DEPRESSION OF ADMINISTRATIVE-TERRITORIAL UNITS OF CHERNIVTSI OBLAST: SOCIAL-GEOGRAPHICAL ASSESSMENT

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Abstract

Problem Statement and Purpose. The world economy has always developed and continues to develop cyclically, which affects the economic development of individual countries and their regions. As a result of cyclical economic development, regions are formed that maintain a progressive or stagnant type of economic development, and some of them, especially during periods of economic crisis, develop a regressive type. Thus, depressed regions or their separate territories appear, the study of which aims to identify in time the territorial disparities and polarizations of different types of the social formation of administrative units and to establish the level of their depression. It should be noted that most of the available scientific achievements concern the study of the territory of Ukraine at the regional level, and not at the subregional (raion) level. Therefore, our research allows us to shed more light on the depression of administrative-territorial units of Chernivtsi oblast, which differs from other regions of Ukraine by its natural-geographical, demographic, ethnic

contrast, as well as cross-border and border position, which certainly has a significant impact on depression of regions and cities of regional significance.

The purpose of this study is to conduct a socio-geographical assessment of the depression of administrative-territorial units of Chernivtsi oblast, which allows us to learn about the current state of the oblast and its raions in terms of depression, as well as identify possible steps to solve this problem.

Data & Methods. To study the depression of administrative-territorial units of Chernivtsi oblast, the following main types were chosen: economic, social, and demographic. For each of these blocks, the main indicators of indicators were determined, according to which a socio-geographical assessment of the level of depression in administrative regions and cities of regional significance was conducted.

Having established the rating places for each administrative-territorial unit according to the selected indicators, or their relative values, it was possible to establish the average place of each unit and, accordingly, the level of depression for each of the studied blocks. It was also established the common place of administrative units in the region by all indicators and thus identified different, according to the level of depression, regions.

Results. With the help of rating research, the typification of administrative-territorial units of the oblast according to the level of economic, social, demographic, and integral depression was carried out. The most depressed were the agricultural raions of the oblast – Khotyn, and Sokyriany. However, it should be noted that Khotyn raion has the same types of depression in all its components, and in Sokyriany raion the worst is the demographic situation, and the best – the economic one. The lowest level of depression is characteristic of Storozhynets raion, which is explained by its favorable geographical location relative to the oblast center, which contributes to economic and social development, as well as polyethnicity, which strengthens the demographic component.

Keywords: territory depression; economic depression; demographic depression; social depression; level of education; level of welfare.

ДЕПРЕССИВНОСТЬ АДМИНИСТРАТИВНО-ТЕРРИТОРИАЛЬНЫХ ЕДИНИЦ ЧЕРНОВИЦКОЙ ОБЛАСТИ: ОБЩЕСТВЕННО-ГЕОГРАФИЧЕСКАЯ ОЦЕНКА

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Резюме

Проанализированы особенности уровня депрессивности административно-территориальных единиц Черновицкой области по отдельным ее видам, а именно экономической, демографической и социальной. Это позволило провести их типизацию и обосновать слабые и сильные стороны каждой из административных единиц, что важно для разработки мер преодоления отсталости и понять особенности стратегического планирования развития сложившихся на базе районов и городов областного значения, территориальных общин.

Ключевые слова: депрессивность территории; экономическая депрессивность; демографическая депрессивность; социальная депрессивность; уровень образования; уровень социального благосостояния.

Introduction

The world economy was always developing and continues to develop cyclically affecting the economic development of individual countries and their regions. As a result of cyclical economic development, regions that maintain a progressive or stagnant type of economic development are formed, and some of them, especially during periods of economic crisis, are regressing. Thus, depressed regions or their separate territories appear. The study of these regions aims to beforehand identify the territorial disproportions and polarizations of different types of the social formation of administrative units and to establish the level of their depression. It certainly has great practical importance since it will help in time, especially

today in the context of decentralization in Ukraine, to take the necessary measures to overcome the depression of raions and cities of regional significance in Chernivtsi oblast.

Scientists in the field of social geography, economics, law, and sociology, such as M. Baranovsky, S. Bila, B. Danylyshyn, F. Zastavny, K. Mezentsev, H. Pidgrushny, M. Pityulych, A. Novikova, V. Govorukha, M. Honcharenko, O. Hrybko, A. Dehtyar, V. Kosenko, M. Latynin, V. Mamonova, M. Sorokun and many others were engaged in the field of the scientific research of depressive territorial formations of different levels. Their scientific works laid the theoretical foundations of scientific research of depression of regions (territories), developed a classification of depressed areas, features of their formation, and further development. It should be noted that most of the scientific works concern the study of the territory of Ukraine at the regional level, not at the subregional (raion) level. Therefore, our research allows us to shed more light on the depression of administrative-territorial units of Chernivtsi oblast, which differs from other regions of Ukraine by its natural and geographical, demographic and ethnic contrast, as well as cross-border and border position, which certainly has a significant impact on depression and cities of regional significance.

This study aims to conduct a socio-geographical assessment of the depression of administrative-territorial units of Chernivtsi oblast, which allows us to learn about the current state of the oblast and its raions in terms of depression, as well as identify possible steps to solve this problem. The main **objectives** of this socio-geographical study are: 1) to analyze the theoretical foundations of the concept of "territory depression", their types and features of formation, as well as to form on their basis a method of rating the level of depression 2) to analyze the depression of the studied administrative-territorial units by its main types, namely — economic, social and demographic, to develop their typification by individual types and by the general level of depression; 3) to suggest ways to overcome depression in Chernivtsi oblast.

Data and methods of the study

To study the depression of administrative-territorial units of Chernivtsi oblast the following main types of depression were selected: economic, social, and demographic. For each of these types, the indicators were determined, according to which a socio-geographical assessment of the level of depression in administrative districts (raions) and cities of regional significance was conducted.

To assess the level of economic depression, we use the following statistical indicators: export volume (% of total exports), capital investment in housing construction (UAH million), capital investment per capita (UAH million), total agricultural output (UAH million), grain

and legume yield (q/ha), number of cattle (thousands of heads), financial results before taxation of enterprises (million UAH), the share of profitable enterprises (%), profit of profitable enterprises (million UAH), loss of unprofitable enterprises (UAH million).

To define the level of social depression, we operate with such indicators as coverage of children with preschool education (%), average monthly nominal salary (UAH), number of registered unemployed, providing subsidies to the population to reimburse the costs of housing and communal services (UAH), morbidity for active tuberculosis (per 1,000), HIV-infected, the number of detected serious and particularly serious crimes (cases), housing (thousand m^2), providing housing for the population (per person avg.).

To study the level of demographic depression, we use the following main indicators: number of births (‰), number of deaths (‰), natural increase, profits (‰), departures (‰), migration balance, the ratio of men to women, the proportion of children (under 14) (%), the share of the elderly (65 years and older) (%), the share of urban population (%).

By establishing the rating places for each administrative-territorial unit according to these indicators, or their relative values, it is possible to establish the average rating of each unit and, accordingly, the level of depression for each of the studied types. Also, the general placing of the administrative units in the oblast based on the indicators has been established. Thus different areas according to the level of depression have been identified.

This method allows tracking the level of depression and identifies the factors of its formation using a small and most importantly available number of indicators in statistical yearbooks. Its practical significance lies in the fact that such research can be conducted for territorial communities, which will allow the adoption of regional development strategies of individual communities, which will increase their economic, social and demographic capability.

Results and discussion of the study

The term "depressed area" first appeared in the "Report on the Study of the State of Industry in Some Depressed Regions" (UK) and was mainly used to identify old industrial areas within the country's coal basins that have been hit hard by rising unemployment caused by the cessation of production in some branches of heavy industry [5].

Due to the deepening of the level of depression in the old industrial areas in different countries of the world and the European Union, in particular, there is an expansion of the range of problems that hinder the development of regions, compared to other neighboring regions. Therefore, the EU regional policy strategy provides for the classification of depressed

regions not only economic indicators but also migration flows, natural population growth, morbidity and education, environmental indicators, and more.

In Ukraine, the concept of "depressed region" appeared only in the mid-90s of the twentieth century, which was associated primarily with the intensification of regional research and outlined mostly economic and environmental indicators of depression in some areas of the state (V. Kolomiychuk, F. Zastavny, Y. Shevchuk, and others). Later, the concept of "demographic depression" appears (V. Nahirna, S. Ishchuk, F. Zastavny, and others). At the present stage, many scientists in the field of economics study the depression of the regions of Ukraine, and among social geographers should include the scientific works of M. Baranovsky, Y. Oliynyk, K. Mezentsev, L. Niemets, K. Niemets, G. Pidhrushny, A. Stepanenko, O. Topchieva and others who continue to improve research methods and assess the depression of the regions of Ukraine.

The Law of Ukraine "On Stimulating the Development of Regions" states that "a depressed territory is a region or its part, the level of development of which, according to the indicators defined by this Law, is the lowest among the territories of the respective type". Article 6 of this document also states that regions, industrial, agricultural districts, as well as cities of regional subordination can be classified as depressed [1].

To understand the concept of "depressed region" were analyzed many scientific works. The basis of the study lies in the works of M. Baranovsky, who classifies "depressed regions" as "part of the country, characterized by low socio-economic development, their negative dynamics, imperfect economic structure, low investment affiliation, and standard of living of the population and inability to ensure self-creation" [4].

If we consider the depression at the level of raions and cities of regional significance, we may observe a pattern that they are mainly peripheral administrative districts, the centers of which are urban-type settlements and small towns with little economic potential. Among them are those where primary cause of depression is the low level of development of the rural economy (agriculture, food industry, rural green tourism, small industrial production), and those which depression is determined by very acute demographic or social problems. It is also worth noting that in rural depressed areas, economic and social well-being indicators will be much lower than the national average, leading to increasing disparities between villages in the vicinity of towns and cities and peripheral villages. As a result, there are socioeconomic disparities and polarization.

It should also be noted that for the population of the region, depression is primarily not an economic but a social problem, which is becoming increasingly important every year. The

search for ways to restore depressed areas should lay in an in-depth scientific analysis of the origin and development of depression in a particular territory. Today there is no single method of conducting such research, which can be explained by different sets of statistic data, and specific natural, socio-economic, demographic, ethnic, and other features of the territories (regions), and different scientific views on the problem by geographers, and economists. There are also no clear criteria for identifying the stem components (types) and levels of depression, and it complicates the unity of vision of scientific research on the same region or territory.

That is why we have chosen three main components of depression of territories or regions: economic, social, and demographic.

Economic depression. Today, one of the main aspects of the development of regions and their territorial parts is the level of economic depression, which reflects the matter-of-fact state of welfare of the population. Particular attention needs to be paid to the study of rural areas, as it is in them that economic depression often leads to the "extinction" of settlements due to the exodus of young people, regressive demographic processes in general, and, as a consequence, increase social unrest. The level of urbanization in Chernivtsi oblast is 43.3%, which indicates a significant predominance of the rural population. Therefore, the study of the raions and cities of regional importance is crucial to prevent the deepening of socio-economic disparities.

After analyzing the above indicators of economic depression and creating rating series for each of them, as well as outlining the average place of each raion and city of regional importance in the oblast, we were able to create their classification by level of economic depression, highlighting the following types: very high, high, medium, low and very low (Fig. 1).

The highest economic depression is observed in Hertsa and Zastavna raions and the city of Novodnistrovsk; high – in Kelmentsi, Putyla and Khotyn raions; medium – in Vyzhnytsia, Novoselytsia, Sokyriany raions, as well as in Chernivtsi; low – in Hlyboka and Storozhynets raions and very low – in Kitsman raion.

It should be noted that this situation with the level of economic depression in Chernivtsi oblast in 2019 can be explained by the fact that the percentage of exports in total trade in the region is highest in Vyzhnytsia, Storozhynets and lowest in Zastavna, Kelmentsi, and Khotyn raions. The most capital investments in the construction of housing were made in the city of Chernivtsi and Storozhynets raion, and the least in Novodnistrovsk and Sokyriany raion. In general, in the oblast, this indicator in 2019 decreased almost by half compared to

the previous year. The most financially secure population was within Chernivtsi and Novodnistrovsk cities, and the least in Zastavna and Khotyn raions.
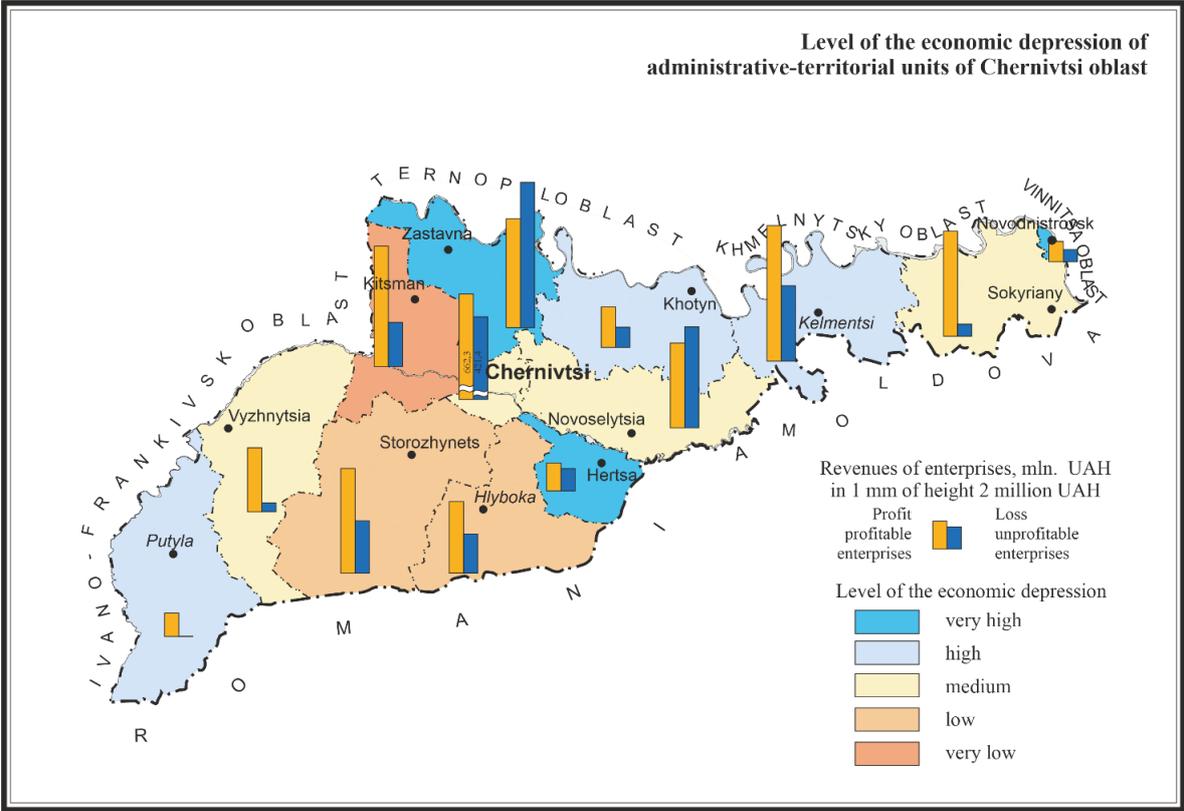

Fig. 1. Level of the economic depression of administrative-territorial units of Chernivtsi oblast

Khotyn and Novoselytsia raions in 2019 produced most agricultural products, which can be explained by the large areas of agricultural land here. However, the yield of cereal and legumes was highest in Kitsman, Hlyboka, and Sokyriany raions, and the lowest in the mountainous Putyla raion. One of the acute problems of the region, as well as of the country, is the reduction of cattle. Thus, in Chernivtsi oblast, this indicator has halved in the last ten years, and the highest numbers of cattle now can be observed in Storozhynets and Putyla raions. The indicator of direct profit of production was the highest in the city of Chernivtsi, due to its administrative and economic importance and in the rural areas, with a significant gap, Sokyriany and Kitsman were in the lead, and Zastavna and Novoselytsia raions were lagging behind. The highest share of profitable enterprises is in Putyla, Kelmentsi, and Kitsman raions, and the lowest in the cities of Novodnistrovsk and Chernivtsi respectively, the profit of profitable enterprises is mostly proportional to these indicators. The loss of

unprofitable enterprises was the highest in the city of Chernivtsi and the lowest in the Putyla district.

Social depression. Deurbanization processes have led to a significant overcoming of disparities in the lifestyle of urban and rural populations, which have identified trends and changes in socio-cultural and living conditions, quality of educational, cultural, medical, transport, sports and other services that determine the level of comfort and social security.

After analyzing the main indicators that characterize the social depression of administrative-territorial units of Chernivtsi oblast and assessing them according to the same method as indicators of economic depression, we were able to typify the five categories of depression, shown in Figure 2.
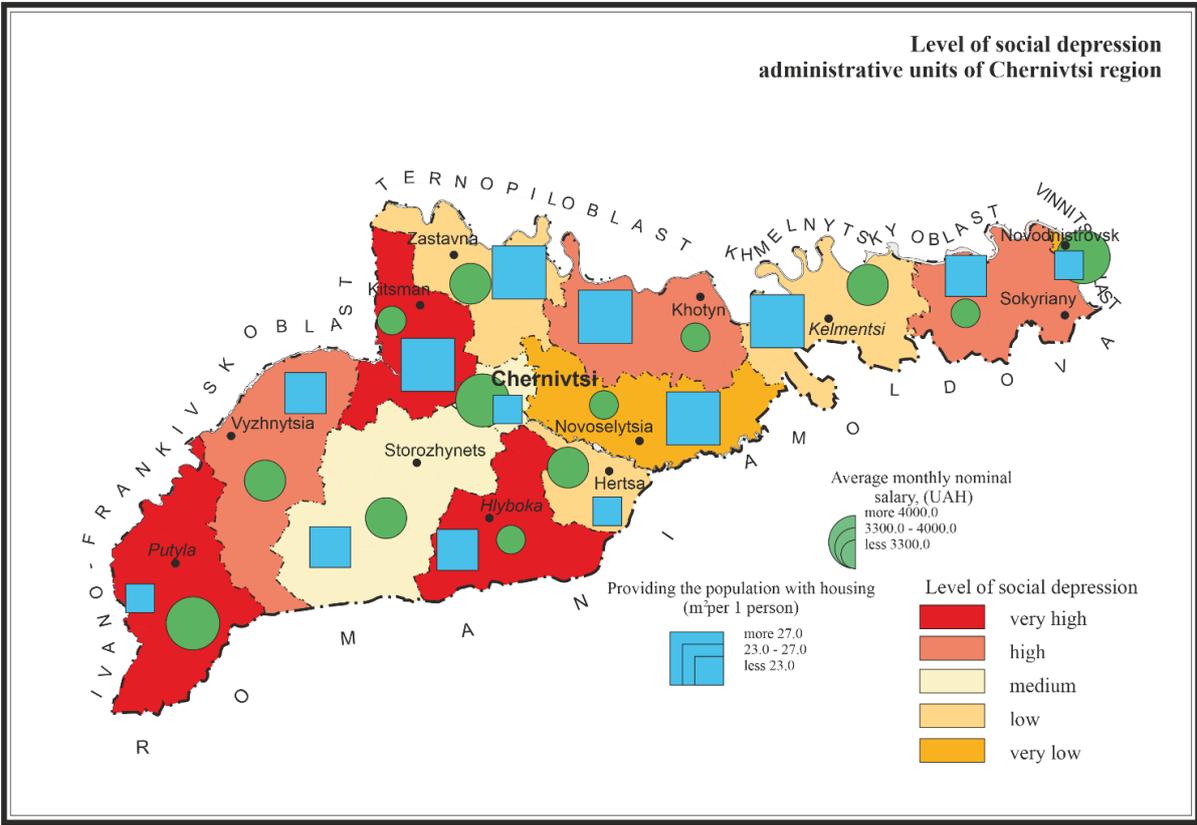

Fig. 2. Level of social depression of administrative units of Chernivtsi region

There is a very high level of social depression in Hlyboka, Kitsman and Putyla raions, high – Vyzhnytsia, Sokyriany, and Khotyn, medium in Storozhynets, and Chernivtsi, low in Hertsa, Zastavna, and Kelmentsi, and the lowest in the city of Novoselytsia and Novoselytsia raion.

The emergence of social depression is caused, in our opinion, by the high unemployment rate, which causes low incomes, population outflow, as well as underfunding of education and culture, medicine, and other spheres. The urbanization process also has an impact on the redistribution of the population between cities and rural settlements, and especially among areas remote from the regional center and those adjacent to them.

The coverage of children with preschool educational institutions in Chernivtsi oblast, as of 2019, was the largest in the cities of Novodnistrovsk and Chernivtsi, and the smallest in Hertsa, Hlyboka, and Storozhynets raions. The highest average monthly nominal salary is in the cities of Novodnistrovsk and Chernivtsi, as well as in Putyla raion, and the lowest is in Novoselytsia and Kitsman raions. The highest number of unemployed is registered in the city of Chernivtsi and Kitsman raion, and the lowest is in Novoselytsia and Hertsa raions, and the city of Novodnistrovsk. The largest number of disabled people reside in Khotyn, Kelmentsi, Vyzhnytsia, and Zastavna raions, and the lowest in Storozhynets, Novoselytsia, and Hlyboka raions.

A considerable aspect of the social development of territories and regions is the quality of secondary education of graduates. The quality of education of graduates of various secondary schools of Chernivtsi oblast differs significantly between different raions of the oblast and the school subjects. In 2019, about 17% of graduates of Chernivtsi oblast did not pass the threshold of the test. The number is high compared to other regions of Ukraine. In the oblast, this figure ranges from 4% to 33%. The largest number of people who did not pass the EIT (external independent testing) is observed in the Storozhynets raion, and the lowest in the cities of Chernivtsi and Novodnistrovsk, and Kelmentsi and Sokyriany raions (Fig. 3).

This can be explained by the ethnic structure of the population of Storozhynets, Hertsa, Novoselytsia, and Hlyboka raions, as well as the language of learning in these raions. Another significant factor is the accessibility of students to educational institutions, notably in the mountainous Putyla raion. These factors need to be taken into account when developing strategies for the social development of raions and cities of regional importance to reduce or completely overcome the depression.

If we consider the arithmetic mean of the results of the EIT, the best level of knowledge shown by graduates in Chernivtsi (155.6 points), Kelmentsi (142.2), and Kitsman raions (141.1). The lowest level of knowledge among graduates in Storozhynets (123.6) and Hertsa (115.7) raions, these numbers are considered rather low.
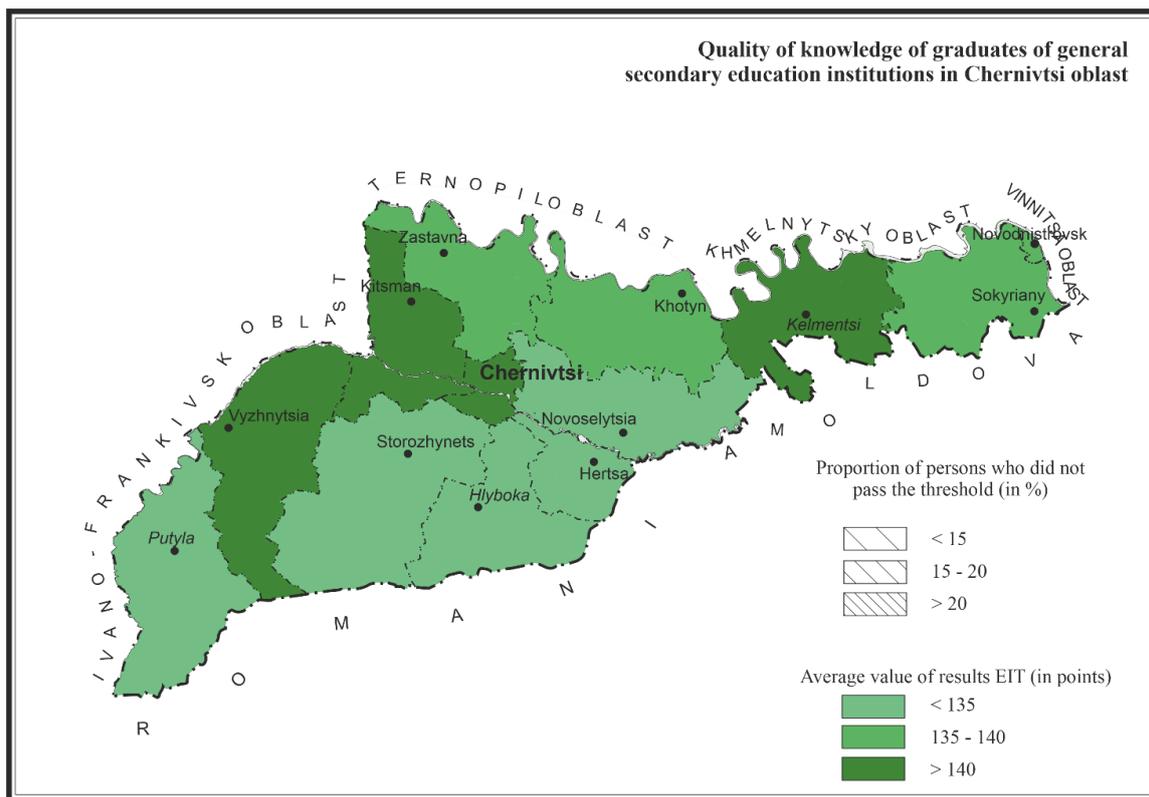
Fig. 3. Quality of knowledge of graduates of general secondary education institutions in Chernivtsi oblast

Demographic depression. The demographic factor is an important condition for the economic, social, political, and cultural development of any region, which first of all reflects its human potential in qualitative and quantitative terms (population and its dynamics, gender and age structure, natural and mechanical growth, and their dynamics, ethnic, linguistic, social and another status, etc.). All this determines the socio-economic development of territories or regions. Therefore, demographic depression is, at the same time, an important indicator and a factor that characterizes social (including economic) sustainability.

After analyzing the main indicators that characterize the demographic depression of raions and cities of the regional significance of Chernivtsi oblast, as well as assessing them by the same method as indicators of economic and social depression, we were able to typify the administrative units of the region in five categories of depression as shown in Figure 4.

Today, most regions of Ukraine have negative indicators of natural and migratory population growth. Chernivtsi oblast is no exception. As a result, there is an unfavorable situation in the sphere of population reproduction, which should be considered as a demographic crisis or depopulation, as well as an aging population. In turn, increasing the number of retirees requires the costs of the state and local governments to ensure their

livelihoods. Demographic indicators also lead to changes in the labor potential, namely the level of employment and unemployment, gender status, material security, and other indicators.
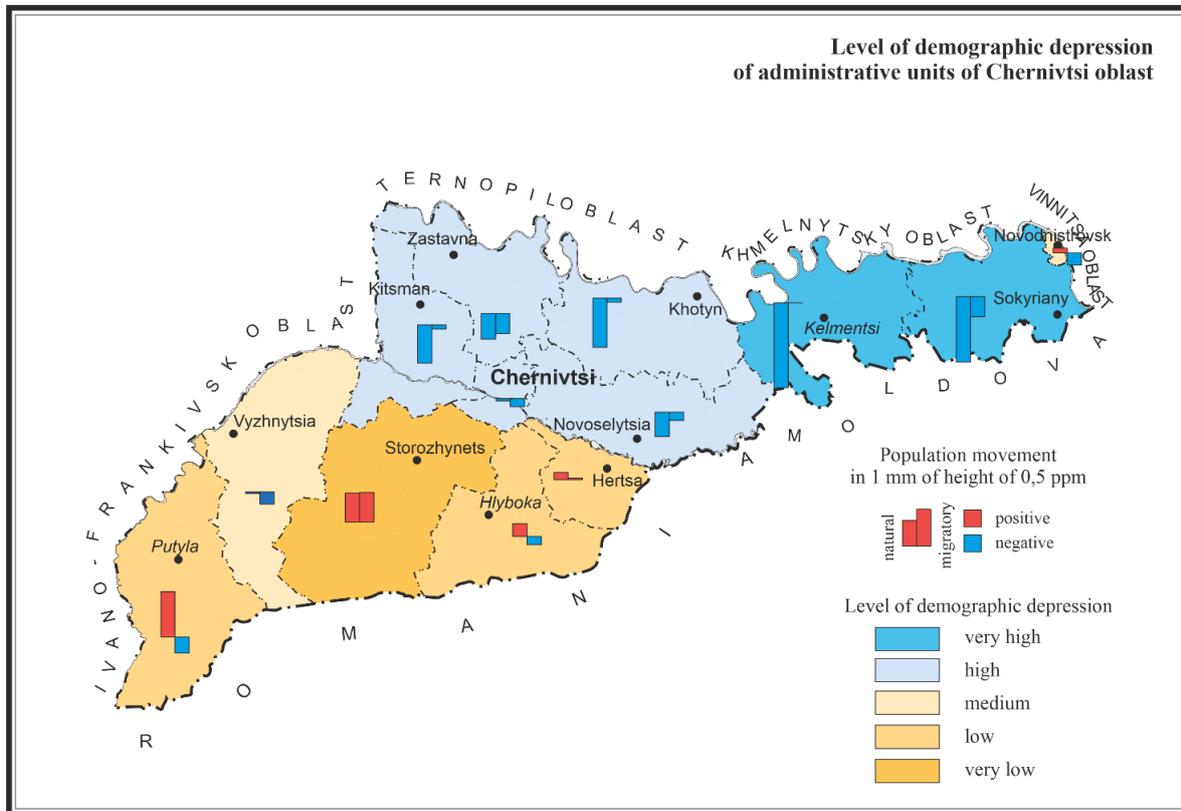

Fig. 4. Level of demographic depression of administrative units of Chernivtsi oblast

The population of Chernivtsi oblast has decreased by more than 20 thousand people over the last 18 years, which indicates a regressive type of population reproduction in the region as a whole. It should be noted that not in all administrative-territorial units there is a regressive type of population reproduction. There are raions with a progressive or not significant regressive type of population reproduction. In particular, in polyethnic ones like Storozhynets, Hlyboka, and Novoselytsia, in monoethnic predominately Romanian Hertsa raion and the mountainous Putyla raion, populated by Hutsuls for whom it is traditional to have large families. Accordingly, the lowest natural increase was in Kelmentsi, Sokyriany, Khotyn, Kitsman, and Zastavna raions. The migration drift decreased the most in the city of Chernivtsi, Zastavna, Sokyriany, Vyzhnytsia, and Hlyboka raions.

Thus, the most depressed in terms of demographics are Kelmentsi and Sokyriany raions. A slightly better situation is observed in Zastavna, Kitsman, Novoselytsia, and Khotyn

raions, as well as in the city of Chernivtsi. Low demographic depression is present in Hertsa, Hlyboka, and Putyla raions, and very low in Storozhynets raion.

To summarize the results of the study, we conduct, according to the method of rating assessment, an integral typification of administrative-territorial units according to the level of depression. To do this, we rated from 1 to five points for each of them and each type of depression. Thus 5 points receive those units in which one or another type of depression rated as "very high" and 1 for those rated "very low"; the results compiled in Table 1.

Table 1 - Typification of administrative-territorial units of Chernivtsi oblast according to the integrated indicator of depression

Administrative-territorial unit	Rating by type of depression			Total points	Type of integral depression
	economic	social	demographic		
Cities of regional significance					
Chernivtsi	3	3	4	10	medium
Novodnistrovsk	5	1	3	9	low
Administrative-territorial raions					
Vyzhnytsia	3	4	3	10	medium
Hertsa	5	2	2	9	low
Hlyboka	2	5	2	9	low
Zastavna	5	2	4	11	high
Kelmentsi	4	2	5	11	high
Kitsman	1	5	4	10	medium
Novoselytsia	3	1	4	8	low
Putyla	4	5	2	11	high
Sokyriany	3	4	5	12	very high
Storozhynets	2	3	1	6	very low
Khotyn	4	4	4	12	very high

It is estimated that the most depressed raions are Khotyn and Sokyriany, which can be explained by the aging population, low incomes, and high morbidity rates. Zastavna, Kelmentsi, and Putyla raions are highly depressed, differing in the factors that cause this depression. The situation with the social depression is the best in Zastavna and Kelmentsi raions, and the lowest level of demographic depression is in mountainous Putyla raion. Vyzhnytsia and Kitsman raions are moderately depressed, as well as the city of Chernivtsi, which also differ in the indicators that caused the general level of depression. Hertsa, Hlyboka, and Novoselytsia raions are characterized by low depression. And Storozhynets

raion rated as the least depressed, which is influenced by its ethnic structure and borderline location with the administrative center of the oblast — the city of Chernivtsi.

The presence of depressed areas of different levels requires anti-depression measures at both the national (state) and regional (local) levels. It is clear that during the economic crisis, the whole country becomes a depressed territory. Therefore, it is important to study the disparities and polarization of depression in order to identify those areas where it reaches the highest levels and to be able to develop a set of measures that will contribute to the development and, consequently, economic, social, and cultural growth.

We believe that the main ways to overcome depression in general and to stimulate the development of rural depressed areas should be in: increasing the priority of rural communities, by creating employment conditions; to overcome rural poverty; to reform the social sphere; to increase the responsibility of local communities for quality of life and living conditions; to optimize land use, as well as to develop a clear strategic plan of regional development of newly created communities and functioning of the regional development fund.

Conclusions

The depression of regions, territories, or individual settlements today is one of the key tasks of socio-geographical research of regional development, which should be taken into account when planning comprehensive and socio-economic development strategies of the regions of Ukraine. The study selected three significant components of depression – economic, social, and demographic, among which there are close connections and complementary factors. The Chernivtsi oblast as a cross-border, polyethnic, multi-confessional region marked by various orographic (mountain, foothill, and plain parts), climatic, and other natural conditions, was chosen to test the method of depression evaluation.

With the help of rating research, we carried out the typification of administrative-territorial units of the region according to the level of economic, social, demographic, and integral depression. The most depressed were the agricultural raions of the oblast – Khotyn, and Sokyriany. However, it should be noted that Khotyn raion has equal types of depression in all its components, while in Sokyriany raion the demographic situation is the worst, and the economic one is the best. The lowest level of depression is characteristic for Storozhynets raion, which can be explained by its favorable geographical location relative to the regional center. It contributes to the economic and social development of the raion, while its polyethnicity strengthens the demographic component.

The results of this study can be taken into account in the planning of the strategy of regional development of Chernivtsi oblast and its communities, which will compare the growth of newly created territorial communities with the development of a particular administrative-territorial unit of which they used to be part of.

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