### PROBLEMS OF DEMOGRAPHIC DEVELOPMENT ON THE EASTERN BORDER OF THE EUROPEAN UNION: CASE STUDY OF THE WESTERN UKRAINE

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#### **Abstract**

The article deals with the issue of demographic development on the eastern border of the European Union - applying the example of the Western Ukrainian border regions (in Ukrainian: *oblasts*). The aim of the research was to identify the main problems and tendencies of demographic development in these regions. On the basis of state statistical data, the authors analysed general demographic indicators and identified the main trends in further demographic development of these border regions. The authors tried to explain the observed trends. A lot of economic and social problems in the Western Ukrainian border regions that have been identified are common to other regions adjacent to the eastern border of the European Union. The research was conducted by the Ukrainian National Academy of Sciences and Wrocław University of Economics.

#### Introduction

Demographic potential is a very important component of Integral Area Potential. Its state reflects economic and social features of the society's development, while population reacts to the main problems in the country in terms of reproductive behavior and mobility. Demographic potential, as a basis of labor potential, is important for the regional economic activity. Research of regional demographic development is important because of the complicated demographic situation in the Ukraine. The ongoing regional demographic processes are caused by changes in the economic activity, social development, and ecological situation. At the same time, the demographic processes in reverse affect social and economic development in the regions. The quantity of population and the migration activity are the most dynamic indicators of the economic and social conditions, environmental security, comfort level and prosperity in particular regions and countrywide.

## 1 The Western Ukrainian regions' location role in their demographic development

As the Western Ukrainian regions (Lvivska, Zakarpatska, Ivano-Frankivska, and Chernivetska oblasts) are located within the Ukrainian Carpathians and Dniester river basin, similarities in the historical territory development are the result of similarities in settling processes, population distribution, and ethnic composition. As a result of the similarities in natural and environmental features, economic, social and demographic processes, all Western Ukrainian regions (oblasts) are included in the Carpathian socio-geographical region.

After Ukraine gained its independence, the geopolitical location state of the Western Ukrainian regions changed significantly. Most of them – Lvivska, Zakarpatska, and Chernivetska oblasts – border with the European Union, and are included in the international association of the Carpathian Euroregion, through which the major Trans-European Crete international transport corridor passes (Lisbon – Trieste – Liubliana – Budapest – Kyiv – Volgograd).

The border location facilitates the development of economic cooperation among the neighboring countries. This factor also helps to create joint venture companies and form Euroregions [6]. For example, in 2008, 12 joint venture companies worked only in the Yavorivskyi municipality of the Lviv region in Ukraine and Lyubachivskyy povit of Podkarpackie Voivodeship in Poland (local administrative formations) alone [2]. Growth of economic activity in the region stimulates its economic development, creates new jobs, and raises the level and quality of life as a result of the improved demographic situation in general. However complicated the socio-economic situation, such as a lack of jobs, a high unemployment rate, and a lack of opportunities for young people, combined with the border location and closeness to the EU countries, this situation has led to a rise in migrational activity and people leaving the region.

# 2 Main trends in the demographic development of the Western Ukrainian border regions

The natural depopulation process in the Ukraine started in 1994, and is still going on along with another process of the population, ageing. Moreover, economic difficulties combined with the political unrest are further escalating the negative demographic trends. At the beginning of the 21st century, the Ukraine found itself in a complicated demographic situation, characterized by the natural population decrease and growth in emigration abroad. To improve the demographic situation in the country, on April 1, 2005 the Ukrainian Parliament passed a new law, which significantly increases financial aid to families for the birth of a child.

Western Ukrainian regions are mainly rural, densely populated areas with their regional population distribution center in the city of Lviv. As of 01/01/2011 the population of the region was over 6 million (13.3% of total Ukraine population). The population distribution system is characterized by the domination of small towns and villages. Settlements are distributed unevenly with the majority of them at foothills in the Ivano-Frankivsk and Chernivtsi regions. Highland villages are mostly in the Lviv, Chernivtsi and Zakarpatsky regions.

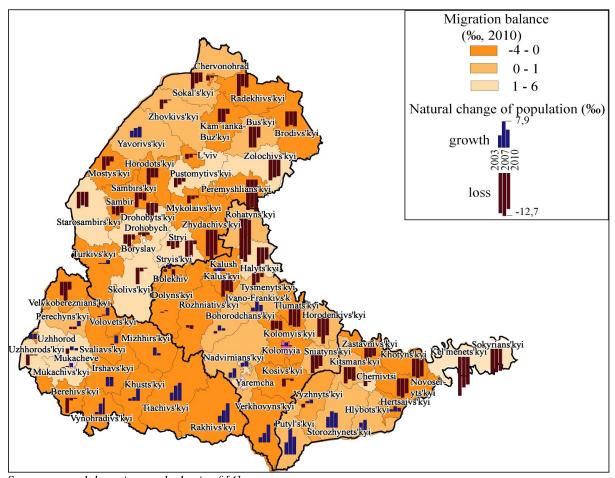
Ethnically, Western Ukrainian regions are quite diverse. Measuring ethnic diversity, the Ivano-Frankivsk region could be considered mono-ethnic, the Lviv and Zakarpatsky regions – transitional and the Chernivetsky region – multiethnic. Judging by the number of nationalities represented, the Chernivetsky and Zakarpatsky regions are the most ethnically diverse regions in the country, where national minorities reside in small, compact territories and often represent the majority of the population in those historically formed territories. Particularly, in the Chernivetsky and Zakarpatsky regions, compact settlements of Romanians can be found(in Gritsiansky municipality they represent 91.5% of the population, in Glybotsky municipality – 45.3%), in the Chernivetsky region there are compact settlements of Moldavians, in the Zakarpatsky region – Hungarians and Slovaks (in the Beregivsky region Hungarians represent the majority, comprising 2/3 of the total population, and many of them also live in the Uzhgorodsky, Vynogradivsky and Mukachivsky regions). These main, general countrywide trends with some specific regional demographic features are typical for Western Ukrainian regions.

#### 2.1 Natural population increase

The natural population increase is an important indicator of life quality as well as the level of socio-economic development in the region. Constant population decrease is typical for most regions (except the Zakarpatsky region) in the area, as a result of natural and partially physical moves. However, the birth rate in the Western Ukrainian regions is higher than the average in the Ukraine. The Zakarpatsky region has the highest birth rate in the area (14.6) while the mortality is lower than average in the country.

One of the main demographic development indicators is natural population growth. Since 2006, among all Western Ukrainian regions, additional population growth could be seen only in the Zakarpatsky region.

In the Carpathian region, natural population growth indicators are significantly different judging by territory (Fig. 1). There is negative population growth in most regions. Regions with negative population growth from 2003-2010 include most municipalities in the Lviv region, part of municipalities in the Ivano-Frankivsk and Chernivtsi regions, which form a strip along the Eastern border of the Carpathian region. Among them, the highest indicators are in the Rogatinsky and Galitsky districts in the Ivano-Frankivsk region, the Zhidachivsky and Peremishliansky districts the Lviv region and the Kelmenetsky and Sokiriansky districts in the Chernivtsi region.



Source: own elaboration on the basis of [4]

Fig. 1: Main demographic indicators of the Western Ukrainian border regions

Districts with positive population growth during 2003-2010 are mostly in the Zakarpatsky region as well as the southern border districts of the Chernivtsi and Ivano-Frankivsk regions. The highest additional population growth could be seen in the highland and foothills of the

Tiachivsky and Rahivsky districts of the Zakarpatsky region, where a high birth rate (13.5-13.6%) is accompanied by a low mortality rate (10.1-12.0%) as well as in the Putilsky and Storozhinetsky districts of Chernivtsi region. This could partially be explained by better economic conditions as a result of entrepreneurial activities in the border area coupled with traditions of big families.

One of the regional demographic development conditions influencing the birth rate is the population's ethnic structure. For example, additional natural population growth in the Chernivetsky region is observed due to the compact settlement areas of Romanians and Hutsuls, who historically formed the tradition of having big families. In the Zakarpatsky region additional population growth is significantly higher in the areas of compact Gipsy settlements. The lowest indicators of natural population growth within this region are observed in the areas where Moldavians and Ukrainians represent ethnic majorities [1].

It is worth pointing out the additional natural population growth in the cities of Uzhgorod, Ivano-Frankivsk, Yaremcha, Kolomyia, Mukachevo, Kalush, which are the centers of the regional population distribution system. The better demographic situation there could be explained by a better socio-economic situation, particularly due to a partially preserved city forming basis (foundation for urban development), job creation, and more developed social services. These cities are the centers of migration activity.

#### 2.2 Age-Gender Structure of the population

Another important, indicator of the socio-economic conditions and natural population growth in the region is the population's age-gender structure. Negative natural population growth combined with emigrational activity of the young leads to a population age structure misbalance, resulting in population ageing. Since 2000, the proportion between the young and the elderly shifted towards the population ageing while the proportion of the working people decreased.

However, it is typical for the Western Ukrainian regions that the proportion of the young to the elderly is higher compared to the countrywide average (table 1). It could be explained by the higher birth rate combined with the lower mortality in this region.

**Tab. 1:** Age-Gender Structure of the population in 2009

Country / Region	the young	population in the working ages	the elderly	Male	Female	
Ukraine	15.2	60.3	24.5	46.1	53.9	
Chernivtsi	18.0	60.1	21.9	46.8	53.2	
Ivano-Frankivsk	18.2	60.2	21.6	47.1	52.9	
Lviv	16.9	60.8	22.3	47.3	52.7	
Zakarpatsky	20.1	61.1	18.8	47.8	52.2	

Source: own elaboration on the basis of [4]

### 2.3 Trends in international and cross-regional migration processes

Besides the natural population growth, migration processes also influence the demographic situation in the Western Ukrainian regions. Migration alone can help partially or completely offset the negative natural population growth. Due to the critical state of most of the region's economies, the Western Ukraine belongs to the group of regions-donors, which supply emigrants to other regions as well as other countries. Negative migration balance has long been a typical situation for the most areas of the Carpathian economic region in the Ukraine. Nowadays, the total number of migrants is decreasing with the Chernivtsi and Ivano-

Frankivsk regions having a positive migration balance. However, the countryside remains the donor of the migrants for the region and the country as a whole. Migration processes in the Western Ukraine consist of two opposite processes. On the one hand, the population moves to other regions, to the capital and abroad, on the other hand, people from the countryside, where economic situation are even worse, move to the bigger towns and cities within the region, which partially or completely offset the population outflow from the region.

Nowadays, the migration process has clearly defined economic character, as there is virtually no national minority emigration to ethnic territories. Moves between different country's regions, i.e. work migration, prevail in today's migration processes. Migration across the border is mainly directed towards EU countries, the Russian Federation and the USA. In the Gender Structure of work migrants, women comprise the majority, and in the Ethnic Structure – Ukrainians (46.1%) [1].

Most Western Ukrainian regions have negative migration balance. A significant number of cross-border migrants is typical for border areas in the Zakarpatsky and Chernivtsi regions as well as some districts of the Ivano-Frankivsk region (Kalush, Rozhniatisky, Verhovinsky) (table 2).

**Tab. 2:** Net migration rate of the Western Ukrainian oblasts in 2009

	Net migration rate per 1000 people						
Country / region	International migration			Cross-regional migration			Net
	immigr.	emigr.	balance	immigr.	emigr.	balance	migration
Ukraine	71.5	42.3	29.2	527.2	527.2	0.0	29.2
Chernivtsi	67.9	24.2	43.7	422.1	363.4	58.7	102.4
Ivano-Frankivsk	37.8	28.4	9.4	371.9	389.6	-17.7	-8.3
Lviv	20.7	24.9	-4.2	315.8	332.9	-17.1	-21.3
Zakarpatsky	20.2	38.6	-18.4	186.2	261.6	-75.4	-93.8

Source: own elaboration on the basis of [4]

There are districts with a positive migration balance in all Carpathian regions (figure 1). The majority of them are in the Lviv and Chernivtsi regions. Additional migration balance is typical for the cities of Chernivtsi, Ivano-Frankivsk, Mukacheve and Yaremcha. This positive balance is mainly due to migration within the regions.

The natural population decrease as well as the decrease due to migration in the Carpathian area is mainly caused by the complicated socio-economic situation in the country. The deep economic crisis, which started at the end of the Twentieth Century, has been negatively affecting the city-forming basis urban development foundations. A sharp drop in economic activity, loss of jobs due to the partial plants closures, leading to high unemployment, along with low salaries and retirement benefits, which were until recently below the cost of living, inflation (in 2010 the rate of inflation was 9.1%) [2], unsatisfactory living conditions for the young, all these reasons caused people to lose confidence and feel insecure about the future and also led to a sharp decline in the population's income and welfare. As a result, the birth rate dropped and migration processes became more active including illegal. As we can see, the main reason for the demographic crisis in the Ukraine and in the Carpathian region is particularly impoverishment of the population majority, caused by market reforms and political unrest in the country.

#### 3 Job market as the main factor in the creation of demographic conditions

The job market is an important factor, which affects the demographic conditions in the region. The country's transition to the market economy including the change in forms of property

ownership caused labor resources redistribution between industries to raise their quality role along with the necessity for effective use of regional labor resources.

During the period of economic reforms, while the employment level throughout the main industries in the manufacturing sector decreased, in non-manufacturing sector industries, such as retail, food, travel, education, healthcare, loans, finances and insurance, government, utilities, customer services, there was an increase in the employment level.

Tab. 3: The labor market conditions in the Western Ukraine in 2009

Country / region	Inactivity rate, ILO methodology [%]	Unemployment rate [%]	Average wage, UAH monthly	Candidates per workplace
Ukraine	8,8	1,9	1906	8
Chernivtsi	9,4	1,9	1523	25
Ivano-Frankivsk	9,0	2,1	1628	81
Lviv	8,5	1,7	1667	22
Zakarpatsky	9,9	1,7	1562	19

Source: own elaboration on the basis of [4]

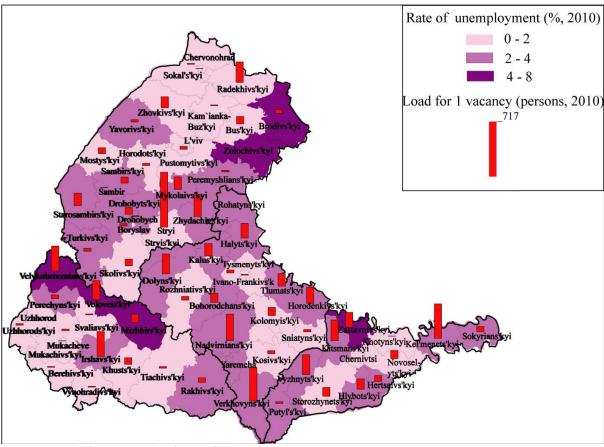
As table 3 shows, the unemployment rate in the Carpathian Region is higher than it is countrywide. At the same time, the wages in this region are significantly lower than in other parts of the Ukraine. 1 euro costs approximately 10.6 Ukrainian hryvnia (UAH) [5]. The regional labor market in Western Ukrainian regions with minimum wages as a result of low employment also has high unemployment and a high number of candidates per workplace. Those regions are the leaders in work migration. Taking an even closer look, the highest unemployment rates can be seen in the Brodivsky and Zolochivsky districts of the Lviv region, the Velikoberezhniansky, Volovetsky and Mezhihirsky districts of the Zakarpatsky region and the Zastanivsky district of the Chernivetsky region. All this is the result of the industrial production and agriculture decline, which lead to a lack of jobs.

The number of candidates per workplace in the Western Ukraine exceeds by several times the countrywide average. The situation is catastrophic in the Ivano-Frankivsk region, with 81 candidates per workplace [4]. Among the Carpathian regions especially noticeable are the city of Striy (717 candidates per workplace), the Verhovinsky district of the Ivano-Frankivsk region (449 candidates), the Kelmenetsky district of the Chernivtsi region (450 candidates) and the Velikoberezniansky district of the Zakarpatsky region (328 candidates) (figure 2). Such a situation is the result of a lack of jobs. Many positions are taken by retired people while new jobs are not being created and, sometimes, are even being cut, which makes it virtually impossible for young professionals to find a job. As a result, the number of candidates per workplace keeps growing.

As we can see in figure 3, the complicated situation on the labor market, the high unemployment rate, lack of jobs and opportunities to realize the potential, especially for the young, low income followed consequently by a low quality of life, all are the factors, which cause the increase in migration activity and emigration abroad.

The proximity of these regions to the Member States of the European Union border and the scale of demographic and social problems that have been identified during the research are significant arguments for making an effort to solve these problems (at least partially). Great opportunities to minimise the negative influence of demographic and social problems in the border regions adjacent to the eastern border of the European Union could be found in cross-border cooperation programmes and the still existing possibility of the creation of European Groupings of Territorial Cooperation (EGTC). The Ukraine seems to be the first neighbouring

country which will be a member of EGTC with the partners from the non-member states of the EU.



Source: own elaboration on the basis of [4]

Fig. 2: Main indicators of the labor market in the Western Ukraine

#### Conclusion

Since the beginning of the 20th Century, the demographic situation in the Western Ukraine could be seen as the general decrease in population as a result of its natural and physical movement. However, it is much more favorable than it is generally throughout the Ukraine. The Zakarpatsky region is one of three regions in the Ukraine which has a positive additional population growth (+2.1), other regions (Chernivtsi, Lviv and Ivano-Frankivsk) have insignificant negative, natural population growth. The speed of negative population growth in the region slows as a result of gradual growth in the birth rate and a decline in the mortality rate. The best demographic situation is in the Uzhgorod region, the Irshavsky and Drogobitsky districts, with positive natural and migration population growth. To summarize, the level of demographic well-being in the Western Ukraine is the best in the country. It could be explained by more stable financial inflows from migrant workers working abroad, big family traditions, ethnic features and religious beliefs. As a result of higher natural population growth, there is a higher share of children and a lower share of elderly people in the population age structure.

Due to city-forming basis the deterioration of urban development foundations and a lack of jobs, the labor market in the Carpathian region notices a high unemployment level, a high number of candidates per workplace and low salaries.

Open borders, the Ukraine's integration in the world economic community, border proximity of the Western Ukrainian regions as well as the unsatisfactory state of the country's labor

market lead to an increase in population mobility and its outflows in search of employment. Of course, the improvement of the economic situation is one of the main conditions for improvement of the demographic situation – not only in border regions. In Western Ukrainian border regions a number of cities and villages with natural and historic recreational potential (cities Lviv, Chernivtsi, Uzhgorod, villages Slavsko, Shidnitsa in Lviv region, Vorohta in Ivano-Frankivsk region) have become important recreational centers. It is strongly recommended to strengthen such positive tendencies in changing of the economic structure of these regions. In new the programming period of 2014-2020 great opportunity to minimise the negative influence of the demographic and social problems in border regions adjacent to the eastern border of the European Union could be found in cross-border cooperation programmes and the possibility of the creation of EGTC.

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# PROBLÉMY DEMOGRAFICKÉHO VÝVOJE NA VÝCHODNÍM OKRAJI EVROPSKÉ UNIE: PŘÍPADOVÁ STUDIE ZÁPADNÍ UKRAJINY

Článek se zabývá otázkou demografického vývoje na východní hranici Evropské unie – na příkladu západních ukrajinských pohraničních oblastí (v ukrajinštině oblasts). Cílem výzkumu bylo identifikovat hlavní problémy a tendence demografického vývoje těchto regionů. Na základě státních statistických údajů, autoři analyzují obecné demografické ukazatele a identifikovány hlavní trendy v rámci dalšího demografického vývoje těchto příhraničních regionů. Autoři se pokusili vysvětlit pozorované trendy. Mnoho ekonomických a sociálních problémů v západních ukrajinských pohraničních oblastech, které byly identifikovány, jsou společné s ostatními regiony přiléhajících k východní hranici Evropské unie. Výzkum byl proveden v ukrajinské akademii národní věd a Wroclawi Vysoké školy ekonomické.

# Probleme der demographischen Entwicklung an der östlichen Grenze der Europäischen Union: Fallstudie der Westukraine

Der Artikel befasst sich mit der Frage der demographischen Entwicklung an der Ostgrenze der Europäischen Union - nach dem Vorbild der westlichen ukrainischen Grenzregionen (in der ukrainischen Oblast). Das Ziel der Untersuchung war es, wichtige Probleme und Tendenzen der demographischen Entwicklung dieser Regionen zu identifizieren. Auf der Grundlage der staatlichen statistischen Daten analysieren die Autoren allgemeine demographische Indikatoren und identifiziert die wichtigsten Trends in der weiteren demographischen Entwicklung dieser Grenzregionen. Die Autoren versuchten, die beobachteten Trends zu erklären. Viele der wirtschaftlichen und sozialen Probleme in den westlichen ukrainischen Grenzregionen, die identifiziert wurden, gibt es auch in anderen Bereichen neben der Ostgrenze der Europäischen Union. Die Forschung wurde von der ukrainischen National Academy of Sciences und der Wrocław University of Economics durchgeführt.

### PROBLEMY ROZWOJU DEMOGRAFICZNEGO NA WSCHODNIEJ GRANICY UNII EUROPEJSKIEJ: STUDIUM PRZYPADKU ZACHODNIEJ UKRAINY

W artykule podjęto problem rozwoju demograficznego na wschodniej granicy Unii Europejskiej – na przykładzie zachodnich regionów przygranicznych Ukrainy (w języku ukraińskim "oblasti"). Celem badania była identyfikacja głównych problemów i tendencji rozwoju demograficznego tych regionów. Na podstawie publicznych danych statystycznych autorzy przeanalizowali sytuację demograficzną, przedstawili wskaźniki demograficzne, a także zidentyfikowali główne tendencje dalszego rozwoju demograficznego tych regionów. Autorzy podjęli próbę wyjaśnienia zaobserwowanych tendencji rozwoju demograficznego. Sporo zidentyfikowanych ekonomicznych i społecznych problemów w zachodnich regionach przygranicznych Ukrainy, występuje także w innych regionach przylegających do wschodniej granicy Unii Europejskiej. Badanie zostało przeprowadzone przez Narodową Akademię Nauk Ukrainy i Uniwersytet Ekonomiczny we Wrocławiu.