure)	+/- (clusters, TASED, investment projects within regional context)
Vologda Oblast	+/- (some intermunicipal differences and some problems of spatial development are shown)	+/- agglomerations, inter-district centers, single-industry towns and rural areas	+/- (clusters, TLS, TASED)
Kaliningrad Oblast	+/- (there are only few examples of information on certain areas of regional economy with mentioning municipal districts, urban districts)	+/- (section “Spatial development of the Kaliningrad Oblast”, development centers, priority directions of development of municipalities, functional zoning, industrial zones)	+/- (clusters, SEZ)
Leningrad Oblast	+/- (imbalances in the development of districts of the Oblast, their current specialization)	+ (section “Territorial development of the Oblast”, maps on main parameters of development, specialization of municipalities, territorial priorities); draft of Strategy (section “Spatial development of the Oblast”, zoning of territories and regional policy priorities for each zone)	+/- (clusters, science cities, projects within regional context)
Murmansk Oblast	-	+/- (designated pivotal centers of the settlement system, directions of individual districts of the Oblast development)	+/- (clusters, TASED, SEZ, TLC, TLS, projects within regional context)
Novgorod Oblast	-	+/- (section “Main directions of spatial development of the Oblast”, industrial and investment sites, single-industry towns)	+/- (clusters, SEZ, TASED, TLC, strategies for the development of groups of regions and urban districts)
Pskov Oblast	-	+/- (section “Development of spatial organization of the Oblast”, formation of network structure, settlement system, growth points)	+/- (clusters, TLC, SEZ)

End of Table 1

RF entity	Criterion 1*	Criterion 2*	Criterion 3*
Saint Petersburg	+/- (section "Spatial and territorial development")	+/- (task "Implementation of optimal model of spatial development", centers of economic activity, agglomeration)	+/- (clusters, SEZ, TLC)
<p>Symbols: «+» – the parameters for this criterion are presented in detail in the Strategy; «+/-» – the parameters for this criterion are not fully presented (fragmentary); «-» – parameters for this criterion are not presented.</p> <p>* The presence of spatial (territorial aspects) in the analytical part (analysis of the situation in municipalities, the development of agglomeration processes, maps, etc.).</p> <p>** The presence of territorial priorities, guidelines for the development of municipalities (corridors, zones, axes, poles of development; support framework of development; support areas; promising specialization of municipalities, zoning of the region; development of agglomerations, single-industry towns, rural areas, etc.).</p> <p>*** Institutions, tools of spatial development (clusters, zones of territorial development – ZTD, territories of advanced socio-economic development - TASED, free, special economic zones – FEZ, SEZ; projects linked to the territories; coordination of urban construction policy; transport and logistics hubs (centers, complexes) – TLH, TLC (transport and logistics center), TLC (transport and logistics company); special organizations responsible for spatial development, etc.).</p>			

period up to 2030" (adopted by the Republic of Karelia Government Decree No. 899-r dated 29.12.2018), has the highest quality in terms of the reflection of these aspects. Thus, it is necessary to adjust these strategic documents in terms of a more detailed and qualitative reflection of spatial and territorial aspects. Besides, these documents need to be brought into coordination with goals and objectives, outlined in "The strategy for spatial development of the Russian Federation until 2025".

Next, let us overview features and problems of interregional policy implementation on the materials of the Vologda Oblast. In Particular, key problems of municipal institutions development.

The results of surveys, which are conducted annually by VolRC RAS employees among heads of Oblast's municipal institutions, show that main problems of their development has not changed in the last 10 years: insufficient financial resources (deficit of own revenue sources, lack of financial support from the government); imperfection of the law in terms of issues concerning functioning and development of municipal authorities; inactivity of local population and the lack of mechanisms

which would balance the interests of business, government, and the population in the process of the territory's development; non-efficient interaction with public authorities (dependence on regional governments, bureaucracy, lack of coherence in program documents); limited powers of a municipality in terms of economic development.

As for the situation with local budgets, it is possible to note that budgetary provision, in comparison with 2006, increased in all municipal regions and urban districts in 2017 (tax and non-tax revenues of their budgets per 1 resident), not including Vologda (average districts' growth – in 4.2 times) (*Tab. 2*). In many ways, it is caused by the fixation of additional standards of deductions from personal income taxes in districts, and transfer of the transport tax and a number of excises to local budgets. As a result, the share of own (tax and non-tax) revenues in the total volume of revenues increased across all regions of the Oblast in this time period (average number in regions – by 18.5 p. p.). At the same time, in Belozersky District, in the cities of Vologda and Cherepovets, the budget provision in comparable prices decreased (the rates of budget revenues growth became lower than

Table 2. Budget provision with tax and non-tax revenues of the district budget (urban district) per resident

Municipal district, urban district	2006		2009		2017		2017 to 2006	
	Value, thousand rubles	Share*, %	Value, thousand ruble	Share*, %	Value, thousand ruble	Share*, %	Value., times**	Share*, p.p.
Nyuksensky	2.4	16.4	3.5	17.6	20.0	50.2	8.23 (3.38)	33.8
Mezhdurechensky	1.5	8.5	3.0	13.0	15.7	40.2	10.42 (4.27)	31.8
Tarnogsky	1.9	14.2	3.8	18.7	13.5	40.1	7.25 (2.98)	25.9
Syamzhensky	1.6	11.9	3.0	16.1	12.3	42.9	7.52 (3.08)	31.1
Vashkinsky	1.9	12.4	2.4	11.9	12.0	32.8	6.43 (2.64)	20.4
Totemsky	2.5	19.5	3.4	21.5	11.6	41.1	4.60 (1.89)	21.7
Kirillovsky	2.6	20.7	4.0	21.3	11.5	28.4	4.48 (1.84)	7.7
Verkhovazhsky	1.6	14.1	2.3	13.1	11.3	43.0	7.24 (2.97)	28.9
Cherepovetsky	2.4	23.9	3.5	23.0	11.2	49.1	4.75 (1.95)	25.2
Vytegorsky	2.0	19.7	3.0	18.5	11.2	40.9	5.61 (2.30)	21.2
Kichmengsko-Gorodetsky	1.4	12.8	2.2	13.0	9.8	31.4	6.80 (2.79)	18.6
Chagodoshchensky	2.4	16.9	3.7	20.6	9.7	38.1	4.12 (1.69)	21.2
Babushkinsky	1.3	11.3	6.2	26.2	9.1	28.0	6.82 (2.80)	16.7
Gryazovetsky	2.3	22.8	3.7	22.6	9.0	41.5	3.96 (1.63)	18.7
Vologodsky	2.0	20.4	2.8	19.3	9.0	50.2	4.44 (1.82)	29.8
Ust-Kubinsky	2.3	10.7	6.5	20.0	9.0	29.9	3.83 (1.57)	19.3
Sheksninsky	3.2	31.8	6.5	27.5	8.8	50.0	2.73 (1.12)	18.2
Babayevsky	2.6	21.5	7.3	31.4	8.5	35.5	3.26 (1.34)	14.0
Vozhegodsky	1.6	12.2	2.2	11.3	8.3	41.2	5.21 (2.14)	29.1
Kaduysky	2.6	19.8	3.9	19.1	7.8	36.2	3.02 (1.24)	16.4
Nikolsky	1.2	10.8	2.3	15.1	7.7	29.5	6.68 (2.74)	18.7
Sokolsky	2.5	26.5	3.1	21.8	7.4	39.9	2.95 (1.21)	13.3
Kharovsky	1.7	15.1	2.3	10.7	7.4	30.0	4.23 (1.74)	15.0
Ustyuzhensky	1.3	9.1	3.1	15.9	6.9	30.3	5.47 (2.24)	21.2
Belozersky	2.9	21.7	2.7	15.4	6.9	29.6	2.39 (0.98)	7.9
Velikoustyugsky	2.5	22.4	3.3	19.6	6.3	22.9	2.49 (1.02)	0.5
Vologda	12.6	70.2	10.3	68.4	8.6	42.4	0.69 (0.28)	-27.8
Cherepovets	10.0	62.5	10.2	58.1	10.1	47.7	1.01 (0.41)	-14.8
By district	2.2	18.9	3.6	19.9	9.2	37.4	4.21 (1.73)	18.5
By Oblast	6.6	46.7	6.9	40.2	9.3	41.2	1.40 (0.57)	-5.5

* Share of tax and non-tax revenues of the budget of a municipal district (urban district) in total revenues.
** The growth rate of the indicator in comparable prices (taking into account the consumer price index for the Oblast) is presented in brackets.

the rates of inflation). In 2006 and 2017, the share of own budget revenues did not exceed 50% in all the regions of the Oblast. Moreover, the most significant decrease happened in Vologda and Cherepovets (by 27.8 and 14.8 p.p. respectively).

The problem of interregional socio-economic differentiation is also relevant for the region (*Tab. 3*).

The biggest differences between districts of the Vologda Oblast are observed in the volume of output (shipment) of industrial products per resident. In comparison with 1996, the regional differentiation in terms of agricultural production became two times bigger as well.

Differences between them in the amount of average monthly wages (in 2 times in 2017) became less than amount of differences in 2005

Table 3. Proportion of maximum and minimum values of key indicators of social and economic development of the Vologda Oblast's municipal districts, times

Indicator	Year							
	1990	1995	2000	2005	2010	2015	2016	2017
Volume of industrial production per resident	16.2	368.7	100.4	69.1	507.5	29.3*	33.5*	29.8*
Volume of agricultural production per resident	-	10.1**	9.2	18.1	19.8	18.1	19.8	18.9
Volume of investments into fixed capital per resident	7.1	7.3	7.8	40.9	50.4	52.1***	13.0***	389.5***
Average monthly nominal accrued salary	1.3	2.2	2.2	1.6	1.6	1.8	2.0	2.0
Retail turnover per resident	1.3	3.1	2.3	2.8	1.8	2.1	2.0	2.1
Availability of doctors per 10,000 population	2.3	2.7	3.0	3.5	3.0	2.5	2.7	3.2

* Data on the volume of industrial production was absent in official 2015-2017 statistical reports, so, for these years, data on shipments of own production goods, works and services are provided (excluding the production capacity of small businesses).
** Data for 1996 are presented.
*** Without small businesses.

(2.8 times). Significant differences in terms of availability of doctors for population remain (2.7–3.2 times). On the basis of the conducted analysis, we may conclude that there was a strengthening of interregional differentiation. In some cases, it could be called critical. It causes the necessity to develop and implement the mechanism of differentiation regulation within interregional policy [22].

Let us switch to the analysis of the efficiency of regional policy on the development of municipal institution in the Vologda Oblast implementation. First of all, primary activities of regional public authorities to support and strengthen their financial and economic independence in 2012–2018³.

1. In order to enhance the development of the region as a whole and municipalities in particular, as well as to increase their investment attractiveness, the Development Corporation was established in the Vologda Oblast in 2012.

The Coordinating Council has also been established for the development of the investment potential of municipalities, and investment commissioners of regions and districts have been appointed. The goals

³ Compiled on the basis of information taken from the official portal of the Government of the Vologda Oblast. Available at: <https://vologda-oblast.ru/>.

of commissioners include: the analysis and the forecast of the certain municipal territory development, the monitoring and preparation of investment passports, provision of legal, methodological and practical help to the investors in projects' implementation. Investment passports, investment, tax maps of municipal regions and districts were developed. Krasavino, Sokol, and Cherepovets, as well as Sazonovo settlement, were included in the federal list of single industry towns. Also, the complex measures of their modernization, in order to, possibly, attract fund from federal budget, were developed. On August of 2017, Cherepovets received the status of the territory of the advanced socio-economic development (TASED).

2. An interdepartmental working group was formed at the regional Department of Finance. The purpose of it is to search for reserves to attract revenues into the regional and local budgets and interdepartmental working groups in order to reduce wage arrears and its legalization. In terms of strengthening the financial and economic foundations of the regional municipalities, the replacement of some subsidies in order to equalize the level of budget provision with additional standards of the personal income tax deductions is being

carried out. For example, in 2015, instead of subsidies, municipalities were given more than 3.1 billion rubles from personal income taxes. As the result, half of the regions achieved non-subsidized levels. Measures to stimulate the growth of the revenue potential of local regional budgets are also being taken: its own revenue base exceeded the level of the pre-crisis year of 2008 by 1321.4 million rubles, or 11.6 %, in 2013.

3. In order to respond to the socio-economic situation in the municipalities on time, a supervisor from the regional Government was assigned to each urban district and municipal region of the Oblast.

4. The implementation of project on optimization of the Oblast's municipal-territorial structure was commenced in 2012 (a fusion of settlements in Kichmengsko-Gorodetsky, Nikolsky, Cherepovetsky, Sokolsky, Gryazovetsky, and Vytegorsky districts). The number of settlements decreased in 2013: in Kichmengsko-Gorodetsky – by 10, in Nikolsky – by 3, in Gryazovetsky, Sokolsky, and Cherepovetsky – by 1. In 2014–2018, the fusion of settlements was conducted in other regions of the Oblast. The departments of domestic policy and finances developed maps of municipalities: investment (the list of implemented and suggested projects was defined) and tax (the assessment of tax potential was conducted, major taxpayers to local budgets were identified), investment passports of regions and urban districts were prepared.

5. The sub-program “Development of local self-government in the Vologda Oblast” of the state program “Strategy of socio-economic development of the Vologda Oblast for the period until 2020” implies the provision of inter-budgetary transfers to the winners of the competition “The best settlement of the

Vologda Oblast”, to the best municipalities defined after the efficiency assessment of local authorities' activities; to settlements which participate in the fusion processes; awards (grants) to the winners of the projects “The Governor's team: municipalities” and “The best village head of the year”.

6. An annual monitoring of local authorities' efficiency, in accordance with the RF President's Decree no. 607 dated 28.04.2008, is conducted and grants are given to the best municipalities. An annual competition for the best settlement of the Vologda Oblast is held, its winners (5 in each of 4 nominations) are given grants for site improvement and strengthening of the material basis.

7. The project “The Governor's team: Your assessment” was being implemented from 2013 to 2018. The point of the project is that the results of authorities and heads of municipalities' work are publicly assessed by people and experts after looking through the reports. The Governor of the Oblast, or his deputies, participates in the public defense of reports. All the reports could be freely found on the website of the Governor. A blank assessment of the work of the heads is organized in each region and urban district (residents may fill out relevant ballots, which are placed in various organizations of the municipality). Their work is assessed according to the results of public reports and expert commissions, which include representatives of various public organizations, business, public authorities and scientific (educational) institutions. The Governor's website contains the results of all assessment types, as well as the average scores, which both define the rating (ranking) of the heads. This process helps find shortcomings in the work of heads of municipalities and develop a detailed plan for raising the efficiency of their work.

8. Since 2018, at the initiative of the Governor of the Vologda Oblast, a new format of interaction with municipalities has been in the focus – urban planning councils, where local residents and authorities discuss the most important problems of the territories. After each such council the Governor gives specific instructions for the construction, repair and reconstruction of the road network,

urban infrastructure, health care, education, and culture. In 2018 – beginning of 2019, urban planning councils were conducted by the Governor in all municipal regions and urban districts. Thus, the budget of development emerges: in the following three years more than 30 billion rubles will be put into the construction of infrastructure (roads, bridges, hospitals, kindergartens, water

Table 4. Amount and volume of infrastructural development objects funding according to decisions of urban planning councils in municipal areas and city districts of the Vologda Oblast

Municipal district, urban district	Number of objects*	Out of these, objects of road network*	Number of completed objects at the end of August 2019*	Total investment volume in urban planning council's objects*, million rubles	Investment volume in objects of urban planning councils per 1 resident, thousand rubles	Investment volume in fixed capital**, million rubles
Babayevsky	14	7	4	1787.2	93.2	6639.2
Babushkinsky	14	4	4	1824.9	159.1	94.1
Belozersky	14	5	5	763.3	52.6	673.2
Vashkinsky	12	2	7	141.4	21.4	199.6
Velikoustyugsky	6	0	1	2385.7	44.4	789.9
Verkhovazhsky	8	2	2	1158.5	90.9	185.5
Vozhegodsky	18	5	5	497.0	34.5	120.6
Vologodsky	41	18	13	1247.6	23.9	7505.5
Vytegorsky	12	3	5	1597.0	66.8	687.9
Gryazovetsky	15	1	0	1232.9	38.3	7732.7
Kaduysky	15	4	5	1068.7	64.1	4647.8
Kirillovsky	13	6	8	425.9	29.0	301.5
Kichmengsko-Gorodetsky	11	5	2	681.2	44.3	184.9
Mezhdurechensky	4	1	1	327.2	61.3	2138.2
Nikolsky	6	3	3	1104.5	56.4	117.4
Nyuksensky	17	5	1	354.6	42.4	1318.4
Sokolsky	10	2	1	1141.8	23.7	3101.4
Syamzhensky	11	5	3	144.1	18.0	84.4
Tarnogsky	9	3	3	235.5	21.0	76.4
Totemsky	12	7	5	182.2	8.2	8064.9
Ust-Kubinsky	8	3	5	400.6	53.4	21.4
Ustyuzhensky	4	1	1	61.8	3.7	46.4
Kharovsky	9	2	4	971.7	70.7	401.7
Chagodoshchensky	13	4	4	440.6	37.4	57.3
Cherepovetsky	23	13	5	2277.9	59.1	5461.2
Sheksninsky	15	2	4	1101.3	32.9	8216.0
Districts' total	334	113	101	23555.1	44.3	58867.6
Vologda	23	4	4	12938.9	40.6	22429.0
Cherepovets	10	2	1	26935.3	85.1	38832.6
Oblast's total	367	119	106	63429.3	54.3	120129.2

Sources: compiled on the basis of:

* The official portal of the government of the Vologda Oblast. Available at: <http://vologda-oblast.ru/municipality/>

** Official portal the Federal State Statistics Service of the Vologda Oblast. Available at: <http://vologdastat.gks.ru>

supply facilities). In total, as a result of these events, almost a thousand orders were issued in the areas of capital construction, repairs, reconstruction, development of design and estimate documentation, examinations and surveys⁴.

Primary results of the instructions' implementation within urban planning councils are presented in *Table 4*.

It should be noted that the urban planning councils adopted 367 decisions on major projects concerning construction, reconstruction or modernization of social and engineering

infrastructure in regions and urban districts of the Vologda Oblast. The completion of most projects is expected to be completed in 2019 and completion of large-scale objects - in 2020–2024. The volume of investments in these projects will be 63.4 billion rubles in total, which is more than half of the total investment in the economy of the Oblast in 2018. In some areas the volume of investments within the decisions of the urban planning councils is several times higher than the annual volume of investments. *Table 5* shows the attitude of the Vologda Oblast's population toward urban planning councils.

Table 5. Attitude of Vologda Oblast residents to conducting urban planning councils in districts and urban districts in 2018-early 2019 under the direction of the Governor of the Vologda Oblast

Answer option	Vologda	Cherepovets	Districts	Oblast
Do you know about work of urban planning councils, conducted in your district, under the initiative of O.A. Kuvshinnikov - the Governor of the Oblast?				
Yes, I am well familiar with it	7.3	2.0	5.3	4.9
I heard something	28.3	23.1	29.8	27.6
No	63.8	74.4	64.0	66.7
How do you generally assess the efficiency of urban planning councils conducted in your city (district)? <i>(% from the number of those who know or heard something about it)</i>				
Efficient, and rather efficient	40.8	52.5	53.9	49.8
Inefficient, and rather inefficient	28.9	28.7	15.9	22.3
It is difficult to respond	30.3	16.8	29.8	27.3
Are you ready to take part in the work of urban planning councils?				
Yes, and rather "yes" than "no"	11.3	6.0	8.0	8.3
No, and rather "no" than "yes"	78.0	84.8	76.8	79.3
I hesitate to respond	10.8	9.2	15.2	12.4
If you are ready to take part in the activities of urban planning councils, what issues of infrastructural development in your city (district) would you like to discuss? (% from the number of those who are ready to participate).				
Healthcare	46.7	41.7	57.1	50.4
Housing and communal services	44.4	25.0	48.2	42.4
Education	46.7	37.5	25.0	35.2
Roads and transport infrastructure	24.4	29.2	35.7	30.4
Physical education and sports	35.6	0.0	30.4	26.4
Culture	24.4	12.5	21.4	20.8
Communication and telecommunications	11.1	4.2	5.4	7.2
Other	2.2	0.0	3.6	2.4
Note. A questionnaire survey of residents was conducted by VoIRC RAS in the third quarter of 2019 in Vologda, Cherepovets, in Babayevsky, Velikoustyugsky, Vozhegodsky, Gryazovetsky, Kirillovsky, Nikolsky, Tarnogsky, and Sheksninsky districts (the method of the survey – questioning at the place of residence). The sample is quota-based which keeps sex and age representation. Sampling error does not exceed 3%.				

⁴ The official portal of the government of the Vologda Oblast. Available at: <https://vologda-oblast.ru/>

Many residents of the Vologda Oblast (67%) are not familiar with the work of urban planning councils. But those who heard something about this way of interaction between public authorities, local authorities, and population actually point out the efficiency of these councils (50% of respondents). However, the majority of respondents (79%) are not ready to participate in them. Priority issues, according to population of the Oblast, which should be discussed at urban planning councils, are the development of healthcare, housing, education, road and transport infrastructure.

Next, we turn to the results of assessing the effectiveness of regional policy for the development of municipalities based on the answers to the questionnaires given to the heads of municipalities of the Vologda Oblast.

As revealed, the greatest impact on the development of the municipality is provided by regional (indicated by 75% of heads of municipal districts, 80% – heads of urban settlements, and 70% – heads of rural settlements) and federal authorities (45, 80, and 49%, respectively), as well as local governments (60%, 60%, 47%; *Tab. 6*).

However, in 2017, in comparison with 2006, the number of heads of districts, who indicate a primary part of the population in the development of the municipality, increased. But the paradox remains: many leaders do not

think that they, or business, play a major role in the process of territorial development: the dependence on higher authorities still exists.

In this survey, heads of municipalities were asked a question about the results of cooperation with regional and federal authorities. In 2017, many of them assessed these results as poor and acceptable. The exception was the Department of finances of the Oblast (75% of heads of districts, 50% of urban settlements heads, and 19% of rural settlements heads indicated a high efficiency of interaction with it), the Department of domestic policy of the Oblast (65%, 40% and 25%, respectively), and the Department of construction (60%, 44% and 6%). It should be noted that the majority of heads of settlements think that low level of cooperation is caused by the fact that federal and regional authorities directly interact only with regional administrations. In 2017, in comparison with 2009, the evaluations, given by the heads of urban and rural settlements regarding the actions of the regional public authorities in the sphere of support of municipalities, improved. The share of negative evaluations (answer option “assistance was insufficient”) decreased, respectively, by 27 and 13 p.p. At the same time, positive changes in this sphere are still noticed only by one third of the heads of districts and rural settlements (*Tab. 7*).

Table 6. Distribution of respondents' answers to the question: “Who, in your opinion, is mostly responsible for the development of your municipality?” (% of respondents)

Answer option	Municipalities					
	<i>municipal districts</i>		<i>urban settlements</i>		<i>rural settlements</i>	
	2006	2017	2006	2017	2006	2017
Public authorities of the region	62.5	75.0	58.3	80.0	44.9	69.9
Local authorities	50.0	60.0	16.7	60.0	16.8	46.6
Private business	12.5	50.0	16.7	20.0	12.1	21.9
Residents	25.0	45.0	50.0	40.0	54.2	57.5
Federal authorities	50.0	45.0	58.3	80.0	42.1	49.3
The head of municipality	12.5	25.0	0.0	20.0	8.4	24.7

Table 7. Distribution of respondents' answers to the question "How do you assess the actions of regional authorities aimed at assisting municipalities in ... year?" (% of respondents)

Answer option	Municipalities								
	<i>municipal districts</i>			<i>urban settlements</i>			<i>rural settlements</i>		
	2009	2016	2017	2009	2016	2017	2009	2016	2017
There was no assistance provided	3.8	0.0	0.0	18.2	0.0	10.0	12.0	19.8	15.1
In general, assistance was inefficient (developed measures were difficult to implement and did not lead to improvements)	19.2	16.7	0.0	27.3	0.0	0.0	21.5	14.3	8.2
Changes have occurred, but they are insignificant	38.5	55.6	70.0	27.3	21.4	50.0	36.1	38.5	39.7
Actions taken have led to improvement of the situation	23.1	22.2	30.0	18.2	57.1	40.0	12.0	14.3	16.4
I hesitate to respond	15.4	5.6	0.0	9.1	21.4	0.0	18.4	13.2	20.5

According to the received data, the heads of municipalities of the Vologda Oblast assessed actions of the Oblast's public authorities as "inefficient" in a number of areas of regional socio-economic policy (more than a third of respondents; *Tab. 8*):

the development of local roads network; the attraction of investments into the economy of the municipality; the modernization of education and healthcare areas; the reduction of unemployment; the support of agricultural production; the promotion of small and

Table 8. Distribution of answers of heads of municipalities to a question: "How would you assess efficiency of actions of the regional authorities carried out within the following areas?" (% of respondents who answered "inefficient")

Area of efficiency assessment	Municipalities		
	<i>municipal districts</i>	<i>urban settlements</i>	<i>rural settlements</i>
Development of local roads' network	66.7	100.0	60.6
Promotion of investment attraction in the economy of the municipality	52.6	87.5	66.1
Modernization of education and healthcare	50.0	66.7	69.8
Reduction of unemployment	47.4	77.8	76.7
Support of agricultural production	47.4	50.0	52.3
Promotion of creation and operation of small and medium businesses	44.4	50.0	45.2
Creation of sustainable interregional cooperative relation	44.4	50.0	70.4
Optimized distribution of powers between regional and municipal authorities	38.9	62.5	61.4
Promotion of housing market and housing construction	36.8	66.7	52.5
Promotion of domestic market expansion for local products	26.3	50.0	37.9
Revision of standards of deductions from regional taxes to local budgets	23.5	77.8	66.7
Development of domestic and inbound tourism	22.2	44.4	25.0
Provision of legal support to municipal authorities	22.2	37.5	38.3
Appointment of a supervisor from regional authorities to each district	21.1	11.1	41.9
Formation of regional road fund	16.7	55.6	48.5
Differentiation of property between municipal formations	11.8	33.3	40.3
Development of forms and mechanisms of support and targeted social assistance to certain categories of population	11.1	50.0	37.7
Examination of municipal legal acts	11.1	11.1	27.0

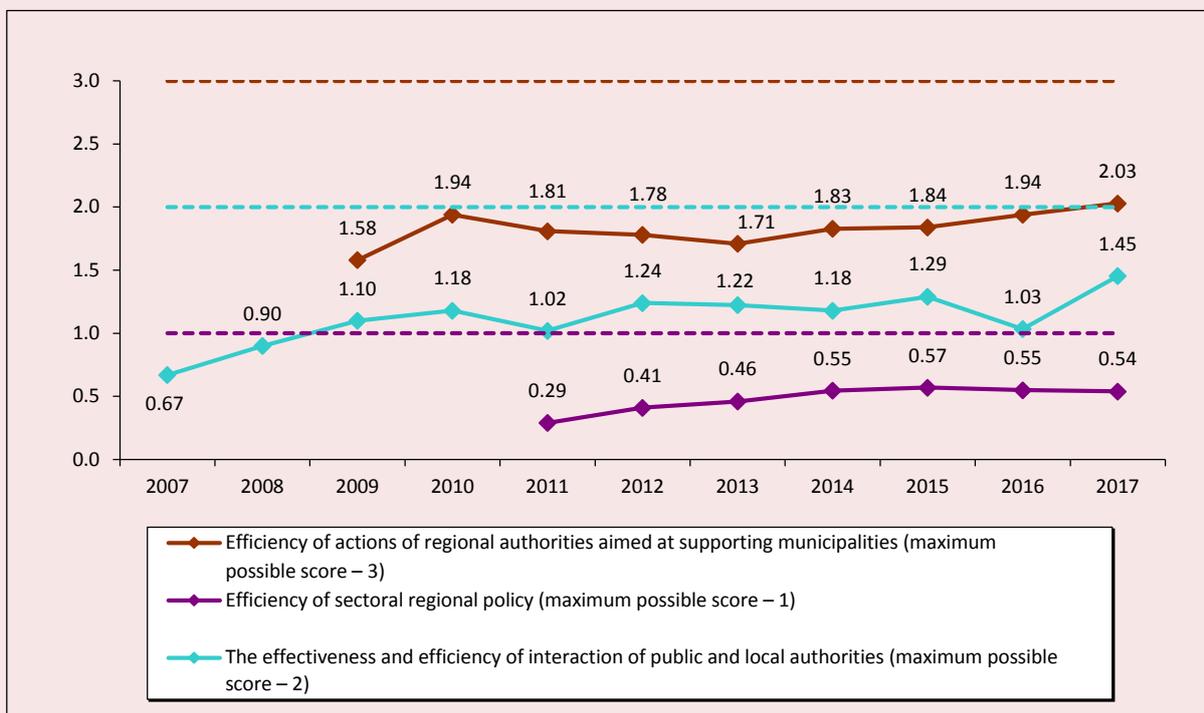
medium-sized businesses' establishment and functioning; the creation of sustainable interregional cooperative relations; the optimized distribution of powers between regional and municipal authorities; the promotion of the housing market and housing construction.

The primary reasons of inefficient cooperation of all public authorities, according to heads' evaluations, are: financial dependence of municipal authorities (it was pointed out by 85% of municipal regions' heads, 40% and 74% of urban and rural settlements' heads); public authorities' lack of information on the real situation in municipalities (55%, 60% and 56%, respectively); inconsistencies in

the system of powers' differentiation (50%, 30% and 43%); a lack of differentiated policy on the territories with varied levels of socio-economic development (50%, 50% and 32%). Heads of urban and rural settlements notice the movement of public authorities toward cooperation with the regions (57% and 33% of respondents). It leads to the inability to timely respond to the settlements' needs, distorts the real situation, limits the equality of rights in municipal institutions.

A point assessment of the efficiency of the regional policy on the development of the Vologda Oblast's municipalities was carried out on the basis of methodological tools described earlier (*Figure*).

Evaluation of efficiency of regional policy on the development of municipalities (on the example of the Vologda Oblast)



Note. Efficiency of sectoral policy and the efficiency of regional authorities' actions – average score across all surveyed municipalities; efficiency and effectiveness of cooperation – score in relation to the Oblast's public authorities on average, according to surveyed heads of municipal districts. Assessment of two types of efficiency is not presented for those years in which the relevant question was not asked. Broken lines indicate maximum possible values of the corresponding type of efficiency.

Conducted calculations show efficiency increase of regional authorities' actions in the sphere of municipalities' support: from 1.58 points in 2009 to 2.03 points in 2017 (high level). The efficiency and effectiveness of cooperation between public authorities and local regional governments increased: from 0.67 points in 2007 to 1.45 points in 2017 (high level). The level of efficient of sectoral regional policy was assessed by the heads of municipalities in 2014–2017 as low: 0.54–0.57 points. It should be noted that the heads of urban and rural settlements more negatively assess the efficiency of interregional policy in the Oblast than the heads of regions. This could be explained by the fact that public regional authorities primarily cooperate with the authorities of urban districts.

At the same time, despite the implementation of measures, concerning the development of municipal institutions, carried out by public authorities of the Vologda Oblast, several problems still exist in interregional policy. First of all, insufficient consideration of the peculiarities of the individual municipalities' development, the presence of bureaucratic obstacles in the interaction between public authorities and local self-government, limited powers of local authorities, etc. As the result, the necessity to correct the Strategy of the Oblast's development until 2030, in order to form systemic regional policy on the

development of municipal institutions, emerges. Besides, key aspects of its improvement might be: the formation of administrative districts on the territory of the RF; the establishment of the coordination council on the development of municipalities; the stimulation of the development of different forms of inter-municipal cooperation; the formation of the optimal municipal-territorial structure, meeting the current economic and social requirements of the regional territorial development. Detailed study of these aspects and scientific justification of legal, organizational, financial, and institutional assistance of the interregional policy implementation are the tasks for further research.

Thus, the contribution of our research, the results of which are presented in the article, to the development of the theoretical science is the justification of the approach to assessing the efficiency of regional policy on the development of municipalities; the contribution to the development of applied science – the assessment of the degree of reflection of spatial (territorial) aspects in the strategies of socio-economic development in the entities of the Northwestern Federal District, the assessment of the features and problems of interregional policy implementation with the example of a certain entity of the Russian Federation (the Vologda Oblast), which will be the basis for determining the areas of policy's improvement.

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The Formation of Digital Space at the Municipal Level: Overview of Settlements' Websites*



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Abstract. The formation of digital economy and transition to electronic government impose qualitatively different demands to authorities' presence on the Internet. Local authorities are not an exception here. Due to modest financial capabilities of many municipalities, their websites, objectively, cannot match the level of federal and regional web portals. The necessity to meet modern requirements implies the search for acceptable ways to be present online. The article attempts to determine the current state of spatial distribution of municipal authorities' digital involvement on the settlement level. To achieve it, we revealed the ways of being present on the Internet, checked the availability of connections between websites of municipalities, gathered information characterizing disclosure of information about dynamics of municipal institution development, identified additional Internet communication channels, and built cartograms. The research includes 313 urban and rural settlements in the Republic of Karelia, the Arkhangelsk, Vologda, Leningrad, and Murmansk oblasts. The results of the study indicate that the digital space of this territory at the municipal level is almost completely formed and has a low degree of mutual integration of its Internet resources. It is shown that the most popular way of providing information about the settlement on the Internet – website – is not the best. It is revealed that local governments rarely use social media as an auxiliary or alternative channel of Internet communication with local residents. It is noted that the majority of settlements orientate toward practices used in settlements of their municipal district, while creating and maintaining webpages without borrowing the experience of neighboring districts and regions. The results of this study might be used for qualitative improvement of municipalities' activities conducted online and formation of e-government on regional and municipal levels.

Key words: digital economy, electronic government, municipalities, website, settlements.

Introduction

Modern people live in the world where information and communication technologies (ICT) enter into all aspects of their everyday life and professional activities. Without “omnipresent” and mobile internet, people, especially in large cities, will not be able to use numerous “smart” devices, which allow overcoming accelerating rates of life. According to K. Schwab [1], the world is close to the beginning of the fourth industrial revolution which will fundamentally change our life, our work, and our communication. ICT is the link element which will more successfully satisfy people's needs and demands. Of course, government authorities understand that development of a new industrial evolution technologies and creation of necessary infrastructure is mandatory for provision of Russia's global competitiveness. That is why authorities adopted the strategy of digitalization and digital economy building.

Current ICTs allow gathering, processing, analyzing, and keeping of large data which are necessary for making optimal management decisions. Today, large data technologies are actively used by commercial enterprises [2-4] and banking structures [5, 6]. The spheres of educational [7, 8] and medical services are developing [9]. The sphere of state and municipal management is no exception. This is where the use of large data can significantly improve the quality and efficiency of services [10]: for example, to manage urban traffic [11], to reduce costs of housing and communal services [12], to improve the accuracy of forecasting and modeling, to plan the construction of necessary infrastructure¹. This is the reason why significant attention is paid

¹ Digital Russia: new reality. July of 2017: report McKinsey&Company. Available at: <https://www.mckinsey.com/~media/McKinsey/Locations/Europe%20and%20Middle%20East/Russia/Our%20Insights/Digital%20Russia/Digital-Russia-report.ashx> (date of access: 20.04.2019).

to the development of “electronic government” (e-government). This term might be defined as the configuration of the public services system that supports the solution of administrative tasks and ensures the involvement of citizens in governance with the help of ICT [10].

Since 2008, the institutional environment of the digital economy development has been changing in our country [13, 14]. The national program “The digital economy of the Russian Federation”² will have been finished until 2024. As the result, digital technologies and platform solutions will be as close as possible to citizens and business entities. It will help to broaden the specter of municipal services provided in electronic form and to organize smooth operation of public services that ensure the security of digital interaction. Events, stated in national project, mostly contribute to provision of medical, educational and other municipal services.

It should be noted that the development of the practice of conversing public services into electronic format [15] contributes to the unnoticed and easy (for business and population) collection of large amounts of information. In 2018, there were 3.59 million contracts, worth 6.85 billion rubles³, signed in Russia through a single information system in the area of procurement. 60 million applications⁴ were received through official Public Services Portal. Integration of such data with indicators, acquired by Rosstat, line ministries and services, regional and local

authorities, within a single information system allows seeing Russia as a single economic space. For now, data accumulated by public municipal authorities are not fully used in analytical work [16]. In this regard, there is still a lot of work to be done in the field of creating various public information systems and their “seamless” integration.

Nowadays, e-government is viewed as the way of increasing availability, transparency, openness, and quality of services provided to people by public and municipal authorities, although it was initially intended to be used as the way of reducing costs. The following examples are given in the work of Muñoz-Cañavate and Hípola [17] which show the advantage of electronic services: in Canada, it was calculated that the provision of one service after citizen’s personal appeal costs 44 Canadian dollars, by mail – 38 dollars, by phone – 8 dollars, by the Internet – less than 1 dollar. In the justification of “i2010 Initiative” given by the European Commission, it was stated that implementation of electronic administration across the European Union will cut costs by 50 billion euros. At the same time, it should be noted that this process also leads to the necessity of providing funding for equipment purchase, special software development and its technical support, fulfilling legislative personal data protection requirements, personnel training [18].

Besides, electronic provision of services should be well implemented and user friendly. Otherwise, due to low efficiency and productivity, e-government, even with expensive implementation and cutting edge equipment, will not meet people’s expectations [19]. This also requires assessment of the current state of information and communication infrastructure, personnel, technical, and financial capabilities of public authorities. It is necessary to mention

² RF digital economy. Available at: <https://digital.gov.ru/ru/activity/directions/858/> (date of access: 23.09.2019).

³ Statistical indicators characterizing the results of procurements for public and municipal needs at the end of the I–IV quarter of 2018. Available at: <http://zakupki.gov.ru/epz/main/public/download/downloadDocument.html?id=30094> (accessed: 06.06.2019).

⁴ The results of work of the public services portal in 2018 were summed up. Available at: <https://digital.gov.ru/ru/events/38738/> (accessed: 15.05.2019).

international indices, assessing different aspects of digitalization, while discussing the degree of country's readiness to digital economy building. According to the index of ICT development, published by International Telecommunication Union in annual "Measuring the Information Society Report"⁵, Russia (index – 7.07) was placed 45th in the ranking of 176 countries. The first position was given to Iceland (8.98), the last one – to Eritrea (0.96). UN Department of Economic and Social Affairs conducts studies of assessing the level of e-government development. In doing so, it uses indices of telecommunication infrastructure and online services. Besides, it additionally calculates the index of electronic participation, which concerns electronic awareness, involvement of citizens in discussions and decision-making. In 2018, Russia, which took 32nd position (out of 193) in the ranking according to e-government development index (0.7998), was included in the list of 40 countries with very high index indicators. Denmark (0.9150) and Lithuania (0.7534) conclude this list⁶. Russia has very high values of online service (0.9167) and electronic participation (0.9213) indices with a relatively low telecommunications infrastructure index (0.6219). However, it should be noted that Russia, in the period from 2003 to 2018, got noticeably closer to the countries which have the highest above-mentioned indices.

There are attempts to calculate similar and more complex indices for our country on the regional level [20]. However, it is impossible to organize e-government without including municipalities, because this is the level where authorities best understand people's needs.

⁵ Measuring the Information Society Report. V. 1. Geneva: International Telecommunication Union, 2017. P. 31.

⁶ UN research: electronic government, 2018. Application of e-government in order to form a sustainable and flexible society. New York: UN, 2018. P. 89.

Taking into account problems of municipal institution's budgets formation, it is possible to ask: are Russian municipal authorities ready for digital economy?

To answer this question, we need to assess launch context of e-government on the level of settlements' administration. There were the following indicators in Spain: 1) computers and communication's costs in different administrative bodies; 2) the percentage of computers with access to the Internet and intranet; 3) the list of current services that the administration provides through its sites [17]. It is impossible to apply these indicators for our study because two groups are not included in official free-access statistics databases and, unlike many countries [21–23], the most part of popular services are provided through "Public Services Portal" in Russia, not through settlements' websites. On the other hand, the availability of the settlement's website, its content, and update frequency is, in a way, an indicator showing the level of ICT development, local administrations' attention to the sphere, and their financial capabilities. According to these ideas, we chose websites of urban and rural settlements as the object of our research.

Settlement's website is its face in the global electronic world. It becomes the primary source of information for many people and companies interested in this specific settlement [23]. Settlement's website is included in the category of public portals which function is provision of information and universal public services to local residents, foreign investors, and travelers [24]. In Russia, the websites of urban and rural settlements perform a purely informational function, which includes ensuring the availability of information about local authorities' actions. According to national law, there is no requirement of having own website.

Nevertheless, it is important and modern way of informational transparency and authorities' maximum publicity implementation [25–27]. It is not advised to completely ignore the possibilities of using it.

The purpose of the research is to define a current state of spatial distribution of municipal authorities' digital involvement on the settlement level. Despite the importance of creating a single digital space in Russia, which concerns the implementation of ICTs in local governments' work and necessity of their presence on the Internet, very few Russian scholars studied this topic on the example of municipal institutions' websites. They paid special attention to websites of municipal regions [26–31] or cities [32, 33]. Foreign scholars primarily study large municipalities [34–37], because they have financial resources to develop complex websites, to offer a great number of services, and keep more qualified personnel. Residents of urban territories are more likely to demand advanced Internet-services and infrastructure than people of rural areas [22], that is why foreign scholars prefer studying cities' websites [21, 22, 38, 39], and they choose settlements with more than 20 thousand people population.

This approach excludes small settlements from the research and avoids the problem of “digital inequality”, which is mostly acute for rural areas [40]. It does not allow seeing all the territory as a single digital space, which keeps mutual integration of the Internet-resources as one of the most important “pillars” [41].

Unlike these studies, our methodology includes a continuous coverage of municipal regions, urban and rural settlements' websites in the studied area, which is not limited to one region. It also includes adjacent municipal areas of neighboring RF subjects. It allows identifying settlements which do not have their

own Internet-resources, showing connections between official websites of municipal institutions, and present the existing practice of providing information about settlement in the Internet and experience exchange between municipalities. The latter is greatly important for small settlements, because, due to the lack of financial and human resources, they need to look for acceptable ways of being present in the Internet. It predetermines practical importance of the study.

Data and methods

The research included 313 settlements from 41 municipal region and urban districts of the Republic of Karelia⁷, the Arkhangelsk, Vologda, Leningrad, and Murmansk oblasts. In addition to the municipal districts of the neighboring regions adjacent to the border of the Republic of Karelia, the neighboring municipal districts of the Arkhangelsk, Vologda, and Leningrad oblasts were analyzed. The algorithm of the conducted work included the following stages: 1) determination of the method of providing information about the settlement on the Internet; 2) analysis of mutual integration of Internet resources; 3) search of information about the dynamics of the settlement development on the official website; 4) identification of additional channels of Internet communication used by the settlement's administration; 5) collection of information about the developer of the website; 6) construction of cartograms.

First of all, with the help of municipal regions' websites and search systems, we determined each settlement's method of presenting the information on the Internet: 1) own website; 2) website based on the website of the municipal district (second-level domain); 3) page on the website of the municipal district; 4) information is not provided.

⁷ The Republic of Karelia is fully covered.

Then we analyzed mutual integration of selected Internet-resources. It is quite easy to check connections between Internet-resources: we needed to find external links to other websites on the analyzed website and to check its correct updating in case of changes in the email address of the external website [42]. Websites of municipal region and entity should be interconnected by links. For example, you should have an opportunity to go to the website of the RF municipal region and entity from the settlement's website, and the website of municipal region should have links to websites of all settlements and RF entity included in it. Presence or absence of such "transitions" shows the attitude of local authorities toward to issues of its Internet-resources integration. For each independent settlement's website (method 1), we defined the presence of links to websites of its municipal district and the RF entity subject⁸. The website of the municipal district had links to the settlement's website. We considered a link to be missing if we had found broken or incorrect link.

In addition to ranking settlements by the way they provide information about themselves on the Internet and determining the links between resources, it was decided to collect additional information characterizing the disclosure of data concerning the dynamics of settlement's development and the use of additional Internet communication channels.

Public speeches and reports on the results of municipal institution head's work, or reports on socio-economic development of municipal institution, available for free access, may represent dynamic of settlement's development. The choice of these documents is caused by

the following ideas: 1) availability of statistical information on different spheres of work; 2) they contain settlement's most relevant problems and significant events; 3) they are interesting for settlement's citizens foreign investors; 4) there is no requirement to publish them on the website. We cannot ignore the timeliness of uploaded data. Since the data collection from settlements' websites was carried out in January of 2019, we took into account only reports and presentations for 2017⁹. Earlier reports and presentations were not analyzed due to their low relevance.

Also, we reviewed social networks as additional channels of the Internet-communication [34, 38]. We checked whether settlements had official groups on social networks. We considered them "official" if settlements' websites, or settlement's pages on the municipal region's website, had a link to this group [34].

It is obvious that this information, offered for collection, is not sufficient for a comprehensive assessment of municipalities' websites [27, 30], but it can also be used to assess the pages of settlements on the sites of municipal districts. At the same time, the search for specific documents on the website of the settlement allows you to see the variety of approaches applied to the placement of information and to assess the easiness of using the resource itself.

The emphasis on interregional borders allows answering the questions: do authorities of "border" municipal institutions look at practices adopted within the region, or do they adopt the experience of neighboring regions? The very placement of information

⁸ The website of the region is understood as the official government portal or the portal of the legislative body of the Russian Federation entity.

⁹ At the time of the research, reports on the results of work in 2018 were not yet available, because most municipalities approve previous year reports in March of this year with subsequent publication.

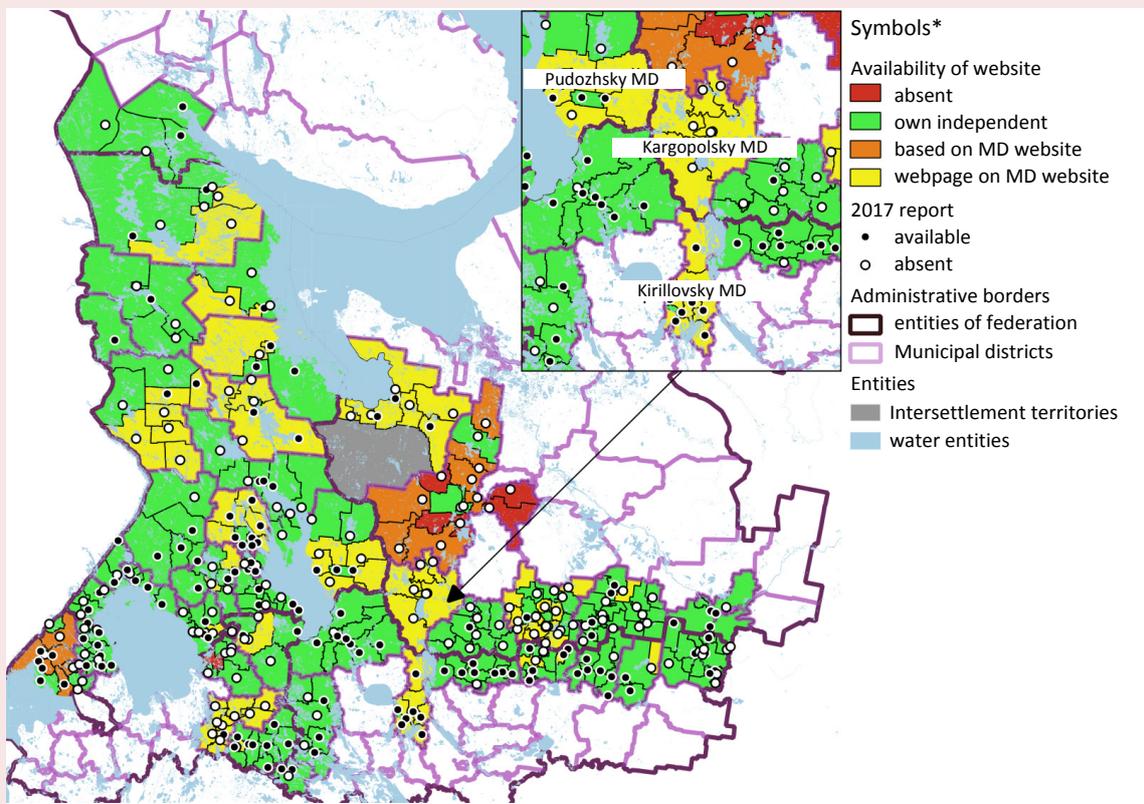
on the Internet, where borders and barriers are almost absent, allows many people to see it, including those who need to solve a similar problem. In this sense, the experience of neighboring municipalities is always available: it is possible to assess it from the outside, and to ask people, who conducted this work, about the convenience of the selected placement option, prices, implementation period, developer's characteristics, service quality, existence of problems, etc. Therefore, we additionally collected information about the name of the developer in settlements with its own website (method 1). In addition to development companies, website constructors were taken into account. Its usage by local authorities shows their desire to create a website at minimal cost.

Cartograms were built on the basis of the collected data in the geographic information system QGIS 3.4 Madeira. We used vector maps as the cartographic basis with administrative regions' borders from the service NextGIS.

Results

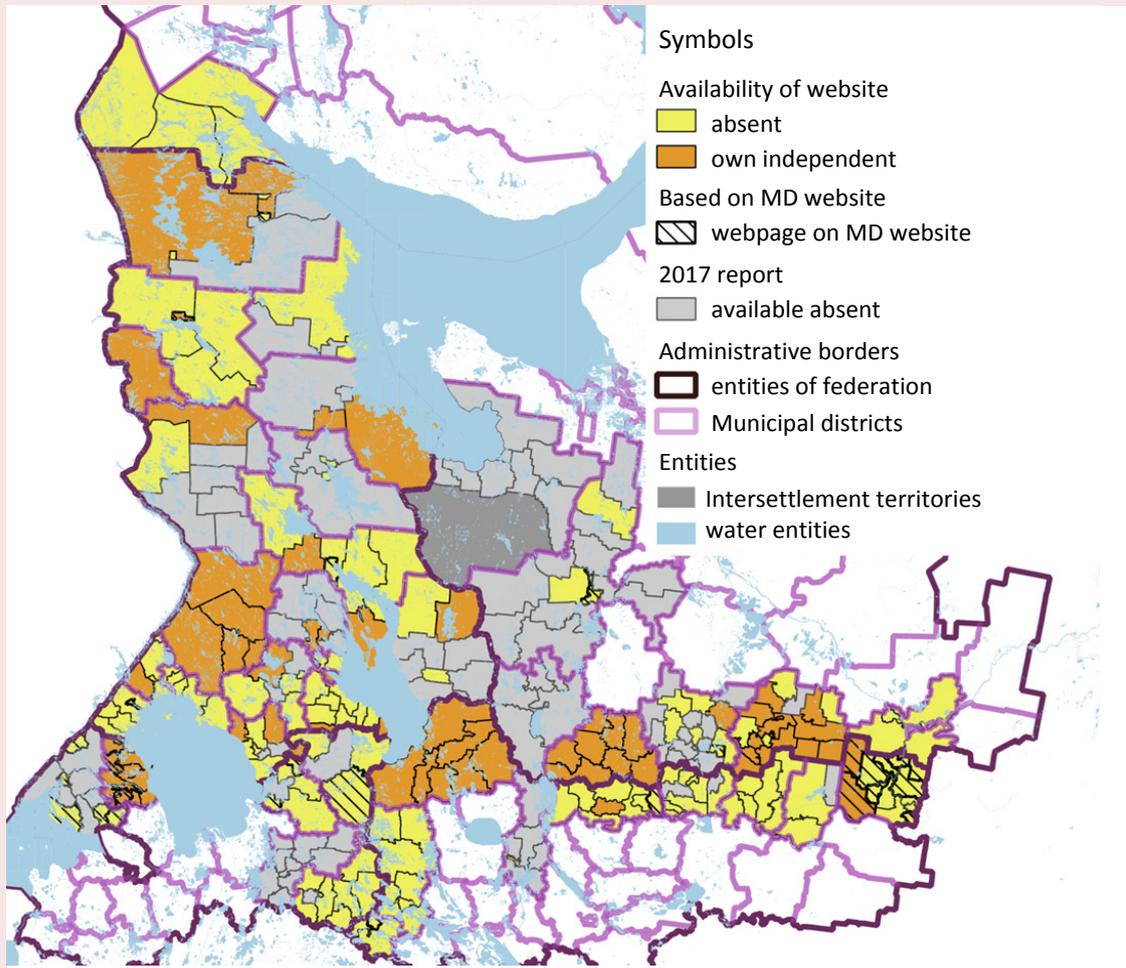
The most popular way of providing official information about a settlement is an own website: 214 out of 313 settlements have it. The second most popular way is a page on the website of a municipal district (80 settlements). 13 settlements use websites made on the basis of municipal district's website: this way of providing information is used only in the Leningrad and Arkhangelsk oblasts. There are also 6 settlements in these regions which do not provide information according to one of the above-mentioned ways (*Fig. 1*).

Figure 1. Ways of presenting official information about the settlement on the Internet



* MD – municipal district
Source: own compilation.

Figure 2. Interconnections between websites of settlements and municipal districts



Source: own compilation.

Two settlements in the Leningrad Oblast completely (Vyborg) and partially (Priozersk) transferred powers of the administration to the municipal district: this is the reason of absence of information there. Four settlements of Plesetsky Municipal District, situated in the Arkhangelsk Oblast, had only contact details of administrations' heads, which was not enough to include these municipalities in the group of settlements with a page on the municipal district's website.

The analysis of the degree of municipalities' websites integration shows absence of links for

transition from settlement's own website to the municipality's website in 85% of cases. The situation is slightly better in case of links to regional government Internet-portals: 92 out of 214 settlements' websites have this link. At the same time, it is possible to access 2/3 of settlements' websites by clicking on the links given on municipal districts' websites (Fig. 2). Some of the studied web-resources had broken links leading to old versions of settlements and districts' websites. However, there is an example of broader integration between resources: website of Vinnitskoe rural settlement situated

in Podporozhsky District of the Leningrad Oblast has links to Internet-resources of other settlements of this municipal district¹⁰.

Reports on the results of socio-economic development for 2017 (often these data are included in the report on the results of the work of the settlement's head) are available on the Internet-resources of 141, out of 313, studied settlements. If we add reports for earlier years, this number will be 216. It is impossible to ignore difficulties of searching and gathering necessary documents. First of all, they can be found on different sections of the website: "Documents"; "Texts of speeches"; "Reports"; "Administration"; "Head of the Settlement"; "News"; "Decisions of the Council", etc. Another problem – inconvenient navigation: you need to scroll through too many pages to find the right one¹¹.

Besides, these reports can be attached as supplementary material to the decision of the settlement's council on the report of the head: often the name of the file contains only the date and number of the decision. It should be noted that in a number of settlements, where there are no reports, only the decisions of the council are published on the website.

Local authorities barely use social services: links to groups in the social media "VKontakte"¹²

¹⁰ Links are clearly visible – they are located at the bottom of the main page of the official website of the settlement's administration. Available at: <http://винницы.рф/> (date of access: 12.08.2019).

¹¹ For example, website of Kaalamskoe rural settlement situated in Sortavala municipal district of the Republic of Karelia has the following structure of accessing required information: Main page / Local government and institutions / Structure / Local authorities of Kaalamskoe rural settlement / Administration of Kaalamskoe rural settlement / Work plans and reports. Available at: <http://admkaalamskoe.ru/msu/structure/organyi-mestnogo-samoupravleniya-kaalamskogo-selskogo-poseleniya/administratsiya-kaalamskogo-selskogo-poseleniya/planyi-rabot-i-otchetyi/> (date of access: 10.02.2019).

¹² In the Northwestern Federal District, this social media site is much more popular than "Odnoklassniki".

are given only on 15 settlements' websites; 11 of them are included in Velsky District of the Arkhangelsk Oblast. Taking into account the fact that information about 9 out of 11 settlements is presented very concisely only on the page of Velsky District, we can point out that a group in "VKontakte" is a free alternative to an official website for informing residents about current events and announcements¹³.

The collection of data about websites' development companies showed that local governments used the services of 29 different companies and 6 different website constructors. 43 websites did not have information about the developer. *Figure 3* presents the most common developers¹⁴.

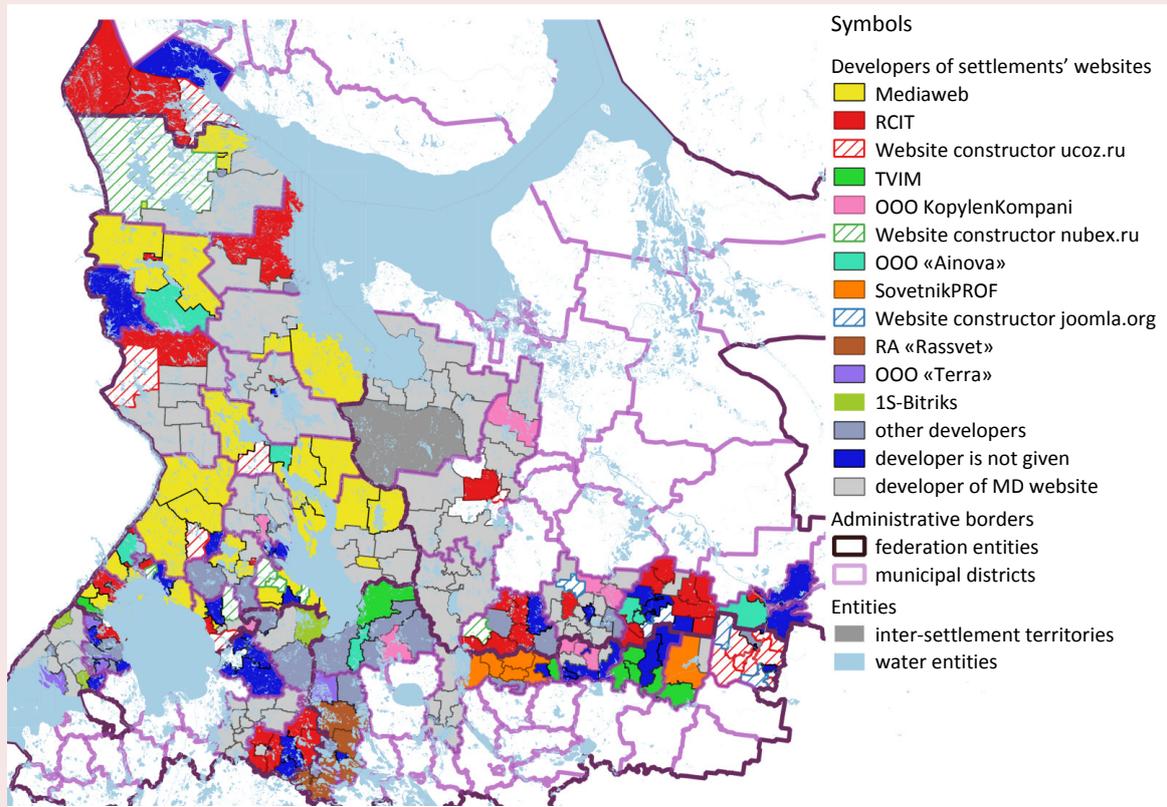
The most popular developers are "Mediaweb" and "RCIT" (34 and 33 websites, respectively). The first company is situated in Petrozavodsk and develops wide-range area websites only in the Republic of Karelia. The second company specializes in developing website of municipal institutions, and it works across all the country. Most of the developers, marked on the map, specialize in creating websites for government institutions and are registered in other regions of the Russian Federation. The cost of their services starts at 20 thousand rubles.

Comparison of settlements' websites showed that "border" settlements primarily take into account experiences of settlement from there area while choosing a website developer. It is interesting to look at border settlements in Pudozhsky, Kargopolsky, and Kirillovsky districts (Fig. 1): most of these settlements

¹³ For example, the official group of the administration of the "Pezhemskeye" municipality. Available at: <https://vk.com/mopezhma> (date of access: 12.08.2019).

¹⁴ Developers, mentioned less than 3 times, were named "other developers".

Figure 3. The geography of developing companies



Source: own compilation.

do not have websites, but all the necessary information is given on districts' websites¹⁵. At the same time, settlements in neighboring municipal districts have their own websites or websites based on district's Internet-portal.

Discussion

There are practically no settlements left in the studied territory that are not represented on the Internet. Many of them have their own websites, which allows us to say that there are favorable starting conditions for e-government development (one of key elements of digital

economy) at the municipal level. However, having processed the information about settlements, which is given on settlements' own websites and on municipal districts' websites, we see that this work is considered perfunctory by many municipalities: the information is usually poorly structured, it is not updated, and several sections of websites remain empty. Possibly, this problem is connected to lack of technical specialists due to insufficient funding and absence of administrative employees' necessary competences. It needs to be mentioned that maintenance of websites is not one of municipal authorities' priorities. That's why its development is residual for them, and it is conducted only to comply with formal requirements.

¹⁵ For example, information about Aleshinskoe rural settlement on the website of Kirillovsky District of the Vologda Oblast is available as a list of 32 sections. Available at: <http://kirillov-adm.ru/poselenia/aleshinsk/> (date of access: 12.08.2019).

It causes the problem of weak integration between municipal Internet-resources which interferes with formation of a single digital space. The situation with links from settlements' independent websites to districts' websites proves it. It is not mandatory according to formal requirements, but, in our opinion, these links should be present due to logic of public management. Another practical aspect of this problem's solution is improvement of settlement's identification by website's users (for example, tourists, investors): quite often it does not contain district's name; even a name of a region is sometimes absent. It is especially relevant in case of coincidences of settlements' names: in studied regions we found 24 of such coincidences. The most common (8 times) name of a settlement is Nikolskoye: we found four such settlements in the Vologda Oblast, two – in the Arkhangelsk and Leningrad oblasts.

The question concerning the best way to provide information about settlement on the Internet (especially, rural) also remains debatable. The acquired results show that own website is not the best option. In domestic and foreign works [23, 30] availability of independent municipality's website is called "an advantage", because, due to having first level domain name, it is better indexed in searching systems, and, therefore, and easier to find the necessary information about the settlement. Besides, direct access to a website ensures rapid loading of the necessary information. On the other hand, settlement pays for creation of own website, hosting, maintenance service, and web-administrator's wages.

Making a choice in favor of own website while having limited finances, settlement's authorities will prefer sticking to cheapest options: standard website or usage of website's constructor. The first one will, probably, have more or less clear structure [21] and basic

functions not including local specifics. The second variant allows creating more unique product with ill-conceived navigation and incorrectly working elements¹⁶. At the same time, even the first option does not guarantee fulfillment of all obligations from developing company concerning above-mentioned shortcomings and resource placement¹⁷.

At the same time, we should not forget that function of a RF municipal institution's website is strictly informational. Taking into account the fact that the average number of district's settlements in our sample is 4 (median - 7), creation of websites to ensure information openness in a typical area might cost more than 100 thousand rubles¹⁸. In this case, in our opinion, the most rational form of providing settlement's information on the Internet is a webpage on the website of municipal district. Experience of Italian peripheral areas, concerning introduction of e-government, shows that only joint efforts of small municipalities and concentration of their resources allow achieving the required level of service quality through economy of scale [18]. Instead of spending 100 thousand rubles on each settlement's website, it is possible to create well-working Internet-portal of a municipal district, which will make it possible to create settlements' websites in the same design [29] and place all important settlements' information in corresponding and structured sections. Obviously, cost of service and maintenance of one web-resource will be much lower.

¹⁶ A typical case when the free trial period of the add-in, which provides the version of the website for the visually impaired people, has ended, and this feature becomes unavailable without paying a subscription fee.

¹⁷ For example, website of Vytegorsky District of the Vologda Oblast has a second level domain name (<http://vytegra.munrus.ru>), and first level domain name (<http://munrus.ru>) belongs to Ugut settlement of Surgutsky Municipal District situated in Khanty-Mansi Autonomous Okrug.

¹⁸ 4 settlement websites and 1 municipal district website.

It does not mean that settlement's authorities must completely abandon work on informing population through the Internet by giving it to district's authorities. They still have to collect all official documents which will be uploaded on district's website: settlement's budget; information on income; resolutions and orders of settlement's administration; decisions of the settlement's council, etc. In addition to the settlement's page on the district's web-resource, a settlement group should be created in the most popular local social network, where the settlement's authorities will distribute important information: public hearings announcements; subbotniks; litter removal; restrictions concerning ice walking; bus schedule; changes in the current legislation, etc.

Currently, municipalities rarely use social networks, although it is quite simple and understandable way of communication, especially for young people. In comparison with development and maintenance of the website, social networks are charge-free (you pay only to employees) and easy to understand.

Lack of positive experience diffusion between neighboring municipalities of the RF bordering entities is a cause for concern: social networks are not used, successful ways of information placement, as well as forms and content of reports, are not borrowed. Despite the assertion that there are no barriers on the Internet, administrative boundaries, due to

lack of unified national standards in the digital information sphere, formed by municipal authorities are clearly distinguished and not blurred.

Conclusion

We may conclude that, despite all the problems, the digital space at the municipal level is almost completely formed, and it has a low degree of mutual integration of its resources. Absence of detailed national standards on presenting official information about settlements on the Internet makes current practice inefficient. At the same time, the suggested approach makes it possible to improve these efforts by finding the best practices in similar settlements outside the "home" region.

Future studies are related to a more detailed research of municipalities' digital development and detailed analysis of municipal authorities' websites. Better understanding of inter-municipal cooperation can assist in the formation of organization models and transformation of municipal e-government.

Despite above-mentioned restrictions, the results of this study might be used for digital policy planning and decision-making at the regional and municipal level. It might also be used for geographical analysis of digital spatial development, collection of relevant sociological information on settlements' problems, and enhancement of ICT implementation at the level of municipal authorities.

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Financial Tools to Develop Social Entrepreneurship*



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Abstract. Social entrepreneurship, being a relatively new activity for the Russian economy, requires the development of conditions and support mechanisms; this helps address social issues in society and also stimulates civic activity in this regard. Our paper classifies financial tools according to types of investors with different financial requirements, and analyzes the availability of these tools for the development of social entrepreneurship. We place special emphasis on mezzanine financing, social impact bonds, impact investing, and hybrid financing. In order to determine the availability of financial tools that are used to develop social entrepreneurship in Russia, we analyze financial statements of social entrepreneurs included in the catalog, formed by the Fund “Our Future”. The analysis used the coefficients of autonomy, current liquidity, profit (EBIT) and its growth rate in 2017. We have revealed that only nine of the considered organizations, which is less than 22%, meet the stated requirements and can apply for loans. Thus, we show that it is necessary to develop investment tools with lower financial requirements. Theoretical importance of our research findings consists in the fact that they expand theoretical and methodological provisions for studying social entrepreneurship in terms of systematization of financial tools used in international practice. The findings of our research are relevant in the practical aspect as well, because they help identify low availability of financial tools used in the Russian practice. The obtained data can be used to elaborate a strategy for development of this type of activity at different levels of management.

Key words: social entrepreneurship, financial tools, impact investing, social impact bonds, accessibility.

1. Introduction

Social entrepreneurship, being a relatively new activity for the Russian economy, requires close attention on the part of scientists and practitioners. The economic behavior of social entrepreneurs is significantly limited by a number of contradictions, which are due to the following factors: the combination of private and public benefits, economic and non-economic goals of social entrepreneurs, the question whether this type of activity belongs to the small business or the non-profit sector, the difference in the institutional environment for business development in Russia and in the West, from which the majority of experience in the development of this activity is borrowed, and the lack of special legal regulation of this activity. These contradictions create barriers to obtaining the necessary resources. It follows that the search for financial support is one of the key issues that need to be solved by the developer of the social and entrepreneurial project.

In an effort to achieve economic and social goals, social enterprises have to experience the impact of different values [1] and institutional rules. To explain these processes, the studies on social entrepreneurship use the term “bricolage” introduced by Lévi-Strauss and denoting the encapsulation of cultural hybridization processes. This concept was developed in the works of Strauss, who defined the process of bricolage as “the ability to make do with what is at hand” [2]. Di Domenico considers the distinctive feature of social entrepreneurship to be its ability to function in areas with underdeveloped private markets, and therefore it is forced to develop in limited conditions. Thus, the lack of resources urges social entrepreneurs to use all available means to create social values and deal with social issues [3]. In addition, of considerable importance is an institutional environment that is not designed to promote socially oriented activities. Social entrepreneurs face not only legal issues,

but also insurmountable rigid selection criteria; this leads to the fact that most startups in the social sphere are forced to stop their activities [4].

Referring to the foreign experience in the development of this type of activity, we should note that the success of social enterprises supported by associations such as the Schwab Foundation for Social Entrepreneurship and Ashoka: Innovators of the Public arouses interest on the part of state authorities and foundations. The development of support for social enterprises contributed to the development of the “social capital market” and a number of financial institutions focused on interaction with this category of entrepreneurs. However, in Russian practice, the tools that support social entrepreneurship are at the stage of their early development.

The goal of our present study is to systematize and analyze the availability of financial tools for the development of social entrepreneurship. To achieve this goal, we identify financial tools used in international and domestic practice; on the basis of the analysis of financial statements we determine a number of indicators characterizing the financial condition of social entrepreneurs in the Russian economy and draw conclusions about the lack of availability of existing tools.

2. Financial tools for the development of social entrepreneurship and their systematization

Social entrepreneurship as a special type of economic activity began to be formed in the 1970s and was developed primarily in the United States and Western Europe. Having analyzed scientific literature on this subject we identify four key research schools that reveal the essence of this phenomenon: social innovation school (J. Thompson, S. Alvord, J. Mair J., I. Martí [5]); social entrepreneurship school (J. Crimmings and M. Kiel [6], J. Emerson,

F. Tversky); EMES (W. Stephan, L. Ulaner, R. Spear, I. Vidal [7]) and the English school for the development of social entrepreneurship [8, 9]. In the framework of the American approach, which includes the first two schools, social entrepreneurship is considered primarily as a market economic activity that serves a social purpose regardless of the sector of activity and organizational and legal structure [10]. The European approach, which includes the third and fourth schools, is based on the development of the third economic sector that functions in areas where there was a lack of public services. In Western Europe, this led to the creation of new social enterprises by civil society actors; while in the United States, social activities were carried out by already existing organizations [9]. In European countries, social enterprises are seen by the state as an example of inclusive, sustainable development that can support the public sector in addressing social issues. Thus, to date, there is no single interpretation of the term “social entrepreneurship”, and this fact greatly complicates the effectiveness of discussions about the goals, objectives and directions of development of this type of activity [9].

The Russian experience in the development of social entrepreneurship has incorporated both American and European traditions. In this regard, organizations that are social enterprises include both small and micro businesses and socially oriented non-profit organizations. This phenomenon urged us to use such terms as social enterprise, social entrepreneur, socially oriented enterprises, startup in the social sphere (the life cycle of organizations in the Russian Federation in this area often does not exceed 3–5 years), social entrepreneurship, social projects and initiatives as synonymous forms describing the subjects and forms of social entrepreneurship.

In determining social entrepreneurship, we shall rely on the approach used by the Fund “Our Future”, which is due to the fact that in this study we use the catalog of social entrepreneurs formed by this organization. Thus, social entrepreneurship is interpreted as an innovative activity aimed at addressing or mitigating social issues on the basis of self-sufficiency and financial stability. It should be noted that these requirements arise in connection with the dual goals of social entrepreneurs, which include not only societal but also commercial goals, the implementation of which helps receive and attract additional resources [11].

The presence of positive external effects of this type of activity necessitates the involvement of both state and municipal and private resources, which is confirmed by the wide experience in supporting social entrepreneurship in various countries [12]. Support for social entrepreneurship consists in expanding the relevant regulatory framework, creating institutions that stimulate the activities of citizens in this area, providing consulting, information, educational services, as well as directly in the development of financial instruments that help obtain additional funds for the implementation of an idea that is being designed.

The combination of social and commercial goals in the implementation of this type of activity expands the list of financial tools of social entrepreneurs. Being the providers of social services, entrepreneurs can apply for subsidies for the implementation of this type of activity, apply to credit institutions, attract investors by becoming participants in public-private partnerships, participate in programs conducted by various support funds, and attract funds from proactive citizens. However, in practice, due to the special nature of this type

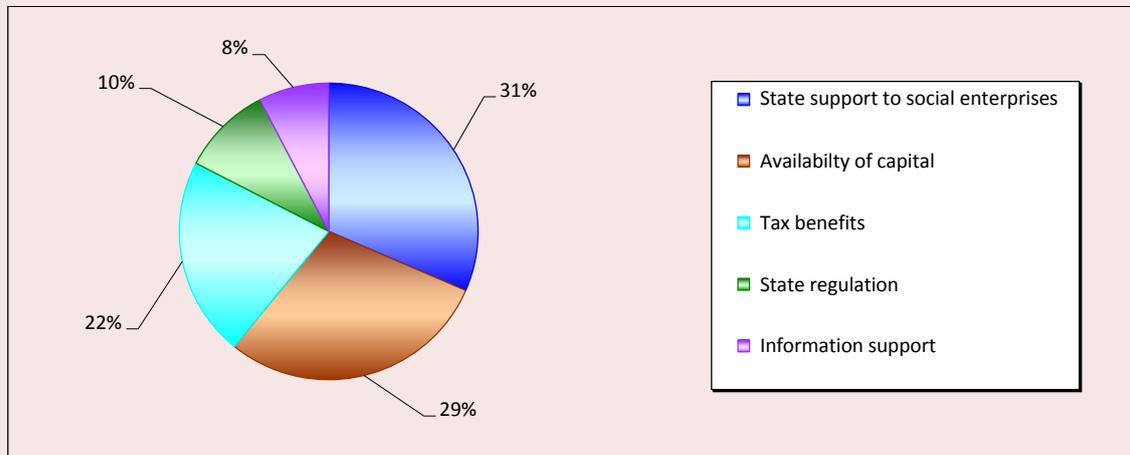
of activity, social entrepreneurs face a number of restrictions that make these tools poorly accessible.

According to the Bank of England, the unavailability of financial support is the most important obstacle to the development of social entrepreneurship. The research conducted in 2013 in the UK shows that 40% of social enterprises see lack of access to finance as a significant barrier to a startup in the social sphere, since socially oriented organizations are forced to cover not only the costs of management activities, but also the so-called “social impact costs”, which include the costs associated with low productivity, maintaining communication with public services, which also creates difficulties in satisfying financial requirements.

According to the reports of the SEFORIS research consortium, a survey of social entrepreneurs in Russia for 2015–2016 showed that the most popular measures to support social and entrepreneurial activities are the preservation of the federal program of support for NPOs (28%) and ensuring the availability of capital (27%) (*Fig. 1*).

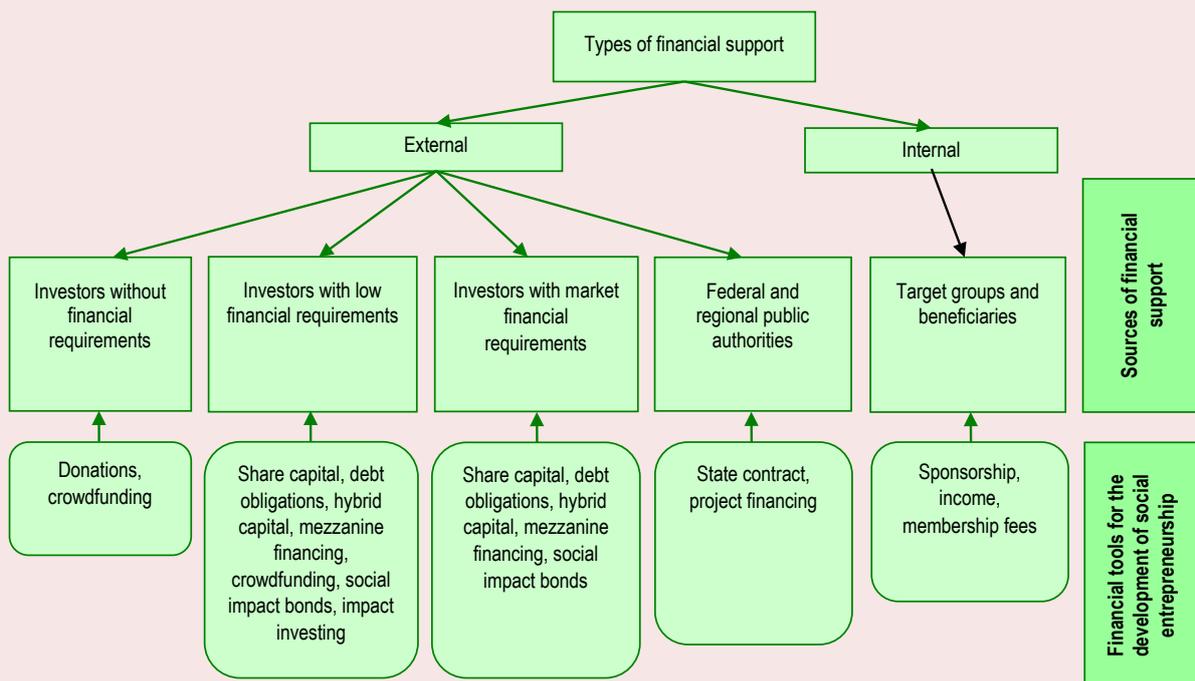
As for the systematization of financial tools for the development of this type of activity, it is advisable to allocate external and internal sources of financial support. External funding is provided in the form of charter capital, borrowed capital or donations. Entrepreneurs can use these investments as long-term investments and cover negative operating cash flows. Funds are provided by investors and are differentiated according to the financial requirements of these investors. Internal funding consists of cash flows received by social entrepreneurs in the process of entrepreneurial activity. Depending on the specifics of the activities of socially oriented organizations and the financial capabilities of the target groups,

Figure 1. Demand for measures of state regulation of social entrepreneurship in Russia



Source: own compilation according to SEFORIS. Cross-Country report. 2016. Available at: https://static1.squarespace.com/static/56d2eebbb654f9329d20e/t/58078c90414fb506d0e5ff33/1476889747238/Cross-country+report_6.pdf

Figure 2. Types of financial support for the development of social entrepreneurship



Source: own compilation on the basis of the review of scientific literature, domestic and international reports.

these goods or services are paid for either by the target group itself or by third parties – public or private organizations.

Figure 2 presents the results of systematization of financial tools by type of investors and their requirements.

Investors who do not expect a financial return on their investments may be funds or sponsors. J. Andreoni suggests several possible reasons for motivating philanthropic behavior: such organizations receive publicity and obtain privileged access to resources due to the good reputation of the sponsors [17]. Donations are generally provided by foundations or individuals who do not receive control or a share in the company, and are non-refundable. However, this type of funding is available only to a certain type of projects. Scientists usually consider donations as a separate funding tool, because it meets accounting standards, as well as the economic realities of social entrepreneurs, who, as a rule, do not include it in the business model, but receive donations from classical or venture funds. Since donations are voluntary and do not require commitment, this tool is available to social entrepreneurs. Thus, donations can come from foundations aimed at providing support to social entrepreneurs, various organizations, individuals, and also as a result of crowdfunding.

Crowdfunding emerged as a separate form of support for social projects in order to develop creative projects in the field of cinema, theater, music, etc. However, over the past decade, many Internet platforms have emerged that host other social initiatives, including social entrepreneurship projects. According to Massolution, there are four types of crowdfunding: equity, lending-based, rewards-based, and donation-based. In equity crowdfunding, sponsors receive a stake in the capital of the company they invest in. In lending-based crowdfunding, investors provide a loan and obtain the opportunity to receive a return on the investment with interest. In rewards-based crowdfunding, sponsors receive goods or services in exchange for their

investment. These rewards can be presented in various forms, such as public recognition, pre-sale product preparation, or limited series of the product. Donation-based crowdfunding refers to investments in projects or firms with social goals. Donors receive neither monetary nor material rewards for their investments¹. Thus, this type of crowdfunding does not provide a return; this fact encouraged J. Cox to classify this type of crowdfunding as a form of digital philanthropy [15].

The second group of investors (investors with low financial requirements), reduce their expectations of financial returns and try to find a balance between financial and social returns, also known as “blended value proposition” [18]. Thus, philanthropic capitalists use financial tools to maintain the entrepreneurial orientation of social entrepreneurship [19]. This approach to investing originates in the organization of venture funds that use venture capital methods to support social entrepreneurship [20].

Loans can be used by social entrepreneurs to finance long-term investments or to cover working capital needs. Debt capital, on the one hand gives entrepreneurs flexibility, but on the other hand limits innovation and risks, since financial obligations imply the presence of a business model with a low level of risk [21].

Contributions to the equity capital, as well as loans, are used to finance long-term investments and working capital needs, and do not involve repayment, but entail the provision of voting rights and part of the profits to the investor. Among followers of social entrepreneurship, there are different points of view on the distribution of profits. Thus,

¹ Massolution. Massolution Crowdfunding Industry 2015 Report. Available at: <http://reports.crowdsourcing.org/index> (accessed 7 November 2018).

M. Yunus denies the payment of dividends [22], while a number of researchers admit a limited distribution of profits [23]. This group also includes impact investing, mezzanine financing, hybrid financing and social impact bonds.

Impact investing refers to investments that promote social change. The term itself was coined in 2007 at a meeting of the Rockefeller Foundation, whose goal was to find a way to create a global industry focused on investment with a positive social and environmental impact [13]. At the same time, the priority of these investments is to create a measurable social impact, and the financial return is considered by investors as additional and can range from 0% (of the debt amount) to the yield at the market rate adjusted for risk [14]. However, according to a 2019 survey of impact investors from European countries, the United States, and Canada, about two-thirds of respondents (66%) are focused on return on investment at market rates, and the remaining third is divided between those who focus on income closer to the market rate (19%) and those who pursue the goal of preserving the capital (15%)². The main participants in the impact investment market on the part of donors are individuals, pension funds and venture philanthropy. In various countries of the world this initiative is supported by the state. For instance, in 2013, UK Prime Minister D. Cameron set up an impact investment group from the G8 countries; the group is working in cooperation with the OECD to promote impact investment in all countries in the group. In addition, the UK has a “Large non-governmental capital” program, and the French government is implementing the “90-10” program, which obliges enterprises to invest

10% of employees’ savings in state-recognized solidarity societies or income distribution funds. In 2013, the European Commission adopted the Regulation on European Social Entrepreneurship Funds and created its own financial support instrument called the Social Impact Accelerator. According to the 2019 survey, respondents manage the assets worth 239 billion US dollars in impact investing.

Social bonds (or social impact bonds – SIB) are private investments under government guarantees to provide social services to a specific target group³. SIB is a security that contains a loan agreement based on certain mutually beneficial conditions for interaction of several organizations engaged in different activities, but seeking to achieve a certain socially significant result. In its simple original form, SIB is a bond loan that is organized by an investment bank and aims to raise charitable funds. The money that will be received in the course of this loan should be used to finance projects. An important party to this agreement is the state, which undertakes the obligation to repay investors their costs, as well as to pay a bonus in case the funded program is successfully implemented. However, if the results are not achieved, then no refund is provided. Therefore, SIB bonds are also called “pay-for success” bonds [14].

In the foreign practice of financing social entrepreneurship there is also the concept of mezzanine capital. This type of investment is a combination of equity and debt capital with fixed interest rates and repayment obligations. Mezzanine capital is flexibly structured and entitles the investor to receive profit in case of financial success. However, as well as obtaining

² Annual impact investor survey. 2019. Available at: <https://thegiin.org/research/publication/impinv-survey-2019>

³ Social finance: from venture philanthropy to impact investments. *Mir sotsial'nogo predprinimatel'stva*, 2018, no. 9. Available at: <https://www.hse.ru/data/2018/11/18/1140955055/Issue%209%202018.pdf>

the loan, it assumes a stable financial business model and low risks.

There are also specialized tools for financing social entrepreneurship in the form of hybrid capital that combines elements of equity or debt capital and donations. This type of funding includes reimbursable grants and non-refundable loans.

A third group of investors expects financial results from investing in social entrepreneurship at the market level. According to the analysis, most of the social entrepreneurs belong to the micro-business with an average number of employees being 1–2 people; this imposes restrictions on attracting investment⁴. The same reason acts as a barrier to the participation of organizations in government contracts.

From a legal point of view, social entrepreneurs have access to all financial tools of financing the commercial sector, such as contributions to the authorized capital, debt and mezzanine capital, as well as the non-profit sector, including loans and donations⁵. However, as evidenced by existing statistics, in practice the financial situation of social entrepreneurs and their short term of operation do not allow them to obtain resources on market conditions.

In general, there are two main differences between the financing of commercial and socially oriented enterprises. In the commercial sector, there is a clear correlation between the interest rate on the loan and the riskiness of investments, but this rule may not apply to the financing of a social enterprise, since investors are willing to reduce their financial

requirements in order to obtain a social result. In this regard, interest-free or reduced interest rate loans and borrowings are not conditioned by the risks of social entrepreneurship. In addition, business entrepreneurs tend to prefer equity capital and internal financing in contrast to social entrepreneurs who have to search for opportunities to receive subsidies or donations [24]. At the same time, potential investors have limited opportunities to obtain profit, since its distribution to participants is either prohibited or strictly limited [25].

One of the forms of support for social entrepreneurship is the performance of services under a state contract. In Russia, Saint Petersburg organization “Nochlezhka” functions according to this scheme. It implements the project “Transit”, in the framework of which it sends home homeless people from other Russian regions. Part of the funding comes from the city program “Comprehensive measures aimed at preventing offenses in Saint Petersburg”. However, this program receives funding only from February to November.

In the Russian practice, the main source of financing for social entrepreneurship is income from the sale of goods and services (60%). Support in the form of grants and donations rank second and third – 23 and 12%, respectively. Investor support and loans do not exceed 4 and 1%, respectively. For comparison, it should be noted that in countries with developed social and entrepreneurial activities – Sweden and the UK – grants make up 36 and 30%, respectively, and loans – 4 and 1%, respectively. In general, the size of grants for social entrepreneurship in Russia is one of the lowest among the European countries under consideration. The use of loans for the development of this type of activity is not a common method of raising funds; this

⁴ Seforis. Cross-Country report. 2016. Available at: https://static1.squarespace.com/static/56d2eebbb654f9329ddb20e/t/58078c90414fb506d0e5ff33/1476889747238/Cross-country+report_6.pdf

⁵ Achleitner A., Heinecke A., Noble A., Schöning M., Spiess-Knafl W. *Social Investment Manual*, 2011. Available at: <http://ssrn.com/abstract=1884338>.

value does not exceed 4% of the total share of financing of socially oriented organizations.

For effective business development, social entrepreneurs need to work out a financing strategy that covers not only current costs, but also promotes scaling. Current operating expenses are usually covered by internal financing (regular revenues), while external sources are used for scaling [16].

Since there is no legal framework for this type of activity in Russia, social entrepreneurs mainly use three legal forms: individual entrepreneur, limited liability company, and non-profit organization. Some social entrepreneurs belong to small and medium-sized businesses, and their activity is regulated by relevant legislative acts, in particular Federal Law 209 “On the development of small and medium-sized businesses in the Russian Federation”. The other part is represented by non-profit organizations.

Currently, the development of social entrepreneurship in Russia is provided for by several regulatory documents. First, infrastructure support is indicated in the Road Map “Support for access of non-governmental organizations to the provision of services in the social sphere”, approved by the Resolution of the Government of the Russian Federation dated 08.06.2016 No. 1144-r. The Road Map contains the following provisions:

- increasing the share of non-governmental organizations in the provision of social services;
- creating conditions for improving the quality of services in the social sphere;
- development of support for socially oriented non-profit organizations and social entrepreneurship organizations;
- development of public-private partnership mechanisms in the social sphere.

Within the framework of this project, social innovation centers (SICs) were established in constituent entities of the Russian Federation; the main competencies of SICs are as follows:

- training of social entrepreneurs through the organization of the school of social entrepreneurship;
- conducting analytical studies on the state of the social sphere;
- organizing communications between business and authorities on the development and implementation of social innovation;
- consultations with the legislative authorities on introducing amendments to the regulations that enshrine the use of social innovations at the system level.

On the basis of SICs there are four main platforms for social entrepreneurship:

- schools of social innovation;
- incubator of social projects and initiatives;
- best practices aggregation platform;
- resource support platform.

Thus, in the Sverdlovsk Oblast, the resource support platform functions with the help of investments from the Sverdlovsk venture fund and the Sverdlovsk investment fund. At the same time, the Sverdlovsk venture fund has the following requirements for investment projects: the minimum size of investments is 1.5 million rubles; the fund’s return on participation in the project is not less than 12% per year and the project period is not more than five years; these are quite high requirements for social entrepreneurs who are at the stage of startup or formation. In addition to SIC funds in Russia there are the Fund “Our Future” and the Fund for Social Entrepreneurship Support (FSES), which provide soft loans to social entrepreneurship.

Table 1. Examples of programs to support social entrepreneurship in Russia

Fund	Name of program/contest	Type of support	Sum	Conditions
Fund for Social Entrepreneurship Support		Loan	Determined individually	Not more than for 3 years, 6.5%
“Our Future”	“Impulse of Good” award	Bonus	2.5 million rubles	On the terms of the competition
“Our Future”	“Social Entrepreneur” competition	Interest-free loan	From 2 million to 40 million rubles	Interest-free loan
SAP Company	Competition of social projects	Bonus	450,000 rubles	On the terms of the competition
Source: own compilation.				

At the same time, support for social entrepreneurship can be implemented with the support of large corporations (*Tab. 1*).

The Fund “Our Future” is one of the largest funds providing loans and grants for social entrepreneurs in the Russian Federation. According to the official regulations on the competition of projects for the provision of interest-free loans “Social Entrepreneur”, the following requirements are imposed on the participants:

- 1) the presence of a measurable socio-transformative impact on the population of a region or group of regions;
- 2) the impact of the project should cover at least 1,000 people per year;
- 3) the availability of confirmed indicators of social and transformative impact during the company’s operation;
- 4) tested sustainable business model of the project;
- 5) at least two years of profitable operating activity of the applicant implementing the project;
- 6) direction of investments in the development of the company⁶.

⁶ Regulations on the competition of projects “Social Entrepreneur” from 05.02.2019. Available at: <http://konkurs.nb-fund.ru/documents/>

In addition, an essential condition for the provision of an interest-free loan is the provision of collateral and/or guarantee of third parties. At that, the total cost of collateral must exceed the amount of the requested financing by at least 10% (excluding VAT). These requirements are quite high and limit the activities of social entrepreneurs.

3. Research methodology

The methodology of this study is presented as follows. We analyze of the financial statements of 42 social enterprises operating in various economic entities and determine the availability of financial tools for the development of social entrepreneurship in Russian practice. In order to receive funds, social entrepreneurs have to show their economic viability and financial stability, which is indicated in the requirements for competitions and grants. In this regard, in the course of further analysis, we used the autonomy coefficient as an indicator of financial stability, calculated as the ratio of equity to total capital; for the analysis of profitability, we used the values of EBIT (earnings before interest and taxes) and their growth rate in 2017 compared to the previous year. This allowed us to track not only the actual values of profit in the period under review, but also to take into account the dynamics of its changes. In addition, the analysis of social entrepreneurs took into

account the indicator of current liquidity, calculated as the ratio of current assets to short-term liabilities and showing the solvency of the organization under consideration. The importance of liquidity indicators is explained by the interest of creditors in the company's ability to repay debt in the near future.

When analyzing the credit worthiness of organizations, we relied on the methodology of Sberbank of Russia (approved by the Committee of Sberbank of Russia on loans and investments dated June 30, 2006 No. 285-5-r), as well as the requirements of the Fund "Our Future".

We used the catalogue of social entrepreneurs of the Fund "Our Future" for 2017 as the information base for our research, because it is almost the only source of information about social entrepreneurs, including organizations located on the territory of the Russian Federation in various economic entities. The Fund does not set requirements for organizational and legal forms of social entrepreneurs, so in this sample there are both individual entrepreneurs and legal entities in the form of limited liability company, closed joint-stock company, autonomous nonprofit organization, interregional charitable non-governmental organization, etc. The data on financial statements (form 1 and form 2) of these enterprises were provided by the information system "Kontur-Fokus". The analysis of the data for 2017 is due to both the limitations of this information system and the time of formation of the catalogue of social entrepreneurs.

It should be noted that these organizations were systematized in the following areas: medicine and medical technology, culture and art, promotion of self-employment, education, care for the elderly and children, ecology, and employment of people with disabilities.

4. Research results

Our analysis of financial statements considered such indicators as current liquidity ratio, EBIT, profit growth rate and autonomy ratio. The analysis showed high current liquidity indicators in such type of activity as the provision of services in the field of employment of vulnerable segments of the population; this fact is most likely due to the lack of borrowed funds, since this type of activity does not involve large investments. We should note that for a more visual presentation of the results obtained we excluded the organization "Nochlezhka" and the project "Dospekhi" (Fig. 3) from the analysis, because their values significantly exceed the standard ones. The standard value for this indicator is 2; only 15 organizations have achieved it.

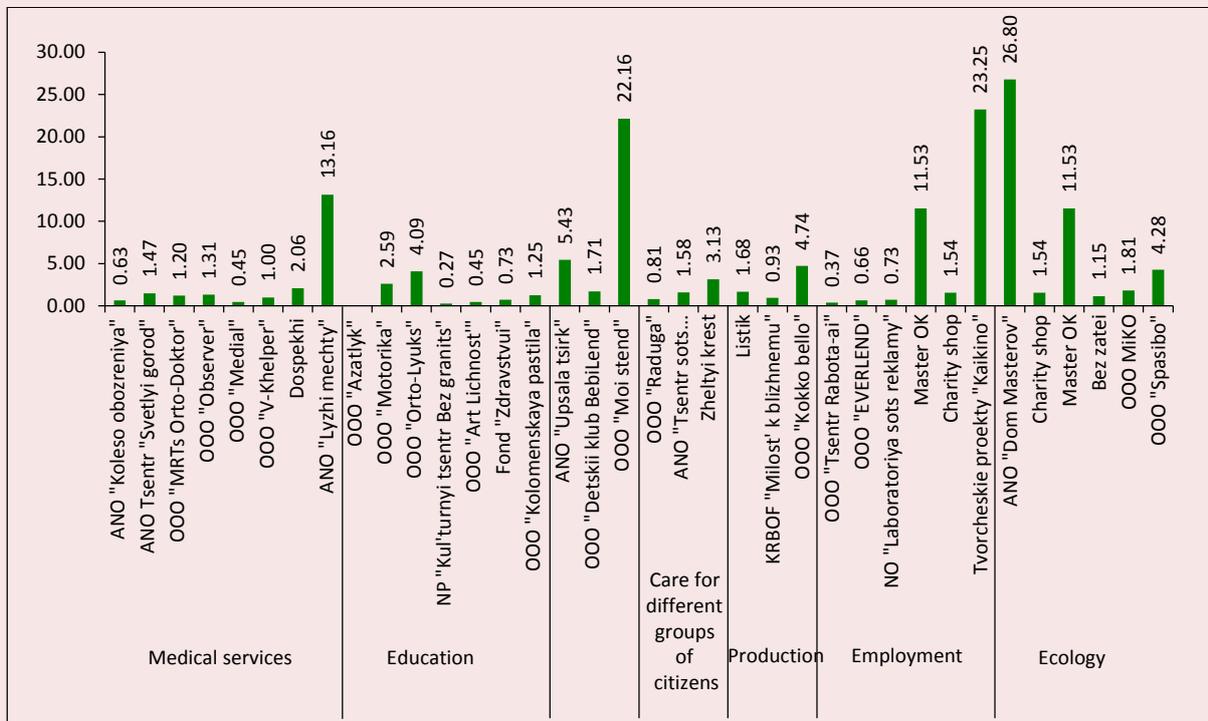
According to the analysis of profitability presented in Figure 4, where each of the types of markers characterizes a separate field of activity, we see that the most stable development is observed in the field of medical services (square marker). This conclusion is made based on the position of the corresponding points in the first square. It should be added that the Ox axis represents EBIT values, while the Oy axis represents the profit growth rate.

Figure 5 shows the values of autonomy coefficients in various fields of activity.

The normative value for this indicator is 0.55 (for education – 0.45). Thus, among these organizations, only 11 are financially stable.

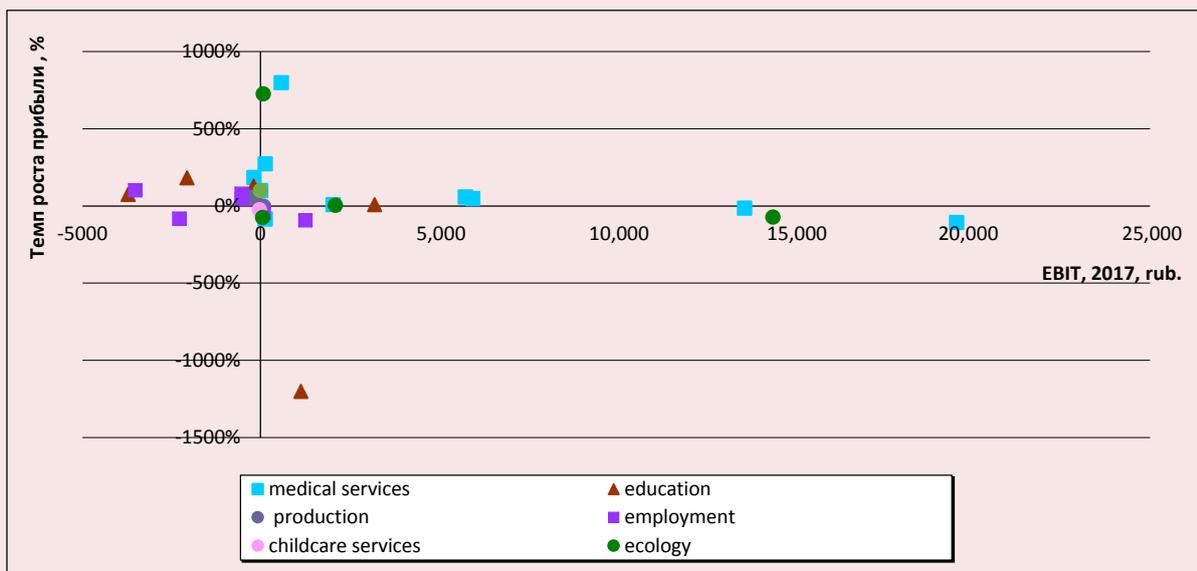
As we noted above, when analyzing the credit worthiness of organizations, we relied on the methodology of Sberbank of Russia (approved by the Committee of Sberbank of Russia on loans and investments dated June 30, 2006 No. 285-5-r). This technique takes into account several indicators ranked by weight. The most significant indicator is the current liquidity ratio

Figure 3. Values of indicators of current liquidity of social enterprises



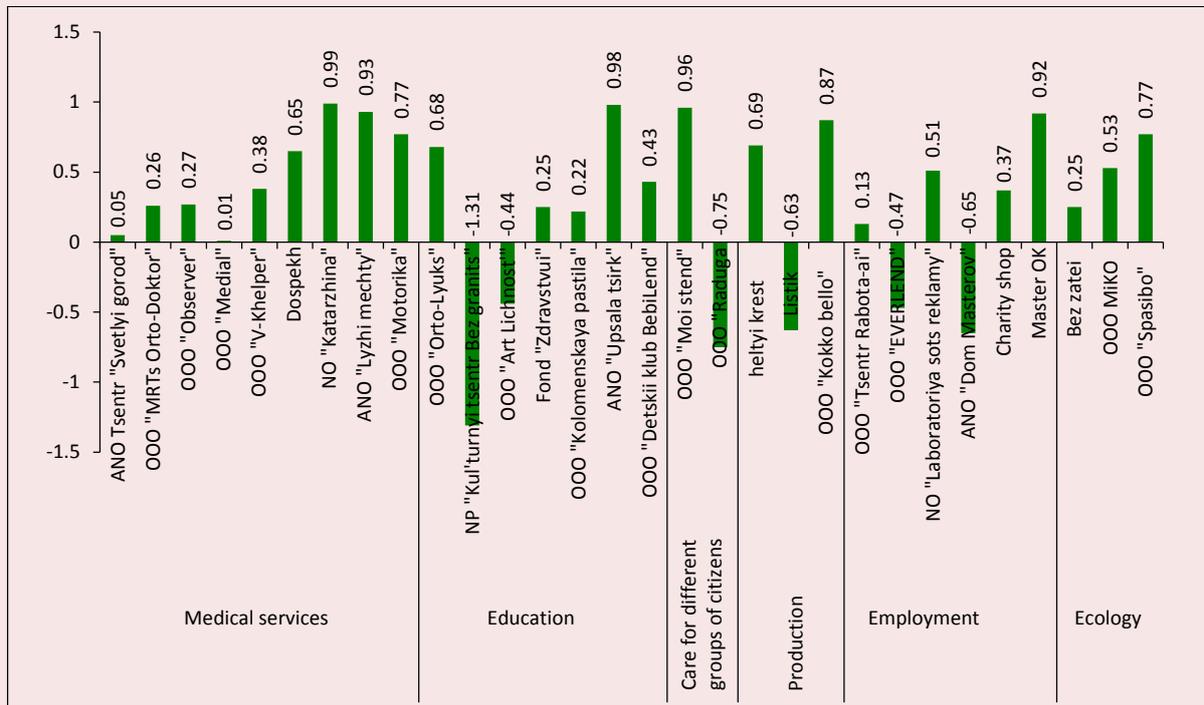
Source: own compilation on the basis of financial statements.

Figure 4. The ratio of EBIT and its growth rate for social entrepreneurship in various spheres of activity



Source: own compilation on the basis of financial statements.

Figure 5. Values of social enterprises autonomy coefficients



(0.4), and the less significant – the absolute liquidity ratio (0.05). According to the analysis, all organizations with current liquidity above 2 have a high chance to get a loan according to Sberbank methodology as well. Thus, according to Figure 3, the highest rates are observed in organizations providing employment services, medical services, and services in the field of education. However, according to this methodology, only five of the analyzed enterprises have a high chance of obtaining a bank loan. Thus, other organizations are forced to seek funding from other sources.

The Fund "Our Future" puts forward a requirement for social entrepreneurs to have financial stability and break-even activity over the past two years. According to the financial analysis based on the autonomy coefficient, growth rate and profitability for 2016 and 2017, we see that only nine organizations out of 42 meet these requirements, and three out of nine

meet the requirements of the bank as well. Hence, we can conclude that the majority of socially oriented organizations cannot obtain loans, even on preferential terms. In this case, social entrepreneurs can take advantage of special support measures, in particular grants, subsidies, etc. However, in practice, the inability of the social entrepreneur to meet the stated requirements makes these support measures difficult to access.

5. Discussion of results

The theoretical review, which made it possible to identify financial tools for the development of social entrepreneurship in international practice, and the analysis of financial and economic activities of domestic social enterprises indicate the need to consider and discuss the possibility of spreading the development of funding sources with low financial requirements in the Russian practice.

Social entrepreneurs, according to the ZIRCON survey for 2018, note that the motives for creating a socially oriented organization include the desire to implement a certain idea (71%) and the desire for self-sufficiency and independence (71%). Since social entrepreneurs are forced to act in market conditions, they need to maintain competitive advantages and fight for the resources of sponsors and grantees.

Resource mobilization plays an important role in the formation of entrepreneurial activity at the stages of its formation and development, but since most entrepreneurs do not have the opportunity to finance their organizations from their own savings, access to financial resources remains one of the most pressing issues that need to be addressed [2].

For organizations operating in the interest of the public, the problem of access to resources is further aggravated by their limitations and by poor development of institutional mechanisms, which is particularly noticeable in developing

countries [26]. The social mission does not allow organizations to set market prices for their goods and services; in addition, restrictions on the distribution of profits (lack of dividends and shares) reduce the opportunities for social entrepreneurs to access financial resources. Thus, the duality of the goals of social entrepreneurs limits the resource pool of financial tools.

Since socially oriented enterprises must have a period of profitable operating activity of at least two years, startups cannot apply for this method of support. Funding sources available to social entrepreneurs include grants, donations, and crowdfunding. As for the funds that provide interest-free loans, we should also note that there are high requirements to these funds; this fact reduces their availability for the majority of the organizations under consideration. The results of the analysis of the availability of financial tools for the development of social entrepreneurship, their advantages and disadvantages are given in *Table 2*.

Table 2. Advantages, disadvantages, limitations and availability of financial tools for the development of social entrepreneurs in Russia

Funding source	Financial tool	Advantages	Disadvantages	Limitations	Availability
Investors who do not make financial demands	Donations, crowdfunding	Non-repayable financial means	High search costs	There are no official limitations	Available
Investors with limited demands	Debt obligations, interest-free loans	Zero or reduced rates	Need to meet certain requirements	Requirements of a sustainable business model, profitable operating activities	Available with limitations
Investors with market requirements	Loans at market value, contributions to authorized capital, venture investment	A large number of offers	High interest rate	High requirements	Virtually inaccessible due to high requirements
Public funds	Payment for services, project financing	Receiving subsidies/grants	Limited time offer	Need to participate in a contest	Low availability due to limited supply
Target groups and beneficiaries	Sponsorship, profit, membership fees	Raising additional funds	High costs of search/attracting	Determined by the level of trust	Limited supply due to the lack of institutions

Source: own compilation based on the analysis we conducted.

Currently, social entrepreneurs receive quite a large amount of support in the form of consulting services and training. At the same time, financial support does not become less important. In Russia, there is an inverse proportion of the availability of loans and training. The list of organizations that provide affordable loans, subsidies and other funds is extremely limited. In Russia, there are also no public or private social investment agencies, social banks, and not enough socially oriented microfinance institutions⁷.

One of the directions for development of financial tools is the focus on international experience, in particular the introduction of impact investment, social impact bonds, mezzanine investment and the spread of crowdfunding. However, the implementation of instruments such as SIB (social impact bonds) and impact investing may face a number of limitations. In the case of bonds, state regulation is necessary, namely the development and implementation of legal support, which slows down the process of introduction of this tool.

In addition, due to the complexity of its application, this financial tool has high risks of not being implemented in sufficient volume. Impact investing is a more appropriate tool because it does not involve government participation. The initiative of large businesses and private investors who have the desire and ability to support socially important projects is enough to use this tool. In this case, effective interaction will be determined by institutional agreements or the quality of informal institutions in the absence of the latter.

⁷ Social finance: from venture philanthropy to impact investments. *Mir sotsial'nogo predprinimatel'stva*, 2018, no. 9. Available at: <https://www.hse.ru/data/2018/11/18/1140955055/Issue%209%202018.pdf>

The second direction of social entrepreneurship development is seen in the dissemination and popularization of crowdfunding as a new model of development and financing of projects, and also in attracting funds from the beneficiaries of their services.

Thus, the problem of financing and sustainable development of social entrepreneurship is extremely important; this statement is confirmed by the need for entrepreneurs to find sources of financial support and simultaneously implement their social mission. To date, Russia has limited opportunities to finance socially oriented projects, that is, support from the top is limited; and the very financial condition of organizations does not allow them to use external financial tools.

Conclusion

In this article, the goal of which was to systematize and analyze the availability of financial tools for the development of social entrepreneurship, we obtained the following results.

First, financial tools for the development of social entrepreneurship were grouped according to types of investors with different requirements. It is shown that the driver of the development of social entrepreneurship can be tools that are not currently used in the Russian practice. These tools include mezzanine financing and social impact bonds. Their application indicates that the development of this type of activity involves not only proactive citizens that face a social problem, which is the most common practice, but also authorities at different levels of administration. Support and stimulation of this category of entrepreneurs, provided that the institutions of trust are being developed, will act as a significant catalyst in addressing social issues.

Second, based on the analysis of financial statements of social entrepreneurs supported by the Fund “Our Future”, we show the low availability of such tools as loans and borrowings. This conclusion is made as a result of the analysis of the coefficients of autonomy, current liquidity and profitability of the social entrepreneur. The highest rates are typical of the organizations providing employment services, medical services, and services in the field of education.

Third, we analyzed the availability of financial tools for the development of social entrepreneurs in the Russian economy. The analysis has revealed that only 7% of social entrepreneurs that are on the list under consideration can meet the requirements of Sberbank of Russia, and 22% have a chance to get a loan from the Fund “Our Future”. All of the above indicates an urgent need to develop affordable financial tools of social entrepreneurship, which in this article are designated as financial tools with low requirements.

Our approach to the analysis of financial tools for the development of social entrepreneurship has allowed us to demonstrate the low availability of existing measures of financial support for social entrepreneurs and

to substantiate the possibility of introducing new mechanisms that are successfully used in international practice.

Theoretical significance of the results we have obtained consists in the systematization of financial tools used in international practice to support social entrepreneurs. Practical significance of this study consists in the fact that it identifies the low availability of financial tools used in the Russian practice for the development of social entrepreneurship. The obtained data can be used in the elaboration of a strategy for the development of this type of activity at the federal, regional, and municipal levels. In particular, the adoption of the decision on the development of social entrepreneurship by increasing the availability of existing financial tools and the development of new ones will contribute to the elaboration of special support mechanisms and will allow different categories of citizens and investors to be involved in this type of activity. The hybridity of the goals of social entrepreneurs, which justifies the emerging limitations in obtaining resources for the implementation of projects, requires the active involvement of civil society. Building new mechanisms of interaction will also form a new vision of meeting social needs in society.

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Working Hours in Russia: Employment Models and Choice Factors*



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Abstract. The paper classifies and investigates working hours in order to identify the structure of their distribution and factors determining their distribution in Russia. Assessment of the situation regarding working time is relevant in conditions of non-standard employment when it is necessary to search for ways to improve productivity. Our article adds to well-known publications that focus on the analysis of working hours and miss the important point that the same number of working hours can be implemented under different working time schemes, which entails, for example, different options for regulation and protection of employees' rights. We design a conventional standard model of employment in Russia based on the frequency of occurrence of each of the three time parameters of employment (the number of working hours per week and per day, and the number of working days per week). We find out that this model represents a 40-hour work week with 5 working days and 8 working hours per day. According to the regression analysis of the microdata of the Russian Longitudinal Monitoring Survey – Higher School of Economics (RLMS-HSE), we identify factors that increase the probability of employment under this

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model, namely: availability of an employment contract, work in companies with state participation, employment in management bodies. While regional trends remain heterogeneous, the conventional standard model continues to spread, but it has not yet become the predominant model of working hours. We show that the growth of balance in the use of working hours is accompanied by processes that do not contribute to economic competitiveness, evenness of regional development and the quality of human potential in Russia. The results we obtain enrich the knowledge about the actual working time schemes used in Russia and can serve as a basis for making substantiated decisions to identify the reserves of working time and find ways to optimize it. Further research can analyze the quality of employment under different working hours.

Key words: working hours, working time, employment models, labor market, quality of employment, RLMS-HSE, employment policy, Russia.

Introduction

Reducing the length of working time is a long-observed trend in the world [1, p. 14]. Thus, the average working time in the countries for which the Organization for Economic Cooperation and Development (OECD) collects data per employee per year was 1,960 hours in 1970, 1,851 hours in 1992 and 1,746 hours in 2017¹. This trend, being one of the implications of economic growth, is typical primarily of Western countries. In Russia, on the contrary, this indicator tended to increase, and after the crisis of 2008–2009 it fluctuates slightly around the level of 1,751 hours per year², which corresponds to about 38 working hours per week³.

In general, a number of institutional factors have contributed to the evolution of working hours. We can note some of them with regard to Russia. For example, since 1991, the standard working week has been legally shortened (from 41 to 40 hours⁴), the minimum annual paid leave was increased (from 18 to 24 working days), national holidays were established (in

the beginning of January and in the beginning of May), the scope of employees with flexible working hours (including part-time working day) was expanded, administrative leave and compulsory transfers to part-time employment were added [3, pp. 16–17]. In addition to these institutional factors, actual working hours also depend on economic and individual factors [4, p. 22].

Topics related to working hours are of particular relevance in the conditions when the problems of transition to a four-day working week, increasing productivity, and use of flexible forms of employment are discussed. Thus, in well-known publications on the Russian labor market, researchers investigate working hours per employee in annual terms [5; 6; 7]. Working hours per month are viewed as indicators of labor supply in assessing its wage elasticity [8]. A number of studies of the labor market in Russia proceed from the assumption that the Russian economy is dominated by the working week corresponding to the upper limit

¹ OECD, Hours worked (indicator). DOI: 10.1787/47be1c78-en (accessed 30.04.2019).

² *Ibidem*.

³ OECD data for Russia represent the normative (not actual) hours worked by one person per year (see: [2]). Our calculations are based on 46 working weeks per year (46 weeks = [250 working days per year – 20 days of paid leave per year (i.e. 28 days of leave – 8 days falling on weekends)] / 5-day working week).

⁴ Working 40 hours a week is recommended by the ILO. See ILO Convention No. 47 concerning the Reduction of Hours of Work to Forty a Week; The ILO Reduction of Hours of Work Recommendation No. 116. The movement toward officially established 40-hour working week is observed in most countries of the world [Lee et al. (Eds.), 2007].

of 40 hours established by labor legislation⁵ [9]. However, it is important to look into the actual situation concerning working hours.

In the majority of well-known publications, including those cited above, their authors tend to focus on analyzing the number of working hours. However, one can work the same number of hours under various working time schemes, and this implies, for example, different options for regulating and protecting employees' rights. This gap in scientific studies defines the novelty of our present work devoted to those working time schemes that include several time parameters of employment (the number of working hours per week and day, and also the number of working days per week).

The goal of our paper is to study working time schemes in order to identify the structure of their distribution and factors determining their distribution in Russia. The knowledge of actual schemes according to which working time is organized can serve as a basis for making optimal decisions to identify the reserves of working time and for changing the way in which standard and non-standard employment criteria are perceived in modern conditions.

The structure of distribution and the factors contributing to the prevalence of particular working time schemes are not studied as profoundly as the effects of both overtime and low-hours work. Studies have already shown their wide range at both micro and macro levels. For example, for an *individual* to be engaged in part-time employment means that there is no guarantee of even a minimum wage, because in order to obtain it, it is necessary to work the full standard working time⁶. When working hours are reduced against the employee's will (for example, the employee is sent on involuntary administrative leave or he/she cannot find full-time employment), his/her employment is

associated with precarious employment, which is characterized by a low level of social rights and guarantees, lower wages, high concern about the likelihood of losing their job, and dissatisfaction with their work in general [10, pp. 9-30]. The presence of workers with precarized employment has an impact on other employees because leadership/training duties are shifted to the latter or because of direct competition for work between the two groups [11, p. 24].

On the other hand, for an individual, working overtime is associated with health problems (burnout syndrome, weight gain, increased alcohol consumption, and smoking), risks of injury, reduced productivity, an increase in the number of errors [12; 13; 14; 15]. Some studies indicate mental health problems that occur when working more than 39 hours a week [16] and are gender-specific [17].

For individuals, the decision to use time is central among the decisions they make throughout their life [18, p.1]. Perhaps this is why low job satisfaction, both in the case of low working hours and in the case of overtime hours, reduces life satisfaction in general [19].

For a *firm*, working hours are important in terms of productivity, employee engagement, and employee turnover issues [20]. For example, output does not necessarily increase as operating hours increase, and in many industries, on the contrary, shorter hours are associated with higher hourly productivity [21].

For the *economy* as a whole, reducing working hours during a recession is one of the tools to curb the rising unemployment. Along with this, it is a factor that reduces gross output. The decrease in working hours may indicate an increase in the balance of working hours in the economy, on the one hand, and a lower flexibility of adaptation mechanisms of the labor market, on the other hand.

High importance of working hours in general urged the international expansion of

⁵ Labor Code of the Russian Federation. Article 91.

⁶ Labor Code of the Russian Federation. Article 133.

the Decent Work Agenda, first introduced by the International Labor organization (ILO) in 1999 and implemented worldwide and in Russia as well. It included the concept of decent working time, implying health safety; work-family balance; gender equality; productivity growth and the ability of workers to influence their working time [22]⁷.

The above-mentioned effects of both overtime and a reduction of working time increase the relevance of the research on the distribution structure and factors determining the spread of working time schemes.

The following section provides statistics that describe the structure of the distribution of groups of employees with different working hours, as well as the dynamics of their distribution. The third section uses regression analysis to identify factors that affect the probability of employment in the working hours scheme defined in this paper as a conventional standard model. The fourth section discusses the findings obtained in the course of the empirical research. In the end of our paper we give general conclusions and recommendations.

General patterns of distribution of workers according to the number of working hours in Russia

Let us clarify that we will talk about employment at the main place of work. We shall start with the *number of actual working hours per week*. According to the Russian Longitudinal Monitoring Survey conducted by the National Research University – Higher School of Economics (RLMS-HSE)⁸, employment

of 40 hours per week is the most common (typical) model of employment in the Russian economy and the main representative database of microdata⁹ for this study. In 2017, this type of employment was typical of 44% of all the employed, in 2001¹⁰ – 37%. This trend indicates the spread of the employment model with the number of actual hours of work per week corresponding to the standard adopted at the legislative level.

To get a more complete picture of the existing employment model in terms of working time, let us note two more characteristics of employment, namely the usual length of the working day and the number of working days per week. Thus, according to the data of RLMS-HSE, in 2017, an 8-hour *working day* was usual for 50% of the employed; this working time scheme has become more common since 2001 (46%). At the same time, the majority of employed (56% in 2017 and 51% in 2001) had a five-day *working week*¹¹. The frequency of using this working time scheme has increased as well¹².

According to the correlation analysis carried out with the use of the data for 2017, we observe a strong positive correlation between the number of actual working hours per week and usual duration of working time ($r = 0.720$; $p < 0.1$); a weak positive correlation between the

⁷ The analysis of working hours in the context of the specifics of the Concept implementation in Russia deserves special attention of researchers.

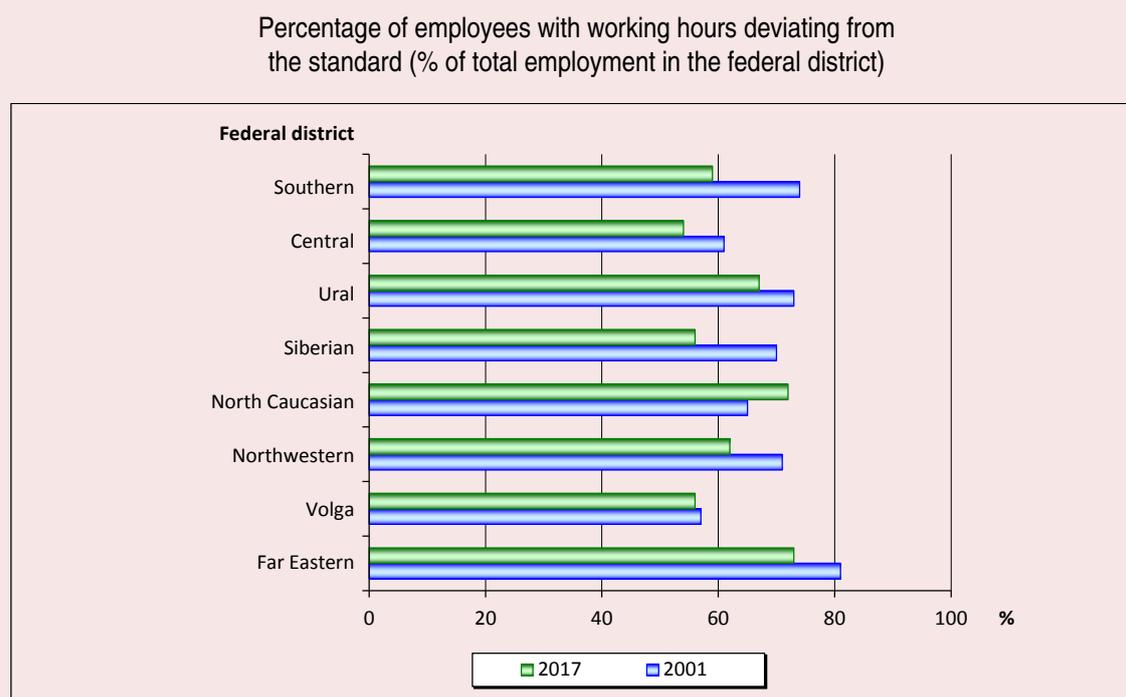
⁸ The Russian Longitudinal Monitoring Survey conducted by the National Research University – Higher School of Economics (RLMS-HSE) and OOO Demoskop with the participation of the Population Center of the University of North Carolina at Chapel Hill and the Institute of Sociology of the Federal Research Sociological Center of the Russian Academy of Sciences. Available at: <http://www.cpc.unc.edu/projects/rlms> и <http://www.hse.ru/rlms>.

⁹ The use of a more representative Rosstat microdatabase of sample labor force survey was less preferable, in part because of the length of the comparable data series.

¹⁰ The choice of 2001 as a reference point in this study is due to the requirements of comparability of the data used by RLMS-HSE.

¹¹ The number of actual working days per week is calculated on the basis of RLMS-HSE data for each respondent by dividing their average hours of work per week by the average length of their working day. The method of finding this parameter allows us to further exclude it from the analysis of the employment model without critical losses for the results of this study.

¹² The share of employees whose working week lasts more than four days was 79% in 2017 (in 2001 – 83%). This indicator is of increased interest in the context of a discussion initiated by the Government of the Russian Federation on the possible transition to a four day working week (<http://government.ru/news/36975/>).



Source: compiled with the use of RLMS-HSE. Available at: www.hse.ru/rlms/ (accessed 14.05.2019).

number of actual working hours per week and number of working days per week ($r = 0.156$; $p < 0.1$); a moderate negative correlation between usual duration of working time and number of working days per week ($r = -0.420$, $p < 0.1$).

Taken together, the three parameters under consideration allow us to build a *conventional standard model of employment* in Russia on the basis of working time. We have found that this model represents a 40-hour work week with 5 working days and 8 working hours per day. The employment of 41% of all employees in 2017 met all parameters of this model, but the employment of the majority (59%) did not correspond to them to a certain extent.

In the regional context, the situation with the deviation from the specified standard of working hours is heterogeneous (*Figure*). From 2001 to 2017, the share of employees whose working hours deviated in one way or another from the standard decreased in all federal

districts (FD), except for the North Caucasian FD, where this share increased. At the same time, the spread of this indicator between the districts decreased (from 24 p.p. to 19 p.p.), but remained noticeable. The minimum value is observed in the Central and Volga federal districts, the maximum – in the Far Eastern Federal District.

For further analysis, we distinguish three employment models with different working hours: standard, transitional and non-standard. The *standard* scheme implies an 8-hour working day and a 40-hour working week. The *transitional* scheme admits non-compliance with one of the specified parameters of the standard. The *non-standard* scheme includes employment that implies more or fewer working hours than the 8-hour working day and the 40-hour working week.

The dynamics of the spread of these three employment models with different working hours in Russia is presented in *Table 1*. During

Table 1. People employed under schemes with different working hours, Russia (% of total employment)

Year	Working hours scheme				Total
	Standard*	Transitional**		Non-standard***	
		40 hours per week	8 hours per day		
2017	41.3	2.8	9.3	46.6	100
2013	40.1	1.9	9.7	48.3	100
2009	36.2	2.3	10.6	51.5	100
2005	38.2	1.8	10.8	49.2	100
2001	34.1	2.6	12.3	50.9	100

Calculated with the use of: RLMS-HSE. Available at: www.hse.ru/rlms/ (accessed: 14.05.2019).

* Employment 40 hours per week and 8 hours per day.
** Employment either 40 hours per week or 8 hours per day.
*** Employment more/less than 40 hours per week and more/less than 8 hours per day.

Table 2. Employee distribution structure according to the combination of working hours per day and week, 2017, (% of total employment)

		Number of actual working hours per day				
		1–5 hours	6–7 hours	8 hours (standard)	9–11 hours	12+ hours
Number of actual working hours per week	1–30 hours	4.2	2.0	0.4	0.3	0.3
	31–39 hours	0.1	7.1	1.1	0.4	2.0
	40 hours (standard)	0.0	0.4	41.3	1.1	1.3
	41–50 hours	0.0	1.2	6.8	6.1	10.6
	51–70 hours	0.0	0.0	1.0	3.8	3.3
	71+ hours	0.0	0.0	0.0	0.5	4.6

Calculated with the use of: RLMS-HSE. Available at: www.hse.ru/rlms/ (accessed: 14.05.2019).

the observed time period, more people were employed under the non-standard scheme than under the standard one. Despite the general vector of dissemination of the standard model, the share of those employed under non-standard working hours remains higher. Redistribution of employees between the standard and non-standard models occurs against the background of the gradual disappearance of the transitional scheme of working hours.

It follows from the HSE database that, for example, in 2017, the average working day was 9.5 hours, and the working week was 43.8 hours. It is known that average indicators may hide a large spread of values. In our case, this would mean a strong stratification of groups of workers in terms of working hours. In order to demonstrate the actual situation, we will resort to a more detailed (compared with the above) structure of the distribution of all employees by combinations of actual number of working

hours per week and the usual duration of working day. This structure for 2017 is presented in *Table 2*.

The most important conclusions drawn from the analysis of the data in *Table 2* include the following. First, the employed persons who work more or less than the standard 8 hours per day and 40 hours per week, are dominated by those whose working hours and working week *exceed* the specified standard. The share of such an enlarged group in 2017 amounted to about 30% of the total number of employees. We pay special attention to its most numerous subgroup, namely those employed with a small number of overtime hours per week (41–50 hours) and high overtime per day (12 hours or more). The size of this group exceeds 10% of the total number of employees. This group is formed in approximately equal proportions by women and men, whose average age is slightly more than 40 years.

Second, the next largest group (13% in the total structure of employment) consists of those employed with *downward* deviation from the standard working hours. Representatives of this group work no more than 7 hours a day, and their working week lasts less than 40 hours. Third, the groups with the least (up to 5 hours per day and up to 30 hours per week) and most (12+ hours per day and 71+ hours per week) intensive working hours account for about 4.5% in each case. The first group is formed by part-time worker¹³, the second one – by those employed with high overtime. These two groups are fundamentally different from each other according to socio-demographic characteristics. Typical representatives of the first group are women whose average age is about 50 years. As for the second group, its characteristic representative is a man 44 years of age.

In addition to the above analysis of the structure of the employed, we analyze the dynamics of this structure for the period from 2001 to 2017 on the basis of the data of the corresponding RLMS-HSE waves. Following the general logic of the previous section, we note a number of key points. First, let us consider those employed whose working hours and working week exceeded the specified standard. The share of this enlarged group during 2001–2017 was quite stable (about 30% of the total number of employees). This makes it possible to include this group in the stable core of the non-standard employment model.

¹³ Statistical as well as legal approaches to the definition of part-time employment often differ. According to ILO data, for the purposes of comparative statistics, part-time work is usually defined as less than 30 hours or 35 hours per week. The legal approach is based on ILO Convention No. 175 “On part-time work” (ratified in Russia in 2016). At the same time, in a number of countries, an upper limit of 25 hours or 2/3 of the normal number of working hours per week is set for part-time employment. See: https://www.ilo.org/global/topics/non-standard-employment/WCMS_534825/lang-en/index.htm (assessed: 24.05.19).

Its largest subgroup, those employed with a small number of overtime hours per week (41–50 hours) and high overtime per day (12 hours or more) increased from 8% in 2001 to 11% in 2017 during the period under consideration.

Second, the share of employees whose working time regime deviates from the standard model in two parameters simultaneously to the *smaller* side during the period under review decreased from 16% to 13%. Third, the proportion of groups with the *least* (up to 5 hours per day and up to 30 hours per week) and *most* (12+ hours per day and 71+ hours per week) intensive working hours barely changed during the period under review.

Speaking about the dynamics of the employment structure proposed in Table 2, we note its reaction to the crisis of 2008–2009. During this period, there was a decrease in the prevalence of the standard employment regime against the background of employment growth under the conditions of non-standard working hours. In the latter case we are talking mainly about such a scheme of working hours under which the number of hours per day and per week was below the standard (i.e. 8 hours and 40 hours respectively). This fact is due to the widespread use of adaptation mechanisms in the domestic economy such as administrative leave, mass transfers of workers to part-time employment¹⁴.

These general patterns of distribution of workers according to the number of working hours in Russia indicate that their structure is highly diversified. What factors give rise to differences in working hours? The answer to this question should help better understand what factors are important for the formation of total working time in the economy.

The heterogeneity of the structure of the employed and its dynamism dictate the

¹⁴ For more details on the mechanisms of adaptation of the labor market in Russia to the crisis of 2008–2009, see [23; 24].

necessity of setting research priorities. From now on, let us focus our analysis on the increasingly common standard working hours. Factors that may influence the likelihood of employment under such working hours will be investigated further. The goal of the study is to confirm empirically the correlation between working 8-hour per day and 40 hours per week and the sample factors. Our main hypothesis is that employment under the standard model is most likely in areas where economic activity is carried out within the framework of legal regulation, in which it is easy to draw boundaries and keep records of working time.

Data, methods and results of the empirical research

Data of the Russian Longitudinal Monitoring Survey conducted by the National Research University – Higher School of Economics (RLMS-HSE) served as the main empirical base for our study. RLMS-HSE is a series of nationally representative surveys designed to monitor the impact of Russian reforms on the health and well-being of households and individuals in Russia. The data contain information about the employed and their main place of work, sufficient for the purposes of the study. We also use the relevant indicators on the unemployment rate, which are issued by the Federal State Statistics Service (Rosstat) and which characterize the situation in regional labor markets.

Estimates based on microdata make it possible to analyze the situation not only as a whole, but also for individual groups. This will help identify the groups with the highest probability of employment under the terms of the standard work scheme (8 hours per day and 40 hours per week). The sample of RLMS-HSE is representative, which allows us to extend the results to the general population of Russia.

The latest published representative data of 26 waves collected in October 2017 – February

2018 were taken for our analysis. We formed a sample of respondents aged 15+ who gave an affirmative answer to the question of whether they are working now. The sample contains data on 5,071 individuals.

The purpose of the analysis is to identify the relationship between the sample characteristics (explanatory variables) of each individual and the probability of their employment under the conditions of standard working hours (i.e. 8-hour working day and 40 working hours per week) compared with the control group.

To do this, we used a logit regression¹⁵ based on the dummy qualitative variable y that reflects the state of employment (where 1 corresponds to employment under standard working hours and 0 – employment under other working schemes), as well as β -coefficients that determine the contribution of each selected factors to the probability of being in employment under standard working hours.

In addition to the basic characteristics commonly used in traditional economic models of labor supply, the impact of demand for labor is taken into account. We will proceed from the fact that the decision regarding participation in the labor market and the decision on the number of working hours are separate not only by logic, but also by time [25, p. 8]. Explanatory variables are divided into three groups: characteristics of respondents, place of work and place of residence (to control regional economic factors). All variables in the model are dummy and take a value of 1 or 0.

The final list includes characteristics we selected taking into account the existing literature, as well as our personal research

¹⁵ For the studies on a large sample, in which the desired value is binary, as in our case, the use of models (logit or probit) binary choice has a number of advantages. For example, these models lack the disadvantage of a linear model in which the probability of an event can be greater than 1 (which is logically incorrect). The results of the logit- and probit-model evaluation differ slightly, which allows us to consider them as alternative.

interests. Thus, the *individual* characteristics of the respondent include: sex; age; nationality; marital status; children under 18 years of age; moving to another area in the last four years; level of education (general, secondary vocational and higher education); professional group¹⁶ (unskilled workers – USW, skilled manual workers – SMW, skilled non-manual workers – SNMW, service workers – SW, office workers and customer service workers – OW, mid-level specialists and officials – MLS, specialists of the highest level of qualification – SHQ, legislators, senior officials, senior and middle managers – LOM; work experience at the current place of work; working at two or more jobs; receiving a pension.

Job characteristics include economic sector, size of company according to the number of its employees, form of ownership, existence of an employment contract.

The group of characteristics of the *place of residence* includes the region of residence (Central Federal District – CFD, Northwestern Federal District – NWFD, Volga Federal District – VFD, Far Eastern Federal District – FEFD, Southern Federal District – SFD, Ural Federal District – UFD, Siberian Federal District – SFD, and North Caucasian Federal District – NCFD; the number of inhabitants in the settlement, and the unemployment rate

in the region of residence of the respondent according to Rosstat.

The estimated logit regression has the following form:

$$(\text{logit}(p_{ij}) \equiv \ln(\frac{p_{ij}(y = 1)}{1 - p_{ij}(y = 1)})) = \alpha + \beta X_i, \quad (1)$$

where β is the vector of the estimated coefficients calculated using the maximum likelihood method; p_{ij} – the probability of the individual i with the set of characteristics X_j (explanatory variables) to be in the state j (i.e., employment under the conditions of standard working hours).

The probability of employment under standard working hours can be determined as follows:

$$p_{ij}(y = 1) = \frac{1}{1 + e^{-(\alpha + \beta X_i)}} = \frac{1}{1 + \exp(-(\alpha + \beta X_i))}. \quad (2)$$

The limiting effect of each variable on the probability of employment under standard working hours is found by the formula:

$$\frac{dp_{ij}(y = 1)}{dX_i} = p_{ij}(1 - p_{ij})\beta. \quad (3)$$

Table 3 presents the results of a logistic regression that assessed the likelihood of being employed under standard working hours compared to employment under other conditions.

Table 3. Factors contributing to employment under standard working hours, 2017 (logit regression)

Employment factor (explanatory variable)	Factor value	
	Average	Calculated
Sex		
(1 — women)	0.516	0.039
Age, years		
15–19	0.004	n.e.
20–24	0.056	-0.731*
25–34	0.239	-0.272
50–64	0.277	-0.215
65–72	0.027	-0.180
73+	0.007	-2.219**
Nationality		
(1 – not Russian)	0.104	-0.293**

¹⁶ According to the International Standard Classification of Occupations (ISCO-88). Available at: <https://www.ilo.org/public/english/bureau/stat/isco/isco88/major.htm> (accessed: 20.05.2019).

Continuation of Table 3

Employment factor (explanatory variable)	Factor value	
	Average	Calculated
Marital status		
(1 – single)	0.422	-0.103
Children		
(1 – with children under 18)	0.400	0.009*
Moving to another area		
(1 –yes, for the last 4 years)	0.015	-0.447
Education		
Professional	0.532	-0.012
Higher	0.339	0.259*
Professional group		
SMW	0.262	0.262
SNMW	0.181	-0.708***
SW	0.057	0.361*
OW	0.193	0.212
MLS	0.172	0.270
SHQ	0.060	0.322*
LOM	0.003	n.e.
Specific employment period		
less than one year	0.138	-0.154
2-5 years	0.329	-0.139
6-15 years	0.331	-0.069
26+	0.076	-0.179
Working at two or more jobs		
(1 — I have a second job)	0.039	-0.281*
Receiving a pension		
(1 — I receive a pension)	0.195	-0.112
Economic sector		
Manufacturing	0.158	0.475***
Construction	0.074	0.638***
Agriculture	0.041	0.078
Administration	0.022	0.928***
Education, science, healthcare	0.201	-0.276*
Army, Ministry of Internal Affairs, security agencies	0.050	-0.391*
Finance	0.022	0.706***
Energy industry	0.019	0.879***
Utilities sector	0.038	0.869***
Other	0.063	0.325*
Company size		
Microbusiness (no more than 15 people)	0.285	-0.115
Small business (16-100 people)	0.419	-0.021
Large business (more than 250 people)	0.203	-0.011
Form of ownership		
with state participation	0.427	0.250**
foreign	0.028	-0.261
other	0.009	-0.877*
Availability of an employment contract		
(1 — available)	0.918	0.937***
Region of residence		
NWFD	0.106	-0.611***
VFD	0.220	-0.107
FEFD	0.048	-0.856***
SFD	0.119	0.023
UFD	0.069	-0.670***
CFD	0.125	0.073
NCFD	0.038	-0.712***
Settlement, number of inhabitants		
More than 3,500 but less than 1,000,000	0.587	0.422***
over 1,000,000	0.081	0.508**
(except Moscow and Saint Petersburg)	0.108	0.584***

End of Table 3

Employment factor (explanatory variable)	Factor value	
	Average	Calculated
Unemployment rate in the region		
(1 – above the Russian average)	0.464	-0.056
Number of observations		3014
Dependent variable	0.413	
Intersection		0.393

Calculated with the use of: RLMS HSE. Available at: www.hse.ru/rims/ (accessed: 14.05.2019).

Note: 1. The logit regression is calculated on the condition that 1 = employment under standard working hours (8-hour working day, 40 hours per week), 0 = employment under other working schemes;

2. All variables are dummy. Assessment is made in respect of the underlying level: comparison for women is made relative to men; for age groups – relative to the group aged 35–49; for single respondents – relative to married ones; for those having children under the age of 18 – relative to persons without adult children; for non-Russians – relative to Russians; for those who moved to another place of residence – relative to those whose place of residence has remained the same over the last four years; for level of education – relative to general education; for professional groups – relative to unskilled workers; for specific work experience – relative to 16–25 years; for the number of jobs – relative to work at one place; for those who receive a pension – relative to those who receive no pension; for the sector of the economy – transport, communications, trade; for the size of the company – medium business (101–250 people); for the form of ownership – private form; for a labor contract – its absence; for the region of residence – Central Federal District; for the settlement – a settlement with population of not more than 3,500 people (i.e. rural area); for the level of unemployment in the region – equal to or below the national average;

3. * denotes statistical significance at the p-value ≤ 0.1 ; ** – ≤ 0.05 ; *** – ≤ 0.01 .

The results of the logistic regression analysis presented in Table 3 can be interpreted as follows. Among the general points, we point out that, first, a positive (negative) estimate of the coefficient for the variable indicates that an individual with the corresponding characteristic is more (less) likely to be employed under the conditions of standard working hours compared to those who do not have this characteristic, and other things being equal. Second, a higher (lower) calculation factor for a variable indicates its relatively higher (lower) contribution to an individual's likelihood of being employed under standard working hours. At the same time, comparisons of calculated estimates of coefficients are correct only within the groups of factors. As for the meaningful interpretation of the calculated coefficients for variables, in this case it does not make sense.

As for the meaningful interpretation of the results of the regression analysis, which are presented in Table 3, we note the following. Let us start with the factors related to the individual characteristics of respondents. Thus, among the *age groups*, the probability of employment under the conditions of standard working

hours is the maximum for the group aged 35–49. However, the lower chances of having such employment are only significant for the groups aged 20–24 and 73+. Nationality is also a significant factor. Russians are more common among those employed under the standard working regime. Higher *education* reduces the risks of working under conditions different from the standard working hours. The fact of *qualification* increases the probability of having a job corresponding to the standard model. This statement is primarily true for professionals of the highest level of qualification and for workers in the service sector. A notable exception is skilled non-manual workers, who are less likely to be employed under the standard model than unskilled workers.

Now let us consider the results associated with a group of factors that characterize the place of work. The lowest probability of working under the standard regime is observed among those employed in the *public sector* of the economy: in education, science, healthcare, as well as in the army and security agencies; the highest – in government bodies. From the point of view of the *form of ownership*, the risks of

employment under non-standard working hours are lower in companies with state participation. The existence of an *employment contract* directly correlates with employment under the 8-hour day and 40-hour week.

Finally, let us present estimates of the statistical correlation between the probability of employment under standard working hours and the characteristics of the *place of residence*. Thus, working in rural areas (i.e. settlements with a population of less than 3,500 people) dramatically reduces the possibility of such employment; and working in Moscow and Saint Petersburg increases it. The latter is true for employment in the Central Federal District. In a tense situation in the regional labor market, which is seen, in particular, in the unemployment rate exceeding the average value for the domestic economy, there are the increased risks of working in conditions different from the employment model with standard working hours. However, the coefficient for this variable is not significant.

Next, we shall discuss these results of our empirical study.

Discussion of the empirical research results

From the standpoint of the changes in the economy in general and labor relations in particular, it makes sense to elaborate on the key factors contributing to the employment under standard working hours, which turned to be significant in the regression analysis.

Thus, the marked increase in employment in companies with state participation, CSP [26, p. 81], increases the likelihood of employment under standard working hours. However, from the point of view of labor productivity, this trend rather reduces the competitiveness of the national economy, since labor productivity in private companies is usually higher than in CSP [26, p. 81].

At the same time, employment in education, science, and healthcare has a negative impact

on the likelihood of employment under standard working hours. Specific features of working in education, science, and healthcare are manifested in the complexity of accounting of actual time worked. Due to the lack of clear regulations in the labor legislation regarding irregular working hours, this leads to the spread of practices of permanent overtime. According to studies, since the beginning of 2010, due to optimization (reductions), there is an outflow of employees from the fields of education, science, and healthcare [27, pp. 176-178]. But what, in this case, is hidden behind the possible increase in the balance in the use of working hours in the economy?

General negative migration growth (in other words, outflow) in rural areas may contribute to the spread of employment under standard working hours. Regions in which traditionally there is an outflow of rural population include the Far Eastern, Siberian, North Caucasian and Ural federal districts. On the contrary, in the European part of Russia, rural areas have a positive coefficient of migration growth. These are the Northwestern, Central and Southern federal districts¹⁷. What is good from the point of view of balance in the use of working hours, damages the potential of uniformity in the development of Russia's territory.

As we have shown above, working 8 hours a day and 40 hours a week is directly correlated with the existence of an employment contract. In other words, the existence of an employment contract increases the likelihood of being employed under standard working hours. Analysis of the actual data on the prevalence of employment contracts in Russia reveals a tendency toward increasing the share of workers

¹⁷ On the state of rural areas in the Russian Federation in 2016. Annual report on the monitoring results: scientific edition. Moscow: Rosinformagrotech, 2018. Vol. 4. Pp. 66. Available at: <http://mcx.ru/upload/iblock/6b7/6b7f34d43ecf21d7ff997df5fe956ef0.pdf> (accessed: 10.05.2019).

without an employment contract [28, p. 38]. Such workers are classified by official statistics as informally employed. The negative effects of informal employment include a whole range of consequences, from a decrease in certainty in labor relations to an increase in income differentiation¹⁸. The observed spread of informal employment reduces the potential for the spread of employment under the conditions of standard working hours. The high level of differentiation of Russian regions in terms of the spread of informal employment does not contribute to the spread of standard working hours either.

Thus, the results of the study generally confirm our basic hypothesis that employment under the standard model is most likely in areas where economic activity is carried out within the framework of legal regulation, in which it is easy to draw boundaries and keep records of working time.

In order to check the stability of the results obtained, it is necessary to reproduce our analysis on the data for a longer time period. We did not set such a task in this paper, but it can be done in the course of future studies.

Summary

The article investigates the actual situation concerning working hours in Russia. Based on the consideration of the frequency with which each of the three time parameters of employment occurs (the number of working hours per week and day, as well as the number of working days per week), we construct a standard model of employment for Russia. We find out that this model represents a 40-hour work week with 5 working days and 8 working hours per day.

While regional trends remain heterogeneous, the standard model continues to spread, but it has not yet become the predominant one.

¹⁸ For details on the risks and implications of informal employment, see [28].

The share of employees with deviations from the standard is minimal in the Central and Volga federal districts, maximum — in the Far Eastern Federal District.

Speaking about the cyclical dynamics of the employment model with standard working hours, we can point out that the scale of its spread in the economy during crises is decreasing (as shown by the example of the 2008–2009 crisis in Russia).

On the basis of the regression analysis of microdata of RLMS-HSE, we determine the factors that increase the probability of employment under the standard working hours. We find out that the probability of such employment is higher if there is an employment contract, in companies with state participation, for residents of non-rural areas, and for employees in management bodies. The probability is lower in sectors (including education, science, healthcare) where it is difficult to establish boundaries and to record the actual amount of time spent at work. As a consequence, hourly wages are not widely used in these sectors.

The spread of the standard working hours employment model is controversial in its implications. On the one hand, it speaks about the growth of balance in the use of working hours; however, this entails the processes that are not quite favorable for the competitiveness of the economy, the uniformity of regional development and the quality of human capital.

The obtained results enrich the knowledge of researchers and practitioners about the actual models of organization of work regimes in Russia. The knowledge can serve as a basis for making informed decisions to identify reserves for the use of working time, as well as to develop ways to optimize it (whether by reducing the number of working hours per day or reducing the number of working days per week, or using a flexible working week and working time).

In general, our paper shows that standard of the understanding of the criteria of employment, which is often said to be receding into the background, is preserved; and the results can be the basis for the transformation of standard and non-standard employment in modern conditions and their consolidation in legislation.

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Transformation of Social Policy in Russia in the Context of Population Ageing



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Abstract. Modern social policy in Russia is formed under the influence of population ageing. The paper presents our point of view on the current state of Russia's social policy. The relevance of the study is due to the fact that the demographic situation is undergoing inevitable changes and the role of the elderly in socio-economic life is becoming increasingly important. The goal of our work is to investigate the specifics of social policy in Russia in the context of population ageing. The novelty of the work consists in the fact that it dwells upon the capabilities of the social group "elderly" as a social resource. We mainly use the following research methods: analysis of laws and regulations at various levels, analysis of statistical and demographic data and results of sociological surveys conducted by VolRC RAS, and content analysis of website materials. The study was carried out both at the national and regional levels (on the example of the Vologda Oblast). We reveal trends in reorienting Russia's social policy toward a broader interpretation of ageing and application of the concept of active longevity. However, the values of active longevity indices in Russia are low in comparison with European countries. According to sociological surveys, the elderly population of the region, which includes citizens over 60 years of age, preserves the values of active life, and many today's pensioners do not think their state of health can interfere with their ability to work. We show how interaction between the state, civil society and citizens is developing in modern social policy. We reveal territorial unevenness in the development of the non-profit sector that addresses social problems of older citizens. In the end, we put forward proposals on updating social policy in the country in the context of population ageing.

Key words: ageing, active longevity, employment, social services for the elderly, intersectoral interaction.

Introduction

In recent decades, issues related to governing social processes have come to the fore in Russia in the context of profound socio-economic, political and ideological transformations. In this regard, there is a need to reconsider current social policy. According to researchers, one of the priority directions to develop social policy in the Russian society is to shift from a social-democratic model characterized by an extensive system of social services for different population groups to the liberalization of the social sphere and provision of targeted forms of support to the poor.

Within the framework of an integrated approach, "social policy" is understood as an interaction between the state, business and civil society aimed to harmonize the interests of different social groups and regions for the

purpose of achieving social peace [1]. Other authors also emphasize the work of various non-governmental institutions in the field of health, education, social security and protection aimed to reconcile the interests of different social groups in the allocation of resources [2, 3, 4]. Thus, social policy should be viewed through the prism of resolving contradictions between the social interests of society as a whole and its individual groups and different regions. Second, the actors of modern social policy include not only the state, but also business and the civil society. We should point out that we observe a transition from the Soviet, paternalistic monopolistic state model to a three-sector (state, business and civil society) model proposed once by V. Korpi and developed in the famous book by G. Esping-Andersen [5].

The interaction between these actors is considered in the context of “intersectoral social partnership” as a constructive cooperation in addressing social issues in two or three sectors (government, business, non-governmental sector (NGOs), beneficial to the population of the territories and each of the parties in connection with the pooling of resources [6, 7]. Proponents of various theoretical concepts (“public-private partnership” [8], “indirect public administration” [9], “co-production” [10]) agree that the participation of society as a partner of the government in the creation of social goods and services attracts additional resources to implement social policy and at the same time provides people with opportunities for personal fulfillment. However, it should be recognized that in practice the state and non-governmental institutions (namely NGOs) often lack mutual trust and readiness for system-wide cooperation. The monopoly on resources creates unequal competition between state/municipal institutions and non-profit organizations in the production of social services at the expense of budget funds.

The goal of our present work is to study general features of social policy in Russia in the context of population ageing. At this stage, the study is reduced to the consideration of the two most important actors in the designated area – the government and civil society structures (NGOs).

Research methodology

Social policy studies involve cross-country and intra-regional comparison as the main method of analysis. We use comparative legal and other variants of the comparative approach, since the empirical basis of the study includes secondary analysis of demographic and sociological data from various sources and the results of a survey conducted in the Vologda Oblast.

The information base of the research includes laws and regulations at various levels, statistical data of the Federal State Statistics Service, materials of the website of the Presidential Grants Fund, and profiles of non-profit organizations in social networks. In addition, we draw important information from sociological surveys conducted by Vologda Research Center of the Russian Academy of Sciences (hereinafter VolRC RAS). The representativeness of the sociological data obtained is ensured by using a model of multistage zoned sampling with quota selection of observation units. Sampling error does not exceed 3%. The assessment is conducted through surveys at the place of residence of respondents. Sample size is 1,500 people 18 years of age and older. The data is processed with the help of SPSS program.

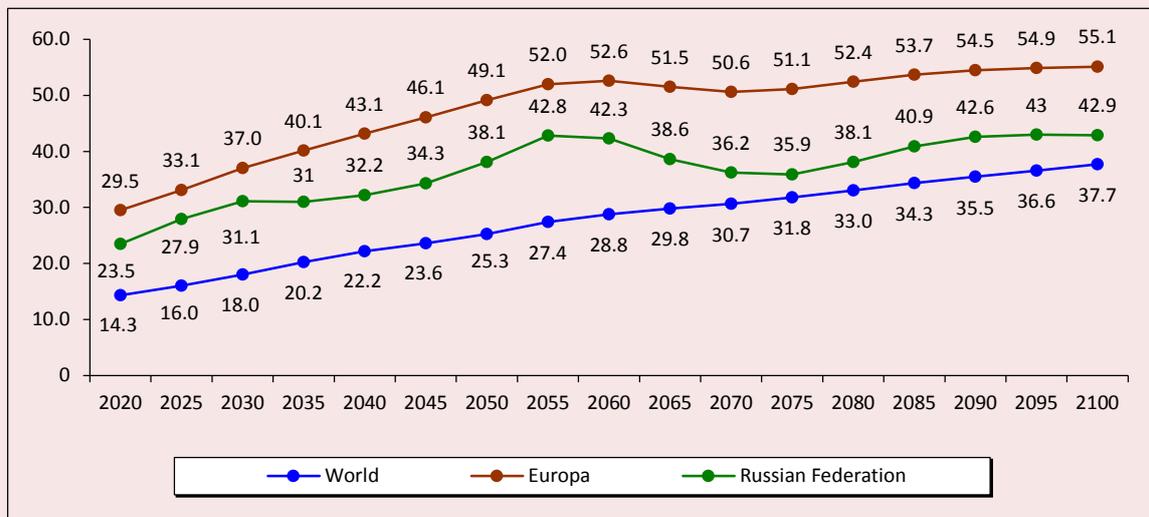
Ageing: theories, facts, forecasts

Researchers mostly consider “population ageing” from the demographic perspective: as an increase in the number of elderly population [11], a shift in the age structure toward older age [12], and an increase in the average and median age [13; 14].

As we already noted, the fundamental cause of population ageing consists in the interaction of two centuries-old trends – increasing life expectancy (due to declining mortality) and declining birth rate. The contribution of declining birth rate and declining mortality to population ageing is not the same, nor are the possibilities for compensating for the negative effects that they may have.

In the course of 50 years – from 1950 to 2000 – the number of elderly people in the world has almost tripled (from 205 to 600 million people). If the views on the boundaries of old age do not change, then over the next 50 years it will again triple in 50 years and will amount to 2 billion people by 2050. The median age of the world’s population in the middle

Figure 1. Forecast of changes in the old-age dependency ratio (ages 65 and older/ages 15 to 64)



Source: [World Population Prospects, 2019], medium-variant projection.

of the past century did not reach 24 years; in 2020 it will be 31 years, by 2050 it will rise to 36 years, and by the end of the century (2100) – to 42 years. In 1950, the median age for the Russian population almost coincided with the global data – 24.3 years. However, according to demographic forecasts, the ageing process in Russia will go faster: the median age will increase from 40 years in 2020 to 42 by 2050; in 2100 it will be 44.5 years¹.

For Russia, the forecast of changes in the old-age dependency ratio – the ratio of older adults (ages 65 and older) to the working-age population (ages 15 to 64) – although it is more favorable in terms of the rate of ageing than for Europe, is ahead of the global rates (see *Fig. 1*).

However, it would be wrong to reduce population ageing studies to statistics and a demographic approach. Indeed, as we shall see, shifting the institutional boundaries of the old age can change the demographic picture created

by dependency/support ratios. In modern statistics, the border between childhood and adulthood is in the range of 15–20 years, and the border between maturity and old age – 60–65 years.

Priority shall be given to the age limits established by the pension legislation of each country. In accordance with the pension legislation, the data of Russian sociological studies indicated the boundaries of old age at 55 years for women and 60 years for men. At the same time, the implementation of active longevity concept can move the age limits of old age beyond 65 years. Both physicians and economists agree with this view: scales developed in the 1950s to interpret the population ageing coefficient (the most widespread of them are the J. Garnier – E. Rosset scale and the UN scale) need to be revised. Their calculations of the demographic ageing of the Russian population in the regional context according to the level, depth, drivers and rate of ageing show that only 60% of Russian Federation constituent entities have old

¹ Data of World Population Prospects as of 2019. We used data of a medium-variant projection of the UN demographic forecast. Available at: <https://population.un.org/wpp/>

and senile population. According to regional measurements on the UN scale, the population in 93% of RF entities belongs is in their old age [12, pp. 2208-2210].

To understand the boundaries of actual old age, it is necessary to combine information about the biological, psychological and social aspects of the ageing process. We will discuss sociological theories of ageing in detail and supplement them with data of psychological and economic concepts.

The first group of theories combines the attitude toward ageing as a process of separation and alienation. According to proponents of the theory of social disengagement, ageing process is characterized by a gap between the individual and society and by deterioration of the quality of social relations, which occurs due to the reduction of biological and psychological resources of an individual. Alienation occurs at a qualitative level through forced retirement, reduction of social activity, death of acquaintances of the same age, separation of children, etc. and this process is inevitable [15, p. 211]. Therefore, both the individual and society should get ready to deal with ageing (in other words, with alienation) so that the functioning of society remains stable. This approach is supported by those psychological concepts of ageing, in which the stage of life associated with old age is characterized by the loss of vital goals, pastime (Charlotte Buhler's theory of intentionality), a desire for solitude, experience of losses, reduction of living space, an integrative assessment of the whole life lived (Erik Erikson's epigenetic theory). This approach has been criticized for promoting a policy of indifference toward the problems of older people, since a person seeking privacy does not need to be integrated back into society.

The desire to separate the elderly from the rest of society is also reflected in the concepts

of marginality, the subculture of old age, and in age stratification. According to proponents of these theories, old people are passive, marginal, socially and psychologically dependent; and the development of a network of social services provided to the elderly increases the tendency toward forming subcultural groups among them [16]. Therefore, a welfare state should develop special programs to support and fill the leisure time of older people, thereby supporting the feelings of insecurity and inferiority. The actions of society and the state in relation to the elderly are negative and preventive: prevention of diseases, mitigation of isolation, etc.

The second group of theories is based on the necessity and possibilities of preserving an active life position in the old age and promoting a significant social role of the elderly in society, responsibility for one's own personality and physical and mental health. It is believed that the social activity of older people slows down the aging process and improves the quality of life [17; 18]. However, proponents of this theory spoke about the effects of stratification and alienating processes in relation to older people: "the need to integrate into society", "to ignore age stereotypes". Thus, it was indirectly confirmed that social activity in old age is an exception rather than the rule. Accordingly, social policy will be focused on creating opportunities for the elderly to be active in society. We have yet to investigate to what extent the concept of active and successful old age is implemented in modern Russian society.

The third trend in theoretical gerontology is represented by the concept of the continuity of normal ageing, which states that older people will usually maintain the same activity, behavior, relationships as in the early years of their life by adapting the strategies related to their past experiences [19].

A separate group of ageing concepts addresses the problems related to the allocation of resources and social services [14]. The elderly have limited access to most social resources, especially if their income is low. From the viewpoint of economic approaches to ageing, as R. Kapelyushnikov notes, the attention of researchers is focused mainly on the narrowly pragmatic aspects of this process (raising the retirement age, the deficit of the Russian Pension Fund, etc.). However, the demographic dependency (or support) ratios, which measure the economic burden placed on the working population, do not reflect these processes effectively. Scientists should focus not only on the demographic, but also on the economic dependency coefficients [14, p. 53]. Moreover, the elderly population is becoming not only more numerous, but also noticeably healthier: people begin to face serious diseases when they are much older and the number of diseases they face is reducing [20], thereby they maintain social and labor activity for a longer time.

It is important to emphasize that society needs confirmation that ageing is not a risk or a crisis, but a humanitarian victory. As for pessimism related to one's own ageing and employment, most likely, shortens one's life [21].

Social policy and active longevity

The "Strategy for actions in the interests of older citizens in the Russian Federation until 2025"² should be called a conceptual document defining the renewal of the philosophy and practice of providing care and assistance to the elderly in Russia. The Strategy calls the elderly

² Resolution of the Government of the Russian Federation dated 05.02.2016 No. 164-R "On approving the Strategy for actions in the interests of older citizens in the Russian Federation until 2025". Resolution of the Government of the Russian Federation dated 05.11.2016 No. 2539-R "On the action plan for 2016–2020 for the implementation of the first stage of the Strategy for actions in the interests of older citizens in the Russian Federation until 2025".

"the older generation" without giving any usual remarks about their need and weakness; it increases the limit when the "older age" starts: 60 years for both women and men (in accordance with the Pension Reform, this limit will be raised to 65 years for men by 2028)³.

Thus, the strategic goals include reduction of age discrimination and elimination of gender discrimination; these goals, however, are not stated in the following documents. The older generation agenda was developed in the Decree of the President of Russia "On national goals and strategic objectives for the development of the Russian Federation for the period up to 2024"⁴ and, as a consequence, in the National Project "Demography"⁵. Two of the nine national development goals set out in Decree 204 for the period up to 2024 concern the quality of life of the older generation: (1) increasing life expectancy up to 78 years (by 2030 – up to 80 years); (2) ensuring sustainable growth of people's real incomes and the level of pension provision above the level of inflation.

In addition to national development goals outlined in the President's Decree 204, it is important to note a number of second-level targets set out in the national project "Demography" and directly reflecting the potential of active ageing: (1) the increase in healthy life expectancy (hereinafter HLE) to 67 years; (2) reducing mortality in the population older than working age to 361 persons per 10 thousand

³ Federal Law "On amending certain legislative acts of the Russian Federation concerning appointment and payment of pensions" No. 350-FZ dated 03.10.2018 (latest edition). Available at: http://www.consultant.ru/document/cons_doc_LAW_308156/ (accessed 01.07.2019)

⁴ Decree of the President of the Russian Federation No. 204 "On national goals and strategic objectives of development of the Russian Federation for the period up to 2024" dated 07.05.2018. Available at: <http://publication.pravo.gov.ru/Document/View/0001201805070038>. (accessed 01.07.2019).

⁵ The national project "Demography". Passport. Available at: <https://rosmintrud.ru/ministry/programms/demography> (accessed 01.07.2019).

population of the corresponding age; (3) increasing the percentage of citizens who are regularly engaged in physical culture and sports, to 55.0%.

At the same time, it remains unclear whether these indicators can be achieved, since both healthy life expectancy and the reduction in the death rate are highly inertial processes. In conditions of instability in employment, low wages and low pensions, as well as ineffective medicine, it is futile to expect improvement in these indicators, although the official course of the Russian government is aimed at identifying additional opportunities for an active and full-fledged life after retirement.

Social policy is shifting toward a broader interpretation of ageing and a comprehensive assessment of its possible implications, embedded in the active ageing concept. According to the World Health Organization (WHO), “active ageing” is the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age⁶. Active longevity implies a fuller use of the potential of the elderly, especially in terms of skills (labor) and social participation.

In global research practice, one of the tools to identify the problems of ageing is the active ageing index (AAI, IAD), which measures the untapped potential of older people for active and healthy ageing across countries. [22]. It was revealed that Russia ranked 18th out of 28 EU countries (plus Russia) in 2010–2012, i.e. it was in the middle of the rating, outstripping most Eastern European countries and some countries of Southern Europe. Since 2014, Russia is among the five bottom EU countries (plus Russia) in terms of AAI. When

comparing the active ageing index for Russia and the EU, researchers conclude that one of the key problems of active ageing in Russia is low life expectancy and poor health, including psychological health. In addition, the negative sides of active ageing in Russia include low social activity and weak social ties [23].

In general, we should note that the decline in the value of AAI in Russia indicates a deterioration in the implementation of the potential for active longevity of older people; thus, it is necessary to fund new tools of social policy. At the same time, active longevity implies not only the development of social policy, but also the interested participation of the elderly in designing their life plans.

In this regard, we find it of interest to consider the values that are most important for the older population.

According to VoIRC RAS sociological surveys, the main values that are preserved in old age include health, family well-being, high financial status, love, and personal well-being. However, the first two categories are valuable for a much larger number of people regardless of age, although the value of health increases with age (by 12 p.p. compared with the total sample; *Tab. 1*). In the senior elderly groups, the value of family well-being and high financial status decreases, but the importance of spirituality in life increases (by 5 p.p. compared to the total sample).

It should be emphasized that for people of pre-retirement and retirement age active life occupies a high enough place in the rating among the significant values (not lower than for the entire population of the region). However, the value of “being of service to people” is very low both in the elderly and in the general population, i.e. active life is focused on individual and family goals and values rather than on being of service to others.

⁶ Active Ageing: A Policy Framework. WHO, 2002. Available at: http://www.who.int/ageing/active_ageing/en/

Table 1. Values of Vologda Oblast population (% of respondents, N=1,500)

Indicators	Aged 50–59		Aged over 60		Vologda Oblast population	
	%	rating	%	rating	%	rating
Health (physical and mental)	75	1	76	1	63	1
Family well-being	68	2	58	2	62	2
High financial status	31	3	25	4	35	3
Love	22	5	23	5	34	4
Personal well-being	24	4	26	3	29	5
Good and loyal friends	11	7=8	18	6	16	6
Active life (interesting and creative work, emotional richness of life)	15	6	15	7	12	7
Self-confidence (inner harmony, freedom from internal contradictions, doubts)	11	7=8	8	9	9	8
Spirituality	10	9=10	13	8	8	9=10
High social status	7	11	6	11=12	8	9=10
Being understood by others	10	9=10	7	10	7	11
Independence, independence in judgments and actions	6	12	6	11=12	6	12
Pleasant and easy pastime, no responsibilities	3	13	5	13	3	13
Gratuitous service to people	1	14	2	14	1	14

Source: VolIRC RAS sociological survey, 2018.

Demands of citizens in relation to the state are constantly growing. This is due both to the rhetoric of the Russian social state itself and to the information openness of modern Russia. In this situation, the population and social services invent positive and discriminatory characteristics that give them certain rights and remove questions concerning mutual obligations or personal responsibility of citizens of any social status.

However, an increasing role in the organization of society can be played by an outstanding personality who has their own view of the world and who is relatively independent of the state in economic terms. However, Russian social policy – the successor of the Soviet policy – does not take into account the existing new forms of social life [1]. In the new realities, the demands of man and society as a whole to the state in the production of social goods and services are changing: citizens are increasingly aware of themselves as taxpayers who finance the state so that it would meet their needs; and they see more and more clearly that

the state is not a very conscientious executor of their requests [6].

Pension reform as a measure of modern social policy

Ageing and the increase in the number of the elderly are inextricably linked to the question of who and how will support them when they are no longer able or willing to work. And this question is acute not only in Russia, but also in the majority of successful welfare states [24]. In conditions of population ageing, sooner or later there emerges an urgent need either to raise the retirement age in order to increase the number of people employed in the economy, or to raise the rate of insurance premiums [25]. However, in Russia, a significant part of its economy is “in the shadow”, i.e. social contributions from shadow enterprises are not collected. In such a situation, it is useless to raise the rate of contributions, it is more important to take the enterprises “out of the shadow”. But to do this, it is necessary to increase trust in the government, which itself does not give grounds

for this. Therefore, one of the most popular ways to adapt social policy to population ageing in most countries is to change the parameters of the pension system (namely, increasing the length of service or raising the retirement age).

When carrying out the pension reform, one should take into consideration the most urgent problems such as the health of the population of retirement age, as well as the provision of jobs for the older generation.

A number of researchers note that Russians have poor health and as they reach the retirement age, they are no longer able to work effectively [26; 27]. Other authors, conversely, argue that the real motive of the negative attitude of Russians toward raising the retirement age is not their poor health and fatigue, but the fact they lose the opportunity to receive “double payments” – pensions and wages simultaneously [28].

Survey data confirm the deterioration of subjective assessments of one’s own health in old age. If in the period from 50 to 59 years old every sixth inhabitant of the Vologda Oblast assesses their health as poor or very poor, then among people over 60 years of age this opinion is voiced by one in four Vologda Oblast residents (*Tab. 2*).

Representatives of older age groups are more likely to talk about their diseases and ailments. But how much does this affect the ability to work, are there significant differences with the population of the region in this aspect?

Ailments in the form of injuries, headaches, general weakness, exacerbation of chronic diseases, all of which are rapidly cured under the influence of massage, medicines or without any treatment, are experienced monthly by 34% of elderly people aged 50 to 59 years (for comparison, data on the population of the region show 28%; *Tab. 3*). Every month 5% of the elderly in the group 50–59 years of age, like all the inhabitants of the region, fall ill and lose the ability to work at their place of employment, but can take care of themselves, do household chores, and cook meals. In older age groups, this figure increases to 14%. The findings show that more than half of the elderly can continue to work after they reach 60, and they go on sick leave once a year or less. In the “younger” age groups, this figure is even higher – 68%.

Thus, the state of health is not an obstacle for many of today’s pensioners to continue working. On the contrary, more and more studies confirm that retirement is harmful to health and a retired person can die at an earlier age [29; 30]. There is also a deterioration of cognitive functions in the elderly after they retire [31]; however, in Russia there are no comparable studies, there is too much confidence that ageing is equal to an incurable disease.

The second most important aspect in raising the retirement age is related to the relevance of the growth of economic activity of the elderly. The 2016 Strategy notes that, based on the

Table 2. Subjective assessment of their health status by the inhabitants of the Vologda Oblast (% of respondents, N=1,500)

Indicators	50-59	Older than 60	Vologda Oblast population
1. Very good	6	5	7
2. Pretty good	16	18	31
3. Satisfactory	62	52	50
4. Poor	15	24	12
5. Very poor	1	1	0

Source: VolIRC RAS sociological survey, 2018.

Table 3. Subjective assessment of the severity and duration of diseases of the population of the Vologda Oblast (% of respondents, N=1,500)

Type of disease (disorder)	50–59	Older than 60	Vologda Oblast population
<i>1. Ailments (headaches, general weakness, exacerbations of chronic diseases, injuries, wounds, etc.) quickly passing under the influence of massage, drugs or by themselves</i>			
– Almost every month	34	44	28
– Several times a year	36	31	33
– Once a year or less	27	17	28
– Never	7	9	11
<i>2. Ailments that reduce the ability to work normally, but do not require a sick leave</i>			
– Almost every month	23	28	16
– Several times a year	41	38	32
– Once a year or less	27	22	31
– Never	9	12	21
<i>3. Diseases that lead to the loss of the ability to work, study, etc., but do not deprive of the opportunity to engage in self-service, do household chores, cook, etc.</i>			
– Almost every month	5	14	5
– Several times a year	28	29	19
– Once a year or less	42	30	34
– Never	26	27	42
<i>4. Diseases that confine to bed, leading to a complete loss of the ability to care for oneself; they require service from other people, treatment at hospital</i>			
– Almost every month	3	2	2
– Several times a year	8	14	5
– Once a year or less	24	27	34
– Never	65	55	42
Source: VoIRC RAS sociological survey, 2018.			

general trend of population ageing in Russia and the reduction of labor resources, the need of the economy to use the labor of older citizens will increase each year. At the same time, the problem of providing jobs for older citizens has not been fully resolved; this relates also to the fact that employers and society as a whole have negative stereotypes regarding the employment of the elderly.

In addition, we should take into account that raising the retirement age will not necessarily lead to an increase in employment. Those who want to work, continue to work regardless of any decisions the state may take in reforming the pension system. For example, according to a VoIRC RAS survey, a quarter of respondents (25%) said that if it depended on them, they would continue to work upon reaching retirement age; the percentage of opposing

responses was 39%; there was a large proportion of those who found it difficult to answer (36%; *Tab. 4*). It is noteworthy that almost 30% of respondents in the older age group (60 years and older) are ready to continue working.

At the same time, for people of pre-retirement age, the main motive to work in retirement is “the need for additional earnings” (84%), and the most urgent problem for current pensioners is “small pensions” (68%) [32]. But does it follow from the above that the relatively high level of employment among the elderly is often determined by economic motives, or is this the simplest and most familiar argument? Among working pensioners the share of those who has to work in connection with low level of pensions is high. But can we assume that work gives the elderly other meanings about which it is necessary to ask in more detail?

Table 4. Opinions of Vologda Oblast inhabitants on the continuation of employment after retirement (% of respondents, N=1,500)

Age groups	Answer to the question "If it was up to you, would you stop or continue working after reaching retirement age?"		
	I would continue working	I would stop working	Difficult to answer
18...29	19.5	28.2	52.3
30...39	24.0	34.7	41.3
40...49	24.6	40.7	34.7
50...59	29.1	45.7	25.2
60 and older	27.5	43.7	28.9
Oblast	25.1	38.7	36.3

Source: VolRC RAS sociological survey, 2018.

When comparing the opinions of people who have already reached retirement age and those in their "pre-retirement" age, we can also note that "forced necessity" significantly straightens the motives for continuing employment. While people are not faced with the growing social exclusion of pensioners and have not found that they often have nothing to do, it seems that the main problem is a low pension. If children and grandchildren moved to big cities, it is especially traumatic. It turns out that "time is more than life", especially if one does not have a habit of reading books and going to the library and does not have skills to use a computer or the Internet, which are always available in libraries. After all, older people used to work in one place, in one team; they get used to the fact that their friends are their colleagues and neighbors, etc. For the elderly, employment provided not only income, but also communication, friendship, mutual assistance.

Social services for the elderly

Retirement age alone does not mean that the person who has reached it has become elderly, and not only eligible for receiving a pension. In the world of socio-economic, rather than medical, indicators of ageing, the question remains, what exactly indicates that a person began to age: the refusal of employment or sexual life, a decrease in interest in others or indifference toward oneself? Many elderly people do not perceive taking care of themselves

as an "investment that always pays off"⁷. Therefore, many elderly people, even women, cease to take care of themselves: they no longer take a shower regularly and dress neatly and tastefully, because they think that "I do not need it anymore", "who can I be interesting to?". Such untidiness and the "smell of old age" often cause rejection on the part of young people [33].

Legislation on social services linked the situation of the elderly, first of all, with their inability to get out of a "difficult life situation" on their own, with the absence of self-sufficiency and self-care. The focus on other needs and problems of the elderly was not made, although we can see that many of them (social exclusion, loneliness, poverty, etc.) may worsen the situation of an elderly person. At the same time, the ability/inability to take care of themselves has not been reflected in the system of evaluation indicators for the necessary service; it has remained a generalized characteristic of the entire population of the elderly. In relation to people 60 years of age recognition of any inability looks discriminatory. Even serving 80+ people needs to assess the extent of their loss of self-care ability.

⁷ "Self-care is an investment that will always pay off". Available at: <http://www.forbes.ru/brandvoice/emc/349297-uhod-za-soboy-eto-investiciya-kotoraya-vsegda-sebya-okupit> (accessed 28.10.2017)

It is also illegal to equate the ability to perform activities of daily living to the ability to provide for oneself, through the establishment of the age of the right to receive care the same as the right to receive a pension. Despite existing developments, indicators to assess the degree of loss of the ability to perform activities of daily living have not been adopted. It is important to emphasize that the necessity of perception of elderly clients of social services as buyers and consumers, as declared by Federal Law 442, changes the logic of social services⁸. On the one hand, the term “client” emphasized the status of the recipient as being dependent on state aid, his/her passive role in this process. The clients themselves saw only obligations towards them in social work, while the question of responsibility for their situation and for the assistance received was not even raised. The development of the services market, on the other hand, forces suppliers to impose certain services; despite the fact that they are included in the list of services, they are not always necessary for an experienced buyer and consumer.

The law also leads to the abandonment of state monopoly in the production and financing of services [34]. The “Strategy of actions in relation to...” indicates the growing need to involve the public in organizing various forms of care for elderly citizens. We agree with I.V. Mersiyanova and L.I. Yakobson, who point out that in practice the leadership of NPOs is observed in those sectors where external formal control is especially difficult and one has to rely on the conscience of people and their personal dedication [6]. This sector includes care for the elderly. Grant support or state subsidies are the

most important tools for providing NPOs with resources on the part of the state in order to address social problems, including those related to pensioners. For this purpose, the concept of “socially-oriented NPOs”⁹ was introduced in the legislation; socially-oriented NPOs are considered as priority recipients of state subsidies and Presidential grants allocated to NPOs [35].

The content analysis of materials of the presidential grants website (which is a key source of funding for NPO social projects), has shown that according to the results of the second contest in 2018 in the area “Social service, social support and protection of citizens”, more than 580 million rubles were allocated in Russia, of which only 9% is directed to the projects for older citizens (*Tab. 5*). Projects addressing the issues of the elderly and supported by the Fund, are represented to a greater extent in the Northwestern Federal District (15% of the total amount of approved projects); the number of such projects is the smallest in the Volga Federal District (5%); there are no such winning projects in the North Caucasian Federal District. Thus, we observe both the territorial unevenness of development of the NPO sector that addresses social problems of older citizens and the disproportion of support, when the share of the elderly in total population is 25%, and the share of supported projects for the elderly is only 9%.

According to the second contest conducted by the Presidential Grants Fund in 2018, the average amount of supported projects for the elderly was 1,309 rubles per thousand people over working age. The leader according to this indicator is the NWFD (4,092.9 rubles), the outsiders are the Volga and Southern federal

⁸ Federal Law 442-FZ “On the basics of provision of social services to citizens in the Russian Federation” dated 28.12.2013. Available at: http://www.consultant.ru/document/cons_doc_LAW_156558/ (accessed 19.05.2019)

⁹ Federal Law 40-FZ dated 05.04.2010 “On amending certain legislative acts of the Russian Federation on the provision of support to socially oriented non-profit organizations”

Table 5. State support provided by the Presidential Grants Fund to non-profit organizations in the direction “Social services, social support and protection of citizens” (winning projects in the second competition of 2018)

District	Total number of projects (in rub.)	Among them: the number of projects focused on the elderly (in rub.)	Proportion of projects focused on the elderly in the amount of supported applications (%)
Central Federal District	233 002 662,4	14 234 090,0	6,1
Northwestern Federal District	102 159 329,6	15 187 622,1	14,9
Southern Federal District	31 832 622,8	3 553 634,8	11,2
North Caucasian Federal District	-	-	-
Volga Federal District	95 353 512,3	4 354 432,0	4,6
Ural Federal District	38 433 204,5	4 768 252,7	12,4
Siberian Federal District	64 456 036,3	7 021 049,8	10,9
Far Eastern Federal District	17 375 063,3	1 838 330,0	10,6
RF	582 612 431,3	50 957 411,4	8,7

Source: Website of the Presidential Grants Fund. Available at: <https://xn--80afcdbalict6afooklqi5o.xn--p1ai/public/home/about> (accessed: 03.06.2019). Own calculation.

Figure 2. NPO projects that won the second 2018 contest of the Presidential Grants Fund for non-profit organizations in the direction “Social services, social support and protection of older citizens” (rubles per 1,000 persons over working age)



Source: Presidential Grants Fund website. Available at: <https://xn--80afcdbalict6afooklqi5o.xn--p1ai/public/home/about> (accessed 03.06.2019), own calculation.

districts (561.5 and 811.2 rubles, respectively; *Fig. 2*). It is obvious that social projects of NPOs, the target group of which are older people, are not developed sufficiently, despite their relevance and demand for them in Russia; their development requires joint efforts on the part of the state and the non-profit sector.

The analysis of the data on the winning projects of the Presidential Grants Fund and the analysis of official groups of non-profit organizations in the social media “VKontakte” have revealed the main activities of the non-governmental sector in addressing the problems of the population of retirement age:

- organizing active leisure for senior citizens (cultural and recreational activities, amateur performances, tourism therapy – tourist and excursion activities);
- promoting a healthy lifestyle among the elderly (advice on proper nutrition, physical education and sports, recommendations of makeup artist, stylist and beautician);
- developing skills and knowledge in the field of information technology (computer skills and financial literacy), manual skills (sewing, dressmaking, weaving, knitting, etc.);
- maintaining the health and safety of the elderly (for example, fraud prevention);
- adaptation and socio-cultural rehabilitation of older persons who are in the care of social institutions.

Our study has revealed that most of the projects not only organize various forms of social and cultural activities for the elderly, but also involve volunteers from among people of the “silver age”, for example, to accompany the disabled, engage the elderly in social activities, participate in the socialization of orphans, etc. However, there has been no serious analysis of the results of “engaging older volunteers” yet.

Thus, the activities of NPOs and initiative groups are aimed both at organizing leisure and

at creating conditions for employment and self-employment of the older generation, promoting their social activity by engaging them in socially significant activities, forming a positive image of the pensioner as an active member of society. In this regard, it should be noted that, despite the fact that in Russia social projects of NPOs aimed at solving the problems of the elderly are not developed sufficiently, as evidenced, among other things, by low estimates of the population [36, pp. 29-38], it is important to point out a few successful practices of today. In modern Russian reality, it is necessary to promote further development of constructive interaction between the state and the public in the implementation of social policy in the context of population ageing.

Conclusion

It is extremely important to update social policy in the context of population ageing, because in this case we are talking about introducing the principle of self-responsibility and preservation of financial independence, self-reliance and the ability to perform daily self-care activities. In determining the prospects for the development of the country, the dynamics of the growth of the number of elderly people should be correlated with the state and trends of the labor market and employment rather than with a decrease in the birth rate. But the motivation of the elderly for delayed ageing is no less important than caring for them. For Russia, however, this approach is still a distant future. Paternalism and reliance on the government are preserved, because in today's conditions there is no compensatory growth of small business, self-employment and non-governmental sector of social services.

In general, the pension reform, new forms of employment, predictive health care and rehabilitation medicine will provide a more definite answer to the questions about the need

to increase the retirement age and the quality of life of the elderly in Russia. Active longevity involves not only efforts to improve health or quality of life, but also the active participation of older persons in building their own lives and promoting employment.

The attitudes of societies and the elderly themselves still retain the shade of the usual thesis that “pension is the time of rest”, when the quality of life of pensioners is the responsibility of the state, society and relatives, but not the elderly themselves. At the same time, studies show that today, a lot of people among those over 60 years old can be involved in socially significant activities, and whose health allows them to be active members of society, its “resource”. Studies have shown that pensioners in Russia have huge temporary resources, but this energy must be delicately directed in the right direction.

We see the following directions in updating social policy in the conditions of population ageing:

1. The state should provide more balanced coverage of Russia’s development prospects in the media. The dynamics of the growth in the number of the elderly should be correlated not only with the decline in the birth rate, but also with the state and trends of the labor market and employment.

2. It is necessary to use state television to motivate those who have reached retirement age to continue working, to increase employment with the help of incomplete, flexible, remote forms of self-employment, etc. The desire of older people themselves to “delay”

their ageing is no less important than the care of the state about them.

3. Instead of imposing sanctions for employers for dismissal of pre-pensioners and pensioners, the state should think about tax benefits for them in case of preservation of pensioners at their workplaces. There is also no need to persecute the informally employed and try to tax them. Any self-sufficiency of the elderly, of course, except criminal, must be supported.

4. It is necessary to explain to all age groups, starting with young people, that the quality of life is mostly the responsibility of the people themselves. Active longevity, in particular, involves not only efforts to improve health or quality of life, but also active participation of older persons themselves in building their life trajectories and preserving independence.

5. State monopoly on the production of social services should also be replaced by the active participation of business and NPOs in various forms of service with the participation of the elderly themselves as volunteers. If the elderly are not involved in solving at least their own problems and their places of residence, all the talks about them as a resource will be wasted, and the resource will not be used.

6. We need to develop various forms of cooperation between the elderly – with other organizations, church communities, various government agencies and authorities. This will help establish an active social field, revival in the field of alternative social work, and psychological revitalization of the elderly.

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Educational Opportunities for Young People of Indigenous Minorities of the North: Social and Spatial Discourse



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Abstract. The relevance of the problem considered in this article is due to the need to provide qualified personnel for investment megaprojects in the Arctic region, while preserving the traditional culture, language, and life values of indigenous peoples of the North. We use qualitative and quantitative methods

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of the sociological research we conducted in 2016–2017 on the territory of Yamalo-Nenets Autonomous Okrug of the Tyumen region of Russia: mass surveys of northerners, highlighting among them the indigenous peoples of the North, in-depth interviews of experts and so on. The analysis of scientific domestic and foreign literature on the subject of the study, including the study of Russian and foreign educational practices of different levels in the Arctic regions, allows us to assess the current level of training of qualified personnel for the Arctic. We substantiate possible ways to improve the system of ethno-regional education, assess the satisfaction of representatives of aboriginal ethnic groups with the system of general and professional education and its compliance with the desired future for their children. According to the results of the study, we make the following conclusions. General and professional ethno-regional education for different levels of the Arctic Zone of Russia needs long-term state and non-state support, including corporate and non-governmental support associated with the prospective modernization of its entire system. It is necessary to strengthen the interaction of universities and other educational organizations with companies that participate in neo-industrial development of the Arctic with the aim of expanding the training of specialists in the industries related to the traditional life of indigenous Northern ethnic groups. Ethno-regional education in the Arctic region should be considered on the basis of the standards adopted by UNESCO for minority groups as an inclusive education having a status different from other educational organizations, taking into account the smallness of the majority of schools in Arctic settlements and nomad camps. At the same time, it is necessary to expand the range of educational opportunities for young people who belong to the indigenous peoples of the North.

Key words: Arctic, indigenous peoples of the North, professional and ethno-regional education, levels of education, traditions, social changes, sociological diagnostics.

Introduction

Sociological diagnosis of the educational system, which is the most important element of human capital and potential, conducted by us in the Arctic circumpolar region on the basis of Yamalo-Nenets Autonomous Okrug (YNAO), situated in the Tyumen Oblast of the Russian Federation, demanded special attention for two of its subsystems: vocational secondary, higher education for the development of the largest hydrocarbon (oil and gas) resources and ethno-regional preschool, primary, secondary general education for children of northern indigenous peoples. In this paper, we rely on the 8-level classification of the Russian educational system in the format of the UNESCO international standard classification of education (ISCED) [1]. Levels 0–7 of ISCED 2013 are analyzed in detail.

The primary goals of this research are as follows: to substantiate the areas of ethno-regional educational system's improvement, to assess satisfaction of aboriginal ethnic groups' members with the system of general, professional education, and to assess the system's compliance with people's desired future for their children.

The relevance of this problem is caused by the necessity, on the one hand, to provide qualified personnel for this Arctic region's investment mega-projects and, on the other hand, to create environment for preserving traditional culture, language, life values of minor indigenous peoples of the North (SIPN). At the same time, it is necessary to extend the range of educational trajectories of young people who belong to indigenous people of the North.

Until 2014, oil and gas companies, participating in the Arctic projects, actively involved foreign specialists, who were ready to work in the exotic (for them) environment of the Far North, with the help of high salaries and additional social packages with low tax deductions. However, after the adoption of international restrictions, many of them were made to leave Russia. A task of training domestic specialists became relevant. At the same time, importance of getting qualitative primary, basic, secondary general, vocational secondary and higher education by native northerners, while keeping the culture and language of their peoples, increased. We analyzed different foreign and Russian educational practices in the Arctic regions, conducted field sociological studies in YNAO, which allowed creating the bank of empirical information, necessary for finding a solution to this problem, conducting its sociological diagnostics, and suggesting some recommendations for power structures of YNAO and other stakeholders, which may be of interest to other Arctic regions.

It is worth mentioning that all the levels of education are open for SIPN representatives. However, its implementation on the scale necessary for the region faces several objective and subjective barriers. Objective ones are the attachment of SIPN to their traditional way of living; weak orientation of these peoples' representatives toward mastering industrial professions, entrepreneurship, etc.; Arctic companies, engaged in the extraction of raw materials, are poorly involved in professional orientation (industrial aspect) of SIPN. The main subjective barrier is that older generations of SIPN want to keep their identity. That is why they do not always want their children to be involved in new spheres of labor ("large world of professions"): they often do not come back to their families, to "minor world" of their people.

Literature overview

Current scientific publications on this topic are primarily devoted to the foreign practices' analysis of children's preschool, primary, and general education: they belong to minor indigenous northern ethnic groups. There was a number of comprehensive works on different aspects of ethno-regional education within industrial development of the Russian Arctic territories in recent years. They included an important area of SIPN education – the formation of competence in the sphere of the indigenous peoples' efficient self-government as a promising and important factor of the Arctic territories' development strategy [2–6]. The analysis shows that foreign educational practices are primarily identical to the Russian ones. Meanwhile, the existing experience in the implementation of certain educational and social technologies might be useful in the environment of the Russian Arctic territories.

Global community acknowledges not only indigenous northern peoples' general rights to education, guaranteed by the constitutions of the Arctic states but also additional ones, in accordance with the United Nation's Declaration on the Rights of Indigenous Peoples, adopted in 2007, which include:

- the right to establish and control one's educational systems and educational institutions by providing education in native language;
- the right to preserve, control and develop one's cultural heritage and traditional knowledge;
- the right not to be subjected to forced assimilation and influence, undertaken in order to destroy ethnic culture [7].

This Declaration is not a legally binding document, it is not an international treaty, and Russia did not sign it. However, the Russian Federation, in regard to SIPN problems, needs to implement Declaration's provisions in full.

In order to do this, it is possible to use Article 27 of “International Covenant on Civil and Political Rights”, which says that “in those States in which ethnic, religious or linguistic minorities exist, persons belonging to such minorities shall not be denied the right, in community with the other members of their group, to enjoy their own culture, to profess and practice their own religion, or to use their own language” [8].

These problems, such as the clash of cultures and teaching practices of industrial and archaic societies, are thoroughly examined in the works of P. Berger and his colleagues [9].

The analysis of these rights’ implementation and the specifics of different Arctic States’ educational systems, aimed at children from the Arctic regions, showed that many problems are similar, but the technologies of their solution are quite different [10; 11]. Thus, in Finland, teaching of the Sami language and other subjects, studied in it, has been conducted since the early 1970s in a number of municipalities of Sami administrative districts. However, 75% of Sami children currently live outside these areas, and they can study their language only two hours a week. The main problem here is the absence of educational materials written in the Sami language [12]. Meanwhile, there is the Sami Education Institute, which provides bachelor’s degrees in northerners’ modern (industrial engineering, information and communications technologies, restaurant business and catering, tourism, etc.) and traditional industries (reindeer husbandry, Sami language and culture, entrepreneurship in Sami folk crafts, etc.), in the Sami district [13].

In Norway, teaching in the Sami language is more common. Even pre-school education in Sami municipal kindergartens is conducted in the native language, and a visiting teacher conducts several hours of such classes in Norwegian kindergartens every week.

Pedagogical personnel for Sami schools is trained in the Sami Education Institute, Center for Sami Studies, Pioneers Indigenous Studies, Nordic Institute, and Arctic Indigenous Peoples Centre. Thus, there are faculties of Sami music, pre-school pedagogics; Sami school education, Sami language and literature, reindeer husbandry, crafts, traditional knowledge, social sciences, journalism in the Sami Education Institute [14].

In Greenland, 90% of its population is Inuit, and mandatory education for people from 7 to 16 years of age is conducted in the Inuit language there. It is possible to get free higher education with scholarship in Greenland and Denmark. The main problem of Greenland’s education is the duality of the requirements to the structure of the educational process. On the one hand, the program should be based on the intensive study of the Inuit language and culture. On the other hand, students must obtain sufficient knowledge to be able to continue their studies in Denmark’s universities [15]. Increased attention to traditional Inuit culture reduces the level of Inuit-graduates’ competitiveness, in comparison with their Dutch peers, in the process of getting higher education and job. The most important problem in Greenland is that many educated Greenlanders do not speak their native language, and other people, after receiving higher education in Denmark, do not return home.

Canada’s government had not interfered with Inuit’s education until 1955, when the agreement on its federal administration and partial funding was made. Ottawa’s overcoming of the assimilation policy in the educational sphere and the recognition of Inuktitut as the official language of Nunavut allowed keeping a significant part of the Inuit who speak the native language. At the same time, social Inuit’s issues (unemployment, rising cost

of living in the Arctic), which keep the Inuit from getting quality education, remain. Thus, according to the Canada's national statistical agency, 71% of the Inuit aged from 25 to 64 do not have secondary education, while only 15% of other Canada's peoples of the same age do not have secondary education. On average, 15% of Canada's population above 15 years old have bachelor's degree, while only 3.6% of Inuit people have it [16]. In fact, Nunavut Arctic College is the only university in the Arctic part of Canada. The development of the Inuit's education strategy, including higher education, was supervised by the University of the Arctic [17]. In particular, one of recent studies showed that traditional language, if taught since grade school, contributes to its preservation, but complicates the transition to English communication in high school [18]. Thus, the transition from native language to English in the 3rd grade was associated with a significant decrease of personal self-esteem [19].

The fundamental problem of the Arctic aboriginal education is that it does not have training programs which would satisfy all the northern indigenous peoples, train successful graduates on par with secondary schools, and devote enough hours to learning and keeping traditional skills and culture. Anyway, it is necessary to make a choice and sacrifice something. This situation exists not only when parents or students select the place of education or educational program, but also when methodologists and teachers develop educational programs [20]. Aspiration to keep identity, traditional knowledge, habitat, and folk crafts is understandable. However, it is impossible to deny the right of these communities' members to make their own choice in favor of the development and opportunities to completely implement their human and social potential.

The experience of Alaska is interesting: the state government there provided all rural settlements with secondary schools for bilingual education [21]. At the same time, the University of Alaska Fairbanks has six educational programs and nine separate courses in Alaska's indigenous peoples' languages. Most aboriginal languages and their dialects belong to the Eskimo–Aleut and Athabaskan–Eyak–Tlingit language macro-families. However, more than 2/3 of Alaska's indigenous peoples speak English at home and outside it. It is illustrative that in 2014 the Alaska Parliament approved the Alaska Native Languages Bill, which gave the status of state languages to 20 Alaska native languages, along with English [22].

However, this law was repealed in court on the federal level. It should be noted that 17 (out of 20) languages of Alaska's ethnic groups have less than one thousand speakers [23]. The main problem of the Alaska's educational system here is the low academic performance of children from aboriginal ethnic groups and, as a result, their more frequent, in comparison with other students, expulsion from schools and colleges. Although, in recent years, scholarships from corporations and foundations have improved the situation [24].

In Russia, the training of qualified national personnel from SIPNs, with studying their languages and culture, is provided by Herzen State Pedagogical University of Russia (St. Petersburg), M.K. Ammosov North-Eastern Federal University (Yakutsk), Yugra State University (Khanty-Mansiysk), etc. [25]. According to experts, whom we interviewed during our scientific expeditions in 2017 and 2018, the current system of Arctic ethno-regional education in our country needs a prospective modernization in the following areas:

- state support implementation of SIPN education;

- personnel provision;
- improvement of educational programs and educational technologies aimed at northern areas;
- development of inclusive education, taking into account UNESCO standards for minority groups;
- carrying out complex interdisciplinary research of the Russian Arctic territories' educational space and monitoring of the Northern ethnic groups' languages and culture study.

Materials and methods

The research of peculiarities and areas of education's change in the Arctic region was overviewed by us within the methodology of P. Bourdieu as the socio-spatial education [26]. Positions and dispositions of social groups, served as actors—carriers of various educational practices and activities, which needed professionals, were identified first of all. In order to get necessary empirical information, we used qualitative and quantitative sociological instruments: widespread surveys of northerners with SIPN selection (*Tab. 1*), in-depth interviews with experts, focus-groups, content-analysis of media and social networks.

Surveys and other studies were conducted by qualified interviewers: graduate students and teachers of Tyumen Industrial University, staff of the West-Siberian Branch of the Federal Center of Theoretical and Applied Sociology of the Russian Academy of Sciences with grant support from the Russian Foundation for Basic Research.

We developed our own methodological instruments that allowed us to analyze the dynamics and territorial factors of the ongoing changes.

The analysis of the results of the survey was conducted in four main social groups of respondents: 1) old residents of the Northern regions (Russians, Tatars and others); 2)

Table 1. Socio-demographic structure of respondents representing SIPNs, % from the number of respondents (N=1,340 people), 2018

Indicators	YNAO regions	
	Krasnoselkupsky	Purovsky
<i>1. Nationality</i>		
Nenets	6.5	89.6
Khanty	1.8	2.0
Selkup	90.5	7.3
Others from the number of SIPN	1.2	1.1
<i>2. Sex</i>		
Male	32.9	37.5
Female	67.1	62.5
<i>3. Age</i>		
Under 20	1.9	5.3
21–30	20.9	25.3
31–40	32.9	35.8
41–50	25.9	27.4
51–60	13.3	4.2
Above 60	5.1	2.1
<i>4. Sphere of occupation</i>		
Reindeer husbandry	5.4	4.2
Fishing	3.6	7.3
Animal husbandry, hunting	6.0	4.2
Oil and gas production	6.0	7.9
Service sector	7.1	3.1
Education	19.0	26.0
Sphere of culture	13.1	10.4
Healthcare	10.1	11.3
Public authorities	1.2	6.3
Construction	1.2	2.1
Folk craft	1.8	1.5
Commerce	2.4	1.0
Transport, communication, etc.	14.9	8.4
Unemployed	19.0	6.3

representatives of aboriginal ethnic groups, indigenous peoples of the North; 3) new settlers (who has lived in the Arctic for less than five years); 4) shift workers. The biggest issue was the survey of the SIPN nomadic population. For this purpose, we attracted representatives of public aboriginal organizations (first of all, “Yamal is for descendants”) and local intelligentsia.

One clarification is required here. There is the discussion in the literature: who “old residents” of the North are. While determining this category, we were guided by three factors. First of all, unlike SIPN, there is no definition

of it in the law. Attempts of some regional legislatures to do it were not successful, because they were solely focused on, for example, “Russian Arctic old residents of Yakutia” [27: 151–152]. Second, the question, whether to consider those who have lived on this territory for a long time with locals (for a generation or more) “old residents”: it is still debatable because of the growth of ethnic consciousness of the northern aborigines. Third, extreme natural and climatic conditions allow us to include all permanent residents (excluding “shift workers” and settlers), who have lived in the local community for more than five years, into this category: five years is a sufficient period for adaptation and understanding of further prospects of living in this region. That is why we attribute not only Russians, who have lived there for a long time (more than five years), to old residents of YNAO but also Tatars, Ukrainians, and members of other ethnic and cultural groups.

Results of the research

In this work, to certain degree, educational levels 0–7 are analyzed according to the International Standard Classification of Education (ISCED 2013), in which SIPNs are presented [28]. Let us point out the specific features of getting education while completing one of its levels.

For preschool education (ISCED level 0), it is children’s life in tundra, away from stationary preschool institutions. Socialization of children and their training for school are practically the family’s concerns, primarily – the mother’s concern. Recently, preparatory classes in boarding schools have become common in the process of training children for school: in this case, a child is brought from the tundra to the nearest village which has a school for SIPN children. This is where a child receives the necessary training to successfully master the programs of primary and secondary general school education.

School education (ISCED levels 1, 2, 3) for SIPN children also has some peculiarities. It functions in two forms: first of all, as stationary acquisition of primary, basic, and secondary general education, when children study and live in a boarding school; second, as acquisition of primary education in nomadic conditions [29; 6]. In the recent case, SIPN children are put in tundra schools where several aboriginal families, which are in a joint nomad (“kaslanie”) with deer in tundra, organize a nomadic school of levels 1–2, where children are taught by specially trained teachers of primary and basic classes: usually, they are members of united families. Such teachers are trained in pedagogical colleges of the Tyumen Oblast (Tyumen, Tobolsk, Golyshmanovo locality, etc.) and in the Yamal Multidisciplinary College (Salekhard) with a branch in Labytnangi.

Vocational secondary and higher education (ISCED levels 4–5, 6–7) for SIPN children is not common: it is especially noticeable at levels 6–7 (bachelor’s degree, specialty’s degree, master’s degree). Distance learning for two last levels is quite popular among SIPN children. At the same time, girls prefer pedagogical and medical specialties, and boys prefer agricultural specialties (zootechnicians and veterinarians) or economic ones. National political, management staff for SIPNs is primarily trained in the University of Tyumen, Tyumen Industrial University, and universities of nearby regions [30].

Our research found out educational trajectories and attractiveness of activity fields in the educational level discourse (*Tab. 2*).

As it is stated in Table 2, traditional crafts top the list of SIPN education of levels 0–5. It could be explained by sufficiency of education for reindeer herding, hunting, fishing occupations. At the same time, employment in the oil and gas sector of the regional economy and the corresponding education’s receiving is becoming more and more attractive for SIPN. Orientation toward commercial and

Table 2. The attractiveness of various activities for the YNAO SIPN, depending on respondents' level of education, % from the number of respondents (N=1,340 people), 2017

Spheres of work	Education level				
	ISCED 0	ISCED 1	ISCED 2-3	ISCED 4-5	ISCED 6-7
1. Traditional crafts	50.0	55.0	56.1	42.0	25.6
2. Oil and gas industry	8.3	25.0	21.5	33.3	30.8
3. Commerce and entrepreneurship	25.0	10.0	8.4	7.2	12.8
4. Authorities	-	5.0	7.5	5.8	23.1
5. Other	16.7	5.0	6.5	11.6	7.7
Total	100.0	100.0	100.0	100.0	100.0

entrepreneurial activities is quite weak: especially with the increase of educational level (it is believed that simple literacy would be enough). Only a small number of SIPN want to join governing bodies. It is related to undesirability of separation from a traditional way of living.

Earlier, we studied the quality of higher professional education for oil and gas sector of the Arctic region. 670 senior students, 560 teachers of specialized disciplines, and 195 different managers from oil and gas companies, situated on the territory of YNAO, were interviewed. Training of oil specialists in Russia is conducted in four universities: National University of Oil and Gas ("Gubkin University"), Tyumen Industrial University, Ufa State Petroleum Technological University, and Ukhta State Technical University. Some results of the conducted research are given in *Table 3* and in [5].

The experts expressed their opinion about young specialists' lack of foreign languages knowledge, information technologies know-

ledge, specifics of the Arctic regions knowledge, and practical skills. In their opinion, it is especially important to improve the interaction between universities, enterprises and organizations for the formation and implementation of educational programs oriented toward the Arctic, taking into account already commenced and promising mega-projects in high-latitude regions.

Low assessment, in comparison with teachers and students' assessments, of specialized enterprises' representatives were followed by specific proposals for changing the structure and content of the educational process.

The primary conclusion of this study is that the main regional university, which effectively interacts with the government, business and civil societies, should become the primary integrator of innovative neo-industrial development of the Arctic region. It must be the coordinator of the formation of new partnering structures (business incubators, technology parks, etc.), the polygon of the efficient technologies' development, business processes,

Table 3. Assessment of professional oil and gas personnel for the Arctic training quality by regional Russian universities, % of the number of respondents (N=1,425 people), 2017

Assessment	Students	Teachers	Employers
Great	18.3	10.1	2.4
Good	29.1	49.3	20.1
Satisfactory	36.9	25.4	35.0
Unsatisfactory	3.1	13.2	39.1
Hesitate to answer	12.6	2.0	3.4
Total	100.0	100.0	100.0

and, finally, one of the major actors of sustainable socio-economic and socio-cultural development of the Russian Arctic region.

According to experts, except the specialists of oil and gas profile, who are trained for the Arctic in aforementioned universities, it is necessary to expand, or start, training for industries related to the traditional SIPN activities. It includes reindeer husbandry and deep processing of venison, fishing and fish processing, aquaculture, tourism, biotechnology, artistic production of souvenirs, northern logistics, Arctic ecology, northern urban economy, as well as engineering, medical, pedagogical, management specialties, and others demanded in the circumpolar regions.

Specifics, problems, and ways to solve them in the spheres of the northern education and staff training for neo-industrial Arctic development were studied in details during two last expeditions. The first one happened in September of 2017: in Salekhard, Novy Urengoy, on the territory of the Yamal District of YNAO (Yar-Sale locality and others) in-depth interviews with experts were conducted: they were related to education of young northerners and the formation of labor resources for circumpolar region; 140 experts were interviewed: heads of schools and educational departments, members of YNAO executive authorities and district's municipal institutions, deputies of the legislative assembly of YANA O, district, city, settlement's legislative bodies, representatives of employers, national and cultural organizations, mass media, and others.

To study the real situation with SIPN education, we chose one of the northern ethnic groups, which has not been specially studied before. According to the 2010 census, 3.6 thousand Selkups lived in Russia, including two thousand in YNAO, 1.2 thousand in the Tomsk Oblast, 0.3 thousand in Krasnoyarsk Krai.

In May of 2018, we conducted scientific expedition to the territory of compact primary residence of the Selkup ethnic group – Krasnoselkupsky District of YNAO. Its center is Krasnoselkup locality where 769 Selkups live. It is 19.7% of average annual number of permanent residents of this settlement. There is a great school, which has the same level of material and technical equipment, in the locality, but the Selkup language is not studied there. Local authorities explained this by the lack of teachers and low demand among children who got used to communications in Russian. The Selkup language is taught in primary schools of two settlements of the District: Ratta locality, where 195 Selkups live (87.7% of the population), and Tolkinskoye locality, where 629 people are Selkups (34% of total population). The main area's occupations are fishing, hunting, gathering and processing of wildflowers, reindeer husbandry. At the same time, only a quarter of Selkup people still retain knowledge of their native language.

A particular feature of the demand for teaching the native language in this Arctic region should be noted. The current generation of SIPN young people largely “passively bear” knowledge of the language, because language link between generations was broken. Often, there is no communication in native language between family members. Also, parents usually do not support its study, because they see meaning and perspective for their children in learning the national and/or international language (e.g. English).

Because of this situation, according to some mass media sources, the Ministry of Education of the Russian Federation is planning to reduce hours of teaching native language to northern ethnic groups in all entities of the Russian Arctic zone – from 3 to 1 hour per week. It cannot be explained as socially justifying.

The training of qualified teachers of the Selkup language is conducted in two Russian universities: Institute of Northern Peoples, which is the part of Herzen State Pedagogical University of Russia, and Tomsk State Pedagogical University. In YNAO, there is only one institution of secondary vocational education which trains specialists in spheres of native languages and culture – Yamal Multidisciplinary College in Salekhard, with a branch in Labytnangi. Ethno-regional education in the region is still at the initial stage of a prospective modernization. It requires long-term state and corporate support, which it is partially receiving now. For example, YNAO, within the national project “Education”, will receive more than 32.2 billion rubles until 2024. It is planned to build 27 schools for 14,925 places, to create three technoparks “Quantorium” for children in Salekhard, Novy Urengoy, and Noyabrsk, to open the center of advanced professional training on the basis of Noyabrsk College of Professional and Information Technologies, and implement other projects using this money. Active participation of representatives of the real economy’s sector, leading scientists, inventors, and entrepreneurs is envisaged in the project’s implementation [31]. By ethno-regional education we mean an educational system that integrates the multiculturalism and polyethnicity of the Arctic region, taking into account a specific ethnic group, in order to provide a harmonious educational environment based on historical, national-cultural traditions, spiritual and moral values. Features of mentality, ways of living of indigenous ethnic groups, the need to preserve the unity and integrity of the cultural-educational space of Russia must be expressed, in accordance with the spirit of commitment to the Bologna process. In this case, the central problem is the formation and integration of ethnic and common Russian

national identity. Self-understanding of being involved in spiritual and moral heritage of ancestors, being an heir, a bearer of language, culture and spiritual traditions of own ethnic group and simultaneously being a citizen of a multinational Russia, natural part of the culture, which includes culture of northern ethnic groups, is the meaning of identification. It is a value basis for the formation and development of ethno-regional education.

Field studies that we conducted in 2017 and 2018 on the territory of YNAO, showed that ethnoregional identity often becomes some kind of an integrator of civil and ethnic identity. While studying the self-consciousness of residents of remote YNAO settlements, it was found out that there are more people who identify themselves as “northerners” and “Yamals” than those who identify themselves as all-Russians, members of ethnic identity (“Russian”, “Slavs”, “Russian”, “Nenets”, “Selkup”, etc.) and locals (“Salekhard”, “Novourengoyets”, etc.). It is proved by the study results of socio-spatial transformation of the Arctic macro-region territory, which had been conducted before [32]. Some survey results of SIPN representatives are given below. This research was conducted in May 2018 according to representative samples in Krasnoselkupsky and Purovsky districts of YNAO. In Purovsky District (Tarko-Sale settlement, N=519, p±3.1%), natural gas production has been carried out for a long time, but industrial development of Krasnoselkupsky District (Krasnoselkup, Tolka, Ratta settlements, N=821, p±2.9%) has only just began. At the same time, the sample was representative not only for the peripheral districts of YNAO as a whole, but also for each of the above-mentioned districts.

The part of a questionnaire, aimed at identifying northerners’ utmost concerns, included questions about the extent of people’s

worries related to children's education and upbringing. It turned out that this problem is very important for members of aboriginal ethnic groups. While determining the level of satisfaction with various elements, SIPN were asked about the importance of obtaining education and the degree of respondents' satisfaction with children's education (*Tab. 4*).

Importance of educational issues and Purovsky District's indigenous people's low level of satisfaction with this aspect are obvious: these problems are major ones.

Respondents were also asked the following question: "What would you want for your children?" The answers are given in *Table 5*.

It should be noted that Purovsky District has been included in the process of industrial development since the 1970s, while Krasnoselkupsky District and its indigenous residents have acquired "civilized" experience recently – at the beginning of the 2000s. Indigenous people from the north of Purovsky District have extensive experience in cooperating with industrial civilization. That is why they are more critical toward anything new and

more actively advocate for the preservation and development of traditional lifestyles than residents of Krasnoselkupsky District.

Discussion and conclusions

Summarizing the results, obtained in the course of sociological research, we can point out that different levels of general and professional ethno-regional education of the Arctic zone of the Russian Federation requires long-term state, non-state, corporate, and public support, associated with the prospective modernization of the entire system. It is necessary to expand the training programs with courses which allow gaining knowledge on the Arctic region's specifics, to strengthen the cooperation between universities and companies, involved in the neo-industrial development of the Arctic in order, among other things, to expand the training of specialists for industries related to the traditional life of northern indigenous ethnic groups. Educational organizations, conducting professional training, should take into account the need for expanding educational trajectories for SIPNs: not only for traditionally profiled specialties, but also for

Table 4. The importance of children's education issue and the level of satisfaction with its solution in SIPN assessment, % from the number of respondents (N=1,340 people), 2018

A. The degree of issue's relevance	YNAO region	
	Krasnoselkupsky	Purovsky
1. Issue of primary concern	86.1	82.1
2. Issue of secondary concern	13.9	17.9
B. Level of satisfaction with children's education		
1. Completely satisfied	54.7	16.1
2. Partially satisfied	30.9	52.7
3. Not satisfied	14.4	31.2

Table 5. Desired life opportunities for children according to respondents from YNAO SIPNs, % from the number of respondents (N=1,340 people), 2018

Future options for children from SIPN, which determine educational strategy	YNAO region	
	Krasnoselkupsky	Purovsky
1. Enjoy all the benefits of modern civilization by moving away from traditional forms of living	28.0	31.8
2. To preserve traditional way of living, even at the expense of giving up some civilization's benefits	22.6	41.2
3. Children should choose their own way of living	49.4	27.0

new, socially significant ones (medical skills, social work, pedagogical training, management competencies, IT-technologies, etc.). It is necessary to adjust mechanisms of referral and quota education for the admission of young people to universities and other educational organizations of Tyumen, Yugra, Moscow, and Saint Petersburg, additional discussion of such mechanisms' legal and financial basis by interested parties is also required. For example, in relation to the provision of the right to receive preferences on the legislative level for SIPN young people, in the form of admission points for universities and other educational organizations, after the successful passing of the exam or sponsorship scholarships from corporations like "Gazprom", "Rosneft", "NOVATEK", interested in qualified national personnel.

Nowadays, native languages of the indigenous peoples of the Russian North are not languages of education. They are taught only in primary classes from 1 to 3 hours a week, or optionally from 1 to 2 hours a week. In fact, there are no educational and methodological teaching materials and professionally trained teachers.

Real pedagogical practice is often not provided with the necessary legal, scientific and methodological, organizational and material conditions for the implementation of ethno-cultural education, including the lack of a unified alphabet in individual languages (for example, in Khanty). Nomadic small schools, created in YNAO, require large material and technical support from, first of all, regional and municipal authorities. In current circumstances, the educational paradigm and the semantic content of the "nomadic school" concept have changed. It was necessary to coordinate its provisions with Federal educational standards, to create an informatized educational environment, etc.

Today, the educational process in a nomadic school goes on for the whole year: training is replaced by "kaslanie", lessons are replaced by practice during a seasonal nomad. There are stationary versions of nomadic schools, based on factories, tribal communities, and transshipment bases, and mobile versions, when people roam together with reindeer herding herd. The educational project "Nomadic school" received legal consolidation in the YNAO in 2012, when training of specialized personnel began in Yamal Multidisciplinary College. New pedagogical, psychological, literary historical, ethnological, cultural courses were prepared. The curriculum included such basic subjects as "Reindeer husbandry", "Chum's host", "Fishing", "Small northern appliances", "Basics of national sewing", "National kitchen", "Folk medicine". Courses on manufacturing fur clothes and shoes, beadwork, bone carving began in training workshops. Physical education lessons are used for testing "Northern multiathlon" educational program. After receiving the necessary theoretical knowledge during full-time field sessions, students of Yamal Multidisciplinary College spend a significant part of their academic time in nomadic schools, practically consolidating acquainted knowledge. An issue concerning advantages (versatile children's socialization) and disadvantages (separation from family and traditional way of living) of boarding schools' activities in the system of SIPN general education requires a special study.

It is clear that ethno-regional education in the Arctic region should be overviewed by taking into account standards, adopted by UNESCO for minor groups of population. It should be seen as inclusive education which has the status different from other educational institutions. Smallness of many arctic settlements and nomadic camps' schools should also be considered.

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FOREIGN EXPERIENCE

Note to the Reader

At an international seminar on trust, held in Tokyo (Rikkyo University, October 2018), with the participation of scientists from Japan and Russia, Vologda Research Center of the Russian Academy of Sciences presented its research findings in the field of institutional trust and socio-economic inequality.

Besides, the journal *Economic and Social Changes: Facts, Trends, Forecast* published by VoIRC RAS was presented.

The results of the seminar prove that, despite certain specific features, various Japanese and Russian studies on social issues are based on similar techniques. That is why we decided to make the studies of Japanese colleagues available to our readers. In this issue, we publish three articles prepared by research teams from Japan. They are preceded by the material of Daishiro Nomiya, Professor at Chuo University, on a brief history of Japanese sociology.

Dear readers! We would be grateful to receive your feedback on these publications.

Yours respectfully,

VoIRC RAS Director, Doc.Sci. (Econ.)



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A Short History of Japanese Sociology: Its Historical Legacies and Future Dreams



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In all non-western countries, Japan was among the first to adopt sociology as an academic discipline. After the Meiji Restoration in 1868, whose revolutionary thrust had pushed feudal past aside and paved a way for a new and western-styled modernization of the country, foreign scholars residing in Japan introduced sociology to Japanese academia. Admired

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first were sociological predecessors, such as H. Spencer and A. Comte. Spencer, for example, was well received among Japanese intellectuals, as his theory of the evolution of society appealed well to both public intellectuals and political and industrial leaders in Japan, who firmly believed that Japan would soon catch up with the Western societies and become a military and scientific giant. Thus, sociology in the 19th century Japan functioned as an intellectual mechanism to acknowledge the governmental policy to push Japan to an western-styled modernized country [1].

Entering into the 20th century, the Japanese intellectual expanded its wing, adopting a more and varied genre of sociology from abroad. G. Simmel, F. Tönnies, and R.M. MacIver were successively introduced to Japanese academia, exposing what we call today formal sociology to the Japanese intellectuals. Also in this period, sociologists in Japanese began to organize themselves, as the Japan Sociological Academy, predecessor of the present Japanese Sociological Society, was established in 1913 [2, p. 237].

During the later years in the first half of the 20th century, formal sociology began to be criticized of its very abstract nature, giving Marxian sociologists and advocates of German cultural sociology a way to promote the study of the state and classes in more concrete terms. Along with this movement came a new strategic change in the study of sociology: introduction of empirical and positivistic sociology. In this period, studies of family, and rural society as well as urban society were in full bloom, all based on the data collected from empirical research. These studies lay the groundwork for current family sociology as well as rural and urban sociology in Japan. Introduction of Durkheim, especially his spirit

of empirical rigor, to Japanese academia in this period may have pushed this trend further [2, pp. 238–239].

Post-war period Japan witnessed another unfolding of sociology as a discipline. As an academic institution, sociology saw further development in its organizational structure. The establishment of the Japanese Sociological Society in 1950 along with successive publications of introductory books and texts, which was fostered by the rapid expansion of courses in sociology in many Japanese universities, set the tone for this trend. It was not an institutional expansion only that was prevalent in the post-war Japan. Post-war rapid socioeconomic development pushed Japanese sociologists to study the social development and associated societal change and social problems. Assisted by an avid import of American sociology, theories of modernization, social stratification, economic sociology, communication, social psychology as well as other subareas of sociology were in full bloom, giving sociology an impression of collected stature of many subdivided areas. Theories of sociology were also introduced from one after another; functionalism, conflict theory, exchange theory, symbolic interaction, phenomenological sociology, critical theory, ethnomethodology provided an array of foundations for further sociological endeavor. All in all, these expansions have led us to what we have as Japanese sociology today [2, pp. 243–245].

It is true that Japanese sociology started from the import of Western sociology. As seen above, however, Japanese sociologists have exposed themselves to an array of sociological theories and practices. This incorporation of varied sociological traditions has laid the foundation for the development of Japanese

sociology, especially in its effort to enrich sociological ideas and imaginations by linking multiple strands of thoughts and perspectives. We have seen this practice time and again in Japanese scholastic work, for example, in such areas as sociology of family, rural society, social stratification, and social movements.

This nature of Japanese sociology also helped us to cooperate and extend dialogue with sociologists abroad. The Japanese Sociological Society was among the founding members when the International Sociological Association was established in 1948. As early as 1973, Japan orchestrated an academic movement to establish the Asian Sociological Society, which lasted up until 1996 [3].

Entering in the 21st century, Japanese sociology continues to play its distinctive role, working for further interaction of

sociologists on a global scale. In 2014, Japan invited the World Congress of the International Sociological Association. Also in 2019, Japan organized an inaugural congress of the East Asian Sociological Association (EASA). EASA is an end product of a longstanding effort by sociologists from the East Asian countries to foster academic cooperation among them [4].

Japanese sociology has benefitted greatly from its Western predecessors. Now it is her turn to provide all she has, from theoretical pursuit and empirical knowledge, to other sociologists from around the world who are eager to work together and cooperate with Japanese sociology. It is our belief that our effort to put together sociologists from different societies will eventually help us all for the betterment of our societies, and the world.

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Social Movements as Networks of Meanings: Constructing a Mental Map of the 2012 Antinuclear Movement Campaign in Japan*

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Abstract. Social movement is a battlefield of meanings; a movement campaign contains a cluster of diverse meanings given by those participating in the campaign. Stimulated by such theoretical concepts as “network of meanings”, scholars have attempted to seize the collective meaning attribution process and resultant meaning clusters, as well as central/dominant and peripheral meanings in social movement campaigns. However, such a meaning cluster in the actual movement campaign has never been captured to date. This paper is an attempt to draw what we call “mental map,” mapping a cluster of meanings the movement campaign accommodates. Employing network analysis technique, we draw a network graph showing a cluster of meanings present in the movement campaign. We used the 2012 anti-nuclear movement campaign in Japan as a research site where we collected empirical data. The analysis of the 2012 network graph clearly showed central meanings considered to dominate the signification process of the 2012 campaign and a cluster of meanings that constituted a subset in the entire web of meanings. To ensure the capability of our research technique to differentiate meaning clusters from one movement campaign to another, we compared the 2012 campaign against the 1954 campaign. The differences were stark: the 2012 campaign was strongly driven by motherhood mentality to protect children and a concern over local environments, while the 1954 campaign dominantly drew its signification from collective memory of Hiroshima and Nagasaki and risk on food safety. The mental map approach can help us understand “why” of the movement campaign from yet another perspective; it can also assist us in understanding the change in the mentality and meaning attribution processes of social movements, as, given the data exist, it can be applied to the past campaigns.

Key words: mental map, social movement, social movement campaign, meaning, network analysis, network of meanings, Japan.

Introduction

On March 11, 2011, a big earthquake and a subsequent tsunami struck Japan. The gigantic tsunami, sweeping away towns and villages and claiming the life of some twenty thousands in the northern pacific coastal regions of the main island, paralyzed the function of the nuclear power plants in Fukushima. Then in the afternoon next day, one nuclear power plant exploded, followed by further explosions of two other plants, causing the Japanese government to give a quick evacuation order to the residents living within a 20 kilometer radius from the nuclear plant site.

This nuclear power plant explosion and its aftermath, now collectively called “3.11,” incited numerous actions. On March 27, more than a thousand protesters took to the street in Tokyo, forming a first antinuclear

demonstration since 3.11. On April 3, another demonstration took place in Kyoto with some 500 participants, according to the Asahi Newspaper on April 4. Since then, the entire Japan became caught up in a series of antinuclear campaigns.

By mid-April, antinuclear campaigns became widespread. A series of antinuclear demonstrations, talks, teach-ins, and forums were organized consecutively in numerous locations in Japan. Large campaign events were also organized. On June 11, a huge national campaign was orchestrated, with more than three thousands of civil organizations actively participating in the activities that covered the entire Japan. Another big event was organized on September 11. Again in some forty different locations, Japan was covered with the voice of denuclearization claims.

Seldom in recent history have Japanese people witnessed the protest action that has continued for such a long period of time. For the first six months, protest actions, campaigns and events, including talks and forums, were organized almost incessantly in various parts of Japan. In the Japanese denuclearization event calendar [3], of the ninety days during the period of May 1 to August 31, 2011, almost all are the days with multiple campaigns occurring somewhere in Japan.

Prompted by the resurgence of the antinuclear movement, studies have been published to inquire into the nature of post-3.11 protest actions with diverse concerns, such as environmental risks, food safety, community reconstruction, and protection of human life. Throughout these studies, one feature stands out as distinctive; they mainly rely on objectively observable events and factual information to grasp the nature of the movement. They emphasize measureable facts and observable aspects, together with other morphological features of the movement, as important references to their understanding. Thus one study depicts a large volume of participation and higher rates in the involvement of the young and inexperienced as a decisive feature of today's antinuclear movements [4].

Morphological understanding based on aspects observable from the outside can reveal important features of civil activities, and thus is an indispensable part of an effort to understand today's antinuclear movements. Yet, this approach, unless exercised with great care, could be misleading. Specifically, it runs the risk of lumping together mutually discrete movement campaigns. In an effort to grasp the nature of the anti-Iraq war movement in 2002–2004, for example, observers pointed out that a great magnitude of participation and involvement of the young and inexperienced

had been important features of the campaign [5]. Such a characterization leaves us little with which to decipher the anti-Iraq war movement a decade ago and today's antinuclear movement in Japan.

Antinuclear movement in present Japan needs to be understood in its own right. To attain this goal, cultural approach offers a viable route for alternative understanding. Cultural approach is context-driven; it emphasizes traditions, ways of life, thoughts and perceptions, and other properties residing in the minds of people in a specific cultural milieu. It provides us with a tool with which to probe deep into the subtleties, and this should lead us to an enriched understanding of the movement action.

Literature on Post-3.11 Antinuclear Movement

To this date, we have a few attempts that seek to understand the present Japanese antinuclear movement with a focus on cultural elements. They invariably look into thoughts and consciousness deemed dominant in the movement. Suga, for instance, interprets today's antinuclear movement as a culminating result of the movement campaigns in the previous decades [6, pp. 9-11]. He argues that the movement claims are to a large degree shaped by the thoughts and spirit of the time, which in turn are conditioned by their predecessors in previous periods. For Suga, post-3.11 movement is a direct decedent of the spiritual movements in 1980s characterized by a strong sense of festivity and nonpolitical orientations in subcultural groups [6, pp. 273-328]¹. This historical approach of Suga separates itself from the rest in that it strongly puts forth historical development of spirituality

¹ Suga often cites such groups as “Shiroto no ran (protest by the laity)” and “Dame-ren (useless bunch)” and other “new wave” groups as referent to his arguments.

as a fundamental force that determines the nature of the movement.

In line with Suga's interpretation, Kawamura offers a post-war history of ideas on nuclear energy. In his work, Kawamura claims that interpretations and perceptions toward "the nuclear" in the minds of the ordinary people have changed dramatically, and that the direction of the change has been determined largely by critical incidents of the time. Thus, Kawamura argues that the governmental campaigns in the 1950s to promote nuclear energy and antinuclear movements in foreign countries in the 1980s function to either promote or hinder the movements in respective historical periods and thus determine the characteristics of the movement [7, pp. 107-110, pp. 179-188]. Kawamura characterizes the movement after 3.11 as a spiritual expression of the concern over the fate of the mankind [7, p. 173].

As much attractive and intuitive their arguments may be, they are not wholly convincing. Efforts to explain social movements using such concepts as spirituality, thoughts, and ideas of the time, might entice their contemporaries with shared experiences. In few instances, however, their arguments are constructed on logical inferences; they do so by reading the "mood of the time", and thus their claims remain as personal accounts. To provide a more sensible account of the post-3.11 movement, we need an understanding built on empirical evidential pieces and sound inferences of the perceptions of those who actually engage themselves in the movement activities.

Social movement studies have identified various cultural components that constitute movement action, such as frames, collective identity, emotions, in addition to norms and ideologies [1; 2; 8; 9; 10; 11; 12; 13; 14]. Among

these cultural assets, this paper focuses on the meaning of action. Human act does not occur in the vacuum; it necessarily entails the intent of action the actor gives to his/her own act of doing, or undoing. Action in the social movement, because it is intended to make a claim, carries with it subjective attribution of the meaning to the phenomenon in question and to subsequent action to change the status quo.

Social movement entails interpretations. Participation in movement action can be considered as an outcome of thought processes that involve an assessment of the object considered problematic and associated interpretations to make sense of the fact that the object exists as it is, together with the defining reasons for its being problematic. As multiple actors exist in the movement action, so do subjective interpretations and meanings, be they interrelated or contradictory, attributed to both problematic circumstances "out there" and the subsequent act of protest. In fact, social movement is a constellation of significations projected by the movement actors against the dominant significations that have occupied the commonsensical understanding in the public space. Viewed more widely, social movement generates "wars of interpretations" [15, p. 385], in which alternative conceptualization confronts hitherto dominant signification.

Importance in understanding movement action in terms of meaning attribution has long been recognized by social movement scholars. In his effort to differentiate various aspects of culture, Sewell [16] points out that one way to understand culture is to view it as a system of meanings. In this perspective, the main task of cultural analysis is to abstract the meaningful aspects of human life. Thus one central component of cultural analysis is to analyze importation and creation of meaning by actors

in their effort to define and redefine situations in favor of their action.

Such a conceptualization of culture and subsequent importance given to the analysis of meaning finds a more concrete expression in Melucci's work. Melucci, referring to the process of collective identity formation, argues that the small groups are the hotbed of anti-dominant culture where new cultural codes are created and alternative frameworks for meaning is produced. For Melucci, social movement can be regarded as a complex of network of meanings of social action. Network, then, is the site where meaning of anti-dominance is born and preserved [1; 2; 14; 17].

Other scholars have also paid attention to various aspects of meaning attribution in social movement. Some focus on the production process of meaning as an important act of creation [18; 19]; others emphasize sociocultural space and background from which social movement extract multiple meanings for action [20; 21; 22; 23; 24].

Despite the importance found in the role of meaning in social movement action, the content of meaning itself has not been well documented in the analyses of concrete social movement action. What meanings, for example, do the movement constituents attribute to the problematic phenomenon and to their own act directed to the phenomenon at hand? Attributed meaning is a product of human capacity for association; a newly associated meaning is extracted from existing sociocultural contexts and then attached to the object in question [16, p. 51]. Repetition of this process, which Gamson and Modigliani [21, p. 3] refer as "value-added," produces a constellation of meanings. Also attributed meanings should differ in content from one actor to another. How then is each meaning in the constellation connected to one another,

and how do they appear as a collective totality? If social movement can be viewed as a network of meanings, then in an ideal empirical circumstance we should be able to identify each meaning as constituting the totality. Delineating the network of meanings, or scheme of interpretation, in a concrete setting then is a next step to proceed; we need to visualize the network of meanings.

Picturing a network of meanings provides us with an additional tool to analyze movement culture: detecting core and peripheral meanings in the movement. We often ask what the central ideas are that spearhead the movement activities. To answer this question, we have in the main relied on an educated guess based on our expertise knowledge. As already discussed earlier in this paper, this practice is without sound empirical foundations. An empirical base on which that can decipher dominant and peripheral meanings should also help us understand the movement culture in a more fruitful way.

Our primary goal in this paper is to characterize the antinuclear movement in post-3.11 Japan through our observations of the meanings attributed to the nuclear power plant explosions and subsequent protest action. To highlight the dominant features of the post-3.11 movement, we will also take up another antinuclear campaign that occurred in 1954, Japan, as a point of comparison. Given that our approach is sensitive enough to capture the meanings of action, we should be able to observe different sets of meanings across these two discrete campaigns. Even though these two campaigns are often bundled together under the names of antinuclear movement, they must be constructed on different premises, with differential socio-cultural backgrounds and mental make-up of those participating in the campaigns. Thus in this paper, we analyze both

1954 campaign and post-3.11 campaign in 2012 to contrast the networks of meanings found in these movement actions.

Two Antinuclear Campaigns in 1954 and 2012

I. Anti-atomic/hydrogen bomb campaign in 1954

Nuclear arms race between the United States and the Soviet Union characterized the first decade of post-World War II period. In 1945, it was the US that first developed an atomic bomb. One month after the experimental run, the atomic bombs were used in Hiroshima and Nagasaki, Japan, claiming the life of more than 200,000 in total. The Soviet Union followed with its own experiment of an atomic bomb in 1949. Then the US developed a hydrogen bomb in 1952, which again was followed by the Soviet Unions. In this historical context the US conducted another hydrogen bomb test, called Bravo Shot, at Bikini atoll on March 1, 1954. The Bravo Shot, it is said, had 1000 times as much explosive power as the one used in Hiroshima [25, pp. 199-210].

A Japanese fishing boat, Daigo Fukuryu Maru, trolling for tuna nearby Bikini atoll in the moment of explosions, was showered with the radioactive fallout from the blast. In March 14, the boat returned to its home port, Yaizu, with a load of radioactive-contaminated fish. By the time the ship arrived, 23 crew members had already developed symptoms of radioactive contaminations. Among them was Kuboyama Aikichi, who eventually died in September, 1954, along with heavily injured two others who were taken to a university hospital in Tokyo.

More than anything else, this incident incited massive disturbance all over Japan. In Japan in 1950s, fish was an indispensable source of the daily food supply. The idea of radioactive-contaminated fish displayed on the market instantly instigated people's anxieties, creating

a panicky situation here and there in Japan. Thus, the Tokyo municipal government, using Geiger Counter, started to measure the extent of radioactive-contamination of unloaded fish from one fishing boat to another in the Tokyo port. Food markets responded likewise; the market price of fish fell down sharply by 20 to 30 % toward the end of March. Local fish merchants and workers in the fish markets, suffering from a sharp drop of sales, started to claim compensation for damages caused by the radioactive-contamination. The Tokyo municipal assembly, together with Shizuoka prefectural assembly, issued a demand for compensation to the national government. Social anxieties grew large as no one, including the Japanese government, was able to show a way to eradicate dietary risks of everyday life.

Soon people began to view the incident in the Bikini atoll in a larger context. In late March, 1954, in Setagaya Ward in Tokyo, the assembly meeting was held, where they adopted a resolution calling for an unconditional ban on the nuclear weapons for the entire humankind, together with an observation that they would constitute damages to the descendants. It also offered a historical recollection that this incident was "the third time" in which the Japanese people were exposed to the nuclear radiation [25, pp. 263-268]².

A huge signature collecting campaign began in this context. In May, 1954, women's council in Sugunami Ward in Tokyo held a meeting and, listening to the story of one fish merchant who had to shut down the store, decided to address the problems associated with the Bikini incident. With a quick establishment of the Sugunami Petition Drive to Ban the Atomic and Hydrogen Bomb, the Sugunami Appeal was

² The first one was the drop of the atomic bomb in Hiroshima in August 6, 1945, and the second one in Nagasaki in August 9, 1945.

issued a month later. The appeal, interpreting the Bikini incident as creating life difficulties of fish market workers and fish merchants and everyday anxieties of the consumers in general, declared to defend the life and happiness of human kind. The Suginami Appeal punctuated the start of the signature collecting campaign. Originally the goal of the campaign was to collect 100,000 signatures in a month; however, it easily exceeded this mark. As the campaign developed itself into a national drive, the number of signatures collected grew to 1.1 million by October, and more than double that number by January, 1955. By August, the signature number rose to more than 32 million [25, pp. 274-299; 26, p. 122; 27, pp. 172-173].

II. Antinuclear Campaign in 2012

On March 11, 2011, a big earthquake and a gigantic tsunami hit the northern part of Japan. The tsunami instantly washed away towns and villages, destroying communities, families and other social milieus people had built up over a long period of time. The tsunami also paralyzed the emergency power system of the nuclear power plant in Fukushima, causing the power plant explosions the next days. The nuclear accident and subsequent radioactive contamination uprooted and drove out local residents who had made their livelihoods in proximity to the nuclear power plant. The residential areas became ghost towns, where only wandering pets and livestock remained to be found.

“March 11 (3.11)” ignited a huge volume of civil actions. After March 27, when a first antinuclear demonstration took place in Tokyo with some 1200 participants, the entire Japan became caught up in a series of antinuclear campaigns [2, p. 66].

In mid-April, the movement picked up its speed of growth. Day in and day out, one spontaneous action was followed by another. A

chronological denuclearization event calendar shows that from April 9 onward, a series of antinuclear campaigns, talks, teach-ins, and forums took place consecutively, with no single day recorded without any civil action until mid-August [3]. It was rare in Japanese movement history that campaigns drew people one after another every day.

This successive rise of spontaneous actions was punctuated by a few commemorative occasions. On June 11, 2011, three months after 3.11, a big national campaign was orchestrated, with more than three thousand civil organizations covering the entire Japan islands with some eighty different civil actions [28]. There, antinuclear activists, environmentalists, labor unionists, educators, food collectives, as well as ordinary people including parents and children, took to the street, claiming denuclearization of power plants in entire Japan. In Tokyo, actions were seen in more than ten different sites in various districts, gathering some ten thousands participants in total. Another big event was organized in September 11, in part in commemoration with the “9.11”. Again, in some forty different locations, Japan was covered with the voice of denuclearization claims. While civil participation shrank gradually in late September, the event was still lively in multiple locations in Japan throughout the year 2011.

Another big event was recorded in January 14–15, 2012, when NGOs and social movement groups got together to hold the first World Congress of Denuclearization in Yokohama. With six organizations in the steering committee, and some 150 NGOs and social movement groups as part of the organizing body, together with 100 foreign guests from 30 countries, the Congress drew some 20,000 visitors and spectators in two days. The congress

venue were packed with hundreds of booths and desks by various civil groups together with onlookers and pedestrians passing by, along with talks and forums organized almost incessantly in rooms and halls of the building; while outside went large demonstrations and small disquieting gatherings surrounding the conference venue. It was in a way among the most colorful event that occurred during the entire denuclearization campaign after March 2011.

A temporal endurance is one characteristic of the post-3.11 antinuclear movement, so is its geographical spread. Of those eighty campaigns that erupted on June 11, for example, five were organized in Hokkaido, the very northern island, and four in Kyushu and Okinawa, the southernmost islands in Japan. During the month of June, an average of 42 campaigns were listed as performed in weekends, suggesting that the campaigns were not organized only in a small number of big urban cities. One reason for the campaign spread is a scattered settlement of fifty-four nuclear plants over the Japanese islands, as protest actions are typically organized around the nuclear plants in the localities³.

The post-3.11 antinuclear movement campaigns continue to the present, albeit having shrunk gradually after one-year commemoration in March, 2012. No parallel movement of this magnitude, with wide geographical spread and temporal endurance, has Japan witnessed since the student movement of the sixties in the last century.

In the next section, we will discuss the data and methods employed in our analysis. As the main case to be analyzed in this paper, we use the denuclearization campaign in January, 2012, to examine its meaning constellation

that comes as a result of participants meaning attribution processes. In so doing, we also introduce 1954 anti-atomic/hydrogen bomb campaign as another case in the analysis. Our claim is that all social movement campaigns are uniquely different in their meaning constellations. This is because each campaign has its own historical context and cultural background, with a different set of participants, distinctive from others. The 1954 campaign and 2012 campaign share the claim of denuclearization of Japan; however they are more than 60 years apart in time, during which the nuclearization policy of the Japanese government has dramatically changed with a substantial increase in the number of nuclear power plants in Japan. Thus, we should be able to see totally different meaning constellations across these two cases if our theoretical premises and analytical method are correct.

Data and Methods

Our aim in this paper is to delineate the configuration of the meanings that would constitute the subjective totality of the movement campaign. By the term meaning we refer to a set of understandings, or interpretations, an actor subjectively attributes to the incidents of nuclear explosion and to the act of participation in the campaign.

We employ network analysis as a method to examine the realm of meaning in the movement campaign. In line with the existing literature on social network [29], we use both qualitative and quantitative approaches, the former in extracting the subjective meanings attributed to the act of participation in the campaign, and the latter in analyzing the data using network analysis techniques, after sorting out an array of meanings in a way to be treated numerically.

The meaning is subjectively created first out of individual mental process of association, the result of which would then constitute a

³ Japan had 54 nuclear plants as of Sept 26, 2011.

motivational source of action of the individual. For example, for an individual actor, the incident may be associated with the terms “Hiroshima and Nagasaki,” “black rain,” “radioactive contamination,” and the “death of an innocent mass.” These four attributes are literally the results of the mental association processes; they represent subjective meanings attributed to the incident. At the same time, these meanings constitute actor’s motivations to act, as they are potential and imagined outcomes that the actor strives to avoid from happening. Since we have multiple actors in the campaign, we need to extract multiple numbers of attributed meanings from the participants in the campaign. By observing interconnectedness among multiple meanings and integrating them into a subjective totality that would represent the entire campaign we can see a configuration of meanings in the campaign.

Who are the subjects of study? Here we had to make a decision. It would be ideal to interview all the participants and attendants to the campaign to obtain their messages, and to sort out the meanings each participant attributes to the nuclear explosions and protest action. This is beyond possibility, however. We then decided to focus on “strong participants”, rather than “weak participants,” in the campaign. The former signifies those who participate willingly in the campaign through an overt expression of their ideas, opinions, and interpretations of the phenomenon at hand; the latter those who either stay quiet or participate rather passively in the campaign. Given that motivational and ideological inclinations as well as general orientations of the campaign tend to be driven by the voices and statements of those who have issued such statements, we decided to focus on expressed ideas and opinions of strong participants. There was another problem: determining strong participants. In

principle, you never know who the committed participants are until you listen to all the participants. To circumvent this problem we laid out one assumption. We assumed that published documents handed out in the campaign site would represent their interpretations about the object they considered problematic and about their actions. Also the fact that they published the documents would constitute their strong involvement in protest action.

This decision then largely defined our data sources. In the post-3.11 social movements, the World Congress of Denuclearization was the best possible opportunity for the data collection. It attracted civil groups and activists from the northernmost islands to the very south islands in Japan, and showed a mixture of social movement activists and NGO groups. Thus we believed that a good representation would be attained by using the documents from the World Congress of Denuclearization campaign. During the entire campaign period, we poured our energy in collecting brochures, pamphlets, on-site newspapers, posters, and any other handouts that were delivered and handed out to attendants in the campaign. These data sources constitute the entire text through which subjective meanings are to be extracted through our interpretive inferential work.

In a way, a set of documents handed out in the campaign gives an analytical edge over the interview methods to our study. Use of text taken from interview limits the scope of study because data-collection has to be done only in the campaign site; whereas using documents as data sources enables us to explore a similar incident in the past, as long as related documents have been stored and available in use. This addition of historical depth in the study enables us to study multiple incidents that have taken place in different historical periods in time.

In this paper, we take up two massive antinuclear campaigns in Japan; anti-atomic/hydrogen bomb campaign in 1954 and antinuclear campaign in 2012. In 2012, we collected the data sources by ourselves. We set two criteria in the data source selection: whether it was handed out at the campaign site and manufactured by the movement participants or participating organizations. We sorted out all the collected documents, and omitted redundancies. In the end, 191 pieces of documents were qualified as documents constituting the data sources for the 2012 campaign. For the 1954 campaign, we entirely relied on the archival data⁴. The archival data range from statements, appeals, pamphlets and posters. After following the same procedures, 34 pieces of documents were retrieved as qualified data sources.

In a first stage of data-set creation, we use qualitative approach. We focus on extracting the meanings an actor attributes to the incident of nuclear explosion. Needless to say, the word “nuclear explosion” or “nuclear fusion” in itself is a term that denotes only physicochemical phenomena. In the life world, through association process such a term is given specific meanings and interpreted as having an impact on the life of the individual in multiple ways. Reading the text in the collected documents, we try to look into subjective interpretive processes. Specifically, we infer the intention, reception, comprehension and explanation of those who drafted and delivered the text, by looking at metaphors, catchphrases, visual images, appeals, and symbolic representations [30]. In other words, we attempt to decode the meaning work of those who drafted the texts and visual images in the documents and extracted meanings attributed to the incident and their reaction.

⁴ All the archival data were in the National Diet Library and the Sugunami Historical Museum.

In a second stage of data-set creation, we quantify the meanings we extracted from various data sources in the first stage. In each year, we often encounter multiple documents that share the same meaning. For example, in the year 2012 “Fukushima” and “radioactive” prove to be among the most frequently associated meanings in multiple documents. For each term, we give a frequency number according to the number of documents sharing the same meaning. This procedure allows us to obtain a list of meanings with different frequency scores respectively: 41 meanings with frequency scores from 1 to 78 for the 2012 campaign, and 23 meanings with frequency scores from 1 to 17 for the 1954 campaign.

It is our assumption that these meanings are interconnected and hierarchical. One meaning may be associated with another, which then is connected to another. This is because a set of meanings tend to be associated together with the term nuclear explosion. Thus the whole set of meanings constitutes a web of meanings, or network of meanings. Not all the meanings are equal, however, in their relative importance in the network of meaning. In an extreme case, one meaning may dominate the rest, playing the central role in the network. Such a case represents the circumstance where there is one strong meaning that all the campaign participants associate with the nuclear explosion. At the other extreme, there may be an array of meanings that are equally important in the creation of the web of meanings. An important task in the data analysis is then to configure the web of meanings, in which meanings are interconnected in one way or another.

This requires us to use network analysis software, which allows us to do a numerical treatment of the data⁵. This is because the

⁵ In this analysis, we used UCINET 6 for Windows (32).

questions of centrality and segmentation in the network of meanings are being sought in this paper [31]. It is also a useful tool to avoid an impressionistic assessment of the role each meaning plays in the entire network of meanings. A network analysis allows us to systematically detect the centrality and sub-networks of the entire network of the meanings in the movement campaign.

Data problems may exist in the 1954 documents. The number of documents we use for the 1954 campaign is much smaller than that for the 2012 campaign. That may show insufficiency in the amount of collected data sources. More problematic is a possibility of biased data. We retrieved documents from the archival collections of historical materials. Some historical documents may have been preserved better than others when compiled into books and booklets of collected materials.

While acknowledging possible existence of these potential problems, we still have decided to employ the 1954 data. Not only are they important historical resources, but they are indispensable materials with which we perform a historical comparison. In fact, after a comparative analysis of qualitative accounts of the 1954 campaign taken from other academic literature and the outcome of our network analysis, we feel fairly confident that we were able to reproduce an essential portion of the field of meanings that existed in the 1954 campaign. Yet we treat the 1954 campaign as a case to be referenced, and not to put too much weight on it in our final analysis of the data.

Results and Analysis

The network graph offers a chance to enhance our understanding of the interrelationship among the meanings and their relative importance in the creation of the entire network

of meanings⁶. *Graph 1* shows a network of meanings found in the 1954 data.

We employ centrality measures to gauge the relative importance of each meaning in the creation of the whole network of meanings⁷. Twelve meanings with high centrality scores are identified and classified into four areas of meanings: instantaneous response to the hydrogen bomb (fear for A+H bomb, radioactivity), Japanese historical memory (Japanese, Hiroshima&Nagasaki, death fallout, death), anxiety and difficulty of everyday life (fish contamination, vegetable contamination, poverty fish retailer), and anxiety for the future (A+H weapons, destruction of a mankind, descendant damages)⁸. These four areas can be considered as mental fields that played an important role in the creation of the 1954 network of meanings.

Adding to this finding, the network graph shows relative importance among these four areas of meanings. In this respect, clearly Hiroshima & Nagasaki stands out as the most central meaning; the rest of eleven meanings retreats somewhat to the background⁹. Looking into the connection between Hiroshima & Nagasaki and other nodes reveals that this node is strongly associated with the other nodes

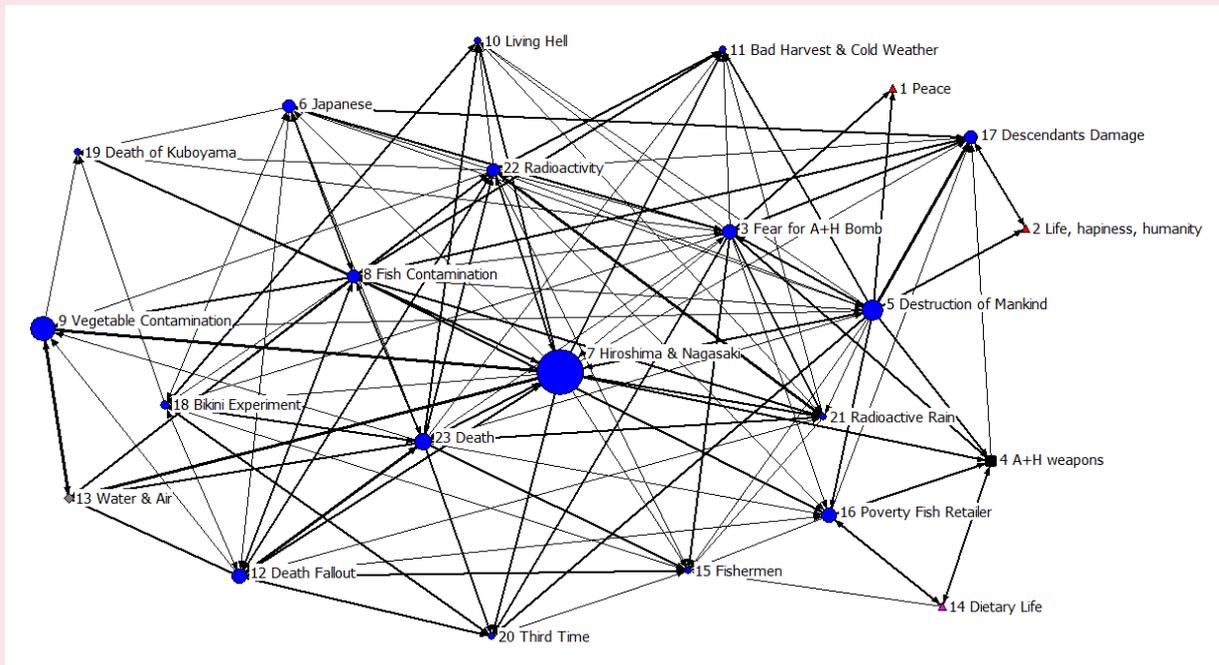
⁶ We used the co-occurrence ratio of 0.4 as a cutoff point in determining the existence of linkage between nodes in the network graph.

⁷ We mainly used betweenness centrality as a measure of centrality. This is because we place importance on connecting function of each node. We consulted with degree centrality measure when necessary; the difference was not significant enough to lead us to change our initial judgment.

⁸ In the network graph, the extent of centrality for each node is shown by the shape and size of the node. A round circle shape (○) denotes the highest degree of centrality, followed by diamond (◇), square (□), and triangle (△). Within the same shape, a larger-sized node shows a higher degree of centrality than a smaller-sized node.

⁹ Betweenness centrality for Hiroshima & Nagasaki is 49.46 while that for vegetable contamination is 21.70. An examination using outdegree centrality measure also points to the same conclusion; Hiroshima & Nagasaki remained to occupy the most central position in the graph.

Graph 1. Network of meanings, 1954*



* Compiled with the use of 1954 anti-nuclear campaign, Japan.

peculiar to the experiences of the Japanese in 1945: such as, third time, living hell, radioactive rain, and death fallout. Clearly the drop of the atomic bombs by the US to the city of Hiroshima and Nagasaki and its consequential disasters of an unprecedented magnitude in 1945 had stayed in the minds of many as a living hell causing the death of an innocent mass with radioactive rain and death fallout. This collective memory became a mental base on which to extract the meanings of 1945 hydrogen bomb experiments. The term “third time” demonstrates this mental association process being at work during the 1954 anti-nuclear campaign; for them the 1954 incident was the third time the Japanese had fallen a victim to the nuclear explosion, followed by Hiroshima and Nagasaki.

Vegetable contamination carries the second highest degree of centrality in the graph. It is linked to the meanings denoting anxieties of

daily diet (water & air, fish contamination, poverty fish retailer) and death and disaster (death, death of Kuboyama, death fallout, destruction of mankind). This set of meanings centering around the vegetable contamination node is interpreted as representing people’s fearful signification that an intake of radioactive-contaminated fish, water, and air may cause death.

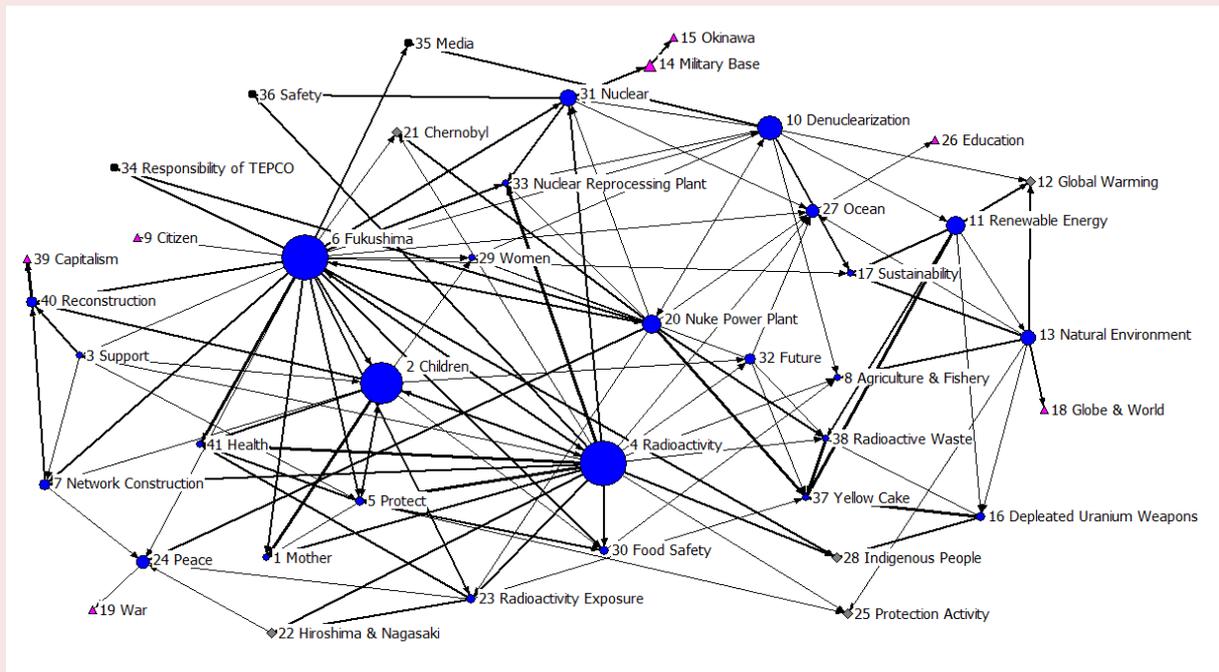
In sum, those participating in the anti-atomic/hydrogen bomb campaign in 1954 took the Bikini experiments and resultant Japanese fishermen’s exposure to the radioactivity as infringing on their everyday dietary practice, which in turn led to the anxiety for the present and future generations, including damages to the descendants and the future of mankind. Historical memory of tragedies and agonies in 1945 Hiroshima and Nagasaki played a central role in the creation of the 1954 network of meanings.

Graph 2 shows the result of network analysis of 2012 movement campaign, our main case to be analyzed in this paper. In the graph, three meanings stand out as having highest centrality scores: “children,” Fukushima,” and “radioactivity.” There are other meanings that also carry higher centrality scores than the rest. Classifying these meanings results in five areas of meanings: Fukushima, direct response to the power plant explosions (radioactivity, radioactivity exposure, nuclear power plant, nuclear), child protection (children, protect, future), denuclearization (denuclearization, network construction), and environmental concern (renewable energy, natural environment, ocean). The term Fukushima has become an all-inclusive word; it signifies from direct physical results of the power plant explosions to a sense of risk and anxiety to the future, and to grief and sorrow of those affected by the incident. Just as we saw

in the 1954 network graph, we find a set of direct mental responses to the 2011 incident. Naturally in this area, the terms nuclear and radioactivity occupy the central significations of the incident.

A set of meanings that represents a mental orientation to protect a child is clearly among the most visible characteristics of the 2012 campaign. In the network graph, the term “children” has linkages to the terms protect, nuclear, health, support, women, future, and food safety as well as Fukushima and reconstruction. This sub-network of meanings can be interpreted as having its origin in the motherhood mentality aiming at the protection of a child into the future. This is reflected to the actual movement action. A significant portion of participants were young mothers, often holding the hands of their children. The post-3.11 movement can then be considered as mother’s movement.

Graph 2. Network of Meanings, 2012*



Compiled with the use of 2012 anti-nuclear campaign, Japan.

The last two areas of meanings, denuclearization and environmental concern, are interrelated, as an effort to stop nuclear energy policy, which has been considered as the source of the contamination of the natural environments – soil, trees, and oceans – after the 3.11 in 2011, necessarily entails retrieving the nature as it used to be and preserving natural environments that have escaped from the contamination.

Note that this environmental concern is not the one we typically find in the global social movements. The terms globe & world and global warming are found to have only marginal positions in the network graph. Thus, it is a locally oriented concern, and closely connected to the daily life of the residents. Global concerns do not play a central role in the creation of the meaning world of the 2012 campaign.

Other strong characteristics of the 2012 network graph are to be found in its peripheral areas. First, quite contrary to the finding we saw in the 1954 data, Hiroshima & Nagasaki do not occupy a central position in 2012. Rather it places itself as playing only marginal roles in the creation of the meaning network. As mentioned earlier, one way to interpret this result is to think that, after 3.11, the term Fukushima has acquired a status synonymous to Hiroshima and Nagasaki, and thus they do not need to resort to a collective memory of the Japanese people as often as they did in 1954. Second, the terms militarism, military base, Okinawa, and capitalism are all positioned in the peripheral areas. This indicates that concerns we typically find in anti-globalization movements, such as anti-capitalism and anti-militarism, do not constitute a substantial base for the meaning creation in the 2012 campaign. Finally, TEPCO, electric company that owns the exploded nuclear power plants, is not the central concern of the campaign participants either. This may be related to the weakness

in the voice in the movements to denounce the TEPCO as causing the explosions and a subsequent human misery.

In sum, the 2012 campaign does not seem to be classified as global movements, nor the movement that strongly oppose to TEPCO. It is a campaign that is centered around the concern over child protection and environmental protection.

Discussions and Implications

The purpose of the paper is to investigate the mental aspects of post-3.11 antinuclear movements in Japan. To attain this goal we focus on the meanings campaign participants attribute to the incident of nuclear explosions and the subsequent action to promote denuclearization. This approach is based on the assumption that the participant acts based on the meanings s/he attributes to the object of concern, and that the multiplicity of participants in the movement campaign create an array of meanings in which multiple meanings are interrelated so that they altogether create a network of meanings.

Social movement researchers have acknowledged, for quite some time, that there is a world of meanings in the social movements and that an act of protest can be interpreted as a battle against a set of meanings attributed by the opposition parties, often dominant, to the phenomenon that the movement participants consider problematic. Scholars have also known that in a social movement campaign, there may be a central meaning that controls and regulates the other meanings, and that there are sub-sets of meanings within the web of meanings that cover the entire social movement campaign [e.g. 12; 14; 15]. In other words, our approach to create a “mental map” is to identify diverse meanings attributed to the act of protest and to identify the central meanings and important sub-networks of the meanings.

Our major finding is that in the 2012 campaign there were three central meanings around which a majority of other meanings were clustered: Fukushima, radioactivity, and children. The term Fukushima appeared to have become a catch-all word, acquiring a status parallel to the terms Hiroshima and Nagasaki. Taken away its root as a noun designating a special location, the term, as when written in “fu-ku-si-ma” in a phonetic Japanese language, seems to have become an abstract word that denotes a totality of tragedy deriving from radioactive contamination, family dissolution, community destruction, and grief and sorrow. Radioactivity can be interpreted as a result of straightforward association process from the power plant explosions. It is probably the first meaning campaign participants attributed to the explosion. A strong presence of the term children shows that participants’ mental inclination moved significantly toward the protection of the children and this gave them a meaning to their act of protest; among other things their action was to protect children into the future. In this sense, post-3.11 movement is a mother’s movement. Also a set of meanings points to participants’ strong concern with environments. There has been a host of popular characterization featuring the post-3.11 movement as overtly expressive and denouncing the government policies and TEPCO [33; 34]. Our analysis shows a different picture of the movement: it is the movement to protect their own neighboring natural environment and children.

Finally, post-3.11 movement is not a global movement. Some of the significations typically associated with today’s global movements were not found to play a central role in the campaign. Nor is it a movement of anti-globalization; meanings associated with anti-capitalism and anti-militarism are pushed to the periphery in the entire network of meanings.

Characteristics of post-3.11 movement in Japan become much clearer when compared with the antinuclear campaign in 1954. In 1954 campaign, major part of participants’ mental disposition was largely formed by the memory of Hiroshima and Nagasaki. It was a collective memory they drew the meanings of nuclear explosions from. Post-3.11 movement appears otherwise. It does not draw its meanings from historical antecedents; instead it seems to have created a new overarching symbol of sorrow of its own: “fu-ku-shi-ma”, or Fukushima. Second, 1954 movement was in part driven by the sense of risk on everyday food security. In the post-3.11 movement, food safety is also a concern; but it does not play a central role in the entire network of meanings, as shown by relative remoteness of meanings referring to food safety.

In total, the 1954 campaign and the post-3.11 campaign, often lumped together under the name of antinuclear movements, are totally different campaigns. While 1954 movement dominantly drew its signification from collective memory of Hiroshima and Nagasaki and risk on food safety, post-3.11 movement was strongly driven by motherhood to protect a child and a concern over local environmental protection.

In cultural approach to social movements, much has been discussed about the meanings participants attribute to their own action and to the object deemed problematic. A host of meanings found in a movement action has also been referred to as a network of meanings. However, such a web of meanings present in the actual movement campaign has never been captured to date. The mental map approach presented in this paper captures mental properties of movement participants. It helps us understand better cultural aspects of social movements.

The mental map approach can also assist us in understanding the change in the mentality and meaning attribution processes of social movements, as, given the data exist, it can be applied to the past campaigns. In this paper, we have examined only two movement campaigns in different points in time. By increasing the number of cases across time, we may be able to draw transformations of meanings movement participants attach to their own act of protest.

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Structural and Institutional Aspects Surrounding Japanese Self-Initiated Expatriates' Career Opportunities in East and Southeast Asian Societies*

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Abstract. This paper investigates how Japanese SIE's labor markets in Asian societies provide career opportunities for young Japanese workers. The number of locally employed Japanese workers in Asia has increased since the 1990s. Previous studies, which have relied on the Lifestyle Migration view, pointed that the primary reason for expatriation is self-seeking and that Japanese expatriates feel finding something worthwhile for their lives by expatriation at the expense of status attainment. However, these studies paid little attention to the demand-side aspects of Japanese SIE's career, which directly determines their opportunities. This study aims to provide some empirical findings based on the structural and institutional accounts that are different from the previous studies. The authors analyze the interview data of staffing agencies and the salary data in Singapore, Hong Kong, Thailand, Indonesia, and China, which the Japanese expatriate workers are likely to choose as destinations. From the qualitative analyses of the interview data, the authors find four dimensions relating to Japanese expatriate's labor market chances; market growth in the local society, the existence of Japanese community, legal restriction of issuing work permits, and the degree of localization of Japanese firms. According to these factors, it is possible to classify the five societies into two groups: one has a premium of Japanese self-initiated expatriate workers, and the other does not. The quantitative analyses using the salary data from a staffing agency also confirm the cross-society difference of economic remuneration. In China, Indonesia, and Thailand which are included in the former group, the salary of native Japanese workers is significantly higher than those of other worker types, but it is not in Singapore and Hong Kong. The authors discuss the differences between the present study and previous literature and the future research prospects in the concluding remarks.

Key words: self-initiated expatriate worker, local employment, career opportunity structure, staffing agencies, local Japanese firm, Asia.

Introduction

Population Dynamics of Japanese Out-Migrants in Asia

Is Japan an inward-looking society? The word 'inward-looking society' means the majority of people in society look to only interests within their home country and do not open their eyes on international or transnational environments. The inward-looking society image in Japan is often debatable [1]. An international comparative survey by CAO (Cabinet Office of Japan) reports that Japanese youth are not much interested in living abroad¹. The percentage of Japanese youth from 13 to 29, who want to settle in other countries, is just about 20% in the CAO's survey.

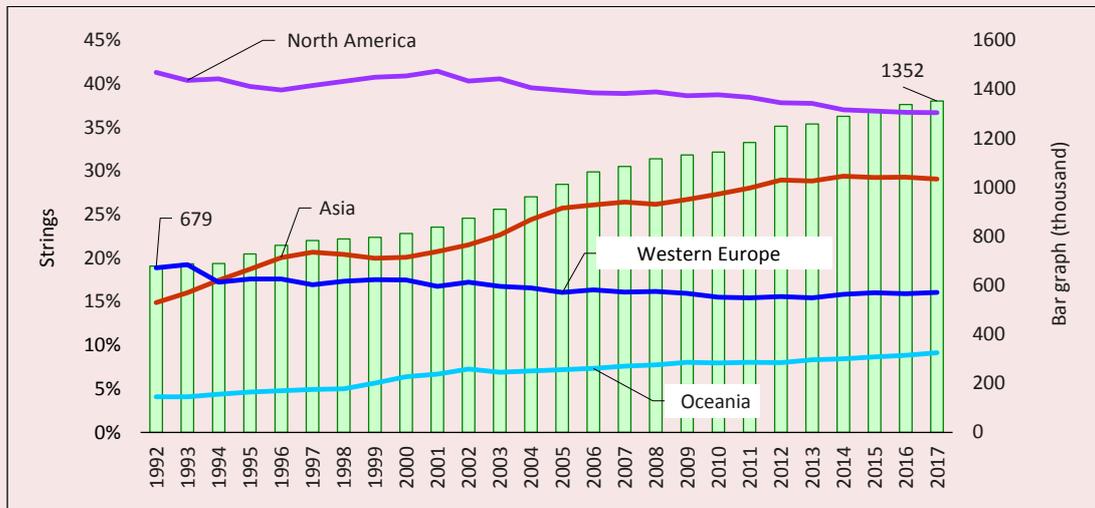
Although Japanese young people seem to be reluctant to live and work abroad, the number

of Japanese out-migrants has increased since the early 1990s. *Figure 1* illustrates the trend of Japanese out-migrant population size across the world and proportions in popular regions where they move. The bar chart in *Figure 1* means the total size of Japanese out-migrants, and it grows up almost monotonically and gets almost twice between 1992 and 2017. In contrast with the Western societies, Asia has gathered more and more Japanese out-migrants for 25 years since the early 1990s, and the increase of the total out-migrant population principally comes from Asia.

In addition to the overall trend, this official statistics result gives a totally different impression from the one the 'inward-looking' Japanese youth discourse might imply. To describe population changes within the same age groups, *Figure 2* shows the relative sizes of Japanese out-migrants in each year compared

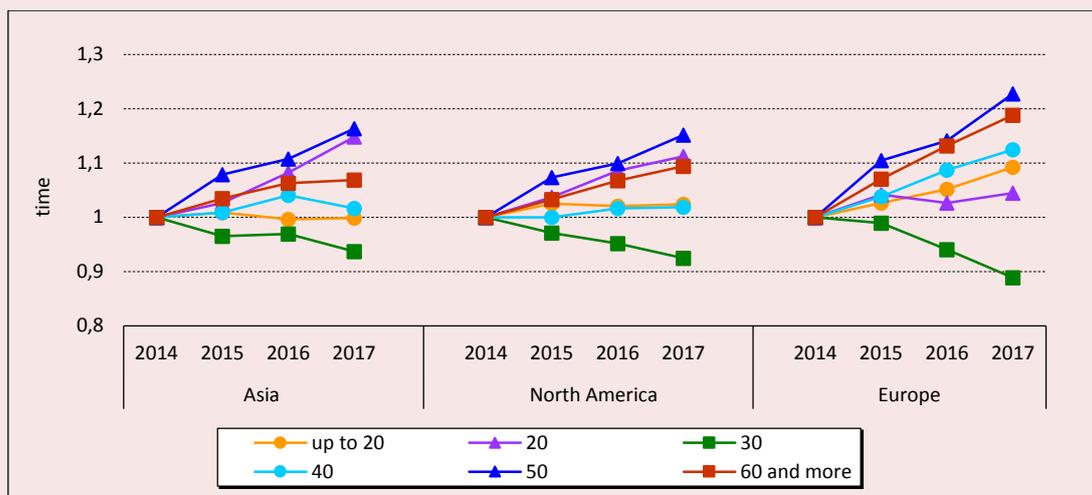
¹ See the website in Japanese (<https://www8.cao.go.jp/youth/kenkyu/ishiki/h30/pdf-index.html>).

Figure 1. Overall number of Japanese out-migrants across the world



Source: Authors' calculation of the Annual Report of Statistics on Japanese Nationals Overseas by Ministry of Foreign Affairs

Figure 2. The relative growth of Japanese out-migrants by regions and age groups



Source: Authors' calculation of the Annual Report of Statistics on Japanese Nationals Overseas by Ministry of Foreign Affairs

to the result in 2014. We calculated them by major three destination regions and age groups². In all three regions, the sizes of Japanese out-migrants in their 20s and 40s commonly grow as well as older age groups such as people in

their 50s and more³ [2]. The proportion of Japanese people in their 30s slight decreases, but the absolute number of them is still much more than younger age groups⁴. In Asia, which

² Japanese out-migrant population size by age group is only available since the 2014 result.

³ Considerable Japanese retiree people choose Southeast Asian societies after their retirements, and results of older people in Figure 2 shows this trend.

⁴ In 2017 in Asia, for example, there are over 63,000 Japanese people in 30's compared to 30,000 in 20's.

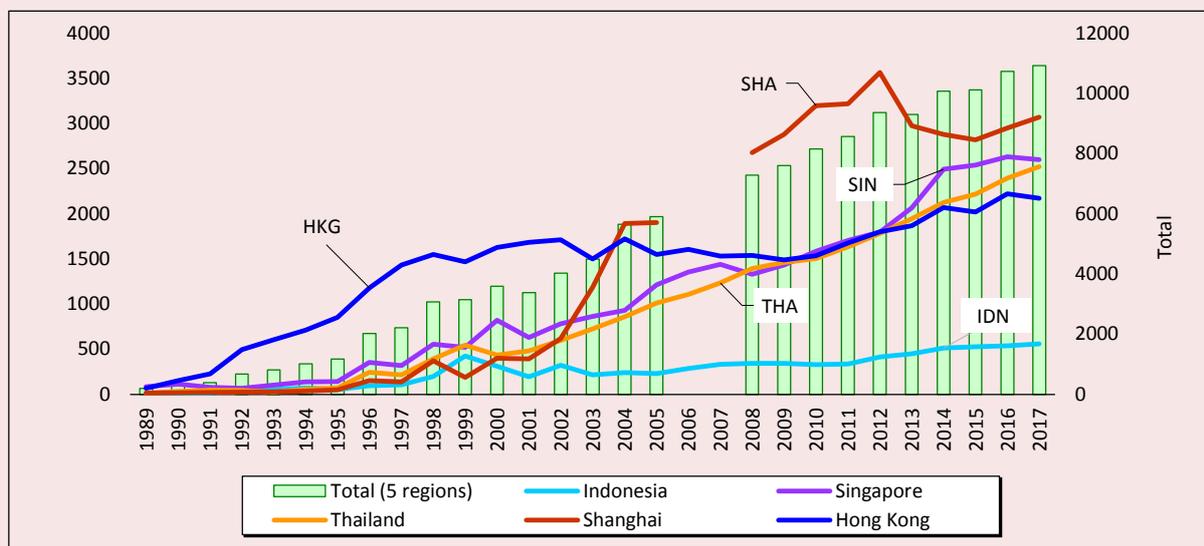
this paper will solely focus on, most Japanese out-migrants are not international students or working holiday makers but employees of private companies. These statistical figures imply that the transnational career experience is progressively emerging.

There are two types of Japanese out-migrants; one is corporate expatriate (CE), and the other is so-called self-initiated expatriate (SIE) [3]. The corporate expatriates are those who are assigned to local branches by their headquarters, and they usually take managerial positions of the local organizations. Unlike the CEs, the SIEs find their positions by themselves and move to the destinations. CE follows the personnel policies and practices by the headquarter in most cases, and its cross-border mobility is located within the organizational career ladder. However, SIE does not have direct employment relationships with the headquarters.

Figures 1 and 2 include both CE and SIE. Unfortunately, there is not an exact figure of SIEs due to a lack of well-designed survey with a focus on them. However, it is possible to approximately see the number of SIEs by that of female employees in private companies. It is because male expatriates dominantly consist of CEs, and a research report of CE figures out that 98.2% of CEs are male workers [4]. The informants of staffing agencies in this study also frequently point that the male-female ratio of SIEs is 50/50 or 60/40. Given that information, the number of male SIE workers in private firms must be close to that of female SIE workers.

Figure 3 depicts the number of female workers employed by private firms in each region. We select five regions that are popular among Japanese SIEs⁵, and the bar chart in Figure 3 is the total amount of them. The total number has increased since the 1990s, and it approaches over ten thousand in 2017, that is

Figure 3. The number of female employees in private companies in major Asian destinations



Source: Authors' calculation of the Annual Report of Statistics on Japanese Nationals Overseas by Ministry of Foreign Affairs.

⁵ Vietnam is also becoming a popular destination, but the Japanese expatriate population there is smaller than other Asian societies.

30 times larger than that in 1990. Hong Kong used to be the most popular destination among Japanese SIEs before the early 2000s, but its relative presence has got smaller nowadays. Instead, Shanghai, Singapore, and Thailand have gathered female SIEs, and the number of them in Indonesia also increases. From these results, there is possibly a similar number of male Japanese SIEs in these societies today.

Research Question and Agenda of the Present Study

The research question in the present study is how the Japanese SIE's labor markets in Asian societies provide career opportunities for young Japanese workers. Previous studies are likely to stress cultural aspects of the Japanese expatriation. A majority of them has focused on how Japanese SIEs interpret their career experiences in their daily lives, because they do not always want to work overseas for higher socioeconomic statuses. Working overseas is a means of seeking one's better way of life, and this kind of expatriation is called the Lifestyle Migration [5][6].

This paper, instead, focuses on the labor market structural factors, like the labor demand-supply relationship in destination societies, directly determines the SIE's opportunity. The previous studies have had relatively few attentions to the demand-side aspects of Japanese SIE's career. This paper investigates their opportunities from the labor demand-side's viewpoint through intensive field interviews for staffing agencies in Asian countries and other statistical information.

The present study illuminates the opportunity structure of Japanese SIE which will vary across Asian societies according to some conditions. With interview data and salary information publicly available, this paper will delineate four dimensions; market growth in the local society, existence of Japanese community, legal restriction of issuing work permits, and

the degree of localization of Japanese firms. Combinations of these factors provide different career opportunity structures to Japanese SIE workers in each society. Detailed analyses will follow the literature review and description of data this paper utilizes.

Literature Review

Significance of the Lifestyle Migration View

The vast immigrant researchers regard economic incentives as pivotal factors to explain international mobilities. In an economic model of immigration studies, international migration is economically rational when people can expect high returns with low costs [7, 8]. High economic returns are pull-factors for migrants in the economic model. This economic perspective particularly helps migration scholars to understand the immigrant inflow process of unskilled workers from developing to developed countries.

The economic model successfully specifies the likelihood of labor migration across societies, but how and why people in an affluent society move to equal or less affluent societies is out of its scope. That is why expatriate scholars in sociology and cultural anthropology have a motivation to construct another analytical framework. When it comes to the middle-class migrants, they do not always have economic incentives for expatriation because pursuing job opportunities abroad is not the only way of their career developments. For them in a high-income society like Japan, it is still substantial to achieve their socioeconomic positions in the domestic labor market. The middle-class migration from higher to lower-income societies cannot but be a residual case in the orthodox economic model of migration.

What Benson and O'Reilly called the Lifestyle Migration sees some rationalities in the migration process. The Lifestyle Migration concept suggests that the migrant's motivation should be the search for a better way of life.

Ordinary people in an affluent society do not have urgent economic matters but face issues in their social lives. Strong social norms and solid interpersonal relationships in their origin societies often restrict one's freedom, and they can be stressful in their daily lives. These negative aspects of the origin society are push-factors for expatriation for some people. From the lifestyle migration perspective, migrants seek the re-organization of their work-life balance, improved quality of life, and freedom from present constraints [5, p. 610]. In other words, expatriation is a means of pursuing one's self-realization.

In addition to the following Japanese cases, there are a lot of previous studies supporting the lifestyle migration perspective. According to them, fulfilling one's middle-class identity is a strong motivation for lifestyle migration. A study focused on professional women from the Philippines in Australia reveals that they used to face with a gendered labor restriction and a severe economic crisis before migration, and they entered into the destination for improving their situations [9]. Young and well-educated Chinese entrepreneurs and working tourists also seek their self-realization and fulfillment of their dreams [10]. These studies show that migration is not only a way of maintaining their positions but of pursuing the middle-class lifestyle such as autonomous and independent daily lives, living in clean environments, having healthy food, and so on. Another example of related studies investigates European highly skilled migrants to Singapore and Japan [11]. Though this study does not rely on the lifestyle migration view, it finds out that the existence of European men who have an orientalist view and enjoy their otherness in these Asian societies. The motivations from the lifestyle migration perspective can be observable in various contexts.

Local Employment for Japanese Expatriates

There are also qualitative studies attempting to describe how Japanese out-migrants define their career experiences in local societies. Most previous researches are likely to conclude that Japanese SIEs have only restrictive career opportunities. That is because of the organizational characteristics of Japanese firms in the local societies, in which CEs have always played a pivotal role in the local branches [12]. The following discussion refers to this point and to what the lifestyle migration means in the context of Japanese expatriate workers.

When Japanese firms started to expand their businesses to Asia in the late 1980s, they mainly dispatched CEs from the headquarters in Japan at first. They have not had a motivation toward localization but tried maintaining Japanese business manners even in overseas branches. One reason for this situation was that the headquarters in Japan did not trust the local organizations and required them to keep frequent contacts [12]. As a result of the internationalization of Japanese firms without localization, the local organizations have just wanted assistant level staffs who can fluently speak Japanese language and understand Japanese business manner. Due to the linguistic and cultural barriers, the local Japanese firms continued to prefer Japanese workers who wanted to work abroad.

At the same time, young Japanese workers' situation has changed. The Japanese youth labor market had shrunk due to a long-term recession since the early 1990s. Firms in Japan had protected their employees and declined their new labor demand for young workers since the mid-1990s as a result [13]. Local Japanese firms in Asian societies such as Hong Kong and Singapore simultaneously started opening job opportunities, as mentioned above.

Young Japanese workers, especially women with an undergraduate degree, struggled with getting their job, and non-negligible size of them felt it attractive to have international career experiences [14]. Even though local organizations of Japanese firms did not pay much for these positions, young Japanese expatriates preferred job opportunities to higher remunerations. The interdependence between Japanese local firms and expatriates have formed labor markets for Japanese workers in local societies [15].

According to previous studies, a unique point of Japanese young expatriate workers is that they rely on the lifestyle migration perspective differently compared to other societies' cases. As was pointed out, the lifestyle migrants except Japan have a strategy of realizing or maintaining the middle-class habits and identities toward their expatriations. A positive selection process works in their expatriation, which means the more successful workers in origin societies seem to go out there for a better way of life. Meanwhile, young Japanese expatriates do not always have more privileges and advantages than Japanese youth staying in Japan have. Even though Japanese labor market situation had got worse from the 1990s to the mid-2000s, Japanese firms had maintained their employment practices, such as long-term employment without a fixed-term contract, seniority-based wage system, and career ladder heavily based on the internal labor market [16]. Under these labor market conditions, it is rational to keep working in Japan in terms of the socio-economic status attainment. Consequently, previous studies have thought the expatriation of young Japanese workers is a negative selection and a vicious cycle of their career because local Japanese organizations have not provided better positions as already seen [17].

Prior researches point out the lifestyle migration perspective makes the Japanese young expatriate workers accept the vicious cycle. Because many of them move to the destinations without clear career orientations, the reasons for expatriation are to explore what they want to do and to avoid the previous work and life [18, 19]. Small successful experiences and living circumstances different from Japan encourage and stimulate young Japanese expatriates even though Japanese firms do not evaluate favorably them [20]. They feel finding something worthwhile for their lives by expatriation at the expense of status attainment. In other words, they make a posteriori justification of expatriation by the lifestyle migration scheme. That is the process of the Japanese expatriate's lifestyle migration, which prior researches have drawn.

It is common for studies relying on the lifestyle migration approach to conclude that the primary reason for expatriation is the self-seeking or realization for a better way of the middle-class life. The Japanese cases are unique in terms of the point that the expatriates define the lifestyle migration as a justification for their worse career experiences than those of non-expatriates staying in Japan. As the subsequent part will discuss, however, there are several points to be argued about the findings from the studies of Japanese SIE career experience.

Structural and Institutional Accounts

It is the first interest that the lifestyle migration approach emphasizes an expatriate gives a subjective meaning of expatriation for one's career experience. In the subjective approach, understanding of the opportunity structure for the Japanese expatriates heavily depends on their perceptions. Although there are many informative findings from the previous literature, it is also essential to illustrate an actual state of the opportunity structure for

them. It is because there might be a significant gap between the subjective and objective pictures of the labor market opportunity in the local societies. Including an investigation of this gap, few studies are focusing on the labor market opportunities for the Japanese SIE workers.

Second, previous studies chiefly have focused on expatriates' situations but have not considered the labor demand side so much. One reason can be that the lifestyle migrant approach is interested in each SIE worker, but the labor market is a result of the interaction between the labor supply and demand sides. In order to investigate the career opportunity independently from the expatriates' perceptions, the information from the labor demand side is necessary.

The third research interest is the validity of assumptions of the lifestyle migration approach for the Japanese SIEs. Given Japanese youth labor market with fewer employment opportunities and the CE dominant Japanese firms in the local society, it is reasonable to infer that the Japanese SIEs rely on the lifestyle migration perception for justifying their restricted career opportunities. However, the Japanese labor market has not always been in a bad situation. Since the late 2000s, the labor market opportunities for youth in Japan have been on a recovery trend. The employment situation in Japan is different from the long-term recession period from the 1990s to the early 2000s when the previous studies intensively had research interests. In respect of the local Japanese firm's organization, the number of CEs from Japan has decreased for a long time [12]. The decline of the Japanese CEs is due to the extremely high cost of assigning them to the local branches, and it has become difficult for many Japanese firms to

maintain the international personnel system which they used to have. It might not be adequate to generalize the findings from prior research under a different social and economic environment.

Because previous studies have a central interest in the individual expatriate's thoughts in the light of these three points, there has been little attention to the institutional and structural aspects surrounding the Japanese SIE workers. Several Japanese scholars consider these dimensions in discussing the opportunity structure of the expatriates, but they are still minorities [21, 22]. Country-level immigration policies such as the generosity in issuing work permits for immigrants will affect the volume of labor demand for the Japanese expatriates. The circumstance of market competition in the local society also appears to be relevant for the expatriate's career opportunities. It will determine Japanese firms' autonomies in the local economic markets, and they have to take isomorphic behaviors with leading companies under a strong global competition in the local society [23]. To follow and adopt in the competition successfully, an organizational structure deviant from a global standard possibly raises the cost for maintaining economic relations with other competitors and causes the risk of isolation from organizational networks.

A comparative approach is relevant for investigating the structural and institutional aspects of the Japanese SIE's career opportunity. Previous researches concentrate on a single-country (society) case study by the qualitative method. While this approach provides in-depth information about the expatriates in the local society, it is difficult to synthesize the findings from different

social contexts or explain differences among those results. The expatriate population size has increased in a variety of Asian societies, but institutional and labor market settings are significantly different from each other. That will mean the opportunity structures for the expatriates will also vary. A cross-society comparison is the first step to investigate the variation of the Japanese SIE's career opportunity from a comprehensive viewpoint. It is a shortage in the research of Japanese transnational career to explain different labor market situations for the Japanese expatriates across societies. The present study fills the blank with both quantitative and qualitative data.

Strategy and Data in the Present Study

Research Strategy and Regions

This paper investigates the career opportunity structures for the Japanese expatriate workers in five Asian societies; Hong Kong, Singapore, Thailand, China, and Indonesia. If we presume the male-female ratio among SIEs is 50/50 as already argued in the previous section, there is estimated at over twenty thousand Japanese SIE workers in these five regions. This number takes up about 67% of the total SIE workers in Asia. Although the five societies do not cover the entire Asia completely, it is possible to extend findings of this study to other Asian societies in the future researches.

This paper focuses on local Japanese firms and investigates the degree of (dis)advantage for the Japanese SIE's labor market condition in these Asian societies. Local Japanese firms play a crucial role in the local labor market because they provide most of the job opportunities for the expatriates. There is no accurate and representative statistics about this, but there is some information supporting that more than the majority of the Japanese SIE workers are

employees of local Japanese firms according to some media and the authors' interviews⁶. Not all of the expatriate workers, but a plausible approach to the Japanese SIE career is to concentrate more attention on the labor demand from local Japanese firms.

In order to shed light on how local Japanese firms provide career opportunities to the expatriates, this study utilizes information from staffing agencies engaging in recruiting Japanese SIEs. It is difficult to find out which local Japanese company hires the Japanese expatriates due to lack of sufficient data. However, the staffing agencies have rich information about local Japanese firms that have demand for the Japanese expatriates. It is because those firms usually rely on the staffing agencies at the early stages of recruitment. The staffing agencies also know well the expatriates who want to work in the local societies. Approaching the agencies is a reasonable way to get information on both sides in the local labor market.

A comparative view is the other approach which the present study takes. As discussed in the previous section, diverse contexts will generate different opportunity structures. Through a comparison among popular destination societies for the Japanese SIE workers, this paper can investigate what aspects have impacts on their career chances. Because the research motivation of this study is not to understand the Japanese SIEs' opportunities within a single society but the whole picture in East and Southeast Asian societies, it is necessary to consider institutional and

⁶ *DACO*, a free Japanese magazine issued in Bangkok, is an example. It conducted an original survey and reported that 67.9% of Japanese SIE workers belong in local Japanese firms (p.16 of No.493 in November 2018). In addition, staffing agencies in Asian societies, who the authors visited, also mentioned Japanese SIEs were likely to find their job in local Japanese firms.

structural differences among destination societies in scrutinizing the characteristics of the expatriates' opportunities.

Data and Methods

In the following part, this paper utilizes two types of data. One is a set of qualitative data which the authors originally collected through interview surveys in the above-mentioned five societies, and the other is a quantitative data of the salary from a staffing agency.

The first one is a set of interview data which the authors originally obtained from August in 2018 to April in 2019. We visited nine agent organizations and one local Japanese firm which employs Japanese expatriates, and two agent organizations in Japan. The total number of informants is 23, and all of them are Japanese. The authors conducted the surveys in a semi-structured manner and recorded the interviews with the informants' consent. Each interview has 1.5 to 2 hours in length. In the interviews, the authors principally asked informants labor market and career situations surrounding local Japanese workers from the late 20s to 40s. In the following analyses, the authors refer to interview scripts relevant with results of the entire surveys. Their statements are in italics, and the names and organizations of informants are anonymized.

As the second source, the authors constructed a dataset of the annual salary level that local Japanese firms offers⁷. This publicly available bulletin reports salaries which firms offer, and it is possible to see the information by countries, positions, and type of workers. In this study, the analytical dataset contains information only for non-managerial positions in local Japanese firms. It is because most SIE workers are less likely to get managerial positions. The type of workers comprises four groups: local staff, local English speaker, local Japanese speaker, and native Japanese. The SIEs are Japanese native speakers, and it is possible to examine the extent of the expatriates' (dis)advantages in terms of career opportunities in the local labor markets. Using the natural logged salary in the U.S. dollars as the outcome variable⁸, the authors estimate the SIE's economic premium by OLS regression. The independent variable in the regression model is the type of workers, and the local Japanese speaker is the reference category. We use three dummy variables; local staff, local English speaker, and native Japanese. The SIE's economic premium is the difference of the natural logged salary between local Japanese speaker and native Japanese.

Table 1. Summary of the field interviews

	SIN	HKG	THA	IDN	CHN (SHA)		Opportunity
(1) Economic Growth	-	-	+	+	+	->	+
(2) Japanese Community	-	-	+	+	+	->	+
(3) Employment Restriction	+	-	+	+	+	->	+ / -
(4) Localization	+	+	-	-	-	->	-

Source: Authors' interview data.
Note: Signs (+/-) in each cell mean relative senses among societies, not absolute ones.

⁷ See *The Salary Analysis in Asia 2019* by JAC Recruitment Group (<https://corp.jac-recruitment.jp/en/sa/>)

⁸ Each value of the outcome variable is intermediate value between minimum and maximum values.

Results

A Variation of Opportunity Structures for the Japanese SIE among Asian Societies

At first, we demonstrate the labor market circumstances surrounding Japanese SIEs and local Japanese firms in Asia from the interviews to the staffing agencies. *Table 1* is a summary of the interview surveys. The field interviews find out the four dimensions which influence the career opportunity for Japanese SIE workers, and each factor has a positive or negative impact on their chances. These dimensions are mutually interdependent, and the composite of them will result in the different degree of Japanese SIE's advantage in each local society.

Institutional and Structural Dimensions Influencing the Career Opportunity

Four factors are (1) the economic growth, (2) the size of the Japanese community, (3) the employment restriction, and (4) the degree of localization in each Asian society. (1) and (2) have positive impacts on the volume of well-paid positions in the local labor market. It is merely because Japanese firms advance their overseas organizations toward markets with more business chances, and some agents referred to that point as the following examples.

“Shanghai’s market is still growing up, and Japanese young workers can experience management tasks in the early stage of their career through these positions”. (M1, a past agent in Shanghai)

“I think the labor demand for Japanese workers is expanding in Thailand and Vietnam. Indonesia also increases labor demand, but Vietnam is becoming more popular”. (F1, an agent in Japan)

Because it takes much cost to assign CEs to local branches, local Japanese firms gradually hire SIEs for intermediate positions in the local organizations. In addition to the cost issue,

the SIE workers can smoothly communicate with both CEs and local staffs. CEs as the top managers in the local branches have to supervise local staffs adequately, but they do not know them well in usual. SIE workers more understand the attitudinal and behavioral manners of local people than CEs. They perform a brokerage role in the organization, which is sociologically beneficial due to filling the structural holes [24]. The following narrative is a brief statement of this point.

“Because Japanese firms are not confident with managing local staffs by themselves, they feel having to hire Japanese workers in the local society and entrust them to the management of local staffs”. (M2, the head of an agency in Thailand)

Japanese community size also affects the degree of career opportunity for Japanese SIEs. With a large supply chain which consists of almost only Japanese firms, it plays a role like an ethnic enclave which immigrant studies define as an area concentrates co-ethnic workers and enterprises [25]. If the Japanese community is weak, however, it cannot guarantee those exclusive opportunities due to a lack of its autonomy. An agent referred to it.

“In Singapore, the Japanese community’s market barrier is low. It cannot ignore British, American, and Canadian companies in its business. In Thailand, it is possible to do business within local Japanese firms only”. (M3, the head of an agency in Thailand)

The extent of employment restrictions in each society has complicated implications toward the career opportunities for Japanese SIEs. Hong Kong does not have a specific restriction on immigrant employment, though immigrant workers need to prove that Hong Kong people cannot meet their skills in applying for their work permits. Meanwhile, the rest of societies have some restrictions.

The quota rule is one of the most critical restrictions, and firms have to hire several local workers in exchange for the employment of foreign workers. It is because of protecting the employment of local people. Thailand and Indonesia have those rules, and it is also applied to one type of work permits in Singapore. Those quota rules primarily make it difficult for Japanese expatriates to find positions because the local Japanese firms have a priority of assigning CEs in filling the limited slots of work permits. As the number of local staffs increase, however, the local organizations become to need the locally employed Japanese workers for the bridging role between local staffs and CEs.

Another important restriction is about the characteristics of positions or workers. There is a minimum salary level for work permission in Singapore, and firms cannot hire immigrant workers under the minimum level. It is usually much higher than the average salary among local Singaporean workers, and it means local Japanese firms must offer Japanese SIE workers positions that need specific skills local Singaporean workers cannot satisfy. China has a rank scheme for immigrant workers, and immigrants cannot work in China unless they satisfy the criteria. The rest of the societies also requires a high level of expertise toward Japanese expatriates. The selection process of Japanese expatriates in each society seems to decline the quantity of employment opportunity for them. However, local Japanese firms can guarantee Japanese expatriates better positions after they pass the prerequisites.

Under these restrictions, there have been more and more competent Japanese SIE workers these days. They should have been able to get a job in large Japanese firms and expected to work overseas in youth, but these large firms

become less likely to assign them as CEs due to the high cost as mentioned above. M2 said that the gap between hopes and realities motivated them to try working in local Japanese firms abroad.

“I have frequently seen locally employed young Japanese workers who are much more highly talented than corporate expatriates. They are competent enough to get a job in large Japanese companies. However, most of them do not usually send young staffs to their overseas organizations. Those young workers who hope to work overseas know that and cannot but find positions as locally employed staff in local Japanese firms. They are so determined that they do well”. (M2, the head of an agency in Thailand)

The last thing which influences the career opportunity is the degree of the Japanese firm's localization. Almost all agents pointed out local Japanese firms little adjusted their organizations to the local societies. They maintain CEs as the top of the organization, and Japanese SIE workers and local staffs follow them. The low degree of localization relates to the Japanese community size and encloses employment opportunities for the expatriates.

Such a structural characteristic is pervasive in Asia, but local Japanese firms in Singapore and Hong Kong are more localized than those in the rest of destinations. A lack of a sizable Japanese community is one of the reasons. There is not the reproduction of demand for Japanese people without the community.

Liberal economic market schemes in Singapore and Hong Kong are also the source of local Japanese firms' localizations. Japanese firms in Singapore and Hong Kong have localized their organizations to some extent under the pressure of the liberal market competition, although the degree of their localizations is still low. They replace Japanese

staffs with local ones because they do not always need those who understand Japanese business customs anymore. By the localization, it is also possible to reduce employment costs. Agents in Hong Kong, for example, have a negative perspective for career opportunities of Japanese SIEs. There is a similar situation in Singapore, according to interviewees.

“The strategy of Japanese firms in Hong Kong has changed for these ten years. They decreased corporate expatriates due to budget constraint, but someone had to handle local organizations instead of them. Therefore, Japanese firms firstly wanted local Japanese people. However, they currently recognize that Hong Kong workers can perform the same tasks Japanese staffs used to do. (...) There is little difference between Hong Kong and Japanese staffs, at least in terms of language skills”. (M4, an agent in Hong Kong)

“Most of the Japanese firms in Hong Kong tend to decrease Japanese staffs and localize their organizations due to much cost. (...) Hong Kong people usually live with their families, and Japanese firms do not have to consider their house rents about their salaries”. (F2, an agent in Hong Kong)

Differences across Local Societies

The career opportunity structure of Japanese SIE workers in each society relies on these four dimensions, that are dependent on each other. In sum, it is possible to classify these five destination societies into two groups. One has a premium of Japanese SIE workers and includes Thailand, Indonesia, and China. Meanwhile, the other does not. Singapore and Hong Kong are the cases with the latter group.

In the former group of destinations, there are plenty of better positions with overall economic growth and a large Japanese community as backdrops. There are still Japanese-style business customs with a large Japanese

community, and local Japanese firms do not need to localize their organizations yet. They make a stratified organization which consists of Japanese and local staffs and locate local staffs under Japanese ones in most cases. In those labor market structures, employment restrictions by immigrant policies can inversely warrant career opportunities for Japanese SIEs. The quota system increases the number of local staffs. At the same time, it expands the labor demand for the Japanese expatriates as intermediary positions between CEs and local staffs. As a result of these processes, there is a threefold stratification in the former group.

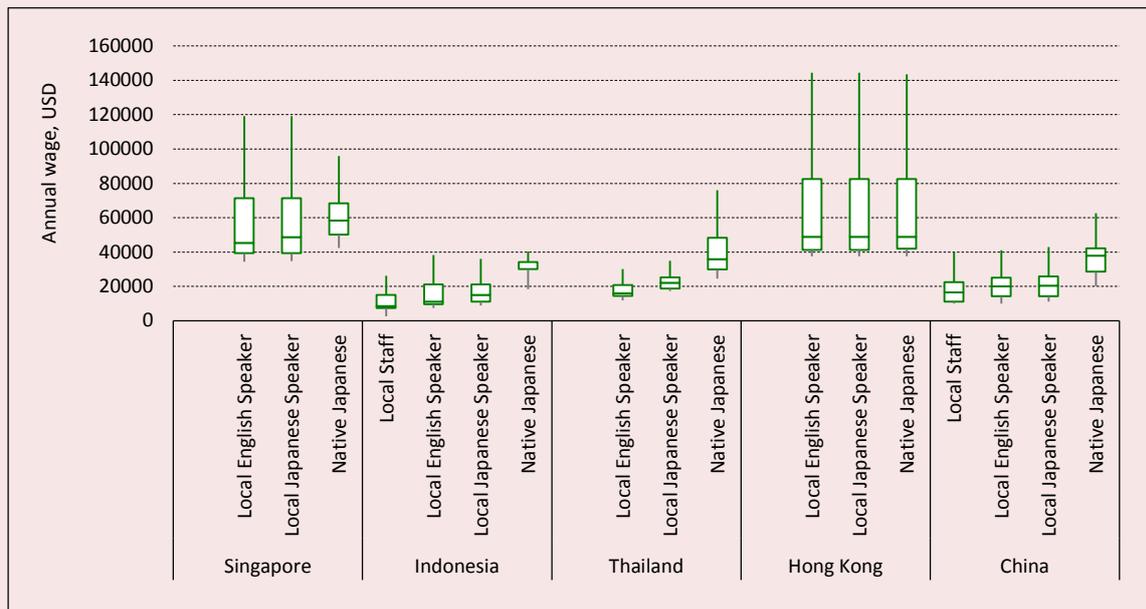
In the latter group, however, there is less room for expanding business opportunities by local Japanese firms than in the former one. That means local Japanese firms primarily maintain CE's position but do not afford to increase positions for Japanese SIE workers. Local Japanese firms do not need SIE workers anymore under the highly localized market. Japanese SIE workers consequently have to compete with local staffs under a simple market mechanism if they want to get better positions.

Career Opportunities for the Japanese SIE workers from the Salary Analysis

The qualitative interview data analyses suggest native Japanese' salary should be higher than other workers' ones in Indonesia, Thailand, and China, but there should be no premium for the SIEs in Singapore and Hong Kong. *Figure 4* illustrates the box plots of the annual salary levels by the five societies and worker types. The boxplot can describe both quantiles and variation in each variable. There are three findings in the box plots.

There is a fair difference in the salary level across societies. It is higher in Singapore and Hong Kong than those in the rest of the three societies. That variation is probably due to the difference in economic scale among these

Figure 4. Box plots of annual salary levels within Japanese firms in Asian societies



Source: author's calculation with the salary analysis in Asia 2019 by JAC Recruitment Group.

societies. Singapore and Hong Kong also have larger variances of salaries between positions.

Second, the expatriate labor markets in Asian societies can provide salary levels close to that in Japanese domestic labor market. According to the Basic Survey on Wage Structure in 2018 by the Japanese government, the average monthly wage of the regular workers in Japan is about 3000 U.S dollars. At least in respect of the economic remuneration, Japanese SIE workers' positions are not worse than those of Japanese domestic workers.

Third, however, Figure 4 shows a difference in the premium of native Japanese workers in each society. The local labor markets in Indonesia, Thailand, and China provide higher salaries to Japanese expatriates than to non-Japanese staffs, but there is no salary difference among worker types in Singapore and Hong Kong. Those descriptive statistics imply the extent of Japanese SIE's advantage will differ among destinations.

OLS regression in each society (*Tab. 2*) also shows the same tendency with the descriptive analysis in Figure 4. In Singapore and Hong Kong, there is no premium of native Japanese workers compared to non-native Japanese speakers. The regression analyses show similar results to the findings from the previous studies which implied SIE workers admitted low wage and employment stabilities in Singapore and Hong Kong [14][26]. Meanwhile, the effects of Japanese native speakers in Indonesia, Thailand, and China are all positively significant, and the salary levels are 1.84 ($=\exp(0.61)$), 1.62 ($=\exp(0.48)$), and 1.67 ($=\exp(0.51)$) times higher than non-native Japanese speaker's salary, respectively.

The quantitative data analyses from the labor demand side's view reveal that the salary level of the Japanese SIE workers is not always lower than that of regular domestic workers in Japan. Also, it is not adequate to conclude that there are few better career opportunities among

Table 2. OLS regression on natural logged annual salary

	Singapore		Indonesia			Thailand			Hong Kong			China			
	Coef.	S.E.	Coef.	S.E.		Coef.	S.E.		Coef.	S.E.	Coef.	S.E.			
Worker Type (ref: Local J.S.)															
Local Staff			-0.56	*	0.09										
Local E.S.	-0.03	0.08	-0.18	*	0.09	-0.25	*	0.08	0.001	0.19	-0.04	0.10			
Native Japanese	0.13	0.08	0.61	*	0.09	0.48	*	0.08	0.02	0.19	0.51	*	0.10		
Intercept	10.89	*	0.06	9.69	*	0.06	10.04	*	0.06	11.11	*	0.13	9.95	*	0.07
R^2	0.041		0.580			0.571			0.0001			0.336			
Number of positions	114		138			73			87			134			
* $p < 0.05$															
Note: E.S. : English Speaker, J.S. : Japanese Speaker.															
Source: author's estimation with the salary analysis in Asia 2019 by JAC Recruitment Group.															

Japanese SIE workers in Asian societies. The results of the salary data analyses are consistent with the qualitative data analyses. Though there need to be more detailed examinations, these results are different from the findings of the previous studies, which have perceived Japanese expatriate workers as marginalized ones.

Conclusion

The primary finding through qualitative and quantitative analyses is that the career opportunity structure of Japanese SIE workers depends on the institutional and structural aspects in the destination societies. The previous studies with a focal point toward the subjective meanings of expatriation have not emphasized that point. They tend to try demonstrating how Japanese SIE workers determine meanings of their relatively low-status attainment situations by the lifestyle migration perspective. On average, however, the economic remuneration of them is not worse than that of Japanese domestic workers. Given some conditions, they can also obtain a certain premium in the local labor market. The comparative viewpoint from the labor demand side can provide these findings prior study did not point out.

Differences in location and period of research can partly explain why the findings of this paper are different from those of the previous studies. Scholars with research interests for Japanese expatriates have not paid much attention to recent growing market society but to societies where the majority of people speak English. In English-speaking societies, it is easy to predict almost no premium for Japanese expatriates. It is because the comparative approach is effective to investigate different situations among destinations.

The period will also affect the opportunity structure because of changes in immigration policies and labor market situations in each society. For example, an agent in Singapore said that it had used to be easy for Japanese expatriates to find a job there, but the situation changed. It might be possible that this study and the previous ones saw different groups of expatriates before and after institutional and structural changes in destinations. Regional and longitudinal extensions of data are plausible future works in order to obtain more accurate and robust effects of these institutional and structural factors.

A theoretical issue is another future research agenda. The low degree of localization and large Japanese community are sources of Japanese SIE's premium, but both the structural factors and outcome are results of the decision-making by Japanese firms. To reach more detailed understandings about the SIE's opportunities, we must figure out why local Japanese firms are reluctant to localize themselves and what competences they require their staffs to have. Approaching these logics will contribute to a theory of the globalization process specific to Japanese firms and workers.

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A New Liberal Class in Japan: Based on Latent Class Analysis

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Abstract. Presently, in Japanese politics, the majority of people opt to vote for conservative parties, with anti-conservatives and old liberals losing power and representation in the government. This study explores the emerging middle-class who may potentially lead to an alternative liberal politics in Japan. Using responses to an Internet survey conducted in 2018 as our data, we articulate features of a new liberal class by constructing a theory of class articulation and combining that theory with latent class analysis to compare the new liberals to old liberals and conservatives. This is the first attempt to apply latent class analysis to figure out differences in political orientations among possible social classes. We analyze some personality traits of the new liberals using our original 18 personality categories. We also analyze their social attitudes by comparing their questionnaire responses to those of old liberals. Although our analysis shows that new liberals are not experiencing upward social mobility, their personalities as defined by our study constitute a new political class, that is particularly sensitive to the environmental issues, and prefer

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the nature and minimal consumption. We discovered that these new liberals are in their sixties, graduates of university or graduate school, professionals, and low-income people. We have also discovered that although these new liberals are a coherent political class, they have no representations in our political party system. However, further research based on mail survey especially for elderly people should be conducted in order to conceive more precise features of new liberals.

Key words: latent class analysis, liberal, politics, Japan, personalities, network.

1. Introduction

In contemporary Japanese politics, the opposition to the conservative majority, represented by the Liberal Democratic Party of Japan, is less visible and less powerful than ever. Anti-conservatives and liberals seem to have lost representation in Japanese politics.

This paper examines various social attributes of an emerging middle class which might support new, alternative liberal politics. In order to understand these new Japanese liberals, the authors conducted an Internet survey in 2018. Below, we describe our theoretical framework and the results of our survey. First, we present our framework for understanding a social image of new liberals in Japan. Second, we posit that there are four classes of political orientation and analyze the features of each class. These four classes are: “the conservative class”, “the pending judgment class”, “the new liberal class”, and “the old liberal class”. Third, we analyze socio-economic status of these four classes’ members. Fourth, we analyze the relationship between these four classes and the personalities of their members, using our original categories of “18 personhood clusters”. Fifth, we describe social attitudes of the new liberal class. Sixth, we analyze the relationship between four classes and political parties they support. Finally, we analyze personal networks of new liberal class’ members.

2. Basic framework for understanding new liberals

The term “liberal” is based on the idea of liberalism. Historically, liberalism has been

defined in terms of “enlightenment” and “tolerance” terms, which were often used in the 18th century in Western Europe¹. The concept of “enlightenment” has the following characteristics. (1) It rejects authority and affirms the autonomous life. (2) It criticizes uncritical ways of living, based on traditional practices, and favors rational actions. The concept of “tolerance,” on the other hand, rejects social conformity (homogenization) and accepts various ways of living which may deviate from standard ones and those practiced by a majority of people. These three features, as well as the ones defining personal traits of a liberal, were considered the fundamental features of liberalism.

Also, there is the approach of thoroughly studying the features of liberalism². Let us call the person, assuming such a position, a “radical liberal”³. Liberals and radical liberals believe in three abovementioned features of liberalism. How and when do we differentiate between

¹ See Inoue [1].

² There is also the term “radical left.” Radical left is a roughly synonymous term to extreme left or far left. In the Japanese political context, the Japan Communist Party (especially in the early 1950s); the Japan Revolutionary Communist League; and the Japan Red Army might be considered radical left. Here, we just focus on some of the theoretical features of these groups, and we do not examine the self-contradictory features that emerge from the interest of their members in political domination and authority. On the distinction between left and right, see Bobbio and Cameron [2].

³ Lichtenstein [3] defined this term. According to him, it represents six following ideas: pluralism, developmental individualism, solidarity, egalitarianism, participatory democracy, and social transformation. However, this term has not become popular, and it is mostly ignored in Japan. As discussed later, we use this term differently.

them? A radical liberal denies every authority, tradition, or call for conformity. In doing so, a radical liberal tries to be “avant-garde”, aspiring to make fundamental changes in the existing society. Their ideal is to emancipate people from every type of suppression arising from authority, tradition, and a call for conformity. However, liberals could no longer be considered liberals, if their opinions become too radical: liberal position usually means not pursuing one’s values in an extremist manner.

It is possible to point out that, while liberals use democratic procedures in pursuit of their goals, radical leftists tend to appeal to violence. However, if we focus on three aforementioned features of liberalism without considering the opposition between democracy and violence, can we understand the difference between these two positions? Is the difference between them only a matter of the degree of extremism in pursuing these ideals? Is there any qualitative difference in perspectives between them? When we ask these questions, we find that these qualitative differences have not been investigated in the literature on political analysis through usage of survey data⁴. People tend to think that these two positions have a common political goal of criticizing authority, tradition, and conformity.

Historically, there were periods when anti-authoritarianism, anti-traditionalism, and anti-populism emerged as important political issues. During the transition from pre-modern to modern society, the issues of authoritarianism and traditionalism were in the center of political arguments⁵. During the

transition from early modern society to mature modern society, criticism of populism became an issue [8]. In Japan, these transitional phases took place in the 20th century. Indeed, anti-authoritarianism, anti-traditionalism, and anti-populism were central issues of Japanese political arguments.

In such political context, liberals and radical liberals together criticized these three ideologies, and the difference between them has not been a big problem. As long as radical liberals resort to democratic procedures for implementation of their ideals, their position can be understood as similar to the liberals’ one. As long as Japan’s primary political rivalry goes on between liberals and conservatives, liberals and nationalists, liberals and populists, liberals and radical liberals will be on the same side. They should not be differentiated from each other, at least in terms of their theoretical views. However, Japanese political landscape seems to have changed radically: it has become less clear. It does not matter, whether the dominant confrontation of ideologies goes on between liberals and conservatives, liberals and traditional nationalists, or liberals and populists. Contemporary liberals seem to adapt certain features of authority, tradition, and conformity. For example, as discussed in the universalism section, Japanese liberals have gradually come to accept the emperor system. They have also started to consider conventional uniforms and clothes in business and high school education spheres of life as ethically acceptable. If this is the situation, how can we identify the features of contemporary liberals?

Our hypothesis is that liberals are currently not only becoming less extreme, but core features, defining them, are also changing. In other words, the newly emerging liberals may be qualitatively different from the liberals

⁴ Since political ideology was traditionally measured by the “conservative-liberal” continuum in Japanese political science, scholars mainly focused on the difference between the conservatives and the liberals [4; 5; 6]. As a result, they did not focus on the heterogeneity among the liberals.

⁵ This is analyzed in detail in Ronald Inglehart’s world value study [7].

described above⁶. We assume that new liberals can be broadly characterized by two following features [9]:

(1) They are related to the “creative class,” which emerged during the period of the IT industry’s rise in the mid-1990s.

(2) They, to some extent, support the “Neo-welfarism” (e.g., [10]), practiced by the Nordic welfare states since the 1990s.

Taking into account these two features, we assume that new liberals could be defined by two following characteristics.

The first characteristic is growth- or investment-orientation. Based on the analysis of Pablo Beramendi *et al.* [11], we interpret the concept of growth-orientation as an inclination to invest in educational and/or cultural capital. Growth-orientation is not the attitude toward asset formation or consumption. Instead, these newly emerging liberals prefer to invest their financial resources in various forms of cultural capital rather than to hold assets (such as land and buildings). In addition, these new liberals, by and large, tend to invest in their children’s and grandchildren’s human capital and not to consume resources by themselves. Conventional liberals do not have this investment-orientation.

However, as Tony Blair’s cabinet in UK in the middle of the 1990s showed us, the idea of investment-oriented public expenditure started to be widely recognized. This liberal investment orientation was later classified and theorized by Anthony Giddens [12], who presented his idea as the “Third Way”. Taking into account Giddens’ Third Way, we assume that investment orientation is a distinguishing feature of new liberals.

The second characteristic of newly emerging liberal class is what we name universalism.

Here, universalism is a position that, on the one hand, is opposed to localism and, on the other, to global monism. For example, unlike global monism, universalism does not deny the significance of the nation-state as a unit of culture and governance [13]. Universalism admits a certain role of authority, tradition, and conformity in the nation-state. In Japan, for example, new liberals take a position, concerning the issue of the Japanese Constitution’s Article 9, which stipulates perpetual abandonment of war (absolute pacifism), different from the one supported by conventional liberals. While old liberals deny every authority that has the political power to organize defense, new liberals admit that certain authorities might do so⁷. Another example is the issue of a female successor to the Japanese emperor. While old liberals deny the authority of symbolic emperor system *per se*, new liberals support the idea of a “female emperor” as a step against male domination in the emperor system⁸. Universalism is a position that denies neither nationalism nor traditionalism. It seeks the criteria of liberal soundness while admitting social authority, tradition, and conformity.

⁷ Shinzo Abe, the prime minister of Japan and the president of the Liberal Democratic Party, insisted that the main political issue in the election to the House of Councilors, conducted in the summer of 2019, is the choice between a party that just does not argue about the constitution, and the one that does it squarely. This approach shows that the main political issue in contemporary Japan is contested mainly by the mainstream conservatives and the old liberals: the opposition parties, supported by liberals, find it awkward to change Article 9, which stipulates absolute pacifism.

⁸ According to the Asahi Newspaper group’s survey, among the candidates, participating in the House of Councilors election, conducted in the summer of 2019, 34% of the LDP candidates supported the idea of having a female emperor; the corresponding figure for the National Democratic Party, which was founded in 2018, was 70%. We assume that this difference, concerning a female emperor support, might be a central point of the ideological conflict between conservatives and new liberals. See the Asahi Newspaper article, “Female emperor→favor, matrilineal emperor→carefully”, July 18th, 2019, p. 1.

⁶ Here, we assume that ideal features of conventional liberals are the same as those of radical liberals.

However, the question is how to find such criteria for new liberals. The criteria would depend on a particular context or constellation of political ideologies. We thoroughly discuss this issue in the universalism section. In any case, using the conventional framework of liberal vs. conservative, new liberals, if they accept some aspects of authority, tradition, and conformity, might be seen as being even more conservative than old liberals. Thus, they are considered, more or less, conservative⁹. In addition, although new liberals adopt some of these features, they are unlikely to be aware of the criteria used for doing so, and they might not understand that they are liberals. They are more or less silent about their political stances and may not even be aware of their political orientations. If this is, indeed, the case, how can we define new liberals, who are different from conservatives and old liberals, in Japan?

Our main hypothesis is that new liberals might be defined as the relatively independent class sharing two features: investment-orientation and universalism. However, because the criteria of a new liberal are unclear even to new liberals themselves, we adopt the method of latent class analysis to identify them. We shall explain our methodological ideas in the next section¹⁰.

⁹ Younger people, who are highly educated and work at large companies, had traditionally supported liberal parties, such as the Socialist Party of Japan and Japanese Communist Party [14]. However, in the last years, they tend to support conservative parties, such as the Liberal Democratic Party [15].

¹⁰ One may think that the criterion for liberal soundness is the same as the one for conservative soundness, and that the conservatives can be divided into two classes: the extreme and the sound. If this is the case, we may call new liberals as new conservatives too. However, we use the term “new liberal” because, at least in the Japanese context, the ideological confrontation has been transforming from the old liberal versus conservative opposition to the new liberal versus the conservative opposition in many aspects. The axis of political conflict is almost blurred. For example, the Japanese Communist Party is now seen as being extremely conservative, while the Liberal Democratic Party is seen as mildly reformist, as opposed to being conservative [6: Ch.2].

3. Method

3.1. Data and approach

In order to define social characteristics of new liberals, we conducted a web-based survey in September of 2018. Objects of the survey were Japanese men and women aged from 20 to 70. There were 1,200 respondents. Respondents were chosen from the research company’s registration list using quota sampling method – this is, we aimed at a roughly equal proportion of men and women, an equal representation of their ages, and an equal representation of each Japan’s region.

Our first hypothesis is that new liberals have a different, from conservatives and old liberals, political orientation. To examine this hypothesis, we need to classify, or group, Japanese citizens on the basis of their political orientation. In our research, we use latent class analysis¹¹ to classify respondents’ political orientations¹². There are three reasons to use the latent class analysis in this study. First, latent class analysis can classify respondents on the basis of categorical variables. We measured respondents’ political orientation through binary choice questions. Second, latent class analysis can reveal characteristics of each group in the form of response patterns. By comparing response patterns of different groups (e.g.

¹¹ On the method of latent class analysis, see McCutcheon [16], Hagenaars, McCutcheon [17], Collins, Lanza [18].

¹² There are not many studies on political orientations based on the method of latent class analysis. Hagenaars and Halman [19] examined the relationship between religious and political orientations among people with this methodology. However, they focused mainly on the religious consciousness and did not go into people’s political orientations. Savage et al. [20] applied this method to articulate class structure through the data on economic and social capitals. However, they showed no analysis on the relationship between the classes and the political orientations. In Japan, Nagayoshi [21] used this method to classify people’s orientations on the issue of political right of foreign residents. Kanazawa [22] clarified the relations between types of feeling of unfairness and respondent’s socio-economic status, based on SSM data in 1995 in Japan. However, there has been no study which would focus on people’s political orientations per se through this method.

comparing response patterns of new liberals, conservatives, and old liberals), we can interpret these characteristics. Third, latent class analysis enables us to show the relationship between socio-economic status and the probability of belonging to each group by using multinomial logit latent-class regression analysis [23].

3.2. Measurement of Political Orientation

We measured four aspects of respondents' political orientation: their attitude toward investment, their belief in universalism, their political stances on issues which have been at stake between conservatives and old liberals, and their self-recognition of their own political attitudes.

Investment-orientation

We measured respondents' investment orientation through their responses to the following binary choice questions:

[Q1-1] Mr. [David] has already retired, and is he is living on his pension. He has saved up some money and would like to spend it on his grandchild. On the one hand, he thinks that it would be wise to use this money to fund his grandchild's future education and jumpstart his future career. On the other hand, he also thinks that it would be wise to transform his money into an asset (e.g. by purchasing land or stocks), so his grandchild would be financially stable. If you were Mr. [David], what would you prefer?

(1) Use the money to fund educational expenses.

(2) Use the money to buy land or financial assets.

[Q1-2] Mr. [David] and his wife both work and they have two children. They have saved up some money. Mr. [David] can spend this money on school or lessons for himself or his family or can use it to pay for entertainment. If you were Mr. [David], how would you spend these savings?

(1) Spend it on learning for me or my family members.

(2) Spend it on entertainment.

Universalism

As stated above, the second characteristic of a common citizen is "universalism". In regards of authority, tradition, and conformity, universalism pursues criteria similar to those pursued by "new liberals". For example, it welcomes a female emperor in the conventional male emperor system rather than denies the emperor system *per se*. Universalism welcomes females, LGBTs, physically challenged individuals, foreigners, elderly persons, members of minority groups, and other discriminated people to assume leadership positions, if they are eligible to take it up. In this context, the criteria, followed by new liberals, include the fair election of a leader without taking his or her cultural background into account, even if they admit the need for an authority to organize a group or a nation-state.

The second example is about learning *onsen* (hot spring) culture in Japan. Recently, many foreign visitors have been visiting an *onsen*. However, they sometimes ignore *onsen* etiquette (being bare, not eating, drinking, not dyeing hair, etc.). Liberals may tolerate their behavior and admit that there are as many ways of behaving in an *onsen* as there are cultural backgrounds. Liberals show their support for the cultural diversity in taking *onsen*. However, new liberals would use a criterion that is different from the multi-cultural attitude of liberals. Liberal soundness would require the adoption of an attitude that teaches foreigners the *onsen* culture. Further, the foreigners are expected to learn about *onsen* culture. This way, liberal soundness can be seen as an attitude that expands a domestic culture beyond its domestic scope. It does not

deny traditional culture, but it tries to expand its adoption on visitors, or even on other areas¹³.

Thus, there are two criteria for defining new liberals in terms of their attitude toward universalism. We measured universalism through survey participants' responses to the following binary choice questions:

[Q1-3] Mr. [David] runs a hot spring facility for day-trip travelers. Recently, the number of foreign guests has increased, and so have complaints from Japanese customers accusing their foreign guests of bad manners. As a result, Mr. [David] is wondering, whether he should ask travel agencies to stop booking foreign guests for his hot spring or accept these guests despite their poor manners. If you were Mr. [David], what would you do?

(1) Temporarily stop accepting foreign guests at your hot spring.

(2) Have foreign travelers learn manner and continue accepting them.

[Q1-4] Mr. [David] is a manager of a pub chain and he hires a number of Japanese and foreign part-time workers. Although foreign workers do not speak Japanese very fluently, they work harder than Japanese workers. Later, Mr. [David] decided to recruit two additional part-time workers. If you were Mr. [David], would you prefer to hire additional Japanese workers, or would you consider recruiting both Japanese and foreign workers?

(1) Prioritize hiring Japanese workers.

(2) Do not distinguish between Japanese and foreign workers in the hiring process.

¹³ Another example is the issue of high school uniform in Japan. If the idea of liberals implies anti-conformity, as stated above, liberals should, by and large, be critical to the existence of high school uniforms. However, the criteria of a new liberal would suggest that there are good uniforms and bad uniforms. Good uniforms would not reflect an authoritarian style; it would rather be based on a style that encourages students to participate in public and civic activities.

Traditional issues between conservatives and old liberals

We tried to identify differences between conservatives and old liberals through respondents' responses to four following questions reflecting historical and political context of Japan¹⁴:

[Q-2-1] Japan should hold on to its "absolute pacifism". If another country attacks us, Japan should either surrender quickly, without engaging in armed conflict, or resist without coordinated armed forces (i.e., only policemen, not soldiers, should fight).

[Q-2-2] The Japanese government should continue to apologize for Japan's use of "comfort women" in South Korea during World War II until people in South Korea are satisfied by the apology.

[Q-2-3] Japan should not rely on American military power, and the Japan-U.S. security treaty should be abolished.

[Q-2-4] The symbolic emperor system in Japan should be abolished, because it is not compatible with democracy.

These questions have been decisive in determining the political constellation of post-war Japan. So-called old, or post-war, liberals are likely to answer "yes" to these four questions, since they oppose authoritarianism. On the other hand, conservatives are likely to answer "no" to these four questions, since they share the idea of authoritarianism.

Self-recognition of political stance

We measured respondents' political self-positioning by asking them to identify their political attitudes according to a sliding scale (from 0 to 10). For this purpose, we used the following question:

"We sometimes express our political beliefs using the words "liberal" or "conservative".

¹⁴ On the characters of old liberals in Japan, see, for example, Ikeda [24].

How would you express your political beliefs using these two words? If you do not know the meaning of “liberal” or “conservative”, please select “I do not know”.

We considered this question important, because the word “liberal” is associated with old liberal ideology (as discussed above) in Japan. This might cause some difficulties for Japan’s new liberals to express their own political beliefs. We assumed that these new liberals might not have a clear sense of their own political stances.

4. Results

Our study has three main results. First, the latent class analysis suggested that it is appropriate to divide respondents into four groups according to their political orientation. These groups are: a conservative, an old liberal, a new liberal, and a judgement pending class. Second, we identified basic socio-political features of each group, such as age and occupation. Third, we articulated distinctive characters of new liberals: personality, social attitudes, preferred political parties, and social relationships.

4.1. Political orientation of Japanese people: A latent class analysis

We conducted a latent class analysis to classify respondents according to their investment orientation, belief in universalism,

stance on traditional political issues between conservatives and old liberals, and self-recognition of their political beliefs. We chose the 4class model based on the value of BIC (*Tab. 1*).

On the basis of the analysis shown in *Table 2*, we named each of these four classes the conservative class, the judgement pending class, the new liberal class, and the old liberal class according to salient features of respective classes.

The new liberal class included 28% of all respondents. New liberals stand out for their tendency toward universalism. Some of these new liberals positively identified themselves with the term “liberal”. However, 25% of new liberals said that they do not know their own political orientation.

The old liberal class included about 14% of all respondents. Unlike new liberals, old liberals displayed a negative orientation toward universalism. Old liberals tended to answer the set of questions about historical and political contexts of post-war Japan decisively – for example, they tended to affirm the statement that “Japan should pursue absolute pacifism.” Some of these old liberals identified themselves with the word “liberal” in describing their political orientation, but others self-identified with the word “conservative”. This

Table 1. The result of model selection based on BIC

Model	L ²	df	P-value	BIC
1class model	4681.66	1183	0.000	-3705.90
2class model	3659.43	1165	0.000	-4600.51
3class model	3171.70	1147	0.000	-4960.62
4class model	3042.83	1129	0.000	-4961.86
5class model	2964.97	1111	0.000	-4912.10
6class model	2910.25	1093	0.000	-4839.21
7class model	2866.71	1075	0.000	-4755.12
8class model	2821.83	1057	0.000	-4672.38
9class model	2778.10	1039	0.000	-4588.49
10class model	2728.33	1021	0.000	-4510.64

Table 2. Latent class analysis of political orientations, %

Proportion	Conservative	Judgement pending	New liberal	Old liberal	All respondents
	38	26	22	14	–
	Conditional response probability				
[Investment] How to leave assets in grandchildren					
Have them use as educational expenses	48	42	49	42	46
Leave it as land and financial assets	52	58	51	58	54
[Investment] How to spend money					
Lessons of myself and family	53	51	63	61	56
Entertainment	47	49	37	39	44
[Universalism] How to respond to foreign group customers					
Do not accept	32	41	5	43	30
Have customers learn manner and continue accepting	68	59	95	57	70
[Universalism] How to recruit people who work part-time					
Prioritize Japanese people	35	40	1	52	31
Recruit without distinction between Japanese and foreigners	65	60	99	48	69
[Traditional Issues] Japan should pursue absolute pacifism					
Agree	9	5	23	72	20
Neither Agree Nor Disagree	12	91	35	16	38
Disagree	79	5	43	12	42
[Traditional Issues] We should apologize to South Korea for the comfort women issue					
Agree	3	4	16	64	15
Neither Agree Nor Disagree	5	86	28	17	33
Disagree	91	10	56	18	52
[Traditional Issues] We should discard the Japan-US Security Treaty					
Agree	12	6	17	71	20
Neither Agree Nor Disagree	22	87	59	25	48
Disagree	66	7	24	4	33
[Traditional Issues] The symbolic emperor system should be abolished					
Agree	4	3	13	50	12
Neither Agree Nor Disagree	13	91	29	32	40
Disagree	83	6	58	18	48
Political stance					
Self-recognized core liberal (0-2)	4	0	13	12	6
Self-recognized liberal (3-4)	16	9	24	23	17
Neutral (5)	15	33	19	13	20
Self-recognized conservative (6-7)	28	21	17	26	24
Self-recognized core conservative (8-10)	22	5	2	17	12
No idea	16	32	25	9	21

contradictory result might appear due to our method of assembling and executing the questionnaire¹⁵.

The conservative class included about 38% of all respondents. They showed a tendency to oppose universalism and beliefs associated with the old liberal class. Unlike other classes of respondents, they were more aware of

their ideological position – they identified themselves with the word “conservative”.

The judgment pending class showed a tendency, regarding their belief in investment-orientation and universalism, opposite to the one of new liberals. Regarding the questions concerning post-war Japan, members of the judgment pending class tended to answer “I cannot say either”. When they were asked to identify themselves with the words “liberal” or

¹⁵ It may be necessary to exclude those who tend to answer “yes” to every question from our analysis.

“conservative”, they often chose the “neutral” answers or “I do not know (the meaning of this scale)”. Judging from these non-committal answers, it can be said that members of this class do not have a clear, or well-defined, sense of political consciousness.

Before conducting the survey, we initially made the following hypothesis: the new liberals do not identify themselves as liberals, whereas the old liberal class strongly identifies itself as liberals. However, according to our latent class analysis, new and old liberals almost equally identified themselves with the political label of “liberal”. However, among new liberals, there were many of those, who stated that they do not know their own political orientation. On the other hand, according to the survey results, many old liberals identified themselves with “conservative” political label. This may indicate that their attitude of “keeping Article 9 of the Constitution” shows a conservative stance in the situation of facing the reformation of the existing constitution. Old liberals may have good reason to identify themselves as conservatives, because they are aware of so-called liberalizing tendency in Japanese society, which has been happening over the last 70 years, and so they name themselves conservatives in the current historical context.

4.2. Socio-economic status of these four classes

What kind of socio-economic status does each of these four classes have? To answer this question, we first analyzed the relationship between these four classes and personal attributes of its members using multinomial logit latent class regression analysis (*Tab. 3*). Instead of dummy coding, we used effect coding of each categorical variable [25, p.16]. As a result, we can estimate the effects of independent variables in all four classes. The regression coefficient values were determined

by the comparison with the grand mean – the value which represents the difference between a given category (e.g., professional job) and average respondents [26].

Socio-economic features of new liberals include the following ones: they are in their 60s, they graduated from a university or a school, they are professionals, they have comparatively low incomes (their household income is less than 3.5 million yen), and they feel that their social status is lower than it was, when they were 15 years old. It is possible that highly educated people over the age of 60 are the center of this class: their low income might reflect the fact that they have already retired and possibly live on a pension.

Features of the old liberal class: its members are in their 30s, they occupy management positions, and they feel that their social status is higher than it was at the age of 15. This result is somewhat different from our initial conjecture. We initially speculated that old liberals would be elderly people over the age of 60. Our survey may indicate that respondents in their 60s represented an unrepresentative group of highly educated people with substantial Internet literacy. If this is correct, it might be difficult to say that our data accurately reflects the political consciousness of elderly people in Japan. It is possible that our survey does not accurately grasp the presence of old or new liberals over the age of 60.

We also made another hypothesis: new liberal class members would respond that they have higher socio-economic status now than they did at the age of 15. Contrary, our new liberal respondents did not answer that they experienced upward social mobility.

Whereas members of the new liberal class feel that their socio-economic status has declined compared to what it was when they were 15 years old, members of the old liberal

Table 3. The result of multinomial logit latent class regression analysis

	Conservative		Judgement pending		New liberal		Old liberal	
	B	S.E	B	S.E	B	S.E	B	S.E
Male dummy								
Age	0.348***	0.081	-0.002	0.075	-0.460***	0.123	0.114	0.101
20–29	0.148	0.158	0.264†	0.145	-0.499†	0.279	0.087	0.203
30–39	-0.151	0.141	-0.012	0.134	-0.206	0.224	0.369*	0.160
40–49	-0.169	0.128	0.229†	0.126	0.162	0.194	-0.223	0.168
50–59	0.248†	0.128	0.055	0.138	-0.082	0.208	-0.220	0.193
60–70	-0.076	0.133	0.536***	0.145	0.625**	0.188	-0.013	0.177
Educational background								
Middle School / High School	-0.020	0.108	-0.031	0.110	-0.118	0.170	0.169	0.139
College of Technology / Junior College / Vocational School	0.188†	0.110	0.116	0.113	-0.151	0.161	-0.153	0.156
University / Graduate school	-0.168†	0.096	-0.085	0.097	0.269†	0.141	-0.016	0.126
Occupation								
Profession	0.204	0.145	-0.128	0.165	0.559*	0.223	-0.635*	0.247
Management	-0.321	0.207	-0.301	0.242	0.143	0.329	0.479*	0.227
Clerical	-0.214	0.130	0.180	0.123	-0.005	0.193	0.039	0.154
Sales / Service	-0.005	0.199	0.018	0.194	-0.259	0.340	0.246	0.218
Blue collar / Farm	-0.046	0.193	0.175	0.204	-0.346	0.352	0.217	0.235
Non-worker / Student	0.382*	0.162	0.056	0.154	-0.092	0.254	-0.346	0.220
Non-regular employment dummy	0.361†	0.189	0.143	0.187	0.158	0.266	-0.346	0.258
Household income								
less than 3,500,000 yen	-0.307*	0.136	-0.049	0.138	0.380*	0.189	-0.024	0.184
3,500,000-5,500,000 yen	0.176	0.125	-0.088	0.131	-0.191	0.216	0.103	0.173
5,500,000-8,500,000 yen	0.254*	0.123	-0.316*	0.137	-0.172	0.200	0.234	0.154
more than 8,500,000 yen	0.257†	0.139	-0.014	0.142	-0.178	0.218	-0.066	0.185
D.K. / N.A.	-0.380*	0.168	0.466**	0.141	0.162	0.226	-0.247	0.225
Subjective social mobility								
downward mobility	0.223*	0.096	-0.186†	0.106	0.308*	0.134	-0.355*	0.144
no-mobility	-0.063	0.093	0.448***	0.091	-0.368*	0.155	-0.018	0.120
upword mobility	-0.171†	0.098	-0.262*	0.110	0.059	0.149	0.373**	0.125
Pseudo-R ²	0.102							
N	1108							

† p < 0.10; * p < 0.05; ** p < 0.01; *** p < 0.001

class report the opposite. How can we interpret this result? One plausible interpretation is that, although members of the new liberal class have become major players of developing industries, such as the IT industry, they had very high socio-economic status at age 15, due to their parents being relatively affluent, and, therefore, they have experienced a relative decline. Another plausible interpretation is that members of the new liberal class do not necessarily have high incomes. Instead, their jobs are highly creative but generate relatively

low incomes. A third interpretation is that people in their 60s, who have already retired, may now have relatively little disposable income and therefore sense that their socio-economic status has declined. Each of these possibilities needs to be examined in further studies.

Members of the conservative class displayed the following features. They are mostly men in their 50s. They attended technological institutes, junior colleges, and vocational schools. They have no job, or they are students, non-regular employees, or have a relatively high

income. They feel that their socio-economic status is higher now than at the age of 15. We might conclude that the conservative class consists of two different groups: (1) those who are middle-aged and older, having high incomes but low levels of education, and (2) those who are non-permanent workers and feel that their socio-economic status has declined since they were 15. Why do these less-educated and higher-earning people tend to become conservative? One interpretation is that male workers in their 50s support the status quo of our society, because they feel that their hard work enabled them to earn higher incomes over the course of their lifetime despite their poor educational background.

Members of the judgment pending class have the following characteristics. They are predominantly in their 20s and 40s. They reported that they do not know their household income, and answered that their socio-economic status is almost the same now as it was at the age of 15. Given their young age, it is true that respondents in their 20s are still developing their political orientation, and this might explain the ambivalence of some members of this class. However, how can we explain the political ambivalence of those members of this class who are in their 40s? This requires further study too.

4.3. Personalities and classes

Next, let us analyze the relationship between four classes and our original categories of “personhood clusters” (*Tab. 4*).

Our 18 categories of “personhood clusters” which appear in the questionnaire in *Table 4* are gleaned from the works of other social theorists. These categories are: (1) creative class [27], (2) low-income creative class [27], (3) conversation lover (hierarchical transparency) [28], (4) conversation lover (e.g. in a pub) [28], (5) ex-cultural circle [30], (6) Internet

cave man [31], (7) online originator [31], (8) entrepreneurial culture supporters [32], (9) homogeneous intimacy-oriented people [28], (10) herbivorous boy [33], (11) naturalist [33], (12) matter-consumer [33], (13) comedy-loving satire [34], (14) person good at caring [35], (15) enlightened consumer [33], (16) minimalist [33], (17) working poor [36], (18) celebrated housewife [37].

Members of the new liberal class exhibit traits of conversation lovers (hierarchical transparency), ex-cultural circles, homogeneous intimacy-oriented people, naturalists, matter-consumers, people who are good at caring, comedy-loving satirists, minimalists, and the working poor.

Members of the conservative class, on the other hand, exhibit the characteristics of online originators, homogeneous intimacy-oriented people, naturalists, matter-consumers, and enlightened consumers. For example, people in the conservative class are distinctive in their usage of the Internet as a tool for disseminating their own information.

Members of the old liberal class share the characteristics of the low-income creative class, entrepreneurial culture supporters, and comedy loving satirists.

Members of the judgement pending class did not show any correlation with the 18 personality characteristics listed above.

Comparing the new liberal class with the conservative class, we can see that both classes share the characteristics of homogeneous intimacy-oriented people, naturalists, and matter-consumers. However, when we interpreted these findings using correlation analysis instead of latent class analysis, we found significantly different results. While new liberals who are defined by investment orientation and universalism-orientation correlate to the clusters of homogeneous

Table 4. Personalities of the four classes, %

Answer	Conservative	Judgement pending	New liberal	Old liberal	All respondents
(1) I want to engage in creative things both in hobbies and work.	35.7	23.7	37.4	34.2	32.7
(2) Even if the salary is low, I want to get a culturally valuable job.	14.2	6.9	17.4	19.9	13.8
(3) I like to talk with people without concern for each other's social status in circles and events.	21.4	8.5	31.7	26.7	21.0
(4) I like to talk to people in a bar or a tavern.	17.9	12.0	20.0	22.4	17.4
(5) I have been active in cultural club activities and circles in junior high school, high school or college (university).	25.2	11.4	31.7	21.1	22.4
(6) I like to do "favorite registration" on the net and to make a list of "my favorites".	21.0	10.4	18.5	15.5	16.9
(7) I like to write and transmit information on the net.	7.0	2.5	4.9	8.1	5.5
(8) I like to support minor idol or artist activities that have not yet been sold so much.	5.0	3.5	3.8	11.8	5.3
(9) I like to spend time with people whose tastes are similar to me.	34.6	14.5	37.4	33.5	29.8
(10) It is OK for me to make lunch box every morning for my partner, so I want my wife (or future wife) to work.	4.2	1.6	4.2	5.0	3.6
(11) I prefer simple and natural life than gorgeous one.	46.2	25.9	55.8	31.7	41.0
(12) I would like to spend money on eating and traveling rather than materials such as clothes and furniture.	21.2	9.8	21.9	13.0	17.3
(13) I like comedy-related performers who will laugh away the authority of the great people.	14.2	6.9	21.5	21.1	14.8
(14) I am good at caring people gently, so I think that it is suitable for me to do medical and nursing care work too.	8.8	3.5	11.7	9.3	8.1
(15) I think it is better to buy items after thinking carefully, not distracted by advertisements.	42.2	18.6	35.5	23.6	32.0
(16) I want to live without material things as much as possible.	36.8	29.3	42.3	26.7	34.7
(17) I am now working with low wage (minimum wage), and there is no hope in the future.	9.2	8.8	12.8	6.2	9.5
(18) I am a full-time housewife of a college graduate, and it is natural to use more than 1,000 yen for the lunch when eating out.	3.3	5.0	3.0	3.7	3.8
Bold: Adjusted residual is +1.96 or more.					

intimacy-oriented people, naturalists, and matter-consumers, conservatives did not exhibit the same correlations. Through latent class analysis, the new liberals differentiate themselves from conservatives by being strongly oriented toward communication, culture, and critical thinking.

We did not identify any distinguishing personal characteristics of the old liberal class through our latent class analysis. Further studies are required for examination of old liberals' personal characteristics. Perhaps, it could be done by setting up another questionnaire which would better capture old liberals' personal characteristics.

4.4. Social attitudes of new liberals

What are the social attitudes of new liberals? We would like to address our hypothesis on the differences between conservatives and new liberals using two basic propositions: (A) It is legitimate to choose our leader based on our conventional value scale. (B) On the basis of the conventional value scale, inferior people should be evaluated lower. The sense of a conventional value scale mentioned in (A) and (B) means conservative implications for our society. Other propositions (A) and (B) are essentially meritocratic, i.e., they espouse a social hierarchy legitimated by merit or ability. Our hypothesis is that new liberals would be critical of these two propositions and address the following considerations [9]:

(1) New liberals would welcome those who are inferior, given the existing value scale, to take positions of social leadership. For example, new liberals might believe that the Japanese emperor should be female. New liberals would not deny authority *per se* but prefer to admit sound authority. We call this idea "equalization".

(2) These propositions will serve as a test for defining what liberals consider "sound

authority". New liberals might show their commitment and loyalty to their organization, or nation, when the governing authority is sound in terms of equalization, as discussed above. We call this idea "sound loyalty".

(3) New liberals might think that it is not always appropriate to admit a person into a leadership position according to the existing value scale. For example, new liberals might not think that it is wise, or good, to uncritically follow the whole purpose and structure of their organization. Instead, they might try to maintain a sound, critical attitude toward any kind of subordination. We call this a "critical attitude".

(4) The same way, new liberals would attempt to take a critical stance on their membership in a given organization. They would try not to show too much commitment to their organizations, because it might be deemed uncritical. We call this "de-contextualism".

(5) New liberals would think that a person, who is inferior, according to the existing value scale, is not necessarily inferior in another value scale, and the value of each person should be recognized as universal or intrinsic. They believe that existing value scales are problematic, because the authorities, who create or created these scales, excluded subordinated people on the basis of tradition and social uniformity. New liberals believe that inferior people are not necessarily inferior and that these peoples' universal human rights should be recognized. This position can be called an "anti-prejudice" position.

On the basis of these speculations, we determined few basic social features of new liberals: equalization, sound loyalty, critical attitude, de-contextualism, and anti-prejudice. However, the results of the latent class analysis did not completely support all these features (*Tab. 5*).

Table 5. Social attitudes of four classes, %

	Conservative	Judgement pending	New liberal	Old liberal
[Equalization] We should assign a certain portion of leaders to women in many organizations.	29.1	18.3	31.0	53.4
[Equalization] It is unavoidable that there are social advantages or disadvantages depending on the family environment and the living areas.	55.8	26.2	40.0	52.8
[Sound Loyalty] If the leaders of your country, region, or organization are those who value freedom and equality, I would like to contribute as much as I can.	49.4	20.2	63.4	62.8
[Critical Attitude] Even in a convincing organization management at present, it should give the members more opportunities to discuss the management.	63.9	29.7	68.7	72.0
[De-contextualism] I want to belong to multiple organizations in order not to be bound by human relations in one organization.	37.7	18.0	44.2	18.3
[De-contextualism] I am the person who accomplishes the task no matter how irrational the request is.	32.2	18.0	37.0	46.6
[Anti-Prejudice] There is no problem even if a foreigner becomes his / her boss, when the boss doesn't have any problem in Japanese language skill.	64.6	30.9	75.4	67.7

Our analysis shows that new liberals exhibit all five of these features. However, almost 40% of new liberals accepted various inequalities in their family environment. It implies that new liberals do not tend to support egalitarianism which stresses equal opportunities for all, regardless of context.

It should be noted that, in our study, conservatives also showed a positive thinking toward critical attitudes, and old liberals, to certain degree, strongly supported the idea of assigning female leaders. In this regard, old liberals are different from conservatives and new liberals. While new liberals might support a symbolic female emperor, they do not support the idea of assigning certain proportion of women to leadership positions.

More differences appear when we review the classes' responses to the statement, "I am the person who accomplishes the task no matter how irrational the request is". Old liberals tended to answer "yes", which means that they tolerate doing unreasonable work assigned to them. Therefore, old liberals might see themselves as being deprived of autonomous judgment due to their

membership in given organizations. This attitude is opposite to the attitude of new liberals.

4.5. Supporting parties

Next, let us analyze the relationship between four classes, precipitated by latent class analysis, and the political parties' members of each class support (*Tab. 6*).

We see that new liberals support the Constitutional Democratic Party more often than people from other classes. However, nearly 70% of new liberals do not support any political parties. It shows their strong independence regarding existing political parties. It is also interesting to point out that the percentage of those who do not support any political parties is very similar in the judgement pending and new liberal classes. Old liberals support so-called leftist parties: the Constitutional Democratic Party, the National Democratic Party, the Communist Party, and the Social Democratic Party. However, nearly 30% of the people in this group support the Liberal Democratic Party – the dominant and largely conservative political party in Japan. Conservatives favor the LDP more than people of other classes.

Table 6. Supporting party of four classes, %

Party	Conservative	Judgement pending	New liberal	Old liberal	All respondents
Liberal Democratic Party	33.5	18.6	10.6	28.0	23.8
Constitutional Democratic Party	4.8	3.2	10.6	9.9	6.3
National Democratic Party	0.0	0.0	1.1	3.1	0.7
Komeito	1.1	1.9	1.5	1.9	1.5
Communist Party	1.8	2.5	4.5	8.1	3.4
Japan Restoration Party	2.0	1.9	3.0	1.9	2.2
Socialist Party	0.0	0.3	0.4	2.5	0.5
Other parties	1.1	0.0	0.0	0.0	0.4
No political party	55.8	71.6	68.3	44.7	61.3
Total	100	100	100	100	100

Table 7. Marital Status and the Number of Children of four classes

Marital Status	Conservative	Judgement pending	New liberal	Old liberal
Unmarried	36.1	41.0	32.8	29.8
Married	57.3	51.7	57.7	67.1
Devorse or Lost	6.6	7.3	9.4	3.1
Total	100	100	100	100
$X^2(6)=15.031. p < 0.01$				
The Number of Children	Conservative	Judgement pending	New liberal	Old liberal
0	49.5	57.7	51.3	41.0
1	15.8	13.6	11.7	11.8
2	25.6	23.7	28.3	35.4
Over 3	9.2	5.0	8.7	11.8
Total	100	100	100	100
$X^2(9)=21.694. p < 0.01$				

4.6. New liberal class and family

Lastly, we examine the relationship between new liberals and social issues involving their family and friends (e.g., work and child-care reform, LGBT partnership, etc.), which have recently become very important in Japan. We hypothesize that the most important social network for individuals is no longer their family network, but the one based on a wider circle of people outside the family. Firstly, we examined the family structure of four classes – i.e., their marital status and the number of children in their family.

New liberals show higher rates of divorces or lost spouses. On the other hand, conservatives and members of the judgement pending class

show higher rates of non-marriage (*Tab. 7*). We also examined the relations between four classes and social networks outside of the family – e.g., neighbors, friends, and acquaintances (*Tab. 8*).

New liberals have slightly higher number of close friends and neighbors than conservatives, much higher numbers of acquaintances than conservatives and members of the judgement pending class have. These results show that new liberals have weaker but broader social networks than other people do.

5. Conclusions

In this paper, we presented our articulation of various features of an emerging middle class in Japan by using latent class analysis. Overall,

Table 8. Neighbors, Friends and Acquaintances Networks of Four Classes, %

The number of close neighbors	Conservative	Judgement pending	New liberal	Old liberal
0	65.4	62.1	57.7	48.4
1-2	20.4	21.1	25.3	20.5
3-5	10.7	11.4	10.6	20.5
6-10	2.8	2.5	4.9	4.3
Over 11	0.7	2.8	1.5	6.2
Total	100	100	100	100
$\chi^2(12)=40,431, p < 0,001$				
The number of close friends	Conservative	Judgement pending	New liberal	Old liberal
0	65.4	62.1	57.7	48.4
1-2	20.4	21.1	25.3	20.5
3-5	10.7	11.4	10.6	20.5
6-10	2.8	2.5	4.9	4.3
Over 11	0.7	2.8	1.5	6.2
Total	100	100	100	100
$\chi^2(12)=42,473, p < 0,001$				
The number of acquaintances	Conservative	Judgement pending	New liberal	Old liberal
0	23.9	39.1	15.8	19.9
1-2	15.1	20.2	16.2	23.0
3-5	21.0	17.7	20.8	24.2
6-10	17.7	11.0	18.5	13.0
Over 11	22.8	12.0	28.7	19.9
Total	100	100	100	100
$\chi^2(12)=71.033, p < 0,001$				

our results prove our hypotheses. However, some results did not meet our expectations. Although our survey might have had some deficiencies, we find that new liberals are not experiencing upward social mobility. On the contrary, members of the conservative class are experiencing upward social mobility. It seems paradoxical and, perhaps, requires more study.

New liberals can be seen as one of four classes in our latent class analysis. Their distinctive features are: people in their 60s, they graduated from a university or a school, they are professionals, they have low income, and they feel that their hierarchical status is lower than it was when they were at the age of 15. Their personalities are: conversation lover (hierarchical transparency), ex-cultural circle, homogeneous intimacy-oriented people,

naturalist, a matter-consumer, a person good at caring, loving comedy satire, minimalist, and working poor. Almost 70% of new liberals do not support any parties. They also have the following characteristics: (1) they are willing to participate in discussions on the management of their organizations, (2) they prefer to belong to more than one community in order not to be constrained by specific common values of a community, (3) they welcome those who are *prima facie* seen as inferior (such as women and foreigners) to become their leaders, and, at the same time, they accept hierarchical relations in their business management, (4) while they think that they need to have a leader for their organization management, they will not obey the leader when their orders are unreasonable, (5) about 40% of new liberals accepted inequalities due to the family environment,

(6) new liberals show higher rates of divorces and lost spouses than other people do. On the other hand, new liberals, in comparison with members of other classes, have broader but weaker ties with people. With the help of our latent class analysis, we discovered that new liberals can be seen as one of four major classes in modern Japan, but they have no political representation in the current political party system.

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State Strategic Planning Experience in the USSR in Theoretical and Empirical Studies*



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Abstract. In recent years, the Russian Federation has been forming a strategic planning system, which exists in many countries with market economics. However, success of its implementation is assessed critically in scientific literature. This is where the goal of this article becomes relevant – expansion of theoretical and methodological framework, including instruments of new institutional economic history for studying empirical sources concerning institutional practices of USSR centralized planning from the perspective of needs of the RF strategic planning economics system. The greatest attention to this problem is paid in the development and institutional economics, which are interconnected with each other. The novelty of the research consists in the fact that we put forward our own methodological questions in the context of our original understanding of trends of development economics' evolution on the basis of our interpretation of studies which explored Soviet experience of centralized planning; formulation of working hypothesis for further empirical studies and their theoretical generalization. We use historical genetic and problematic approaches, general logical methods and techniques – system approach, generalization, analysis and synthesis. We compare individual concepts in the sphere of development economics with empirical studies. We find out that the slowdown of USSR economic dynamics urged

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development economics theorists to shift their focus from macroeconomics' modeling of production factors to the analysis of the institutional environment features. The approach to centralized planning as a key instrument of overcoming "traps of underdevelopment" ("market failures") was substituted with understanding of transactional costs connected with it ("state failures"). It was stated that important issues, such as cooperation between institutions of scientific knowledge and state's management of economics, were not properly analyzed. The conclusion was drawn that the research on empirical sources, concerning institutions of soviet planning, using theoretical and methodological instruments of development economics, enriched with concepts of institutional economics, will contribute to the formation of new theory of national and regional economics' planning in the paradigm of post-Soviet institutionalism.

Key words: centralized economics, catch-up development, USSR, economic policy, institutional traps, market failures, state failures, history of economic thought.

Introduction

The novelty of the research is defined by the formation of the economic strategic planning system¹, in accordance with Federal Law no.172-FL "On strategic planning of the Russian Federation", dated 28.06.2014. In case of institutional economics, this system might be defined as a set of institutions which provide cooperation of political and economic entities for implementation of events aimed at defining long-term (together with short-and medium-term) priorities, target indicators, instruments of its public regulation, and public property management. Similar systems work in many countries with market economy. At the same time, success of the first stage of such system implementation in RF is critically assessed in scientific literature (for example, [1; 2; 3]). It leads to the necessity to correlate the USSR planning experience with relevant theoretical and empirical developments.

Relevance of Soviet planning experience is underlined by the release of the third, revised edition of the textbook (25 years after the

previous one) written by one of the most experienced specialists of this sphere – M. Ellman². Significant progress in theoretical and methodological comprehension of different planning types, within economic policy's objectives of countries with medium³ and high⁴ income levels, was recorded in a collective monograph edited by M. Yülek⁵. Another monograph, edited by A. Amsden and her colleagues⁶, was a serious attempt to directly analyze the problem of relations between political elite and scientific society from the theoretical standpoint of development economics. In domestic literature, work of national economics' catch-up institutions was reviewed, in particular, works by V.M. Polterovich [5], who suggested recommendations in the field of interactive planning policy.

² Ellman M. *Socialist Planning*. 3rd ed. Cambridge (U.K.): Cambridge University Press, 2014.

³ Turkey, China, South Africa.

⁴ Japan, South Korea, Israel, Ireland.

⁵ Yülek M.A. (Ed.). *Economic Planning and Industrial Policy in the Globalizing Economy: Concepts, Experience and Prospects*. Springer International Publishing Switzerland, 2015. The most informative article was written by M. Babacan [4].

⁶ Amsden A.H., DiCaprio A., Robinson J. A. (Eds.). *The Role of Elites in Economic Development*. Oxford University Press, 2012.

¹ In addition to the economy, public strategic planning includes the social sphere and national security; it refers to different territorial units (the Russian Federation, entity of the Federation, municipal formation), sectors of the economy, but does not directly affect enterprises (firms).

However, the statement of the scientific problem – actualization of theoretical understanding of Soviet experience concerning centralized planning in terms of development economics (hereinafter – DE) and within formation of the strategic planning system in RF economy – is new. In this regard, this paper presents original understanding of development economics' evolution trends within its interconnection with other scientific areas. Besides, scientific novelty of the work consists in our methodological questions within our own interpretations of research contents, which explored Soviet experience of centralized planning in the light of development economics and scientific areas connected with it; phrasing of working hypothesis which suggest areas of further empirical studies and its theoretical generalizations.

Respectively, the goal of this article is to expand theoretical and methodological basis and instruments of new institutional economic history for studying empirical sources about institutional practices of centralized planning in the USSR from the perspective of the strategic planning system of the RF economy' needs.

The given goal defines the following objectives:

1. To systematize the theoretical and methodological instruments which have been developed and tested in the works of DE authors at different stages of its evolution (from the 1940s until now) and in scientific literature related to it.

2. To show its place in the development of the USSR planning economics on the basis of critical analysis of different theoretical and empirical works.

3. To show spheres of interconnection between theoretical concepts of development economics and institutional economics with empirical studies of the USSR economics.

4. To determine factors which affected the assessment of Soviet experience.

5. To determine aspects of institutional interaction between planning entities which were not explored due to DE discourse.

6. To define working hypothesis for further studies of scientific problem of institutional cooperation between science representatives and public governance of the USSR economy.

Research subject also includes theoretical and methodological instruments of development and institutional economics which were used for studies of Soviet planning practices in analyzed scientific literature. These instruments include the set of concepts, models, and basic approaches to defining goals of socio-economic development.

To complete objectives of the research, we used historical genetic and, to a lesser extent, problem-based approaches, as well as general-logical methods and techniques: systematic approach, generalization, methods of analysis and synthesis. At the same time, we compared separate DE theories with empirical researches (scientific works about economic Sovietology, economic history).

The article consists of the introduction, three sections, and the conclusions. In the first section “*Development economics as a scientific sphere*”, we explore, why the structure and instruments of DE are more relevant to objectives of studying practices of Soviet centralized planning. The second section “*Evolution of Soviet centralized planning experience assessment*” explores the change of position, which was occupied by the analysis of Soviet centralized practice experience within DE sphere and literature, connected with it. The usage of reviewed theoretical and methodological instruments for the analysis of historical experience of the USSR development economics, in order to define strategic priorities

of the RF economy's public policy, is discussed in the third section – "*Development economics as a research program within the policy of catch-up modernization*". Primary results and brief working hypothesis for further studies are given in the *conclusions*' section.

1. Development economics as a scientific sphere

Prevailing neo-classical trends of economic thought (mainstream, neo-institutionalism is also included in it) cannot analyze long-term planning of national economy as appropriate and efficient instrument of public structural policy due to corresponding axiomatic *laissez-faire* (economic state's passivity). Neo-institutionalism, also based on the principle of methodological individualism, accepts the necessity of state's interference only with the spheres of establishing economic activity rules and contracts' fulfillment enforcement.

At the same time, planning, as the large-scale technology of state management of the territory's economy, may gain legitimization in theoretical DE constructions. This scientific area studies regularities of economic systems' transformations as controlled dynamic process, focusing on problems of qualitative changes. Usually, objects of the analysis are different territorial economic systems (settlement, region, country, geographical group of countries, world as a whole), but in most cases it means the national economy. DE supporters often proceed from the insufficiency of market mechanisms for getting out of institutional traps and inefficient equilibrium states. Thus, the necessity of an active and proactive public policy, in order to bridge the socio-economic gap, is justified.

We analyze DE as a component of the interdisciplinary modernization paradigm which emerged in the 1950s. This paradigm, just as Neo-classicism and Marxism, proves

country-wide patterns of transition from a largely agricultural natural economy to a dominant industrial economy, but accepts specifics of in-country processes' forms. Systemic approach to structural and social aspects of economic dynamics and state's economic policy has been preserved for more than eight decades of this sphere's evolution (*Table*).

While forming its theoretical basis, DE, as an alternative to classic economy, used ideas and approaches of Neo-Keynesian economics (active government's regulation) and Marxism (proactive role of government in systemic regulation). In the course of further evolution, it proved to be quite receptive to positive ideas of other scientific economic trends (human capital theory, neo-institutionalism, neo-Schumpeterism). Recently, DE has been showing signs of increased studies aimed at addressing relevant global issues. Everything mentioned above formed theoretical and methodological instruments relevant for studying transforming communities.

It is important not to overestimate the extent of responses to economic policy's requests DE may provide, because its theorists' predictions have not always been confirmed [6, p. 43]. Cases of successful catch-up development are statistically rare and usually occur in East Asia. This region includes, primarily, large countries, economy of which received a favorable scale effect and, in turn, significantly affected other countries. This means that the theory should be considered "working" and applicable to the study of domestic empirical sources in the long-term historical and economic dynamics.

2. Evolution of Soviet centralized planning experience assessment

Development economics, economic Sovietology, and transition economy (transitology) were observed by M. Ellman as separate

Evolution of development economics discourse

Stage	1940s – late 1970s	late 1970s – 1990s	2000s – 2010s
Paradigm characterization	Structuralist	Neo-liberal	Neo-structuralist
Main approaches	Neo-Keynesian macroeconomics, with emphasis on “market’s failures” and accelerated capital accumulation (primarily physical)	Appeal to market mechanisms and role of liberal institutions, with emphasis on “state’s failures”, within increasing influence of neoclassical theories	Protection of active state policy of stimulation while keeping pro-market principles of openness and economy’s competitiveness
Priority countries-objects of analysis	Eastern Europe, USSR, Japan, Latin America	East Asia, Latin America	China, India, middle-income countries, Japan
Concepts, models, and major supporters	Big push model (P. Rosenstein-Rodan), unbalanced growth model (A. Hirschman), stages of growth model (W. Rostow), modern theory of economic growth (S. Kuznets), hypothesis on the relation between income inequality and economic growth (“Kuznets curve”), the theory of dual economy (W. Lewis, G. Ranis), the vicious circle of poverty theory (H. Leibenstein, R. Nurkse), advantages of backwardness theory (A. Gerschenkron), theory of economic dependence (R. Prebisch, C. Furtado), the model of borrowing and new technologies diffusion (R. Nelson, E. Phelps), planning model of macroeconomic policy (J. Tinbergen, R. Frisch)	Models of endogenous (R. Lucas, P. Romer) and exogenous growth, hypothesis on the relationship between environment and level of development (“environmental Kuznets curve”, J. Sanford, A. Krueger), development state theory (Ch. Johnson), concept of “the resource curse” (A. Gelb, R. Oti). Alternative to mainstream: concept of human development (A. Sen, M. ul-Haq)	Innovative growth model based on “creative destruction” (Ph. Aghion, P. Howitt), the theory of new structural economics (J. Yi. Lin), theory of extractive and inclusive institutions (D. Acemoğlu, J. Robinson), unified growth theory (O. Galor), the middle income trap concept (I. Gil, H. Haras, B. Eichengreen), concept of premature deindustrialization (D. Rodrik)
Influence of close areas of economic science	Neo-Keynesianism (R. Harrod, E. Domar), Russian Marxism (E.A. Preobrazhensky, G.A. Feldman), European Marxism (K. Mandel’baum (Martin); M. Dobb, M. Kalecki), human capital theory (T. Schultz, G. Becker)	Neo-institutionalism (D. North, J. Buchanan, M. Olson), neo-classical mainstream (G. Mankiw, D. Romer, D. Vale), transitology, human capital theory (T. Schultz, G. Becker)	Neo-schumpeterism (P. Aghion, P. Howitt), political economy (D. Acemoğlu, J. Robinson), neo-institutionalism, human capital theory (G. Becker), post-Keynesian economics (J. Stiglitz)
Development goals	Increase of per capita GNP, security ensuring of maximum employment, changing the structure of the economy towards manufacturing	Increase of per capita GNP, meeting basic needs, poverty reduction, sustainable development. Alternative: expansion of the selection space, implementation of human potential	Sustainable development, improvement of life quality, inequality reduction, eradication of absolute poverty
Political strategy	Industrialization, import substitution, income equalization, development planning, interventionist policy on prices, directive methods of planning	Financial stabilization, privatization, economic openness, industrial policy	Globalization, implementation of comparative advantages, green economy, financial development, improving the institutional environment, national and regional economic planning

Sources: compiled according to: Chenery H., Srinivasan T.N. (Eds.). *Handbook of Development Economics*. Vol. 1. North-Holland: Elsevier BV, 1988; Chenery H., Srinivasan T.N. (Eds.). *Handbook of Development Economics*. Vol. 2. North-Holland: Elsevier BV, 1989; Behrman J., Srinivasan T.N. (Eds.). *Handbook of Development Economics*. Vol. 3A. North-Holland: Elsevier BV, 1995; Behrman J., Srinivasan T.N. (Eds.). *Handbook of Development Economics*. Vol. 3B. North-Holland: Elsevier BV, 1995; Schultz T.P., Strauss J. (Eds.). *Handbook of Development Economics*. Vol. 4. North-Holland: Elsevier BV, 2008; Rodrik D., Rosenzweig M.R. (Eds.). *Handbook of Development Economics*. Vol. 5. North-Holland: Elsevier BV, 2009; Yülek M.A. (Ed.). *Economic Planning and Industrial Policy in the Globalizing Economy: Concepts, Experience and Prospects*. Springer International Publishing Switzerland, 2015; Yülek M.A. (Ed.). *Industrial Policy and Sustainable Growth*. Springer Nature Singapore Pte Ltd., 2018.

scientific areas, produced by different institutional systems' [7]. He also posed a question about its common contribution to modern economic theory. In the search for appropriate theoretical and methodological instruments for the analysis of planned economies, we are interested in spheres of cooperation between major areas of scientific literature (*Figure*).

Some researchers preferred to define Soviet model as “administrative” [8; 9], or “centrally managed” [10], in comparison, or additionally, to “planned”. It underlines instrumentality, not substantiality, of national economy planning, which could be applicable in different institutional systems.

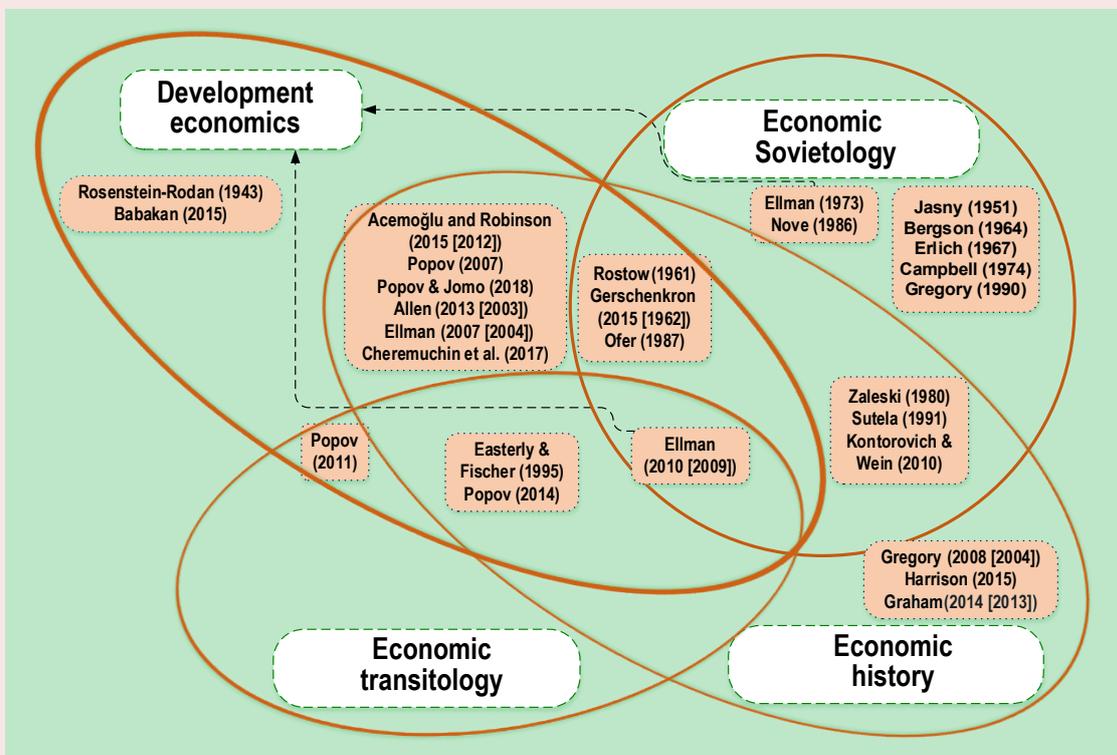
In DE discourse, the USSR planning strategy was explored by British Sovietologist of Russian origin – A. Nove [11, pp. 379–383]. He attributed short-term and perspective plans

(for 15 years and more) to development plans which were basic for investment programs [11, pp. 17–18]. According to him, it was their difference from operational (annual and quarterly) plans, which contributed to directive management of production units. Besides, Nove admitted motivational value of plans [11, p. 26].

Within special strategy of economic development, planning in the USSR was studied by R. Campbell [9, pp. 141–169] and A. Erlich [12]. Campbell, while praising mobilization of Soviet institutions, pointed out inefficiency of resources' consumption [9, p. 141]. Erlich also noted economy's below-potential growth rates, because the strategy of its development was overly focused on increasing capital intensity [12, pp. 259–268].

In 1973, Ellman pointed out rationality of directive (not indicative) planning of the 1930s

Interaction of directions of scientific literature in assessing the Soviet planning experience



USSR economy. According to him, economic system, which wants to quickly bridge the development gap in the environment of external military threats and failures of market mechanisms functioning, tends to use mobilizing methods [8, p.172]. Proponents of DE [13] and economic Sovietology [11, p. 142] supported this position. M. Ellman [14, pp. 219-220, 227; 7, pp. 7–8], V. Kontorovich and A. Wein [15], M. Harrison [16] later wrote about the defining importance of the military factor. At the same time, authors of Sovietology books (the late 1960s – the early 1970s) admitted that gradual transition to indicative planning, at first in the direction of “decentralization”, Hungary and Yugoslavia’s “market socialism”, using methodology of “optimal planning” [8, pp. 143–150, 187, 180–194; 9, pp. 39–40, 137–140, 201–240; 11, pp. 38–47, 390], would be advisable and possible. However, theoretical and practical technologies of the transition were not systematically developed.

Thus, in DE paradigm, centralized planning might be perceived as the key instrument of certain countries’ catch-up strategy implementation, a way of overcoming institutional “underdevelopment traps” in the environment of increasing level of external threats⁷. It involves the concentration of limited resources in a single center, authorized to make decisions on distribution, in order to reduce transactional costs associated with conflicts of interest, competition, and provision of incomplete information in case of economic agents.

The basis of national economy’s directive planning is a combination of short-, -medium and long-term key indicators of certain community’s development, acquired by scientific, according to its supporters, methods. In the USSR and other countries with increased role

of the government in the economy, entities of the planning did not cooperate efficiently all the time, and it led to “state’s failures in economic policy”⁸.

In this regard, it is interesting to try to introduce methods of balance sheet calculations based on “input – output” tables, linear programming, and optimization models in the process of preparing plans. Soviet government’s support of scholars, working in the spheres of economics and mathematics, which emerged in the late 1950s – the early 1960s, was limited to technical assistance.

At the same time, scholars’ propositions to set mandatory rules of decision-making, which would limit spheres of concerned departments’ powers, faced opposition [8, pp. 79, 178–186; 11, pp. 47, 324–328, 390].

In turn, supporters of this sphere proceeded from a technocratic understanding of the political decision-making process, which did not take into account the existence of goals lying outside the economy itself: for example, full employment security and income equalization. A fundamentally important constraint was the integrity of the Soviet socialist ideology, which legitimized the use of power resources by the USSR political elite.

Discussion of examples of new mathematical methods of planning in Sovietology literature showed the connection between this problematics and DE discourse. This is especially evident in the context of its comparison with main economic theories: Neo-Keynesian economics (cross-sectoral interactions and aggregate growth), Marxism (social and political factors of distribution), and neo-classicism (balance and efficient allocation of resources) [8, pp. 179–180].

⁷ This idea in the discourse of linear modernization was expressed by W. Rostow [17, pp. 230-232].

⁸ Theoretical analysis of mechanisms of economic policy development and cooperation of its entities was suggested by S.A. Afontsev [18].

It should be noted that, despite limited technical means of plans' compilation, its internal imbalances, and institutional problems of cooperation between planning entities, development of the Soviet system, until the early 1960s, primarily matched its own structural priorities and performance criteria. Even though they were not always operationalized in current plans [11] and were not carried out to the extent determined by political attitudes [8; 11]. The most important factor in the literature of the late 1960s – the early 1970s was the existence of strong state institutions that ensured the implementation of plans.

While development rates of Soviet economy in the 1970s slowed, and structural crisis deepened in the 1980s, another aspect of Sovietology, supported by N. Jasny [19] and A. Bergson⁹ [20], strengthened. This aspect emphasized shortcomings of Soviet planning institutes, and it was based on the theoretical arsenal of neo-institutionalism and neo-classicism.

For studying practices of the USSR centralized planning, Gregory and Harrison used instruments of neo-institutional theory. Gregory opposed planners (*apparatchiks*) to economic managers [21]. Planners primarily established rules and monitored, while economic managers signed contracts for the allocation of resources and took risks and responsibilities for results. Gregory did not select scientific elite as an individual entity of the planning process¹⁰ and denied any scientific approaches to plans' drafting.

⁹ A. Bergson tried to find internal logic of economic decisions within goal-setting and mechanisms of socialist system's functioning.

¹⁰ Just like historians of economic thought did it. For example, P. Sutela [22, p. 26-48]. In this paper, the contribution of early Soviet economic thought to the formation of development economics, planning economics, and mathematical economics' foundations was noted. It also outlines further ways of complex interaction of economic science with the "engineering" approach to planning by state structures.

In other work, based on information from archives, opened in the 1990s, Gregory showed how, instead of vertical subordination, lobbying and administrative bargaining were carried out on different levels of the Stalin's economy¹¹ [23].

After J. Kornai [27, pp. 137–156], P. Gregory [21, pp. 15–19, 47–49; 23, pp. 22–23, 182–184, 317–322], and M. Harrison [16, pp. 305–323, 353–357] explained these phenomena as a conflict of interest between the principal (representing the national economy) and its agents (representatives of industries and regions). Harrison paid attention to increasing transactional costs of informational monitoring and agents' enforcement [16, pp. 391–392, 412–413].

In economic literature of the 1980s – the 1990s, critical assessment of Soviet system development also prevailed. Catch-up development experience, gained through the usage of centralized planning and economy's management, received minimal positive assessments in generalizing DE books¹², published in the late 1980s. In mainstream transitology, the contents of further socialist countries' development were interpreted as the rejection of planned mechanisms in favor of the ones regulating market. Sectoral priorities, boundaries of free pricing introduction, and property privatization were also discussed.

While analyzing reasons of sharp slowdown of Soviet economy, G. Ofer [13] pointed out specifics of its development strategy. It was about maximum accumulation of physical capital, new construction instead of reconst-

¹¹ These phenomena are attributed in the literature to the essential characteristics of the economy of the late Soviet period in the concept of administrative market (the economy of approvals, the economy of hierarchical bargaining), which describes the processes of exchange of power resources for economic [24; 25; 26]. In turn, this concept was developed by adapting the instruments of neo-institutional theory of public choice.

¹² See sources of *Table* compilation (section 1).

duction, which led to low elasticity of production factors' substitution. He also reviewed institutional problems, related to the inflexibility of the economic system, weak interest of enterprises in the introduction of scientific achievements and organizational innovations.

W. Easterly, S. Fischer [28] relied on G. Ofer's idea [13], concerning low elasticity of production factors' substitution in the USSR, which became a fatal weakness of the extensive development strategy at later stages. As the result, the USSR economy growth was lower than in reference countries (first of all, in East Asia in the 1950s–1980s), and it had low efficiency in comparison with the growth of production factors (physical and human capital¹³). However, the generalizing conclusion about the negative impact of planning on growth rates did not answer the following question: why growth rates were high in the USSR at the early stage of development.

A revision of pessimistic assessment of Soviet planning began in the 2000s. Thus, R. Allen [29] relatively highly estimated the USSR achievements in the 1930s (implementation of the “great push” [30], “rise” [17], and “great breakthrough” [31] models). These assessments did not become unanimous, but this work caused a significant resonance in historical and economic literature. Opposing researchers accepted a number of its arguments.

Summing up the discussion on the economic growth rates, M. Ellman [14, p. 227] admitted that, although the Soviet breakthrough was not globally “outstanding”, it certainly stood out against the mediocre results of Africa, Latin America, and India between 1928 and 1989.

¹³ In this staged work, indicators of human capital in natural units were used for the analysis of Soviet economic growth for the first time: coverage of secondary education, the share of specialists with higher education in total population.

A. Cheremukhin and co-authors noted that the level of institutional barriers of intersectoral mobility of production factors significantly decreased at the early Soviet stage [32, pp. 27–28].

From the position of DE, there were attempts to answer the question (“Why the development slowed down, and the quality of its structure worsened at the later stages of the USSR”) in a new way. According to R. Allen [29, pp. 259–272], the country's authorities chose false development strategies of the economy which brought its structure closer to “third world” countries.

V.V. Popov [33] proceeded from the statement that planned system has its own life-cycle, which is determined by the time of fixed assets' service (20–30 years) and the moment of sharp increase of accumulation norm. Building on G. Ofer's idea about elasticity of labor replacement by physical capital, V.V. Popov argued that the key factor of development rates' slowdown in the 1960s–1980s was manufacturers' disinterest in timely replacement of obsolete equipment¹⁴. Also, he paid attention to progressing weakening of state's institutional potential in the late USSR (in comparison with China in the 1950s–1970s), which determined failure of gradual economy's reformation [34, pp. 25–33, 310–316; 35, pp. 104–114].

According to D. Acemoğlu and J. Robinson [36], within strengthening of “extractive” institutions of state coercion, central planning, and mobilization economy, growth rates were below possible even in the best periods. Most importantly, growth rates could not be sustainable with the exhaustion of excess labor in the low-productive agricultural sector, the

¹⁴ The way of thinking opposite to the one supported by R. Allen [29, pp. 261–265] who wrote about preferences of planners to implement reconstruction of working enterprises, which turned out to be less economically efficient than shutting down of old enterprises and opening of the new ones.

growing rent-seeking of political elite and weak incentives to innovation spreading.

However, these authors did not answer question of how primarily illiberal institutions of South Korea, China, and other Asian countries have been keeping relatively high growth rates and timely adapting its institutions to “inclusivity” for a long time.

Russian economists of institutional school E.V. Balatsky and N.M. Pliskevich [37], criticizing monocausal authors’ approach, rightly pointed out underestimation of social mobility factor and the existence of “mixed” institutional regime in the early USSR.

On the other hand, D. Acemoğlu and J. Robinson’s [36] main point was illustrated by L. Graham [38] on the basis of history of Russian science development. He managed to systematize factual material showing the commitment of Russia’s age-old development trajectory to catch-up (not innovative) model, which defining factor of scientific and technological development was interest of state’s institutes in security provision. The same institutes blocked the commercial distribution and usage of advanced scientific achievements.

Thus, Soviet experience was one of the largest historical examples which planted seeds of DE. Its analysis in this paradigm was conducted within cooperation between theoretical thought and empirical works. However, its importance to DE was lowering together with the slowdown of the USSR economy, the growing institutional problems of interaction between its subjects, and the subsequent collapse of the country.

Mostly unsuccessful results of the transplantation of Soviet economic institutions in other countries were added to mentioned factors. Under these circumstances, the interaction of DE with other areas of economic science, primarily with neo-classicism and neo-institutionalism, intensified.

Certain Sovietologists (most of all, M. Ellman) in their works identified scientists-economists as individual entities, claiming to participate in making planned decisions. However, M. Ellman noted signs of their technocratic understanding of economic rationality.

Recently revived interest of DE supporters in Soviet experience is characterized by intensified discussions about the role of institutes, which provided fast structural USSR transformation and country’s victory in The Great Patriotic War. However, they simultaneously contributed to slowdown of growth and reversal of several socially important indicators in the 1960s and the 1980s.

3. Development economics as a research program within the policy of catch-up modernization

It is quite natural that the modernization agenda, related to DE, has a tendency of being actualized in the political discourse of Russia [39] and other countries of catch-up development [40]. In this regard, it is important to find an adequate positioning of this agenda in a comparative historic context. Russia is a country that made the transition to an industrial society during the Soviet period, but lags behind the world’s “technological border”. Russia has achieved high quantity (but not quality and value) indicators of human capital, measured in natural units’ numbers [41, pp. 266–277; 42, pp. 38–50]. Despite the attempts to import several institutes of post-industrial society, the state of institutional environment is assessed as weak. At the same time, within ultra-high efficiency of mining industries, Russia continues to be exposed to the risks of early deindustrialization¹⁵ due to low competitiveness of processing industries.

¹⁵ Its factors and mechanisms in the middle income countries were analyzed by D. Rodrik [43].

In this regard, there is still room for improvement of the DE theoretical paradigm through the usage of instruments of new institutional economic history. Its key concepts were reviewed on the basis of domestic sources by R.M. Nureev and Yu.V. Latov [44, pp. 17–19]. Among them, such concepts as “competition” of institutions and its “selection” as a result play a crucial part. Other examples of corresponding empirical analysis [45, pp. 75–78] also indicate significant potential of DE. D. Acemoglu, P. Aghion, F. Zilibotti [46] proved the pattern, arising from the typological differences of socio-economic development of “relatively lagging behind” countries, established by A. Gerschenkron [31]. Their technological model means: the further national economy from the global “technological border” is, the more benefit in following strategies, typical for catch-up development, its meso-economic entities have. It means borrowing technologies which use political institutions, stimulating accumulation of capitals but limiting the competitiveness.

This pattern is largely supported by economic development trajectories of the USSR and other socialist countries. Thus, in relation to the USSR in the 1930s and the 1950s, there was a reduction of the gap, followed by its stabilization in the 1960s and the 1980s. In the 1950s–1980s, there was a moderate convergence of South-Eastern European countries and divergence of the most developed Central European countries with Western countries [47; 48].

In turn, potential of economic system for efficient borrowing of technologies and institutes expresses the term “absorptive capacity” (as opposed to “innovative”), developed by V.M. Polterovich [5, p. 42, 47]. This is a multidimensional concept, which also includes the

efficient interaction of interested social groups.

The division of terms “effectiveness” and “efficiency” has the crucial importance for the analysis of Soviet experience. According to GOST ISO 9000-2011 (p. 3.2.14, p. 3.2.15), effectiveness is “the degree of implementation of planned activities and achievement of planned results”, and efficiency is “the connection between results achieved and resources used”¹⁶. Close understanding of these terms is given by V.N. Leksin and B.N. Porfir’ev. They underline that effectiveness may have quantitative and specific qualitative expression, while efficiency may have only quantitative expression [49, pp. 84–85]. At the same time, the concept “effectiveness” is actually considered to be a component of the quite wide concept of “efficiency” [49, p. 83; 50, p. 80] in normative documents and in practice of implementation assessment of the RF state programs.

It should be noted that this understanding of effectiveness makes sense only if there is a plan. However, the result of an activity might be compared not only with the planned results, but also with the actual results achieved by rivaling economic entities. Corresponding indicators for national economy might be the volume of the key investment goods output, the level of the economy’s energy intensity, and the availability of critical technologies.

Well-known facts and quantitative assessments, cited in the literature (see section 2), show that centrally managed economic systems, based on non-economic coercion, can show positive effectiveness (for example, in binary opposition “is” or “is not”), but low levels of efficiency (“...one Victory is needed, ... nothing of value ever is”).

¹⁶ GOST ISO 9000-2011. Quality management system. Fundamentals and vocabulary. Put into effect by Rosstandart’s order no. 1574-st, dated 22.12.2011. M.: Standartinform, 2012. p. 12.

At the same time, it is important to understand that specific historical target parameters and efficiency criteria are set by the political elites' priorities at different stages of social development. The presence, or absence, of consensus on this issue with scientific elites is an important factor of their cooperation.

Thus, the target planning parameter for a catch-up country is its *speed*, which was considered a main efficiency criterion by Stalin's political authorities. This issue, within the USSR general strategy of economic development, was reviewed by G. Ofer; in relation to the accumulation of human capital – D.V. Didenko. The high norm of intertemporal preference, associated with this parameter, was the cause of economic growth instability (current rates are more preferable than the future ones) [13, pp. 1798–1901] and reduced efficiency in terms of the relation of socially important results to additional costs [41, p. 308].

In catch-up economy, selective import of institutes (mainly through state entities) can also be enhanced in order to bridge the gap between it and the most economically developed countries. However, the establishment of institutions, suitable for solving current and medium-term issues of catch-up development, creates institutional traps that hinder growth despite the gap narrowing.

An important issue in the discussion of the Soviet institutes' role is the question, why USSR, moving away from the mobilization practices of industrialization in the second half of the 1950s, did not timely and gradually move away from directive planning to market economy and did not anticipate a more effective institutional trajectory of China?

In order to answer this question, we need to pay attention to the concept of “path dependence”, analyzed in the works by P. David

[51], W. Arthur [52], integrated in new institutional economic history by D. North [53] and actualized by R.M. Nureev and Yu.V. Latov [47, pp. 11–14]. From their point of view, saving of less efficient institutes is explained by excessive transaction costs of their replacement and the difference in intertemporal preferences of economic entities.

Several important issues concerning cooperation between institutes of science and USSR public economy governance were not thoroughly discussed. For example, important thesis on decreasing institutes' efficiency in the late USSR requires additional conformations from institutional interactions between science and government.

Another important issue is what institutes of centralized planning and economy management might work in modern Russia. It requires further substantive discussion. We might assume that the program-target approach, implemented in Federal Target Programs (FTP), regional programs of territorial development, complex state programs, shows decent efficiency in the development of Russia's budgetary system. Its prototype of the late USSR period is, for example, complex programs of scientific and technological progress¹⁷. Also, the positive potential is seen in the combination of sectoral and territorial planning sections in the development strategies of macroregions¹⁸. Medium-term planning, based on development goals regularly approved by the highest

¹⁷ Since the 1970s, such programs have been developed once in 5 years and were aimed at the next 15–20 years. See: A comprehensive program of scientific and technical progress of the USSR in 1991–2010. Available at: <https://ecfor.ru/publication/kompleksnaya-programma-nauchno-tekhnicheskogo-progressa-sssr/>.

¹⁸ Implemented in “Spatial Development Strategy of Russia until 2025” (approved by the RF Government decree no. 207-p, dated February 13, 2019). Available at: <http://static.government.ru/media/files/UVAIqUfT08o60RktoOXI22JjAe7irNxc.pdf>.

legitimate authority, might become workable (even if it is incomplete)¹⁹.

Integration of processes of macroeconomic and budgetary planning is also an important sphere. In USSR (since the late 1920s), the cornerstone of the resource allocation process was the capital investment plan (not the production plan), which included planners' actual priorities [23, pp. 152–158, 103–104, 144, 313–314]. So, the planning was the key instrument of public investment policy, which currently should include costs of the formation of physical and human capitals. At the same time, structures of governance cannot implement directive regulations for the results of economic entities' work and directly allocate the bulk of resources in the sphere of market economy. In the public sector of national economy, their efforts should be focused on efficient management in the role of resource owners.

These issues play a crucial part in improving the system of strategic planning in Russia – efficient cooperation between its social entities which have an appropriate motivation.

With the increasing role of the state as a subject of the investment process, planning might become an important instrument of structural industrial policy, rationally determined not only by the criteria of economic efficiency. At the same time, the fundamentally important problem of “principal – agent” (see section 2) requires the formation of institutional mechanisms in order to stop its negative manifestations. The positive examples of other countries, which are referent to Russia (Brazil [54], China [55]) and discussed in

¹⁹ Attempts to actualize Soviet experience of five-year planning included the RF President's Order “On National Goals and Strategic Objectives of the Russian Federation through to 2024” no. 204 (available at: <http://static.kremlin.ru/media/acts/files/0001201805070038.pdf>), dated May 7, 2018, and previous 11 decrees, dated May 7, 2012.

the literature, show the situation, when elites can implement development policy. In turn, similar USSR studies may adjust DE theoretical provisions and concepts, including criteria for the effectiveness and efficiency of interaction between planning entities.

Conclusions

In this article, the historical experience of planning in the USSR is correlated with the accumulated theoretical and empirical developments, the critical analysis of the relevant areas of scientific literature is carried out, methodological issues are raised, possible areas of empirical research and improvement of economic development theories are determined.

The author defines three stages of DE evolution and its chronological borders; the current stage is characterized as neo-structuralist, actualizing the paradigm of early development economics with the reception of concepts and approaches of institutional economics²⁰. In this regard, author's periodization is different from the ones existing in the works on history of economic thought²¹. Besides, in theoretical and methodological instruments of DE the author selects the list of concepts relevant for modern Russia and models of socio-economic transformations, which had not been done in the systematic way in the literature before²².

²⁰ Interactions of DE with institutional economy and economic history were mentioned in several works, especially the ones by S.R. Khan [57, p. 61–63, 76–78], R. Boyer [58], N. Crafts [59]. However, in works, known to us, development of DE discourse was analyzed primarily through opposition of pro-market and interventionist approaches.

²¹ Especially from E. Thorbecke's work [56], where detailed characteristics of prevailing DE discourse are given by decades. Chronological borders of evolution's stages, selected by the author, are also different from the monograph written by S.R. Khan [57], which is based on the opposition of developmentalism and neo-liberalism.

²² While important ideas on this issue were expressed in the works by R.M. Nureev and Yu.V. Latov [44], V.M. Polterovich [5], V.V. Popov [34, 35].

Conducted analysis of scientific literature has the following results in relation to the key trends of DE evolution:

- Methodologically relevant research of historical planning experience in USSR was conducted in cooperation with theoretical concepts of development economics and institutional economics with empirical researches in the areas of economic history, Sovietology, and transitology.

- In DE paradigm, which emerged as an alternative to classic theories, centralized planning of economy gained theoretical legitimization and was reviewed as the key instrument of implementation of catch-up development strategies.

- Slowdown of the USSR economic dynamics in the 1970s and 1980s caused the shift of ER theorists' focus from macro-economic modeling of production factors to the analysis of the institutional environment's features.

- Last decades were marked by adjustment and update of DE theoretical foundations. Unanimous recognition was given to the priority of market methods of economic regulation, at least within upward phase of opportunistic cycle.

- Different stages of DE economics were receptive to positive influence of other areas of economic science (Russian and European Marxism, neo-schumpeterism, the theory of human capital, neo-institutionalism).

- Since the 2010s, global scientific literature shows signs of attention strengthening to problematics of planning on national and regional levels, actualization of historical experience in studying certain examples and in attempts of theoretical analysis.

- The formation of new theory on planning national and regional economy, based on DE methodological paradigm, began. This paradigm has heuristic potential for

empirical analysis of societies lagging behind in technological and institutional development.

Several important for the early DE representatives' problems were left outside research interest, reflection, and the analysis:

- Accumulation of empirical data in researches of western Sovietologists and economic historians on features of economic growth in the USSR and institutional problems, related to directive nature of planning, did not receive timely and deep theoretical assessment from DE representatives due to linearity of their world view and focus on early stages of industrialization.

- Theoretical constructions and political recommendations, coming from it, assumed the presence of adequately functioning state institutes for the implementation of the catch-up development strategy, the possibilities of its degradation were not envisioned.

- The problem of imperfection of social communication between the representatives of science and government, as well as the presence of special group interests in different planning entities having different institutional mechanisms of coordination, was poorly identified.

- The criteria of success, effectiveness, and efficiency of interaction between the institutes of science and governance in the sphere of economic planning were not clearly identified.

- Insufficient attention was paid to the analysis of the institutional reasons which caused low efficiency of cooperation between representatives of science and public authorities in the sphere of economic planning.

New areas of research indicate the following working hypotheses:

1. Effectiveness and efficiency of cooperation between institutes of science and governance decreased in the late Soviet period.

It did not allow timely addressing important issues concerning development features of basically formed industrial society.

2. Distinction between political and economic types of rationality, entities of which interact on political markets with a certain level of transactional costs, has an important methodological meaning [1; 18]. According to neo-institutional theory of public choice, political decision-making entities may, more or less, ignore scientifically-based recommendations, aimed at maximization of public welfare, and its economic policy do not meet the criteria of optimality. The example of such political market, having inefficient balance, is the cooperation between entities of economic governance in the period of the late USSR.

3. An important factor of worsening of social communication in the late Soviet period was the growing difference of discourses of analyzed planning entities. A fundamentally important constraint of state authorities was integrity of official ideology, which legitimized monopoly for political power but continued to lose public trust. Its combination with a special kind of technocratism, expressed in high expectations from the natural science knowledge development [60, pp. 39–40; 61, pp. 247, 258–260, 287], did not receive enough

insight from scientists, who claimed intellectual leadership. According to them, obstacles to effective interaction were other kinds of value-rational ideocratism (preference, for example, for the values of “democracy”, “social justice”, “economic rationality”) and technocratic scientism (preference for “economic rationality”, “mathematical optimization”, ideological restrictions). Members of scientific society barely understood mechanisms of implementation of their conclusions and recommendations, which were based on several assumptions, in political and social actions.

This article explains the usage of development economics’ instruments, enriched with concepts of new institutional economic history, as a theoretical and methodological basis for the study of empirical sources on institutional practices of centralized planning in the USSR. It, in turn, will contribute to update of theoretical basis of development economics within the policy of Russia’s catch-up modernization. The article also might be used for addressing the issue of imperfection of social communication between science and governance members; the formation of new theory of national and regional economy planning within the paradigm of the school of post-soviet institutionalism.

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What Kind of Teacher Does the “School of the Future” Need? Possibility of Using John Hattie’s Approach in Russian Education



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Abstract. In the article, we tried to express our opinion in the framework of a controversy that unfolded between the New Zealand researcher John Hattie and his opponents. The dispute concerns the validity of the arguments made by the scientist in his book *Visible Learning* (2009) on the size of external and internal effects that influence the performance of secondary schools. The subject of discussion in the article is not chosen randomly. Hattie’s ideas are widely used in the educational policy of foreign countries (especially Australia), but will they be relevant in the Russian reality? A number of educational innovations borrowed from Western countries do not have unequivocal approval in Russian society (this applies to the final exam in the form of testing, the Bologna system of higher education etc.). In our study, we analyze Hattie’s arguments and evaluate their scientific validity. For this purpose, we generalize arguments of the scientist and his opponents (for some reason the criticism by his opponents is not mentioned in the Russian-language literature). Hattie’s book offers a scientific approach to the substantiation of indicators that affect school education performance to varying degrees. Among these parameters, a special role belongs to productive activities of teachers aimed at self-education and creating a positive climate in the classroom, whereas the contribution of the amount of professional competences of the teacher in lesson planning and content is clearly undervalued. Such thoughts, not fully accepted by the scientific community, became the basis for further controversy. Our article highlights methodological and cultural approaches to the criticism of “visible learning”. It is found that the arguments of Hattie’s opponents relate to different aspects of his research, but are purely theoretical. We calculate the coefficients of variation and carry out a statistical analysis of the estimated model (which has not been done before). Having interpreted the

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data obtained, we find out the heterogeneity of the sizes of the effects in Hattie’s model. On this basis, we make practical conclusions about the methodological and conceptual possibilities of using the New Zealand researcher’s approach in the realities of Russian education. The article will be of interest to both educators and all those interested in social policy issues.

Key words: education, reform, educational policy, “new school”, unschooling, meta-analysis, effect size, variation coefficient.

Introduction. Substantiation of efficiency markers in relation to social policy in general and to education management in particular remains relevant for departmental structures [1, pp. 58-95]. As a consequence, the academic community finds solutions to this problem, but they are often being disputed because they are usually formed *ad hoc*, taking into consideration the experience of other countries, but in isolation from the prevailing cultural traditions, and without considering the opinion of the educational community and the need for preliminary testing on the example of the model region (organization). As a result, some of the new phenomena turn into real institutional traps for all participants in educational relations. Suffice it to recall the Unified State Examination, which is now approved by only a third of school teachers [15].

It is well known that education today is a field in which tradition and innovation meet, which often leads to a direct confrontation. One side of this conflict is traditional education and the other is experimental education or the “school of the future”.

Traditions in teaching (traditional didactics), formed over the centuries, are revealed in the works of J.A. Komenský (17th century), A. Diesterweg (19th century). The traditional educational concept rests on “five pillars”: 1) **knowledge paradigm** (orientation of pedagogical process on the formation of knowledge); 2) **central role of the teacher** (belief in the authority of the teacher as a central part of the educational process); 3) **class-and-lesson system** (belief in the positive impact of the team on the final results of education); 4) **discipline** (providing a link between training

and education); 5) **B. Bloom’s taxonomy of educational objectives** (strategy of skills development at certain levels: knowledge/comprehension/application/analysis/synthesis/evaluation) [2, pp. 20-29].

A.A. Verbitsky believes that the classical educational paradigm conceptualizes a person as “a simple system, limiting the range of the student’s mental functions included in the work” [3, pp. 3-6], and also “does not provide for the activity at the level of thinking and personality of the student, his/her creative consciousness” [3, pp. 3-6]. G.M. Nurmukhamedov points out that a significant drawback of the traditional education system consists in the lack of “a diagnostic goal focused on the meaning of human life”, which in turn is expressed in work and creativity [2, pp. 20-29].

With the development of progress (technological, in particular), the model of traditional education was often criticized, which was facilitated by the preservation of school orders in post-war Europe and the United States, and the lack of real educational innovations against the background of improving technologies [4, pp. 23-27]. J. Goodlad in 1980 wrote that “the ability of schools to perform their main and usual role (promoting literacy and elimination of ignorance) raises more and more doubts, and for a reason” [5, p. 10]. However, in the 1970s, the impact of demographic pressures on Western schools increased due to the increase in the number of divorces. As a result, relations in the heterogeneous class became increasingly alienated and depersonalized [5, pp. 23-27]. In addition, in science there emerges a new nonlinear idea of the educational process,

proceeding not from the universal system, the same for all, but from the individual goals and strategies of each student, the theory of metacognition (Marzano taxonomy) [6, pp. 5-17].

As a consequence, in the second half of the 20th century in Europe there emerged a movement of “the new school”, which on the basis of the development of the concept of “natural education” by J.-J. Rousseau proclaimed a departure from institutional to non-institutional forms of education. In particular, the fathers of the “new school”: educators R. Cousinet and C. Freinet wrote about the need for a radical reorientation of the education system to suit the needs of the child, and about the importance of using new forms of teaching, such as work in small groups (instead of classes), learning through play, organizing school self-government, and abandonment of grading and textbooks [7]. Teachers in this model already cease to play a leading role in the educational process. Instead of mentoring and transferring knowledge, they are intended to monitor the “natural development of students and advise them on challenging issues” [8, pp. 121-122].

French teachers-innovators probably did not even suspect that their rather cautious ideas would be later developed in a more radical theory of unschooling – education of children in complete separation from school. Within the framework of this trend, the Austrian theoretical philosopher I. Illich developed the thesis about “the liberation of society from the monopoly of the school” [9, p. 16]. Inspired by the ideas of Illich, American teacher J. Holt put forward a theory that the main cause of academic failure in the modern school is the school system itself, because it is interested in the formation of a “producer rather than a thinker” [10, p. 8]. In his opinion, the child’s qualities are developed best of all in “natural conditions”, outside the walls of an educational organization (“the best place for learning is the thick of life”) [10, p. 447].

The ideas of unschooling, which were repeated many times in foreign pedagogical science (R. Moore, P. McLaren, D. Goodlad, K. Robinson, A. Helmke, etc.), influenced a number of pedagogical concepts (Wal-dorf education, Montessori education, home-schooling) [11, pp. 213-219]. However, this concept did not have a significant impact on the formation of the educational paradigm in Western countries; the concept received the status of a revolutionary, but at the same time underground and marginal ideological direction¹. Already in the 1980s, against the background of the decline of industrial production, revolutionary ideas in Western pedagogy receded into the background, and educational traditions began to revive. In particular, the system of classical education regained popularity thanks to the article by D. Sayers “The Lost Tools of Learning”, in which the “standards” of the medieval school (grammar, dialectics, rhetoric) were adapted for the modern world [11, pp. 213-219].

However, being on the second positions, the ideas of the “new school” show themselves indirectly as an ideology of modern educational policy. A striking example of this can be found in the monograph of New Zealand scientist Jonh Hattie, which he called “Visible Learning” (2009). The book boldly claims not only theoretical and philosophical, but also empirical justification of the factors that help the school to become effective (in relation to educational performance). In this regard, Hattie’s work proved to be advanced for its time and gained considerable authority in the educational community of Western countries, and in some cases became the ideological and methodological basis for reforming the education system. The reason for this is

¹ For reference, we note that the situation is different in the Russian Federation. The Higher School of social Sciences and Humanities has included I. Illich and P. McLaren in the list of the most influential foreign authors in the field of pedagogical theory, politics and practice (whereas their books are not so highly valued abroad).

simple: the scientist offers a fairly ordinary solution to educational problems, which by its accessibility may attract managers at all levels. This solution is reflected in the fact that schools are implementing a monitoring system for the indicators that he highlighted.

At the same time, Hattie’s approach emphasizes the professional activity of teachers, who according to their duties are closer to the moderators of the student’s educational path than to professionals (which is in tune with the thoughts of the theorists of the “new school”).

Currently, the wave of popularity of “Visible Learning” has reached Russia. In 2017, this book was translated and published by “Natsional’noe obrazovanie” publishing house, which is part of group of companies “Prosveshchenie”. In our study, we asked the question: to what extent is Hattie’s concept applicable in the Russian school and in teachers’ work in the light of future development prospects? These prospects, largely identified by the national project “Education”, guide the teacher along the path of continuous updating of their knowledge (including digital and technological), as well as forming a situation of success for each student. Last but not least, we are interested in the feasibility of integrating Hattie’s ideas into educational policies at the local, regional and national levels.

The goal of our paper is to analyze, based on the study of the research literature and own calculations, the scientific validity of Hattie’s arguments and the results of his meta-analysis for the subsequent assessment of the applicability of his approach in Russian educational policy.

Methodology. When formulating the goal of the study we use the following methods: 1) theoretical and methodological overview of the strengths and weaknesses of Hattie’s ideas used a discursive analysis of his concept, and also criticism of his book “Visible Learning” (the bulk of which is presented exclusively in foreign languages); 2) to verify the stability of Hattie’s assessment model, we calculated the

coefficients of variation (CV) of the statistical population of medium size effects highlighted by the researcher in the course of meta-analysis.

Hattie’s concept. Hattie’s study is not the first attempt to generalize educational effects in meta-analysis. This method, proposed by D. Glass in 1976, involves the synthesis of already created empirical works on a given topic not in the traditional (review) way, but with the help of mathematical evaluation tools [12]. This method is more common in economics and medicine. In 2000 R. Marzano in the book “A New Era of School Reform” for the first time applied meta-analysis to education. He summarized 4,057 dimensions of effects and ultimately identified five levels of school performance: 1) a safe and orderly environment that supports interaction and collaboration; 2) an educational structure that supports effective learning in each classroom; 3) a guaranteed and viable curriculum focused on improving learning outcomes; 4) a standards-based reporting system for student performance; and 5) a knowledge control system that ensures that students acquire the knowledge and skills they are taught at school. However, according to experts, Marzano’s system is noticeably limited in the choice of school-related and structural factors [14].

Hattie essentially supplemented the scientific tradition of studying the education system, because he applied meta-meta-analysis (or mega-analysis) rather than meta-analysis. This approach is different, because it synthesizes not the empirical works themselves, but the very meta-analyses devoted to the evaluation of these works. Hattie’s book analyzes more than 800 meta-analyses that were conducted on the basis of studies of educational performance of schoolchildren in three countries (USA, Australia and New Zealand) during the 1980s–2000s [14].

The goal of such a large-scale generalization is to assess the so-called “school effects” (the term is borrowed from Marzano). These are external and internal factors that have a different

vector of orientation in relation to the process of forming the student's academic performance. At the same time, Hattie understands effective education as a multi-faceted process, including "successful learning" on the part of children and "successful teaching" on the part of teachers [14, pp. 54-59]. In a fundamental sense, Hattie sets a task to find a universal recipe for a successful educational reform.

Hattie's methodology is based on the following sequence of research steps:

1. *Identification of environmental sources* that affect the academic performance of the child. Hattie identified six such sources: family, school (as a special environment and administrative apparatus), teachers, curricula, teaching strategies and methods, and the student.

2. *For each source, a set of estimated variables are determined*, Hattie called them factors. In total, he identified 138 factors ranging from the stages of development of the child's intelligence according to J. Piaget to the summer holidays.

3. *Synthesis of meta-analyses to assess the impact of factors on the success of students*. At this stage, as part of the generalization of scientific papers, variables were calculated for each factor; the variables are called the "average effect size" (d). The size of the effect was determined in the range from -2 to 2.

4. *Interpretation of the results of calculations* for which Hattie developed a "barometer of influence" with zones of negative, low, medium and high effect.

Calculations carried out by Hattie on the basis of synthesis of meta-analyses show that the work of the teacher has the greatest influence on the achievements of schoolchildren ($d=0.49$). However, this conclusion will not be complete without taking into account the influence of various factors (*Tab. 1*). Thus, it was found that micro-training (pedagogical practice) is extremely important ($d=0.88$) for the effectiveness of the educational process, and the stock of pedagogical knowledge and teacher qualification are the least important ($d=0.1$). Such conclusions led Hattie's critics to question the correctness of his conclusions.

Oddly enough, the least influence on the knowledge and skills of students, according to Hattie, is exerted by the school itself as a social institution and educational organization ($d=0.23$). In matters of socialization, the researcher clearly gives priority to the family rather than to education. Here we find obvious parallels with the ideas of the classics unschooling (Illich and Holt), who wrote that it is best for the teacher to work outside institutional structures. Hattie himself is not very enthusiastic about school administration, believing that it is concerned with petty economic problems (school uniform, inventory purchases, accounting, etc.), which do not seem to belong to education itself [14]. At the same time, he says nothing about the fact that the funding regulated by the school administration is directed to the creation of important conditions for the educational

Table 1. The size of the effects of "school factors" in J. Hattie's meta-analysis

Source of influence	Average size of the effect (d)	Minimum size of the effect		Maximum size of the effect	
		Factor	Value	Factor	Value
Teacher	0.49	Subject knowledge, education	0.1	Micro-education	0.88
Curricula	0.45	Whole text method	0.06	Advanced vocabulary programs	0.67
Student	0.40	Nutrition and diet	0.12	Students idea of their level of knowledge	1.44
Teaching and learning approaches	0.42	Control of the student over extracurricular factors	0.04	Formative evaluation	0.90
Home	0.31	Watching TV	-0.18	Home environment	0.57
School	0.23	Moving between schools	-0.34	Accelerated learning	0.88

Compiled with the use of: Hattie J. *Visible Learning*. Moscow: Natsional'noye obrazovanie, 2017. 496 p.

process: teachers’ salaries, infrastructure development, buildings, heating, sewerage, etc. In Russia, for example, financing issues are rightfully considered the “cornerstone” of educational policy. Thus, according to the results of the monitoring of the economic situation and social well-being of teachers of the Vologda Oblast, in 2017, 45% of teachers were most concerned about the level of school funding in terms of further prospects for the development of Russian education [15].

It should be noted that the controversial aspects of the results of Hattie’s calculations are largely reflected in the scientific methodology he uses. The sample of “school factors” taken into account by one or another source of influence is not the same. For example, Hattie used 29 different factors to assess the impact of the school, and only 7 and 10, respectively, for the impact of the family and the school [14]. This is due to the limitations of the problems that have been addressed in the writings that formed the basis of the meta-analysis of “Visible Learning”.

To interpret the calculations, Hattie developed an evaluation scale (“barometer of influence”), the basis of which is the so-called “central point” (h). According to the author, it should determine the typical size of the effect, equal to 0.40. This is a kind of “benchmark for assessing the pedagogical impact” [14, pp. 36-37]. After the release of Hattie’s work, his critics often discussed the appropriateness of choosing this “typical size”. In accordance with the understanding that the “h point” is a conditional watershed of the desired and unwanted results, Hattie formed a “barometer of influence”, which includes the following zones:

1. *Negative effect zone* ($d < 0$). Factors with negative effect values are concentrated here; they are the source of “destructive behavior of schoolchildren” [14, p. 34-35]. Hattie included five different factors in the “negative effect zone”: summer vacation, retention (holding students back), moving between schools (source

– school); family on welfare/state aid, watching television by the student (source – family).

2. *Development effect zone* ($d = 0 - 0.15$). According to Hattie, it includes the teacher’s education (0.11), teacher subject matter knowledge (0.09) and other factors. As Hattie himself says, “similar results can be easily achieved outside the school” [14, pp. 38-40].

3. *Low and moderate effect zone* ($d = 0.15 - 0.4$). This included average teacher effect (0.32), use of calculators (0.27), class size (0.21), family structure (0.17), etc. The influence of these factors leads to the results that the student can achieve in a year of studying at school [14, pp. 38-40].

4. *Desired effect zone* ($d > 0.4$). It includes the quality of teaching at school (0.44), teacher expectations of the learning process and its effectiveness (0.43) – average effect; micro-education of teachers (0.88), clarity of teaching (0.75), relationship between teacher and student (0.72), professional development (0.62), inclusion of students to the group of “children with special educational needs” (0.61) – high effect. These factors, according to Hattie, “have the greatest impact on the student’s progress” and are formed in the course of many years of professional activity of the teacher [14, pp. 38-40].

It should be noted how little attention the author of “Visible Learning” pays to the educational competencies of the teacher. In essence, he says that it is important for a teacher not so much to have strong subject knowledge, but rather to teach a subject in a non-boring and accessible way (in all likelihood, this conclusion ignores the relationship between educational training and the quality of professional activity). Hattie thinks that the impact of pedagogical education programs (implemented in universities) on the performance of the school is doubtful, since “the low quality of teacher training is the main obstacle to pedagogical education”, a small effect of which is fairly compensated by the experience acquired on the job [14, pp. 160-161].

According to Hattie, a special place in the system of pedagogical skills belongs to the ability to establish verbal and mental contact with children (“active learning strategy”) [14, p. 339]. He argues that the most important task for the teacher is to form a situation of “visible learning” built on the type of feedback (“teachers see the educational process through the eyes of students – the students see themselves as their own teachers”) [14, pp. 328-329]. Maintaining such a situation, according to Hattie, requires constant monitoring. He believes that “the starting point in addressing educational problems should be neither textbooks, nor the usual lesson plans, but the desired learning outcomes – success criteria that correspond to educational intentions” [14, p. 329]. As such criteria, Hattie proposes indicators of the “desired effect zone” [14, p. 39]. “The main thing is for the pedagogical community to acquire professional maturity and move from opinions to evidence, from subjective assessments to critical ones” [14, p. 358].

On the basis of the review of Hattie’s ideas, we will try to answer the question: what kind of teacher, in his opinion, is necessary for the “school of the future”? The place of the teacher, in all probability, remains very significant; but it should be the teacher-moderator of the educational path of the child, rather than a professional teacher. The school as an institution in the paradigm of “Visible Learning” is presented purely as a bureaucratic machine – a controller of teacher performance in accordance with a system of pre-selected indicators. Such a position has been criticized by the scientific and pedagogical community of Western countries, although it has managed to take root in educational policy.

The scientific tradition of criticism of Hattie’s ideas. We should say that after Hattie’s book was published in 2009, it immediately acquired the status of the “Holy Grail of education” [16, pp. 425-438]. I. Snook and others write that the concept of “visible

learning” led to a great debate in society and attracted the attention of politicians [17, pp. 93-106]. S. Eacott compares “visible learning” with the myth about “a great man who can save education” [18, pp. 413-426]. N. Brown believes Hattie’s efforts are “enormous and commendable”, although he notes that he disagrees in many ways with his methodology². I. Arnold, in turn, calls Hattie’s work quite convincing, and, in his opinion, most teachers will agree with the conclusion that “effective learning cannot take place without proper feedback from teacher to student” [19, pp. 219-221]. According to P. DeWitt, the author of “Visible Learning” is “open and honest about the lessons he has learned from life”³.

Moreover, the influence of this work on the educational policy of a number of foreign countries is very great, which is especially noticeable in Australia (Hattie in 2011 became Director of the Melbourne Education Research Institute at the University of Melbourne). S. Eacott writes: “Hattie’s work is everywhere in contemporary Australian school leadership” [18, pp. 413-426]. In this country, the “quality teaching model” (QTM) has been adopted at the legislative level, which is largely based on the postulates of “Visible Learning”. QTM is a document that is essentially a “theoretical framework for evaluating teacher performance and behavior in the classroom” [20, pp. 340-344]. Thus, in Australian education, “managerial rhetoric has concentrated around the idea of rationality” [18, pp. 413-426]. The concept of “visible learning” is well established in the United States, where Hattie’s idea of the advantage of small classes for the performance of schools was received well and was adopted by the social movement “Class size matters”. It actively lobbies for the maximum reduction of

² Brown N. Book Review: Visible Learning. Available at: <https://academiccomputing.wordpress.com/2013/08/05/book-review-visible-learning/> (accessed: 29.08.2019).

³ DeWitt P. John Hattie Isn’t Wrong. You Are Misusing His Research. Available at: https://blogs.edweek.org/edweek/finding_common_ground/2018/06/hattie_isnt_wrong_you_are_misusing_his_research.html (accessed: 29.08.2019).

Table 2. Main points of criticism of J. Hattie's ideas in foreign literature

Author	Essence of the criticism
M. Lupton	<ul style="list-style-type: none"> - the meta-analyses used are outdated and can hardly reflect modern school practice; - meta-analyses are presented in the natural sciences, so traditional methods are understood as fact-based learning, and experimental methods are associated with a laboratory approach
N. Brown	<ul style="list-style-type: none"> - conclusions are based on averaging the size of the effects, which in some cases is impractical
D. Haesler	<ul style="list-style-type: none"> - it is doubtful whether it is possible to determine a numerical value for the effect that any teacher can have on any student in any class
G. Jones	<ul style="list-style-type: none"> - the generalization of different studies in the framework of meta analysis is used incorrectly
I. Snook, J. O'Neill, J. Clark, A.-M. O'Neill, R. Op	<ul style="list-style-type: none"> - various studies summarized in the framework of the meta-analysis have not been evaluated for their validity; - the meta-analysis excludes the effects of the social environment (poverty, health, nutrition, etc.), as well as a number of characteristics of students (age, social origin, abilities, etc.); - the research is limited to one dimension of learning (what can be quantified); qualitative educational outcomes (new knowledge, skills and customs) are ignored); - effect sizes may not be applicable to regular teachers working in regular classrooms, but they are rather addressed to innovative teachers; - the conclusions ignore the cause-and-effect relationship, with its unjustified replacement by statistical significance; - comparing disparate studies can be likened to comparing apples with oranges; - in search of an average result, the heterogeneity of students studying in the classroom is ignored; - Hattie's research is not designed to predict (does not show what the future should be); - the findings are generalized in relation to English-speaking countries and cannot be used for the whole world; - the threshold of the “desired effect” zone is determined arbitrarily
A. Kamenetz	<ul style="list-style-type: none"> - averaging the results of the studies conducted with students from different age groups, in different conditions, different types of interventions and different indicators of results can lead to erroneous conclusions
R. Slavin	<ul style="list-style-type: none"> - any effect size below 0.40 is ignored, which is incorrect; - the results of basic meta-analysis studies are accepted unconditionally, there is no attempt of critical approach to them
E. Terhart	<ul style="list-style-type: none"> - qualitative studies are not considered; - out-of-school factors (social background, financial inequality, race) are not considered; - methodological problems and debates are ignored; - most of the original data are no longer relevant (outdated 5 years ago); - no accurate information is provided on the quality standards that are used to draw conclusions; - not all indicators are used in the analysis, but only empirically achievable ones; - it is not explained how the results of heterogeneous studies can be accumulated in meta-analysis, in the course of multiple accumulation of data (meta-meta-analysis), as a result of which objectivity disappears
L. McKnight, B. Whitburn	<ul style="list-style-type: none"> - learning is not always visible, not always quantifiable, it can be elusive, messy, unpredictable and not always desirable <p>Sources: Lupton M. Hattie's analysis of inquiry-based teaching. Available at: https://inquirylearningblog.wordpress.com/2016/01/05/hatties-analysis-of-inquiry-based-teaching/ (accessed: 29.08.2019); Brown N. Book Review: Visible Learning. Available at: https://academiccomputing.wordpress.com/2013/08/05/book-review-visible-learning/ (accessed: 29.08.2019); Haesler D. Is John talking through his Hattie? Available at: http://danhaesler.com/2014/11/17/is-john-talking-through-his-hattie/ (accessed: 29.08.2019); Jones G. The school research lead and another nail in the coffin of Hattie's Visible Learning. Available at: http://evidencebasededucationalleadership.blogspot.com/2017/01/the-school-research-lead-and-another.html (accessed: 29.08.2019); Snook I. et al. Invisible Learnings? A Commentary on John Hattie's book: Visible Learning: A synthesis of over 800 meta-analyses relating to achievement. <i>New Zealand Journal of Educational Studies</i>, 2009, no. 44 (1), pp. 93-106; Kamenetz A. 5 Big Ideas In Education That Don't Work. Available at: https://www.npr.org/sections/ed/2017/01/14/508991615/5-big-ideas-in-education-that-dont-work (accessed: 29.08.2019); Slavin R. John Hattie is Wrong. Available at: https://robertslavinblog.wordpress.com/2018/06/21/john-hattie-is-wrong/ (accessed: 29.08.2019); Terhart E. Has John Hattie really found the holy grail of research on teaching? An extended review of Visible Learning. <i>J. Curriculum Studies</i>, 2011, no. 43 (3), pp. 425-438; McKnight L., Whitburn B. Seven reasons to question the hegemony of Visible Learning. <i>Discourse: Studies in the Cultural Politics of Education</i>. DOI: 10.1080/01596306.2018.1480474.</p>

the number of pupils in classes in government circles and at the local level⁴. H. Knudsen in his article notes that the book “Visible Learning” had a great influence on Danish schools [21, pp. 253-261].

Let us emphasize at the same time that Hattie’s work received a warm welcome in Russia. His ideas are actively discussed at webinars for teachers. Based on the analysis of his ideas, Russian researchers come to the conclusion that it is necessary to use meta-analysis to “check the productivity of pedagogical innovations” [22, pp. 79-90]. E.A. Sokolova finds the connection of Hattie’s research with the provisions of the Federal State Educational Standards (FSES) concerning the formation of critical thinking in schoolchildren [23, pp. 6-14]. N.A. Borisenko calls the publication of “Visible Learning” one of the main events in the field of publishing translated pedagogical literature in recent years. She notes that so far it is the only scientific work “in which the most important factors affecting the educational achievements of schoolchildren are evaluated” [24, pp. 257-265].

At the same time, Hattie’s research results and conclusions are highly criticized by many modern scientists (*Tab. 2*). For instance, A. Kamenetz considers the theory of “visible learning” one of the “big ideas in education that do not work”⁵. What is the essence of these doubts? First of all, the scientific methodology Hattie uses has been heavily criticized. In his mega-analysis, Siebert J. Myburgh and his colleagues identify six “chronic problems”:

1) “*trash in the trash*”: in his analysis, Hattie indiscriminately included data from poorly designed and poorly planned studies (critics call them “extreme”);

2) “*displacement of publications*”: Hattie relies on a set of already published data, which

⁴ Class size matter. Available at: <https://www.classsize-matters.org/> (accessed: 29.08.2019).

⁵ Kamenetz A. 5 Big Ideas In Education That Don’t Work. Available at: <https://www.npr.org/sections/ed/2017/01/14/508991615/5-big-ideas-in-education-that-dont-work> (accessed: 29.09.2019)

date back to the 1980s–1990s and are no longer relevant (this point of view is supported by N.A. Borisenko);

3) “*comparing apples to oranges*”: the comparison of initially disparate studies, to which Hattie resorts, evokes the “subjectivity, reproducibility and generalizability” of his findings;

4) “*incorrect use of effect size*”: averaging the values of variables into a single indicator, as Hattie did, is incorrect; in this regard, the size of the effect “cannot be causal” and be a panacea for the educational community;

5) “*empirical bias*”: in his analysis, Hattie uses not all indicators, but only empirically achievable ones: for example, he ignores the results of qualitative research;

6) “*limitations of application*”: Hattie’s conclusions are not related to the conceptual understanding of educational reality, because they do not take into account the factor of social interaction, which is very important for education [25].

While much of criticism of Hattie’s ideas has been focused on mathematical missteps in the application of meta-analysis mechanisms, L. McKnight and B. Whitburn in their work “Seven reasons to question the hegemony of visible learning” presented a cultural assessment of his work. As a result, they found a close connection between Hattie’s policy statements and some controversial practices of neoliberalism (in particular, it concerns discrimination of schoolchildren on the level of development of abilities and “underprofessionalization” of teachers) [26, pp. 1-13]. According to L. McKnight and B. Whitburn, Hattie’s ideas entail “political baggage”, and also introduce into education the concept of “new administrative panopticism” (“everyone watches everyone”) [26, pp. 1-13]. To do this, the teacher will need to move from internal reflection (characteristic of the teaching profession) to external accountability. In this, the authors see the reactivity of Hattie’s ideas, which they compare even with “educational

fascism emanating from poststructural and postmodern doubts about knowledge” [26, pp. 1-13]. They treat what is written in the book as a rational “male view” that undermines the female monopoly on education, which worries the opponents of “visible learning”.

Summing up the generalization of criticism, we note that in the Western scientific tradition (as opposed to Russian) there was an opinion about the incorrectness of Hattie’s evidence. In “Visible Learning”, its research prerequisites are incorrectly defined, therefore the obtained scientific results “cannot be automatically applied in practice without hard work on their unification with personal beliefs, values and experience” [25, p. 18]. It seemed to most opponents that the choice of indicators of meta-meta-analysis was not due to anything (except for the scattered information that was in the hands of the researcher). As a result, the conclusions of his book are questioned.

We can assume that such criticism would not have arisen at all, if some of Hattie’s ideas did not seem too controversial (as, for example, the idea of the weak importance of subject matter knowledge for the work of the teacher, or the unimportance of the school as an institution). At the same time, the indicators given in the evaluation system do not always reflect the educational realities. Scientists are surprised why “the list of considered factors does not include the school textbook (or its analogue) as the main means of education” [24, pp. 257-265].

Hence the conclusion: “The book is perceived as a panacea for the educational community, but as a result of taking this drug, the school will experience a short-term placebo effect” [25, p. 13].

However, the question concerning the validity of the doubts of Hattie’s opponents is not so unambiguous. Rather, the arguments of the current controversy can only be called hypotheses, because they are often strictly

theoretical and emotionally colored. So far, the majority of critics have not tried to test the strength of Hattie’s model mathematically (although Hattie uses calculated data). We will try to fill this gap.

Testing Hattie’s evaluation model. To test Hattie’s evaluation model, we use the method of exact distribution of variation coefficients – a statistical characteristic used in the analysis of measurements of random variables (like the data of the meta-analysis under consideration) [27, pp. 166-171].

The calculation of the coefficient of variation is usually necessary to substantiate the reliability of the selected variables by estimating the homogeneity of the samples and comparing the spread of random parameters. It is often used to check the safety of machines and structures (in mechanics and engineering), as well as to compare the dispersion of values relative to the expected value (in the social sciences) [27, pp. 166-171].

To assess the quality of the meta-analysis model, we calculated the coefficient of variation ($V\sigma$) as a percentage of the average deviation of the sizes of variables (effect sizes) to their average value in accordance with the formula:

$$V\sigma = \frac{\sigma}{x} \times 100\%,$$

where $V\sigma$ is the coefficient of variation of the variables,

σ is the average deviation of the size effects,
 x is the average size of the effects.

Negative values were not taken into account during the testing.

According to the results of the calculations, the variation of the variables used by Hattie exceeds 50%, which is higher than the statistical threshold of sample homogeneity (33%). The same conclusion can be drawn with respect to individual sources of influence – the home (39%), the school (66%), the student (41%), the teacher, teaching and learning approaches (51% each), and the curricula (42%; *Tab. 3*).

Table 3. Variation coefficient of the variables used in J. Hattie's meta-analysis, in %

Source of influence	Number of observations taken into account	Variation coefficient ($V\sigma$)	Deviation from the optimal value ($V\sigma= 33\%$), +/-	Nature of the data set
All indicators	133	56.87	-23.87	Extremely uneven
According to individual sources of influence				
Home	5	38.57	-5.57	Not even enough
School	25	65.97	-32.97	Extremely uneven
Student	19	71.24	-38.24	Extremely uneven
Teacher	10	51.01	-18.01	Extremely uneven
Teaching and learning approaches	49	50.65	-17.65	Extremely uneven
Curricula	25	41.95	-8.95	Extremely uneven
Calculated with the use of: Hattie J. <i>Visible Learning</i> . Moscow: Natsional'noye obrazovanie, 2017. 496 p.				
Note. Only positive values (133 out of 138) were taken into account in the calculations.				

To interpret the calculated data, we turned to the recommendations of experts, according to which the coefficients of variation with values less than 17% indicate an absolutely homogeneous set of data, in the range from 17 to 33% – sufficiently homogeneous; in the range from 35 to 40% – insufficiently homogeneous, and the coefficients of variation more than 40% indicate a high oscillation of the feature in the aggregate⁶. The aggregate used by Hattie belongs to the latter group ($V\sigma = 56.87\%$).

Thus, the verification of the evaluation model under consideration allows us to talk about different degrees of heterogeneity of the data set used in Hattie's study. This is least noticeable in the case of family factors, most of all – in the case of the influence of the student and the school. In turn, this means that determining the strength of any effects in such a model, due to its instability, will likely not lead to the formation of objective conclusions. Thus, the hypothesis of Hattie's opponents about the absence of any control over the calculations during the meta-analysis is confirmed.

Conclusion. Summarizing the above, we note the strengths and weaknesses of Hattie's meta-analysis. On the one hand, we cannot but

agree with some of his conclusions. The life of teachers within the new paradigm of education and the challenges of digitalization is significantly changing, and their situation in society continues to deteriorate. According to the All-Russian Center for Public Opinion Research (VTsIOM), in 2018, only 16% of Russians considered the work of a teacher prestigious⁷. This result proves that the status of a teacher in the Russian Federation is insufficiently high, while the situation is opposite in other countries. Thus, according to the results of the TALIS-2013 study, in Asian countries (United Arab Emirates, Korea, Malaysia and Singapore) every second school teacher out of three is confident in the social significance of their profession [28, pp. 7-11]. In this regard, Hattie's contribution is certainly high. In his work, indeed, he expresses a noble desire to substantiate scientifically the importance of the work of the teacher for the education and moral development of children. This very desire has received the most positive feedback in Russia⁸. However, can the importance of the teacher for the school become the subject of scientific substantiation? Is it not self-evident?

⁶ Yudina A.V. *Social Statistics: Studying and Practical Workbook*. Vladivostok: VGUES, 2005. 83 p.

⁷ Prestige and income: what professions do Russians choose? Available at: <https://wciom.ru/index.php?id=236&uid=9387> (accessed: 29.08.2019).

⁸ Nikonov A. The teacher and the system. *Zavtra*, 2019, no.12, March.

On the other hand, we can highlight several aspects that cause distrust in Hattie’s scientific argument. First of all, he made a number of methodological errors in the meta-analysis, one of which is the use of inhomogeneous medium-sized effects. When accumulating them into a common indicator for individual sources of influence, data can be obtained that cannot be trusted (as evidenced by the results of our calculations). Apparently, Hattie ignored the data validation phase, which included the effects that should ideally have been rejected.

We also share the opinion of Hattie’s opponents that it is extremely difficult (and is it necessary?) to measure the processes taking place in educational systems using any evaluation methodology. At school, there are important phenomena that are not amenable to understanding from the point of view of standardized approaches and statistics: communicating, values, mutual understanding, etc. The problem of taking them into account is solved in the framework of the qualitative rather than quantitative (accounting) approach that Hattie uses.

Let us also emphasize the problem of “underprofessionalization of teachers” in Hattie’s concept (to which L. McKnight and B. Whitburn pay attention). According to Hattie, the teacher is important, but not as a professional, but as a moderator of the free development of the child. This thesis was borrowed by “Visible Learning” from the tradition of unschooling. However, the idea that “everyone can become a teacher” can be found in the amendments adopted in 2016 to the current professional standard “Teacher” in the territory of the Russian Federation⁹. It seems that the “underprofessionalization” of teachers can only reduce the social importance of this profession and negatively affect the formation

of vocation among young professionals. Today, vocation is one of the few aspects of teachers’ work that helps them survive the difficulties of educational reform and the risks of “burnout”, as evidenced by the results of sociological studies [15].

Thus, we can conclude that the implementation of Hattie’s ideas within the framework of Russian educational policy is inapplicable, since it can cause negative consequences and extend the range of new problems (in particular, the increase in the bureaucratic functionality of the teaching profession in the pursuit of “school leadership”).

For example, the education system of Australia already feels such effects (“a tragedy in the Australian educational leadership” – this is how S. Eacott calls the policy on “continuous production of data”, which became common for schools in this country after the first attempts to implement Hattie’s ideas in practice) [18, p. 422]. Here it is necessary to point out that a similar problem concerns modern Russian education as well. According to the data of the all-Russian monitoring of the Russian Academy of National Economy and Public Administration (RANEPA), 79% of teachers of secondary schools pointed out that in 2018 the reporting component noticeably increased in their professional activity; as a result, their work “is becoming more difficult” [29, p. 25]. A number of experts already call the continuous growth of document circulation an “organizational pathology” of the education system¹⁰. At the same time, according to a regional study, more than a quarter of school teachers who wish to find a new job as soon as possible are concerned about the bureaucratization of their profession (even the educational reforms carried out at the federal level were not such a significant factor in the formation of such plans) [15]. Thus, coupled with the low prestige of teaching in society,

⁹ Ministry of Education: the teacher has the right not to have pedagogical education. Available at: <https://pedsovet.org/beta/article/minprosvesenia-ucitel-imeet-pravo-ne-imet-pedagogiceskogo-obrazovania> (accessed: 29.08.2019).

¹⁰ Podvoysky D. Over the precipice with a report. Available at: <http://pltf.ru/2019/03/25/nad-propastju-s-otchetom-oprodelanno-rabote-denis-podvojskij/> (accessed: 17.09.2019).

even a slight increase in “bureaucratic pressure” (inevitable in the framework of the concept of “visible learning”) can become a catalyst for protest activity of teachers of schools in the form of mass “withdrawal from the profession”. Of course, it is necessary to search for and use new solutions in Russian educational policy, but it requires scientific substantiation, taking into account the adaptive capabilities of the agents of the institutional system and the established traditions. Otherwise, the consequences of implementing such solutions can be catastrophic.

Hattie’s work, in our humble opinion, warns practitioners about the need for a strict selection of solutions to educational issues (from updating curricula to finding the means suitable

for the development of human resources of educational institutions). Indeed, in Hattie’s work, you can find simple answers to rather complex questions: what works at school? what doesn’t work there? what you need to invest money in, and what to save? R. Slavin, Director of the Center for Research and Reform in Education at Johns Hopkins University writes: “How wonderful to have every known variable reviewed and evaluated!”¹¹. In education, however, there is little that “works” and little that “does not work”. The correct question is: “Under what conditions will this work in school?” But the task of finding these conditions concerns not so much the evaluation of the activities of educational organizations as the effectiveness of public administration.

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¹¹ Slavin R. John Hattie is Wrong. Available at: <https://robertslavinsblog.wordpress.com/2018/06/21/john-hattie-is-wrong/> (accessed: 29.08.2019).

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PUBLIC OPINION MONITORING

Public Opinion Monitoring of the State of the Russian Society

As in the previous issues, we publish the results of the monitoring of public opinion concerning the state of the Russian society conducted by VolRC RAS in the Vologda Oblast¹.

The following tables show the dynamics of several parameters indicating the social feeling and socio-political sentiment of the Vologda Oblast population in the period from October 2018 to October 2019

We compare the results of the surveys with the data for 2007 (the last year of V. Putin's second presidential term, when the assessment of the President's work was the highest), 2011 (the last year of Dmitry Medvedev's presidency) and 2012 (the first year of V. Putin's third presidential term).

We also provide yearly dynamics of the data for the last two years (2017–2018).

In August – October 2019, the level of approval of the work of the President of the Russian Federation did not change significantly: the share of positive assessments is 54–56%; the share of negative assessments is 29–30%.

There have been no tangible changes in the dynamics of assessments of the work of the head of state since April 2019; but in general, over the past 12 months (from October 2018 to October 2019), there has been a noticeable decrease in the share of positive judgments (by 10 percentage points, from 64 to 54%).

¹ The polls are held six times a year in Vologda, Cherepovets, and in eight districts of the oblast (Babayevsky District, Velikoustyugsky District, Vozhegodsky District, Gryazovetsky District, Kirillovsky District, Nikolsky District, Tarnogsky District and Sheksninsky District). The method of the survey is a questionnaire poll by place of residence of respondents. The volume of a sample population is 1,500 people 18 years of age and older. The sample is purposeful and quoted. The representativeness of the sample is ensured by the observance of the proportions between the urban and rural population, the proportions between the inhabitants of settlements of various types (rural communities, small and medium-sized cities), age and sex structure of the Oblast's adult population. Sampling error does not exceed 3%.

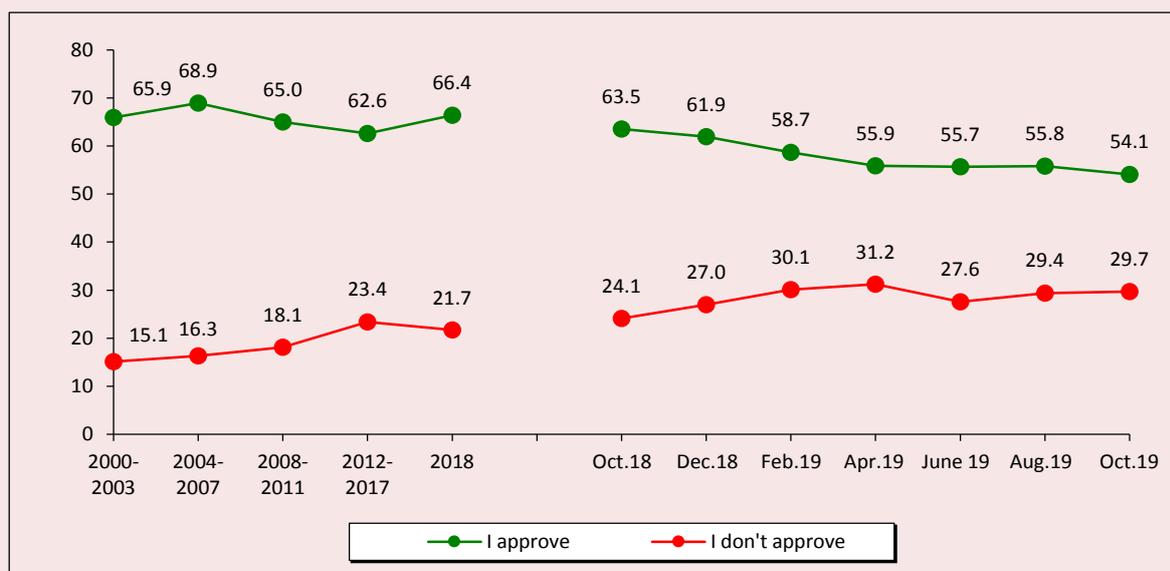
More information on the results of VolRC RAS polls is available at <http://www.vsrc.ac.ru/>.

For reference:

According to VTsIOM, the level of approval of the work of the President of the Russian Federation in September – first half of October 2019 amounted to 65–66%; the share of negative assessments was 26%.

According to Levada-Center, in August – September 2019, 67–68% of Russians expressed positive opinions about the work of the head of state, while 31% expressed negative opinions.

In general, do you approve or disapprove of the work of the President of Russia? (% of respondents)



* Here and further, the tables and graphs present the data of VoIRC RAS on the results of the monitoring of public opinion conducted in the Vologda Oblast.

How do you assess the current performance of...? (% of respondents)

Answer	2007	2011	2012	2017	2018	Oct. 2018	Dec. 2018	Feb. 2019	Apr. 2019	June 2019	Aug. 2019	Oct. 2019	Dynamics (+/-), Oct. 2019 compared to	
													Oct. 2018	Aug. 2019
Chairman of the RF Government*														
I approve	-*	59.3	49.6	49.5	48.0	45.2	45.3	41.6	38.8	40.9	43.1	41.1	-4	-2
I don't approve	-	24.7	33.3	31.1	31.6	34.8	36.9	39.3	40.2	38.0	36.3	37.5	+3	+1
Governor														
I approve	55.8	45.7	41.9	39.8	38.4	35.7	38.3	36.5	34.7	35.4	36.1	35.6	0	-1
I don't approve	22.2	30.5	33.3	39.3	37.6	39.1	40.3	41.5	41.4	38.6	38.5	40.1	+1	+2

* Included in the survey since 2008.

Over the past two months, the proportion of Vologda Oblast residents who believe that Vladimir Putin is successful in his work aimed at restoring order in the country decreased slightly (by 3 percentage points, from 46 to 43%). This is significantly less (by 6 percentage points) than in October 2018 (49%).

In general, the opinion of Vologda Oblast residents regarding the success of the President's work on other key problems of the country in August – October 2019 has not changed:

- ✓ 50% of the population positively assesses the President's work on strengthening Russia's international positions;
- ✓ 35% of the population positively assesses the President's work on protecting democracy and strengthening citizens' freedoms;
- ✓ 27% of the population positively assesses the President's work on economic recovery and growth of people's welfare.

In your opinion, how successful is the RF President in coping with challenging issues?* (% of respondents)

Answer	2007	2011	2012	2017	2018	Oct. 2018	Dec. 2018	Feb. 2019	Apr. 2019	June 2019	Aug. 2019	Oct. 2019	Dynamics (+/-), Oct. 2019 compared to	
													Oct. 2018	Aug. 2019
Strengthening Russia's international standing														
Successful	58.4	46.2	43.1	55.7	54.2	51.3	53.5	51.5	50.2	51.9	51.0	49.9	-1	-1
Unsuccessful	24.9	33.7	37.9	26.8	28.4	30.7	30.3	31.7	32.7	30.3	30.6	32.4	+2	+2
<i>Success index</i>	133.5	112.5	105.2	129.0	125.7	120.6	123.2	119.8	117.5	121.6	120.4	117.5	-3	-3
Imposing order in the country														
Successful	53.2	36.6	35.4	50.6	51.1	48.5	46.9	44.2	42.4	44.5	46.1	43.1	-5	-3
Unsuccessful	34.0	50.0	50.7	36.1	35.0	37.9	39.5	40.7	42.6	39.3	39.3	40.0	+2	+1
<i>Success index</i>	119.2	86.6	84.7	114.5	116.1	110.6	107.4	103.5	99.8	105.2	106.8	103.1	-8	-4
Protecting democracy and strengthening citizens' freedoms														
Successful	44.4	32.4	28.8	40.3	40.5	37.3	36.5	33.5	32.3	34.6	35.5	35.1	-2	0
Unsuccessful	37.0	48.3	52.3	40.2	40.2	42.7	43.3	45.3	47.7	45.5	46.1	45.7	+3	0
<i>Success index</i>	107.4	84.1	76.5	100.2	100.2	94.6	93.2	88.2	84.6	89.1	89.4	89.4	-5	0
Economic recovery and increase in citizens' welfare														
Successful	47.2	30.7	28.5	29.3	31.0	30.6	29.9	28.1	28.1	29.1	26.5	26.9	-4	0
Unsuccessful	39.1	56.1	57.9	56.9	56.2	57.2	57.6	56.9	58.2	57.8	59.7	58.2	+1	-2
<i>Success index</i>	108.1	74.6	70.6	72.4	74.7	73.4	72.3	71.2	69.9	71.3	66.8	68.7	-5	+2

* Ranked according to the average value of the index of success for 2018.

In June–August 2019, the structure of people’s political preferences has not changed: the level of support for the United Russia party is 33–34%, LDPR and KPRF – 8–9%, the Just Russia party – 4%.

We should note that in comparison with October 2018, people’s support for the ruling party decreased (by 4 percentage points, from 37 to 33%) and the share of those who believe that today none of the political forces represented in Parliament expresses their interests has increased (by 5 percentage points, from 29 to 34%).

Which party expresses your interests? (% of respondents)

Party	2007	2011	Election to the RF State Duma 2011, fact	2012	2016	Election to the RF State Duma 2016, fact	2017	2018	Oct. 2018	Dec. 2018	Feb. 2019	Apr. 2019	June 2019	Aug. 2019	Okt. 2019	Dynamics (+/-), Oct. 2019 compared to	
																Oct. 2018	Aug. 2019
United Russia	30.2	31.1	33.4	29.1	35.4	38.0	34.7	37.9	36.5	36.0	34.6	33.3	34.8	33.5	32.8	-4	-1
KPRF	7.0	10.3	16.8	10.6	8.3	14.2	7.6	9.2	11.1	9.9	9.1	8.0	8.5	8.7	9.1	-2	0
LDPR	7.5	7.8	15.4	7.8	10.4	21.9	11.0	9.6	9.7	8.8	8.9	8.2	9.1	10.5	8.3	-1	-2
Just Russia	7.8	5.6	27.2	6.6	4.2	10.8	4.8	2.9	3.4	2.8	2.9	2.9	2.5	3.9	4.2	+1	0
Other	1.8	1.9	–	2.1	0.3	–	0.5	0.7	0.4	0.4	0.6	0.3	0.3	0.4	0.1	0	0
None	17.8	29.4	–	31.3	29.4	–	29.2	28.5	29.0	31.9	34.2	34.7	32.3	32.1	34.3	+5	+2
It’s difficult to answer	21.2	13.2	–	11.7	12.0	–	12.2	11.2	9.9	10.2	9.7	12.6	12.4	10.9	11.2	+1	0

In fact, there are no changes in the indicators of social well-being: the proportion of those who characterize their mood as positive is 70–71%; the proportion of those who believe that today “everything is not so bad; it’s difficult to live, but it’s possible to stand it” is 77–78%.

The proportion of those who consider themselves “poor and extremely poor” amounted to 47–48% in August – October 2019, which is slightly higher than in October 2018 (by 3 percentage points, 45%).

Apparently, this is due to low (or, at least, not sufficiently tangible) rates of growth of the standard of living and quality of life; it is evidenced by the steady prevalence of people’s pessimistic forecasts about the future of the Russian economy and their personal financial situation. Thus, the consumer sentiment index in October 2018 amounted to 89 points, in August – October 2019 – to 92 points; that is, despite its positive dynamics, it still varies in the range of less than 100 points.

Estimation of social condition (% of respondents)

Answer	2007	2011	2012	2017	2018	Oct. 2018	Dec. 2018	Feb. 2019	Apr. 2019	June 2019	Aug. 2019	Oct. 2019	Dynamics (+/-), Oct. 2019 compared to	
													Oct. 2018	Aug. 2019
Mood														
Usual condition, good mood	63.6	63.1	67.3	70.4	71.2	71.3	70.7	68.0	68.8	71.4	70.9	70.3	-1	-1
I feel stress, anger, fear, depression	27.8	28.9	27.0	24.2	23.1	23.1	23.5	25.6	25.5	23.5	23.4	24.0	+1	+1
Stock of patience														
Everything is not so bad; it's difficult to live, but it's possible to stand it	74.1	74.8	76.6	77.7	77.1	75.7	77.1	74.3	76.7	78.0	76.8	77.8	+2	+1
It's impossible to bear such plight	13.6	15.3	15.8	15.8	16.3	17.1	17.5	19.1	17.5	16.5	16.2	17.2	0	+1
Social self-identification*														
The share of people who consider themselves to have average income	48.2	43.1	44.7	43.1	42.3	42.8	41.6	43.8	41.3	43.3	42.9	41.4	-1	-2
The share of people who consider themselves to be poor and extremely poor	42.4	44.3	44.5	46.6	45.4	45.4	44.7	44.8	46.9	45.8	47.0	48.0	+3	+1
Consumer sentiment index														
Index value, points	105.9	89.6	91.5	84.6	89.9	89.2	89.1	90.1	90.0	91.2	91.8	92.0	+3	0

* Question: "Which category do you belong to, in your opinion?"

Over the past two months, in most socio-demographic groups, the proportion of people who characterize their mood as being positive has not changed significantly.

The share of positive assessments has increased slightly among those over 55 years of age (by 4 percentage points, from 61 to 65%) and among Vologda residents (from 68 to 71%).

At the same time, we observe a decrease by 3 to 5 percentage points in the share of positive assessments of their mood among men (from 72 to 69%), among persons under the age of 30 (from 85 to 80%) and among those from 30 to 55 years of age (from 74 to 71%).

Over the past year (from October 2018 to October 2019), we observe negative trends in the dynamics of assessments of social moods among young people under the age of 30 (the percentage of positive assessments decreased by 5 percentage points, from 85 to 80%), among people with higher and incomplete higher education (by 4 percentage points, from 77 to 73%), among those who according to their own assessments of their income belong to the bottom 20% (from 60 to 54%), and among the residents of Cherepovets (by 6 percentage points, from 78 to 72%).

As we can note, a slight deterioration in the emotional state of representatives of not only socially vulnerable population groups (those with lowest incomes), but also other categories suggests that the standard of living is not the only factor affecting people's daily mood. Apparently other factors in this regard include the expectations of the population in relation to tangible changes in the implementation of the President's election promises, the growth of interest in political life in the country and the region (which may be associated with the elections of the head of the region held September 8, 2019) and, accordingly, a clearer articulation of the socio-political request to the authorities.

Social mood in different social groups (answer: "Good mood, normal condition", % of respondents)

Population group	2007	2011	2012	2017	2018	Oct. 2018	Dec. 2018	Feb. 2019	Apr. 2019	June 2019	Aug. 2019	Oct. 2019	Dynamics (+/-), Oct. 2019 compared to	
													Oct. 2018	Aug. 2019
Sex														
Men	65.9	64.5	69.1	70.6	72.8	70.8	73.4	69.9	68.6	72.1	71.8	69.2	-2	-3
Women	61.7	62.0	65.8	70.2	69.8	71.8	68.4	66.4	69.0	70.8	70.1	71.2	-1	+1
Age														
Under 30	71.3	70.0	72.3	78.1	80.0	85.1	81.6	76.3	81.2	82.9	85.2	79.9	-5	-5
30-55	64.8	62.5	67.9	71.5	72.6	70.9	71.6	68.0	71.5	70.5	74.0	71.1	0	-3
Over 55	54.8	58.3	62.1	64.9	65.2	65.4	64.7	64.3	59.8	67.4	60.7	65.1	0	+4
Education														
Secondary and incomplete secondary	58.4	57.4	57.2	63.6	64.8	63.8	67.8	61.5	60.4	64.4	65.6	63.4	0	-2
Secondary vocational	64.6	63.6	66.7	72.0	72.2	73.5	70.5	68.6	73.0	77.3	72.8	73.9	0	+1
Higher and incomplete higher	68.6	68.3	77.0	75.8	76.8	76.5	74.1	73.8	73.3	72.1	73.9	72.6	-4	-1
Income groups														
Bottom 20%	51.6	45.3	51.5	52.9	57.3	59.6	61.3	50.4	56.1	54.9	53.2	54.1	-6	+1
Middle 60%	62.9	65.3	68.7	72.0	71.9	73.1	69.7	67.2	69.9	74.1	72.1	72.6	-1	+1
Top 20%	74.9	75.3	81.1	83.7	82.9	81.3	83.4	86.2	81.0	81.0	81.4	80.5	-1	-1
Territories														
Vologda	63.1	67.1	73.6	72.6	71.0	68.8	67.1	65.5	68.5	70.3	68.0	70.8	+2	+3
Cherepovets	68.1	71.2	76.2	75.7	75.8	77.7	74.5	71.1	67.8	72.1	74.4	72.0	-6	-2
Districts	61.6	57.1	59.8	66.1	68.7	69.2	70.5	67.6	69.6	71.7	70.5	69.0	0	-2
Oblast	63.6	63.1	67.3	70.4	71.2	71.3	70.7	68.0	68.8	71.4	70.9	70.3	-1	-1

CONCLUSION

Thus, according to the results of the next stage of the public opinion monitoring conducted by VolRC RAS, the socio-political situation in the Vologda Oblast in August – October remains quite stable: despite the end of the summer vacation season and the gradual deterioration of weather conditions, the assessments of the emotional state of people are still at a high level (70% of residents of the Vologda Oblast characterize their mood as "normal, good, even").

People's attitude toward the work of key representatives of state power has remained stable since April 2019: 55–56% of Vologda Oblast residents approve of the work of the President, 40–43% – the Prime Minister, 35–36% – the Governor (we should note that the lower estimates of the level of approval of local authorities is quite a normal situation, which is typical not only of the Vologda Oblast, but also of Russia as a whole. Experts attribute it to "the proximity of regional and municipal governments to the everyday life of citizens", as well as to the fact that "people can monitor their work not only by watching TV"²).

It is most likely that in August–October, a slight decrease in the proportion of people who believe that the President is successfully restoring order in the country (from 46 to 43%) adequately reflects the reaction of Vologda Oblast residents to the protest actions in Moscow, which were associated with

² *Russian Everyday Life in Crisis: How Do We Live and What Do We Feel?: Information and Analytical Summary of the Results of a Nationwide Study*. Moscow, 2015. P. 15.

the non-admission of a number of candidates to the elections to the City Duma. However, this event had no significant effect on regional life; thus, the socio-political situation remained stable. The gubernatorial elections on September 8, 2019 in the Vologda Oblast (as in the RF majority of constituent entities that participated in the voting) were held without incidents; according to the Central Election Commission of the Russian Federation, the incumbent head of the region O.A. Kuvshinnikov won the election with 60.79% of the votes, with a turnout of 40.52%³.

There remains a rather tense situation regarding how Vologda Oblast residents assess their financial situation. In the dynamics of social self-identification, significant changes have not occurred for at least the last 12 months (since October 2018), while the proportion of those who consider themselves to have “average income” remains significantly lower than the proportion of the “poor and extremely poor” (approximately 42–43% vs. 45–48%). Against the background of expectations of “breakthrough” changes in the standard of living and quality of life, it is difficult to characterize the situation as positive; and perhaps it affects the deterioration of the emotional state of certain population groups such as people 18–30 years of age (due to their age, they are ready to be more actively involved in the social and political life of the country and the region), persons with higher education (who have a potentially higher level of awareness and interest in the events of domestic political life), residents of Cherepovets (who traditionally have a higher level of income than residents of Vologda and its districts).

We should also note that according to official statistics, real cash incomes in the second quarter of 2019 increased by 11.6% compared to the first quarter. However, this growth was mainly associated with social benefits rather than wages: during the same period in the structure of cash incomes the share of income from business activities decreased from 5.4 to 5%, the share of income from wages changed very slightly (from 61.2 to 61.3%), the share of income from social benefits increased by 2.7% (from 23.3 to 26%)⁴.

The positive changes of the last two months are largely restorative. In particular, this applies to the level of approval of the work of federal authorities, which in the long-term retrospective (over the past 12 months, from October 2018 to October 2019) decreased by 4–10 percentage points, as well as the share of the “poor and extremely poor”, which during the same period increased from 45 to 48%.

Thus, we can point out that psychological well-being of the population is relatively stable; however, it would be premature to say that the current estimates of the work of the authorities concerning the most acute question – raising the standard of living and quality of life – are long-lasting. In order to “consolidate” and develop the positive changes observed in the dynamics of public opinion in recent months, it is necessary to fulfill key expectations and socio-political requests of the general public, which are primarily related to the President’s election promises implemented today in the framework of national projects. The effectiveness and timeliness of achieving these indicators will influence the nature of public sentiment and the level of social tension not only in the Vologda Oblast, but also in Russia as a whole.

The materials were prepared by M.V. Morev, I.V. Paranicheva, I.M. Bakhvalova.

³ Election results published on the website of the Central Election Commission. Available at: http://www.vologod.vybor.izbirkom.ru/region/region/vologod?action=show&root=1&tvd=23520001251387&vrn=23520001251383®ion=35&global=&sub_region=0&prver=0&pronetvd=null&type=222

⁴ Operational data of Vologdastat:

“The main indicators of the standard of living”. Available at: <https://vologdastat.gks.ru/storage/mediabank/60R.htm>

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¹ Information about the modified Harvard standard is given in the book: Kirillova O.V. *Redaktsionnaya podgotovka nauchnykh zhurnalov po mezhdunarodnym standartam: rekomendatsii eksperta BD Scopus* [Editorial Preparation of Scientific Journals according to International Standards: Recommendations of a Scopus Expert]. Moscow, 2013. Part 1. 90 p.

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