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Population Change in Russia: Dynamics and Socioeconomic Risks

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Abstract—This paper analyzes positive and negative demographic trends of modern Russian society. Two main approaches to interpreting and evaluating these trends are presented. It is proved that the demographic potential of society remains sufficient to overcome depopulation, and the continuity of traditional family values is preserved. Despite the risks associated primarily with population decline and aging, in the medium term, Russian society is able to ensure demographic growth through the integration of demographic, socio-economic, and socio-cultural policies and the use of reproductive and migration reserves.

Keywords: population change, depopulation, socioeconomic risks, demographic policy, traditional family values, qualitative characteristics of the population.

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The range of issues expounded by M.V. Lomonosov more than 250 years ago in his treatise “On the Preservation and Reproduction of the Russian People,” is almost identical with the demographic agenda of today. It is hard to disagree with the statement that it is demography that composes “the majesty, power, and wealth of the entire state, and not the vastness, which is in vain without inhabitants” [1, p. 384].

In present-day Russia, the importance of the problem of population growth or decline has risen to the level of a strategic priority. The increased attention paid to this topic is the result of a decline in the population, which over the past century has suffered a series of wars, deprivations, and radical changes in the conditions of everyday life, which have directly affected demographic indicators. The problem is especially acute: *the indigenous population of a country can become a nonrenewable human resource.*

In the work “Towards a Knowledge of Russia” published in 1906, D.I. Mendeleev predicted population growth to 594 million people by 2000. If we subtract 25% of the population, which lived in those years in the Privislyansk provinces, Ukraine, the Baltic States, Central Asia, and Transcaucasia, and make allowance for the decrease in the level of the birth rate, then it will come to approximately 280 million people,

which is two times larger than today’s population of the Russian Federation. Based on this, we can assume that the difference of 140 million people is the potential and real demographic losses that the country suffered during the course of the events of the past century.

For the first time in its history, post-Soviet Russia is experiencing a long period of depopulation in peacetime. The natural decline of the population began in 1992 and has continued for more than two decades. It has reached 14 million people, which is comparable in scale to the losses in the Great Patriotic War (Fig. 1).

The configuration of the so-called “Russian cross” was formed by a simultaneous sharp reduction in the birth rate and an increase in mortality. The mortality rate of the male population of working age was close to military reports. Male life expectancy fell to 58 years in 1994. Human losses caused by homicides, suicides, and alcohol poisoning in the period from 1991 to 2018 amounted to more than three million people. Migration processes compensated for the natural decline of the population by 60%, but did not change the trend of the reduction in its number. The break in depopulation with migration lasted for eight years (2010–2017), with only three years without migration (2013–2015) (Fig. 2). It is estimated that in 2019, the natural decline of the population will amount to 250 000 people.

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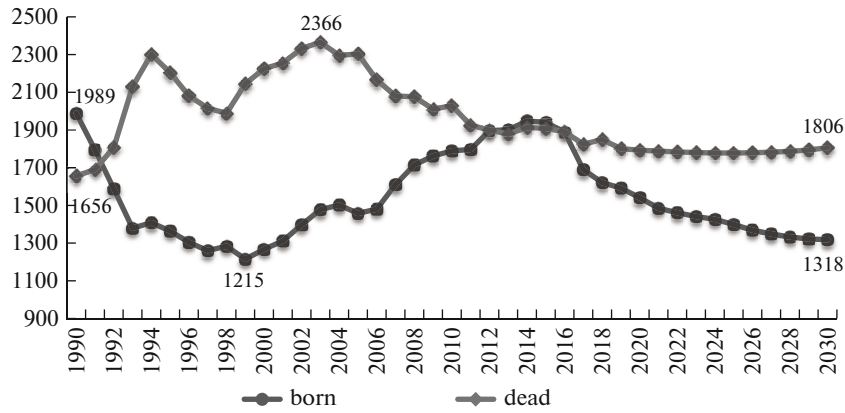


Fig. 1. Natural population changes of Russia in 1990–2018 and the average forecast until 2030, thousand people. Source: Goskomstat, Rosstat.

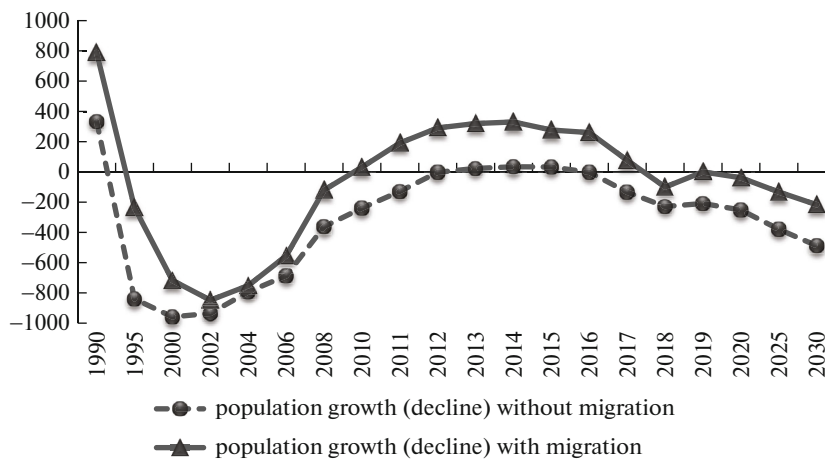


Fig. 2. Natural population changes of Russia with and without migration in 1990–2018 and the average forecast until 2030, thousand people. Source: Goskomstat, Rosstat.

It turned out to be difficult to overcome the “demographic pit” of the 1990s. Most experts predict that natural population decline will continue until at least 2030. This forecast is based, in particular, on the number of women of childbearing age: in 2018 it was the lowest over the past 30 years (Fig. 3). If the number of women aged 20–34 years in 2017 was 16 million, then in 2020 it will decrease to 14 million; in 2025, to 12 million; and in 2030, to 11 million.

The upward trend in recent years in an increase in the average age of motherhood has a negative impact on the dynamics of the birth rate and reproductive health. Among families with children, as before, single-child families prevail, for almost 2/3 of all households with children [2]. The number of children in the current five-year period (2016–2020) will be reduced to about 8.3 million people (Fig. 4).

The decline in the population paints a worrying picture if we consider that the health of the new generation is worse than the health of the previous genera-

tion [3, pp. 74–79]. The analysis of the results of a longitudinal study (1995–2010) related to children’s health and development conducted by the Institute of Socio-Economic Development of Territories, Russian Academy of Sciences (ISERT RAS), in Vologda oblast suggests similar conclusions [4, p. 108]. The number of absolutely healthy children (the 1st children’s health group who do not have deviations in all the criteria selected for evaluation) decreased from 49 to 12% of the total population over the past 30 years. More than half of schoolchildren have chronic conditions, and over the past ten years, the frequency of children’s health disorders has increased by 1.5 times, and chronic conditions, by two times [5].

The reproductive health of the population is declining. According to the World Health Organization (WHO) if the infertility rate exceeds 15%, this problem becomes not only medical, but also socio-demographic. In Russia, the extremely critical

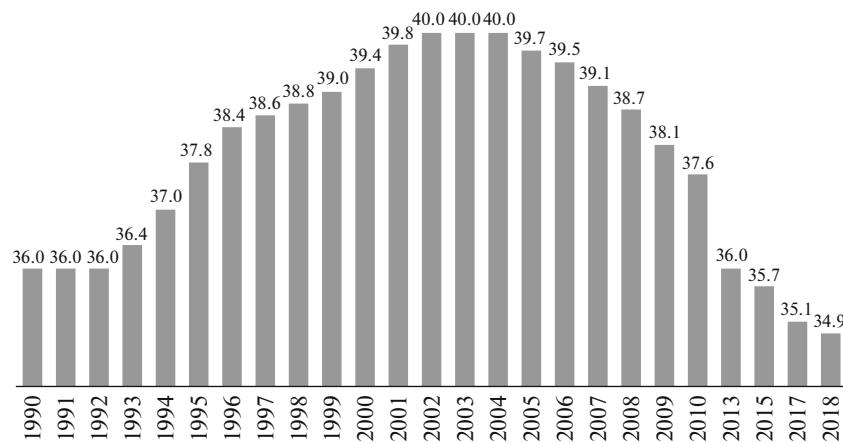


Fig. 3. Number of female population of childbearing age in Russia, million people. Source: Goskomstat, Rosstat.

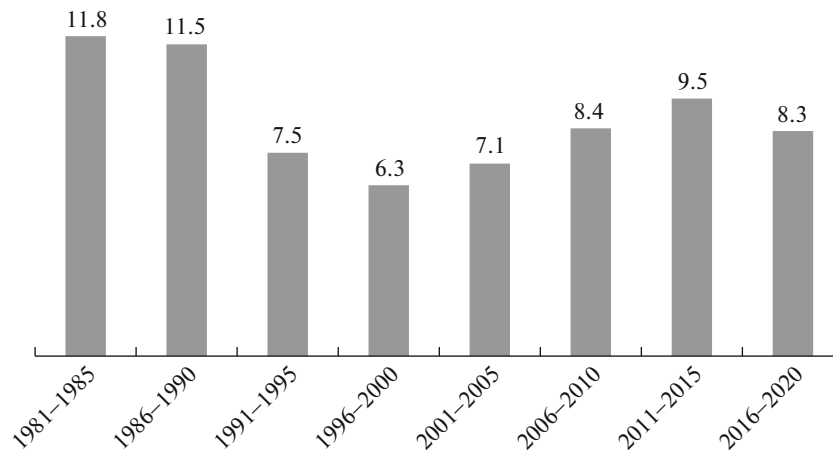


Fig. 4. The number of live births in 1981–2020, million people. Note: 2019–2020 data, Rosstat forecast. Source: Goskomstat, Rosstat.

(threshold) value of this indicator was passed in 2016 and reached 17% [6].

In 2017, more than two million patients with alcoholism, 1.9 million with drug-related disorders,¹ and 3.3 million Russians with mental health problems were subject to regular medical check-ups. According to the Minister of Health V.I. Skvortsova, up to 70% of the deaths among the men of working age are associated

¹ In 2018, the regular medical check-up of patients addicted to alcohol and drugs was revised. The Order of the Ministry of Health of USSR of December 13, 1988, no. 704 “On the terms of dispensary observation of patients addicted to alcohol and drugs and substance abuse” (Order no. 704) was declared invalid. The basis is the Order of the Ministry of Health of the Russian Federation of December 13, 2018, no. 877. This order does not contain any grounds for forced dispensary observation of persons suffering from alcoholism or drug addiction. <https://kormed.ru/novosti/dispensernogo-ucheta-za-bolnymi-alkogolizmom-i-narkomaniyami-bolshe-ne-budet/#hcq=hfP-JsLr>.

with alcohol consumption [7]. According to various estimates, the share of Russians who use narcotics and potent substances had increased to 8% of the population by 2018. There is a rejuvenation of all forms of social diseases, and drug addiction is related to nearly 80% of the diseases among Russians under the age of 30.

The cost of living in Russia and other countries is growing [8, pp. 54–66], and demographic processes influence this trend. In total, due to the deterioration of the health of the Russian population and premature deaths, the society annually loses about 2.5 trillion rubles of investment in care, education, and lost benefits from the loss of employees. To these socio-demographic losses should be added losses from the annual departure for permanent residence abroad of 50 000–60 000 mostly young and qualified citizens of the Russian Federation.

Another factor in assessing population change (in addition to the health of the population) should be considered the availability of the necessary human resources for the development of the country's territory. The minimum area required for comfortable residence of one person is 2 hectares of land, where 0.6 ha should be used for food production, 0.2 ha should be used for human settlement and industrial production, and 1.2 ha should remain untouched in order to preserve the stability of the biosphere [9, p. 46].

Based on these calculations, from environmental and other points of view, Russia is the only self-sufficient country among the major industrial countries that can increase the population by three times without detriment to the nature, level, and quality of life. Therefore, "the loss of human resources, regardless of the nature and specific reasons, especially for Russia with its vast territories, is not only a domestic political problem, but also a geopolitical one" [10, p. 3].

Based on the analysis of demographic trends, the following should be included in the list of the most significant socio-economic risks.

First, *the reduction in the number of people of working age*. According to the average version of the Rosstat forecast, this figure will decrease by three million people in 2018–2022 and will continue to decrease until 2035. The share of the population that is out of working age, which was 25% in 2018, will increase: in 2025, up to 27%; in 2030, to 28%; and in 2035, up to 30%. However, this forecast should be revised considering the increase in the retirement age.

Second, *further aging of the population*. The increase in the share of elderly people, in addition to the increasing number of deaths, will lead to increased demographic dependency and, accordingly, growth of expenses on social needs. The change in the age structure of the population is a systemic challenge to Russia's security. However, research conducted at the Institute of Socio-Economic Studies of Population, Russian Academy of Sciences, shows that the increase in the number of older people with intact resources does not lead automatically to an increased dependency burden, nor on the family nor on society as a whole. The share of older people with intact resources in Russia, measured by their level of health, qualifications, social support, motivation, and other indicators, is 10% (in economically developed countries, it is 20%) [11].

Third, *there are restrictions on the formation of contingents for the army and other law enforcement agencies*. In 2017, the formation of power structures was provided by the generation born in 1999; compared with the level of 1987, their number was 48%. There is another circumstance that causes a reduction in the draft potential: the health of young people is deteriorating. In 2018, for example, about 20% of draftees were found unfit for military service [12].

Fourth, *increasing risk of changing the ethnic structure of the population*. Unfortunately, the analysis of this risk is difficult, since the collection of statistical data with differentiation by ethnic groups was discontinued from 2007.

Fifth, *the aggravation of the geo-economic situation associated with the outflow of population from the territories of Siberia and the Far East*. To the territories that require greater attention in terms of their demographic indicators, it is necessary to add the subjects of the old-habitable European part of the country, the Central and Northwestern Federal districts (except Moscow). Over the past 30 years, most of the subjects of these districts have lost about 20% of their permanent population due to natural population decline.

Independent objects of the analysis within the framework of the study of socio-economic risks are internal differentiation of population change by regions of the country, as well as between the city and the village, and the external "brain drain."

Statistical data provide a clear picture of the dynamics of Russia's population change, its trends in the short term, and socio-economic risks. However, when interpreting demographic changes, there are a number of fundamental differences. There are two trends in the interpretation of key aspects of this issue.

The main separation line lies in the attitude of experts to changes related to population reproduction, migration, and transformation of the traditional family. These changes can be considered either as *natural processes*, objective manifestations of another demographic transition, or as *anomalies, crises, or distortions of the course of nature*. Selecting one of these approaches causes most of the differences in expert assessments of demographic processes and management measures in this area. Supporters of the first approach will be called demographers–sceptics, supporters of the second one are demographers–pragmatists. Let us define the main points on which they conduct scientific disputes.

Demographers–sceptics believe that, in general, the processes are moving in an objectively set direction, the same as most of the developed countries. Population decline should be considered a natural phenomenon, even profitable from an economic point of view. According to skeptical demographers, it is pointless to manage demographic processes, and this entails unjustified costs. First of all, it is necessary to regulate migration flows, which are more susceptible to external influences than inert processes of birth and death. Therefore, the primary focus should be on attracting migrants. Sceptics believe that the motivation for a particular demographic behavior is a personal, even intimate matter for each person. Calls for such motivation can even be interpreted as a violation of human rights.

Demographers–pragmatists do not agree with this approach. From their point of view, demographic

changes are determined, among other things, by subjective factors and the use of social construction methods. Such an opinion is based on the examples of successful adjustment of demographic processes, including the effectiveness of measures taken since 2006, which led to the suspension of depopulation in Russia. Demographers—pragmatists are more often focused on stimulating the birth rate using a variety of family support measures.

ISESP RAS members favor the approach of demographers—pragmatists [13]. Over the course of decades, the Institute has been developing methodological justification and recommendations for adjusting demographic processes and identifying the relationship between depopulation and a low level and quality of life, excessive inequality, arbitrary calculations of the subsistence minimum, and inefficient distributing relations. According to ISESP RAS, the level of relative poverty at the birth of the first child is increased by 8 percentage points, that for the second child is 14 percentage points, and the third, 21 percentage points [14]. In comparison with childless families, families with children are 2.5–3.7 times more likely to find themselves in cramped housing conditions.

There are at least five ways out of the long-term decline in the population of our country.

The first is *to strengthen the social responsibility of the state*. If the state regains some of its obligations in relation to health and social protection systems, this will have a positive impact on demographic processes. Over 30 years, the share of the population's own funds in health financing (when receiving healthcare services) has increased from 19% to more than 40%, while in accordance with the World Health Organization (WHO) recommendations, the maximum critical value of this indicator should not exceed 20%.

The second is *to improve the level and quality of life of the population*. Sociological studies show that lack of money and housing-related difficulties are the main barriers to having a child in Russia [15]. According to the Ministry of Labor and Social Protection, about 80% of families below the poverty line are families with children. The current poverty line, in terms of its social consequences, can be compared with the line of settlement a century ago. According to a survey conducted by the Levada Center (October 25, 2019), the average desired number of children (reproductive intentions) for Russian residents is 2.6. If article 2 of the Labor code of the Russian Federation were observed (the salary must ensure a decent standard of living for the employee and his family), people would have the opportunity to use their own resources to achieve their reproductive intentions.

The third is *the return of a part of the population to traditional family values, including having many children*. According to the Institute of Sociology, Russian Academy of Sciences (ISRAS), starting of a family and

giving birth to children ranks first among the life priorities of Russians [16, p. 119]. Moreover, a number of studies show that the setting for the birth of children depends more on the subjective value orientations of people than on their assessment of their own standard of living [17, p. 36–41]. The Russian population is largely focused on the preservation of traditional values, which contributes to a pronounced simplification of social relations. A kind of conservation of community social practices has occurred in the mass consciousness, which helps to preserve the continuity of these values.

Fourth is *attracting migrant workers to the Russian economy*. According to experts, in the near abroad countries, the real migration potential is 4–5 million people of Russian and other titular nationalities for Russia [18, p. 22]. Other countries, including neighboring countries, also have significant migration potential. However, the experience of recent decades makes us treat the seemingly obvious benefits of immigration with some caution.

Fifth is *modernizing the economy on an innovative basis*. Today discussions revolve around the demographic consequences of the transition to a digital economy: about the so-called “unnecessary people,” the fundamentally different role of artificial labor, about overcoming the shortage of labor resources and the disappearance of the need for traditional professions. Sometimes not only the robotization of certain types of activity is proclaimed, but the mass displacement of a person from the labor sphere. For example, Momentum Machines has created a robot that can radically change the fast food industry² [19, p. 383]. This is a fundamentally new attitude to work, its productivity, and human activity in general.

Russian society stands a good chance of advancing in all five areas. This requires public consensus and political will.

With respect to the issue of quantitative growth and population decline, we should not lose sight of the problem of improving its quality characteristics, accumulation, and personal fulfillment. *The quality of the population*, defined through health indicators (according to the WHO, this is thought of as physical, mental, and social health), education, and culture, is the main strategic resource for the development of modern society, the basic criterion for its effectiveness. There is a natural shift of dominating social development from the economic sphere to the socio-economic sphere and then to the socio-cultural sphere. As a result, noneconomic factors, including socio-demographic factors, gradually become the leading ones in the life of society.

² The cofounder of this company A. Vardakostas said: “Our device is not designed to improve employee performance. We want to completely abandon their services.” The company’s website says that their machine “does everything that employees can do, only better.”

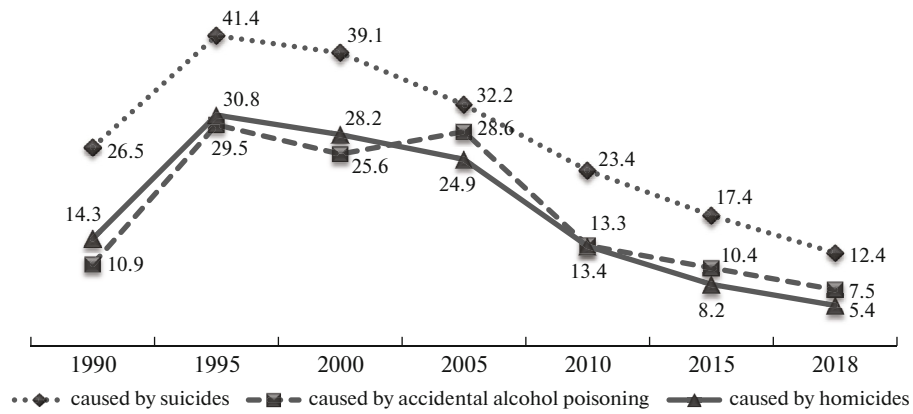


Fig. 5. Dynamics of homicides, suicides, and alcohol poisoning per 100000 people. Source: Goskomstat, Rosstat.

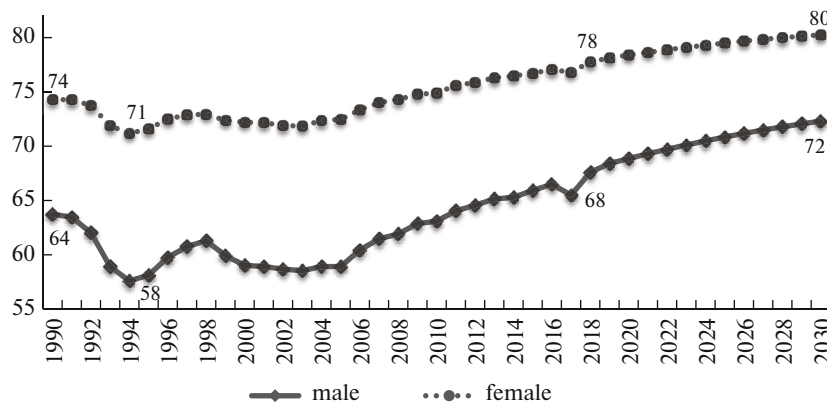


Fig. 6. Life expectancy at birth in Russia in 1990–2018, and the average forecast until 2030, years. Source: Goskomstat, Rosstat.

The emphasis on strengthening human potential is rightly made in the speeches of the President of the Russian Federation V.V. Putin: “It is educated, creative, physically and spiritually healthy people, not natural resources or nuclear weapons, that will be the main force of Russia in this century and the next” [20]. In 1922 the classic of Russian sociology Pitirim Sorokin wrote the same: “The fate of any society depends primarily on the properties of its members. A society made up of idiots or incompetent people will never be successful. A society consisting of talented and strong-willed individuals will inevitably create better forms of communities” [21, p. 7].

Despite the complexity of Russia’s population change, there are a number of factors and trends that allow us to look to the future with measured optimism. This is evidenced, in particular, by the adoption by the country’s leadership since 2006 of numerous measures of intensive demographic policy, including the introduction of the so-called maternal (family) capital and the implementation of the national project “Demography” (2019–2024). It is necessary to mention some positive trends of recent years, in particular, the strengthening of social health of the population. There

is a tendency to reduce the mortality rate of the working-age population and the death rate from causes associated with deviant behavior (Fig. 5).

There is a shift away from paternalistic orientations of the population in favor of activist ones. Most likely, one of the effective responses to socio-demographic risks will be the implementation of a participatory approach (the formation of a “participation society”), its integration into the contours of state administration and local self-government in order to improve the quality of life and qualitative characteristics of the population [22]. On the one hand, market realities do not allow us to place all our hope for solving social issues on the state authorities; on the other hand, problems of improving the quality of life, especially the fight against poverty, cannot be solved only by people. It is the mutual participation of citizens, their communities, and authorities that becomes an important condition for increasing the level and quality of life and strengthening social interaction.

A healthy lifestyle has become trendy and fashionable in Russia. The growing popularity of a healthy lifestyle has contributed to an increase in life expect-

tancy (Fig. 6), while a loss of health today often creates a kind of underclass.

The main reason for the depopulation of Russian society is not the result of natural causes, it is closely related to the negative consequences of the neoliberal stage of transformation of society. *Depopulation is one of the ways the population adapts to new living conditions*. Improving these conditions can enhance many of the indicators of population change.

Thus, in the coming years, the goal of demographic development is to maximize the use of reproductive and migration reserves to overcome the process of depopulation. What these reserves are and at what time they can most effectively be used should not be determined by individuals, no matter how high a position they hold, but by specially created working groups that include scientists of the appropriate profile (specialists in the fields of fertility, mortality, and migration) and those practitioners who implement the state demographic policy. These groups should rely on extensive statistical and empirical databases that are generated in the monitoring mode for all major demographic indicators, including indicators of the population's ethnicity.

A skeptical, if not fatal, attitude to population change is losing its supporters. In the medium term, Russian society is able to ensure demographic growth based on the scientific justification of integrating demographic, socio-economic, and socio-cultural policies, and using reproductive and migration reserves.

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