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Trends and Prospects in Sociodemographic Dynamics of Russia: Philosophical and Economical Approach*



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Abstract. The study is aimed at analyzing the long-term historical dynamics of sociodemographic processes in Russia over the period of 500 years and elaborating the directions for overcoming the current sociodemographic crisis. The novelty of the research consists of considering cyclic sociodemographic processes with a significant horizon period (half a millennium), and studying the impact of government regulations in the country starting from the “the Time of Troubles”, through the reforms of 1861, the revolution of 1917 and the transformation of 1991, on demographic bifurcations. The authors introduce the statistical information regarding the population of Russia from 1500 to the present moment; the researchers propose to use the philosophical and economical approach (the theory of population economy) analyzing

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the population problems based on the theory of economy's philosophy and the theory of economy by S.N. Bulgakov and Yu.M. Osipov, the professors from the Lomonosov Moscow State University; and by 2025 to elaborate and adopt the social doctrine of the Russian Federation. Using the historical material the authors prove that the mechanisms and institutions of state regulation in the country can create conditions affecting the change of the population's reproductive behavior. The article presents the comparative analysis of the proposed theory of "population economy" and traditional ones of economic demography and population economics, and describes the main postulates of the theory of "population economy". The researchers mark the factors that should be taken into account in composing the social doctrine of the Russian Federation. The research results can be used for justifying the long-term strategy of the sociodemographic policy in Russia.

Key words: sociodemographic processes, demographic cycles, social doctrine, sociodemographic complex, population economy.

Introduction

During the 20th century, there was a turn toward the development of a strategy for regulating population reproduction at the state and UN levels. It is especially relevant for countries with depopulation. Russia belongs to this group. Since 2017, it has been going through the stage of depopulation for the second time in the contemporary history. It indicates crisis effects in the socio-economic sphere [1].

In such circumstances, Russian scholars face a task of developing relevant theory of population. Traditionally, these problems are included in the sphere of economic demography and population economy. We suggest complementing these approaches with the study of the organization of population reproduction – *the theory of population economy*.

During its development, we focused on the following points:

- 1) description of main provisions of the theory of population economy;
- 2) cyclical fluctuations of sociodemographic processes, without which it is impossible to adequately regulate it at the state level;
- 3) overview of the dynamics of the socio-demographic development over the last 500 years considering four bifurcation

points¹ ("Time of Troubles", reforms of 1861, revolution of 1917, transformation of 1991) aimed at the application of historical approach to socio-demographic processes which allow considering features of Russia's demographic dynamics and showing that bifurcations in the state socio-economic regulation cause changes of population's reproductive behavior. This position is disputed by several demographers.

The real crisis sociodemographic situation in Russia at the state level should be overcome in 2018–2024 with the help of the implementation of the system of national projects. To ensure the continuity of the state social regulation in Russia, we propose to develop and adopt a Social doctrine of the Russian Federation at the federal law level by 2025. It should reflect the fact that the country, according to the Constitution, is postulated as a social state. Interlinked aims of the Doctrine should be:

- 1) depopulation overcoming;
- 2) improvement of the level and quality of life of Russian population;
- 3) compliance with social security of the Russian Federation [2].

¹ Point of bifurcation – the change of the system's established operation mode.

The social doctrine of the Russian Federation should include a description of mechanisms and institutions of the state regulation of reproduction processes of the country's population, which is the subject of the theory of population economy.

1. *The theory of population economy*

Economic problems of population are studied by such sciences as economic demography and population economy. Let us consider the difference of these approaches from the proposed theory of population economy.

Economic demography and population economy are based on achievements of political economy, and the theory of population economy is based on the *theory of economy*² developed in 1995–1998 by the professor of the Lomonosov Moscow State University Yu.M. Osipov. They are also different in philosophical basis: the first two approaches are based on economic materialism, and the theory of economy is based on *philosophy of economy*, which was developed at MSU by S.N. Bulgakov. He also defended it as a doctoral dissertation in 1912 [3] (*Tab. 1*).

Let us review main provisions of the theory of population economy.

1. Population reproduction is simultaneously a family and social reproduction.

Social population reproduction appears as an organism in which all families (cells of a body) do not just interact, but they are in a mutual position organized in a certain way. Every family is a system. At the level of families, population reproduction is carried out, at the first glance, spontaneously. At the same time, humanity, as a social organism, is a part of a civilization consisting of states. Within each state, the institution of marriage is legislated.

It will be discussed below how drastic changes of socio-economic conditions in a country affect the natural reproduction of population. Currently, the regulation of these processes is moving to the global level. In UN documents of the 21st century³, aims of the sustained development, many of which are related to socio-demographic processes, are defined. Until this, in 1961, the European Social Charter – the Convention of the Council of Europe, which secures a number of social human rights (in 2009, the Russian Federation joined it) – was developed and adopted. It impacted socio-demographic processes in Europe. Thus, humanity, as a single social organism, begins to pay attention to the organization of reproduction of the Earth's population.

Table 1. Comparison of population theories

	Economic demography	Population economy	The theory of population economy
Philosophical basis	Economic materialism	Economic materialism	S.N. Bulgakov's philosophy of economy (MSU, 1912)
Scientific basis	Political economy	Political economy	Yu.M. Osipov's theory of economy (MSU named after M.V. Lomonosov, 1995–1998)
Object of research	Population	Population	Population
Subject of research	Influence of demographic processes and structures on the economic development	Influence of economy on demographic processes of population reproduction	The organization of population's reproduction

² Osipov Yu.M. *Teorija hozjajstva: ucheb. v 3-h t., tom 1*. Moscow: Izdatel'stvo MSU, 1995. 458 p.

³ *Transforming our world: The 2030 Agenda for Sustainable Development*. Available at: <https://sustainabledevelopment.un.org/post2015/transformingourworld> (accessed 18.09.2019).

2. The good, which is the product of the population's reproduction, is a human. The organization of reproduction is a special sphere of a person's activity. The activity according to such organization is *the economic management*. In population economy, in order to describe economic mechanisms of the population's reproduction at the level of households, the theory of the Nobel laureate Gary Becker [4] is used as the basis. It is believed that the demand for children is influenced by household factors – primarily, household income. This reproductive behavior is natural for an “economic person”. At the same time, there are different forms of the reproductive behavior within humankind⁴, features of which are necessary to consider while organizing the population's reproduction.

3. *Economy* has a richer content than an actual organization of production. It is not just the organization but everything that is exposed to organization being its direct – objective – environment⁵. Thus, *the economy of population* is a humankind's activity on organizing the population's reproduction that includes organizational activities at the level of regions, states, civilizations, humanity, and population itself. According to Yu.M. Osipov's definition, the theory of economy studies the structure of economic life, i.e. its characteristic relationships, laws and mechanisms, efficiency of economic institutions and systems' functioning, its dynamics and development

⁴ While implementing the RHSF grant no. 16-02-0029 “Sociodemographic evolution of Russia and other BRICS countries: Regularities, tendencies, and prospects” (2016–2018), we studied features and trends of family dynamics in BRICS countries [5] and features of sociodemographic processes and its regulation at the macro-level in BRICS. countries [6]. The conducted analysis showed that different civilizations are characterized by special characteristics of intra-family behavior and its macro-regulation.

⁵ Osipov Yu.M. *Teorija hozjajstva: ucheb. v 3-h t., tom 1*. Moscow: Izdatel'stvo MSU, 1995. 458 p.

trends, the impact of economic life on nature and society⁶.

4. Each social economy is a system, a set of private economic systems, i.e. families. Families are not just elements of social reproduction of population but also its organic components. Economies differ in various devices and methods of organization. The main function of the economy is the production of goods, in case of population economy – people. In an economic life, a person is presented and expressed by labor. Population reproduction is a special sphere of labor that includes intra-family relations and branches of the country's *socio-demographic complex*. It includes sphere of services (health and medical services; all forms of education; social security and services for various categories of the population that require public care and state support; culture, recreation and tourism; physical education and sports); agri-food complex, including food production and processing; housing and communal services; light industry; passenger and personal transport, personal communication⁷. The composition of branches of this complex has changed historically because it depends on means of population economy, which are formed as a result of the mankind's historical development. The socio-demographic complex is formed at the global, national, and regional levels. In other countries, it was characterized by evolutionary development, and it went through two bifurcation points in 1917 and 1991 in Russia. In this regard, the history of the formation of this complex should be reviewed at three historical intervals – before 1917, from 1917 to 1991, and since 1991. Each one had its own means of population economy.

⁶ *Ibidem*, p. 30.

⁷ In case of expanded interpretation of the sociodemographic complex of a country, it may include retail trade and banking services for the population.

5. The theory of ethnogenesis [7] implies an overview of a nation as a synthesis of ethnic groups included in it. For the Russian Empire, the Russian ethnic group was the bond. However, in such a multi-ethnic state as the Russian Federation, the analysis must proceed from the synthesis of sociodemographic processes occurring in various ethnic groups. In this regard, the sociodemographic complex of the country may be overviewed at the macro-level and with the allocation of regions: Moscow, St. Petersburg, Muslim regions in the European part of Russia without the North Caucasus, the North Caucasus, other European part of Russia without the Arctic, the Far East without the Arctic, Siberia without the Arctic, Russian Arctic regions. Each one possesses features of self-preserving behavior of the population, different natural and climatic conditions, GRP per capita, migration flows, which affects the nature of the functioning of its sociodemographic complex.

6. A special role in population economy belongs to the state. Yu.M. Osipov notes that the state must run the economy, and the economy is inseparable from the state, its power will, and social functions⁸. Primary stages of state regulation of sociodemographic processes in Russia are described in our monography [8]. To implement the economic function of the state in organizing reproduction of the population after 2024, we propose to develop and adapt the Social doctrine of the Russian Federation by 2025. The head of domestic scientific sociodemographic school, RAS counsellor N.M. Rimashevskaya suggested developing a social doctrine back in 2003 [9]. In 2010, the Center of S.S. Sulakshin published a monography with the methodology of creating such doctrine [10]. A Social doctrine should become a federal law that would define the

⁸ Osipov Yu.M. *Teoriya hozjajstva: ucheb. v 3-h t., tom 1.* Moscow: Izdatel'stvo MSU, 1995. 458 p.

method of population management in Russia after 2025.

Thus, we examined main provisions of our proposed theory of population economy. The development of a Social doctrine of the Russian Federation in the environment of depopulation is primarily related to the creation of optimal conditions for organizing reproduction of the population in the country, that is, with population economy. At the same time, this document must contain provisions that allow maintaining the state of social security in Russia.

Let us look at main points that need to be taken into account in a doctrine.

1. Experts predict a sharp reduction of traditional jobs due to the transition to the "digital economy" and the robotization of production⁹. With the increased retirement age in the country, the issue of employment of able-bodied population arises. At the same time, the reduction of working age cohorts and the increase of the dependency burden on able-bodied population are predicted [11]. All these issues should be connected in order to develop the most favorable social population policy.

2. "Demographic waves" create cyclical fluctuations in Russian sociodemographic processes. Own social policy should be developed for each qualitatively homogeneous period of such "wave".

3. Earlier, we have already mentioned the regional heterogeneity of Russian socio-demographic processes. That is why the development of a Doctrine should be directed from the federal level to the regional one and vice versa through its step-by-step connection.

4. The development of a Social doctrine of the Russian Federation implies its adoption

⁹ Accelerating Workforce Reskilling for the Fourth Industrial Revolution. *WEF*, 2017. Available at: <https://www.weforum.org/whitepapers/accelerating-workforce-reskilling-for-the-fourth-industrial-revolution> (accessed 01.08.2019).

as a federal law (similar to the RF Military doctrine) for a certain time interval.

5. In relation to the current situation with population problems in Russia, it is necessary to include two points in the structure of a Doctrine: first, the problem of preventing accelerated depopulation of the Far East, and, secondly, the transition from the domination of agricultural holdings to the growth of the number of peasant farms and agricultural cooperation as the basis of rural development.

A Social doctrine of the Russian Federation may become an instrument of the state sociodemographic policy, conducted at the national level, considering territorial features of a multinational state.

While developing a Doctrine, it is necessary to move from extrapolation to accounting the cyclical nature of socio-economic and demographic processes. It will increase the adequacy of forecast calculations.

2. Cycles of Russian sociodemographic development

Traditionally, demography studies constant renewal of population as the substitution of generations of people for new generations. It may be considered as a cycle¹⁰. A generation is a sociodemographic and cultural community that unites people of approximately the same age. Generational boundaries have historically changed with population's age structure shifts and life expectancy. The generational change law reflects constants of society's cyclical dynamics. It allows us to review cyclical processes as the subject of demography as a social science¹¹.

¹⁰ Dobrokhleb V.G., Dzhavadova S.A. *Demografija: kurs lekcij*. Moscow: RGGU, 2012. 247 p.

¹¹ The sociological analysis of generations conducted by E.I. Ivanova in her dissertation research "Socio-demographic generations of modern Russia: Reproduction and interaction" is of interest. Available at: <https://famous-scientists.ru/list/14614> (accessed 21.12.2019).

It seems that a combination of cyclical and aperiodic processes creates a unique nature of the dynamics of reproduction of the world, civilizations, and individual states' population.

The analysis of demographic processes using historical approach showed the presence of long cycles. The first extralong demographic cycle took place during the neolithic revolution and primitive society, the second one – during the slave-owning civilization, the third one – in the Middle Ages, the fourth one – during early capitalist and capitalist civilizations [12]. In our research, we focus on features of the 500-year period of the last extralong demographic cycle in Russia.

The selection of such interval of our country's development is caused by the fact that long-term (quadracentennial) development cycles had been chosen before. For example, in studies of the Institute for Economic Strategies, it is possible to find a proposed hypothesis on the presence of special long-term cycles in Russian history. It was also confirmed by calculations using the theory of social turbulence and classic methods of historical science. The authors of the hypothesis call these cycles "the rhythm of Russian history, its amazing chronon" [13, p. 5].

In addition to long-term demographic cycles, scientists identify periodic medium-term oscillatory processes in reproductive and socio-cultural areas, which affect the nature of demographic processes. These processes may be called sociodemographic. They are studied by the scientific school of N.M. Rimashevskaya.

In economic reproduction processes, the driver of the reproduction development is scientific and technological progress. It sets the pace of fluctuations by creating epoch (for centennial cycles), basic (for long-term Kondratiev waves and the change of technological generations), improving (for

medium- and short-term cycles and the change of technological generations) innovations.

According to S.Yu. Glaz'ev, not only reproduction processes transform in the transition of the economy from one technological order to another, but there is also a change of the global economic order. The scientist identifies trade-monopolistic, imperial, industrial, and integral global economic systems; each one has a family-generic circuit that ensures the population's reproduction [14]. This circuit retains relative autonomy that allows preserving historical memory and the ability of public consciousness to regenerate social structures. The collapse of this circuit, according to S.Yu. Glaz'ev, is accompanied by an explosion of uncontrolled social energy and aggression.

The study of Klaus Schwab [15] also shows that current scientific and technological revolution, observed in global economy, leads to the change of characteristics of reproduction processes, including those selected by S.Yu. Glaz'ev in the family-generic circuit.

Thus, economic reproduction processes are influenced by cyclical fluctuations that affect the socio-demographic dynamics. However, in scientific literature, there are descriptions of cycles in the socio-cultural sphere, which affects society's sociodemographic characteristics. The issue of the influence of socio-cultural factors on characteristics of demographic processes was studied by Zh.A. Kalabaeva¹². Oscillatory socio-cultural dynamics was noted by many scientists. The sociologist Pitrim Sorokin [16] said that there are fluctuations from the sensuous socio-cultural order to the ideational one and vice versa in the global history; the integral sociocultural order is possible. A.S. Akhiezer

writes that there is a periodic inversion of public consciousness in socio-cultural areas of Russia, which is explained by the Russian specifics of overcoming public discomfort [17].

An economist V.T. Ryazanov described repeated transitions from liberalism to conservatism that took place in the country in the 19–20th centuries [18]. A researcher of historical sociology B.N. Mironov analyzed the characteristics of natural reproduction of the population in the Russian Empire in the 19–early 20th century [19]. It is the period of the end of the early capitalist and the beginning of the capitalist cycle of social reproduction in the country. B.N. Mironov convincingly showed that there was the transition from a traditional to a modern type of population reproduction during that time: from a compound family to a small one (in the author's interpretation) and from authoritarianism to democracy in family relations.

In addition to long-term cycles within the scientific civilizational approach, scientists [20; 21] put forward a hypothesis on three "waves" of mankind's development. During the transition from the second to the third "wave", a social phenomenon "demographic transition" emerged.

The consideration of cyclicity in the analysis of sociodemographic processes is a new direction of studies. For its implementation, it is necessary to build an interconnected system of interactive simulation models that describe the flow of processes of different durations in their interdependence, which makes the study interdisciplinary. The transition to computational capabilities of modern "digital technologies" will allow implementing this task in practice while predicting long-term sociodemographic processes. However, it will be necessary to review the historical sociodemographic dynamics in the long-term retrospective for such forecasts.

¹² Zh.A. Kalabaeva. The place of socio-cultural factors in the research of demographic processes. Available at: <https://cyberleninka.ru/article/n/mesto-sotsiokulturnyh-faktorov-v-issledovaniyah-demograficheskikh-protsessov/viewer> (accessed 21.12.2019).

In our country, in the reviewed 500-year period, the natural population reproduction, evaluated at the macro-level, has gone through four points of bifurcation – the beginning of 17th century, 1861, 1917, and 1991. At this historical interval, it is necessary to consider consequences of “Time of Troubles”, the periods before the abolition of serfdom, before the revolutions of 1917, before the collapse of the USSR in 1991, and after the collapse of the USSR in the Russian Federation. Each period is characterized by its own reproduction parameters, the formation of which was influenced by general cyclical processes in the demographic world order.

3. Demographic development of Russia at different historical intervals

Demographers argue about the possibility of regulating demographic processes. Some of them believe that state regulation of demographic processes is possible only in countries like socialist China. In this regard, the 1990s demographic crisis in Russia, first, is not a consequence of the implementation of country’s reforms in the form of “shock therapy”, but the “second demographic transition”.

However, there is also a different opinion in scientific literature: mechanisms and institutes of state regulation directly or indirectly affect the nature of the flow of sociodemographic processes. To support it, we will review how bifurcations in the political and socio-economic development of the country affected the socio-demographic characteristics of the population over a long historical interval. To do this, we examine four points of the formation, flourishing, and then decline of the four-century stage of the fourth-generation Eurasian civilization in the North of the Eurasian continent – “Time of Troubles”, 1861, 1917, and 1991. It was the time of

constant change of mechanisms and institutes of state regulation in Russia. Three of these years (except for 1861, when, as the result of state reforms, the Russian Empire received an impulse to accelerated development) may be characterized as social catastrophes in the development of Russia [22; 23].

“Time of Troubles”

According to experts, in 1500, 12–15 million people lived on the territory of Russia. The reign of Ivan the Terrible (1530–1584) turned out to be a crisis for the socio-economic development of the country. It was facilitated by the oprichnina and the three-year famine of 1569–1571, which killed hundreds of thousands of people; cannibalism also took place. As a result, the population of Moscow reduced by three times, and the countryside was depopulated. Most of the land was not cultivated. Thus, in the Moscow Uyezd, at the time of Ivan the Terrible’s death, 5/6 of crop lands was not sown [17, p. 97]. During the reign of Boris Godunov in 1601–1603, the country experienced an unprecedented famine once again. All of this led to the social catastrophe of “Time of Troubles”. N.I. Kostomarov defines “Time of Troubles” as the period of 1604–1613. He writes that “Time of Troubles will remain an extremely significant epoch in Russian history as the evidence of the strength of the inner life of people – an important prerequisite for its future” [24, p. 777]. After such a shock, the country was reborn. In 1796, its population was 36 million people, in 1851 – 69 million [17, p. 137].

The reform of 1861

To study the impact of consequences of the 1860s reforms on the abolition of serfdom in the Russian Empire concerning the population reproduction, we need to discuss features of the reproductive behavior of Russian population before reforms.

We may find statistical data on population of the Russian Empire before reforms in V.O. Klyuchevsky's work¹³. According to the 8th revision (1833), the serf population constituted for almost 45% of the whole population in the European part of Russia, and according to the 10th revision (1856) – 34.4%. In 23 years, the share of the serf population declined by 10.5%. According to the 8th revision, there were 127 thousand noblemen in the European part of Russia who had serf people. In particular, 43 thousand gentries had 340 thousand males, and 14 thousand major landowners had 8 million males.

Thus, it is possible to assume that, before the 1861 reforms, the share of serf population in the European part of Russia could decrease primarily due to physical extinction of such people, because cases of the serfdom liberation at that time were very rare. At the same time, there was a strong stratification according to the level of the “serf wealth” among landowners – the ruling class.

According to the 10th revision, population of the Russian Empire was 62.5 million people of both genders. There were 103 thousand noblemen's estates with 10.5 million serf males included in a census list in the European part of the Empire. Since 1859, more than 44 thousand estates with more than 7 million such people have been pledged. Consequently, averagely, there were 100 serf males per one noble estate in the European part of Russia. At the same time, 67% of serf males were pledged from 43% of noble estates. Such statistics indicate the economic crisis of Russian agriculture in the middle of the 19th century, the extinction of serf families, and the impoverishment of noble families.

¹³ Klyuchevskii V. *Polnyj kurs lekcij po istorii Rossii*. Available at: <http://www.bibliotekar.ru/rusKluch> (accessed 22.12.2019).

Let us take a look at the change of the reproductive behavior of Russian Empire's population in the post-reform period (and, consequently, the reproductive behavior of peasants, who constituted for the most part of the country's population).

After the all-Russian census of 1897, the population of the Russian Empire was 126.411 million inhabitants, while 16.290 million people (12.9%) lived in cities¹⁴. Consequently, with a drastic change of socio-economic conditions, the country's population has doubled in 40 years since 1857. The further growth of the population of the Russian Empire before 1914 was also very rapid (*Tab. 2*). In 16 years, the Empire's population increased by 41.4 million people.

In 1906, D.I. Mendeleev published a work entitled “Towards the Knowledge of Russia”¹⁵, in which, on the basis of the results of the 1897 census, a long-term forecast for Russian population was made (*Tab. 3*).

As we see in table 3, the forecast for the population reproduction regime in 1987–1906, without taking into account the revolution, famine years, wars, “shock therapy”, “demographic transition”, according to D.I. Mendeleev, promised the transformation of Russia into one of the most populated countries in the world.

Revolutions of 1917

Socio-economic changes, which happened after 1917, were universal; they affected almost every aspect of human life including models of behavior, the system of values, forms of family, models of family relations, adaptive

¹⁴ *Naselenie imperii po perepisi 28-go janvarja 1897 g. po uezdam*. Available at: http://istmat.info/files/uploads/15771/perepis_1897_vypusk_1.pdf (accessed 22.12.2019).

¹⁵ Mendeleev D. *K poznaniju Rossii*. Available at: http://alldata.narod.ru/Mendeleev_K_poznaniyu_Rossii_1907/Mendeleev_K_poznaniyu_Rossii_1907.pdf (accessed 22.12.2019).

Table 2. Natural population growth in Russia in 1897–1913 (with amendments), thousand people

Year	European part of Russia	Privislinsky Guberniyas	Caucasus	Siberia	Central Asia	Total
1897	1725.1	180.3	141.2	115.1	103.1	2264.8
1898	1479.5	185	142.4	95.7	107.6	2010.2
1899	1761.2	184.3	144.1	105.9	110.2	2305.7
1900	1803.5	188.6	164	101.5	112.6	2375.2
1901	1592.1	185.4	161.7	129.3	116.3	2184.8
1902	1798.9	229.3	163.6	111.3	109.3	2412.4
1903	1884.4	195.8	172.6	143.7	121.5	2518
1904	1981.5	176.6	186.2	113.2	125.2	2582.7
1905	1431.6	158.9	168.9	96.7	124.5	1980.6
1906	1875.2	186.1	186.5	127.5	127.2	2502.5
1907	2122.1	194.9	194	130.6	128.2	2769.8
1908	1864.9	196.2	177	151.3	131	2520.4
1909	1712.3	190.4	172	165	135.9	2375.6
1910	1569.9	198.7	154	198.4	145	2266
1911	2051.6	205.9	182.1	189.7	149.8	2779.1
1912	2060.4	208.1	215	185.8	154.6	2823.9
1913	1987.5	-208.1	218.6	184.8	155.5	2754.5
Total for 1897–1913	30706.7	3272.6	2943.9	2345.5	2157.5	41426.2

Source: Sifman R.I. *Dynamics of the Russian population in 1897–1914. Demoscope*. Available at: http://demoscope.ru/weekly/knigi/polka/gold_fund05.html (accessed 22.12.2019).

Table 3. D.I. Mendeleev's forecast for Russian population in the 20th century

Year	Million people	Year	Million people
1897	128.2	1904	142.3
1898	130.2	1905	144.5
1899	132.1	1906	146.6
1900	134.1	1910	155.6
1901	136.1	1950	282.7
1902	138.2	2000	594.3
1903	140.2		

Source: Mendeleev D. *K poznaniyu Rossii*. Available at: http://alldata.narod.ru/Mendeleev_K_poznaniyu_Rossii_1907/Mendeleev_K_poznaniyu_Rossii_1907.pdf (accessed 22.12.2019).

strategies of a personality, gender roles of men and women. In post-revolutionary Russia/ USSR, huge masses of people were affected by marginalization. It primarily included the loss of a previous social status and uncertainty of the present, transformations of the content of gender roles and the model of human reproductive reproduction, and a quite sharp breakup with the socio-cultural tradition, which was also manifested in relation to the family. In the post-revolutionary period, the family social institution underwent significant changes.

Since the beginning, the Soviet state began to actively reform civil legislation, including the part regulating marriage and family relations. First, the Orthodox Church was excluded from the regulation process. Thus, in December of 1917, it was deprived of the right to register births and marriages, and a civil marriage was introduced as the only legally valid one.

In a situation of the civil war and devastation, such radical reforms of family relations caused the change of the dynamics of Russian

population. Detailed statistics for these years are not available, so we can only use individual data from disparate sources.

According to the statistics for the end of 1916, there were 186 million people in the Russian Empire; there was the 60 million increase in 16 years¹⁶. V.I. Lenin in 1921 thought that 1.2–2 million Russian immigrants lived abroad¹⁷. In some sources, it is possible to find fragmentary information on population losses in certain regions. On February 1, 1917, 2.017.173 people lived in Moscow. According to the August census of 1920, there were 1.028.218 residents in Moscow. In other words, the decrease of Moscow population was 49%. There are no similar examples in European history concerning population dynamics in a major city. Only St. Petersburg surpassed Moscow in terms of depopulation. Its population was 2.440.000 people in 1917. According to the census of August 28, 1920, the city had only 706.800 inhabitants. Since the revolution, the number of residents decreased by 71%. In other words, the population there was declining almost two times faster than in Moscow¹⁸. The same dynamics on the number of Petrograd's residents in those years is given in the HSE journal "Demoscope"¹⁹. Consequently, it is possible to say that the radical change of the traditional model of a Russian family under the

Soviet regime significantly worsened the decline of Russian population, which was observed in the country in 1917–1921 because of the civil war and devastation.

Such population dynamics forced the country's leadership to drastically change the USSR family legislation in the 1930s. This process culminated in 1936, when a new family code that prohibited abortion was adopted. "Free love" was branded as anti-socialist, and the state began to fight for family strengthening.

The next stage of active demographic policy in the USSR was the post-war revival of population. The demographic situation in the country in 1941–1945 was determined by huge irretrievable losses among military and civilian population. The government adopted a special program of active demographic policy aimed at overcoming consequences of the war (Decree of the Presidium of the Supreme Soviet of the USSR of July 8, 1944). The most important provisions of the Decree concerned the active promotion of large families (with five or more children) and the support for families with an optimal number of children (with three or four kids). In accordance with the Decree, maternal labor was encouraged morally and financially. These measures helped restore the country's population in the period from 1941 to 1956 (*Tab. 4*).

Table 4. The number of population in the USSR

Year	Million people	Year	Million people
1917	91.000	1960	119.046
1941	111.359	1970	130.079
1950	101.438	1980	138.291
1956	112.266	1990	148.041

Source: *Population of Russia for 100 years (1897–1997): Stat. Coll.* Moscow: Goskomstat Rossii, 1998. 222 p.

¹⁶ Shramko S. *Russia in 1917–1925. The arithmetic of losses*. Available at: <http://www.proza.ru/2013/09/04/701> (accessed 23.12.2019).

¹⁷ *Ibidem*.

¹⁸ *Ibidem*.

¹⁹ Population of the Northern capital. *Demoscope Weekly*, 2004, no. 163–164, August 1–15. Available at: <http://demoscope.ru/weekly/2004/0163/tema01.php> (accessed 23.12.2019).

The active demographic policy in the USSR was also carried out in the 1980s, and it had a positive impact on the country's birth rate.

1991

N.M. Rimashevskaya described in details changes that occurred in a Russian family since 1991 after the transformation of Soviet society [9]. The main ones are:

1. As the result of socio-economic transformations, a family received an independent economic status, and the paternalism of the state over all of its economic spheres ceased.

2. At the same time, external conditions of Russian families' existence significantly deteriorated, especially during the years of "shock therapy".

3. The Communist party's control over "moral foundations" of Soviet society, including intra-family behavior, completely ceased.

4. There was an extreme stratification of society into the poor and rich, and a significant part of population was marginalized.

As the result, as the number of marriages decreased (from 8.9 per 1000 population in 1990 to 6.2 in 2000), the number of divorces increased (from 3.8 per 1000 population in 1990 to 4.3 in 2000), the birth rate fell (from 13.4 per 1000 population in 1990 to 8.7 in 2000), and the death rate increased sharply (from 11.2 cases per 1000 population in 1990 to 15.3 in 2000), especially among able-bodied men²⁰.

Thus, changes at the state level, which occurred in 1991, negatively affected natural reproduction of population. However, since 2000, Russian authorities have begun to understand the severity of the country's negative demographic processes. Since 2007, the catastrophic situation with natural population reproduction has been reversed. The first stage

of depopulation in Russia had ended before 2013, but the second stage of depopulation began in 2017 [25]. A small contingent of people who formed in the 1990s – years of the significant reduction of the birth rate – reached a reproductive age.

Thus, we reviewed changes of the natural reproduction of Russian population over 500 years at four points of bifurcation of Russian legal family environment. At the first point, at the beginning of the 17th century, the country was able to overcome "Time of Troubles" and revive as a sovereign state. At the second point, the reforms of 1861 led to the sharp increase of the birth rate. At two other points – the revolution of 1917 and the reform of the 1990s – there was the decline of the country's population. We assume that *institutions of the country's state regulation can create conditions that affect the matrimonial, reproductive, and other types of population's demographic behavior.*

Conclusions

In the middle of the 2000–2010s, many scientists predicted an "avalanche" depopulation in Russia [26]. In his Address to the Federal Assembly of the Russian Federation in 2012, Vladimir Putin twice called the country's demographic situation "catastrophic". However, in 2013–2015, there was a natural increase of the population. It was, among other things, caused by the fact that socio-demographic processes have been governed by authorities of the Russian Federation since 2000, and the centralized organization of population reproduction began.

On the basis of this practical activity, in 2012, Yu.M. Osipov proposed to consider sociodemographic processes from an economic position – in the interpretation of the theory of philosophy of economy developed at the Lomonosov Moscow State University

²⁰ *Russian Statistical Yearbook*. Federal State Statistics Service, 2013.

(Yu.M. Osipov, S.N. Bulgakov). We developed this proposal in the theory of population economy, the main postulates of which are presented in the article. The theory's practical conclusion is the need to develop and adopt a Social doctrine of the Russian Federation at the federal law level by 2025, right after the completion of national projects of the Russian Federation in 2024.

While developing a sociodemographic part of a social doctrine, it is necessary to consider

the fact that the “demographic transition” has already ended in Russia. Thus, a new approach to the organization of the country's population reproduction is required [27].

Our historical analysis of various stages of Russia's demographic dynamics over the last 500 years allows us to draw an optimistic conclusion: the country's population has overcome catastrophic periods associated with the decline of population, and it will be able to cope with this task in the 21st century.

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