
MIGRATION TRENDS: CITIES AND SUBURBS

To the City or to the Suburbs: What Russians Choose at Different Stages of Life Course

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Abstract—Migration between large cities and their suburbs was considered from the perspective of two conceptual approaches: models of urban development and agglomeration development, and the life course concept. The research objectives were, firstly, to analyze the migration flow of the population between large cities and suburbs, and secondly, to identify its age characteristics and assess the applicability of migration models described using life course concepts to Russian realities. Individual depersonalized data on internal long-term migration of the population in Russia for 2011–2020 were used, allowing us to detail the directions of migration and identify different age groups of migrants. 137 Russian cities with a population of over 100 000 people were considered as large cities; territories formed around cities of this size at a certain distance from them (20–100 km depending on the city’s population) were classified as suburbs. The migration efficiency indicator was analyzed, allowing us to evaluate not only the directions of the flow, but also its effectiveness. The results obtained showed that each year these cities lose population in exchange with the suburbs by an average of about 50 thousand people. Almost all of these losses occur in the near suburbs. The distant suburbs are losing population in migration exchange with the centers. High efficiency of migration is recorded precisely between the centers and their near suburbs. Without distinguishing between individual age groups, out of the 25 (between centers of various size and suburban settlements of various size and distance from the center) migration directions examined, 16 are directed towards the suburbs, and only 9 towards large cities; these flows are also characterized by lower efficiency. The analysis of migration at different stages of the life course in the migration flow between large cities and their suburbs does not have a clear direction. Families with newborns and preschoolers, as well as people of older working and retirement ages, are the most active in moving to the suburbs. In this sense, the Russian case is characterized by the same patterns that are observed in other countries. However, these rules do not work in Moscow and its suburbs, which at this stage raises a number of questions that require further research.

Keywords: migration, life course, suburbanization, urbanization, cities, suburbs, migration increase

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PROBLEM STATEMENT AND PREVIOUS RESEARCH

The relationship between cities and their suburbs is a long-standing and still actively developed research topic. Both features—the longevity of traditions and at the same time the undiminished relevance—seem to be connected with the importance of the urban way of life. The urban way of life—referred to in school geography textbooks as urbanization—is gradually affecting more and more territories and has different manifestations.

Since the 1970s, studies of urbanization have been dominated by the logic of the stage-by-stage development of the urban system, the central mechanism of which is migration. It contributes to the fact that in some time periods, cities (all or divided into large and small) become especially attractive, while in others, non-urban areas become especially attractive. In the

works of J. Gibbs (1963), then B. Berry (1978), “cities and suburbs” were not considered as a single system, but they were not directly opposed to each other.

Later models of urban development (Champion, 2001; Geyer and Kontuly, 1993) identified a cycle of three stages: urbanization, suburbanization and counter-urbanization. At the stage of urbanization, cities, due to their economic development and concentration of economic life, receive positive rates of net migration and, accordingly, population concentration. The overload of the monocentric structure of cities (primarily infrastructure, as well as limited space) and the increasing segregation of the population by income contribute to suburbanization. Due to this, in small settlements adjacent to large cities, there is an increase in migration, while the rate of migration increase in large cities or even migration loss from them is decreasing. In fact, here we come close to the relationship between cities and suburbs. In the final

stage, the population in the least dense areas increases, while the largest cities lose population. There are three actors behind these processes: families, companies and governments (Berg et al., 1982). These processes are determined by a variety of reasons: the population changing its preferences and habits; the aging of the population (Raagmaa, 2003); the growth in the number of households consisting of one or two people (Rérat, 2012); the shortage of housing in cities, the rise in prices for the purchase and rental of real estate (Rérat, 2012; Stawarz and Sander, 2020; Thorkild, 2006); changes in the quality of the environment and infrastructure, the location of jobs, etc.

The study of relationship between core cities and suburban areas was further continued in models of agglomeration development (Klaassen and Scimeni, 1981). These authors identified four stages of the process: growth of the city—center (urbanization); then, under the influence of a complex of mutually opposite processes (for example, an uncomfortable environment in the centers and, conversely, an attractive one in the suburbs), a stage occurs when the suburbs grow faster than the centers (suburbanization); at the next stage, the rates of population growth of both the centers and suburbs decrease, but the population of the centers decreases faster than in the suburbs (deurbanization); finally, at the fourth stage, the growth of the city—center is resumed or its population decreases more slowly than in the suburbs (reurbanization). The models were tested in different countries and were criticized for simplifications, underestimation of factors, insufficiently precise identification of the main mechanisms, and the inexplicable speed of the flow of negative externalities (traffic jams, real estate prices, etc.) from the centers to the suburbs (Rérat, 2012). However, it seems important to us that these concepts, reflected in the realities of many countries (Western, then with a lag—Eastern European ones), have demonstrated universality; variability in the development of the system of cities and suburbs; dependence on demographic, territorial and economic factors, without the traditional primacy of only the latter. They also identified the existing gap in research between understanding external “environmental” factors and the analysis of individual and personal characteristics of people and families.

Research on migration and other life course events (within the framework of the relevant concept) developed in parallel and at first hardly intersected with models of urban and agglomeration development. However, in the 1990s, papers appeared (Clark and Huang, 2003; Mueser et al., 1988; Mulder, 1993; Plane and Heins, 2003; Plane et al., 2005; Plane and Jurjevich, 2009; Stockdale and Catney, 2014), which projected socio-demographic events in the life of an individual and their family (graduation from school, entering an educational institution, marriage, divorce, etc.) onto the territory through migration. However, these studies did not consider agglomerations; territo-

ries were distinguished by their capital/non-capital status (metropolitan and non-metropolitan areas) or in the rural/urban dichotomy.

The most important trigger that initiates changes in an individual’s place of residence and independent life is education. For college education, people tend to move to small and medium-sized cities nearby; for higher education, they move to larger cities that provide appropriate educational opportunities. As training progresses, the flows become more divergent: some, in pursuit of self-realization, want to move to even larger centers, while some return back (Plane and Heins, 2003; Sage et al., 2013). The formation of a family, and especially the birth of a child, creates a need for new housing and stimulates the search for it—with a more affordable price, a larger size, and a favorable environment (Mulder, 2013; Vobecká, 2010). Suburbs often become such places. Life in them is also attractive because it provides some freedom and a sense of security. Entering school is the next impetus for a possible change of residence. In the United States, from the time of Levittown until recently, segregated suburbs attracted city dwellers, among other things, because children there would be able to study in a socially homogeneous environment; only in the 2010s did changes in the ethnic and racial composition and types of suburbs lead to a transformation of these views (Fry, 2009; Goyette et al., 2014).

Our field research in Russia’s regions shows that some parents of six-year-old children are moving from small towns and probably from the suburbs as well—closer to good schools in big cities. Studies in the United States and European countries do not show such an age peak, since the age of entry into school varies significantly across countries, and a significant portion of families remain in the suburbs until they finish school, and the mobility of the population with school-age children falls (Bures, 2009). When children become independent and move away, “empty nest syndrome” can push parents (middle-aged people) left without children who have departed to study in large cities to move after them, but more often—to move in search of new meaning in life (Bures, 1997, 2009; White, 2003). Others, on the contrary, at this stage move from the suburbs even further from the centers to the periphery, returning to their roots in the countryside. This is particularly common for people nearing or entering early retirement (de Jong, 2020; Lundholm, 2012; Stockdale and Catney, 2014; Stockdale and MacLeod, 2013). At older retirement ages, people are returning to the suburbs to collective housing for the elderly (Litwak and Longino, 1987; Plane and Jurjevich, 2009; van Diepen and Mulder, 2009), as well as to cities or suburbs, closer to relatives (Chen et al., 2023; Litwak and Longino, 1987; Morrill, 1995).

Papers analyzing the specifics of the stages of Russian urbanization in relation to the whole of Russia appeared in the 1990s (Gritsai et al., 1991; Zaionch-

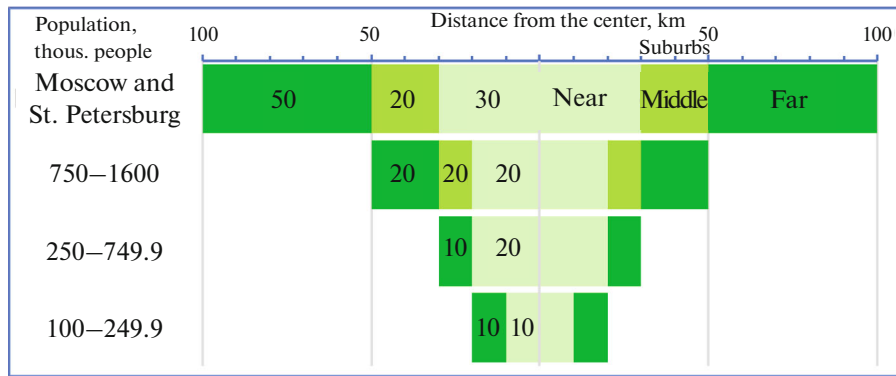


Fig. 1. The radius of delimitation of suburbs and their parts depending on the size of large cities, km.
Compiled by the authors.

kovskaya, 1991; Kümmel, 1987; Nefedova and Treivish, 2002), then to individual regions of Russia (Makhrova, 2014; Chugunova, 2017). These studies trace the specificity of Russia in relation to classical schemes of urban development models (Nefedova and Treivish, 2002). It was determined by the socio-political order and the significance of the extraordinary events of the 20th century. The results obtained are also influenced to some extent by the lack of long and comparable series of statistical information. Apparently, for the same reason, in Russia, in essence, there were no studies revealing the spatial patterns of age-selective migration (if we consider that age is an approximator of life events), which are quite common in foreign countries. The first such papers appeared only in the mid-2010s (Denisov, 2018; Karachurina and Mkrtychyan, 2020, 2022). At the municipal level, they found that the net population growth of cities—regional centers is mainly due to the migration of 15–19-year-olds moving to obtain secondary and higher education, while rural areas and small towns are generally outflowing and attract only older migrants.

However, until recently, there was no statistical base for analyzing sufficiently detailed directions of population migration of individual ages, allowing understanding not only the directions of movement at a particular age, but also tracking the flow between individual types of settlements. Not only was it impossible to assess the flow of population of certain ages between the centers, suburbs and the periphery, but it was also impossible to assess even the total rate and direction of these flows. It should be noted that, despite the abundance of foreign papers on migration in its relationship with other life events related to age, there are almost no studies on the projection of this movement onto cities—suburbs—periphery. We assume that, as has been the case in Russia for a long time, researchers do not have enough data for this type of papers. Their appearance gives us grounds to put forward tasks and understand: how the migration flow of population between large cities and suburbs is

formed? What are the age characteristics of migration between cities and suburbs in Russia? Does the above model apply to Russia (“born in the suburbs, studied in the city, got married and moved to the suburbs, etc.”)?

RESEARCH METHODS AND DATA

Large Cities and Their Suburbs in Russia

We study migration between large cities and their suburbs. By *large cities*¹ we mean settlements with a population of over 100000 people according to the 2020 All-Russian Population Census (conducted in 2021). *Suburbs* include territories formed around cities of a given size. As a rule, suburbs experience a strong, direct influence from cities. That is, in essence, we are talking about functional regions in relation to urban development models (Rérat, 2012). The criterion for identifying suburbs is the straight-line distance from the city center to the center of each suburban settlement; the larger the city, the larger the radius of the circle that outlines the suburbs and separates them from the outlying areas (Fig. 1).

For Moscow and St. Petersburg, this radius is defined as 100 km, for other cities with a population of over 750000 people—50 km, for cities with a population of 250000 to 750000 people—30 km, from 100000 to 250000 people—20 km. In Russia, migration has a pronounced centripetal direction. At approximately this distance from large cities of the corresponding size, a positive or higher migration population growth than in other parts of the regions is maintained (Karachurina et al., 2021). Large cities located near an even larger center are referred to as its suburbs. For example, Novocheboksarsk, numbering 120 thousand people and located 17 km from Cheboksary—a suburb of

¹ There are several different approaches to the range of city populations and their names (“big,” “large,” etc.). In this paper, the term “large” is used to designate cities with a population of over 100000 people.

the capital of Chuvashia. If one large city is located in the suburbs of another, but the area of its suburbs extends beyond the radius of this center, this area is also included in the suburbs of the largest, but such cases are few in the country.

Based on distance from a large city, suburbs are divided into near and far suburbs; for the largest cities (in our study—more than 750 000 people), suburbs are also divided into middle ones. *Near suburbs* represent territories most closely connected with the city, often forming continuous development areas divided only by administrative boundaries. These are the areas with the best transport links to central cities; many of them have multi-story residential buildings. It is in the near suburbs that the majority (21 out of 39) of large cities are located, classified as suburbs of even larger ones. *Far suburbs* are less closely connected to the cities that form them, but the majority of their population still makes regular trips to the centers for work and other purposes. The boundaries of far suburbs roughly coincide with the boundaries of large urban agglomerations (Antonov and Makhrova, 2019).

According to our calculations, the number of residents of large cities and their suburbs in 2021 amounted to 64.1% of the total population of Russia (Table. 1). The proportion within the unified system “large cities—suburbs” is as follows: 71.5% lived in large cities, 28.5% in their suburbs. We identify 137 large cities—centers that form suburbs. The number of settlements in the suburbs was more than 22 thousand, which is about 14.4% of all settlements in Russia.²

The data presented show that we are analyzing migration in the most densely populated parts of Russia. Our task is to understand how large cities and the territories most dependent on them exchange population with each other.

Data Used

To calculate the average population of the studied territories for 2011–2020, data from the 2010 and 2020 All-Russian Population Censuses were used. Despite all the problems with the data of censuses (Andreev and Churilova, 2023), they are the only source providing information on the population size for each settlement.

The article uses individual depersonalized data on internal long-term migration in Russia for 2011–2020, provided by Rosstat upon special request.³ These data, firstly, allow us to ignore the boundaries of municipalities when delimiting centers and peripheries, as they provide spatial detail down to populated areas. Secondly, they make it possible to analyze age groups of migrants with the same spatial reference. In addition,

² If we exclude settlements without population from the calculations, the share of settlements in the suburbs is 17.1%.

they allow assessing the impact of auto-return,⁴ which is important for the analysis of migration in Russia, however, the auto-return does not have a decisive influence on the flow of population between large cities and their suburbs. Over the 10 years of studies, the recorded scale of intra-Russian migration amounted to 39.3 mln people.

Indicators

To characterize migration, we use brutto and net migration indicators, as well as the migration efficiency indicator. Migration efficiency is the quotient of the migration increase (*net migration*) divided by migration turnover (*brutto migration*). This indicator varies from 0 to 100 (1000) and allows us to compare flows in corresponding directions and draw conclusions about the equilibrium of migration exchange (efficiency approaches 0) or its unidirectionality (the characteristics of the indicator tend to 100 (1000)).

RESULTS

General Parameters of Migration Movement

Every year in 2011–2020, less than 0.5 mln people moved between the centers and suburbs in Russia (Table 2). This is a relatively small part of the total internal migration flow. It also seems modest because it concerns settlements in which almost 2/3 of the country’s population lives. The rate of the flows was influenced by the fact that we do not consider the flow of population within the suburbs, and migration within the large cities themselves is residential mobility, which in Russia, unlike many foreign countries, is not subject to statistical accounting. In addition, we leave aside the exchange of population between the systems of “large city and its suburbs,” as well as their migration exchange with peripheral territories, focusing our attention only on the migration of the population of large cities with their own suburbs within the framework of long-term resettlements.

Every year, the centers (large cities) lose population in exchange with the suburbs by an average of about 50 000 people. Almost all of these losses occur in the near suburbs. The far suburbs, in turn, are losing population in migration exchange with the centers.

³ Rosstat data on migration were obtained as a result of the development of statistical documents on arrivals and departures received from territorial bodies of the Ministry of Internal Affairs of the Russian Federation (since 2019—federal statistical observation forms), which are compiled upon registration and deregistration of the population at the place of residence, as well as upon registration at the place of stay for a period of 9 months or more.

⁴ Auto-return is the automatic come-back of a migrant to the place of registration of permanent residence upon expiration of the registration period at the place of stay.

Table 1. Population of large cities and their suburbs, at the end of 2021, mln people

Groups of large cities	Large cities and their suburbs, total	Large cities	Suburbs		
			near	middle	far
Total	94.5	67.6	11.8	4.0	11.1
Moscow	20.4	12.1	3.2	2.4	2.7
St. Petersburg	6.9	4.7	1.3	0.5	0.4
Cities with a population of 750000 to 1.6 mln people	23.8	17.0	2.7	1.1	3.0
500000–749000 people	12.2	9.9	1.6	...	0.7
250000–499000 people	18.0	13.9	2.0	...	2.1
100000–249000 people	13.2	10.0	1.0	...	2.2

Compiled by the authors.

Table 2. Migration between centers and their suburbs, 2011–2020, average per year, thous. people

Groups of large cities	Centers, total	Suburbs		
		near	middle	far
Migration turnover, total	468.6	261.7	57.1	149.8
Moscow	107.5	62.9	23.8	20.8
St. Petersburg	42.2	25.2	9.1	7.9
Cities with a population of 750000 to 1.6 mln people	125.1	51.3	24.2	49.6
500000–749000 people	58.3	41.6	...	16.7
250000–499000 people	90.3	61.2	...	29.1
100000–249000 people	45.2	19.5	...	25.7
Migration increase, total	–49.3	–51.4	–4.7	6.8
Moscow	–0.4	–4.3	–0.3	4.2
St. Petersburg	–8.7	–8.2	–0.5	0.0
Cities with a population of 750000 to 1.6 mln people	–20.2	–17.2	–3.9	0.9
500000–749000 people	–11.6	–11.1	...	–0.5
250000–499000 people	–7.5	–8.7	...	1.2
100000–249000 people	–0.9	–1.9	...	1.0

Calculated by the authors.

In general, suburbs draw population away from large cities of all sizes, but to a greater extent, from the largest ones.

Parameters of migration increase in *Moscow* are unusually small for a city of its size. Some outflow of population from *Moscow* occurs to the near suburbs, which in turn is compensated by an influx from the far suburbs. In the suburbs of *Moscow*, it is more attractive to live closer to the city; those moving from *Moscow* to the suburbs note the proximity and convenience of transport infrastructure as the most important thing (Karachurina, 2022).

Yet, from the point of view of migration relations with its suburbs, *Moscow* appears to be an exception that contradicts logic: the flow of population from the country's largest metropolis to the suburbs appears to

be the most expected. Studies have repeatedly indicated that it was in *Moscow* that the history of suburbanization in Russia began (Makhrova, 2014; Makhrova et al., 2008). This is consistent with the logic of urban and agglomeration development models, according to which, suburbanization can be seen as the next stage of the general urbanization process (Klaassen and Scimeni, 1981). Suburbanization begins in those spatial centers, in which the standard of living and demands of the population are higher, and the organization of infrastructure in space allows a certain part of the population to live in more comfortable suburban conditions. In Eastern European countries, it also started with the capital cities, the most advanced centers (Brown and Schafft, 2002; Krisjane and Berzins, 2012; Ouředníček, 2007; Tammaru et al., 2004). Why does the data not reflect the

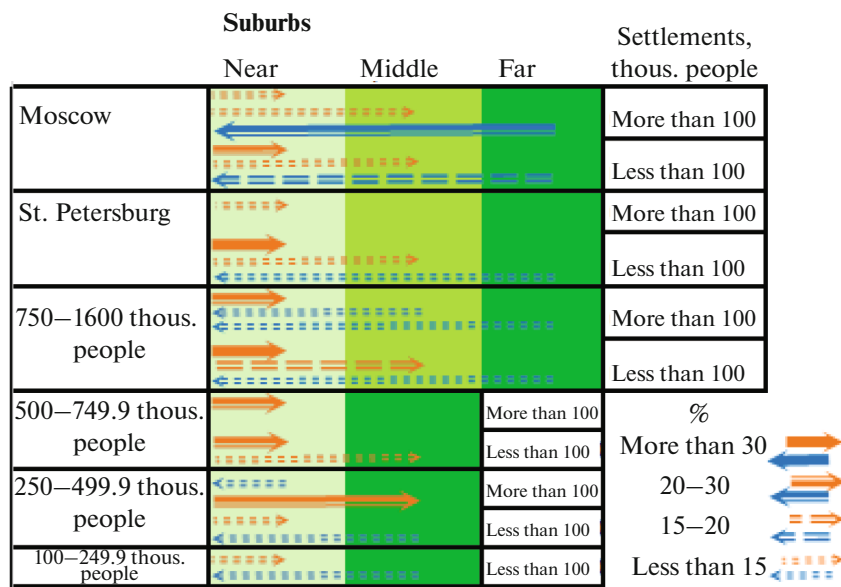


Fig. 2. Efficiency of migration between large cities of Russia and their suburbs, 2011–2020, %.
Compiled by the authors.

manifestations of suburbanization around Moscow? Apparently, we are dealing with a complex of reasons.

(1) After the abolition of the residence permit (its replacement with registration in 1995), there has been a long-term inertia, according to which the legal affiliation of “Muscovite” remains more desirable than “resident of Moscow oblast” and other regions bordering Moscow (far suburbs). This priority also has real grounds: Moscow has a better developed system of healthcare, social security, and other services than other regions of the country, and unimpeded access to them is associated with registration in Moscow. In this respect, the Russian system is somewhat reminiscent of the system *hukou* that is in force in China (Li et al., 2023; Yang and Guo, 2018). In the 2010s, Moscow’s attractiveness increased as a result of the authorities’ efforts to create a comfortable environment, in which significant investments were made.

(2) Living in the suburbs of Moscow, especially in the near ones, people often conduct all forms of activity (work, leisure, social services) in Moscow. The suburbs are seen by many as a place to sleep and are essentially the city’s dormitory districts.

(3) Moving out of Moscow to the suburbs may be largely invisible to statistics. The system of registration at the place of residence and stay provides little incentive for people to declare a change in their actual place of residence. When moving from Moscow to the suburbs, it is not necessary to change registration, and people, while retaining the opportunity to be registered in the capital, do not change it to registration in the suburbs. This is confirmed by studies based on data from mobile operators (Makhrova and Babkin, 2018): according to the calculations of these authors,

the population of Moscow is overestimated, and the population of Moscow oblast, primarily of the territories closest to Moscow, is underestimated, which is interpreted, among other things, as unaccounted migration from Moscow to the suburbs.

(4) Moving to the suburbs is often done on a seasonal basis, since many private residences are not suitable for year-round living. According to estimates, of the 3 mln suburban dachas of Muscovites, only slightly more than 0.5 mln in the mid-2015s were intended for year-round living (Makhrova and Kirillov, 2015). This concerns not only Moscow, but also other centers and their suburbs, however, the study of this issue is currently connected specifically with the Moscow region.

Outflow from *Saint Petersburg* to the suburbs is significantly more prominent. We believe that the development of several settlements in the areas closest to the city, such as Murino and Kudrovo, played a role here, where huge blocks of multi-story buildings arose in place of small rural settlements. Similar processes, but on a smaller scale, took place in *other large cities*. The general pattern of movement between the suburbs and the center is primarily a flow to the near suburbs. At the same time, the far suburbs have a migration balance close to zero with the centers.

As a result, there is high efficiency of migration between the centers and their near suburbs (Fig. 2). Only in cities with a population of 250 000–500 000 and 500 000–750 000 people, a highly effective population flow from large cities to distant suburbs was observed. Of the 25 migration directions examined (see Fig. 2), 16 are directed towards the suburbs and only 9 towards large cities; these flows are also characterized by lower efficiency.

Age-Related Features of Flow

For individual ages, the picture of the flow directions and its effectiveness differs significantly.

In *young ages*—finishing school and entering college or university (15–19 years old)—the flow of migration is clearly directed towards large cities, and the flow from them to the suburbs is greatly weakened. The most pronounced unidirectionality of flows in favor of the centers is at the ages of 16 and 18. This is a consequence of the highly centralized organization of the vocational education system, the institutions of which are concentrated in large cities, and, as studies show, it only increased in the 2010s (Gabdrakhmanov et al., 2022). Campuses and dormitories in small towns and suburbs, with rare exceptions, have not developed in Russia. Migration from the distant suburbs of largest cities to the centers is particularly effective, since, upon entering universities, young people have the opportunity to live in their dormitories, especially if their families live a long distance from the campuses.

At older ages (20–24, 25–39 years old) people move to the near suburbs, the outflow from the distant suburbs to the centers is somewhat weakened compared to the flow of students.

The most suburban-oriented are *families with children 0 years old*. This flow is highly efficient, including the flow from large cities to the far suburbs. Similar processes are noted by researchers in European countries (Kley and Drobnič, 2019; Kostelecky and Vobecky, 2009): Families with children are more likely than others to need spacious housing and a safe environment. However, families with older children, especially school-age children, are not moving to the suburbs as often as families with young children. At the same time, families with school-age children prefer the near suburbs. Such migration behavior in Russian conditions is also connected with the organization of the education system: in the suburbs, there is often a shortage of schools, especially good schools, which makes living there less comfortable for families with children. European studies indicate the general low affordability of housing in the city centers and high rental costs (Stawarz and Sander, 2020), low availability of affordable and relatively large housing (Booi et al., 2021) as one of the reasons for the move of young families, even without children, to the suburbs.

At older ages (40–49 years old), in *pre-retirement* and *“younger” retirement age* (50–64 years old), the flow from the centers spreads to the middle and far suburbs, and it becomes more unidirectional. This is a reflection of the great opportunities and desires of people at these ages to live closer to nature, without being tied down by daily trips to the city for work. Up until the very advanced age, 75 years and older, there is practically no flow from the suburbs towards the centers, with the exception of Moscow.

“Old” elderly are more likely to move from the suburbs to the city centers, but living in the near suburbs seems preferable to them. Apparently, as in other countries (Plane and Heins, 2003; Rogers and Watkins, 1987; van Diepen and Mulder, 2009), this is related to the need to live close to adult children for assistance. Young and old people are very actively moving from the suburbs to Moscow. This may be due to the capital’s supplements to pension payments (up to the level of the subsistence minimum in Moscow and up to the level of the city’s social standard), as well as access to other social benefits that are extended only to Moscow residents, provided that they have lived in the capital for at least 10 years in total.

Migration Between Large Cities—Centers and Other Cities in the Suburbs

We separately analyze the population flow between large cities—centers and large cities in their suburbs, as well as smaller settlements in the suburbs (Figs. 2 and 3). The division was based on the assumption that, on the one hand, large cities in the suburbs provide more opportunities for work and the use of educational services, health care, cultural and leisure institutions than small towns. On the other hand, suburbanization, the development of traditional suburbs, represented by low-rise housing, if it is present in the suburbs, is directed, on the contrary, towards small settlements. The calculations performed showed that there are no significant differences in the directions of flow for suburban settlements depending on their size. Perhaps it would have been worthwhile to distinguish more groups of suburban settlements by size. Small suburban communities can experience explosive growth and intense migration if large-scale housing construction is carried out on their territory. Such growth is possible if the initial population is small. For example, in the period under review 2011–2020, the population of the “famous” suburbs of St. Petersburg, and in fact its dormitory districts—Murino and Kudrovo—increased from 7000 and 100 to 89100 and 60800 residents, respectively. In large cities, such growth is impossible in the suburbs, since, as a rule, there are no large areas for new housing construction, just like in the centers themselves. There are no differences in preferences for moving to densely- and sparsely-populated suburbs among people of different ages. It turns out that these hypotheses were not confirmed. In suburbs, it is not the size of the settlement that matters, but its proximity or distance from the city around which they are formed.

DISCUSSION AND CONCLUSIONS

The concept of urban development and agglomeration development (Champion, 2001; Geyer and Kontuly, 1993; Klaassen and Scimeni, 1981) was created for a situation, if not of demographic growth,

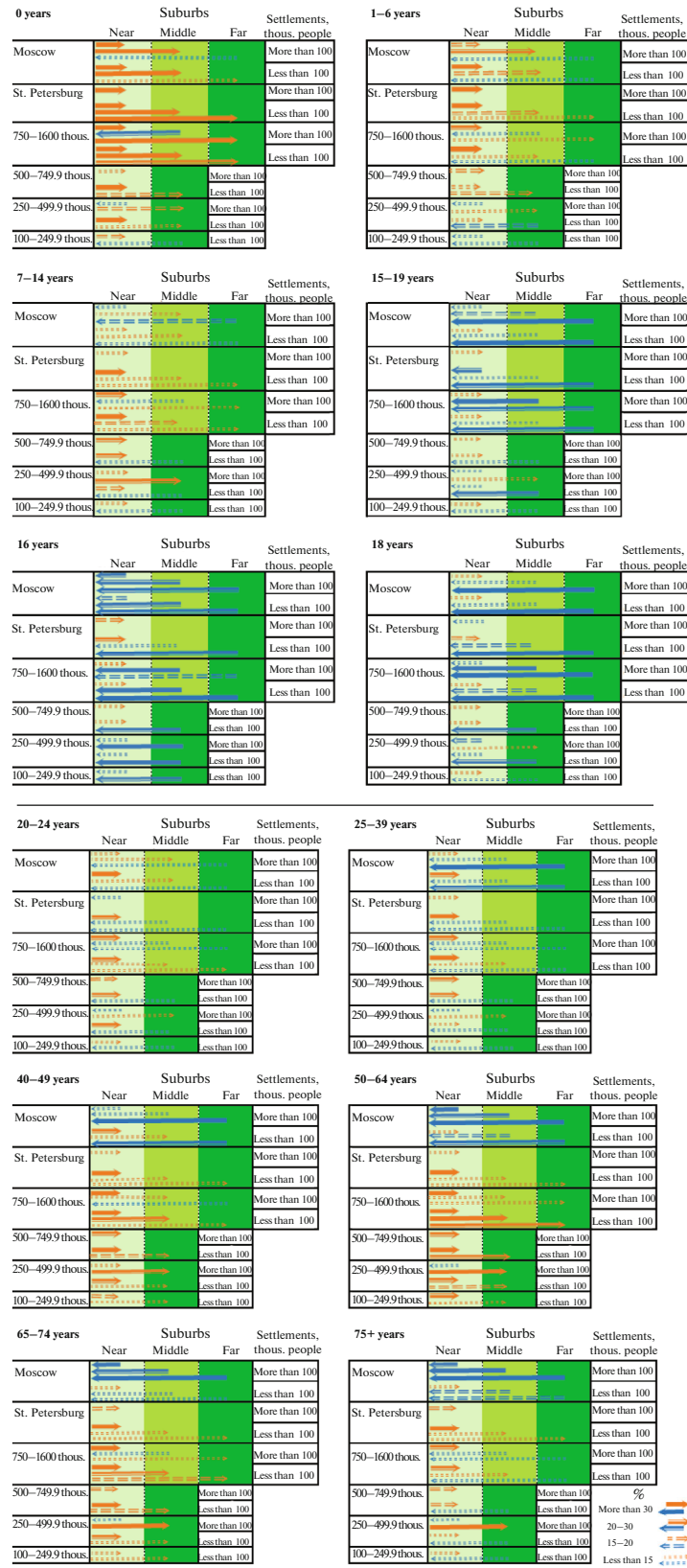


Fig. 3. Efficiency of migration between large cities and their suburbs by selected age groups, 2011–2020, %.
Note. The maximum number of horizontal arrows linking cities of a certain population with suburbs of more/less than 100000 people is three (with near, middle, and far suburbs). The absence of an arrow means there are no middle or far suburbs of that size.
Compiled by authors.

then of stability in the overall demographic dynamics, which does not correspond to the current demographic situation in many European countries and in Russia. In this sense, it is now even more difficult to talk about the correspondence of the identified migration dynamics to the stages of the models. Some foreign researchers demonstrate this by showing the contradictory assessments and the pendulum between stages occurring in just a few years in one country (Stawarz and Sander, 2020). The calculations we have performed do not assess the dynamics of the ongoing processes for at least a couple of intercensal periods, since there is no data for such calculations. Therefore, it is not entirely correct to talk about long-term changes in the ratio of indicators between the centers and suburbs and to look for any precise correspondence to the stages of the models. However, we think it is important to emphasize that the calculations made on migration between large Russian cities and their suburbs indicate that—without taking into account intra-country differences—Russia is at the suburbanization stage of the model (Klaassen and Scimeni, 1981).

The flow of population between the centers and suburbs in Russia is carried out primarily in favor of the near suburbs, directly bordering the territory of large cities—centers. This situation may be associated with expansion of cities, when urban development extends beyond the administrative boundaries of the city (often called urban sprawl in Russia⁵) (Dokhov and Sinitsyn, 2020)); with a preference for living in close proximity to the city to save costs associated with regular trips; with financial difficulties in solving housing problems in the centers. In other words, the migration attractiveness of such suburbs, moving to them is determined not by the preference for living in a classic suburb, but as an economically accessible alternative to living in a large city. The middle and, to an even greater extent, the far suburbs do not have such advantages for living, although they can provide an even cheaper alternative to purchasing (renting) housing.

The attractiveness of the near suburbs is universal for the population of cities of different sizes; it is characteristic of both cities with a population of over a million and cities with a population of just over 100 000 people. In this paper, we initially assumed (and based on this, made calculations) that the boundaries of different types of suburbs depend on the size of the center. On the one hand, we acted objectively, in accordance with the patterns observed by us and other researchers. On the other hand, the costs of

travel from the far suburbs of cities with populations of 100 000–250 000 people do not correspond to the costs incurred on travel from the far suburbs of Moscow or St. Petersburg to the city centers due to the significantly greater remoteness of the latter. This may make comparisons between far and near suburbs less valid. Similarly, it can be assumed that the boundaries of the suburbs of Moscow and St. Petersburg, due to their different populations, also cannot be distinguished as equal. However, the general rule—the significantly greater attractiveness of the near suburbs compared to others—applies even taking these restrictions into account.

At the same time, we are seeing a greater attraction for families with newborn children and people of pre-retirement and retirement age to move to the far suburbs. These population groups, on the one hand, may be less dependent than others on regular work or other trips to large cities (in the case of families with children, one member of the household may be on parental leave). In addition, for these categories of the population, living in an ecologically clean environment, which can be provided primarily by areas sufficiently remote from large cities, may be more in demand. Another possible reason is financial considerations and the additional benefits that come from living in the far suburbs. These issues require further study, in this article we only point them out.

As in the case of migration between centers and peripheries or large cities and small towns far removed from them, the group of the population most focused on large cities is young people of school-leaving and university-entering age (15–19 years). In Russia, unlike many countries, admission to universities occurs immediately after completing high school (18 years), the process of educational choice rarely extends over several years, and socio-demographic behavior is highly standardized (Mitrofanova and Artamonova, 2018). Therefore, at this age, about 80% of the reasons for migration are related to obtaining education. Already in the next age group—20–24 years—educational reasons are not so clearly dominant. At the same time, some variations in migratory behavior appear. Flows at this age are also directed towards the center, although living in the near suburbs is also possible. It may involve daily commuting for work or less regular trips to the city to complete studies, making city living important but not essential, but implying proximity to it.

We note that, in relation to Russia, when analyzing migration at different stages of the life course, there is no clear direction in the migration flow between large cities and their suburbs. In this sense, the Russian case is characterized by the same patterns that are observed in other countries—suburbs attract families with small children, children—school graduates definitely choose the centers, adults who let their children move to the centers demonstrate different options for migration

⁵ In foreign studies, by urban sprawl is meant a more precisely defined process that is associated with a decrease in population density and employment from the city center to the periphery, accompanied by decentralization of the core and changes in land use on the periphery (Galster et al., 2001; Lopez and Hynes, 2003; Schmidt et al., 2015).

behavior, young and old people are quite willing to move to the suburbs, and not necessarily near ones, old elderly people return back or to their adult children. Despite the later start of suburbanization and the formation of the middle class, and a certain latency in migration between large cities and their suburbs, it follows the logic observed in other countries.

Our findings are, of course, subject to a number of limitations related to the chosen methodology: we essentially define suburbs as homogeneous, differing only in their distance from the center. In reality, they are heterogeneous and differ not only in distance, but also in density, type of housing, population structure, etc. Within the near suburbs, there may be those growing and receiving net growth, but there may also be those where the opposite processes are occurring. The same is true for the far suburbs. The use of a single distance criterion for Moscow and St. Petersburg and, in general, a unified system of criteria depending on the population of cities may also raise questions.

Overall, since “demographic change underlies much of the logic of [housing]⁶ mobility” (Clark and Huang, 2003, p. 335), the very reduction of all variations of what happens in the lives of different people to a certain scheme now seems (after hundreds of studies carried out) somewhat naive to foreign researchers (Stockdale and Catney, 2014). However, in Russia, studies that have shown the event–biographical logic of migration with a projection onto space are rare; the current study opens the door to this topic.

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CONFLICT OF INTEREST

The authors of this work declare that they have no conflicts of interest.

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⁶ In Western and Northern European countries, by housing mobility is meant virtually all types of mobility.

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