

ANALYSIS OF EMPLOYMENT DYNAMICS OF THE POPULATION OF UKRAINE IN THE CONTEXT OF MILITARY TRANSFORMATIONS

Yuliia Bondar¹

Abstract. The purpose of the research is to provide a comprehensive analysis of employment dynamics and to identify the main factors influencing change in the context of modern economic development. *Methodology.* The methodological basis is a comparative analysis of employment and total population statistics, which are the main determinants that reveal the level of employment at different times. This made it possible to trace changes in trends before and during the deployment of large-scale military operations. The study is based on official statistical data and methods of dynamic analysis, generalisation and economic and statistical approaches, providing a comprehensive assessment of employment transformation. *Results.* The analysis showed that employment is the main element of the labour market and reflects the extent to which a society utilises its labour potential, determining the state of a country's socio-economic development. Employment not only provides the population with a means of obtaining labour income, but it is also an important factor in social stability, the reproduction of human capital, and regional development. The statistical analysis revealed a significant reduction in the employed population and a change in the trajectory of its dynamics in conditions of military upheaval. The main determinants of these changes were found to be demographic losses, large-scale external migration, a decrease in economic activity and structural imbalances in labour supply and demand. At the same time, adaptation processes in the labour market are evident, as demonstrated by the gradual stabilisation of individual employment indicators. *Practical significance.* The results obtained can be used to inform state employment policy and develop measures to support the labour market in the event of military challenges. They can also be used to forecast future trends in its development during the economic recovery period. *Value / Originality.* The novelty of this study lies in its comprehensive approach to assessing employment dynamics among the Ukrainian population. By combining analysis of the pre-war and wartime periods, it provides a deeper understanding of the nature of labour market transformations and their systemic consequences.

Keywords: employment, labour market, population, national economy, transformation processes, activity.

JEL Classification: J21, J22, O33

1. Introduction

The contemporary labour market has undergone substantial transformations, precipitated by digitalisation, automation, the advancement of information technologies and the emergence of novel organisational business models. However, within the context of Ukraine, these processes are rendered considerably more complex by the presence of military challenges, which have served to exacerbate pre-existing structural imbalances within the employment sector, thus engendering further losses of a demographic and economic

nature. Such changes have led to the formation of a qualitatively new employment structure, altering the nature of labour relations and necessitating greater flexibility and adaptability from the workforce. Consequently, the dynamics of changes in the employment sector are becoming increasingly complex and multidimensional, necessitating in-depth scientific analysis and generalisation.

The present study is of particular pertinence in light of the necessity for a systematic understanding

¹ Rivne Branch of Private Higher Education Establishment "European University", Ukraine
E-mail: Juliamolinska2308@gmail.com
ORCID: <https://orcid.org/0000-0002-2409-3577>



of the trends that determine the modern development of the Ukrainian labour market. This understanding is of twofold value: firstly, it identifies key factors of structural shifts and secondly, it assesses their impact on employment in the short term. The study goes on to consider the impact of military transformations. Notwithstanding the considerable scientific advances that have been made in this domain, it is imperative to recognise the pressing necessity for a thorough investigation that integrates the evaluation of economic, demographic, and socio-institutional determinants of employment dynamics within an unstable macroenvironment.

The objective of this research is to elucidate the patterns of change in the employment level of the Ukrainian population and to delineate the factors that shape contemporary trends in the development of the labour market in conditions of structural transformations and martial law. The solution to this problem will facilitate a more profound comprehension of the manner in which demographic shifts, technological advancements, novel forms of employment organisation, and macroeconomic transformations, in general, impact the employment levels of the population. The purpose of the present study is to comprehensively analyse the dynamics of employment and to identify the main factors that influence its change in modern conditions of economic development.

The work is based on a combination of general scientific and special methods of cognition. These include analysis and synthesis, the comparative approach, and induction and deduction. Statistical methods are also employed to provide a comprehensive assessment of trends and patterns in employment numbers in the context of structural and legal changes.

In accordance with the set goal, the following research tasks have been formulated:

- 1) To reveal the essence of the concept of 'employment' and clarify its role in the labour market structure.
- 2) To analyse the employment level dynamics of Ukraine's population in the pre-war period and identify key change trends.
- 3) To assess the impact of demographic losses and external migration on employment levels in Ukraine.
- 4) To summarise the consequences of military operations on Ukrainian territory for the labour

market and outline possible restoration and stabilisation strategies.

2. The Essence of Employment and its Role in the Structure of the Labour Market

Employment is one of the key socio-economic categories. It is designed to determine the level of development of the national economy, the nature of the labour force and the extent of population well-being. This category has been the focus of attention from scientists from various fields of knowledge (economists, sociologists, lawyers, demographers) for a considerable period. Nevertheless, employment remains a pertinent concept due to the intricacies and significance of this phenomenon, its perpetual dynamism, and its capacity to mirror the profound processes of social evolution. In the domain of scientific discourse, a plethora of approaches to its interpretation exists. However, the most pervasive and broadly accepted definition is that articulated by the International Labour Organisation (ILO), which stipulates that employment constitutes the activity of all physically capable individuals who, within a limited timeframe, engage in any activity that results in the production of goods or the provision of services for the purpose of remuneration or profit.

In the context of contemporary conditions, it is recommended to conceptualise employment not solely as a series of individual labour decisions, but rather as a multifaceted system of interaction among economic entities. This system mirrors the structure of social production, the technological level of development, and the institutional principles of labour regulation. This approach facilitates a more comprehensive evaluation of the role of employment, encompassing its function not only as a process of integrating individuals into the labour market, but also as a pivotal component of the socio-economic system's overall functioning.

The transformation of the labour market, the emergence of new forms of labour organisation, the spread of flexible and non-standard types of labour activity, as well as intensive digitalisation and automation of production processes significantly affect the content, structure and functional characteristics of employment. Such changes require constant updating, adaptation and the development of new approaches to analysis that meet the conditions of the current stage of economic development.

It can be stated that employment is not only a fundamental theoretical category, but also an extremely important practical guideline in ensuring sustainable socio-economic development, the formation of an effective policy for the development of labor resources and improving the well-being of the population. Concurrently, employment in the labour market fulfils not only an economic function related to income generation, but also a significant number of other important social functions. In general, functional manifestations of employment can be grouped into four large blocks, including:

1) Economic, which is responsible for creating GDP, generating household income, ensuring tax revenues to the budget and supporting the financial stability of the state;

2) social, which consists in ensuring the social integration of a person, solving the issue of poverty, preventing social isolation, creating conditions for improving the quality of life of the population, which, among other things, involves the development of digital skills (Tsyra, Tochylina & Tanashchuk, 2024) as a necessary prerequisite for competitiveness in the modern labour market;

3) demographic, which is manifested in the impact of employment on migration processes, the reproduction of labour potential, the consolidation of the population in certain territories and the support of socio-economic stability of regions;

4) institutional – reflects the interaction between the state, employers and employees, and involves the implementation of state employment policy and the functioning of labour market regulation mechanisms.

Consequently, employment constitutes the primary component of the labour market, thereby reflecting the extent to which the labour potential of society is being utilised. This, in turn, determines the state of socio-economic development within the country. Employment is not only a mechanism for obtaining labour income by the population, but also an important factor in social stability, reproduction of human capital and regional development. The employment relationship serves as a conduit through which the interests of the individual, the business, and the state are harmoniously aligned, thereby ensuring the seamless operation of the labour market.

3. Diagnostics of the Current Employment Situation in Ukraine

In light of the profound institutional and socio-economic transformations precipitated by military events, it is recommended that the analysis of the employment of the Ukrainian population be divided into two distinct periods. The initial period under consideration extends from 2010 to 2021 and is founded upon a quantitative analysis. The second period (2022–2025) is characterised by the undertaking of a qualitative analysis, primarily due to the unfeasibility of conducting a comprehensive quantitative study of indicators that reflect the state of the labour market's functioning. This is attributable to the absence or fragmentation of official statistical data during the period of martial law.

During the initial period, the Ukrainian labour market was subject to the influence of both domestic socio-economic transformations and external factors, a phenomenon that was reflected in the dynamics of its key indicators. As demonstrated by the data presented in Table 1, there has been a gradual decline in the population, which has had a direct impact on the general parameters of the labour market.

Among the factors that caused these negative trends, the following should be noted first and foremost: the occupation of Crimea and certain areas of Luhansk and Donetsk regions in 2014, which made it impossible to include these territories in official statistical observations and, accordingly, led to a formal decrease in the registered population; Secondly, the prolonged demographic crisis, the characteristic manifestations of which over the last decades have been:

1) Population aging, which affects "an increase in the demographic burden on the working-age population, difficulties in forming human resources and is generally one of the most alarming symptoms of worsening demographic conditions" (Babiak, 2014). Such a problem is extremely significant for Ukraine, as it is ranked among the 30 "oldest" countries in the world (LB.ua – official website).

2) Birth rate decrease.

3) Significant migration processes. Although migration reflects a society's openness and the freedom to choose where to live and work, it also indicates limited opportunities for professional development within the national economy. After all, it is mainly highly skilled and intelligent

Table 1

Dynamics of the main indicators of the labour market of Ukraine from 2010 to 2021

Year	Total population, million people	Economically active population (15–70 years old)	Employed population (15–70 years old)	Unemployed population (15–70 years old)
2010	46,0	22051,6	20266,0	1785,6
2011	45,8	22056,9	20324,2	1732,7
2012	45,6	22011,5	20354,3	1657,2
2013	45,5	21980,6	20404,1	1576,5
2014	45,4	19920,9	18073,3	1847,6
2015	42,9	18097,9	16443,2	1654,7
2016	42,8	17955,1	16276,9	1678,2
2017	42,6	17854,4	16156,4	1698
2018	42,4	17939,5	16360,9	1578,6
2019	42,2	18066,0	16578,3	1487,7
2020	41,9	17589,5	15915,3	1674,2
2021	41,6	17321,6	15610,0	1711,6

Source: compiled by the author based on data from the National Bank of Ukraine and the State Statistics Service of Ukraine

workers who go abroad, causing significant social losses and threatening the national security of Ukraine (Tsvihun, 2022).

The analysis of the dynamics of the employed population confirms the general trends in the functioning of the labour market. In the period spanning from 2010 to 2013, the number of employed individuals remained relatively stable, with a figure exceeding 20 million. Furthermore, the employment rate within the population aged 15-70 was sustained at a level exceeding 58%, signifying a substantial degree of engagement of the working-age demographic in economic activity. Since 2014, there has been a marked decline in the number of employed individuals, reaching a low of 15.6 million in 2021. The primary factors contributing to these dynamics are the loss of territories and the subsequent destruction of production potential, as well as the disruption of regional labour markets. Consequently, the proportion of the employed population within the 15-70 age bracket has been recorded at 55.7%, signifying a constricted array of prospects for the actualisation of labour potential, an augmentation in the rate of unemployment, and an escalation in structural imbalances within the labour market. It is important to note that this reduction had complex macroeconomic consequences, including a decrease in tax revenues to the budget and a simultaneous increase in state spending on social protection of the unemployed population.

A thorough examination of the proportion of the employed population in relation to the total population is imperative in order to

ascertain the critical level at which the country's population is directly involved in the generation of economic output. In 2010, the figure stood at 44.6%, while in 2021 it had decreased to 37.5%, representing a decline of over 15% over a decade. It is hypothesised that this phenomenon is not an isolated occurrence, but rather a reflection of broader demographic and macroeconomic processes, including the decline in the working-age population, net migration losses, an increase in the economically inactive population, and the adverse impact of crisis phenomena on the labour market. The outlined dynamics thus indicate a narrowing of the economic basis for the development of society, an increase in the burden on the working population, and an increase in risks for fiscal sustainability and the social security system. Consequently, a primary objective of state policy has become the regulation of the unemployment rate, in conjunction with measures to counteract inflationary processes.

4. Changes in the Employment Level of the Ukrainian Population During the Wartime

The deployment of a full-scale war in the Russian Federation has had catastrophic consequences for all spheres of public life in general and the national economy and employment in particular. In consequence of active military operations, mass forced migration, loss of labour potential and destruction of production facilities, changes in the sectoral structure of the economy, and disruption of logistical connections, there have been noticeable

changes in the functioning of the domestic labour market. These changes have resulted in increased instability, asymmetry of regional development and transformation of the scale and structure of employment.

A notable development in Ukraine is the change in its population, which has been particularly evident in challenging circumstances. This change is identified as a significant contributing factor to the destabilisation of the labour market. According to estimates by the Global Data and Statistics Center, the population of Ukraine was approximately 38.98 million people as of 2025 (Statbase). However, Ukrainian researchers and experts have expressed a more pessimistic outlook, emphasising that no more than 31.5 million people (Ukrinform) reside in the territory under the control of the Ukrainian authorities. The primary factors contributing to this substantial decline include demographic losses and significant external migration of the population.

A considerable number of Ukrainians have been compelled to seek refuge elsewhere in order to guarantee their personal safety and to establish stable living conditions. The initial primary recipients of displaced persons were European countries; however, by August 2025, the number of Ukrainians had surpassed 4.37 million (Fig. 1). The highest recorded number of displaced persons was in Germany (surpassing 1.2 million individuals), a phenomenon attributable to the presence of

a well-developed social protection system, support programmes for temporarily displaced persons, a high level of economic stability and significant employment opportunities.

Outside of Europe, a significant proportion of Ukraine's forced migrants are concentrated in North America, with an estimated total of 400,000 people (Wilson Center). A large proportion of this population has moved to Canada, due to the well-established Ukrainian diaspora, long-standing historical ties, and effective state programmes for accepting Ukrainian citizens. The departure of a significant proportion of the population has led to a noticeable reduction in labour potential, particularly among working-age groups. This has affected the labour supply and exacerbated imbalances between labour demand and supply in certain sectors of the national economy.

Thus, the reduction in Ukraine's population has a systemic and long-term impact on the functioning of the national labour market. The decline in the working-age population in particular has led to a reduction in the potential labour supply, resulting in new structural imbalances between labour demand and supply, and increased staffing levels between industries and regions.

Alongside quantitative changes, there are also qualitative transformations in employment. The redistribution of labour resources, changes in the professional composition of the workforce,

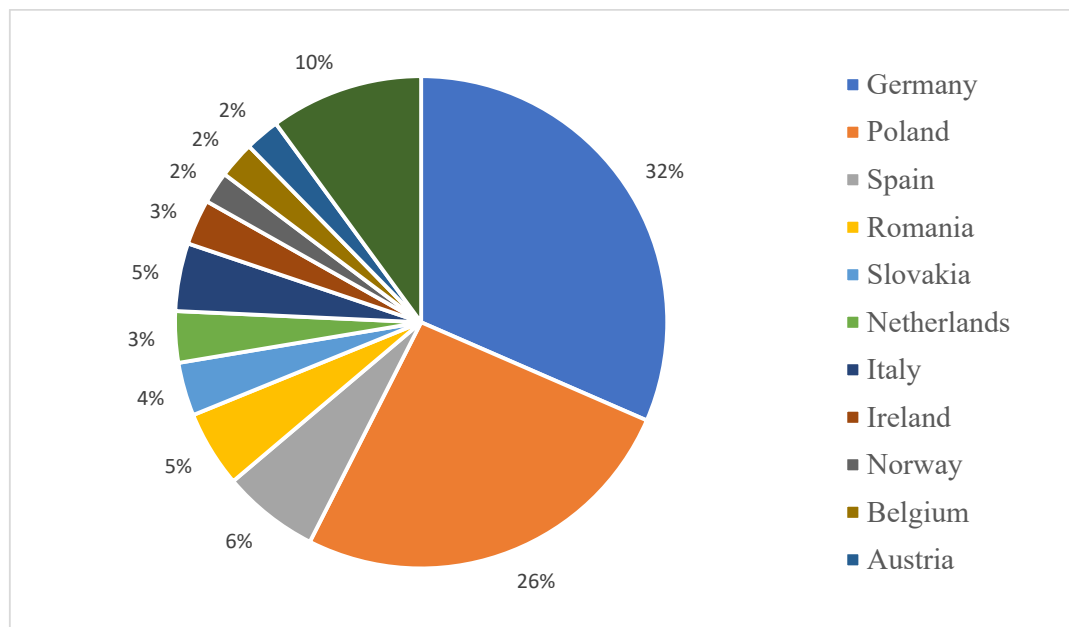


Figure 1. Structure of forced migration of the population of Ukraine to European countries (as of the end of August 2025)

Source: summarised by the author based on Eurostat data

forced professional mobility and the increase in non-standard forms of employment all indicate the formation of a new labour market structure adapted to wartime conditions. Such processes generally lead to an increased burden on the economically active population and a change in sectoral employment priorities.

Thus, the transformation of employment in wartime conditions highlights the need to reconsider state policies aimed at stimulating employment. These policies should focus on restoring labour potential, stimulating economic activity and ensuring the balanced development of the labour market in the post-war period.

5. Conclusions

The findings of the research indicate that employment is a multidimensional socio-economic category that reflects the level of utilisation of the labour potential of society and ensures the relationship between the demand and supply of labour. It performs economic, social, demographic and institutional functions, thus forming the basis for the stable functioning of the labour market.

In the period preceding the war, the Ukrainian labour market demonstrated signs of stabilisation following the preceding crisis, yet persistent structural imbalances and regional disparities remained evident. A significant challenge for the functioning of the labour market was the demographic crisis, which is manifested in the ageing of the population, a decrease in the birth rate and migration processes, which create long-term risks for the reproduction of labour potential. Military actions resulted in a substantial decline

in the economically active population, owing to fatalities, forced displacement, and alterations in the age and territorial composition of the labour force. These developments served to intensify existing imbalances within the labour market.

The war resulted in a significant restructuring of employment, evidenced by the decline in employment opportunities in affected regions, the relocation of enterprises, the proliferation of non-standard employment forms, and the intensification of regional disparities. In the context of martial law, the state has assumed an expanded role in the regulation of employment, evidenced by the introduction of business support programmes aimed at stimulating employment, facilitating vocational training and retraining the population. The labour market has evolved to resemble an adaptive system, operating under the influence of extraordinary circumstances and necessitating constant coordination between state institutions and employers.

It is the contention of the present study that the restoration of the labor market should be based on a comprehensive policy aimed at rebuilding the economy, stimulating job creation in high-tech and innovative sectors, reintegration of internally displaced persons and the return of labor migrants. Investments in human capital, the development of the system of vocational education and advanced training, as well as the coordination of employment policy with demographic and regional policies are of great importance. The strategic objective should encompass not only the quantitative restoration of employment, but also the establishment of a more sustainable, productive, and competitive labor market model.

References:

- 4.37 million under temporary protection in August: Eurostat. *Official website*. Available at: <https://ec.europa.eu/eurostat/en/web/products-eurostat-news/w/ddn-20251010-1>
- Babiyak, H. P. (2014). Demographic factors and their impact on the reproduction of the labor potential of Ukraine. *Social and labor relations: theory and practice: collection of scientific works*, (1), 362–367. Available at: <https://ir.kneu.edu.ua/items/9dfb9c5c-1747-4668-b58b-a277be003fa0>
- Population size and composition: Data bank. State Statistics Service of Ukraine. Available at: <https://stat.gov.ua/uk/explorer?md5=22fb4077f27cf51088adc40eb6e2caec>
- Employment: International Labour Organization. *Official website*. Available at: <https://www.ilo.org/resource/employment-1>
- Macroeconomic indicators: National Bank of Ukraine. Available at: <https://bank.gov.ua/ua/statistic/macro-indicators#3>
- Population. Ukraine: statbase. *Official website*. Available at: <https://statbase.org/data/ukr-population>
- Statistical Yearbook of Ukraine 2021: State Statistics Service of Ukraine. Available at: https://ukrstat.gov.ua/druk/publicat/kat_u/2022/zb/11/Yearbook_2021.pdf

The Impact of War on Ukraine as Seen Through Its Communities in Exile. Wilson Center. *Official website*. Available at: <https://www.wilsoncenter.org/blog-post/impact-war-ukraine-seen-through-its-communities-exile?utm>

Tsvihun, I. A. (2022). Threats to the demographic security of Ukraine: monograph. Kamianets-Podilskyi: ZVO "PSU", 228 p.

Tsyra, O., Tochylina, Yu. & Tanashchuk, K. (2024). Study of Digital Skills Using ICT in the Development of the Digital Economy. *Proceedings of International Conference on Applied Innovation in IT*, vol. 12, issue 2, pp. 223–230. DOI: <http://dx.doi.org/10.25673/118137>

Ukraine turned out to be one of the 30 countries in the world with the oldest population. *LB.ua – official website*. Available at: https://lb.ua/society/2018/01/29/388478_ukraina_okazalas_30_stran.html

The population in the territory controlled by Ukraine has decreased to approximately 31.5 million. *Ukrinform – official website*. Available at: <https://www.ukrinform.ua/rubric-society/3964197-kilkist-naselenna-na-pidkontrolnij-teritorii-ukraini-znizilasa-priblizno-do-315-miljona-libanova.html>

Received on: 14th of January, 2026

Accepted on: 26th of February, 2026

Published on: 27th of March, 2026