
Repopulation and Demographic Transition Geodemography and Demography

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Abstract: This article provides information about population regeneration, types of population regeneration, demographic transition process and its stages.

Keys words: Population regeneration, demographic transition, demographic explosion, depopulation, “Demographic transition stages”, geodemographic waves, demographic situation, demographic waves, demographic development stages

Repopulation is a biological process that ensures the existence of society and the growth of the population, and is a regular renewal of the human generation. «Reproduction of the population» means that the number and composition of the population is always naturally renewed by new generations by filling the place of older generations. «The essence of the concept of population regeneration» can be understood in broad and narrow meanings. In a broad sense, the concept of «population regeneration» includes the development and renewal of the population structure in terms of age, gender, social groups, nationality, marital status, level of education, professional structure. In a narrow sense, population regeneration — is the renewal of the human race by birth and death. Thus, despite the limitation of each person's life, the population continues to exist, changing or preserving its number and composition.

The following three types of population regeneration are distinguished:

1. Narrowed reproduction — the population living in it does not rebuild its place. The number of passing generations is more than the number of generations entering life.
2. Simple reconstruction. In this type of population regeneration, the number of generations entering life and the older generation is equal, and a stationary type of population is created.
3. Expanded reconstruction. This species is characterized by the abundance of each generation entering life compared to the passing generation. A progressive type of gender composition appears in the population. and its absolute number increases.

Demographic transition the event is — technology, education and is a phrase that represents the process of transitioning from high birth and high death rates in societies with low levels of economic development to low birth and death rates in societies with high levels of technology, education, and economic development. In terms of economic development, the process of demographic transition has taken place all over the world over the past two centuries, and birth rates and population growth rates have decreased significantly in all regions of the world

The process of demographic transition strengthens economic development and involves three different factors: capital and the crushing of land properties is prevented, which is included in human

capital investment the size will increase and the share of working age will increase compared to the gross population, and changes will occur in the share of different age categories of the population. Although this transition phenomenon is many in industrialized countries although this has happened, applying this theory and model to individual countries will not give much results, and this will be caused by specific social, political and economic factors in each country.

However, the idea that some form of demographic transition phenomenon applies in social sciences, and this is caused by the relationship between the decrease in the birth rate and the indicator of socio-economic development, which is observed many times historically in societies. Scientists industrialization and whether high income indicators cause a decrease in the level of population growth, or vice versa, whether low population growth indicators lead to industrialization and high income, has not come to a conclusion. Scientists also believe that interrelated factors such as high per capita income indicators, low death rates, post-retirement financial support and increased demand for human capital affect the demographic transition to what extent has not come to a conclusion about it. In the second stage of industrialization human capital growth has occurred, and this phenomenon coincides with the process of demographic transition. The increased role of human capital in the manufacturing process encourages families to use human capital in children, and this may be the beginning of the demographic growth process.

«Demographic transition» refers to the transition of a population from one type of reconstruction to another. For example, due to changes in demographic processes, the population moves from an expanded reconstruction to a simple or narrowed reconstruction. «The term demographic transition» was first introduced into scientific use in 1945 by the American demographer F. Noutstein. The first concept of demographic transition was created in 1909-1934 by the French demographer L. Landry. Swiss criminologist Leon Rabinovich (1929), American scientists Warren Thompson (1930) and Kingsley Davis (1949) made great contributions to the development of this theory. In the course of the historical development of the society, profound changes took place in the reconstruction of the population. For example, in the post-World War II era, demographic processes - birth, death and marriage management - were common in society. As a result, the socio-economic changes that took place in developed countries directly affected the demographic inclination of the population, and the attitude of the population towards the number of children changed, that is, many childhoods were replaced by average childhood and low childhood. At the same time, socio-economic and demographic factors such as the process of urbanization and the development of industrial sectors, the widespread spread of contraceptives among the masses, and the increase in the employment of women in social production led to a gradual decrease in the need of families for many children. Also, the improvement of medical care for the population, the introduction of modern technologies in the healthcare system, the equipping of treatment facilities with modern equipment, the training and retraining of highly qualified personnel in this field, and the provision of highly qualified personnel in the field the size of the attention caused a decrease in the number of deaths among the population, a prolongation of the average life expectancy. In most countries, the birth rate is maintained at a high level, and the death rate is drastically reduced it led to a high-speed increase in the number. This process is called «demographic explosion» in the scientific literature. Here we will explain the essence of the concept of «demographic explosion». This concept appeared after the 1950s. Demographic explosion occurs due to the increase in population reproduction, i.e. high birth rate, low death rate, high growth of the absolute population, and expanded reproduction of the population. The problem of demographic explosion causes a number of socio-economic problems.

As a result, each family begins to control the birth of children based on their economic capabilities. This, in turn, leads to a decrease in the population. In demography, the decrease in the absolute population is called «depopulation». This demographic decline in developed countries can be attributed, first of all, to the birth process. The decrease in birth rate and its wide coverage in a short period of time are clearly separated from other demographic processes, shaping the life of the family and stamping the crisis. Birth is also affected by the economic situation, that is, an increase in the standard of living of the

population leads to an increase in births, on the contrary, a low living conditions leads to the control of emotional feelings. The next factor affecting the decrease in the population is the increase in the level of death (infants, mothers and the working age population, the elderly). The depopulation process leads to a reduction in labor force and labor potential, as a result of which production and economic activity decrease, and the aging of the population. As a result, there is a decrease in economic growth. Thus, in accordance with the concept of demographic transition, all countries and peoples gradually move from one type of population regeneration to another in their demographic development.

The demographic situation, the reconstruction of the population and its migration will have their own characteristics in different regions and countries. Including the natural movement of the population, that is, its birth and death rates it changes on the scale of space and time, and this complex process takes place under the influence of a number of factors. Changes in the economy and demographic situation are carried out in a revolutionary and evolutionary way. For example, new technologies in production lead to truly revolutionary changes in the current economy. Similar revolutionary fundamental changes, demographic revolution or demographic explosions occurred in demographic processes, and such events mainly occurred in African and Asian countries in the 60s and 70s of the last century. Between the two revolutionary changes, the development is evolutionary, and this period, which spans several decades, is usually called "transition". Evolutionary changes lead to a revolutionary situation and then develop again in an evolutionary way based on the law of dialectics, quantitative changes, transition to qualitative changes. Thus, the characteristics of development in the intermediate or transition period are reminiscent of specific waves. Such waves have been studied from the point of view of time (time) in economics and demography.

For example, the Russian economist NDKondratev created his idea of "long waves" for economic development in the 30s of the 20th century. The well-known Russian demographer BTsUrlanis expressed his opinion about the gradually fading demographic waves observed for many years in the natural movement of the population under the influence of the Second World War. According to this idea, the demographic situation during the war, that is, the sharp decrease in birth rates, periodically, when the generation that appeared at that time and their children reached the age of starting a family and having children It is repeated to a certain extent, and this situation gradually weakens. It can be seen that such "waves" are mainly from the point of view of history, in other words, it has been researched and interpreted over time. However, they do not have geographical (territorial) aspects, because any event, reality occurs in a certain time and place. Therefore, it is possible to talk about geographical waves here. The expansion of such changes on the scale of the regions Swedish scientist T. "created by Hegerstrand is similar to the idea of diffusion distribution" goes. It should be noted that in socio-economic and demographic development, transition periods, first of all, in connection with the laws of internal development of these areas, sometimes a sharp "without a coup, occur not suddenly, but gradually, and the transition to a new situation is somewhat smooth. For example, in post-industrial countries, which have left the stage of industrial development, the process of urbanization will move to a new, qualitatively different state in the same way. In the economy, the transition to the current market relations and, accordingly, the demographic transition period will also take place gradually. Economic and demographic development takes the form of specific cycles or separate stages. But the transition periods in these areas begin at the same time and do not end at the same time; the demographic transition period begins a little later and lasts for a relatively longer period. This period is determined by the change in the forms of population regeneration (wide, simple and narrow). Stages of demographic development. In demographic development we can distinguish the following steps:

Phase I. In this case, both birth and death rates are high, the large circulation of the population is characterized by a small amount of natural reproduction, and its average life expectancy includes a much shorter period;

In stage II, the mortality rate decreases faster than birth, natural reproduction increases;

stage III is characterized by a decrease in birth rates in some countries and, above all, in large

industrialized centers, a decrease in death rates, but death decreases more slowly than births);

In stage IV, births will decrease in other cities of the country, the gap between urban and rural areas will decrease, and death will have much lower rates;

Stage V. A low birth rate is observed in all regions of the country, and the total mortality rate stabilizes at relatively low rates (5-6 ‰), natural reproduction is much reduced; At the level of birth in stage VI there are no serious changes, it is kept in a low state, but due to the “aging of the demographic composition of the population, the overall mortality rate is higher than the birth rate, and in the demographic situation, depopulation, that is, the absolute decrease of the population, occurs. The above stages of demographic development occur in all countries of the world not at the same time, that is, asynchronously, and not all countries must go through these stages. At the same time, it is even observed that there are different stages within the same country, and the demographic situation has the characteristic of “mixed”. In addition, some countries implement measures to prevent the aggravation of this situation in their special demographic policy. Therefore, demographic development stage VI may not be available in all countries (including Uzbekistan). In the countries that have passed this stage, a policy of improving the existing demographic situation is being carried out.

Demographic development of the population of the regions of the world. The fact that the mortality rate has been very high and the population growth rate has been low for several thousand years has its own valid reasons. At first, this is due to the unsatisfactory state of material and sanitary-hygienic conditions, as well as the destruction of hundreds of thousands of people as a result of repeated famines, pestilence, cholera and smallpox epidemics. Such disasters were recorded on the globe in 200-400, 1200-1300, 1600-1650 years, and the population did not grow at all during those times, during the 1300-1400 years, under the influence of the black plague epidemic, the earth the surface separated from 1G'4 of the population. Unexpected wars have a great impact on population indicators. Wars cost 5.2 million in the 18th century, 5.5 million in the 19th century, and almost 50 million in the 20th century. dried a person's pillow. There were no significant changes in demographic processes until the 19th century. In the periods after that, the processes characteristic of the demographic transition period began in the indicators of the natural movement of the population. It is a sharp change in the tasks performed by the family, a relative improvement in life, and the age of the population associated with changes in composition and other factors. The world's population has grown 2.6 times in the last 60 years. An even higher indicator was characteristic of Asia (2.9) and Africa (4.5). This indicator was equal to 1.3 times in Europe. In recent years, the absolute population of the Earth has averaged 90 million per year. is increasing per person. In Africa, Central and South Asia, Central America, the population is growing at a high rate. At the same time, the population in some regions of Europe is growing at a very low rate or is almost unchanged.

Changes in demographic processes at the regional level create specific geodemographic waves. For example, the process of decline in birth rates in the recent past began in Western and Central Europe and spread to all parts of the world, first in Southern and Eastern Europe, and then in America, Asia and Africa. The geographical distribution of this geodemographic innovation “speed” was different under the influence of complex factors. In the middle of the last century, births in Asian and African countries were around 40-45 ‰, and deaths were around 22-24 ‰. Around this time in Europe, these indicators were 18-20 and 9-10 per thousand. If we look at the level of individual countries, in the 1960s, births in Myanmar (Burma) were 45.4, deaths were 18.6 and natural reproduction were 26.8‰, in India, the above, respectively, were 41.7; 22.0 and 9.7 ‰, in China - 38.0; 12.8 and 25.2 ‰, and in France 18.0; It was equal to 11.2 and 6.8 ‰. The birth rate in Uzbekistan was 46.9 per thousand inhabitants in 1895, 45.1 in 1900-1910, 44.8 in 1920, 30.6 in 1940, and 33.5 in 1960. The spread of birth rates in Eurasia in the form of geodemographic waves, as we mentioned above, began in Western and Central Europe and continued in the southern and eastern directions. Currently, the lowest level of this indicator is observed in the Baltic countries, Belarus and Russia. The depopulation process in these countries has great indicators. It should be noted that the negative nature of the natural movement of the population, which was caused by the low birth rate and the high death rate, has gradually spread from Russia to the

Republic of Kazakhstan in recent years being monitored. Such a geographical change of the demographic situation in Kazakhstan is noticeable in its northern, western, central and eastern parts.

Therefore, the demographic development of this country is mainly dependent on its neighboring southern region, especially the South Kazakhstan region. The analysis shows that the birth rate and natural increase of the population in Uzbekistan decreased by more than 2 times over the next 50-60 years. Currently, the birth rate in our republic is 18-19 per thousand, that is, slightly lower than the global average (20-21 ‰). At this point, it should be noted that the death rate in our country (5-5.5 ‰) is much lower than the world average (9 ‰) (2005). The reduction of the birth rate observed in Uzbekistan begins in the center and spreads in the direction of the southwest and east. Of course, such a geodemographic wave taking place in our republic is not in the form of clear and continuous "isodem". The process of reduction of the population birth rate starts from the city of Tashkent and the Tashkent region, and ends or stops in the southern regions, that is, in the Surkhandarya and Kashkadarya regions. In this regard, Khorezm, Jizzakh, Bukhara, Namangan and Andijan regions and the Republic of Karakalpakstan are close to average positions. Also, in non-traditional cases, very low birth rates are recorded as a kind of "reduction centers" in industrialized cities and towns, and in Samarkand and Bukharai Sharif.

Thus, demographic processes change wave-like, step-by-step at the level of time and region, time and space. Studying such phenomena from the point of view of population geography and geodemography allows to predict the natural movement and growth of the population.

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