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## IMPACT OF LABOUR MIGRATION ON INTERNATIONAL BUSINESS ENVIRONMENT

*It has been established that international migration contributes to optimizing the distribution of human capital, reducing interregional differences, and improves the functioning of labour markets, the international business environment of host countries and countries of origin. A generalization of the results of previous empirical studies suggests that the positive effect of migration is higher than the negative effects of impact on national markets, while this impact is different for highly and low skilled workers, for firms and employees, and for producers and consumers. In the host countries, migration allows filling job positions in what the indigenous population does not agree to work, contributes to the expansion of production and lowering of the tax burden on the working population. In countries of origin, migration reduces unemployment and makes the national labour market more flexible. Thus, international labour migration opens up new opportunities for the socio-economic development of host EU member states, provoking a large number of problems both at the level of society and the state. The current stage of integration processes in the EU is accompanied by the rapid development of external migration processes, so the unified EU migration policy must be implemented taking into account the problems associated with the mass flows of immigrants to European countries, the consequences of the financial and economic crisis, the current trends in European labour markets, and the real needs of these labour markets. It should be noted that the existence of a direct link between migration and the unemployment rate and difference in income makes it possible to empirically confirm one of the main tenets of the neoclassical macro-level theory that migration arises as a result of the difference in income between regions (countries) and the existence of labour surplus in the region where the migrants come from. Consequently, workers migrate from low-wage and labour surplus regions to high-wage and labour shortage regions. Thus, a migrant's goal is to maximize its income and minimize its costs.*

**Keywords:** international business environment, migration, labour force, unemployment rate, panel data

### INTRODUCTION

In the process of development and transformation of any state, migration affects social life and plays an important role in the development of socio-economic relations, which, in turn, affects political development. Migration processes are reflected in migration policy, which has its own characteristics in each country.

Along with such factors of international migration as globalization, uneven development of various regions, the demographic situation in the host countries, movement of foreign direct investment, development of transport and means of communication. A very important factor is the official policy of regulation of the migration itself [1].

Due to the fact that international migration covers many countries and regions and makes the latter interdependent on migration flows, therefore, changes in the migration policy of one country are able to influence the situation with migration in other countries as well. To a certain extent, migration policy influences the quantitative and qualitative parameters of migration flows, their direction, and the ratio of legal and illegal migration [2].

One of the important consequences of international labour migration is the receipt of cash income by family members remaining in the country of origin. In recent years, remittances from migrants have become a relatively stable source of financing, especially for the economies of developing countries and countries in transition. Statistics show that the income from migrants is constantly growing on a global scale, changing the living standards of the population of recipient countries and affecting the socio-economic situation. Thus, the study of the role of remit-

tances and their impact on the economic development of countries is undoubtedly relevant [3].

The **PURPOSE** of the paper is to study the scientific and methodological foundations of the mechanism of the impact of labour migration on the economies of countries and development of recommendations to improve the effectiveness of policy instruments for regulating international labour migration both at the national and international levels.

### METHODS

To solve the tasks, a theoretical analysis of the scientific literature, reports of international organizations in the field of economics, migration, and demography was carried out. To achieve this goal in the work, general scientific and specific research methods were used. To identify the scientific and theoretical foundations of international migration, analysis and synthesis, theoretical generalization, historical, scientific, analytical, systematization, and classification methods were used. To provide a quantitative assessment of the factors of international migration and its impact on the national economy, statistical methods of linear correlation and regression analysis based on panel data, time series, and cointegration were used.

The information base for the study was the regulatory legal acts in the field of migration, the statistical databases of the European Union, and the International Monetary Fund. All statistics used in this work are publicly available from open sources. A wide range of scientific literature of the authors is used in the work.

### RESULTS

At the present stage of development of the world economy, there is a complication of migration processes and

an increase in their participants, migration processes are spreading and becoming more dynamic. This objectively necessitates the need for detailed studies, on the one hand, of the factors affecting the decision of individuals about migration, and on the other, of the socio-economic consequences of migration. The formation of a system of regulation of international labour migration should be based on a set of interrelated international and national principles, norms, and rules of influence on the development of migration relations [4]. In this context, influence must be exercised through economic, political, financial, legal, and administrative instruments.

The object of this influence is the state's measures in relation to certain groups of external migrants who leave or arrive in the country in order to ensure the effective distribution of migration flows in the long term. The main subject of such regulation is the state, which should implement the migration policy [5].

That is why the key issue is the development and implementation of an effective state migration policy, the procedure of which was proposed by the author. In turn, measures to improve the effectiveness of migration policy require the improvement of theoretical concepts and methods of analysis of international labour migration.

International migration relations have made a long way and continue to change under the influence of various numbers of factors. Together with them, theoretical approaches to the analysis of international migration also developed (it should be noted that most theoretical studies do not distinguish between international migration and international labour migration). Economic and mathematical methods for analyzing international migration have also changed [6].

A feature of the current sample is a balanced panel data structure for the period 2001-2017 with an interval of 1 year. The total volume of observations is 72 units. The objects of study were selected countries such as Estonia, Latvia,

Lithuania, Poland, Hungary, and Slovenia. The main data source was Eurostat statistical databases.

Following the algorithm for determining the best specification for a panel data model, auxiliary regression equations should be analyzed, namely:

– the pooled data model, which does not take into account the panel data structure and estimates the regression coefficients using the one-step least-square method (OLSM);

– the model with fixed individual effects (fixed effects, FE), the results of estimates of the coefficients of which are due to the significant influence of the individual characteristics of the objects of observation. In the evaluation process, individual characteristics are deleted using the procedure of transition to time average values (“demeaning”);

– the model with random individual effects (random effects, RE), which is a compromise between regression of the combined data and regression with fixed effects, and allows entering a constant for each sample object in the model.

The purpose of the modeling is to identify the greatest influence of macroeconomic factors on the number of emigrants from the country. It is suggested in the study that the number of emigrants from the aforementioned countries is affected by economic (GDP per capita, unemployment rate, consumer price index, minimum wage), social (social protection costs), and demographic factors (population dynamics, fertility rate). The model is based on the “push-pull” theory, which differentiates between factors of emigration and immigration, as well as the neoclassical theory, which emphasizes the difference in wages between regions. Thus, according to the “push-pull” theory and the neoclassical theory of migration, it is expected that economic factors will turn out to be the most influential in the number of emigrants from the country.

The results of empirical verification of the model of the influence of GDP per capita and the unemployment rate on the number of emigrants from the country have been analyzed (tab. 1).

Table 1 – **Model specification coefficients and their statistical evaluation** (author's calculations based on data [7])

Model parameters	Pooled	Random effects	Fixed effects
	Coefficient (t-statistics)	Coefficient (t-statistics)	Coefficient (t-statistics)
Natural logarithm of GDP per capita, euro	0,142514 (0,3057)	2,55217 ( 5,371) ***	3,25043 (7,086) ***
Unemployment rate,%	0,0824640 (2,324)**	0,043435 (2,107) **	0,044403 (2,415)**
Constant	7,39439 (1,674)*	-13,8594 (-3,168) ***	-20,1449 (-4,793)***
R <sup>2</sup> adjusted	0,067096	—	0,80262
FcmaT. (p-value)	3,553223 (0,033982)	—	37,17820 (0,000) ***

Notes: \*\*\* - statistical significance at the level of 0.01; \*\* - statistical significance at the level of 0.05; \* - statistical significance at the level of 0.1.

To determine the most appropriate model, a pairwise comparison of the estimated models should be made:

1) comparing the fixed effects regression model and the pooled regression based on the Wald test about equality to zero for all individual effects, it should be noted that the test statistic  $F(5,64) = 45.99$ ,  $\text{prob} > F = 0.0000$ . Since the p-level is  $< 0.01$ , the main hypothesis is rejected. Thus, the authors conclude that a fixed effects regression model is better

suitable to describe the data than a pooled regression model.

2) comparing the regression model with individual random effects and the pooled regression based on the Breusch-Pegano test regarding the panel component evaluation, the higher statistical reliability of the model with random effects is testified:

$$LM = 94.9942 \text{ p-level} = P(Xi\text{-square}(1) > 94.9942) = 1.90947e-022.$$

3) The Hausman test allows choosing between the RE model and the FE model. In this case,

$$H = 22.0369, p\text{-level} = \\ = \text{prob} (X_i\text{-square} (2) > 22.0369) = 1.63965e-005.$$

This indicates that the fixed effects model better approximates the data presented.

Thus, assessing the impact of GDP per capita and unemployment on the number of emigrants from Estonia, Latvia, Lithuania, Poland, Hungary, and Slovenia, it can be noted that a direct correlation between these macroeconomic factors and emigration is revealed. This confirms the thesis that increase in the overall level of well-being in European donor countries contributes to an increase in the number of people traveling abroad since income grows, some of which can be released for paperwork, relocation, obtaining more decent living conditions, cultural adaptation (foreign language courses, advanced training courses or training confirmation courses), etc. At the same time, the existence of a direct link between the unemployment rate and the number of emigrants indicates that the imbalance in the labour market of the donor country and chronic un-employment encourage people to seek better employment conditions, which coincides with the basic theoretical as-sumptions [8].

The consequences of international labour migration in EU countries are related to socio-economic, ethnic, cultural, and other problems of migrants' arrival and stay in the EU. The author clarified the features of mass migration to European countries and the problems associated with this phenomenon by examining the recent works of a number of authors, who analyzed this problem.

Mass migration has caused ethnic problems such as radicalism and even terrorism on the part of migrants and extremist and neo-Nazi sentiments on the part of the local population. Immigrants form their own ethnic groups (clans), maintaining the traditions of their native country for a long period, unlike the United States, where already the second generation, that is, migrant children, is considered indigenous.

Most locals are negatively opposed to immigrants, especially those who are from non-OECD countries, from another cultural background or from other racial backgrounds; these sentiments are reflected in public opinion and the popular press. Foreigners do not always cope with the language barrier, looking as "strangers". The negative perception on the part of the local population is reinforced by the existing stereotype that immigrants are taking jobs from EU indigenous people.

Only part of the migrants who come here find a job in the labour market, including refugees, asylum seekers, family members, illegal migrants who do not have a certain level of education and skills that employers need. This leads to an increase in unemployment in European countries, which is twice as high among third-country immigrants than among EU citizens.

In an effort to save money, businesses use the labour force of illegal migrants, partly influencing the growth of the shadow economy in the EU, which is estimated to range from 7 to 16% of GDP. But the introduction of tough measures to regulate the entry of low-skilled labour force triggers an increase in illegal migrants in European countries. Enhancing the control and entry barriers does not solve the problem and does not pay attention to the causes of increased migration, on the contrary, it provokes criminali-

zation of society and human rights violations.

Thus, international labour migration opens up new opportunities for the socio-economic development of host EU member states, provoking a large number of problems both at the level of society and the state. The current stage of integration processes in the EU is accompanied by the rapid development of external migration processes, so the unified EU migration policy must be implemented taking into account the problems associated with the mass flows of immigrants to European countries, the consequences of the financial and economic crisis, the current trends in European labour markets, and the real needs of these labour markets.

## CONCLUSION

Therefore, on the basis of modeling, it was proved that the greatest influence on the activation of migration flows was due to the increase in the difference in social expenditures between the countries of Estonia, Latvia, Lithuania, Poland, Hungary, Slovenia, and the EU-15. A less statistically significant influence on the increase in the number of emigrants was due to the reduction of the difference in GDP per capita between countries (reverse link) and the increase in the difference in the minimum wage (direct link).

Thus, summarizing the above, it should be noted:

- the main results of the study were obtained in the process of analysis of panel models with fixed effects, which is a completely logical result of forming a sample of the study from countries that have similar tendencies in economic development;

- macroeconomic (GDP per capita, unemployment rate, consumer price index) and demographic factors (population growth/decline, fertility index) have the greatest impact on migration flows;

- based on the analysis of the factors of Estonia, Latvia, Lithuania, Poland, Hungary, and Slovenia at the national level, no correlation was found between the number of emigrants and social indicators (minimum wage, social expenditures);

- based on the analysis of the impact of differentiation in the socio-economic development of Estonia, Latvia, Lithuania, Poland, Hungary, Slovenia, and the EU-15, it was found that the greatest impact on the activation of migration flows was due to the increase in the difference in social expenditures between countries.

It should be noted that the existence of a direct link between migration and the unemployment rate and difference in income makes it possible to empirically confirm one of the main tenets of the neoclassical macro-level theory that migration arises as a result of the difference in income between regions (countries) and the existence of labour surplus in the region where the migrants come from.

Consequently, workers migrate from low-wage and labour surplus regions to high-wage and labour shortage regions. Thus, a migrant's goal is to maximize its income and minimize its costs.

Thus, it should be noted that in European countries there is a certain imbalance of labour resources, as a result of which more developed countries need migrants. At the same time, migration has both positive and negative consequences for the host countries and countries of origin of migrants. In EU-6 countries, international migration plays a significant role in the development of the national economy and demographic situation.

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## **ВПЛИВ ТРУДОВОЇ МІГРАЦІЇ НА МІЖНАРОДНЕ ДІЛОВЕ СЕРЕДОВИЩЕ**

Встановлено, що міжнародна міграція сприяє оптимізації розподілу людського капіталу, зменшення міжрегіональних відмінностей та покращує функціонування ринків праці, міжнародне бізнес-середовище приймаючих країн та країн походження. Узагальнення результатів попередніх емпіричних досліджень свідчить про те, що позитивний вплив міграції вищий за негативний вплив на національні ринки, хоча цей вплив відрізняється для висококваліфікованих працівників, фірм та працівників, а також виробників і споживачів. У приймаючих країнах міграція дає змогу заповнювати робочі посади там, де корінне населення не погоджується на роботу, сприяє розширенню виробництва та зниження податкового навантаження на робоче населення. У країнах походження міграція зменшує безробіття та робить національний ринок праці більш гнучким. Так, міжнародна міграція праці відкриває нові можливості для соціально-економічного розвитку країн-членів ЄС, що провокує велику кількість проблем як на рівні суспільства, так і держави. Нинішній етап процесів інтеграції в ЄС супроводжується швидким розвитком зовнішніх процесів міграції, тому уніфікована політика міграції ЄС повинна бути реалізована з урахуванням проблем, пов'язаних з масовими потоками іммігрантів до європейських країн, наслідками фінансової та економічної кризи, нинішніх тенденцій на європейських ринках праці та реальних потреб цих ринків праці. Слід зазначити, що наявність прямого зв'язку між міграцією та рівнем безробіття й різниці в доходах дає змогу емпірично підтвердити одне з основних принципів неокласичної теорії макрорівного рівня, що міграція виникає внаслідок різниці в доходах між регіонами (країнами) та наявністю надлишку праці в регіоні, звідки беруться мігранти. Мени статистично значущий вплив на збільшення кількості емігрантів обумовлено зменшенням різниці ВВП на душу населення між країнами (зворотна ланка) та збільшенням різниці в мінімальній заробітній платі (пряма ланка). Так, робітники мігрують з регіонів з низькою заробітною платою та зайнятістю до регіонів з високою заробітною платою і зайнятістю. Отже, мета мігранта – максимізувати свій дохід і мінімізувати витрати.

**Ключові слова:** міжнародне бізнес-середовище, міграція, робоча сила, рівень безробіття, панельні дані