

GLOBAL LABOR MIGRATION: IMPACT ON ECONOMIC GROWTH AND COMPETITIVENESS OF NATIONAL ECONOMIES

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Abstract

The article provides a comprehensive analysis of the impact of global labor migration on economic growth and the competitiveness of national economies under the current transformation of the global labor market. The study examines theoretical approaches to assessing the economic effects of migration, including the concepts of G. Borjas and P. Collier, and analyzes recent trends in international labor mobility in 2024-2025. Based on statistical data from international organizations and national institutions, the paper explores the experience of recipient countries (the United States, Germany, and the United Kingdom) and donor countries (India, Bangladesh, and Ukraine) regarding the impact of migration processes on GDP dynamics, unemployment rates, investment activity, and demographic structure.

The findings demonstrate that, for recipient countries, immigration contributes to the expansion of production capacity, supports aggregate demand, and partially offsets demographic aging, while also creating short-term pressure on labor markets and social systems. For donor countries, migration generates significant remittance inflows and reduces pressure on domestic labor markets; however, it also creates risks associated with brain drain and structural labor shortages. Particular attention is paid to the Ukrainian context, where migration under wartime conditions has a decisive impact on macroeconomic stability and post-war recovery prospects.

The study concludes that a balanced migration policy is essential to ensure economic efficiency, social stability, and the long-term competitiveness of national economies.

Keywords: global labor migration, economic growth, labor market, remittances, competitiveness, demographic aging, recipient countries, donor countries, Ukraine, brain drain.

Introduction

Global labor migration is one of the key factors shaping modern national economies, significantly influencing their socio-economic environment. The growing scale of international labor mobility leads to deeper interdependence between countries and highlights the importance of studying the impact of migration processes on economic dynamics. In a broad sense, migration is defined as the movement of population within a country or between states, driven by socio-economic, political, or demographic factors. The historical origins of global labor migration date back to the period of the Age of Exploration, when large-scale population movements began, associated both with voluntary colonization and forced slave trade. Subsequently, these processes only intensified and contributed to the formation of the global labor market. In today's globalized world, labor migration has evolved from a sporadic phenomenon into a fundamental structural component of the world economy.

The relevance of this study is driven by the profound transformations experienced by national labor markets under the influence of geopolitical upheavals, demographic shifts, and changes in migration policies of leading countries in 2024-2025.

Research objective and tasks

The objective of the study is to conduct a comprehensive analysis of the mechanisms through which global labor migration affects macroeconomic indicators (GDP, unemployment rate, inflation) and the competitiveness of national economies, with a focus on both recipient and donor countries.

Achieving this objective requires addressing the following tasks:

1. To assess current trends in international migration and their impact on labor supply under the demographic challenges of 2024-2025.
2. To analyze the experience of leading economies (the United States, Germany, and the United Kingdom) in using migration as a driver of economic dynamics and as a tool to address sectoral labor shortages.
3. To examine the role of remittances as a source of external financing and a stabilizing factor for the balance of payments in donor countries.
4. To evaluate the scale and consequences of migration processes for Ukraine, particularly in the context of wartime challenges and macroeconomic recovery forecasts.
5. To determine the impact of migration policies (in particular, the EU Pact on Migration and Asylum of 2024) on the institutional environment and labor markets

Analysis of recent research and publications

Issues of labor migration have remained at the center of global economic research for decades; however, the events of 2023-2025 have compelled scholars to reconsider classical models.

The theoretical foundation of this study builds upon the work of George Borjas, who conceptualizes migration as a “labor supply shock.” In his recent research, Borjas emphasizes the role of ideological biases in assessing the impact of migration and demonstrates that its effect on native wages is heterogeneous: low-skilled workers are the most vulnerable, while high-skilled workers benefit from complementarity [1]. He also makes an important contribution to understanding growth dynamics in the context of migration within the framework of the Solow Growth Model. According to this approach, immigration increases total GDP but may temporarily reduce per capita income due to a decline in capital-labor ratios, which in turn stimulates further capital investment [2].

Paul Collier, in his works from 2020-2025, examines migration through the lens of social models and institutional trust. He argues that migrants move from dysfunctional social models to more effective ones; however, the rapid expansion of diasporas may slow assimilation processes and create risks of cultural separatism, which can negatively affect the social capital of recipient countries [3].

The Ukrainian context of the migration crisis has been thoroughly examined in the works of Tetiana Karmadonova, Oleksii Pozniak, and Mykhailo Makarov. T. Karmadonova investigates the historical and contemporary trends in the migration of Ukrainian scientists, identifying three key periods (post-Soviet, post-2013, and during the full-scale war). Her work analyzes the motives, destinations, and factors influencing scientists’ decisions to emigrate, as well as their choice of host countries [4]. O. Pozniak provides a quantitative assessment of irregular (informal) migration in Ukraine. The study emphasizes the difficulty of accurately measuring such migration flows, highlighting the problem of insufficient data, which affects migration policy, as well as the risks associated with the spread of distorted information regarding the number of irregular migrants [5]. M. Makarov analyzes the legal status of Ukrainian refugees in European Union countries following the full-scale war, comparing the temporary

protection regime with formal refugee status. Particular attention is paid to rights related to employment, education, and recognition of qualifications, as well as differences in legislative approaches in Poland, Germany, and the Czech Republic that influence the integration of Ukrainian scholars [6]. Overall, the works of Ukrainian researchers share a common conclusion: for Ukraine, migration has transformed into a threat to national security and a major constraint on economic growth.

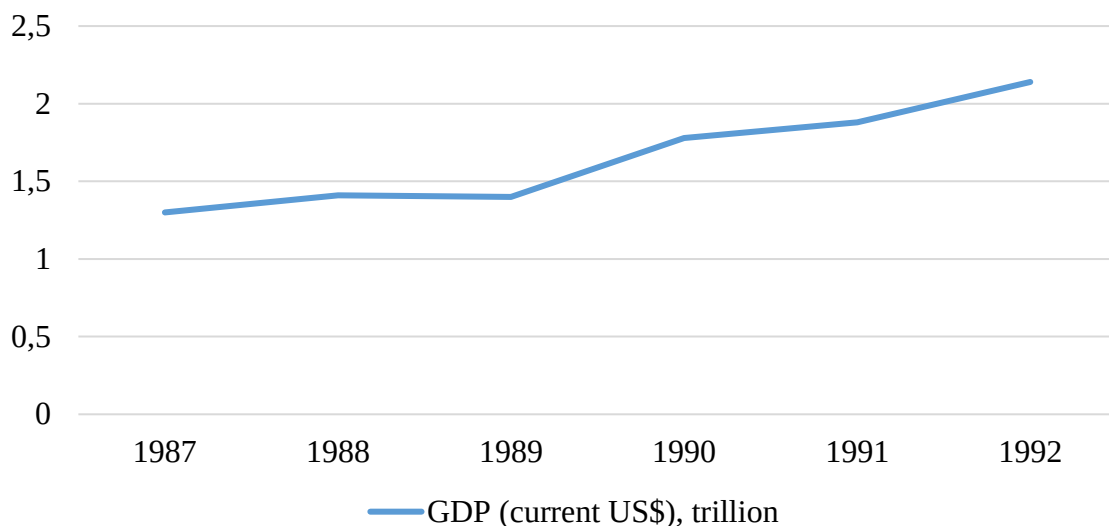
Thus, it is evident that the issue of the impact of migration processes on economic growth and competitiveness, particularly in the case of Ukraine, requires more detailed examination and analysis.

Research results

There are many reasons for migration, with the primary one being the desire to improve living standards. People leave their homes and move to countries where it is easier to find well-paid jobs and ensure a stable livelihood. Another major cause of migration is insecurity in the country of residence, such as wars and political instability. Over the past 40 years, unprecedented levels of human mobility have been observed. Today, more people than ever before live outside the countries in which they were born.

Current trends indicate a rapid increase in the number of international migrants. According to the United Nations Department of Economic and Social Affairs, as of 2020 there were 281 million international migrants worldwide, and by 2024 this number had risen to 304 million. The share of migrants in the global population is also increasing: from 2.3% in 1980 and 2.8% in 2000 to 3.5% in 2024. The ranking of recipient regions has remained relatively stable in recent decades: Europe (31%), North America (21%), Africa (9%), Latin America and the Caribbean (5%), and Oceania (3%). Among the leading destination countries are Germany, United States, United Kingdom, France, and Canada. The main donor countries include India, Bangladesh, China, Mexico, and Ukraine [7].

The economic impact of migration is primarily reflected through its effects on the labor market, investment activity, and overall macroeconomic dynamics. The case of Germany demonstrates that the active attraction of foreign workers following the German reunification contributed to accelerated GDP growth (Fig. 1).



*Fig. 1. GDP (current US\$) – Germany, 1987-1992, trillion US dollars**

*Compiled by the authors based on [8]

Subsequently, the generated demand for labor for the reconstruction of the eastern regions stimulated an inflow of migrants from Eastern European countries, Turkey, and the former Yugoslavia. On average, Germany's economic growth rate amounted to about 2.01% per year. At the same time, unemployment increased due to the labor market integration of newly arrived migrants (from 5.3% in 1991 to 11.2% in 2005); however, this indicator later declined to 3.4% in 2024 [8].

Similar trends are observed in the United States, where following the adoption of the 1991 Immigration Act, the annual inflow of migrants amounted to 800,000-1 million people. After the enactment of this law, the country's economy began to show dynamic recovery. GDP growth was driven, among other factors, by the inflow of labor into low-wage sectors (agriculture, construction, and services), as well as by migrants' participation in high-tech industries, particularly in Silicon Valley companies. Economic growth rates increased from -0.1% in 1991 to 3.5% in 1992, and in the long term stabilized at 2.4-2.5%. In the United States, the unemployment rate followed a pattern similar to that observed in Germany in the 1990s. It also initially increased amid rapid migrant inflows (up to 9.6% in 2010), but later declined to 4% as of 2024 [8]. In 2025, the inflow of migrants decreased, and this has certain consequences. According to projections by the International Monetary Fund, U.S. GDP growth in 2025-2027 will average around 1.8%, compared to 2.8% in 2024 [9]. At the same time, this trend creates certain positive effects for the economic system: reduced labor market competition for the native workforce, lower fiscal pressure on the social welfare system, and consequently a decrease in budgetary transfers for social support.

Large-scale migration processes in the United Kingdom began earlier than in Germany and the United States, immediately after the end of the Second World War. Post-war migration was driven by an acute labor shortage, as the country required a significant number of workers to rebuild the economy and reconstruct its

devastated infrastructure. The main inflow of migrants during this period came from countries of the Commonwealth of Nations.

Starting in the 1990s, the structure of immigration underwent significant changes. Whereas earlier migration had been dominated by inflows from Commonwealth countries and Europe, from the early 1990s there was an increase in migration flows from other regions, particularly Pakistan and Bangladesh, and the overall volume of immigration to the United Kingdom rose substantially [10]. At the same time, in the short term, this did not contribute to GDP growth, as the country was experiencing an economic recession caused by sharply increased interest rates and crisis developments in the banking and financial sectors.

These factors constrained economic growth and business expansion, which in turn limited labor demand. As a result, even in the presence of migratory inflows, the country's unemployment rate increased: from 6.8% in 1989 to 7.2% in 1990, and during the prolonged crisis it reached 10.3% in 1993. Thus, in the short term, migration had a counterintuitive effect, contributing to rising unemployment. After the economic crisis was overcome, the labor market gradually stabilized, and unemployment began to decline. As of 2024, this indicator stands at 4.4% [8]. Currently, migration to the United Kingdom, totaling 417,114 persons, plays an important role in addressing labor shortages in specific sectors of the economy, particularly healthcare, logistics, construction, and agriculture [11]. In 2024, the country's annual GDP growth rate was 1.1%, with a gradual projected increase over the next three years to 1.5% [8].

Another illustrative example is large-scale migration from India. This process began around the early 1970s and was driven by a shortage of jobs, low-income levels, overpopulation, and insufficient industrialization. In addition, the country's agricultural sector was unable to provide sufficient resources to sustain its growing population, which further intensified migration pressures.

Migration processes have had an overall positive impact on the Indian economy. A significant role in this is played by remittances from Indian migrant workers employed abroad, as they increase household incomes, stimulate domestic consumption, and contribute to improving living standards. Following the onset of large-scale migration, GDP growth rates accelerated. The outflow of part of the labor force abroad also helped reduce competition in the domestic labor market, which had a positive effect on unemployment dynamics. Although for a long time the unemployment rate in India remained at around 7.7%, in recent years it has declined significantly to 4.2% in 2024 [8].

At the same time, large-scale migration has generated a number of structural challenges, in particular the phenomenon of “brain drain” and a shortage of highly qualified professionals. A significant share of specialists emigrates in search of better working conditions, higher wages, and broader professional development opportunities, which negatively affects key sectors of the national economy. The most severe labor shortages are observed in healthcare, information technology, manufacturing, engineering, automotive and mechanical engineering, as well as the energy sector. In particular, in the information technology sector, demand for artificial intelligence specialists is growing rapidly, and forecasts suggest that the shortage may exceed 1 million qualified AI professionals by 2027. In 2024–2025, in the energy and utilities sector, 72% of employers reported difficulties in finding qualified workers [12]. A significant personnel deficit is also recorded in healthcare: for example, in the state of Rajasthan, the shortage of doctors is estimated by the World Health Organization at approximately 40% [13].

Thus, large-scale migration from India has both significant economic benefits and long-term challenges, the mitigation of which requires a comprehensive state policy in the areas of employment, education, and human capital retention.

The formation of a systematic labor migration flow from Bangladesh abroad began in 1976, when the Bureau of Manpower, Employment and Training (BMET) was established as a government body responsible for organizing and regulating the overseas employment of citizens. The causes of migration from Bangladesh are largely similar to those in India, including low wage levels, high unemployment, especially among young people, the search for better professional and career opportunities, as well as adverse climatic conditions such as floods, cyclones, rising sea levels, and coastal erosion.

Migration from Bangladesh plays an important role in reducing unemployment in the context of overpopulation and alleviating pressure on the domestic labor market. Families of migrant workers receive remittances that are used for housing construction, children’s education, healthcare services, and the development of small businesses, thereby improving living standards and reducing poverty. Migrant remittances generate billions of dollars annually for the national economy and represent one of the key sources of foreign exchange earnings for the country [8].

The beginning of organized labor migration was accompanied by an improvement in macroeconomic indicators: in 1976, GDP growth amounted to 5.7%, compared to 1975, when a GDP decline of – 4.1% was recorded. In 2024, economic growth in Bangladesh is estimated at 4.2% [9]. As of recent years, the number of labor migrants from Bangladesh is approximately 473,362 persons, with the main destination countries being European states, Gulf countries, and the United States of America [14]. The unemployment rate in the country remains relatively low – around 3.6% [8].

At the same time, large-scale migration has generated a number of structural challenges similar to those observed in India, particularly a severe shortage of skilled labor. A significant proportion of highly qualified professionals emigrates in search of better working conditions and higher wages, which constrains the development of key economic sectors. According to estimates by the Bangladesh Institute of Development Studies, by 2025 the country will require an additional 8 million skilled workers in sectors such as the textile and garment industry, construction, agro-industrial complex, food processing, healthcare, information technology, engineering industries, and leather manufacturing. The problem of labor shortages is further exacerbated by a high share of informal employment, as well as a mismatch between educational and vocational training programs and the actual needs of the labor market [15].

Migration processes in Ukraine also significantly affect economic dynamics. Large-scale migration began after independence was gained in 1991, and the drivers of these processes differed substantially from those observed in India or Bangladesh. Following the collapse of the USSR, Ukraine experienced a deep transformational economic crisis, characterized by a sharp decline in production, mass enterprise closures, and hyperinflation. A significant contraction in employment and a fall in real household incomes led to increasing labor migration, as many citizens were forced to seek employment abroad. During the period from 1991 to 2022, the average annual migration outflow is estimated at approximately 220,000 persons. The main destinations of Ukrainian labor migration were the European Union countries and post-Soviet states. At the same time, the contraction of Ukraine’s gross domestic product in the 1990s was driven not so much by migration processes as by deep structural weaknesses of the economy that emerged after the dissolution of the USSR. In particular, in 1991 GDP declined by 8.7%, and during 1991–1999 real GDP contracted by approximately 60%, marking one of the most severe economic downturns in Europe [8].

Prolonged economic decline and instability led to a loss of economic attractiveness of the country for its own citizens, which sustained high levels of migration intentions. At the same time, labor migration also had certain positive effects, similar to the experience of India and Bangladesh, particularly in the form of remittances from labor migrants to Ukraine, which became an important source of foreign currency inflows and household support (Table 1).

The decline in remittance inflows to Ukraine since 2022 is primarily associated with the full-scale invasion

of the Russian Federation. In 2022, remittance inflows decreased by approximately USD 1.4 billion compared to 2021. This was driven not only by economic factors but also by significant demographic changes. Following the onset of the full-scale war, around 6.5 million Ukrainians left the country, leading to a reduction in the population remaining in Ukraine and receiving financial transfers [17]. Migration processes have also significantly affected the functioning of Ukraine's labor market. Given the relatively small population size (ap-

proximately 37.86 million people in 2024), the substantial outflow of the working-age population has reduced labor supply, particularly in construction, industry, and agriculture. This has resulted in labor shortages and rising wages in certain sectors of the economy. The most severe shortages are observed in occupations involving manual labor and blue-collar professions. At the same time, wage growth has been observed in selected industries due to increased demand for labor under conditions of constrained supply.

Table 1

Remittances to Ukraine from abroad, 2014–2025 (USD million)*

Year	USD million	Change compared to previous year	Change compared to previous year (%)
2014	6489	-2048,0	-24%
2015	6959	+470,0	+7,2%
2016	7535	+ 576,0	+ 8,3%
2017	9287	+1752,0	+ 23,3%
2018	11111	+ 1824,0	+ 19,6%
2019	11921	+ 810,0	+ 7,3%
2020	11980	+ 59,0	+ 0,5%
2021	14019	+ 2039,0	+ 17,0%
2022	12621	-1398,0	-10,0%
2023	11367	-1254,0	-9,9%
2024	9440	-1927,0	-17,0%
2025	8028	-1412,0	-15,0%

* Compiled by the authors based on [16]

Alongside this, the problem of a shortage of highly qualified personnel is becoming more acute. According to expert estimates, in 2025 the shortage of skilled workers in Ukraine will exceed 500,000 people. Approximately 30% of labor migrants are highly qualified specialists who are in particularly high demand in developed countries [18]. As a rule, such professionals receive long-term contracts or opportunities for permanent residency, which increases the risk of their permanent integration abroad without returning to Ukraine. However, the most severe labor shortages are forecast among workers in blue-collar and technical occupations. An additional factor is the prolonged demographic decline in the working-age population, which further exacerbates structural imbalances in the national labor market.

Thus, it can be concluded that migration processes exert a complex impact on the socio-economic dynamics of national economies. Migration significantly affects the productive capacity of domestic enterprises and the economy as a whole. The inflow of migrants contributes to an expansion of production potential through an increase in labor supply. This enables firms to fill vacancies more quickly, avoid production disruptions, and increase output, particularly in sectors experiencing chronic labor shortages. An additional labor force may also help contain excessive growth in wage costs, thereby enhancing business competitiveness. At the same time, immigration contributes to an increase in aggregate demand, as migrants act as active consumers of goods and services. This stimulates production expansion, investment activity, and the development of domestic markets. Migration is particularly important for countries with aging populations, where immigrants

increase the share of the economically active population relative to retirees, thereby supporting the stability of employment systems and social security mechanisms.

Migration processes also play an important role in the creation of new enterprises and the expansion of economic activity. An increased labor supply creates favorable conditions for business formation, particularly in low- and medium-skilled sectors such as construction, manufacturing, agriculture, and services. The expansion of consumer markets and the growth of domestic demand further stimulate economic development.

At the same time, an excessive labor supply may also generate negative effects. In particular, in certain sectors of the economy it may exert downward pressure on wage levels, potentially leading to wage reductions or slower wage growth.

Regarding donor countries, the outflow of part of the working-age population reduces pressure on the domestic labor market and may contribute to lower unemployment, facilitating job placement for those who remain in the country. At the same time, in certain sectors this can lead to higher wages due to shortages of qualified labor. However, for enterprises, this trend has mixed consequences, as rising labor costs increase production costs and may constrain the pace of output expansion and investment activity.

Massive and intensive migration also has a significant impact on the social systems of recipient countries. This is primarily reflected in increased pressure on social welfare systems due to a growing number of individuals applying for social assistance, housing subsidies, unemployment benefits, and support within in-

tegration programs. In cases where migrants are not integrated into the labor market quickly enough, or when their qualifications do not match employer demand, public expenditures may grow faster than tax revenues generated through their economic activity.

There is also a noticeable strain on healthcare systems. Newly arrived migrants use medical services while often not yet being fully integrated into the social insurance system, which can lead to overcrowding in healthcare facilities, longer waiting times, and rising public expenditure, particularly in large urban centers and border regions. A similar situation is observed in the education sector, where educational institutions are required to accommodate a larger number of students, including those with language barriers, which necessitates additional resources for teaching staff, preparatory programs, and integration measures. In the short term, this increases the financial burden on local government budgets. Rising demand for housing may also create shortages of affordable real estate and push up rental prices, which in turn encourages governments to invest in social housing or temporary accommodation centers.

Another important dimension of migration's impact concerns demographic indicators of states, particularly its role in maintaining or increasing population size. A notable example is Germany, where prior to the implementation of an active immigration policy, population size was either stable or showed a declining trend. Large-scale inflows of migrants from various countries helped stabilize the demographic situation and partially offset natural population decline. Migration to some extent slows population aging; however, its effect remains limited. Whereas the average age of the German population previously stood at around 36 years, in recent years it has increased to approximately 45 years, indicating deepening demographic aging. Immigration flows have been insufficient to fully compensate for low fertility rates among the native population [19]. At the same time, young migrants typically exhibit higher fertility rates compared to the native population, which partially offsets natural population decline. Thus, migration contributes to sustaining demographic dynamics, partially rejuvenating the population structure, and increasing fertility rates; however, it cannot fully resolve the problem of population aging and structural demographic imbalance.

Therefore, considering the above aspects, in response to significant migrant inflows, a number of OECD countries have defined strategic objectives aimed at regulating migration flows both overall and by specific categories. In many states, asylum procedures have been tightened, social benefits have been reduced, and additional restrictions on family reunification have been introduced. At the same time, labor migration policy is increasingly focused on attracting highly qualified professionals and meeting specific needs of national labor markets [20].

Conclusions

The conducted study confirms that global labor migration is a structural component of the modern world economy and a significant factor shaping economic dynamics in both recipient and donor countries. Its impact is complex and multidimensional, encom-

passing labor markets, firms' productive capacity, demographic processes, investment activity, and social systems.

For recipient countries, immigration contributes to an expansion of labor supply, an increase in productive potential, growth in aggregate demand, and the maintenance of economic competitiveness. Migration plays a particularly important role in the context of population aging, where immigrants partially compensate for the decline in the working-age population. At the same time, excessive or uncontrolled migration inflows may create short-term pressure on labor markets, social infrastructure, and public budgets.

For donor countries, labor migration has a dual effect. On the one hand, it reduces pressure on the domestic labor market and generates significant volumes of remittances, which support macroeconomic stability and household welfare. On the other hand, the sustained outflow of working-age and highly qualified population creates structural labor shortages, exacerbates demographic imbalances, and constrains long-term economic growth potential.

Thus, migration is neither an unequivocally positive nor negative phenomenon. Its economic consequences are determined by the quality of public policy, the effectiveness of integration mechanisms, labor market conditions, and the demographic situation. In the contemporary context, a key task for states is the development of a balanced migration strategy that combines economic interests, social stability, and the long-term competitiveness of national economies.

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