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THE SPATIAL AND NATIONALITY ASPECTS OF DEPOPULATION IN THE EUROPEAN PART OF THE RUSSIAN FEDERATION

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Abstract

The paper introduces the results of a statistical analysis of two components of depopulation, movement through migration and the natural growth of population in the European part of the Russian Federation during the period 1990-2010. The analysis also involves a breakdown by nationality, which is seen to be a driver of quantitative change. A typology analysis is presented with consideration given to trends to demographic growth or decline. The outcome of an analysis via Webb's typology indicates that depopulation occurs due to natural decline with an increasing role of migration as a driver of depopulation.

Key words

depopulation • natural growth and decline • migration • nationalities and ethnic relations • Webb's typology • Russian Federation

Introduction

At a time when the world's population is increasing, the opposite trend is observed in certain countries of both the developed and developing world as national and regional demographic potentials shrink. Causes of depopulation tend to be complex, but they typically involve: (1) economic factors of both a macro-scale, i.e. national economic development, and micro-scale involving individual decisions of people weighing the costs and benefits of migration to improve their material position and the standard of living (Eberhardt 1989; Massey et al. 1993; Bayona-i-Carrasco & Gil-Alonso 2013); (2) social factors, including changes in the realm of social norms and value systems; (3) spatial factors, e.g. the place of residence at the centre vs. periphery and town vs. countryside, as well as the degree of access to social infrastructure; and (4) administrative factors, such as the elimination of formal barriers limiting mobility. This selection of factors is dictated by

a neoclassical theory of migration whereby migration is a necessary process between economically highly different areas (Lewis 1954). Such differences lead to international differences in the levels of income that determine migratory movements (Todaro 1976) as one of two components of depopulation. Migratory decisions are also influenced by a number of complex conditions occurring both at the place of residence and in the potential target area (push and pull factors Lee (1966), including specifically the level of unemployment, education, family and social bonds and individual migratory behaviour[1] (see: migratory behavioural theories, such as Woods 1982). At the regional scale, historical circumstances may also contribute to a demographic decline. Current migratory movements in Russia are also influenced by historical decisions taken at the time of a centrally planned economy and by the policy of development in peripheral areas (Russian North). According to some researchers, the depopulating peripheral areas of Russia are indeed overpopulated (e.g. Heleniak 2003; Spies 2009) which results in the scale of the migratory outflow. The quality of the natural environment can also contribute to depopulation (Burke 2000), especially in areas subjected to intensive human impact, such as the town of Norilsk.

The second component of depopulation processes is a natural change in the population. The demographic changes observed in the Russian Federation are typical of the second demographic transition, which involves changes to the family model, social norms and value system (van de Kaa 1987) that have an influence on reproductive behaviour. As value systems vary between cultural and religious circles it may be argued that the demographic change in the study area is determined by the nationality composition of the territorial units analysed. Indeed, adverse demographic processes seem to be linked to large proportions of ethnic Russians in the overall composition of a given region and are counterbalanced by a non-Slavic population component, which tends to be in a better demographic condition.

Depopulation processes in the European part of the Russian Federation[2] may lack the pace observed in the Asian part of the country, but have a longer history (Bogdanova et al. 2001; Terenina 2004). Indeed, between 1990 and 2010 European part of Russia lost more than one million people (1.0%) while the Asian part of the Russian Federation lost more than 4.3 millions (10.3%). This disproportionate rate of depopulation in Siberia and in the Russian Far East has contributed to a shift of researchers' focus away from the processes occurring in the European part of the country. However, bringing the spotlight back to this area seems important if only because European part of Russia is a target for migrations (both domestic and international), its demographic processes display a high degree of spatial variability and the population change is bipolarised. For these reasons a study of these processes in the European part of Russia may prove very useful.

This attempt to capture depopulation processes in the European part of the Russian Federation has two main objectives:

- to investigate spatial dependencies between the rate of depopulation and the nationality breakdown in the regions;
- and to identify the main drivers responsible for the rate of this process at the regional scale.

The paper uses official data from the Russian Federal State Statistics Service (*Federalnaya sluzhba gosudarstvennoy statistiki*) from general censuses and current records kept in the period 1990-2010, which is also the core study period. For the population change analysis by nationality the authors used census data from 1989, 2002 and 2010.

[1] This individual variability between migrants means that different migratory decisions may be taken in identical circumstances (Massey et al. 1993).

[2] The regional-scale analysis includes the European part of Russia with its administrative units grouped into five federal districts: Northwestern, Central, Southern, North-Caucasian and the Volga District.

Demographic changes in the European part of Russia

According to the 1989 census, the last general census of the Soviet Union era, the European regions of Russia had a population of 85.0 million (Fig. 1). By the time of the next census in 2002, this population increased by more than 736.6 thousand. A closer analysis of the quantitative change suggests a great variability in the rates of depopulation depending on nationality. The number of Russians dropped by 2.28 millions despite large numbers of Russians immigrating from the recently independent former Soviet republics. During the same period, the population of other national groups increased by more than 3.0 million. These values illustrate a deep demographic crisis of the ethnic Russian population. Between 2002 and 2010, when another census was held, there were further significant quantitative changes, as the overall population in the European regions of the Russian Federation dropped by nearly 5.2 million. More than 55% of this reduction was due to the drop in the ethnic Russian population. This time, however, other nationalities were also affected, except nationalities originating in the Caucasus Mountains and certain titular nations (e.g. Mordvins & Kalmyks). Across the entire study period, there has been a reduction in the ethnic Russian population and an increase in other nationalities.

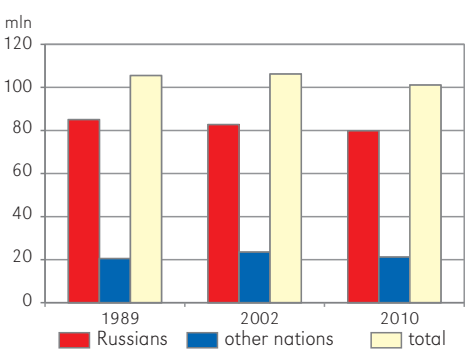

Figure 1. Population changes by nationalities in the European part of the Russia

Source: Figures from 1 to 10 and Table 1 are based on the Russian Federal Statistics Service data.

The European part of Russia accounts for nearly 75% of Russia's population and this proportion has been steadily increasing (from 71.7% in 1990 to 73.7% in 2010). At the same time, the proportion of ethnic Russians in that part of the country has been falling (from 80.6% in 1989 to 79.0% in 2010). The more other nationalities are represented in the population of a given region, the stronger is this trend, especially in the titular national republics.

The decrease in the population of European part of Russia is explained by the natural decrease observed since 1993 (Fig. 2). After the break-up of the Soviet Union, the birth rate fell dramatically while the mortality rate increased. Between 1990 and 2000, the natural population growth rate dropped from 1.2‰ to -7.2‰. Within the same period, the marriages' indicator dropped (from 8.9/1000 inhabitants in 1990 to 6.1/1000 in 2000), while the number of divorces rose (from 3.7/100 inhabitants in 1990 to 4.2/1000 inhabitants in 2000). Demographic growth is not helped by high rates of abortion (4.1 million abortions in 1990 and 1.1 million in 2010), which is regarded in Russia as the main method of birth control. Indeed, at 67 abortions per 100 births. Russia remains the regional leader by a significant margin when compared with 31/100 in Belarus and 36/100 in the Ukraine (all in 2010) (Fig. 3) (Sakevich 2003; Denisov et al. 2012). This figure, however, is a considerable improvement on the 170 abortions per 100 births recorded in the early 21st century, when the total fertility rate was below the replacement fertility level (Fig. 4).

After the deep demographic crisis of the first decade of the 21st century, the rate of decline of the Russian population slowed down. It is difficult to determine at this stage to what extent this effect, comprising a decrease in the negative rate of natural growth and a minor increase in immigration, is a result of such effects as demographic gaps and booms or a change in the standard of living in the Russian Federation.

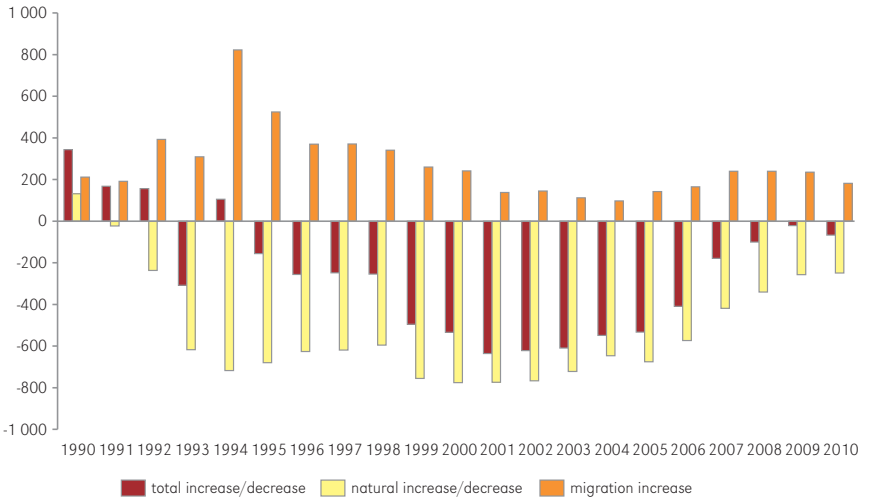

Figure 2. Components of total population size changes in the European part of Russia (in thousands)

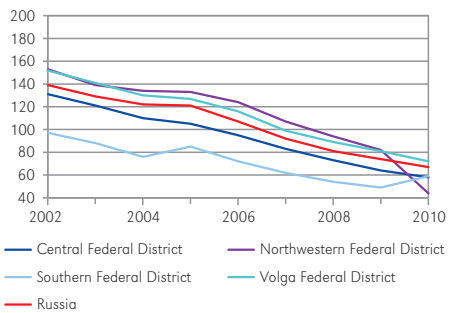

Figure 3. Number of abortions per 100 births by federal districts[a] of the European part of Russia[b]

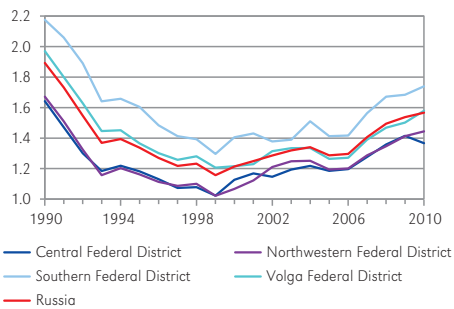

Figure 4. Total fertility rate by federal districts of the European part of Russia

[a] In 2009, a North-Caucasian Federal District was carved out of the Southern Federal District. On Figures 3 and 4 the 2010 data from the two units was aggregated.

[b] The selection of the period (2000-2010) was determined by the availability of statistical data.

Regional breakdown of demographic change including the national component

The overall change in the population between 1990 and 2010 in the European part of Russia fails to fully reflect the quantitative change seen at the regional level. The demographic potential of many administrative units fell by more than 20% (Fig. 5) while the average for European part of Russia was -4.8%. The most spectacular growth was recorded in the Caucasian republics and in the city of Moscow. In the Caucasus this was a result of a high natural growth rate, while in Moscow the increase in population came from migration.

The rate of change in the population across the study area follows a zonal pattern from the strongly depopulating northern regions to a high rate of demographic increase in the Caucasus Mountains with some islands of exception in between. The central section of the area is an interesting case due to the impact of the bipolar Moscow-St. Petersburg system.

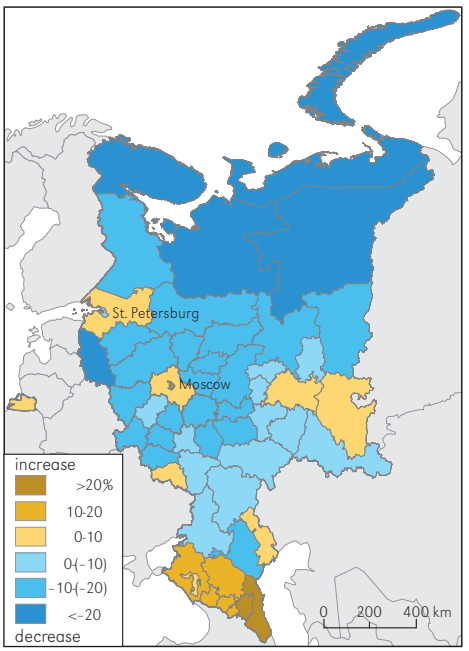

Figure 5. Percentage changes in the population in 1990-2010

This spatial illustration of the population change in administrative units reflects the demographics of individual national groups. Between 1989 and 2010, the greatest increase in population, by nearly 575 thousand, occurred in the Armenian community (Fig. 6) concentrated predominantly in the Southern Federal District (mainly in Krasnodar Krai). During the same period, high rates of increase were observed among the national groups in the Caucasus Mountains despite the region's political instability. This has led to decreasing shares of ethnic Russians in the national structures at the regional level, which was particularly strong in titular republics with high rates of population growth (Tab. 1).

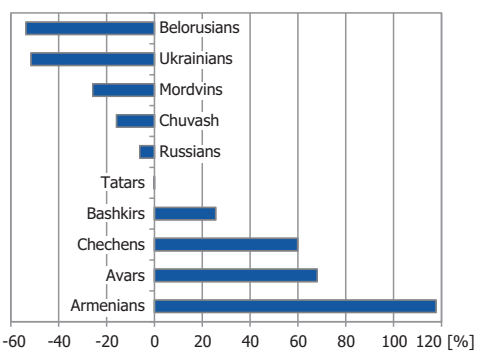

Figure 6. Percentage changes in the population in the 10 most populous nationalities in European part of Russia (1989-2010)

The migration component of depopulation in a regional breakdown

There are two distinct factors influencing the current patterns of migratory behaviour in the Russian Federation: the current economic changes and institutional decisions taken in the Soviet Union.

In terms of external migrations, an important role is played by networks linking Russia and the former Soviet republics, which determine the rate and scale of the migration process and influence the development of individual migration networks. Other linking factors include culture, primarily involving Belarus and the Ukraine, and language. For this reason, the main source area for migrations into Russia is the post-Soviet area, especially Central Asia. In the years before 2012 Russia's migration policy ignored a need to compensate for the effects of the demographic crisis in various areas of the economy. It even led to a deepening of existing adverse phenomena, such as the fuelling of the grey zone with immigrants finding work, for example, in the little-regulated open-air markets. The new policy, introduced by President Putin in June 2012, presents immigration as a positive phenomenon that is desirable for the labour market and in the light of the depopulation of the Russian Federation. The policy introduces a range of improvements for foreigners, including registration with the authorities, employment and obtaining Russian citizenship (FMS 2012). Any impact of this policy will depend on how it is implemented in this very corrupt country.

Table 1. Population change in selected titular republics

Administrative unit/ nationalities	Depopulation by nationality (1989-2010) [%]	Share of population in the administrative unit [%]		
		1989	2002	2010
Republic of Kalmykia				
Kalmyk	–	45.4	53.3	57.4
Russians	60.7	37.7	33.6	30.2
Dargwa	9.0	4.0	2.5	2.7
Chechens	8.5	2.6	2.0	1.2
Kazakhs	2.3	1.9	1.7	1.7
Turkish	–	0.0	1.1	1.3
Other nationalities	19.5	8.4	5.8	5.5
Republic of Bashkortostan				
Russians	41.7	39.3	36.4	36.1
Bashkirs	–	21.9	29.8	29.5
Tatars	40.2	28.4	24.2	25.4
Chuvash	4.0	3.0	2.9	2.7
Mari	0.8	2.7	2.6	2.6
Ukrainians	12.7	1.9	1.3	1.0
Other nationalities	0.6	2.8	2.8	2.7
Mari El Republic				
Russians	48.4	47.4	47.6	47.4
Mari	38.5	43.3	43.1	43.9
Tatars	6.3	5.9	6.0	5.8
Chuvash	3.4	1.2	1.0	0.9
Other nationalities	3.4	2.2	2.3	2.0
Republic of Mordovia				
Russians	93.9	60.9	61.1	53.4
Mordvins	–	32.5	32.1	40.1
Tatars	2.6	4.9	5.2	5.2
Other nationalities	3.5	1.7	1.6	1.4
Republic of Tatarstan				
Tatars	–	48.5	52.9	53.2
Russians	68.2	43.3	39.5	39.7
Chuvash	16.6	3.7	3.3	3.1
Other nationalities	15.2	4.5	4.2	4.0
Udmurt Republic				
Russians	23.5	58.9	60.2	62.2
Udmurts	61.8	30.9	29.4	28.0
Tatars	8.4	6.9	7.0	6.7
Other nationalities	6.3	3.3	3.4	3.0
Chuvash Republic				
Chuvash	68.5	67.8	67.9	67.7
Russians	25.2	26.7	26.6	26.9
Tatars	1.1	2.7	2.8	2.8
Mordvins	4.2	1.3	1.2	1.1
Other nationalities	1.0	1.5	1.5	1.5
Republic of Adygea				
Russians	74.4	68.0	64.6	63.6
Adyghs	–	22.1	24.3	25.2
Armenians	–	2.4	3.5	3.7
Ukrainians	25.6	3.2	2.1	1.4
Other nationalities	–	4.3	5.5	6.1

The rate of immigration into the Russian Federation was declining steadily throughout the 1990s and bottomed out in the middle of the first decade of the 21st century when the official migration balance hovered just above 40 thousand per annum (2003 and 2004).

The main internal streams of migration have led from Siberia and the Russian Far East (i.e. economically underdeveloped areas) into central Russia and have been dubbed in Russian literature the "westerly migration drift" (Vishnevskiy 2007; Mkrtchyan 2009; FMS 2012). In 2010, nearly 70% of the officially registered immigration went to the European regions of Russia peaking in the Central Federal District at more than 26% of the total. Moscow and its district accounted for nearly 13% of overall immigration illustrating the strong centralisation of the phenomenon.

In the European part of Russia the only cases of a negative migration balance were observed in some Caucasian republics (Fig. 7), where it can be explained by warfare in Chechnya and a resulting instability across the region, and in the far-north, where the fluctuating population outflow corresponded with major events in the economy, such as during the break-up of the Soviet Union in the early 1990s and the financial crisis of 1998. Centres of economic growth and large labour markets, whether federal cities or regions, have been attracting the largest numbers of immigrants and saw relatively little emigration.

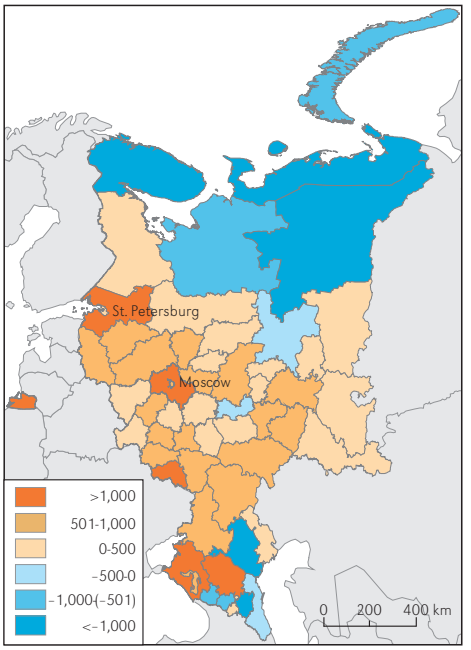

Figure 7. Average migration balance per 10 thousand inhabitants (1990-2010)

The natural growth component of depopulation in a regional breakdown

In the European part of Russia the first evidence of a natural decline in the population was observed in 1991 at a time of fundamental geopolitical change. This shows that demographic and social change in Russia had not started with the break-up of the Soviet Union, but only accelerated processes that had already existed (Vishnevskiy 2010).

The demographic change, a result of a long accumulation of socio-economic problems, involved both falling birth rates (from 13.0‰ in 1990 to 8.3‰ in 2000) and growing mortality (from 11.8‰ in 1990 to 15.5‰ in 2000), both of which together constituted a direct cause of the demographic decline (Kuznetsov & Rybakovskiy 2005). Since 2006, there has been a significant reverse of trends with a considerable growth of the birth rate (to 12.0‰ in 2010) and a slight decrease in the mortality rate (14.4‰ in 2010). The growth of the birth rate can primarily be explained by the entry into reproductive age of the baby-boomers of the 1980s. Perhaps a role was also played by the implementation of the demographic growth policy and, subsequently, of the Russian Federation's demographic policy[3]. These documents involved a range

[3] In 2001, Russia adopted a plan for demographic development of the Russian Federation until 2015 and in 2007 the country adopted the Russian Federation's demographic policy until 2025.

of solutions intended to increase the fertility rate and material support for families[4].

The net natural growth ratios are spatially highly variable, which is largely due to the varied nationality structures in the respective administrative units. (Generally, the greater the component of titular nationalities in a population, the higher the natural growth or lesser the natural decline).

A central Russian (or more broadly Slavic) core in the centre of the study area is characterised by a significant natural decline in the population, while hot spots of dynamic natural growth are found in the Eastern Caucasus Mountains (Fig. 8). To the east of the core area there is a transitional area consisting largely of the titular republics. In their case, the large natural decline among Slavic nations is compensated to a high extent by high natural growth among the titular nations.

Typology of change in demographic potential over the period 1990-2010

An application of a typological and spatial framework to population change allows the territorial variability of demographic structures to be identified. For this purpose the authors selected a typology proposed by Webb (1963), which defined relationships between the natural change and migratory change components of population change. Application of this typology did not simply allow the population status in a given year to be determined, but it also enabled longer-term demographic trends (1990-2010) to be identified.

In 1990, a majority of the units in this study showed a growth in population (types A, B, C, D, including the whole Russian Federation as type C), which was primarily accounted for by high natural growth (Fig. 9A). Cases with net depopulation were found not just in the peripheries, but most importantly also in the Central Federal District, a relatively economically prosperous area with a dominance of the Russian ethnos. The overall decline in population was mainly the result of a negative natural growth (i.e. decline), which was much greater than the migratory inflow.

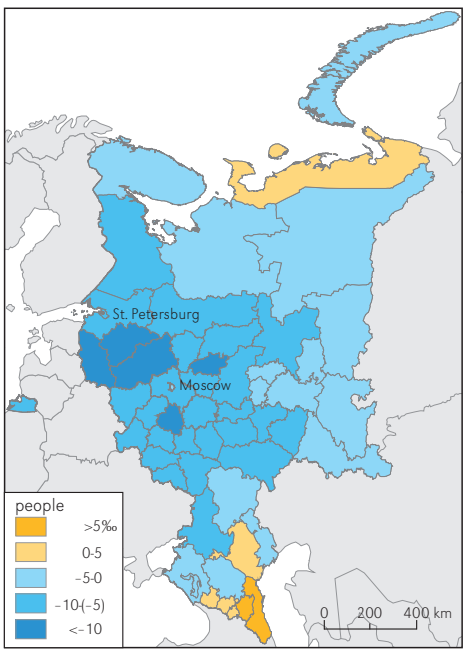

Figure 8. Average natural growth or decline in 1990-2010

The subsequent decade brought a huge demographic transformation. Russia has changed from a country with a relatively high rate of population growth (by nearly 800 thousand in 1990 and 343.1 thousand in European part of Russia) into one affected by strong depopulation processes (a real decline in the number of inhabitants of more than 700 thousand in 2000, including 534.2 thousand in European part of Russia), which are observed in nearly all administrative units of the study area (Fig. 9B). The negative change was primarily accounted for by a high rate of natural decline, mainly

[4] In 2007, Russia adopted a system of material support for families with children based on the Maternity (Family) Capital Law. The state pays a one-off benefit of 343,378 roubles, or ca. 8200 euros, for each second and subsequent child born to a family (Pension fund of the Russian Federation, http://www.pfrf.ru/family_capital/).

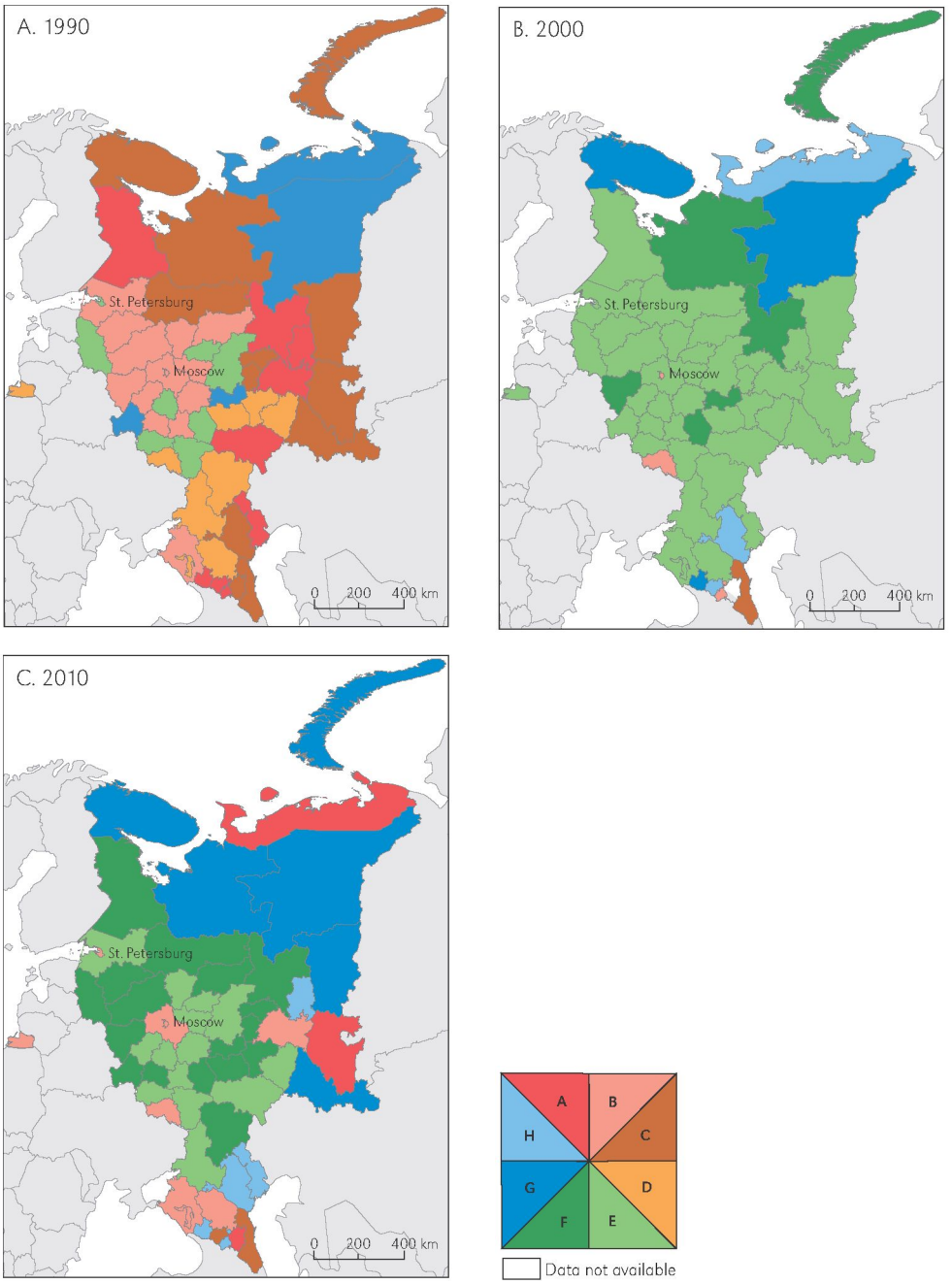

Figure 9. Webb's typology of European part of Russia

Table 2. Changes in Webb's types in 1990-2010

Type no.	Type name	Description	Units per type	Spatial, national and economic profile
I	Growth	Depletion of population at the onset of the period (E, F, G, H) followed by an increase (A, B, C, D), e.g. E → A	2	• Peripheral areas with unfavourable environmental conditions • Large cities • Good economic condition
II	Depopulating	Growth of population at the onset of the period (A, B, C, D) followed by depletion (E, F, G, H), e.g. D → H	31	• Russian domination in nationality structure • Peripheral and central location • Spatial impact of poles of growth
III	Stagnant with growth tendency	1. No change in types describing real population growth (A, B, C, D), e.g. A → A 2. Change occurred in types describing real population growth (A, B, C, D), e.g. A → B	12	• Large proportion of titular nations • Large cities – poles of economic growth • Peripheral areas with poor economic condition
IV	Stagnant with depopulating tendency	1. No change in types describing real population decline (E, F, G, H), e.g. E → E 2. Change occurred in types describing real population decline (E, F, G, H), e.g. E → F	10	• Predominantly central location • Russian domination in nationality structure

among Slavic nations, which exceeded migratory growth (type E) several times over (up to more than ten times in certain cases). Units representing types F and G – the Arkhangelsk Oblast[5] and the Murmansk Oblast as well as the Komi Republic) found themselves in the deepest demographic depression, as both of the components of demographic change were negative. Population growth was only recorded in four administrative units: Dagestan, due to a high rate of natural growth (type A), and Moscow, Belgorod Oblast and the North-Ossetian Republic – all three due to migration. Moscow and Belgorod Oblast may have attracted migration due to the strong economy of the country's capital (Moscow) and extensive and successful manufacturing and mining industries (Belgorod)[6].

According to the national census of 2010, Russia remains a country with a real population decline, but the rate of the process is not as high as before (population decline of 81.5 thousand, including 66.9 thousand in European Russia).

While the typology carried out for the year 2000 revealed an overall negative picture of the country's demographic situation, the latest census data suggest a mosaic nature of the depopulation problem (Fig. 9C). There was a considerable decrease in the migratory deficit and a positive balance of natural growth. Administrative units characterised by growing types of population fell into two groups. The first involved titular republics (mainly Caucasian) with high natural growth rates (primarily among non-Slavic nations)

[5] According to the Constitution of Russia of 2008, the Russian Federation is made up of 83 federal subjects (constituent entities). These are *inter alia* oblasts (provinces), republics, krais (territories), autonomous okrugs (districts) and federal cities.

[6] The real growth of the population in the Belgorod Oblast comes from the city itself and from its raion, which is the immediate administrative district, where the rate of population increase was very fast. The economy of the oblast and its attractiveness to potential migrants is tied to rich iron ores within the famous Kursk magnetic anomaly. The example of the Belgorod Oblast suggests that depopulation phenomena vary greatly at a local scale and this would call for further research to focus at this level.

that either far exceed any migration deficit or coincided with a positive migration balance. The other group (type D) includes areas that are mainly economically prosperous (Moscow (city and oblast), St. Petersburg, Kaliningrad Oblast, Belgorod Oblast and Krasnodar Krai, the last of them known for being the country's granary and for the extensive construction programme ahead of the 2014 Winter Olympic Games in the local town of Sochi).

The Webb typology analysis shows a gradual shift in the role of the depopulation components, especially during the last decade of the study period (2000-2010). While in 2000 the depopulation effect was due to natural decline in a majority of the administrative units affected, by 2010 migration outflow had gained in significance.

The various types were grouped to provide a generalised picture and identify trends in demographic change (Tab. 2).

The typology shows that only two administrative units of European Russia can be classified as belonging to growth type (I): St. Petersburg and the Nenets Autonomous Okrug (Fig. 10). In St. Petersburg this is a result of a positive net migration and in Nenets AO of natural growth that overcompensates a negative net migration.

All other units with a relatively good demographic condition (type III) fell into one of two groups. The first one grouped major poles of economic growth (Moscow city and oblasts, Leningrad, Belgorod and Kaliningrad oblast), while the second mainly comprised titular republics with their large proportion of non-Slavic nations. A third mixed grouping could be added to the two clear-cut ones, including the relatively economically prosperous Krasnodar Krai and Stavropol Krai, which also have a varied mix of nationalities, a condition demonstrated to have an impact on demographic change.

Negative demographic change affected a clear majority of the administrative units in the study (types II and IV). They presented a varied set of regions with different socio-economic situations, climates and environments, etc. Most of them either had a strong ethnic Russian majority or, in the case of the titular republics, the ethnic Russian component formed a majority or was large enough to determine the overall demographic outcome in these units. Indeed, positive demographic trends in titular nations were often sufficient to offset a real decline affecting the Slavic nationalities. A particularly difficult demographic situation was observed in units classified as type II where both of the demographic components were in the negative.

During the entire study period, most of the administrative units in European part of Russia were observed to rapidly transit from the growth type (I) to the depopulation type (II). In many of them the negative processes had already occurred at the beginning of the period and continued to develop throughout (type IV).

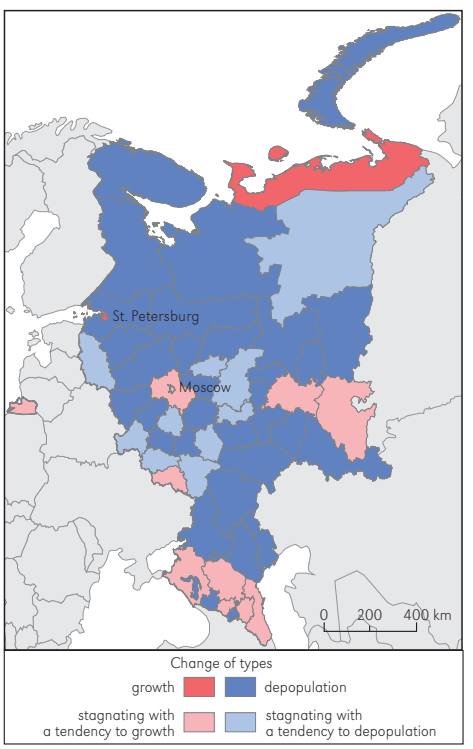

Figure 10. Change of Webb's types between 1990 and 2010

Conclusions

The depopulation processes observed in European part of Russia are highly variable spatially. While the demographic structures are strongly affected in some areas leading to a sustained depletion of their demographic potential, others experience dynamic population growth.

The depopulation processes observed are a result of a combination of factors, including net migration outflow, falling fertility rates and high abortion and mortality rates, which lead to a natural demographic decrease, which is the main driver of depopulation in European part of Russia. Adverse demographic processes primarily affect Slavic nationalities, while non-Slavic nationalities tend to increase in number, primarily due to their high rate of natural growth. In some titular republics this pattern leads to an overall population increase, while their internal nationality structures are affected with a shrinking proportion of ethnic Russians and other Slavic nations, mainly Ukrainians and Belarusians. Other titular republics also experience an overall population decline, which in most cases is explained by the same adverse trends among ethnic Russians, whose share of the local nationality mix is steadily reducing.

Migration is playing an increasingly important role in the depopulation process. It primarily affects administrative units with adverse climatic and environmental conditions, while the target areas include Moscow with its oblast, St. Petersburg and other large cities of European part of Russia.

The occurrence and rates of depopulation processes display a strong link with the local structure of nationalities, with their mentalities, world-views, attitudes and priorities (both individual and societal), which were established during the course of their historical development and which have an influence on reproductive behaviour. Indeed, those very few ethnically uniform Russian regions that recorded population growth owed it exclusively to high migration inflows that overcompensated for the natural population decline.

In Russia, depopulation not only affects peripheral areas, but also areas located centrally between poles of growth. In these latter areas the depopulation rates may be lower than in the former, but the processes started much earlier. This is explained by the closer proximity of migration targets offering economic and other types of opportunity for individuals. Poles of growth therefore have an adverse impact on change in the demographic structures of areas within their reach.

The analysis of the change in Webb's typology has shown that demographic change in European part of Russia continues to have an adverse character, as most of the units analysed displayed sustained depopulation trends. Only very few administrative units recorded demographic growth. There is also a structural shift between the drivers of these processes, as migration has an increased impact on the overall depopulation process.

A great deal of variation in the size of Russia's administrative units leads to a certain degree of analytical simplification. For this reason it would be desirable to conduct a demographic analysis at the raion level, which corresponds to a NUTS 4 analysis in the European Union. In this way depopulation could be studied at a local level by identifying depressed and growth regions. Besides spatial variability it would seem useful to also research depopulation in terms of the qualitative change of demographic structures.

Editors' note:
Unless otherwise stated, the sources of tables and figures are the author(s), on the basis of their own research.

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