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## ANALYSIS OF MIGRATION PROCESSES BASED ON CENSUS DATA <sup>1</sup>

*The subject matter of research is the internal migration processes of the Russian population in the period from the 1960s to 2010. The research is based on the data about the territorial population flows published in the all-Union census materials of 1970, 1979, and 1989, and in the all-Russia census materials of 2002 and 2010. The basic migration flows and directions are considered. Methodologically, the analysis of migration is based on the use of end-to-end indicators enabling to assess the dynamics of migration processes over a long period. Special attention is paid to rural-urban internal migrations, the volumes, patterns and consequences of which have not been so far properly investigated or assessed. The authors offer and calculate relative indicators that have never been used to assess the processes in question. To make the census materials of the soviet and post-soviet periods comparable, the economic zoning adopted before 2000 is used, and the administrative-territorial network is unified. The authors confirm the hypothesis that from decade to decade the intensity of territorial mobility of both urban and rural population was reduced. Interregional migration flows are considered, and various tendencies and migration intensity for over four decades are defined. The authors analyze the dynamics in the structure of migrants by the time they lived in the place of their permanent residence in various regions. The research shows that the tendencies developed at that time and persisting continue to adversely affect the territorial re-distribution of population and the regional social and economic development of the country. The research results can be used in adjusting the regional socio-economic and migration policy.*

**Keywords:** internal migration, migration in Russia, population census, interregional migration, economic regions of Russia, rural-urban migration, urbanization, natives and non-natives, long-time residents, new settlers, length of residence

### Introduction

The data of all-Union censuses conducted in the USSR in the post-war years, containing the information about the migration of population (1970, 1979 and 1989), and the all-Russia censuses (2002 and 2010) are unique for in-depth research studies of the migration processes and the changes in the settlement of Russian population that were taking place in its territory for over four decades from the mid-1960s to 2010. This period is chosen for a reason, as it is characterized by changes in the socio-political order and socio-political conditions that had an impact on the migration processes in Russia.

For the first two decades, from 1970 to 1989, that were once called a period of developed socialism, the territorial flows of population were taking place in the conditions of planned economy where the distribution of population had an important role in the development of production forces and the economy of the regions. Based on the current statistics, in-depth studies were conducted on the internal migration of population in Russia [1–7]. The next two decades, from 1989 to 2010, the population's migration preferences limited by personal material means, were formed under the influence of spontaneously emerging market regulators of economic development which were new for Russia, as well as investment processes and regional and sector specifics. Export-oriented mining industries, financial, and business sectors became the most rapidly developing economy sectors. In the last decade, the building sector demonstrated accelerated development as a result of initial accumulation and investment of the population's income and savings into real estate. The demand for labor resources in these economy sectors was erratic and disproportionate to the territorial distribution of population, which in view of new emerging labor and capital combination forms had an effect on the population's migration behavior and entailed a reorientation of migration flows. During this period, there was some research, though in much less scope, on the internal migration processes in Russia [8, 9]. However, it was also mostly based on the current statistics on those who arrived and moved away, rather than on the census data. The migration processes in each of the two 20 years long time segments (1970–1989 and 1990–2010) and their causes can only be assessed using the unique census data.

<sup>1</sup> Original Russian Text © O. D. Vorobyova, A. V. Topilin, A. A. Grebenyuk, T. V. Lebedeva, 2016, published in *Ekonomika regiona [Economy of Region]*. — 2016. — Vol.12, Issue 1. — 175–188.

**Migration links of Russia's economic regions according to 1970, 2002, and 2010 census data\***  
(% to the total number of non-natives)

Regions left and regions of arrival	Intraregional migration			Interregional migration within the RSFSR			Migration to other countries		
	1970	2002	2010	1970	2002	2010	1970**	2002	2010
North-Western region***	53.8	63.6	62.0	28.2	22.0	19.0	18.0	14.4	19.0
Central region	56.8	74.8	73.9	26.2	14.0	13.0	17.0	11.2	13.1
Volgo-Vyatsky region	63.7	86.8	86.2	28.9	9.8	8.8	8.4	3.4	5.0
Central Black Earth region	59.6	80.3	77.4	27.3	10.5	9.8	13.1	9.2	12.8
Povolzhsky region	60.5	78.5	78.8	27.6	13.5	11.1	11.9	8.0	10.1
North-Caucasus region	56.4	78.4	69.1	27.1	10.7	9.3	16.5	10.9	21.6
Ural region	64.1	85.7	84.2	24.7	9.8	7.7	11.2	4.5	8.1
West Siberian region	67.2	76.2	78.1	22.1	16.9	14.9	10.7	6.9	7.0
East Siberian region	64.7	85.0	81.9	26.3	13.0	10.3	9.0	2.0	7.8
Far East region	54.9	71.4	73.3	31.4	18.9	14.6	13.7	9.7	12.1

\* Itogi Vsesoyuznoy perepisi naseleniya 1970 goda. T. 7. Prodolzhitel'nost' prozhivaniya naseleniya v postoyannom meste zhitel'stva po SSSR, soyuznym i avtonomnym respublikam, krayam i oblastyam [All-Union Census of 1970. Volume 1. Permanent residence length in the USSR, union and autonomous republics, territories and regions]. (1973). Moscow: Statistics Publ.; Materialy Vserossiyskoy perepisi naseleniya 2002 goda [Data of All-Russia Census of 2002]. Retrieved from: <http://www.perepis2002.ru/index.html?id=11> (date of access: September 12, 2014).

\*\* Including former union republics.

\*\*\* In 2002 and 2010, North-Western region without the Northern region.

Based on the questions about the territorial population flows included in the census programs, the authors define the following categories of population that are very important for further analysis: migrants, new settlers, and long-time residents. These are the so-called end-to-end indicators that make it possible to assess the dynamics of the migration processes based on the census data.

The migrants include all the population recorded as living in the census area not since their birth (i.e. non-natives). The segment of population living in the census area for up to 2 years is referred to as new settlers [10, 11]. This term may be used to evaluate the migration attractiveness of this or that region during the inter-census period, to assess the migration process intensity (ratio of the absolute number of people categorized into this group to the total population), and to investigate the factors that affected the migration activity of the population. Finally, all the population permanently residing in one region for at least ten years is generally referred to as the long-time residents [12, pp. 58–59].

It should be remembered that the all-Union census data (1970, 1979 and 1989) were processed subject to the USSR economic zoning of that time. In the RSFSR (Russian Soviet Federative Socialist Republic), there were ten (even eleven, for a short time) economic zones that united not only geographically close regions, but also those that were relatively similar by their economic characteristics.

### Interregional migrations

Comparing the internal migration data contained in the census findings of 1970, 2002, and 2010 makes it possible not only to build a matrix (a migration link grid) between the economic zones of Russia for the forty years period, but also to identify the tendencies in the centripetal and centrifugal forces affecting the migration behavior of the population (Table 1).

While in 1970 the interregional migration flows in the RSFSR stood at 60 % on average (from 53.8 % in the north-western zone to 67.2 % in West Siberia), by 2002 the share of interregional migration reached 80 %. The regularities of population movement discovered more than a century ago are confirmed [13].

The highest territory closure is demonstrated by the Volgo-Vyatsky region, where 87 % of the total migration was within the region, the Ural region (86 %), and the East Siberian region (85 %). Accordingly, there was a sharp decrease in the migration links with other regions.

The interregional migration links reduced least in the border regions, North-West and Far East, where the share of intraregional migration was 64 % and 71 % respectively. The tendency towards a decrease in the interregional links was especially strong in the 1990s as a result of a number of

factors: broken economic ties, radical economic reforms, immature real property market, first of all for residential property, and a drop in living standards.

During the period between the two all-Russia censuses of 2002 and 2010, the situation changed insignificantly as compared to 1970–2002. There was a tendency towards some increase in the interregional migration in its total scope, including the emerged interstate relations between the CIS countries. Distinguished were the North-Caucasus regions, where the share of intraregional migration reduced significantly—from 78 % in 2002 to 69 % in 2010. At the same time, the share of external migrants who moved to the North Caucasus from the neighboring countries and beyond increased two-fold—from 11 % to 22 %.

### New settlers and long-time residents among non-natives

The two decades from 1970 to 1989, that passed between the all-Union censuses reflecting the migration processes in the unified country—the USSR, differ greatly from each other by the growth rates of new settlers, that is the population that changed the place of their permanent residence in the last two years before the census (Table 2).

The rates of changes in the number of new settlers reduced in the second decade (from 1979 to 1989) as compared to the first decade (from 1970 to 1979) in all economic regions. Only two West-Siberia regions (Khanty-Mansiysk and Yamalo-Nenets Autonomous Districts) were an exception.

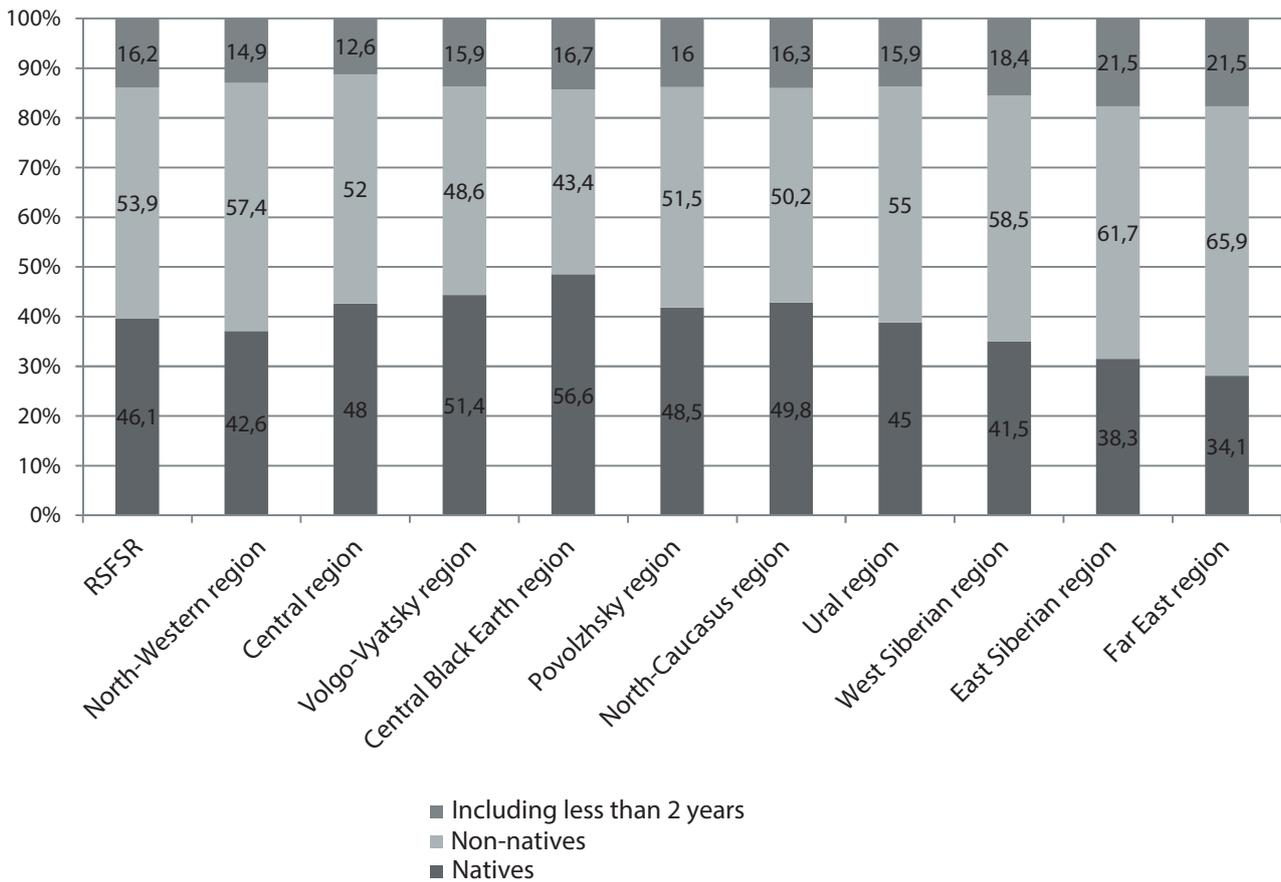
In the first decade (1970–1979), the share of migrants, including new settlers, grew among the population of the Asian part of the Russian regions (Fig. 1). In the eastern regions, new settlers amounted to 18.4–21.5 % of all migrants. It is substantially higher than in the central regions and evidence that the re-distribution of the population from west to east was also traditional for Russia in the 1970s. For the period between the censuses of 1970 and 1979, the number of people living in Siberia and in the Far East grew. In 1970, the number of people living in the European Russia (including the North-Caucasus region) and the Ural region versus the Asian part was 69 % versus 31 %. According to the 1979 census, this ratio changed and stood at 67 % and 33 %.

Table 2

Changes in the number of new settlers living in a new place for up to 2 years  
(according to the censuses of 1970, 1979, and 1989)\*

Economic region	Number of new settlers (living for up to 2 years, persons)			Growth rates of new settlers (%)		
	1970	1979	1989	1979 to 1970	1989 to 1979	1989 to 1970
RSFSR	8,785,466	12,005,312	13,358,341	136.6	111.3	152.1
North-Western region	852,175	1,134,118	1,198,072	133.1	105.6	140.6
Central region	1,397,147	1,897,101	2,048,794	135.8	108.0	146.6
Volgo-Vyatsky region	448,780	645,583	661,565	143.9	102.5	147.4
Central Black Earth region	344,469	566,453	569,312	164.4	100.5	165.3
Povolzhsky region	1,122,808	1,300,808	1,145,027	115.9	88.0	102.0
North-Caucasus region	909,187	1,256,736	1,383,063	138.2	110.1	152.1
Ural region	1,065,970	1,653,107	1,705,661	155.1	103.2	160.0
West Siberian region	1,012,230	1,394,269	2,106,776	137.7	151.1	208.1
East Siberian region	793,859	1,082,251	1,204,843	136.3	111.3	151.8
Far East region	772,983	995,367	1,170,069	128.8	117.6	151.4

\* Itogi Vsesoyuznoy perepisi naseleniya 1970 goda. T. 1. Prodolzhitelnost prozhivaniya naseleniya v postoyannom meste zhitelstva po SSSR, soyuznym i avtonomnym respublikam, krayam i oblastyam [All-Union Census of 1970. Volume 1. Permanent residence length in the USSR, union and autonomous republics, territories and regions]. (1973). Moscow: Statistics Publ.; Itogi Vsesoyuznoy perepisi naseleniya 1979 goda. T. 10. Prodolzhitelnost prozhivaniya naseleniya v postoyannom meste zhitelstva po SSSR, soyuznym i avtonomnym respublikam, krayam i oblastyam: stat. sb. [All-Union Census of 1979. Volume 10. The duration of permanent residence in the USSR, union and autonomous republics, territories and regions: statistical book]. (1990). Gokomstat SSSR. Informatsionno-izdatelskiy tsentr [USSR Goskomstat. Information and Publishing Center]. Moscow; Itogi Vsesoyuznoy perepisi naseleniya 1989 goda. T. 12. Prodolzhitelnost prozhivaniya naseleniya SSSR v postoyannom meste zhitelstva. Statisticheskiy komitet sodruzhestva nezavisimyykh gosudarstv [All-Union Census of 1989. Volume 12. Duration of permanent residence in the USSR. Statistical Committee of the Commonwealth of Independent States]. (1993). Moscow.

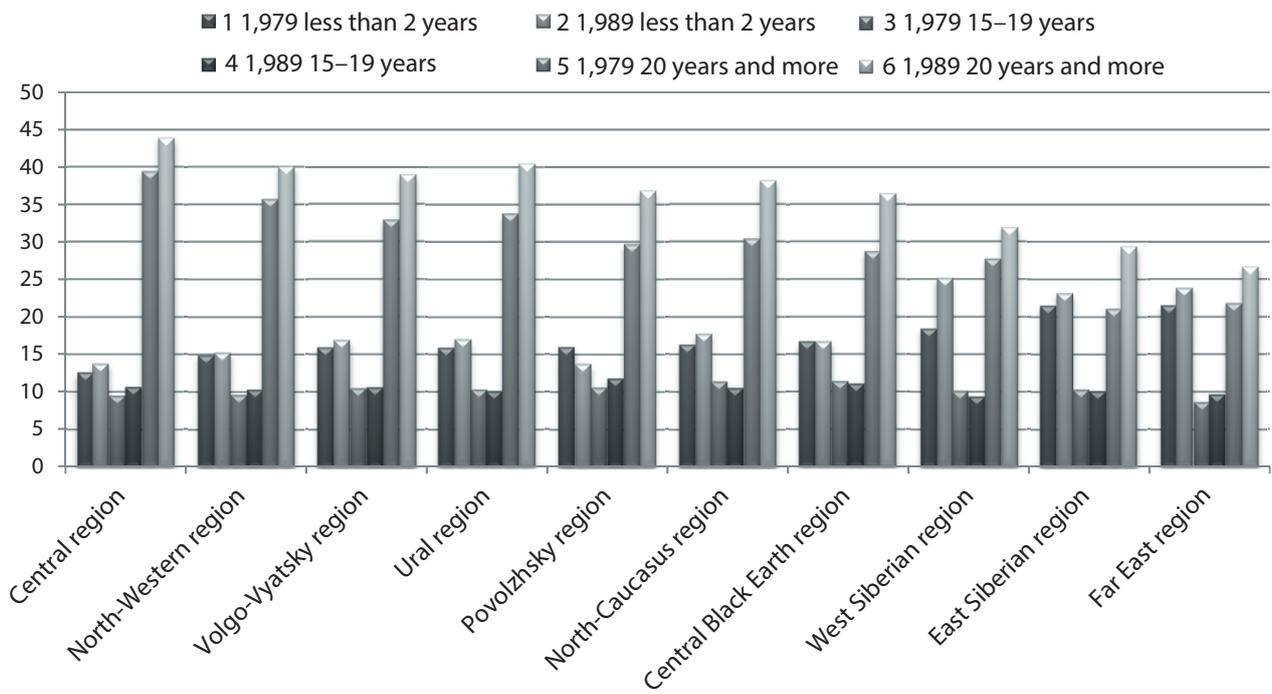


**Fig. 1.** The share of natives and non-natives (including new settlers) residing in the economic regions of Russia in 1979

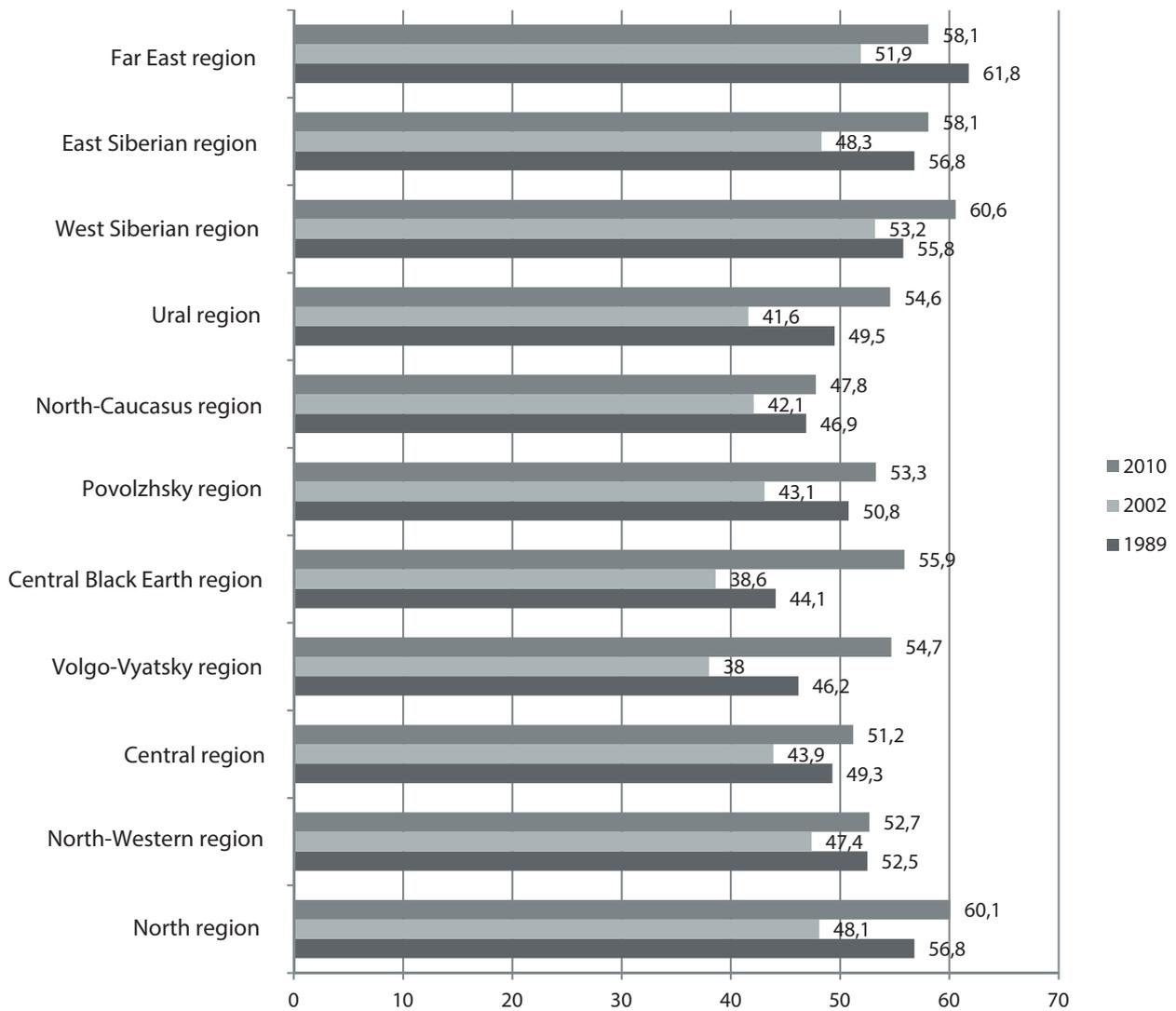
The creation and development of powerful industrial complexes beyond the Urals and the state policy of developing the natural resources of the eastern regions were the main reasons for the migration of people in the eastern direction. In the 1970s, large industrial building projects and operation of the commissioned facilities started in the Siberia and Far East regions. In particular, commissioning of a new production line at the Angarsk Plant (Irkutsk Region), the country's largest steel and non-standard equipment works and the first production line of the Primorsky Ore-Dressing and Processing Enterprise. In the 1970s, the Bilibino Nuclear Power Plant was commissioned. The construction of the Baikal-Amur Mainline stretching across the territory of Siberian regions was resumed. The first unit of the Sayano-Shushenskaya HPP was commissioned. Along with the industrial growth, in the 1970s new universities were opened in the eastern and northern regions of the country: Tyumen, Omsk, Altai, Chelyabinsk, and Syktyvkar universities. Economic motivation of the population migration prevailed [14].

The ranging of the economic regions by the share of new settlers in the number of migrants as of 1979 shows that their share is minimum in the western regions and grows towards the east. The ratio of new settlers remains about the same until the end of the 1980s. Correspondingly, the share of long-time residents, the highest in the European part of Russia, reduces from west to east (Fig. 2). This tendency reflects the overall vector of the interregional migration in the 1970s and 1980s—towards the east.

From 1989 to 2010, the figures were studied for the larger groups of population (natives—non-migrants, non-natives—migrants). The census data (1989, 2002, and 2010) demonstrate significant fluctuations in the share of non-natives in the total number of people living in all economic regions of Russia due to a sharp drop of this indicator in 2002 and its growth in 2010. In 1989, the largest shares of migrants (non-natives) in the population were recorded in the West-Siberian (55.8 %), East-Siberian (56.8 %), and Far East (61.8 %) regions that had been actively developed and populated during the previous decades of the Soviet period. According to the census of 2002, in these regions the share of non-natives fell most. The “western drift” led to a considerable decrease in the population of the eastern regions of the country. Thus, for 13 years (1989–2002) the share of non-natives dropped by 9.9 % in the Far East region, and by 8.5 % in the East-Siberian region. It can be concluded that the



**Fig. 2.** The share of migrants with various length of residence after moving to the permanent residence place as per the censuses of 1979 and 1989



**Fig. 3.** The share of non-natives living in the region as per the censuses of 1989, 2002, and 2010

population outflow grew first of all on account of non-natives that is the most mobile part of the population having a migration experience.

The situation cardinally changes towards 2010. The number of non-natives grows sharply in all the regions, including Siberia and the Far East. During this period, large cohorts of people born in the 1980s reached the working age and actively changed their place of residence for employment or education reasons (both within and beyond the constituent entities). However, regional imbalances in the social and economic development contributed to the drift of the population to the European part of Russia. For example, the highest increase of 17.3 % in the share of migrants was recorded in the Central Black Earth region (Fig. 3).

### Rural-urban migration

The 1980s are characterized by a decrease in the territorial mobility of the population. The migration intensity among urban citizens dropped from 56‰ in 1970 to 34‰ in 1989. By 1989, the migration of rural citizens dropped as well from 86‰ to 76‰.<sup>2</sup> With growing urbanization by almost 20 %, the migration intensity of urban citizens reduced by 40 % (from 56‰ to 34‰), and that of rural citizens, whose share dropped from 38 % to 26 %, by only 12 % (from 86‰ to 76‰) (Table 3).

The decrease in the intensity of migration (by the migration turnover indicator) is evidenced by the data analyzed for individual flows of internal migration in 1989 vs. 1970.

The most intensive direction of internal migration in Russia has always been from rural areas to cities. It has been repeatedly mentioned by many researchers [15–17].

If in 1970 interurban and rural migration flows were practically equal by their intensity only in the Western Siberia, by 1980 they became equal in all economic regions (with an overall reduction). Consequently, with the growth of urbanization interurban migration flows slow down and become by their intensity practically equal to the migration flows between rural settlements. However, with reduced intensity of all flows, the rural-urban migration flow still remained the most intensive in the 1980s (Table 4, Fig. 4).

With the overall reduction of its intensity in the RSFSR, it grew in three regions, where the share of rural population was higher: the Volgo-Vyatsky, Central Black Earth and Povolzhsky economic regions. The same is also true of the rural-rural flow for these and the Central region.

This is another evidence of the direct relation between the intensity of migration flows and the relatively high share of the rural population [18].

As already mentioned above, the census figures of 1989 make it possible to assess the intensity of rural-urban migration flows not only for the population with minimum length of residence in the new place of living, but also for all non-natives living in the census area, that is for all the people who changed their place of permanent residence as of the census date. The scale of migration in the basic movement areas is provided in Table 5. For 10 years, the total number of migrants moving between urban settlements amounted to 27 million. It did not affect the number of urban population, but shows that 252 of each thousand of residents living in an urban area had changed the city of residence by 1989. If to add the volume of urban-rural migration flows of 5.5 million people, the migration turnover for the urban population (vs. the number of urban residents in 1989) will be over 300 people per each 1,000.

For 10 years, over 30 million people moved from rural areas to cities. This flow, net of the back (urban-rural) flow, determined the increase in the number of urban population due to rural-urban migration exchange, which amounted to almost 25 million people. Over 11 million people moved from one rural area to another rural area for permanent residence (Table 5).

Thus, for 10 years over 41 million rural residents moved (30 million to cities plus 11 million to other rural areas), which is 2.5 million more than the total number of rural population by 1989 that had reduced as a result of migration to 39 million people (from 42.2 million in 1979), that is by almost 10 %, with the level of natural growth remaining rather high (1,700 thousand people from 1979 to 1989).<sup>3</sup> In total, for 10 years the rural population in Russia reduced by almost 5 million, as a result, rural-urban

<sup>2</sup> The estimations are based on the comparable migration flows of new settlers — people living less than 2 years in the place of their permanent residence.

<sup>3</sup> Calculation based on the *Naselenie Rossii za 100 let (1897–1997): stat. sb.* [Population of Russia for 100 years (1897–1997): Statistical book] (1998). Goskomstat Rossii [Goskomstat of Russia]. Moscow, 88–89.

**Changes in the level of urbanization and intensity of migration of urban and rural population about the RSFSR and economic regions (according to the censuses of 1970 and 1989)\***

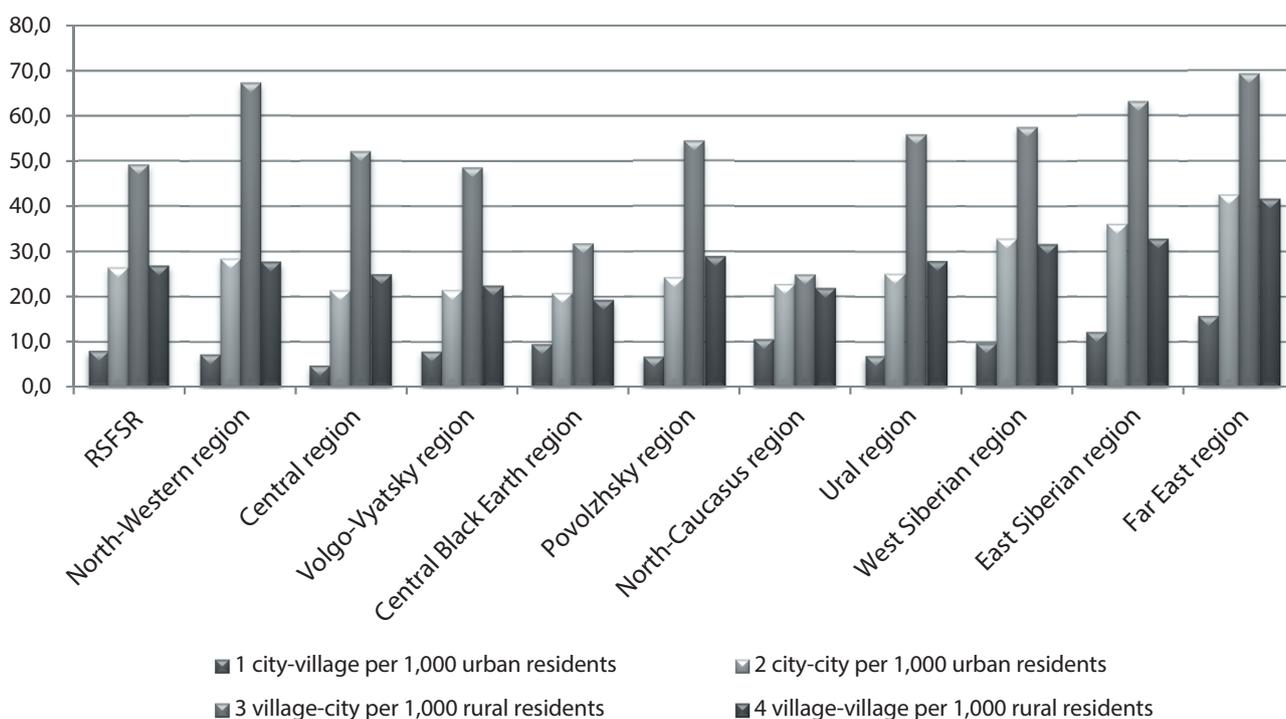
Economic region	1970				1989			
	Share of urban population	Share of rural population	Urban migrants per 1,000 urban citizens	Rural migrants per 1,000 rural citizens	Share of urban population	Share of rural population	Urban migrants per 1,000 urban citizens	Rural migrants per 1,000 rural citizens
RSFSR	62	38	56	86	74	26	34	76
North-Western region	73	27	56	110	82	18	36	95
Central region	71	29	38	81	83	17	26	77
Volgo-Vyatsky region	53	47	45	63	69	31	29	71
Central Black Earth region	40	60	45	42	60	40	30	51
Povolzhsky region	57	43	43	60	73	27	33	83
North-Caucasus region	50	50	63	65	57	43	33	47
Ural region	69	31	62	131	75	25	32	84
West Siberian region	61	39	66	112	73	27	43	89
East Siberian region	62	38	90	134	72	28	48	96
Far East region	71	29	122	163	76	2	58	111

\* Itogi Vsesoyuznoy perepisi naseleniya 1970 goda. T. 1. Prodolzhitel'nost' prozhivaniya naseleniya v postoyannom meste zhitel'stva po SSSR, soyuznym i avtonomnym respublikam, krayam i oblastyam [All-Union Census of 1970. Volume 1. Permanent residence length in the USSR, union and autonomous republics, territories and regions]. (1973). Moscow: Statistics Publ.; Itogi Vsesoyuznoy perepisi naseleniya 1989 goda. T. 12. Prodolzhitel'nost' prozhivaniya naseleniya SSSR v meste postoyannogo zhitel'stva. Statisticheskiy komitet sodruzhestva nezavisimyykh gosudarstv [All-Union Census of 1989. Volume 12. Duration of permanent residence in the USSR. Statistical Committee of the Commonwealth of Independent States]. (1993). Moscow.

**Intensity of internal migration flows in the RSFSR and its economic regions (according to the censuses of 1970 and 1989)\***

Economic region	City — village, per 1,000 urban citizens		City — city, per 1,000 urban citizens		Village — city, per 1,000 rural citizens		Village — village, per 1,000 rural citizens	
	1970	1989	1970	1989	1970	1989	1970	1989
RSFSR	14.8	8.0	41.7	26.4	55.3	49.1	30.4	26.9
North-Western region	13.3	7.3	42.3	28.4	76.8	67.3	33.1	27.8
Central region	8.5	4.8	29.9	21.4	58.3	52.1	22.3	24.9
Volgo-Vyatsky region	12.7	7.9	32.5	21.5	43.6	48.6	19.8	22.4
Central Black Earth region	15.2	9.5	29.8	20.8	28.4	31.7	13.4	19.3
Povolzhsky region	9.5	6.7	33.1	24.2	41.6	54.3	18.8	28.9
North-Caucasus region	21.7	10.6	41.1	22.6	33.2	24.8	31.3	21.8
Ural region	14.1	6.9	47.6	25.1	91.3	55.9	39.8	27.9
West Siberian region	19.8	9.7	45.7	32.9	65.5	57.5	46.9	31.7
East Siberian region	24.3	12.2	65.3	36.0	79.0	63.1	54.5	32.8
Far East region	34.6	15.7	87.4	42.5	91.5	69.2	71.7	41.6

\* Itogi Vsesoyuznoy perepisi naseleniya 1989 goda. T. 12. Prodolzhitel'nost' prozhivaniya naseleniya SSSR v meste postoyannogo zhitel'stva. Statisticheskiy komitet sodruzhestva nezavisimyykh gosudarstv [All-Union Census of 1989. Volume 12. Duration of permanent residence in the USSR. Statistical Committee of the Commonwealth of Independent States]. (1993). Moscow.



**Fig. 4.** Intensity of internal migration flows in the RSFSR and its economic regions (according to the census of 1989)

Table 5

**Volumes and directions of migration in the RSFSR and its economic regions (according to the census of 1989, ths. people)\***

Economic region	The number of moves of all non-natives from the place of their permanent residence in various directions			
	City — city	Village — city	City — village	Village — village
RSFSR	27,318.1	30,237.2	5,514.5	11,233.2
North-Western region	3,171.9	3167	507.1	819.9
Central region	6,034.2	6,282.4	788.1	1,597.2
Volgo-Vyatsky region	1,056.1	1,943.6	258.6	614.8
Central Black Earth region	984.1	1483	299.2	612.5
Povolzhsky region	2,833.4	3,687.8	497.6	1,243.9
North-Caucasus region	2,404.5	2,489.7	818.4	1,907.7
Ural region	3,344.7	4,397.4	667.2	1,503.7
West Siberian region	3,090.8	3,169.3	682.4	1,369.2
East Siberian region	1957	1945	434.5	827.6
Far East region	2,173.8	1,496.6	524.6	649.2

\* Itogi Vsesoyuznoy perepisi naseleniya 1989 goda. T. 12. Prodolzhitel'nost' prozhivaniya naseleniya SSSR v meste postoyannogo zhitel'stva. Statisticheskiy komitet sodruzhestva nezavisimyykh gosudarstv [All-Union Census of 1989. Volume 12. Duration of permanent residence in the USSR. Statistical Committee of the Commonwealth of Independent States]. (1993). Moscow.

migration (the total population reduction of 3.2 million plus 1.7 million – natural growth of the rural population for that period).

The migration turnover indicator for the rural population calculated to the population of 1989 exceeded 1,000 persons per each 1,000 rural residents and amounted to 1,064. The less the share of rural population was in the region, the higher was the migration turnover indicator for the rural population. Only in the regions with a relatively high share of the rural population (Volgo-Vyatsky, Central Black Earth, and North-Caucasus regions), this indicator was less than 1,000‰ (Table 6).

If we consider the overall intensity of each internal migration direction for the 1980s, the conclusion that the most intensive is the rural-urban flow is also true of this period.

In this period, the intensity of interurban and rural migration flows was generally balanced in Russia as it pertains to all the inhabitants who changed their permanent place of residence (all

**The urbanization level and the intensity of the urban and rural population migration turnover  
(according to the census of 1989)\***

Economic region	Share of urban population, %	Number of urban-rural and urban-urban migrants per 1,000 urban residents (‰)	Share of rural population, %	Number of rural-urban and rural-rural migrants per 1,000 rural residents (‰)
RSFSR	74	303	26	1,064
North-Western region	82	310	18	1,568
Central region	83	272	17	1,485
Volgo-Vyatsky region	69	226	31	974
Central Black Earth region	60	275	40	681
Povolzhsky region	73	277	27	1,124
North-Caucasus region	57	336	43	615
Ural region	75	265	25	1,152
West Siberian region	73	346	27	1,112
East Siberian region	72	363	28	1,078
Far East region	76	448	24	1,118

\* Itogi Vsesoyuznoy perepisi naseleniya 1989 goda. T. 12. Prodolzhitelnost prozhivaniya naseleniya SSSR v meste postoyannogo zhitelstva. Statisticheskii komitet sodruzhestva nezavisimyykh gosudarstv [All-Union Census of 1989. Volume 12. Duration of permanent residence in the USSR. Statistical Committee of the Commonwealth of Independent States]. (1993). Moscow.

**Intensity of internal migration flows of non-natives in the RSFSR and its economic regions  
(as per the census of 1989)\***

Economic region	City — village	City — city	Village — city	Village — village
	per 1,000 urban citizens		per 1,000 rural citizens	
RSFSR	51	252	776	288
North-Western region	43	267	1,246	322
Central region	31	241	1,184	301
Volgo-Vyatsky region	44	181	740	234
Central Black Earth region	64	211	482	199
Povolzhsky region	41	236	840	283
North-Caucasus region	85	251	348	267
Ural region	44	221	858	293
West Siberian region	62	283	776	335
East Siberian region	66	297	756	322
Far East region	87	361	780	338

\* Itogi Vsesoyuznoy perepisi naseleniya 1989 goda. T. 12. Prodolzhitelnost prozhivaniya naseleniya SSSR v meste postoyannogo zhitelstva. Statisticheskii komitet sodruzhestva nezavisimyykh gosudarstv [All-Union Census of 1989. Volume 12. Duration of permanent residence in the USSR. Statistical Committee of the Commonwealth of Independent States]. (1993). Moscow.

migrants) (Table 7). If the number of migrants for 10 years was over 1,000 per each thousand of people in 1989, it means that by 1989 as a result of permanent rural-urban migration the migration outflow led to a sharp decrease in the region's population.

The tendencies towards a reduction of the territorial population mobility that prevailed in the 1980s were even stronger in the 1990s. The growth of the urban population stopped. The severe economic crisis led to sharp job cuts on the labor markets of major industrial centers, but the possibility of having an own household plot in the rural area to a certain extent mitigated the consequences of the drop in the living standards. As a result, the share of people living in the cities for the period between the censuses of 1989–2002 did not change and amounted to 73 %. A minor increase in the urban population (by 1 %) was recorded only as per the census of 2010.

Level of Urbanization in Russia (according to the censuses of 1989, 2002 and 2010)\*

Economic region	Share of urban residents in the total population, %			Changes in the urban population 2002, % vs. 1989	Changes in the urban population 2010, % vs. 2002
	1989	2002	2010		
Northern region	76.5	76.4	77.7	86.0	92.8
North-Western region	86.5	86.8	87.6	94.7	102.5
Central region	82.4	84.3	85.4	103.2	103.6
Volgo-Vyatsky region	68.6	70.6	71.1	96.7	94.0
Central Black Earth region	59.9	62.1	63.7	100.7	99.0
Povolzhsky region	73.1	73.6	74.3	101.5	98.5
North-Caucasus region	57.0	54.6	54.2	108.9	101.7
Ural region	74.7	73.6	72.3	96.4	94.1
West Siberian region	72.7	73.9	75.3	113.3	100.7
East Siberian region	71.9	72.2	72.3	93.7	95.9
Far East region	75.8	75.9	74.8	84.3	92.6

Source: calculated according to the censuses of 1989, 2002, and 2010).

\* Itogi Vsesoyuznoy perepisi naseleniya 1989 goda. T. 12. Prodolzhitel'nost' prozhivaniya naseleniya SSSR v meste postoyannogo zhitel'stva. Statisticheskii komitet sodruzhestva nezavisimykh gosudarstv [All-Union Census of 1989. Volume 12. Duration of permanent residence in the USSR. Statistical Committee of the Commonwealth of Independent States]. (1993). Moscow; Materialy Vserossiyskoy perepisi naseleniya 2002 goda [Data of All-Russia Census of 2002]. Retrieved from: <http://www.perepis2002.ru/index.html?id=11>. (date of access: December 9, 2014); Materialy Vserossiyskoy perepisi naseleniya 2010 goda [Data of All-Russia Census of 2010]. Retrieved from: [http://www.gks.ru/free\\_doc/new\\_site/perepis2010/croc/perepis\\_itogi1612.htm](http://www.gks.ru/free_doc/new_site/perepis2010/croc/perepis_itogi1612.htm) (date of access: September 20, 2014).

The 2002 census findings evidence not only a sharp slow down of the urbanization rate, but also an emergence of a reverse process, de-urbanization (a decrease in the share of the urban population) in 2 economic regions: North-Caucasus and Ural regions. However, if in the Ural region, the reduction of urbanization was accompanied by a decrease in the total urban population, the North-Caucasus region demonstrated an increase in its population by 8.9 %, and the reduced share is attributed to the growth of rural residents (Table 8). According to the census of 2010, the de-urbanization tendency in these regions remained unchanged. And while, in the North-Caucasus region, this process continued along with the growth of urban population, in the Ural region it was as a result of its reduction. Thus, the urbanization growth in Russia in the zero years of the 19th century is distinguished by the depopulation and a decrease in the absolute urban population.

After the urbanization potential of rural areas was exhausted, the rural population experienced quality changes. The transformation of the rural population gradually increased, which was reflected in the last five censuses.

For the whole 40 years period, the number of people living in rural settlements was reducing, and the settlements were disappearing. After grouping rural settlements depending on the number of their residents, we have obtained the following results: if in 1970 the rural population living in settlements with less than 10 residents stood at 25.9 thousand, in 1989 it was 30.2 thousand or 17 % more, and the share of rural population living in them grew almost two-fold—from 12 % to 20 %. In the period between the censuses of 2002 and 2010, the depopulation of villages intensified (Table 9).

The share of small settlements with up to 10 residents grew to 30 % (including 12.7 % without population), and the share of larger settlements with over 100 residents reduced to 33 %. About 80 % of rural settlements without population and with less than 10 residents are in the Central and North-Western regions, including about 30 % in Tver, Vologda, and Pskov Regions.

The highest share of settlements abandoned by rural residents is in Kostroma, Tver, Yaroslavl, Vologda, Pskov, Kirov and Magadan Regions, and in the Republic of Ingushetia (about 20 %). In these regions, there is the most number of villages and hamlets. In the Yaroslavl, Vologda, Novgorod and Pskov regions, their ratio exceeds 40 %.

Such multistage step-by-step rural-urban and interurban migration is a manifestation of a rather stable regularity of migration processes contributing to the accelerated concentration of population in larger settlements and cities as they grow.

**Groups of rural settlements by the number of residents (according to census data)**

Group	1970		1979		1989		2002		2010	
	ths. people	%								
Up to 10 people	25.9	12	23.9	13	30.2	20	47.1	30	55.6	36
From 11 to 50 people	62.5	29	54.6	31	44.7	29	38.1	24	32.8	22
From 50 to 100 people	37.2	17	26.3	15	18.0	12	14.9	10	13.8	9
Over 100 people	91.2	42	72.2	41	60.0	39	55.2	36	50.9	33
Total	216.8	100	177.0	100	152.9	100	155.3	100	153.1	100

Source: calculated as per the census of 1970, 1979, 1989, 2002, and 2010.

With growth stagnation, much more with reducing population and simultaneous changes in the rural-urban proportions for the benefit of the urban population, the population concentrates in large settlements. In countries with extensive territories and low population density resulting from the above process, the territories are depopulated, the number of settlements reduces, and the distance between them grows. People have less possibilities of using land and nature resources that are located far from their settlements. This can be assessed as an adverse distribution of population from the perspective of the social and economic development of territories and their inhabitants.

By 1989, the share of urban population reached 73 % vs. 27 % of the rural population. The population of the world's largest country in terms of territory concentrated in big and medium cities with over 250,000 inhabitants. At the turn of the new millennium, over half (57 %) of the urban population lived in 75 cities (vs. 1098 in 2002). It is the large cities that first experienced the reduction of natural growth and depopulation leading to the overall reduction of their inhabitants.

In this regard, the measures that directly or indirectly contributed to the higher concentration of people in large settlements are generally non-productive for regions and countries with a large territory (due to high risks of territory losses and exclusion of territories from agricultural and economic turnover) [19, p. 51–58]. The geopolitical interests of such countries and regions are to break the tendency to the depopulation of large territories and the tendency to the concentration of population. It is only possible by purposefully preventing such concentration of people in large settlements and pursuing an appropriate migration and socio-economic policy.

### Conclusion

In our opinion, the forecasts of the social and economic development in a mid-term and long-term perspectives are to play an important role in reducing the disproportions in the distribution of population and labor resources. In 2014, a Federal Law On Strategic Planning in the Russian Federation was adopted to regulate a wide range of organizational and methodological issues of improving the development and territorial organization of the country's national economy. The basic provisions of this Law require comprehensive research studies of the key problems related to the distribution of production forces and their main element – labor resources that accumulated over a long period and escalated in the market economy environment.

In this regard, the USSR unique experience of conducting pre-plan research and forecast developments for the long-term period is to be used more extensively.

One of such pre-plan documents is the General Scheme of Population Distribution in the USSR developed for a long-term perspective. For example, the General Distribution Scheme for 1976–1990 was based on the following scientific concept:

– The distribution system is to ensure optimum distribution of production forces across the economic regions and to enhance the efficiency of public production and social and economic progress of the country;

– The system is to ensure the concentration of rural settlements to create favorable conditions for their inhabitants by employing the potential of planned scientifically-based urban development;

– The distribution system shall be based on large urban agglomerations combining big, medium and small cities, and possibly rural settlements;

– The growth of major cities with over 1 million inhabitants is to be purposefully restrained [20, p. 71–72].

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