

# CONCEPTUAL IMPERATIVES FOR OPTIMIZING LABOR MIGRATION FLOWS FROM UKRAINE

Olena Liutak<sup>1</sup>, Olena Baula<sup>2</sup>

**Abstract.** *The purpose* of the article is to substantiate the impact of labor migration of citizens abroad on the international competitiveness of the country, as well as to outline the conceptual imperatives of optimizing the flows of labor migration from Ukraine to preserve the human capital of the country. *Methodology.* During the study, the dialectical method of scientific knowledge was used, as well as methods of scientific abstraction, generalization of analysis and synthesis, deduction and induction, the method of statistical and comparative analysis, the graphical method. *Results.* To identify the reasons for the threatening scale of Ukrainian labor emigration, the country's ranking positions in international rankings of economic freedom, ease of doing business, safest countries to live in, global competitiveness, investment attractiveness index and the Global Innovation Index were studied. Competitive advantages and threats to the Ukrainian labor market are described. *Practical implications.* It is proposed to reduce the excessive volume of labor migration from the country through the use of innovation potential (given the obvious competitive advantages of Ukraine in the innovation sphere, according to the authors, they have the potential for optimal adjustment of labor migration from Ukraine). A conceptual scheme for the optimization of labor migration flows from Ukraine has been developed. It is based on the assertion that human capacity building in the field of innovation is possible through international innovative cooperation in the system of higher education; one of the main opportunities for rapid innovative development of Ukraine is the participation in international innovation clusters (the application of cluster policy will contribute to the competitiveness of economic entities due to the potential of effective interaction between its participants due to their close geographical location, provides increased access to innovation, technology and highly skilled personnel, as well as reduced transaction costs; clustering is an effective mechanism for attracting foreign direct investment; the integration of national clusters into global value chains can significantly increase the level of the national technological base, increase the speed and quality of economic growth by increasing the international competitiveness of enterprises in the cluster. *Value/originality.* The scientific novelty of the results obtained consists in deepening the theoretical and methodological foundations and developing practical approaches to the optimization of labor migration flows from Ukraine to ensure an adequate level of international competitiveness of the country. In particular, a conceptual scheme for the optimization of Ukraine's participation in migration processes has been substantiated and the steps of Ukraine's innovation policy for the preservation of the country's human capital have been outlined.

**Key words:** labour migration, innovation activity, international innovation clusters, international competitiveness.

**JEL Classification:** F22, O31, O32, O33

## 1. Introduction

The concept of international competitiveness has become even more important in a global economy whose long-term capabilities are determined by a multitude of endogenous and exogenous factors: human and natural resources, infrastructure, governance, capital,

government intervention, technological capabilities of companies, etc. The efficient allocation of these resources leads to different levels of productivity as well as the ability to generate, adapt and diffuse innovation.

Modern global socio-economic transformations contribute to the fact that the quality of a country's

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participation in international migration processes is an important component of its competitiveness. Highly developed countries of the world act as centers of attraction for large numbers of migrants, who thus seek better conditions for self-realization. At the same time, the consumer attitude of migrants toward their host countries is increasing, when migrants, regardless of their level of professional training, claim a significant improvement in their standard of living only because they somehow reside or are in one of the economically developed countries.

The most massive and significant migration flow for Ukraine is labor migration of citizens abroad, since highly qualified specialists and young people account for the lion's share of labor emigrants. Since 2014 there has been an increase in migration processes due to the combined forces operation in eastern Ukraine. Large-scale external labor migration in the country could be clearly observed in early 2020, when as a result of the COVID-19 pandemic and the announcement of quarantine, thousands of Ukrainians returned en masse from abroad to their homeland, and after the quarantine was loosened, they also went abroad en masse in search of work.

The main purpose of the study is to substantiate the impact of labor migration of citizens abroad on the international competitiveness of the country, as well as to determine the conceptual imperatives of optimizing the flows of labor migration from Ukraine to preserve the human capital of the country.

The scientific novelty of the results obtained consists in deepening the theoretical and methodological foundations and developing practical approaches to the optimization of labor migration flows from Ukraine to ensure an adequate level of international competitiveness of the country. In particular, a conceptual scheme for the optimization of Ukraine's participation

in migration processes has been substantiated and the steps of Ukraine's innovation policy for the preservation of the country's human capital have been outlined.

During the study, the dialectical method of scientific knowledge was used, as well as methods of scientific abstraction, generalization of analysis and synthesis, deduction and induction, the method of statistical and comparative analysis, the graphical method.

## 2. Ukraine in international ratings of economic development

The study of the conceptual features of labour migration flows from Ukraine should begin with an assessment of the rating places of Ukraine in the international ratings of Economic Freedom (Index of Economic Freedom), ease of doing business (Doing Business/ease of doing business), the safest countries to live in (Index the Global Peace Index), Global Competitiveness (The Global Competitiveness Index), Investment Attractiveness Index, Global Innovation Index (GII) (Table 1).

The assessment of Ukraine's place in international ratings reflecting the quality of life and level of economic development allows us to draw a number of conclusions:

- the level of economic freedom is increasing, but it is assessed at a mediocre level;
- the ease of doing business has improved significantly over the period under study, but its level is far from that of developed countries;
- according to the international index of the safest countries to live in 2020, Ukraine is in 148th place out of 163 positions (this is one of the worst indicators on a global scale);

Table 1

### Ukraine in international ratings reflecting the quality of life and level of economic development

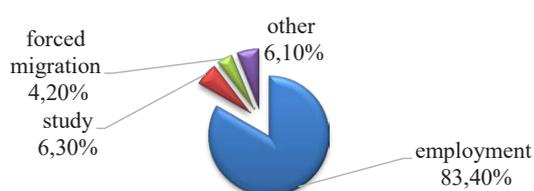
Year	Rating of Economic Freedom ("Ukraine – index of economic freedom", 2021)	Ease of Doing Business rating ("The Doing Business Report", 2020)	International index of the safest countries to live in (Global Peace Index) ("Ukraine – Global peace index", 2020)	Global Competitiveness Index ("Ukraine's position in the ranking", 2017)	Investment attractiveness Index of Ukraine, 2020	Global Innovation Index, 2020
2010	46,4	147	97	82	3,28	61
2011	45,8	145	69	89	2,56	60
2012	46,1	152	71	82	2,12	63
2013	46,3	137	111	73	1,81	71
2014	49,3	112	141	84	2,50	63
2015	46,9	96	150	77	2,57	64
2016	46,8	83	156	79	2,85	56
2017	48,1	80	154	85	3,03	50
2018	51,9	76	152	81	3,10	43
2019	52,3	71	149	83	2,90	47
2020	54,9	64	148	85	2,46	45

– the ranking positions of Ukraine on the Global Competitiveness Index for 2010–2020 actually have not changed, and as of 2020 it ranks 85<sup>th</sup> among 140 countries;

– the index of investment attractiveness of Ukraine is in the negative plane (as of the end of 2020, 78% of CEOs of member companies of the European Business Association consider the current investment climate unfavorable, and this indicator has increased significantly since the beginning of the year – by 16%. Another 16% of respondents consider the current investment climate as neutral. Only 6% of respondents consider the investment climate favorable, up from 4% in the first half of 2020);

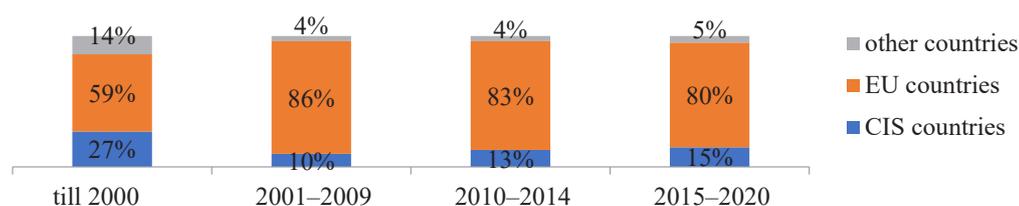
– the values of the Global Innovation Index are encouraging: as of 2020, it ranks 45<sup>th</sup> out of 131. Ukraine ranks higher on a number of individual sub-indices in 2020 – higher education development 32<sup>nd</sup> place, knowledge creation and online creativity 39<sup>th</sup> place, research and development 44<sup>th</sup> place, trade, competition and market size 45<sup>th</sup> place. In addition to these indicators, Ukraine's positions on the export of information and communication technology services (11<sup>th</sup> place), higher education coverage (14<sup>th</sup> place), gross domestic research and development costs financed abroad (15<sup>th</sup> place), patent applications, intangible assets and new knowledge creation (17<sup>th</sup> place), computer software costs, mobile application creation (19<sup>th</sup> place), ease of obtaining a loan (29<sup>th</sup> place), competition and market scale (42<sup>nd</sup> place), ease of starting a business (48<sup>th</sup> place), electricity output (55<sup>th</sup> place) ("Global Innovation Index", 2020).

Thus, Ukraine's potential for international competitiveness lies in the resource component of



**Figure 1. The structure of migration flows of Ukrainians for the purpose of emigration, 2017–2020**

Source: created by ("Migration in Ukraine", 2019; "Labour migration: how many Ukrainians", 2021)



**Figure 2. Geographic structure of long-term labor emigration of Ukrainians**

Source: created by ("Labour migration: how many Ukrainians", 2021)

innovative development, the system of human capital and Science for the development of technology and knowledge economy.

### 3. Migration flows from Ukraine

Global socio-economic transformations themselves, as well as their deepening, have led to the fact that labor migration has become an integral characteristic of the modern world economy. It is predominant and widespread in the overall structure of migrants from Ukraine. Figure 1 shows the average indicators of the structure of migrants from Ukraine by stay abroad in 2017–2019. As can be seen, more than 80% of domestic emigrants are workers seeking earnings abroad. Historically, Ukraine has been a donor country in global labor migration flows.

As for the geographic structure of labor migration, since 2001 there has been an increase in the number of labor migrants from Ukraine to EU countries (Figure 2).

The main sectors of employment for Ukrainian workers are construction, restaurant and hotel business, agriculture, and work at home (Figure 3).

According to IOM estimates in 2020 Ukrainian migrants in the long-term labor migration prevail in the 30-44 age group, and Ukrainian migrants in the 45-65 age category. In the 18-29 age group the number of men / women is more balanced (17% / 22%). Overall, the majority of short-term and early labor migrants are aged 18-44 ("Labour migration: how many Ukrainians", 2021).

The status of Ukrainian labor migrants abroad is not always legal (Figure 4).

### 3. Causes and consequences of labor migration of Ukrainians

External labor migration is not a new phenomenon for Ukraine. Since the declaration of independence, Ukrainians have been attracted to work abroad. There are logical explanations for these processes. First, the primary reason for Ukrainian labor migration is the fact that Ukraine is surrounded by countries with a high level of wealth and wages. This can be demonstrated by comparing the minimum wage in Ukraine and the main countries of destination for Ukrainian labor

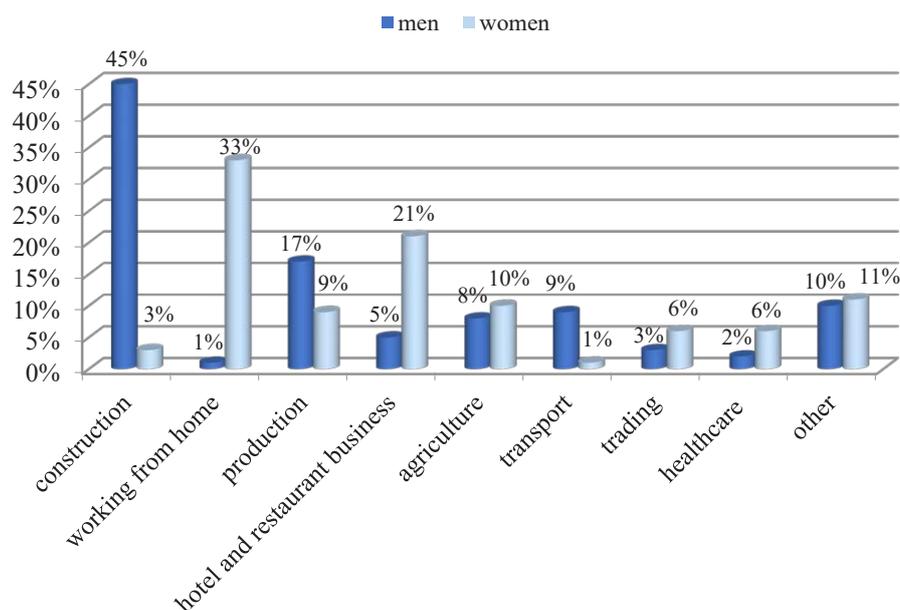


Figure 3. Sectoral and gender employment of Ukrainian emigrants, 2020

Source: created by ("Labour migration: how many Ukrainians", 2021)

migrants. Table 2 shows the minimum wage and expenditures on basic foodstuffs in Ukraine and the main countries of attraction of internal labor migrants at the beginning of 2020.

In addition to the low minimum wage, the average salary in Ukraine is also one of the lowest in Europe (in December 2020 it was UAH 14,179, or approximately 480 US dollars) ("The average salary in Ukraine", 2021).

Among the reasons for the high rates of labor migration of Ukrainians are the reduction and aging of the population in the EU countries, the presence of hidden unemployment in Ukraine, the problems of employment of young people after education, the lack of specific measures aimed at the repatriation of

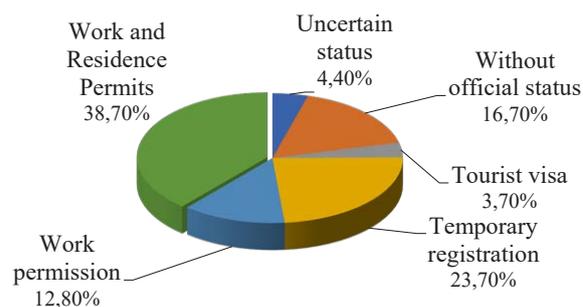


Figure 4. Status of Ukrainian labor migrants abroad in 2015-2019

Source: created by ("Labour migration: how many Ukrainians", 2021; "World Migration Report", 2020)

Table 2

**Minimum wages and expenses for basic foodstuffs in Ukraine and the countries where most Ukrainian labor migrants work, at the beginning of 2020**

Country (% of labour migrants from Ukraine)	Minimum wage as of the beginning of 2020, USD US (after taxes)	% change in the minimum wage compared to 2019	Expenses for basic foodstuffs as of the beginning of 2020, % ratio to the minimum wage
Ukraine	157	+13,2	42,1
Poland (38.9)	485	+14,9	15,5
RF (26.3)	166	+6,5	44,8
Italy (11.3)	1320*	+3,2	14,8
Czech Republic (9,4)	525	+7,6	18,3
Portugal (1,6)	626	+5,8	15,5
Hungary (1,3)	357	+8,1	21,8
Spain (0.9)	1163	-	9,2
Germany (0.8)	1358	+1,9	9,3

\* There is no minimum wage in Italy. The average PO for low-skilled labour at the beginning of 2020 was at the level of 1,320 US dollars

Source: created by ("Minimum wage in the world and Ukraine", 2020)

Ukrainians in Ukraine and, instead, the existence of such measures in foreign countries, political instability in Ukraine, and hybrid war with the Russian Federation. The signing of the association agreement between Ukraine and the European Union also contributes to an increase in the number of migrant workers, in particular by simplifying visa regulations and facilitating mobility.

Labor migration of citizens abroad has a multifaceted impact on the country's economy:

- reduces tensions in the labor market, contributes to the welfare of many families, is a source of foreign exchange earnings and intangible transfer of new knowledge and experience, which can contribute to the development of the state, and the national currency is stabilized;
- causes a shortage of workers in some industries and regions, negatively affects family relationships, child rearing, fertility; migrants' earnings, aimed at consumption, provoke higher prices, inflation, increased imports.

So, if one focuses only on economic imperatives, then, on the one hand, labor migration provides foreign exchange earnings from abroad, but on the other hand, there is a loss of created value added in the country.

The transfers of migrant workers do reduce the level of poverty in the country, increase the current consumption of relatives at home, etc. According to the NBU, workers transferred \$12.1 billion to Ukraine during 2020. This is \$0.2 billion more than in 2019 (and that does not include transfers through unofficial channels) ("Workers Remit More and More Money to Ukraine," 2021). These figures significantly exceed the attracted foreign investments in the Ukrainian economy. Thus, during 2015 Ukraine received \$4.3 billion of direct investment, in 2016 – \$4.4 billion of direct investment. In 2017 – 2.5 billion USD. In 2018 – \$2.9 billion. In 2019 – \$2.5 billion ("Foreign Direct Investment in Ukraine: Dynamics of 2015–2019", 2020).

At the same time expert estimates show that if the current trend of labor migration of Ukrainians abroad continues, and given the demographic situation in Ukraine, we can expect a complete collapse of the social security system in 2025. There will be three pensioners per one working Ukrainian ("Return of Labor Migrants: What the State Is Doing Wrong", 2019). Therefore, if the choice is between currency transfers of workers and creating appropriate conditions for their return home, the second option is obviously the right one. Cash receipts provide a short-term effect that cannot ensure sustainable economic development of the country, while creating conditions for the return of migrant workers will help stabilize the labor market, create added value on a much larger scale and, as a result, increase the competitiveness, investment attractiveness and innovativeness of the national economy and achieve indicators of the average European level of well-being

of citizens. Currently, according to experts, a new wave of labor migration in Ukraine is gaining threatening proportions, which involves well-educated young people who see migration not as an economic process, but as a way of life (Sadova, 2019).

### 3. Conceptual imperatives for optimizing labor migration flows from Ukraine

Given Ukraine's obvious competitive advantages in innovation, in our view they have the potential for optimal adjustment of labor migration from Ukraine.

Summarizing the causes and preconditions of migration processes in Ukraine, let us form a conceptual scheme of optimization of labor migration flows from Ukraine (Table 3).

### 4. Conclusions

The vast majority of economically active and competitive population of Ukraine determines their motives for going abroad for the purpose of employment, based not only on the state of personal life and well-being, but also taking into account the low level of economic development of the country. This motive is extremely dangerous in connection with the desire to implement an individual strategy in the global labor market, as it threatens the failure to return qualified emigrants to their home country. The loss of such categories of workers will have a negative impact on the age and educational and qualification characteristics of the labor force and will hinder economic growth. Therefore, the main task of state migration policy of our state should be the protection of weaknesses and threats with the use of strengths and opportunities to overcome the negative effects of modern migration processes.

The negative aspects associated with excessive labor migration from the country can only be leveled out by the use of innovative potential. Compared to national economies that do not pay attention to innovation, innovatively developed countries show higher rates of economic growth in the long-term trend and no outflow of human capital. This is especially evident in those countries that are building their own national innovation system based on a combination of stimulation of state innovation policy, science, education, the business community and participation of the country in international innovation clusters to create and implement innovation as a priority of economic development.

Building human capacity for innovation is possible through international innovative cooperation in higher education, which forms a platform for building relationships between people, social and cultural exchange, and strengthening business ties with other countries.

Table 3

**Conceptual scheme of optimization of labor migration flows from Ukraine**

<b>FACTORS INFLUENCING LABOR MIGRATION FLOWS ON A GLOBAL SCALE</b>	
	Globalization and openness of the national economy, increased labor mobility
	Neo-protectionism
	Structural and innovative shifts in the global economy
	The transition of countries to "Industry 4.0" due to the intensification of labor migration and the growing role of international organizations as coordinators of international economic relations: such traditional 20th century professions as car driver, letter carrier, tour guide, courier, construction worker, traditional engineering professions, as well as professions requiring a lot of labor are gradually "dying out" on the world labor market
	Regulatory influence of international organizations that determine the standard "rules of the game" for countries of the world in the national and global labor market
<b>STRATEGIC PRIORITIES FOR STREAMLINING LABOR MIGRATION FROM UKRAINE</b>	
<b>Solving problems related to employment of the most "vulnerable" segments of the labor market – young people and people of pre-retirement and retirement age, who are willing and able to work</b>	The spread of dual education; the introduction of special government programs to provide "first jobs," grant support for "freelancers" and the self-employed; training and retraining of workers (based on a system of "lifelong learning" (LLL)); training the workforce for the service sector on the basis of skills in IT-technology; institutional support for the development of the creative economy (culture, exhibitions, show business, art projects, etc.) with appropriate preferential taxation of "freelancers"; spread of the practice of tax benefits on the profits of entrepreneurs who create new jobs and hire young people.
<b>Addressing structural unemployment associated with the transition to Industry 4.0</b>	Reorientation of the system of training specialists to fundamentally new specialties: engineers in robotics, operators of robotic machines and equipment, operators of unmanned vehicles; training specialists in interdisciplinary specialties (for example, specialists serving the "health economy"); development of bioengineering, biotechnology, etc. Reforming the social protection system (including the system of pensions, social assistance and social benefits) by introducing a system of "unconditional basic income" payments.
<b>General priorities of labour market reform in Ukraine</b>	Protection of the rights of working people
	Countering all forms of discrimination and the "shadowing" of recruitment and income-generating processes in the labor market
	Preventing the exploitation of child labor
	Implementation of international standards for the protection of workers' rights in Ukraine; raising the level of wages to EU standards; prevention of discrimination and "shadowing" of the labor market
	Legalization of income of employers and employees
	Protection of rights and freedoms, observance of social guarantees for all workers working on the Ukrainian market, as well as for Ukrainian migrant workers
	Provision of assistance, settlement, employment, access to medical care, education and social services for internally displaced persons
	Health care and pension reform
	Modernization of facilities in the real sector of the economy and implementation of technological solutions in the social sphere
<b>UKRAINE'S STRATEGIC PRIORITIES FOR INNOVATION POLICY TO OPTIMIZE LABOR MIGRATION FLOWS</b>	
<ul style="list-style-type: none"> <li>– Building human capacity for innovation by creating an effective system of continuing education and encouraging work in those sectors of the economy that determine the country's innovative development.</li> <li>– Technological modernization of key sectors of the economy and increasing the level of business perception of innovation – the consideration of innovation as an integral element of company development.</li> <li>– Implementation of innovations in all spheres of public administration and the formation of a balanced research/development sector by the state, favorable conditions for the use of innovation in all areas of the economy.</li> <li>– Increase of openness of the National innovation system, the degree of integration of the country into global innovation processes, development of Interstate innovation clusters.</li> </ul>	

One of the main opportunities for rapid innovative development of Ukraine is participation in international innovation clusters. The application of cluster policy will contribute to the competitiveness of economic entities through the implementation of the potential of effective interaction between its participants due to their close geographical location, increasing access to innovation, technology and highly skilled personnel, as well as reducing transaction costs. Clustering is also an effective

mechanism for attracting foreign direct investment. The inclusion of national clusters in global value chains can significantly increase the level of national technological base; increase the speed and quality of economic growth by improving the international competitiveness of enterprises included in the cluster. Further research will be aimed at finding the most rational ways to ensure the competitiveness of Ukraine in the context of the identified innovative advantages.

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