# = URBAN DEVELOPMENT =

# Regional Capitals of Russia and Their Suburbs: Specifics of the Migration Balance

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Abstract—Regional capitals and their suburbs are a few stable points of population increase in Russia. The article singles out the near-capital areas for 72 regional centers of Russia (except for Moscow and Leningrad oblasts, as well as a number of other federal subjects) on the basis of proximity to regional centers. Indicators of migration population increase (decrease) for 2012–2016 were used for their characteristics, calculated from Municipal Units Database indicators both in whole and in part, with division of (a) intra-, interregional, and international migration and (b) the breakdown of migration rates by five-year age groups. The analysis shows that the migration balance in large cities and their suburbs does not have clearly expressed regional specifics: regional centers and their suburbs that actively attract migrants prevail in all parts of the country, which proves the widespread occurrence of a centripetal migration trend. On average, suburbs differ from regional capitals not only by a more intensive migration increase, but also by its structural features. Centers attract young people, first of all, those entering higher educational institutes. The suburbs, in contrast, attract families with dependent children, the middle-aged, and elderly.

**Keywords**: regional centers, near-capital areas, suburbs, migration, age of migrants, Russia **DOI**: 10.1134/S2079970519010076

# FORMULATION OF THE PROBLEM

In Russia, after a certain hitch associated with the transformative crisis of the 1990s, migration to large and major cities has renewed. Researchers associate this with the incompleteness of Russian urbanization [14, 16], the weak, and almost indistinguishable in terms of statistics, transition to suburbanization and counterurbanization, which are stages of urbanization development in most Western countries. Russia's lag is confirmed by the population size dynamics in cities of different sizes: large cities are growing more sustainably [20], gaining from migration attractiveness [8, 10]. However, the attractiveness of the largest cities to migrants also extends to the nearest areas, their suburbs, which often experience a very high migration intensity. Therefore, among the growth leaders are towns in Moscow and Leningrad oblasts and satellite towns of a number of regional capitals.

However, the situation goes beyond cities. The rural population is concentrated near many regional capitals, which is growing due to good transport accessibility to the center and possibilities for various relations with it. Therefore, in almost every Russian region, the only center of population increase is formed by a capital and its suburbs, which is most noticeable against the background of a steady decrease in the population of the intraregional periphery.

Population dynamics and migration balance in large cities and their suburbs are studied in various aspects. Often, the subject is the regional capitals themselves [9] or cities apart from their suburbs [25]. A large city and its suburbs were studied in detail with the example of the Moscow metropolitan area [11, 19], where seasonal suburbanization was analyzed, as well as other related forms of commuting associated with the recurring mobility of the population between capital and suburbs [12]. There are few works on other regions; studies by colleagues from Irkutsk [4–6] and Ulan-Ude [2] can be cited as an example of a comprehensive study of the suburbs. To the author's knowledge, no one has performed an all-Russia study of large cities and their suburbs, or large parts thereof.

Researchers in Eastern European countries perform similar spot analyses of cities and their suburbs, the process of the suburbanization and development of suburbs with case studies of capitals or the largest individual urban agglomerations [24, 26]. However, if Russian [15] and, e.g., Ukrainian [18] researchers note only particular signs of suburbanization associated with outrunning population increase in the suburbs, in many postsocialist countries, the transition to this stage was staunchly noted by researchers back in the 1990s [28, 29], and research tasks of the qualitative component of this process were posed. At the same time, just like in post-Soviet countries [18], Eastern European researchers write about the imperfection of statistics, which prevents assessment of real changes in settlement patterns in the suburbs of large cities [26].

Western researchers have gained solid experience in studying the development problems of cities and their suburbs [17, 27]. The role of migration has been studied for many decades, and today the focus of research has shifted from direct analysis of the population dynamics in the city-suburb system to analysis of the structural characteristics of population (see, e.g., [31]), natural population movement patterns [23], etc. With some time lag, the structural features of population increase in suburbs have become an object of study in Eastern European countries, which, e.g., distinguish individual components of the suburban population increase [26]. There are very few such studies in Russia: there are not enough statistical data, and the existing studies are constrained by the framework of current administrative-territorial division.

This article aims to assess the migration balance of the population of Russia's regional capitals<sup>1</sup> and their environs (with allowance for individual intraregional, interregional, and international migration components), as well as to identify the age-related characteristics of migration increase (decrease) of the population in regional centers and their suburbs.

#### MATERIALS AND METHODS

The article considers regional capitals and their suburbs in Russian 72 regions. The centers of a number of Far North regions (Salekhard, Magadan, Naryan-Mar, and Anadyr) were excluded from the analysis due to their small populations and the absence of suburbs. Due to a shortfall of statistical information on migration or population size, the centers and their suburbs of the republics of Dagestan, Ingushetia, Tyva and Crimea were also excluded. The cities of Sevastopol, Moscow, and St. Petersburg (together with the oblasts of the latter two) are not considered in this article, since due to their size and great attractiveness for migrants, these major centers are incomparable with other regional centers and their suburbs and deserve a separate analysis. However, it should be kept in mind that the negative results of interregional migration for the territories considered in this article are explained precisely by the exception of Moscow and St. Petersburg from the analysis.

Municipal units of a municipal district or urban okrug (district) rangs directly adjacent to the territory of a regional capital (corresponding urban okrug) are considered near-capital (suburban) areas. The limited nature of the analysis of regional capitals and their suburbs within Russia's existing administrative-territorial division requires to signify features that should be taken into account for their identification. First of all, some capital urban okrugs are formed by regional capitals themselves, while some urban okrugs include the population of a considerable number of other settlements. Thus, the urban okrug Krasnodar City includes 29 rural settlements with a total (rural) population of 91500 people; the urban okrug Barnaul City includes the urban-type settlement Yuzhnyi with a population of 20000 people and rural settlements with a total rural population of 44800 people as at the start of year 2017. This article considers the population of an entire urban okrug as residents of regional capitals, with all the settlements making it up. In fact, the secondary (administratively dependent) settlements of regional capitals constituting the same urban okrug could be considered suburbs, but this cannot be done due to information constraints, because there are no migration data on them in the source we used.

As in the studies of other authors [18], the main criterion for identifying near-capital areas is the vicinity of the municipality with the territory of the capital urban okrug. The presence of a common boundary was not taken into account automatically: in each case, in addition to vicinity, the presence of an adjacent settlements network was assessed. For example, if an urban okrug is large and the neighboring municipality has a small common boundary segment, it cannot be considered a suburb.

Official suburban territories in regions or those informally reputed to be were taken into account, but not as a basis, nor were the boundaries of urban agglomerations, even if they were indicated in the respective territorial planning schemes. Thus, e.g., for Ulan-Ude, three municipal districts were considered suburban territories, as local experts believe [3], despite the fact that the Ulan-Ude urban agglomeration includes four municipal districts. Divnnogorsk and Sosnovoborsk, as well as Berezovka and Yemelyanovo municipal districts, were singled out as suburbs of Krasnoyarsk; Zheleznogorsk was not included (this is a Closed administrative-territorial unit (ZATO) and no information is available on it); the Manskii and Sukhobuzimskoe municipal districts were also excluded due to their remoteness from the regional center.

In this article, the criterion of connectivity of a territory with a center, e.g., daily commuting (the most frequent criterion for delimiting urban agglomerations [11]), was not taken into account when distinguishing suburbs. The real proximity was taken into account, the presence of a settlements snetwork in the vicinity of the urban district boundaries, visually detected using the Yandex.map service. The resulting suburban areas in terms of the composition of the territories included in them can be grouped as follows (Table 1).

<sup>&</sup>lt;sup>1</sup> In this article, the concepts of "regional capital" and "regional center" are synonymous.

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<b>Table 1.</b> Grouping of regional capitals by type of identified suburban a	capitals by type of identified suburban areas	Table 1. Grouping of regional ca
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Suburban type	Regional capitals
(1) One municipal district or urban okrug (37)	Belgorod, Kostroma, Oryol, Smolensk, Tver, Yaroslavl, Petrozavodsk, Syktyvkar, Arkhangelsk, Vologda, Murmansk, Novgorod, Pskov, Maikop, Elista, Astrakhan, Nalchik, Vladikavkaz, Stavropol, Yoshkar-Ola, Izhevsk, Orenburg, Kurgan, Khanty- Mansiisk, Gorno-Altaisk, Abakan, Barnaul, Chita, Omsk, Tomsk, Yakutsk, Pet- ropavlovsk-Kamchatsky, Vladivostok, Khabarovsk, Blagoveshchensk, Birobidzhan
(2) One municipal district and urban okrug (4)	Bryansk, Tambov, Cheboksary, Kemerovo
(3) Several municipal units (28)	Vladimir, Voronezh, Ivanovo, Kursk, Lipetsk, Ryazan, Kaliningrad, Krasnodar, Vol- gograd, Rostov-on-Don, Cherkessk, Grozny, Ufa, Saransk, Kazan, Perm, Kirov, Nizhny Novgorod, Penza, Samara, Saratov, Ulyanovsk, Yekaterinburg, Chelyabinsk, Ulan-Ude, Krasnoyarsk, Irkutsk, Novosibirsk
(4) Without identified suburbs (3)	Kaluga, Tula, Yuzhno-Sakhalinsk

(1) A suburban area consisting of only one urban okrug bordering on the capital, often of the same name municipal district, e.g., for Smolensk, Smolensk municipal district; for Khabarovsk, Khabarovsk municipal district. Usually one near-capital district is enough to delimit suburbs of small or medium size in terms of the population regional capital. This group consists of 34 suburban areas. The suburbs of three other regional capitals for various reasons form one urban okrug, e.g., the urban okrug Artyom City for Vladivostok (due to its geographic position); the urban okrug Zhatai for Yakutsk; the urban okrug Novoaltaisk City for Barnaul. As mentioned above, the latter includes, in addition to Barnaul, an urban-type settlement and a large number of rural settlements that could form its suburbs, but these have already been included in the urban okrug limits and their separate analysis is impossible.

(2) A municipal district and one urban okrug bordering on the capital urban okrug: Bryansk district and the urban okrug Seltso City for Bryansk; Tambov district and the urban okrug Kotovsk City for Tambov; Kemerovo district and the urban okrug of Berezovo for Kemerovo; Cheboksary district and urban okrug Novocheboksarsk for Cheboksary. There are four suburbs of this type; the suburbs of Tomsk could also be rated to this group, but there is no data on the ZATO Seversk.

(3) Several municipal settlements bordering on the capital urban okrug. The largest and most complex suburbs are formed either near the largest regional capitals with a population of 1 mln or more or near urban okrug, which have a relatively small area, including a regional center without rural allotments, and not surrounded by the territory of a near-capital municipal district. These suburbs have been identified for 28 regional capitals. The larger the regional center, the more difficult, as a rule, to clearly and unambiguously single out its suburbs.

A special case is Takhtamukai municipal district of the Republic Adygea; it was joined to the suburban area of the city of Krasnodar (urban okrug Krasnodar City) of the neighboring federal subject Krasnodar krai.

(4) For some regional capitals, suburbs were not distinguished. First of all, for those capital urban okrugs, which included, besides the city itself, a large number of other administratively dependent settlements. The resulting large urban okrug area borders on several municipalities whose centers and main settlements are significantly far from the regional capital. There are few such examples: urban okrug Kaluga (borders on five municipal districts), Tula (since 2014 it has included the near-capital Leninskii municipal district with 64000 people, mostly rural population) and Yuzhno-Sakhalinsk (which borders on almost the entire southern part of the island). The hypothetically large size of the suburban area, determined by the vicinity to the urban okrug, in this case would distort the concept of suburb and make it incompatible with other regions.

The source of statistical data was the Municipal Units Database (MUD), hosted by Rosstat. Indicators of the migration increase of the population (long-term migration) for individual migration flows and age groups were used, as well as population size by age groups for 2012–2016, i.e., for the entire period available at this resource. The database does not contain indicators for some regions for the entire period under study; therefore, the average indicators for the years at hand were calculated. For example, if the database did not have indicators for 2012 and 2016, then the average for 2013–2015 was calculated. There is no information on ZATO in the MUD. There are a few of them in the composition of near-capital areas; the significant ones are the town of Seversk in Tomsk oblast and Zheleznogorsk in Krasnovarsk krai. Their exclusion from the analysis did not distort the results.

Subject	Total increase	Natural increase	Migration increase	Administrative- territorial transformations
Total population of regions under consideration, including:	-0.3	-0.4	0.1	0.0
Regional capitals and near-capital areas, total	7.5	1.2	6.3	0.0
Regional capitals	7.2	1.4	5.8	0.1
Near-capital areas	8.7	0.5	8.2	0.4
Other areas	-6.1	-1.5	-4.5	0.0

Table 2. Components of change in population size of regions under consideration, 2012–2016, per 1000 people

Source: Population size and migration of Russian Federation, statistical bulletins for 2013–2017; MUD.

#### **RESULTS AND DISCUSSION**

The regional capitals in Russia and their suburban areas are not only in close spatial interaction, the territories are constantly redistributed between them. Moreover, the redistribution occurs almost exclusively in favor of capitals: only for the intercensal period 2003–2010. according to incomplete estimates (e.g., they did not take into account Moscow, St. Petersburg, and their suburbs), 23 regional capitals grew in size due to the annexation of suburban territories and only three experienced a slight decrease in population. As a result, the increase of the population due to administrative-territorial changes about was 450000 people. During 2011–2016, absorption of the suburban area by the regional capital occurred only in 2013, when neighboring settlements with a total population of 22300 people were joined by Tyumen.

Most often, the territories of the most actively growing nearest suburbs were joined, with the result that the capitals received not only additional population, but also territories that were actively built-up and continued increase population at an outstripping pace. Thus, the suburbs were deprived of the most dynamically developing territories. Nevertheless, in 2003-2010, the suburbs increased their populations faster than the regional capitals themselves [13]. In general, the regional capitals and near-capital areas increased their populations throughout the post-Soviet years, and not only in Russia, but also, e.g., in Ukraine [18] and Belarus [20], while the population of peripheral territories continued to decrease. Migration from peripheral areas to the centers and their suburbs is the main cause of the multidirectional population dynamics in the centers and periphery [21].

In 2012–2016, judging from the current statistical data, the increase in the population of the capitals and their suburbs contrasted with the decrease in the population outside them (Table 2). In many regions, the capital and its suburbs represent the only points of population increase [5, 21].

There are significant differences between centers, suburbs, and other territories not only in terms of migration balance, but also natural movement, despite the fact that, traditionally, the hinterlands provided for Russia's overall population increase. Today, a higher total birth rate remains in rural areas. However, migration significantly redistributes the young population in favor of large cities, which leads to rejuvenation of their population and an increase in the birth rate.

## Migration Increase (Decrease) in 2012–2016

The population of regional capitals and their environs studied in this article averaged 48.9 mln people in 2012–2016, of which 38.7 mln lived in regional capitals and 10.2 mln in their suburbs. The annual migration population increase averaged 307000 people, including 194000 due to the internal Russian and 113 000 due to the international migration. At the same time, the entire increase in the considered territories in the internal Russian migration was provided by intraregional movements, since in general, there was a small population outflow to Moscow, St. Petersburg and their oblasts from regional capitals and near-capital areas.

The main inflow of migrants, almost three-quarters, was to regional capitals, while its intensity was higher in the suburbs (Table 3), and the differences in the inflow intensity was provided only by intraregional migration; the indicators of interregional and international migration are completely similar. It is not so much the regional capitals as their suburbs that benefit from intraregional redistribution of the population.

The intensity of population increase (decrease) at the expense of migration in regional capitals on average ranged from -11.1 per 1000 in Cherkessk to 24.7 per 1000 in Tyumen. In near-capital areas, the scatter of this indicator was higher: from -15.0 per 1000 in Zhatai, a suburb of Yakutsk, and -10.5 per 1000 in Prigorodnyi district of Vladikavkaz to 47.1 per 1000 in Blagoveshchensk municipal district of Amur oblast and 38.3 in Orenburg municipal district of Orenburg oblast. These extreme cases are an example of small suburbs in terms populations, represented by a single municipality; for vast near-capital areas, a smaller scatter of the indicator is typical.

Kaliningrad and Krasnodar showed the highest rates due to migration of the population both to the

Subject	Total migration	Within Russia	Of which:		Internetional			
			intraregional	interregional	International			
Regional capitals and near-capital areas, total	6.3	4.0	4.3	-0.3	2.3			
Regional capitals, total	5.8	3.5	3.8	-0.3	2.3			
With a population of, thou. people:								
More than 1000	6.2	4.1	3.1	1.1	2.1			
500-1000	6.9	4.6	4.2	0.4	2.3			
250-500	5.0	2.4	4.6	-2.2	2.6			
Less than 250	1.3	-1.2	3.5	-4.7	2.5			
Near-capital areas, total	8.2	5.8	6.1	-0.3	2.4			
With a capital population of, thou. people:								
More than 1000	7.9	6.0	5.7	0.3	1.9			
500-1000	11.0	8.4	8.1	0.3	2.6			
250-500	6.0	3.0	4.9	-1.8	2.9			
Less than 250	6.4	3.9	5.7	-1.8	2.5			

**Table 3.** Net migration of capitals and near-capital areas population in relation to number of residents on average for 2012–2016, per 1000 population

Source: Rosstat, MUD.

capital and to its suburbs. High increase rates were also observed in Tyumen, Khanty-Mansiisk, and Krasnoyarsk, but mainly due to the inflow of migrants directly to capital cities. In general, the migration increase rates in the near-capital areas far exceed that of regional capitals, such as: Smolensk, Yaroslavl, Ufa, Stavropol, Orenburg, Penza, Gorno-Altaisk, Ulan-Ude, Irkutsk, Blagoveshchensk, etc., which have a lower migration increase compared with their suburbs.

In the group of leaders in migration increase, million-plus cities and their suburbs do not prevail, although they seem to have the greatest potential for this with allowance for Russia's centripetal nature of migration. Among the regional capitals, cities with a population of 0.5-1 mln people show the highest increase rates on average; the same is true for their suburbs, despite the fact that it is million-plus cities that experience significant increase due to the interregional migration; i.e., they attract the population of their neighbors, in addition to Moscow and St. Petersburg (see Table 2). It is due to the interregional flows of population that relatively small regional capitals and their suburbs experienced a smaller migration increase rate; the intraregional and international migration parameters did not depend much on the size of the center.

Million-plus regional capitals and near-capital areas (in addition to the million-plus cities themselves, Krasnodar and Saratov are also included in this group) demonstrate serious differences in terms of migration increase (Fig. 1). Million-plus capitals have vast suburbs, consisting of several municipal districts with an average number of inhabitants exceeding 360000 people.

The largest cities, regional capitals and their suburbs, do not show a clear dependence of migration increase of the population, either on their size or on their geographical position. Southern cities do not have any tangible advantage: Volgograd and Samara are located on the opposite side of the ranking with leading Krasnodar. The total population of Samara and Tolyatti with suburbs rank them first with 2.2 mln people, but neither does this provide an inflow of migrants.

A very high migration increase rate in the suburbs of Kazan, Rostov-on-Don, Ufa, and Saratov helps them pull ahead of Chelyabinsk, Perm, and Yekaterinburg, in which increase is concentrated within the capital's municipal district. However, the leaders in the rating of million-plus cities have combined the intensive migration increase both in the capital and suburbs. This leadership resulted, on the one hand, from a significant increase due to interregional migration, which in Krasnodar has even exceeded the inflow from other regional municipalities, and, on the other, from the average and above average inflow of intraregional migrants (in Krasnoyarsk and the suburbs).

In contrast, the capitals and their suburbs located at the other end of the ranking experienced a decrease in interregional migration (the most tangible were Omsk and Volgograd; it is no accident that these cities are called poor million-plus cities in various ratings) and a very low inflow of intraregional migrants (Samara and Nizhny Novgorod). Such intraregional migration parameters for capitals could have formed



**Fig. 1.** Migration increase of population of regional capitals and their suburbs with total population of more than 1 mln people on average per year, 2012–2016 (ranked by intensity of total migration increase per 1000 people).

\* Including Tolyatti and Stavropol municipal district in suburban area.

Source: Rosstat, MUD.

as a result of the outflow of their inhabitants to the suburbs, which also did not show a high migration increase. Unlike the 1990s—early 2000s, these cities cannot draw migrants from neighboring regions; in all likelihood, they are not even the main centers of attraction for the residents of their own intraregional periphery.

Among the regional capitals and their suburbs with a smaller population, the highest migration increase rates are demonstrated by the centers of regions where successful socioeconomic regional development is combined with advantageous spatial position (Kaliningrad, Belgorod), which attracts both interregional and international migrants. It is also the regional capitals the peripheries of which have preserved a fairly solid migration potential toward their centers (Ulan-Ude, Gorno-Altaisk, and partly Stavropol). Here, the suburbs are increasing apace, since most migrants from rural areas do not have enough money to buy or build housing in the city limits, so they settle in the suburbs [2]. The case of Tyumen should be considered separately, since it attracts many wealthy migrants from the oil-and-gas Khanty-Mansi and Yamalo-Nenets autonomous okrugs.

#### Age Peculiarities of Migration

In addition to the overall intensity of migration increase (decrease), regional capitals and their suburbs differ significantly in their structural components. Regional capitals primarily attract young people of student age and a young population in general: in 2012–2016, young people aged 15–19 accounted for 40% of the intraregional migration increase and 37% of the total migration increase; 15–29-year-olds, 73 and 69%, respectively. The near-capital areas, by contrast, attracted people of all ages with the exception of 15-to 19-year-olds (Fig. 2).

In the context of internal migration, the capitals outpace the suburbs in the inflow intensity of migrants aged 15–19, and not much for 25–29 years. Near-capital areas are clearly more attractive for people from 30 up, as well as for families with children aged 0-4 years. The latter age group may be a marker of trends towards suburbanization: it is the inflow of families with children and increased birth rate in the suburbs that have gained traction in the European Union, the United States, and other Western countries [30]. Regional capitals in internal Russian migration exchanges experienced an outflow of population aged 40-69 years, including 45-69 years in intraregional migration; i.e., middle-aged and elderly people feel no desire to live in centers, but an age-related decrease of inflow to the suburbs is barely noticeable.

Figure 3 shows the top 25 regional capitals leading in inflow of young people of university admission age (15-19 years old). It is this age that provides the main differentiation of the migration balance indicators for cities of this type. The highest total migration increase is most often significant inflow of young people from other regions. Therefore, topping the ranks are Khabarovsk, Tomsk, Krasnoyarsk, Voronezh and Novosibirsk, large education centers that attract many students from other Russian regions (for the regional level, see [22]). However, the leader in the inflow of young people, Yakutsk, has yielded an extremely intense indicator owing to intraregional migration alone, which has even exceeded outflow to other regions. The situation is similar in Khanty-Mansiisk and Arkhangelsk. In general, the intensity of migration



**Fig. 2.** Net migration of population of regional capitals and near-capital areas by flows on average per year, 2012–2016, per 1000 population of corresponding age. Source: Rosstat, MUD.

increase in the population aged 15-19 years in the largest regional capitals (with populations of over 1 mln people) is on average 30% higher than in smaller centers.

All regional capitals experiencing outflow of young people aged 15–19 to other centers could not compensate this through inflows from their own periphery. As a rule, these are small regional capitals located in the North Caucasus or in the North that do not have a developed network of universities. Two cities, Grozny and Salekhard, have lost young people even in intraregional exchange.

Many of the cities in Figure 3 have experienced intensive inflow of young people in the wider age group of 15–29 years. A significant inflow of older people was observed in a few regional capitals: Belgorod, Kaluga, Kaliningrad, and Tyumen.

At the same time, everywhere (except, perhaps, Tyumen), migration increase in the population aged 30 up in the suburbs was higher than in the centers. Even in Krasnodar, which is attractive to migrants of all ages, the suburbs outpaced the city in terms of inflow of people of this age by more than 30%, and the bulk of this increase was interregional migration.

The suburbs differ from the regional capitals by a more intensive inflow of middle- and old-aged population. However, the suburbs themselves differ in the value of this indicator. Figure 4 shows cities whose suburbs in 2012–2016 experienced the most intensive inflow of the population of these ages. According to the inflow intensity of the population aged 25-39 (the most active age for starting families), most of the suburbs of the largest million-plus cities are among the leaders, but not in the most leading positions. Ignoring the suburbs of Blagoveshchensk with its extremely high rates, it is capitals with a quite average number of residents that are the leaders. The list of leaders is similar in terms of inflow of people over 30, but there are more suburbs located in central Russia, Kostroma and Belgorod, which were combined with Tyumen and



**Fig. 3.** Migration increase (decrease) of population aged 15–19 years by components on average per year, 2012–2016, per 1000 population of corresponding age (top 25 cities for indicator value). Source: Rosstat, MUD.

Kurgan. All these are regional centers attractive for retirees leaving the North [7].

The main inflow into the suburbs comes from intraregional migration, which may be both a result of the attraction of the population from the intraregional periphery and suburbanization (e.g., in the suburbs of Irkutsk [4]). The data used in this article do not give an idea of the real ratio of centrifugal (suburbanization) and centripetal flows.

Note that the suburbs of Krasnodar, Kaliningrad, Yaroslavl, and Belgorod are to a great extent built up of people originally from other Russian regions and countries; this obviously lowers the contribution of suburbanization processes to the population dynamics of these centers. The dacha settlement pattern and financial constraints ("financial unavailability of comfortable suburban housing for the majority of the population" [11, p. 329]) make it difficult to assess the suburbanization processes and even hinder it. The suburbs themselves are heterogeneous areas of residence for summer visitors, external migrants, and wealthy second homeowners [15, p. 20].

There are many capitals whose suburbs are losing middle-aged and elderly. They are often located in the North Caucasus (Cherkessk, Nalchik, Vladikavkaz) and in the North (Arkhangelsk, Murmansk, Khanty-Mansiisk, Yakutsk). The underdevelopment of the suburbs in the North is primarily due to the severity of the natural conditions and the general outflow of the aged population to southern regions of the country [7]. The outflow from suburbs of Caucasus regions defies explanation, perhaps due to imperfection in accounting for migration.

## CONCLUSIONS

Regional capitals and their suburbs are almost the only points of positive population dynamics in the overwhelming majority of Russian regions. In conditions of near-zero rates of natural population increase in the country and negative population dynamics in two-thirds of regions [1], this increase is due to migration, which concentrates population in regional capitals and their closest suburbs. The centripetal movement primarily involves young people; therefore, the positive migration balance has a rejuvenating effect on the population of large cities, which improves the indicators of its reproduction.

At the same time, suburbs, on average, are growing faster than centers, despite the ongoing expansion of their area, sometimes accompanied by administrativeterritorial transformations legalizing the expansion. The structural component of the inflow into the suburbs has an important difference from the centers themselves. Near-capital areas are not attractive to students, and the flow of families, including those moving from the regional capitals, levels out to a certain extent owing to the inflow of people of preretirement and retirement age, which smooths the rejuvenating effect of family migration.

Thus, the centripetal movement of the population in Russia and its regions, continuing urbanization



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**Fig. 4.** Migration increase (decrease) of population aged 25–39 and over 30 years by components on average per year, 2012–2016, per 1000 population of corresponding age (top 25 near-capital areas for indicator value). Source: Rosstat, MUD.

[15], is distributed differently between capitals and their suburbs. The possibilities of attracting people to capitals and their suburbs (except for Moscow and St. Petersburg) are determined by the following:

(1) The general migration attractiveness of the region, its geographical position (including natural–geographical). The most prominent examples are Krasnodar krai and Kaliningrad oblast. It is more difficult to have a migration increase in regional capitals and their suburbs in the eastern part of the country, which are suffering from a western migration drift, and the northern regions, which have also been experiencing a steady migration outflow for decades.

(2) The presence of a developed network of higher education institutes attractive for young people of not only their own region, but others: Tomsk, Novosibirsk, Krasnoyarsk, Voronezh, Rostov-on-Don, Khabarovsk, and, to a lesser extent Kazan, Yaroslavl, Yekaterinburg, and Krasnoyarsk.

(3) The remaining migration reserves from peripheral territories of regions (sometimes neighboring regions): Tyumen and Irkutsk oblasts; Stavropol krai; the republics of Bashkortostan, Yakutia, and Buryatia; etc. In general, regional centers and their suburbs are growing to a greater extent owing to intraregional migration; therefore, their migration balance depends on the migration outflow potential of the "patron-ized" territories. If the outflow from the periphery is large in absolute terms, this will yield a significant migration increase even for a weak regional capital.

When analyzing migration in Russia, assessing its trends and tendencies, one should avoid traditional division into urban and rural populations. Cities of different sizes should not be considered outside the **REGIONAL CAPITALS OF RUSSIA AND THEIR SUBURBS** 

context of their immediate environment. Analysis

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