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CORRELATION BETWEEN DEMOGRAPHIC PROCESSES AND CONSUMPTION OF SOCIALLY IMPORTANT SERVICES

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НАЧАЛО ТЕМЫ В ГС № 5 2016

Traditionally, socially important services involve such services as education, health and social protection, though transport, policing and housing and communal complex services are not less significant.

Let us consider the circuit diagram of correlation between consumers and services (Figure 1).

Such being the case, it is conventional to consider socio-economic and psychological aspects, the questions of "supply and demand". Regardless of the type of service it presupposes the existence of potential customers. Groups of "potential customers" may considerably vary in size, socio-economic and other characteristics.

Services should be potentially "in demand". It also depends on a number of conditions. If within a certain social group it is not accepted to send children to a day nursery, this service will not be in demand. Likewise children of primary school age don't need nurseries service.

If in a social group it is considered indecent to apply

to social protection institutions for the care of elderly parents, nursing home will not be in demand.

Services must be available, not only from an economic point of view. Services should be within walking distance or pedestrian and transport accessibility.

To estimate demand for socially important services it is necessary to differentiate such services to those guaranteed by the legislation and others that can be provided by government or municipal organizations and businesses.

To estimate the guaranteed volume of socially important services to potential consumers, it is necessary to define aggregative nomenclature of services, organizations that provide related services, and real estate listings held for the provision of corresponding services. Thus, it is possible to illustrate the crosslinks between demographic processes and urban planning activities on the examples of education, health, and social protection.

Fig. 2: Population change in the territory of the Russian Federation and by Federal Districts on the period from January 1, 2009 to January 1, 2015

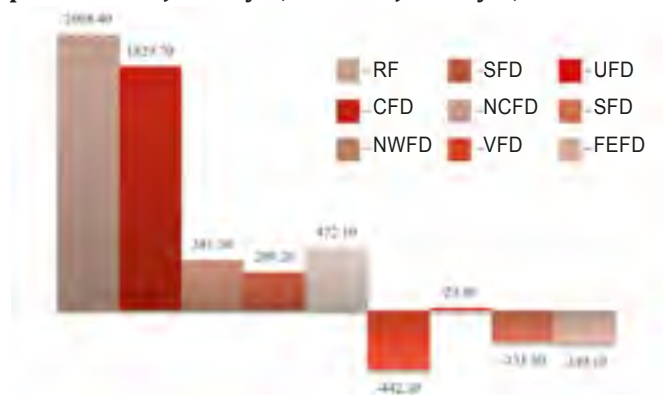
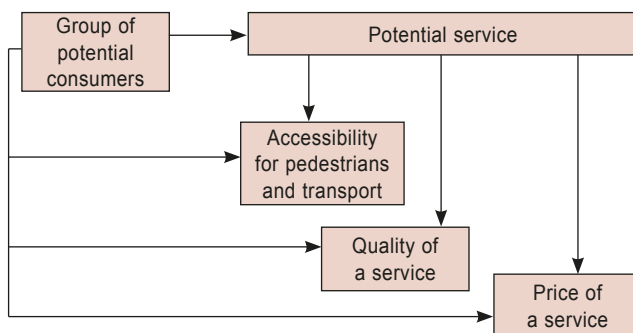


Fig. 1: Potential consumers – potential services correlation chart



ВЗАИМОСВЯЗЬ МЕЖДУ ДЕМОГРАФИЧЕСКИМИ ПРОЦЕССАМИ И ПОТРЕБЛЕНИЕМ СОЦИАЛЬНО-ЗНАЧИМЫХ УСЛУГ

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Аннотация: В статье анализируется взаимосвязь между демографическими процессами и потреблением социально-значимых услуг. Авторы рассматривают некоторые тенденции изменения численности населения России и их влияние на потребление социально-значимых услуг.

Ключевые слова: демографические процессы, изменения численности населения, социально-значимые услуги.

Fig. 3: Relative population growth in the period from January 1, 2009 to January 1, 2015



Fig. 4: Changes in urban and rural population (nationwide, ths. people)

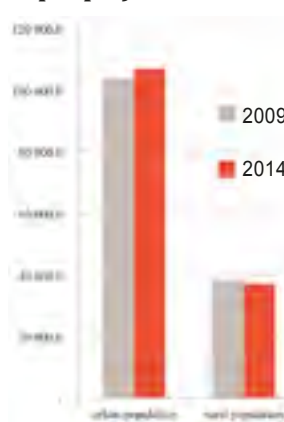
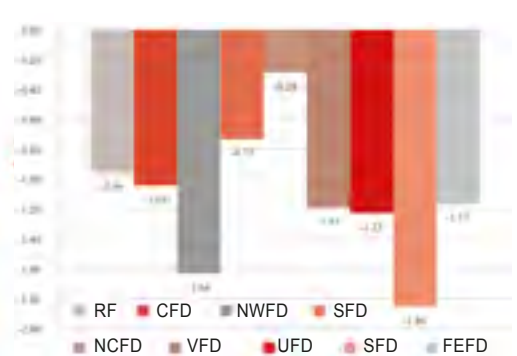


Fig. 5: Changes in rural population share in the period from January 1, 2009 to January 1, 2015, countrywide and by Federal Districts (%)



First and foremost, in order to determine the minimum amount of guaranteed services we need to estimate the number of potential consumers. Health Care is a comprehensive sphere of health services that in various extents is provided to all Russian citizens and foreigners staying in the country.

The analysis of statistical data of the Russian Federal State Statistics Service for 2009-2014¹ allows us to trace some population trends.

Figure 2 illustrates the results of analysis of the data characterizing population change in the period from January 1, 2009 to January 1, 2015. Population growth was more than two million people (2064 thousand), however, if we subtract the new federal district population (Crimean Federal District), the chart will demonstrate negative population growth, because as of January 1, 2015 the population of the Crimea was 2294.9 thousand people.

Changes in population by federal districts have occurred unevenly: population growth was observed in Central, North-Western, Southern and North Caucasus Federal Districts; in Urals Federal District population remained stable; in the Volga, Siberian and Far Eastern Federal Districts population has declined.

The intensity of the above-described processes was uneven.

Figure 3 illustrates the results of analysis of the data characterizing the relative population growth in the period from January 1, 2009 to January 1, 2015. The most significant population growth was observed in North Caucasus and Central Federal Districts. The most significant population decline has been registered in the Far Eastern Federal District.

Service delivery system largely depends on the system of settlement. Traditionally, the majority of socially significant services are provided in the settlements, in specially equipped buildings or premises. Outpatient care is provided at home, however, as a rule, there are some medical organizations with the appropriate equipment in the settlements.

¹ Russian Federal State Statistics Service data 2007-2015. See Demographic Annual Books of Russia, 2008-2014 (Statistics Digests). Moscow: Rosstat, 2009-2015.

Despite the differences in typification of settlements, population is traditionally divided into urban and rural.

The analysis of statistical data of the Federal State Statistics Service for 2009-2014² allows us to trace some of the trends in the number of urban and rural population. **Figure 4** illustrates the changes in the number of urban and rural population nationwide. Throughout the country, urban population is increasing and rural population is declining.

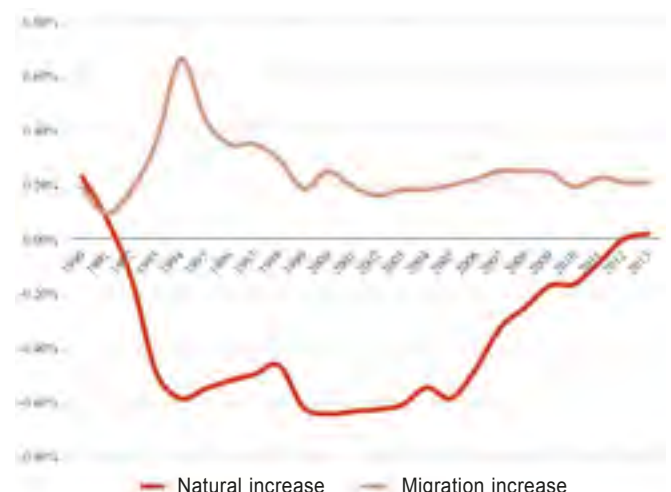
If we analyse changes in rural population share, the trend seems clear: the rural population share has reduced (**Figure 5**).

Maximum decline of the rural population share has been registered in Siberian and Northwest Federal Districts, minimum – in Far Eastern Federal District.

Changes in population and settlement structure indicate the influence of natural increase and migration.

The data released in the Demographic Yearbook of Russia 2015 (**Figure 6**) shows the dynamics of these processes in the past decade³.

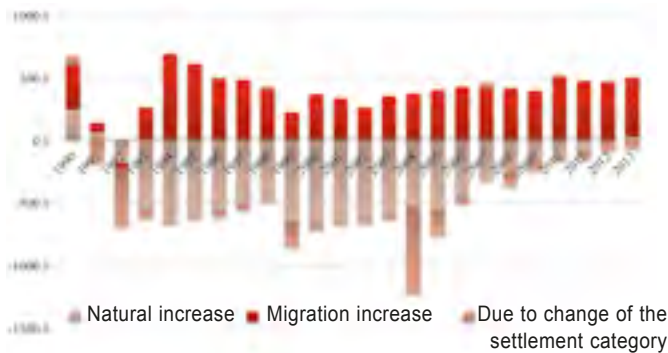
Fig. 6: Dynamics of natural growth and migration, countywide



² Ibid.

³ Demographic Yearbook of Russia. Moscow: Rosstat, 2015.

Fig. 7: Changes in demographic trend of urban population



Migration inside the country has a significant impact on demographic processes in federal districts and certain federal subjects. For example, in 2008 positive migration inflow was registered in all districts, except for the North Caucasus and the Far East⁴.

The most intensive migration inflow was registered in the cities of federal significance: Moscow and St. Petersburg, as well as in certain subjects of Central, Northwestern and Southern Federal Districts (Belgorod Region, Moscow Region, Leningrad Region, Republic of Adygeya, and the Krasnodar Territory).

The most intensive migration outflow was recorded in the following subjects: Komi Republic, Arkhangelsk Region, Murmansk Region, Republic of Kalmykia, Yamalo-Nenets Autonomous District, Republic of Tuva, Republic of Sakha (Yakutia), Kamchatka region, Magadan Region, Sakhalin Region, and Chukotka Autonomous District⁵.

Figure 7 illustrating the data published in the Demographic Yearbook of Russia (2015) displays a visible change in the trend of urban population⁶.

Between 1992 and 2011 there is a negative natural growth; in the period from 1992 to 2006 – a negative natural increase that is not offset by migration. Since 2007 migration rates remained relatively stable, and indicators of natural migration changed gradually (natural population decline has reduced). This led to the fact that in 2012 the decisive role in the urban population was played migration.

If we consider the same data, characterizing the rural population, the difference is clearly visible. Prior to 2000, the natural decline was in whole or in part compensated by migration (or statistically levelled out by settlement categories). From 2001 till 2012 there was a significant migration outflow and natural population decline has gradually reduced. Since 2012, migration from rural areas determines the population.

If we consider the data characterizing the settlements' population that have changed status (changes in urban (rural) population, occurred as a result of transformation of rural settlements into urban, or urban to rural, by deci-

Fig. 8: Changes in demographic trends of rural population

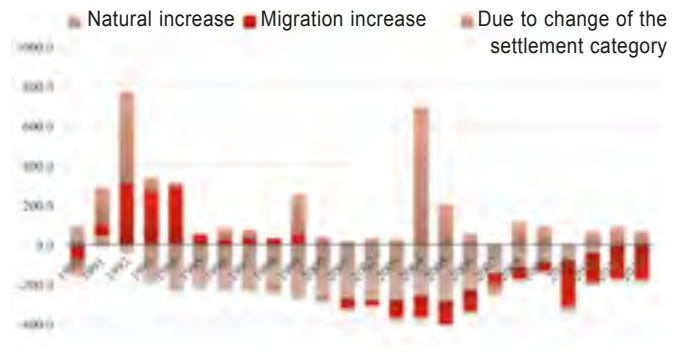


Fig. 9: Population changes resulting from transformation of settlements status (urban settlements that has received rural status, and vice versa)

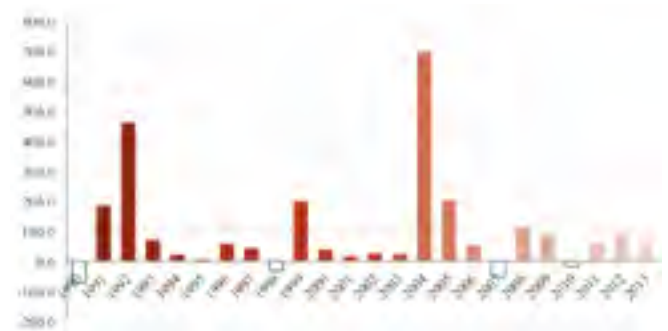
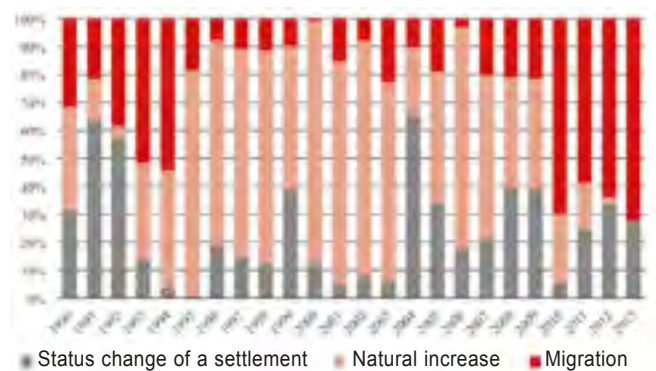


Fig. 10: Impact of demographic processes on rural population



sion of the authorities)⁷, we shall see that the majority of urban settlements have become rural.

This indicates that as a result of population decline, some localities has changed their status. The importance of this process for rural areas is comparable to the migration (Figure 10).

This might have a significant impact on volume, range, quality and accessibility of socially important services. Visible increase in the number of settlements with a relatively small population complicates the provision of equal conditions for socially important services. Consolidation of organizations providing socially important services reduces the availability of services for consumers.

Trends that characterise share and size of population

⁴ Russian Federal State Statistics Service data: Demographic Annual Book of Russia, 2008 (Statistics Digest). Moscow: Rosstat, 2009.

⁵ Ibid.

⁶ Demographic Yearbook of Russia. Moscow: Rosstat, 2015.

⁷ Ibid.

Fig. 11: Share of children at the age of 1-4 years in population structure

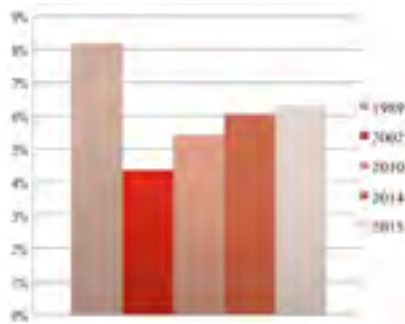


Fig. 12: Size of population of children at the age of 1-4 years

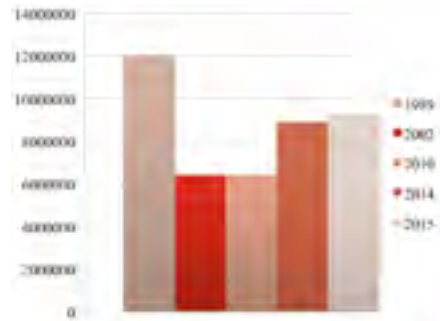


Fig. 13: Share of children at the age of 5-19 years in population structure



Fig. 14: Share of women of reproductive age in population structure

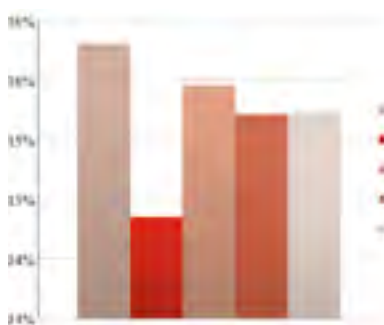
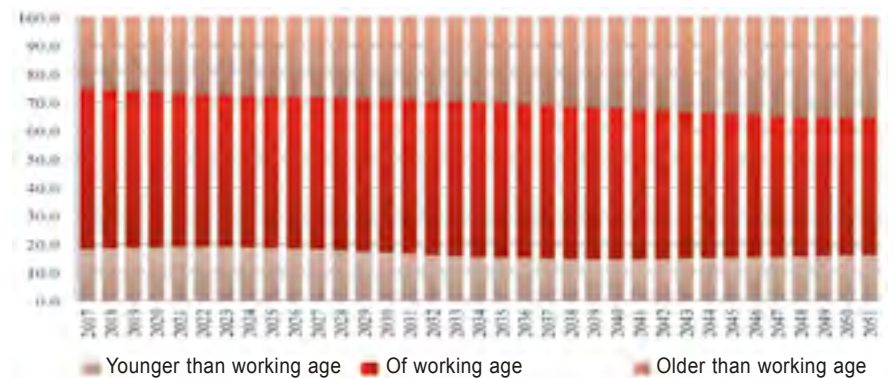


Fig. 15: Long-term forecast of population structure



of children at the age of 1-4 years⁸ determine a potential increase in demand for pre-school educational institutions (Figures 11, 12).

Between 1989 and 2002, the number of children in this age group has decreased by up to 90% (5.6 mln. people). Since then, the population has increased by 44%.

Trend changes in the older age group at the age of 5-19 years were somewhat different and as if “postponed” (Figure 13). Therefore, in the next 5-7 years we shall witness the increasing need for schools.

Similar changes affect the need for prenatal dispensaries (Figure 14).

The share of consumer groups in population structure affects the evaluation of demand for social infrastructure facilities.

However, the dynamic of population structure is underestimated in forecasting the volume of socially important services that must be guaranteed to the population.

One of the options for long-term forecast published by Rosstat shows that, despite fluctuations in share of the child population, the share of people over working age⁹ will steadily increase. These changes will determine an increase in demand for health care facilities and social security.

8 Ibid.

9 Ibid.

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Summary: The article presents the analysis of correlation between demographic processes and consumption of socially important services. The authors examine some trends of the population change in Russia and its impact on the consumption of socially important services.

Keywords: demographic processes, population change, socially important services.