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Methodological Aspects of Providing the Demographic Capacity of the Community

1. Introduction

The demographic level of a community is affected by many factors: the sustainability and progress of the community economy, the level of health care, the sufficient level of well-being of the families of the community, employment opportunities, education, including vocational, etc. The change in the political and economic system in Ukraine in the early 1990s caused a crisis in all spheres of public life, which, logically, led to a demographic crisis. In the modern period in Ukraine there is a process of reforming state institutions and institutions of local self-government. The reform of decentralization of state power and local self-government has led to the strengthening of the resource base of communities, including the newly formed united territorial communities. This process has increased the powers of local self-government and, at the same time, the responsibilities of communities themselves for the level of local development and their own capacity. Restoration of the demographic balance in Ukrainian communities depends on the onset of positive changes in the socio-economic and political spheres. Residents of those communities that have managed to achieve such positive changes and improve their standard of living are more inclined to take care of their health, feel positive, and have children. Today, the capacity of the community is more the responsibility of the community itself than of the state. And the community development

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strategy should include general capacity development goals, which include: financial capacity (budget and resource capacity); institutional capacity (institutional capacity of local governments and civic institutional capacity); demographic capacity (level of population growth / decrease dynamics, birth rate, mortality rate, population aging rate); legal capacity (legality of actions and procedures).

The scientific issue of a positive demographic level is related to determining the optimal demographic structure that can ensure sustainable growth and expanded reproduction. The main characteristics of the natural and mechanical movement of the population of Ukraine are negative and the state can influence them only indirectly. However, some socio-demographic characteristics can be adjusted based on the implementation of the national economic strategy. The immanent essence of demographic stability as an institutional prerequisite for economic growth is practically not studied in the domestic scientific discourse, being an important issue in Western economic theory².

2. Research of problems in Ukrainian and foreign sources

Among foreign researchers, the role of socio-demographic factors, including certain aspects of demographic stability, in ensuring economic development has been thoroughly studied by Bloom D.E³, Kelley⁴, Lindh, T., & Malmberg, B⁵, Robertson⁶, P.E. Hagen⁷. Among ukrainian researchers, the

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² Kozlovskiy S.V. (2019), *Teoretychni aspekty demohrafichnoi stiiikosti* [Theoretical aspects of demographic stability]. *Ekonomika ta orhanizatsiia upravlinnia* [Economics and management organization]. Kyiv, vol. 3 (35), pp. 59–68 [in Ukrainian].

³ Bloom, D.E., & Freeman R.B. (1988), *Economic Development and the Timing and Components of Population Growth*. *Journal of Policy Modeling*, vol. 10 (1), pp. 57–81.

⁴ Kelley, A.C., & Schmidt, R.M. (1995), *Aggregate population and economic growth correlations: the role of the components of demographic change*. *Demography*, vol. 32 (4), pp. 543–555.

⁵ Lindh, T., Malmberg, B. (1998), *Age structure and inflation – a Wicksellian interpretation of the OECD data*. *Journal of Economic Behavior & Organization*, vol. 36 (1), pp. 19–37.

⁶ Robertson, P.E. (2002)., *Why the tigers roared: capital accumulation and the East Asian miracle*. *Pacific Economic Review*, vol. 7 (2), pp. 259–274.

⁷ Hagen, J. von, & Walz, U. (1995), *Social security and migration in an ageing Europe. Politics and Institutions in an Integrated Europe*, vol. 1, pp. 177–192.

contribution was made by: A.I. Romanyuk, O.M. Gladun⁸, S.V. Kozlovsky⁹, I.O. Kurilo¹⁰, E.M. Libanova¹¹.

Researchers Anand and Sen examined the interdependence of human development and economic stability and concluded that a balance was needed between social impartiality, sustainable economic development, optimal proportions of economic growth, and the demands of modernity. Approaching the definition of demographic stability (capacity), they do not offer methods for assessing the impact of changes in the number and structure of society on the overall proportions and dynamics of the reproduction process¹². McMichael, Butler, and Folke propose the concept of “reverse sustainability” as an integral issue that combines and improves measures for socially responsible business, environmental protection, improving the quality of life and, on this basis, reducing morbidity and mortality, increasing the average expected and actual life expectancy, growth of human capital, expansion of production¹³.

Based on the definitions of sustainability in the economy, we can conclude that a stable economic system simultaneously satisfies many criteria, in particular: at the macro level actively counteracts the likely destructive effects of exogenous factors, mimics and adapts to environmental changes without losing uniqueness and identity, adapting to progressive external modifications that are potentially able to bring a useful

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⁸ Romaniuk A.I. (2015), Demohrafichni tendentsii v Ukraini: mynule, sohodennia i maibutnie [Demographic trends in Ukraine: in past, present and future] // Demohrafiia ta sotsialna ekonomika [Demography and social economy], vol. 3, pp. 21–42. Kyiv. [in Ukrainian].

⁹ Kozlovskyi S.V. (2019), Teoretychni aspekty demohrafichnoi stiikosti [Theoretical aspects of demographic stability]. Ekonomika ta orhanizatsiia upravlinnia [Economics and management organization], vol. 3 (35), pp. 59–68. Kyiv. [in Ukrainian].

¹⁰ Kurylo I.O. (2016), Narodzhuvanist ta materynstvo v Ukraini: rehionalnyi aspekt [Birth rate and motherhood in Ukraine: regional aspect]. Demohrafiia ta sotsialna ekonomika [Demography and social economy], vol. 1, pp. 65–79. Kyiv. [in Ukrainian].

¹¹ Libanova E.M. (2014), Demohrafichni zrushennia v konteksti sotsialnoho rozvytku [Demographic changes in the context of social development]. Demohrafiia ta sotsialna ekonomika [Demography and social economy]. vol. 1, pp. 9–23. Kyiv. [in Ukrainian].

¹² Anand, S., & Sen, A.K. (1996), Sustainable human development: concepts and priorities. In ODS Discussion Paper Series, no. 1.

¹³ McMichael, A.J., Butler, C.D., & Folke, C. (2003), New visions for addressing sustainability. Science, vol. 302 (5652), pp. 1919–1920.

effect in the future; at the micro level maintains the optimal dynamic multiple relationships between the elements of the endogenous environment in accordance with the chosen development strategy¹⁴.

Simon and Gobin, studying the relevant socio-demographic and economic interdependencies for developing countries, identified the lag effect of birth rate growth, as the results of social production in the late 1970s depended directly on the employment of those born much earlier¹⁵. Bloom and Freeman noted that countries with comparable economic growth rates can differ significantly in birth and death rates, and this does not provide an unambiguous answer to the question of the nature of the impact of natural population growth on the scale of social reproduction¹⁶. Kelly and Schmidt have consistently investigated the multiple interdependencies of population change and economic growth in developed and emerging economies in order to identify the underlying determinants of demographic change¹⁷.

3. Analysis of the current demographic situation in Ukraine

The current population in Ukraine is estimated at February 1, 2020, amounted to 41,879.9 thousand people (excluding losses of the temporarily occupied territories). During January 2020 the population decreased by 22.5 thousand people. Compared to January 2019 the volume of natural reduction decreased by 8.7 thousand people. Natural population movement in January 2020 characterized by a significant excess of the number of deaths over live births: per 100 deaths – 52 live births. In general, the birth rate has halved since 1991: in 1991, 630.8

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¹⁴ Kozlovskiy S.V. (2017), *Kontseptsiiia upravlinnia stikist suchasnoi ekonomichnoi systemy yak osnova zabezpechennia yii rozvytku* [The concept of managing the stability of the modern economic system as a basis for ensuring its development]. *Ekonomika ta derzhava* [Economy and state], vol. 12, pp. 4 – 8. Kyiv. [in Ukrainian].

¹⁵ Simon, J.L., & R. Gobin. (1980), *The Relationship between Population and Economic Growth in LDCs*. *Research in Population Economics*, vol. 2, pp. 215–234.

¹⁶ Bloom, D.E., & Freeman R.B. (1988), *Economic Development and the Timing and Components of Population Growth*. *Journal of Policy Modeling*, vol. 10 (1), pp. 57–81

¹⁷ Kelley, A.C., & Schmidt, R.M. (1995), *Aggregate population and economic growth correlations: the role of the components of demographic change*, *Demography*, vol. 32 (4), pp. 543–555.

thousand children were born, in 2019 – 308.8 thousand. The birth rate began to fall after 2013, with an average of about 400,000 babies born per year. In the first half of 2020, 139.1 thousand children were born in Ukraine.

Institute of Demography and Social Research of the National Academy of Sciences of Ukraine predicted that the average population of Ukraine will decrease to 39,195 thousand in 2050 and to 37,147 thousand in 2060. The low version of the forecast provides for a decrease by 2060 population of Ukraine by 35% compared to 2011 to 29,836 thousand, while in the high case, this decrease will be only 3%. According to the UN demographic forecast, Ukraine's population is projected to decline to an average of 40 million in the late 2020s and to 30 million in the early 2060s. However, the Institute of Demography and Social Research of the National Academy of Sciences of Ukraine does not agree with this forecast of the UN, explaining it by the fact that in recent years the forecasts are constantly changing because Ukraine has lost a significant amount of territory and population. Therefore, the population will decrease faster, so on December 1, 2019, the population of Ukraine amounted to 37 million 289 thousand. (taking into account the losses of the temporarily occupied territories). Also, it can be observed that the number of inhabitants of rural communities in Ukraine is significantly reduced, which leads to a weakening of the demographic capacity, first of all, of rural and urban territorial communities. As of December 2020, rural residents – 31.1%. In fact, in 10 years, the rural population has decreased by about 16%. The employment rate of the rural population in the first quarter of 2019 was 62.2%, and the urban population – 68.2%. The unemployment rate among the rural population of Ukraine is 10.9%, among the urban population – 9%¹⁸. Among the causes of death of the population of Ukraine in January 2020, as in January 2019, the first place was occupied by diseases of the circulatory system, the second – neoplasms, the third – external causes of death (data excluding the temporarily occupied territory of the Autonomous Republic of Crimea and Sevastopol occupied territories in Donetsk and Luhansk regions).

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¹⁸ Holovne upravlinnia statystyky u Kyivskii oblasti [Main Department of Statistics in Kyiv Region]. Retrieved from: <http://kyivobl.ukrstat.gov.ua/content/p.php3?c=114&lang=1>.

4. Dynamics of development of demographic capacity of the countries of Central and Eastern Europe

According to the analysis of the demographic capacity of a number of Central and Eastern European countries for the period 1991–2017, demonstrated by the World Bank, the population of Belarus, Poland, Russia and Slovakia can be characterized as aging, while the population of Romania, Ukraine, Czech Republic, Lithuania, Hungary, Estonia, Latvia and Bulgaria are old. Social deductions and taxes on labor by international grouping are distortionary fiscal instruments, i.e. their application distorts the proportions of social reproduction, affecting the personal income at the disposal and behavior of economic agents. For example, the European Commission estimates that EU social security contributions and payroll taxes account for up to two-thirds of all labor taxes. The share of redistribution of GDP through the system of state compulsory social insurance indirectly characterizes the demographic burden, as it does not take into account private pension contributions, but creates an information base for the formation of demographic policy. Bulgaria, which is characterized by the highest share of the population over the age of 65 in the sample – 17.19% (with an average of 14.66%) – is characterized by a fairly low average share of social contributions to GDP at 8.39% (average value – 11, 29%). The maximum share of social contributions in GDP – 14.38% – is typical for the Czech Republic, where the share of the elderly population reached 14.04% in 2005 and has since risen to 19.42%, providing an average of 14.80 %. This almost corresponds to the indicator of Ukraine – 14.78%, but the average share of social contributions in GDP in our country is 3.39 percentage points lower, amounting to 11.00% (which is close to the corresponding indicator in Belarus and Estonia). The youngest population in the period 1991–2017 was the population of Slovakia, where the average share of the elderly in the overall structure was 11.96%, with social contributions being high – 13.49% – second only to the Czech Republic. In order to deepen the analysis in the studied interval, the periods 1991–2000, 2001–2010 and 2011–2017 were identified. The general trend remained unchanged, but some fluctuations were noted. The population

of Slovakia was mostly the youngest during the period, but in the interval 2011–2017 the average share of the population over the age of 65 was the lowest for Russia. Rapid population aging has been observed in Latvia, Estonia, and Hungary. At the same time, Belarus recorded a “rejuvenation” of the population by 0.14 percentage points in the period 2011–2017, compared to the previous decade, which can hardly be explained by the demographic boom¹⁹.

5. Directions for ensuring the demographic capacity of the community in terms of local development opportunities

Theoretically, we can identify and group the following factors to ensure the demographic capacity and optimal proportions of the reproduction process:

- a) macroeconomic: real gross domestic product per capita at purchasing power parity; the growth rate of real gross domestic product; average level of income and property differentiation of the population; inflation rate; total volume and compositional structure of public expenditures; the amount of public and private spending on human capital development, including science and education, health care, spiritual and physical development, etc.; adequacy and fairness of the tax component of national fiscal policy;
- b) socio-political: general development and quality of democratic institutions of the rule of law and civil society; the level of legal awareness and culture of citizens; efficiency and transparency of the public administration system; the general level of development of local self-government; network of social infrastructure institutions; humanistic direction of socio-demographic policy; institute of public quality control of public services;
- c) natural, in particular ecological and geographical-climatic: state of the environment; agroclimatic potential; natural resource potential; specifics of geographical location;
- d) socio-demographic: total population size and density; gender and age structure of the population; the share of the economi-

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¹⁹ World Bank Open Data [Electronic Resources]. Retrieved from: <https://data.worldbank.org/>.

cally active population, as well as the share of the population aged 15 and over in the overall structure; actual employment and unemployment rates; general birth rate (current and taking into account the lag effect); mortality rate, including people of working age; average life expectancy at birth; natural and mechanical movement of the population;

- e) socio-cultural: quality and accessibility of education; average duration of training; academic mobility, quality and availability of medical services; the level of spiritual needs²⁰.

To understand the depths of the current demographic crisis and identify ways to reduce its impact on the development of Ukrainian society, it is necessary to analyze the main, in our opinion, the factors that have contributed and may contribute to this crisis in the future. After all, demographic processes are an area that is influenced by almost all factors operating in society, among which the main ones are distinguished – socio-economic, political, demographic (population health factor), socio-psychological. The negative effect of these factors leads to a demographic crisis in society, the essence of which is the unity of two components – fertility and mortality²¹.

The level of demographic capacity of the community is influenced by virtually all processes of state and local policy. After all, all decisions made at the state level and at the level of local self-government are aimed at improving living standards, quality of public services and the level of citizen satisfaction. Local authorities, exercising their own and delegated powers, can use a set of different mechanisms to increase and strengthen their own capacity to improve the demographic situation within their community. Analyzing the main areas of local policy, we can identify the basic directions of the exercise of powers by local governments, aimed at strengthening demographic capacity:

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²⁰ Kozlovskiy S.V. (2019), *Teoretychni aspekty demohrafichnoi stiiokosti* [Theoretical aspects of demographic stability]. *Ekonomika ta orhanizatsiia upravlinnia* [Economics and management organization], vol. 3 (35), pp. 59–68. Kyiv. [in Ukrainian].

²¹ Iakovenko T.V. (2014) *Osoblyvosti suchasnoi demohrafichnoi kryzy v Ukraini* [Peculiarities of the modern demographic crisis in Ukraine]. *Visnyk Kharkivskoho natsionalnoho universytetu imeni V.N. Karazina* [Bulletin of VN Kharkiv National University Karazina], vol. 1122, pp. 77–83 [in Ukrainian].

1. Resource sphere
  - Efficiency of the budget process and development of the local economy
  - Qualitative long-term strategic planning of community development
  - Development of employment and promotion of decent wages
  - Balanced local tax policy
  - Creating a comfortable business environment and increasing the profitability of households
  - Ensuring the competitiveness and innovation of the local economy
2. Social sphere
  - Providing quality and affordable public services in the field of health, education, culture, sports and social security
  - Providing equal opportunities for quality recreation, sports and leisure
3. Political sphere
  - Promoting civic education and citizen participation in local policy-making
  - Observance of gender equality
  - Adherence to the principles of democracy, transparency and accountability of the government to the community
4. Legal sphere
  - Ensuring equal application of the law
  - Observance of legality and fair legal procedures
  - Introduction of equal legal responsibility, exclusion of selective justice
  - A balanced and consistent policy of local political decision-making
5. Sphere of urban planning, household services
  - Providing quality and affordable services for the maintenance of public utilities
  - Creating a comfortable and safe living space within the community
  - Provide measures to preserve the climate and friendly environment.

6. Conclusions

The demographic capacity of the community should be ensured by means of state and local policies and the efforts of the community residents themselves. At their level, state bodies determine the rules and conditions for the organization of public life in all communities and perform an important stabilizing function of guaranteeing equal opportunities for all communities in Ukraine. Local governments, using their own uniqueness and features of their resources, can direct their decisions of local importance to the best performance and delegated by the state and their own powers aimed at the main goal – to strengthen the level of satisfaction of their community. An important condition for the exercise of their powers by both public authorities and local governments is their observance of the principles of legality, equality, democracy and transparency. Also, researching aspects of demographic capacity, it should be noted that in addition to the efforts of government (state and local), an important role is played by the efforts of community residents themselves. It is the citizens who are the consumers of public services and it is their activity that is the driving force for the implementation of all government decisions made by the authorities for them. Conscious and responsible attitude of a person both to the goals of community development and to the goals of their own development, development of their own family (household) is the basis for strengthening the demographic capacity of the community as a whole. Taken together, the means and opportunities used by public authorities, local governments and, in fact, the efforts and capabilities of community residents can guarantee an improvement in the country's demographic situation and the strengthening of the demographic capacity of the local community. This is the joint responsibility of the government and the individual. And the common goal is the level of public welfare, the level of satisfaction of individuals, and, consequently, the increase in the birth rate, duration and quality of life.

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Summary

Development of local self-government institutions, positive dynamics of local development through the level of public capacity. Demographic capacity is part of the overall capacity of the local community. Demographic capacity is seen here as the ability of a local community to demonstrate a positive level of demonstration – one that allows communities to function smoothly, to have a resource program that provides a quality level of services to live in communities. The article presents an analysis of the current state of demographic processes in Ukraine and European countries. Insufficient demographic capacity in Ukrainian territorial communities is a consequence, first of all, of negative transformational societies, state institutions and local self-government institutions. Restoration of the demographic balance in Ukrainian communities depends on the nation of positive changes in the socio-economic and political spheres. Take care of your health, feel positive, give birth to children more than residents of those communities that have managed to achieve such positive changes and improve living standards.

Theoretical and methodological basic research is the scientific works of foreign and domestic scientists on selected issues. Dialectical, systemic and structural methods of analysis and generalization are applied. The main goal of the article is to analyze and systematize the theoretical and methodological approaches to defining the concept of demographic capacity of the community. The task of the article is to study the trends and patterns of the current situation and identify opportunities and mechanisms to ensure demographic capacity.

Keywords: demographic capacity, community capacity, capacity building, demographic situation, local community self-government