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Population as the object of socio – economic reality

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Abstract

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The analysis of quantity and composition of population in terms of measuring labor potential, income and other socio-economic parameters starts to have a special economic significance only when population acts as an independent social object of research that reflects specific social links. The purpose of this research is to ground features of process of becoming an independent social object of research, to ground changes of modern discourse of population research, taking into account use of potential of older people in the process of economic development. Results of study show that the forming new discourse of population can be concentrated on economic qualities of older generation. It displays its social inactivity and labour ability that have a significant impact on economy in general. It is considered that the phenomenon of population aging is a new opportunity for the development of society.

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1. Introduction

Global demographic changes that came in the twentieth century have their effects in the socio-economic aspects of human existence and generate new trends of sustainable economic development.

Demographic trends in the development of recent decades are associated with the increase of the portion of elderly in the total population, the increase of the median age and life interval. Changes in the scale of fertility led to the "aging" of population. According to the forecasts of the World Health Organization (WHO, 2015), the increase of the portion of the older generation in the total population is our future, as the number of people aged over 60 by 2050 can double.

With the increased attention to the sustainable development of the economy, population growth became again the relevant subject of scientific research.

This requires fundamental changes in interpreting the concept of "population" as an independent socio-economic object of research, the research of population changes in the regional context and the process of aging in terms of its socio-economic consequences.

Population as an independent social object of research begins to form since the end of the XVIII century. One of the first works in the history of demographic research is the work of Thomas Robert Malthus "Essay on the Principle of Population" (Malthus, 1798), where he raised the question on "absolute excess of population" and how it may impact the "welfare of the human race" and the need for selection. It should be noted that he considered the population regardless of the level of economic development as an inviolable law of nature without taking into account the demographic changes (transitions). The work results in proposals in the field of social policy, which came down to a refusal of encouraging the poor to remain poor and produce poverty and establishment of new laws and rules of population control. This study already analyzes the ratio of births to deaths, the conditions and periods of doubling of the population, its density and the average income per capita, the natural life interval of humans. This is the beginning of separation of "population" as the new the object of research among other well-established objects in the social sciences. Despite the fact that this discourse (Fishuik, 2014) was not supported by the majority of his contemporaries, T. Malthus had theoretical fans such as prominent scientists like Charles Darwin and John Maynard Keynes.

The term "population" as an object of social reality for the first time was undergone to critical analysis in the concept of Michel Foucault. He (Mihel, 2005) noted that along with the "nation" and "people" there is another reality, or "public body" - "population", which "has become the most important object of rational management strategies since the end of the XVIII century". This is directly related to the emergence of the nation states. One of their most important functions was the realization of public control over the state of the population in general. Elements of this public control were the social origin of such category as population.

Only after the formation of the nation state it became possible to consider the population as an object of socio-economic reality. This object finds its reality in work of the various governance institutions and instances forming qualitative and quantitative characteristics of people as parts of a certain unit on the basis of formation of "specifications grating" (internal distinctions system) representing the own language of the object. As a result, "population" as the "objective reality" starts carrying weigh and gets its "objective logic" of development. This allows certain professional categories of people to represent the object and speak on its behalf, that is to speak about the needs of the people in general, to assess its different states as favorable or unfavorable, to form strategies and prospects of its development. It is important (Foucault, 2012) to understand that without the basic elements of formation of discourse - instances of formation, distinction, specification - the existence of such discursive object as population is impossible. This means establishing of a set of relations between these instances, which leads to emergence of:

- specific ways to study not only the male warriors or territorial monarchies, but the laws of the population itself as a new management object;

- new specialized institutions (branches) controlling all aspects of social life, social control technologies (Foucault, 2002);
- production of knowledge about fertility, mortality, commercial activity, hygienic culture;
- issues of the family and child care;
- demography sciences, political economy, health medicine, gynecology and psychiatry;
- new management practices and technologies of power in the social context of the time.

This approach is based on the concept of the meanings of "social" of Bruno Latour. He considers the social object not as a separate area (sphere) or specific types of things, but as a process of formation or creating links, "deployment of strings of mediators". The word social in this case (Latour, 2014) is interpreted in a broad sense, in accordance with the Latin word "socius", meaning "associate", "follower", "someone following someone else", "have something in common".

But in order to be able to describe social objects and derive their similarities, they must first be taken into account. Only then objects give information and influence the other ones, reestablish the social links.

2. Statistical estimate

In Russia the population census was carried out in the form of organizational compilation of "audit stories" (lists of audits of tax-paying population, cadasters and court surveys) since the XVIII century (1718-1858). The first and the only general census of the Russian Empire was carried out in 1897 and published in 89 volumes (119 books) priced 7 million rubles. By results of the general population census of 1897 there were 125.6 million inhabitants in the Russian Empire. Population in urban areas amounted to 16.8 million people (13.4%). 1.928 million people lived in Tomsk region and 52.2 thousand people lived in Tomsk. Already at that time (State Public Historical Library, 2016) Tomsk was considered as a big city with population more than 50 thousand people (population of Moscow was 1038.6 thousand). However, there is no comprehensive statistics on the older generation in the documents of the only general census of the Russian Empire. This discourse appeared much later, when the average life interval has increased, and there have been significant shifts in demographics.

In the process of formation and development of the socio-economic reality new aspects of the research of population as a social object appear.

Russia's population according to the census of 2010 amounted to 142.8 million people. The census showed demographic crisis changes.

After the collapse of the Soviet Union for a long time in Russia there was a process of depopulation or natural loss of the population (Federal State Statistics Service, 2016), which has become a special discursive subject (Table 1, 2).

Table 1. Natural increase/loss of the population in Russia by 1926 – 1990 years

Years	1926	1940	1960	1970	1980	1990
Natural increase rate	23,4	11,4	15,8	5,9	4,9	2,3

Table 2. Natural increase/loss of the population in Russia by 1993 – 2015 years

Years	1993	2000	2011	2012	2013	2014	2015
Natural increase rate	-5,1	-6,5	-0,9	0	0,2	0,2	0,2

Number of born people in peace time depends on the historical type of population reproduction. Until the XIX century in Russia there had been a traditional type of reproduction: on average 7-8 children were born in one family, of which only half reached 15 years. At the turn of the 60s of XX century in Russia the demographic transition from a traditional to a modern type of reproduction was completed. On average two children were born in one family, of which 95% reached 15 years.

The decline in fertility is also caused by the general trend in industrialized countries with a high proportion of the urban population. According to the general census of 1897 in the Russian Empire urban population amounted to 16.8 million people (13.4%). In 1913 urban population made up 18%, in 1991 the number reached 109.6 million and made up 73.9%. Currently, the portion of Russia's urban population remains mostly unchanged at 74%.

The fertility and life interval are directly related to the level of welfare. "Safety factor" of the human body amounts to 125 years or more. Economic progress serves as the main recipe for longevity. It can be evaluated in per capita gross national income. People have lived with a life interval of 30 years or less more than 99.9% of the time of their existence on earth. Life interval started to grow significantly only in the twentieth century after the discovery of antibiotics, as infectious diseases were the main cause of death. In 1900 the life interval of the population amounted to 45 years and already in 2007 - 67.61 years, in 2014 - 70.93 years. Currently, this figure reached almost 72 years.

After 2012 (Centre of Humanitarian Technologies, 2015) a positive trend in demographics in Russia appeared in spite of all previous expert forecasts and estimates. The Russian government has focused on the state support for elderly people, families with children, assistance for young mothers in education and employment, and all that bore fruit. As of January 1, 2014, Russian Ministry of Labor data show that the number of older people (women over 55 years, men over 60 years) amounted to 33.8 million (23.5% of the population). At the same time, every third person who has reached retirement age continued to work.

Elderly people in modern society are becoming an important social group. Their activity has a significant impact on the economy in general due to falling fertility in the early 90s of XX century, related to the unfavorable socio-economic conditions of the time and the change of development model. This leads to the emergence of new objects of discourse of population and new ways through which it shapes them.

At the present stage of development the discourse of research of population demographic structure and its socio-economic consequences is changing. The elderly (older generation), which becomes a significant social group, serves as a contemporary research discourse and not only the population in terms of its social activity and welfare. Social activity of older people is beginning to have a significant impact on the quality of economic growth, and creation of conditions for the integrated society of all ages.

A number of strategic documents in relation to "the older people" (women over 55, men over 60) and "people of older generation" have been already accepted in Russia (Russian Government 2015): the Concept of socio-economic development of Russia until 2020, the Concept of population policy until 2025 and others. One of the latest key documents, offering a systematic approach to sustainable increase of interval, level and quality of their lives is "Strategy of actions for people of older generation in the Russian Federation until 2025". It is a kind of social contract between the public sectors on a wide range of activities covering all aspects of life of the older generation, separated into three age groups: from 60 to 64 years old (quite active in economic and social terms, people who continue to work); from 65 to 80 years old (less active, requiring medical care and social services); over 80 years old (needing care and assistance). Despite the fact (Ministry of Labour and Social Protection, 2015) that this separation is relative, it suggests a stable policy in relation to this category of population, taking into account the difference of their needs and interests to ensure active aging and preserve labour ability and employment. The task of the Russian government is to achieve by 2018 a life interval of at least 74 years, and by 2020 - 75.7 years.

3. Results and methods

As results of complex monitoring of the socio-economic situation of older people indicate, as of January 1, 2014, the number of older people in Russia (Federal State Statistics Service 2016) amounted to 33.8 million (23.5% of the population), that means that every fourth person was over the working age. For comparison, according to the 2011 (European Statistical System, 2015) European census the proportion of people over 60 years old in Germany accounted to 26.5%, in France - 22.7%, in Poland - 20% [14]. If regions of the Russian Federation are considered, the maximum proportion of older people is still in the Tula region (29.1%), minimum - in the Yamal-Nenets Autonomous Area and the Chechen Republic (less than 9%).

At present, older people are among the most numerous socio-demographic groups in the regions of Russia. The population of Tomsk region (Russian Statistical Yearbook, 2014) , as well as in the whole country, is getting older, amounting to one-fifth of the entire population of the region.

In Tomsk region at the beginning of 2015 there were 230.7 thousand people over working age (men - 60 years old and older, women - 55 years old and older). Compared with 2011, the number of older people increased by 24.1 thousand people (11.7%), since multiple generations of people born in 50s began to reach the retirement age. During this period, the portion of the older generation in the total population increased from 19.7% to 21.5%.

Currently, according to international criteria, the population of Tomsk region (Tomskstat, 2015) is considered to be old as the age limit of 65 years is exceeded by more than 7.0% of the population. In early 2015, number of people of the specified ages relative to total population amounted to 11.0%, and that was every ninth inhabitant of the region (in the beginning of 2011 there were fewer - 10.4%). Also, the aging of the population is evidenced by the increase of the average age of the inhabitants of the region. Only in the last three years, the average age of the population increased by one year - from 37 years to 38 years.

The process of demographic aging of population is more common for women. The predominance of the number of the retirement age women over the number of men is quite significant. Women amounted to 70.6% in the composition of the population over working age. This is connected with the nationwide trend, when most men simply do not live until retirement, dying at working age. Life interval of women is 12 years longer than men. On average, men live 65 years, and women live 77 years and their retirement age occurs 5 years earlier. Among the male population portion of people of retirement age was 13.5%, among women - 28.5%.

However, in recent years there has been positive progress, and gender disproportion is gradually reducing: at the beginning of 2011 2460 women accounted for 1000 men, at the beginning of 2015 - 2386.

It should be noted that gender disproportion in all older age groups is very noticeable. And the older the age group, the more it is signified. There are 1.4 times more women at the age of 60-64 years old than men (Federal State Statistics Service 2015), at the age of 75-79 years old - 2.2 times, and at the age of 85 years and older - 3.6 times (Fig.1).

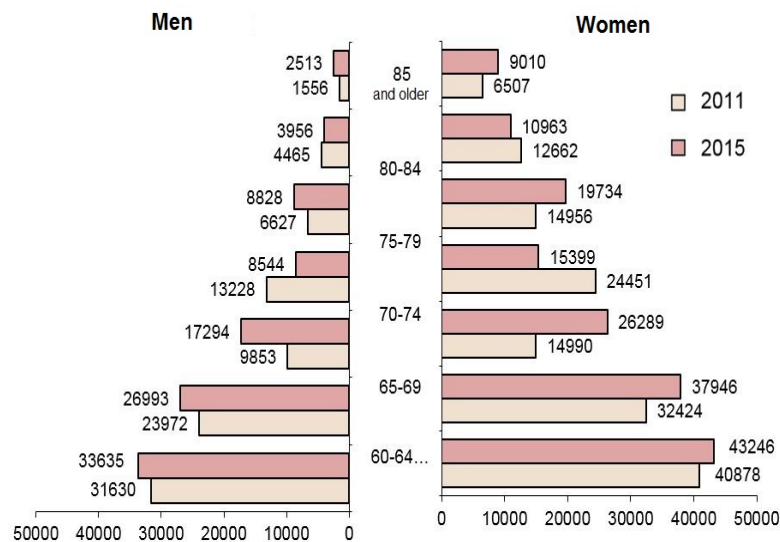


Fig.1. Age and sex structure of the population of working age (at the beginning of the year), people.

Mortality has significant impact on the ratio of the older generation genders. It had a downward trend in recent years. Compared to 2010, in 2014 level of mortality among people who are over the working age declined by 9.3% and amounted to 39 deaths per 1000 people in the specified age group. Higher mortality is typical for men. The level of mortality of men aged 60 years old and older 1.8 times higher than the mortality rate of women aged 55 years old and older. Among men of retirement age 56 deaths accounted for 1000, among women - 31.

The main causes of death for Tomsk Region are circulatory diseases and neoplasms. About 76.5% of the older people died because of them. Also, quite often causes of death of this population category were respiratory diseases and advanced age (Fig. 2).

A positive trend has started: for the last three years there was a decrease of mortality of the older generation people from diseases of the circulatory system, as well as from external causes, which for a

long time were among the main ones. There was a visa-versa situation with mortality of older people from the neoplasms.

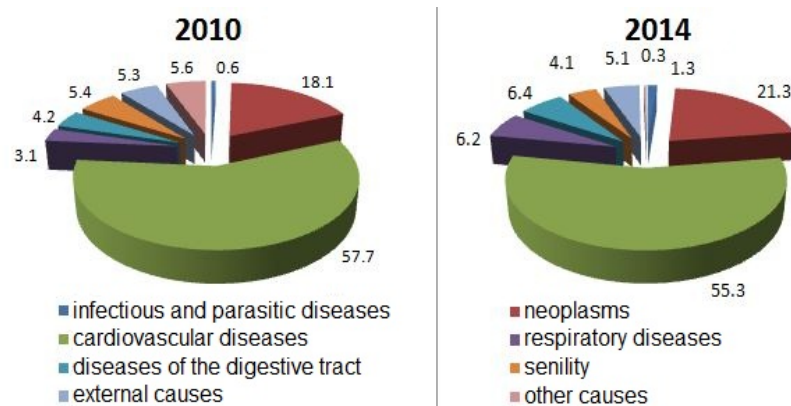


Fig. 2. The structure of mortality rates of the working age population by main causes of death, %.

As a result of reduced mortality and population growth of the older generation the age structure of the population of the region changed. Number of inhabitants over the working age became bigger than number of children and adolescents. This trend has been observed since 2005, and even increase of fertility did not break it. At the same time, the working-age population significantly reduced, caused by the working age entry of scanty generation born in the first half of the 90s. Thus, at the beginning of 2015 the proportion of children aged under 15 years accounted for 18.1%, people of working age - 60.4%, people over working age - 21.5% (Fig. 3).

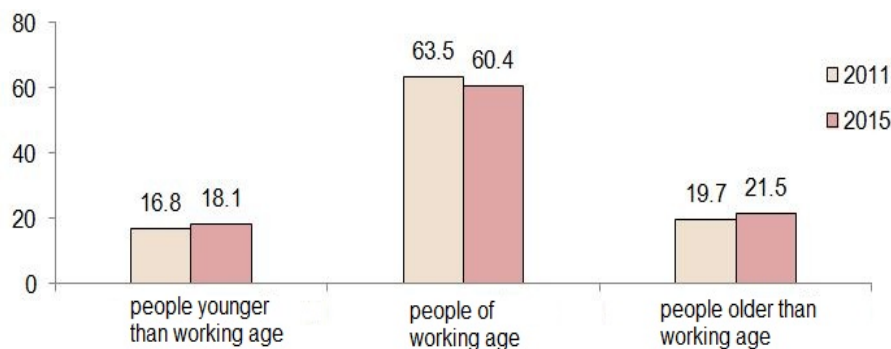


Fig. 3. Major age groups relative to total population at the beginning of the year, %.

The long aging process has significant socio-economic consequences for the region's economy, which the Tomsk region is already facing. Today there is a shortage of labor on the labor market, which partly can be overcome at the expense of immigrant workers. As a result, population pressure on the working population has increased. At the beginning of 2015 655 disabled accounted for 1000 people of working age, including 300 children and 355 people of retirement age. Whereas at the beginning of 2011 there were fewer dependents - 575, including 265 children and 310 pensioners. This situation is socially dangerous because if current trends continue, the working population may not be able to provide pensions to the elderly as well as to provide them with medical and social care. This

looks even worse when we consider that there are high rates of inflation in the region, as well as in the whole country in recent years. Thus, according to official data (Tomskstat, 2015), the average consumer price index for food products in the Tomsk region amounted to 110% in 2015.

The main source of income of the elderly in the region is a pension. According to the National Population Census of 2010 (Statistical Yearbook, 2015), more than 60.0% of the population older than working age live off the pension.

The average monthly insured (labor) old-age pension was 13878 rubles. During 2010-2015, the old age pension increased by 57.1% (1.6 times) in nominal terms, but in real terms, after allowing for inflation, only by 5.3%. That means that purchase power of pension falls far short of real wages. Purchase power of pensioners is almost 3.0 times less than purchase power of the working population. This further aggravates the socio-economic differentiation among the population and tensions on the regional labor market. This imbalance is also one of the reasons why pensioners continue to work after reaching retirement age. From 2011 to 2013 the number of working pensioners (OECD iLibrary, 2015) across the country has increased by 8% .

4. Conclusion

Thus, the increase in the portion of middle-aged and older people is a global trend, and its importance will only grow. In this connection, there is an aggravation of the problem of the development of technologies aimed at the extension of the period of economic activity, the expansion of its forms, the adaptation of modern information, communication and educational technologies for the specific needs of the elderly.

In the process of formation of the new socio-economic reality new aspects of the research of population as a social object appear. They require the development of a comprehensive system of support and implementation of socio-economic activities of older people and young mothers, the formation of the scientific and practical basis and special measures of national, regional and local socio-economic policies aimed at improving the satisfaction of the life quality. This leads to the emergence of new objects of population discourse and new methods of their formation. For example, the discourse on the differentiation of the able-bodied and disabled people is being replaced by the new discourse - differentiation of the able-bodied and disabled elderly population, where the needs of older people are moving to the central place. As a part of these studies it is highlighted that there is a weak link between disability and the actual age of the person, and the aging of population is considered as a new opportunity for the development of society. This requires creation of new consciousness of the healthy population for all generations. It is connected with secure aging, the emergence of systems for complex and long-term care for older people, the fight against discrimination of elderly people, the welfare of the elderly.

This necessitates the creation of such social institutions as centers of statistical monitoring of quality of life of older people in all regions. There, along with the established statistical data it is important to take into account the design of special social welfare technologies that can help the elderly fill market and social gaps that are important for society, but for various reasons are not sufficiently attractive for the younger generation of people. We need "new statistics" in order to maintain the new concept of

"population" as "aging population", taking into account the diversity of the older generation of people, learning new needs of the population with the changing age structure, overcoming of ageism in the regulations and social practices.

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