

## LABOR MIGRATION OF THE RURAL POPULATION OF UKRAINE: STATISTICAL ASPECT

*Svitlana Chugaievskaya*<sup>1</sup>, *Olena Rusak*<sup>2</sup>

<sup>1</sup>Assoc., Prof., Zhytomyr Ivan Franko State University, Velyka Berdychivska 40, Zhytomyr, Ukraine, E-mail address: [schugaevskaya@ukr.net](mailto:schugaevskaya@ukr.net)

<sup>2</sup>Assoc., Prof., Polissia National University, Old Boulevard 7, Zhytomyr, Ukraine, E-mail address: [erusak1208@gmail.com](mailto:erusak1208@gmail.com)

Received 17 11 2021; Accepted 09 01 2022

### Abstract

Labor migration remains one of the most topical issues of our times. The country's economic and political crises have led to large-scale involuntary resettlement of population, decline in gross output and intensified labor migration. Under the conditions of limited financial security, rural population has largely relied on employment abroad in the effort to solve social problems. The purpose of the article is statistical analysis of labor migration of the rural population of Ukraine. In the process of the research the following economic and statistical methods were used as well as abstract-logical, monographic, sociometric, balancing methods. The article examines the current state of migration flows, analyzes the dynamics of the rural population of Ukraine, its natural and migratory movement in 2010 – 2019, a number of theoretical principles of modern migration waves were studied and 4 groups of factors that cause the rapid growth of this phenomenon were determined: social, economic, political and environmental. Based on a sociological survey and the responses received from respondents, it was found that the main reasons that force Ukrainian people to labor migration.

**Keywords:** labor migration, rural population, geopolitical transformations, statistical information, sociological survey.

**JEL Codes:** C44, C89, R23.

### Introduction

Significant geopolitical transformations in recent years have affected unexceptionally all aspects of society including migration processes. The economic and political crisis, the annexation of Crimea, and the unfolding of the military conflict in the southeastern part of the country led to large-scale forced displacement, a deep economic crisis, and intensified labor migration. As a result of the introduction of democratic freedoms, including freedom of movement (Miroshnichenko, 2014), cross-border mobility of the population of Ukraine has increased rapidly mainly due to crossing the western border (Nikolaiets, 2018) to countries with better economic dynamics that attract labor forces. Under the conditions of limited financial security, it was mostly rural population that has largely benefited from trying to solve social problems through

employment abroad. The combination of such events and their long-term nature reflect the real state of economic development of Ukraine - a country with active migration processes.

Migratory exchange of the population is one of the main components of globalization, the formation of transnational labor markets, the creation of a single educational, cultural, linguistic space, the involvement of all earthlings in the results of civilizational progress (Libanova, 2018). Having considered the theoretical aspects of the chosen topic, the variety of approaches to its interpretation were established and the factors of labor migration of the rural population were justified. The structure of labor migration from Ukraine is changing, namely: the volume of long-term migration is increasing; more men migrate not only due to the needs of the labor market of the destination countries (construction, transport),

but also as a result of hostilities in eastern Ukraine; the share of young people, women, city dwellers, people from northern, central and eastern Ukraine is increasing.

Other reasons include the following social factors: low opportunities for self-employment and professional development, the desire to improve skills and pursue a career abroad, personal reasons, access to health care, people's vulnerability to corruption and crime, insecurity and more. Geopolitical riots and insecurity in Ukraine have also led to a revival of migration from Ukraine (Nikiforak et al., 2019).

According to G. Sabluk, today labor migration from Ukraine has a "female face", which is a social challenge to the village communities. Due to the unsatisfactory social infrastructure in the countryside, rural women are in fact deprived of the necessary living conditions. According to statistics, 30% of Ukrainian rural women with higher education remain unemployed, 36% of rural families live below the poverty line. Therefore, most women see the only way out in the fight against poverty - to go to work abroad. Such migration causes reconfiguration within Ukrainian society (Sabluk, 2019).

Labor migration is a complex and large-scale phenomenon for Ukraine today, which has mostly negative consequences. The number of young people and highly qualified specialists is decreasing, on whose education, training and professional training the state has spent considerable funds, and they will apply their knowledge outside the country. The massive out migration of Ukrainians to work in neighboring countries contributes to the growth of the economy and prosperity of these countries, but at the same time the economic, demographic and social situation in Ukraine is deteriorating. Legal labor migrants pay taxes in the countries where they work, respectively, the problem with the payment of pensions is worsening, as Ukraine still has a solidary pension system (Pikulyk, 2020).

The increase in the scale and duration of migrants' staying abroad leads to the weakening of their ties with the Motherland, the final loss of part of the country's labor and intellectual potential. A possible shortage of

workers can become a brake of economic development, as well as the most active young and educated people - democratic transformations in Ukraine.

That is why the question of a detailed study of labor migration of the rural population in the country, in order to identify factors (Libanova, 2018, 2019) and eliminate the causes that motivate this arises. At the same time, the need to obtain reliable statistical information on this phenomenon is also very important.

*The working hypothesis* is that in order to reduce labor migration of the rural population, advance economic potential, improve social infrastructure and innovation and investment climate in the regions, there is a need for their state support with reference to creation of favorable conditions for starting and running agribusiness.

*The purpose of the article* is to substantiate the theoretical background and statistical analysis of migration processes in Ukraine, to study the causes of labor migration based on the survey results of the rural population.

*The object of the study* is labor migration of the rural population of Ukraine.

*The subject of the study* includes the dynamics of the number, natural and migratory movement of the rural population of Ukraine, the level of average wages in Ukraine and other neighboring countries, the number of border crossings by Ukrainians, economic factors that stimulate Ukrainians to migrate.

*Research methods.* Taking into consideration the social-constructive perspectives and the need to study statistical indicators of migration processes in rural areas, the main source of data is the official information of the State Statistics Service of Ukraine: <http://www.ukrstat.gov.ua/>.

Statistical analysis of indicators of border crossing by Ukrainians when leaving the country is based on the data of the Ministry of Social Policy of Ukraine and the analytical portal Slovo i Dilo: <https://www.slovoidilo.ua/2020/07/09/infografika/suspilstvo/skilky-lyudej-peretnulo-kordon-ukrayiny-kudy-najchastishe-yizdyat-ukrayinzi>. The comparison of the number of

the state border crossings in the direction of the state and vice versa made it possible to determine the percentage of the number of people who stay abroad in search of work.

In the process of research, the sociometric, economic and statistical methods were used (Ereskova et al., 2011). In particular, a system of absolute, relative and average indicators of dynamics was used to study the number of permanent population, its natural and migratory movement, which made it possible to determine indicators of natural decline and migratory movement per 1000 person of population (B. Mokin & O. Mokin, 2015).

The method of comparative analysis facilitated the assessment of wages in Ukraine and neighboring European countries, which are presented in USD, which allows us to compare their numerical values (Nadtochiy, 2015). The official information of the Ministry of Finance of Ukraine and the Exchange Portal in Ukraine was the database for data on average monthly salaries: [lex.minfin.com.ua](http://lex.minfin.com.ua) and [lex.minfin.com.ua](http://lex.minfin.com.ua) and <https://take-profit.org/statistics/wages/>.

The research included the study of public opinion in the context of the migration intentions of the rural population of Ukraine. For this purpose, a survey of peasants was conducted on the basis of regional National Universities, the questionnaire consisted of 14 questions in Ukrainian, the sample size was 300 respondents.

Economic and statistical methods became the basis for the survey, which was based on 14 questions, the sample size was 300 respondents. Theoretical generalization of the survey results became a methodological basis for identifying groups of factors that affect labor migration in the country (Sadova, 2019).

Statistical analysis of the survey on labor migration of the rural population included determination of the proportion of respondents' groups by the following characteristics: gender, age, field of activity, place of work, intentions to migrate, possible causes of labor migration in the region.

Processing of the survey results made it possible to determine the average indicators of the sample size: the average age of the respondents, the average salary and the average distance from the village to the nearest town.

The sampling method made it possible to determine the error of representativeness of the survey at a level of reliable probability of 95%. In particular, to determine the representativeness error, the limit error formula for a random non-sample was used:

$$\Delta p = t \sqrt{\frac{\sigma^2}{n} \left(1 - \frac{n}{N}\right)}, \quad (1)$$

where:  $\sigma^2$  is the variance of the sample mean, i.e. in our case, wages, which according to the results of the study is the most significant factor for migrant workers;

t is the critical value of the Student's distribution (according to the table of values t-distribution in this case for a significance level of 0.05 is 1.96);

n - the size of the sample (in this study it is 300 respondents);

N - the volume of the general population, in this case the authors determined the number of economically active population of rural areas on the basis of the calculation and design method and data from the State Statistics Service of Ukraine (Pilipenko, 2012).

Then the error of representativeness of the survey was determined by the formula:

$$E = \frac{\Delta p}{\bar{x}} * 100\%, \quad (2)$$

where:  $\bar{x}$  - the average value of wages among respondents.

Testing of the statistical criterion of t-distribution (t- test) confirmed the null  $H_0$  hypothesis about the probability of a sample average wage among respondents and the high degree of influence of this indicator on decisions regarding migration processes in the country.

## Research results

Socio-demographic situation in the country is formed against the background of

the population reproduction processes and migration flows. The main reasons for the decline in Ukraine's population are low reproduction rates. This is accompanied by an increase in depopulation (when mortality exceeds the birth rate) and the presence of rapid migration. In particular, in 2019, there were 581.1 thousand deaths per 308.8 thousand live births in Ukraine, or 1.9 times

less. In recent years, an average of 3-4 deaths in Ukraine have occurred in two births, there has been a significant decline in the country's population, and in terms of rural areas, these figures are even more striking. Thus, the coefficient of natural reduction in 2010 was 6,713 per 1000 rural population, in 2015 - 6,841, and in 2019 it increased to 8,773, i.e. by 2.06 points (table 1).

**Table 1. Dynamics of the number, natural and migratory movement of the rural population of Ukraine, 2010 - 2019 (as of the end of the year)**

Indicator	2010	2015	2016	2017	2018	2019	2019 to 2010	
							+/-	%
1. Number of available rural population, million people	14,3	13,2	13,1	13,0	12,9	12,8	-1,5	89,5
<i>Indicators of natural movement of the rural population</i>								
2. Number of live births, thousand people	171,1	145,7	138,3	126,1	115,8	106,2	-64,9	62,1
3. Number of deaths, thousand people	267,1	236,0	229,0	223,6	223,9	218,5	-48,6	81,8
4. Natural population decline, thousand people	96,0	90,3	90,7	97,5	108,1	112,3	16,3	117,0
5. Natural reduction rate per 1000 people of the existing rural population	6,713	6,841	6,923	7,500	8,380	8,773	2,060	–
<i>Indicators of rural migration</i>								
6. Number of arrivals, thousand people	204,0	172,8	94,1	135,5	198,4	166,0	-38,0	81,4
7. Number of leaving, thousand people	209,3	160,9	75,4	127,6	209,1	187,2	-22,1	89,4
7. Migration increase (decrease), thousand people	-5,2	11,9	18,6	7,9	-10,7	-21,2	-16,0	407,7
- including interstate migration	4,9	2,4	1,1	1,7	1,3	0,9	-4	18,4
8. Migration growth rate (decrease) per 1000 people of the existing rural population	-0,364	0,901	1,419	0,608	-0,829	-1,656	-1,292	–

Source: determined according to the State Statistics Service of Ukraine

\*) data for 2015-2019 do not contain information on the temporarily occupied territories of Crimea, Donetsk and Luhansk regions.

In addition, the size of the population is significantly affected by indicators of migration (mechanical) movement, when people change their place of residence in search of a better life, for political or personal reasons, and so on. According to official statistics, migration growth has taken place in recent years, i.e. the number of people arriving in Ukraine exceeds the number of people leaving. In particular, in 2010 the above

indicator as a whole for all categories of the population was 16.1 thousand people, in 2016 there was a slight decrease to 10.6 thousand people, and in 2018 it increased to 18, 6 thousand people, i.e. during the analyzed period this figure increased by 15.5%. Indicators of interstate migration indicate minor changes in the indicator from 16.1 to 15.1 thousand people, or 6.2%.

In rural areas, statistical information is mostly based on data from individual migration authorities, such as village councils or village heads. Regarding the rural population, the indicator of population migration is mostly negative, i.e. there is a significant migration reduction, which intensifies in the analyzed period. In particular, in 2010 the above-mentioned indicator was - 5.2, in 2018 - 10.7, in 2019 - 21.2 thousand people, i.e. 4.1 times more. Although in 2015-2017 the indicator of migration of the rural population was positive and amounted to: 11.9, 18.6 and 7.9 thousand people, respectively. Similarly, there was a significant decrease during the analyzed period and the migration growth rate (reduction) per 1000 people of the existing rural population, the value of which in 2010 was - 0,364, and in 2018-2019 - 0,829 and - 1,656 people per 1,000 people. Such negative values of this indicator confirm the presence of rapid migration movements in rural areas of Ukraine.

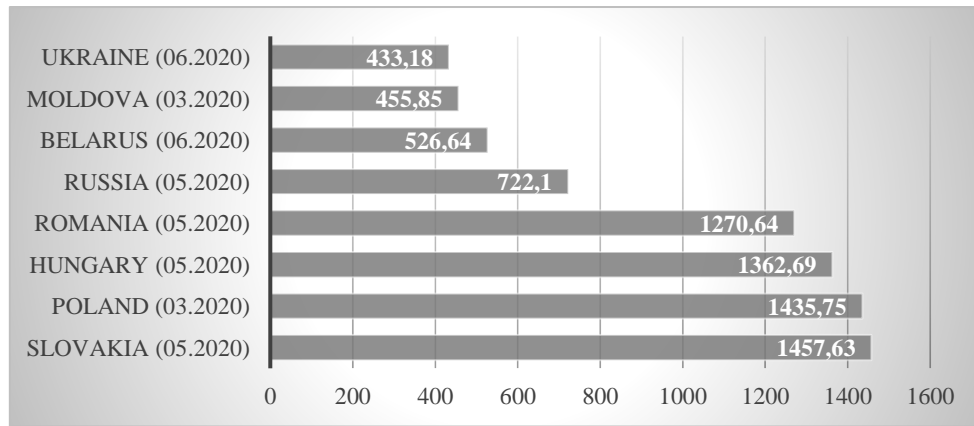
It should be noted that official statistics does not fully reveal the depth of the problem, as in many (especially western and central) regions there is a so-called "grey", unofficial migration, when people go abroad as tourists, using biometric passport, and work there for 2-3 months, then return home for a short time, then go abroad again, etc. In addition, since 2015, the reporting forms in the State Migration Service has significantly changed and the system of official data on labor migration often does not correspond with the data of independent statistical surveys.

It is worth noting that reliable information on the population, its natural and migratory movements can be provided by the All-Ukrainian census, which was scheduled for the end of 2020, however, there is a

possibility of its transfer in connection with the coronavirus pandemic.

Undoubtedly, labor migration remains one of the most significant problems today. According to the forecasts of the Institute of Demography and Social Research of the National Academy of Sciences of Ukraine, by 2030 the population of Ukraine will significantly decrease. And it's not just high mortality - Ukrainians continue to migrate to other countries to improve their socio-economic situation. As a result, it has become a mass phenomenon today and has received a modern scientific definition in modern sociological research, as labor migration (Sadova, 2019). It should be noted that the main reason for labor migration in Ukraine remains low wages. A comparative analysis of the average wage in nominal and real terms in Ukraine and neighboring European countries allowed us to conclude that this indicator is the lowest compared to its western and northern neighbours. As of June 2020, it amounted to US \$ 433.18 (Fig. 1). In particular, the average net wage in Ukraine is more than 3 times lower than in Poland, 3.4 times lower than in Slovakia, 3.2 times lower than in Hungary, and 2.9 times lower than in Romania and 1.7 times lower compared to the same figure in Russia. The ranking of popular professions among workers in Europe is headed by the following fields of work: construction, welding, farming and crop production, trade, engineering and IT.

Experts from different countries have developed different estimates/criteria of the migration study, however, no criterion can provide accurate data on the number of Ukrainian labor migrants, as many of them work unofficially, and domestic standards of state control of migration are outdated.



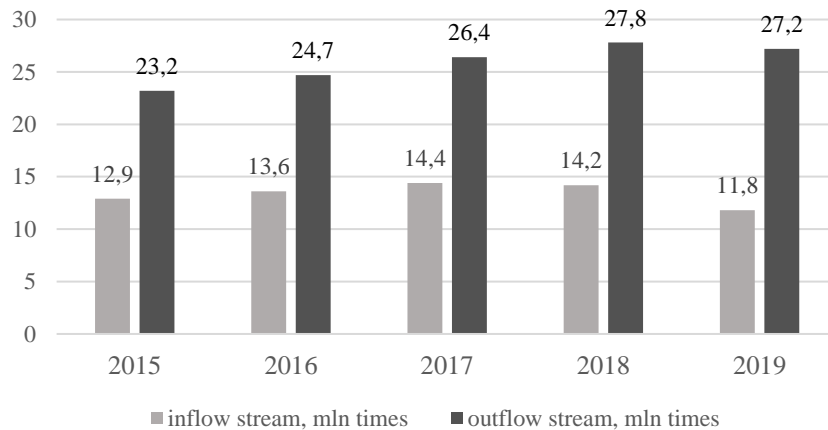
**Figure 1. Comparative analysis of the average gross wages in Ukraine and some European countries, 2020, USD**

\*Source: calculated on the data of:

- Ministry of Finances of Ukraine: [lex.minfin.com.ua](http://lex.minfin.com.ua/lex.minfin.com.ua)
- Exchange Portal in Ukraine: <https://take-profit.org/statistics/wages/>

Rapid labor migration is a major problem in rural areas, it shapes the situation in regional labor markets, regulates the development of social and labor relations, employment, welfare, consumption and savings and reproduction processes. According to the Ministry of Social Policy of Ukraine and the analytical portal Slovo i Dilo, there are up to

30 million crossings of the state border in the direction of other state a year, of which every 6-7<sup>th</sup> Ukrainian (i.e. from 2.5 to 4 million people) is looking for a work abroad, guided by seasonality (Figure 2). It is characteristic that only 40 to 60% of migrants return home, i.e. on average every second person.

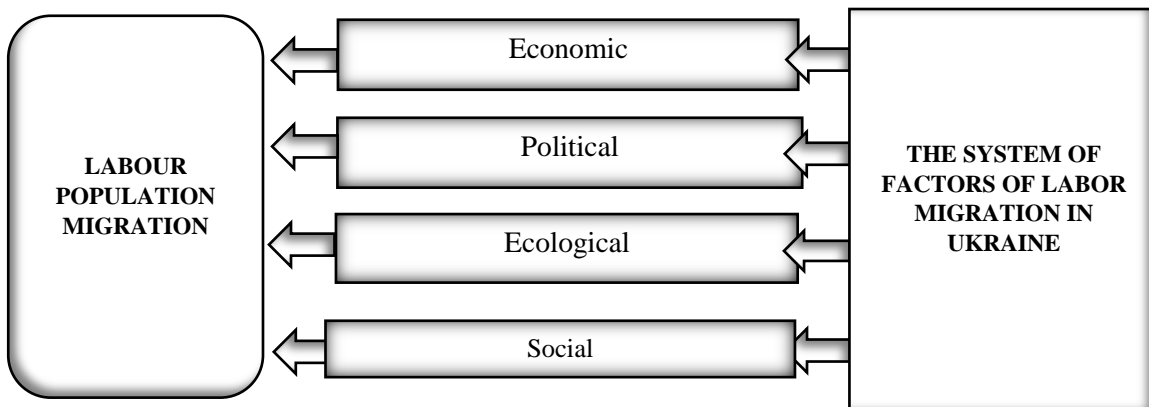


**Figure 2. The number of border crossings by Ukrainians when leaving and entering Ukraine, million times, 2017-2019**

\*Source: own research based on the data: <https://www.slovoidilo.ua/2020/07/09/infografika/suspilstvo/skilky-lyudej-peretnulo-kordon-ukrayiny-kudy-najchastishe-yizdyat-ukrayinczi>

According to the results of 2018, the top 5 countries where Ukrainian labor migrants work include the following EU countries: Poland, Italy, Germany, the Czech Republic and Spain. In the context of the set tasks,

having studied the current state of migration flows and a number of theoretical studies of modern migration waves, the authors identified 4 groups of factors that affect labor migration in Ukraine (Fig. 3).



**Figure 3. The system of factors influencing labor migration in Ukraine**

\*Source: authors' own developments.

- *Economic* factors are mostly manifested in low wages; low living standards; disproportions of economic development of regions; economic instability; general globalization of the Ukrainian economy in the world.
- *Political* factors constitute the lack of effective state instruments for regulating migration policy; low democracy level; political instability; high level of corruption; threat to human security.
- The complex of *social* factors comprises an outdated education system; imperfect health care system; imperfect conditions for professional growth, lack of proper legal protection of citizens in the courts.
- Environmental factors include a polluted ecological environment; low quality of drinking water and food (Pitiulich, 2014, Melnyk, Losheniuk, 2016, Pozniak, 2016, Malynovska, 2016).

For a more detailed analysis and conviction of the obtained causes of labor migration and their statistical indicators, a survey of 300 rural residents was conducted. The survey was conducted both orally, in

writing, and using the Google platform. The results of the survey are shown in table 2.

Among the respondents, the predominant group comprised young people under the age of 35, whose share in the total is 73.2%. Middle-aged people account for 21.4% of respondents. The survey confirms the high threat of continued labor migration in search of better socio-economic living conditions, as the average age of respondents was 32 years. Statistical analysis showed that the vast majority of respondents (51.8%) intend to find employment abroad in the near future.

By processing the answers received from the respondents, it was found that the main reasons that force people to go abroad are:

- 1) low wages, as evidenced by 91.3% of respondents;
- 2) high tariffs (52.8%);
- 3) political and social instability in the country (51.8%);
- 4) lack of permanent work (33.8%);
- 5) corruption among the authorities (33.8%).

**Table 2. The results of the survey of the rural population on the problems of labor migration in Ukraine**

Questionnaire questions	Specific weight of respondents, %	Specific weight of respondents, %	Weight of respondents, %
Gender of respondents: - female - male	58,5 41,5	Place of work (study): - town, city - village	50,8 49,2
Age category of respondents: - young people (under 35 years old) - middle-aged people (35 to 55 years) - elderly people (over 55 years old)	73,2 21,4 5,4	intend to migrate for employment abroad	51,8
Field of activity: - student - trade, restaurant, hotel business - military service, bodies of the Armed Forces of Ukraine - education, science - construction industry - others (transport, communications, medicine, industry, service sector) - unemployed	34,8 13,7 10,0 8,0 6,7 20,4 6,4	The main reasons that, according to respondents, force people to go abroad: - low wages - high tariffs - political and social instability - lack of permanent work - corruption among the authorities - others (environmental situation, high taxes for doing business, high rate of interest in banks on loans, low protection of human rights in court cases	91,3 52,8 51,8 33,8 33,8 75,3

\*Source: research results.

Based on the processing of the obtained results, a number of average statistical indicators were determined, in particular, the average salary of the surveyed persons is UAH

6,663.88. per month (ie \$ 258 USD), the share of the unemployed in total - 6.4%. The average distance from the place of residence to the nearest city is 38.4 km (Table 3).

**Table 3. Statistical analysis of the survey on labor migration of the rural population**

Questionnaire questions	The indicators mean
The average age of respondents, years	32
Average salary, UAH	6663,88
The average distance from the village to the nearest town, city, km	38,4
Representativeness error, %	2,1
Reliable probability level	0,95
Statistical criterion of t-distribution - $H_0$ hypothesis about the probability of the sample mean value is accepted	

\*Source: research results.

The reliability of the conducted statistical research is characterized by the non-sampling error, which is determined by a selective method of statistics. The average wage of the respondents was chosen as a key indicator, as, according to the majority of

respondents, this is the main reason for population migration. According to the State Statistics Service of Ukraine, the number of economically active rural population of working age in all regions in 2019 is 5656.4 thousand people.



According to preliminary calculations, if the value of the sample variable is:  $\sigma^2 = 1500200$ , then the margin of error for this sample is:

$$\Delta p = 1,96 \sqrt{\frac{1500200}{300} \left(1 - \frac{300}{5656,4 * 1000}\right)} = 138,6 \text{ UAH.}$$

The representativeness error is:

$$E = \frac{\Delta p}{\bar{x}} * 100\% = \frac{138,6}{6663,88} * 100\% = 2,1\%.$$

The representativeness error's level of 2.1% is within the margin of the sample statistical results and indicates the high reliability of the results of the sociological survey obtained during processing.

According to the State Statistics Service of Ukraine, the nominal average wage in rural areas in 2019 amounted to UAH 8,856 per month. After payment of taxes (income tax), this figure in net terms equals to UAH 7,262, which in dollar terms is USD 281. Absolute deviation of the sample value to its average value:

$$\tilde{x} = 6633 \text{ UAH. } \bar{x} = 7262 \text{ UAH. } \Delta x = 7262 - 6633 = 599 \text{ UAH.}$$

Here calculated are the variance-adjusted dispersions: for the official salary by official statistics (3) and for the sample salary (4):

$$\sigma^2_1 = \frac{\sigma^2 * N}{N-1} = \frac{1500200 * 5656400}{5656400-1} = 1500200 \quad (3)$$

$$\sigma^2_2 = \frac{\sigma^2 * n}{n-1} = \frac{1500200 * 300}{299} = 1505217. \quad (4)$$

Here the square of the mean errors for each sample is shown:

$$m^2_1 = \frac{\sigma^2_1}{N} = \frac{1500200}{5656400} = 0,27; m^2_2 = \frac{\sigma^2_2}{n} = \frac{1505217}{300} = 5017,39 \quad (5-6)$$

The mean error from the difference of the two averages is:  $\bar{m}_{1-2} = \sqrt{m_1^2 + m_2^2} = \sqrt{0,27 + 5017,4} = 70,8 \quad (7)$

Then there are all the prerequisites for calculating the actual estimated value of the t-test:

$$t_\phi = \frac{\Delta x}{\bar{m}_{1-2}} = \frac{599}{70,9} = 8,45 \quad (8)$$

The obtained actual value is usually compared with the critical value according to the statistical table of Student's distribution. To do this, the variance value needs to be determined:

$$k_1 = N-1 = 5656400-1 = 5656399; k_2 = n-1 = 300-1 = 299; k = k_1 + k_2 = 5656399 + 299 = 5656698.$$

According to the table of t-distribution:  $t_{cr} (\alpha = 0.05; k = 576798) = 1.96$  it can be affirmed that the Student's criterion is met, i.e.:  $t > t_{cr.}; 8.45 > 1.96$ . Thus, there are all prerequisites for accepting  $H_0$  hypothesis regarding the equality of the general mean and the sample value. Thus, the difference between the sample average salary according to the survey and official statistical information is insignificant and within random fluctuations. Testing the statistical criterion of t-distribution confirmed the null  $H_0$  hypothesis about the probability of a sample average wage among respondents and the high degree of influence of this indicator on decisions regarding migration processes in the country.

*Conclusions.* Economic and political instability have prompted large-scale migration movements and increased labor migration both within the country and towards other countries. Based on the study, it was found that the most massive migration flow for Ukraine is labor migration of citizens abroad. Thanks to the acquired freedom of movement in difficult economic circumstances and low wages, working abroad has become one of the main means to improve well-being for many Ukrainians. In addition, labor migration is a powerful social shock absorber, a factor in reducing poverty, a source of significant foreign exchange earnings in the country. However, in this context no risks of losing part of the labor and intellectual potential necessary for the country's development were considered.

Recent years' statistical results on the number of Ukrainian labor migrants in the EU countries indicate the largest number of them stay in Poland, Italy, Germany, the Czech Republic and Spain. Having studied the current state of migration flows and a number of theoretical studies on migration waves, the authors identified 4 groups of factors that affect labour migration in Ukraine: economic, political, social, environmental.

Today, labor migration from Ukraine has a “female face”, which is a social challenge to rural communities. According to statistics, 30% of Ukrainian rural women with higher education remain unemployed, 36% of rural families live below the poverty line. Therefore, most women see the only way out of the fight against poverty - to go to work abroad. Such migration causes reconfiguration within Ukrainian society.

Analysts also pay attention to the increased the long-term migration of men, in the structure of labor migration from Ukraine. Men migrate not only due to the needs of the labor market of the destination countries (construction, transport), but also as a result of hostilities in eastern Ukraine.

The authors studied the current state of migration flows in Ukraine. The indicators of population, natural and migratory movements of the rural population of Ukraine, 2010 – 2019 were analyzed based on data from the State Statistics Service. It was found that the migration of the rural population is mostly negative, i.e. there is a significant migration reduction. In particular, in 2010 the above-mentioned indicator was - 5.2, in 2018 - - 10.7, in 2019 - - 21.2 thousand people, i.e. 4.1 times more. While in 2015-2017 the indicator of migration of the rural population was positive and amounted to: 11.9, 18.6 and 7.9 thousand people, respectively. Similarly, there was a significant decrease during the analyzed period and the migration growth rate (reduction) per 1,000 people of the existing rural population, the value of which in 2010 was - 0,364, and in 2018-2019 - 0,829 and - 1,656 people per 1,000 people. Such negative values of this indicator confirm the presence of rapid migration movements in rural areas of Ukraine.

In order to confirm the established causes of labor migration, a heuristic approach

was used, and, in particular, its method of questionnaires, which allowed to specify details of the issue. The results of processing the answers received from 300 respondents indicated that the main reasons that force people to go abroad are: low wages (91.3%); high prices for tariffs (52.8%); political and social instability in the country (51.8%); lack of permanent work (33.8%); corruption among the authorities (33.8%).

In order to ensure high reliability and confirm the fact that the low level of wages is the key factor of labor migration (i.e. \$ 258 USD), a check of the statistical criteria of the formed sample was used. Statistical analysis of the survey provided an opportunity to determine the error of representativeness at a level of reliable probability of 95%. Testing the statistical criterion of t-distribution confirmed the null hypothesis  $H_0$  about the probability of a sample average wage among respondents and the high degree of influence of this indicator on decisions regarding migration processes in the country.

Thus, it was established that modern migration processes in Ukraine are primarily due to low wages. However, high inflation, rising real and hidden unemployment, low rural development, declining living standards and security in the country, increasing social tensions among Ukrainians cause rapid growth of migration. That is why the urgent issue to be addressed is the introduction of an effective brake mechanism for citizens to go abroad. The main tool of such a mechanism should be the state policy of protectionism, which should stimulate own production, socio-economic stability, regulate the labor market in the country and reduce the efficiency of migration processes. Under such factors only, Ukraine will be able to recover from the image of the country-importer of trained personnel, which will further lift its own economy to a new level.

## References

- Average wages. OECD (2020), Average wages (indicator). Retrieved from: <https://data.oecd.org/earnwage/average-wages.htm>. doi: 10.1787/cc3e1387-en on 26 July 2021.
- Ereskova T.V., Mazurik O.V., Nikiforenko N.O. (2011). *Metodologiya ta metodi sotsiologichnih doslidzhen: Praktikum [Methodology and methods of sociological research: Workshop]*, Donetsk: Shidniy vidavnicхий dim. 232.
- Kolodii, S., Kochuma, I., Marenych, A. & Rudenko, M. (2018). Features of functioning national model of resource economics in Ukraine. *Financial And Credit Activity-Problems of Theory and Practice*, Vol. 4, Issue 27, 359-369.

Kychko, I. (2017). Rational component of motivational factor of labour productivity growth. *Scientific Bulletin of Polissia*, Issue 1, 99–102.

Libanova, E. (2010), Quality instead of quantity: opportunities of demographic crisis. *Osteuropa*, Vol. 60 (2-4), 413-426. Retrieved from: [https://www.researchgate.net/publication/295174681\\_Quality\\_Instead\\_of\\_Quantity\\_Opportunities\\_of\\_Demographic\\_Crisis](https://www.researchgate.net/publication/295174681_Quality_Instead_of_Quantity_Opportunities_of_Demographic_Crisis) on 20 October 2021.

Libanova, E.M. (2018). Zovnishni trudovi mihratsii Ukraintiv: mashtaby, prychny, naslidky [External labor migration of Ukrainians: scale, causes, consequences]. *Demohrafiia ta sotsialna ekonomika*, 2 (33), 11–26. <https://doi.org/10.15407/dse>.

Libanova, E. (2019), Labour migration from Ukraine: key features, drivers and impact. *Economics and Sociology*, Vol. 12(1), 313-328. Retrieved from: [https://www.economics-sociology.eu/?657,en\\_labour-migration-from-ukraine-key-features-drivers-and-impact](https://www.economics-sociology.eu/?657,en_labour-migration-from-ukraine-key-features-drivers-and-impact) on 12 September 2021.

Malynovska, O. (2016). Mihratsiia v Ukraini: fakty i tsyfry [Migration in Ukraine: facts and figures]. Kyiv: Mizhnarodna orhanizatsiia z Mihratsii. Predstavnytstvo v Ukraini. 32. Retrieved from: [https://iom.org.ua/sites/default/files/ff\\_ukr\\_21\\_10\\_press.pdf](https://iom.org.ua/sites/default/files/ff_ukr_21_10_press.pdf) on 14 October 2021.

Melnik, T.M. & Loshenyuk, O.V. (2016). Vplyv mizhnarodnoyi trudovoyi migratsiyi na ekonomiku Ukrayini [The impact of international labor migration on the economy of Ukraine]. *Biznes-Inform*. №12. 29-35. Retrieved from: [http://business-inform.net/export\\_pdf/business-inform-2016-12\\_0-pages-29\\_35.pdf](http://business-inform.net/export_pdf/business-inform-2016-12_0-pages-29_35.pdf) on 15 July 2021.

*Mihratsiia v umovakh transformatsii rehionalnykh rynkiv pratsi Ukrainy: mekhanizmy rehulivannia: monohrafiia [Migration in the conditions of transformation of regional labor markets of Ukraine: mechanisms of regulation]*. (2019). DU «Instytut rehionalnykh doslidzhen imeni M. I. Dolishnoho NAN Ukrainy». Nauk. red. U. Ya. Sadova. Lviv. Serii «Problemy rehionalnoho rozvytku». 263.

Miroshnychenko, T. (2014). Zakonomirnosti mizhnarodnoi mihratsiinoi syly v konteksti prohramy bezvizovoho rezhymu Ukrainy ta EU [Regularities of the international migration force in the context of the visa-free regime of Ukraine and the EU]. *Naukovyi visnyk Khersonskoho derzhavnogo universtetu*. Seria Ekonomichni nauky. 6(1), 100-102. Retrieved from: [http://nbuv.gov.ua/UJRN/Nvkhdu\\_en\\_2014\\_6\(1\)\\_25](http://nbuv.gov.ua/UJRN/Nvkhdu_en_2014_6(1)_25) on 4 December 2021.

Mokin B. I., Mokin O. B. (2015). *Metodologiya ta organizatsiia naukovih doslidzhen: navchalnyi posibnik. 2-e vydannia zmintna ta dopjvnena [Methodology and organization of scientific research: textbook / 2nd edition, amended and supplemented]*. Vinnitsya: VNTU. 317.

Nadtochii, A. O. (2015). Prychny zovnishnoi trudovoi mihratsii ta otsinka yii naslidkiv dlia ekonomiky Ukrainy [Causes of external labor migration and assessment of its consequences for the economy of Ukraine]. *Teoriia ta praktyka derzhavnoho upravlinnia*. 1. 106-113.

Nikolaiets, K. (2018). Trudova mihratsiia do krain yevropeiskoho soiuzu: faktory ta naslidky [Labor migration to the countries of the European Union: factors and consequences]. *Zovnishnia torhivlia: ekonomika, finansy, pravo*. 5. 101-115. <https://doi.org/10.31617/zt.knute>

Nykyforak, V. A., Todoriuk, S. I. & Antokhova I. M. (2019). Trudova mihratsiia za kordon u suchasnykh umovakh transformatsii ekonomiky Ukrainy [Labor migration abroad in modern conditions of transformation of Ukraine's economy]. *Investysii: praktyka ta dosvid. Serii: Ekonomichni nauky*. 8. 52-58. <https://doi.org/10.32702/2306-6814.2019.8.52>

Pikulyk, O. I. Prychny, osoblyvosti ta naslidky trudovoi mihratsii v Ukraini [Causes, features and consequences of labor migration in Ukraine.]. *Svitove hospodarstvo i mizhnarodni ekonomichni vidnosyny. Ekonomika ta suspilstvo*. 21. 16-20. <https://doi.org/10.32782/2524-0072/2019-20-7>

Pityulich, M.I. (2014). Novitni tendentsiyi rozvitku mizhnarodnoyi trudovoyi migratsiyi ta yih naslidki dlia Ukraini [Recent trends in international labor migration and their consequences for Ukraine]. *Naukovyi visnyk Mukachivskogo derzhavnogo universitetu*. Seriya: Ekonomika. Vipusk 1. 96-100. Retrieved from: [http://nbuv.gov.ua/UJRN/nvmdue\\_2014\\_1\\_20](http://nbuv.gov.ua/UJRN/nvmdue_2014_1_20) on 25 October 2021.

Pilipenko, V. (2012). *Ukrayinska sotsiologiya sгодni: doslidzhennya osnovnih sfer zhittediynosti suspilstva. Monografiya [Ukrainian sociology today: a study of the main spheres of society. Monograph]*. Lviv: ZUKT. 326.

Poznyak, O. V. (2016). Otsinyuvannya naslidkiv zovnishnoyi trudovoyi migratsiyi v Ukraini [Assessment of the consequences of external labor migration in Ukraine]. *Demografiya ta sotsialna ekonomika*. №2. 169-182. Retrieved from: [http://nbuv.gov.ua/UJRN/dse\\_2016\\_2\\_15](http://nbuv.gov.ua/UJRN/dse_2016_2_15) on 15 July 2021.

Rym, O. & Pylypenko, P. (2019). The European employment strategy as a tool promoting Ukraine &#39. S integration. *E-Journal of International and Comparative Labour Studies*, Vol. 8, Issue 3. 68–84.

Sabluk, H.I. (2019). Mihratsiini protsesy yak naslidok nehatyvnykh tendentsii v zhytti silskykh zhynok [Migration processes as a consequence of negative trends in the lives of rural women]. *Ekonomika APK*. 10. 71. <https://doi.org/10.32317/2221-1055.201910071>

*Ukrainska mihratsiia v umovakh hlobalnykh i natsionalnykh vykykiv XXI stolittia [Ukrainian migration in the context of global and national challenges of the XXI century: a scientific publication]* (2019). Naukowe vydannia / nauk. red. U. Ya. Sadova. Lviv. 110. Retrieved from: <http://ird.gov.ua/irdp/p20190801.pdf> on 17 August 2021.