

**CHAPTER 29**  
**TRANSFORMATION OF THE LABOR MARKET OF UKRAINE**  
**UNDER THE IMPACT OF WAR AND ECONOMIC RECOVERY**

**Tetiana Skliaruk, Svitlana Hladun**

**INTRODUCTION**

The labor market is an important component of the socio-economic system of a state, as it is through this mechanism that the labor potential of society is formed, distributed, and utilized. Its functioning directly affects the level of employment, labor productivity, economic stability, and the pace of socio-economic development of the country. An efficient labor market ensures a balance between labor supply and demand, promotes the rational use of labor resources, and creates conditions for increasing the competitiveness of the national economy. At the same time, the condition and dynamics of labor market development largely depend on economic, social, demographic, and political processes taking place within the state.

In the current conditions of Ukraine's economic transformation, particular relevance is gained by studying the processes that influence the functioning of the labor market. In recent years, the Ukrainian economy has undergone significant transformations caused by globalization processes, the development of digital technologies, structural changes in the economy, and deeper integration into the European economic space. These trends have influenced the employment structure of the population, increased the requirements for the professional training of workers, and contributed to changes in approaches to labor organization as well as the spread of new forms of employment.

A significant factor in the transformation of Ukraine's labor market has been the full-scale war launched by the Russian Federation against Ukraine in 2022. Military actions have caused large-scale socio-economic losses, destruction of industrial and transport infrastructure, damage to industrial enterprises, and a substantial decline in economic activity in certain regions of the country. As a result, changes have occurred in the functioning of the national labor market, including a decrease in employment, an increase in unemployment, changes in the sectoral structure of the economy, and the redistribution of labor resources between regions.

An important consequence of the war has been the mass displacement of the population both within the country and abroad. A significant number of citizens were forced to leave their homes and move to safer regions or migrate abroad. Such migration processes have led to changes in the regional structure of the labor market, the emergence of labor shortages in a number of sectors of the economy, and the intensification of imbalances between labor supply and demand. At the same time, the relocation of enterprises, the development of new economic sectors, and the intensification of international economic cooperation have contributed to the emergence of new employment opportunities.

In addition to military factors, the transformation of the labor market is significantly influenced by the processes of economic digitalization and the spread of information and communication technologies. The development of digital platforms, remote work, and flexible forms of labor organization contributes to the transformation of traditional employment models and the formation of new approaches to organizing labor activities. In modern conditions, such forms of employment as remote work, hybrid employment, freelancing, and project-based work are gaining increasing importance, enabling greater flexibility in enterprise operations and enhancing labor mobility.

At the same time, the transformation of the labor market is accompanied by a number of challenges and problems. In particular, there is a shortage of qualified personnel in certain sectors of the economy, a mismatch between the professional structure of the workforce and modern economic requirements, increasing labor migration, and the spread of informal employment. These trends necessitate the improvement of state employment policy, the development of the vocational education system, and the enhancement of workers' qualifications.

During the process of post-war economic recovery, Ukraine's labor market will play an important role in ensuring sustainable socio-economic development of the state. The implementation of programs aimed at infrastructure reconstruction, modernization of the industrial sector, development of innovative industries, and deeper integration into the European economic space will contribute to the creation of new jobs and increase in employment levels. At the same time, the effectiveness of these processes will largely depend on the efficiency of state policy and the formation of a modern labor market management system that ensures the rational use of the country's labor potential.

In this regard, the study of the transformation of Ukraine's labor market under the conditions of war and post-war economic recovery becomes particularly relevant. The analysis of current labor market development trends, assessment of structural changes in employment, and identification of key problems and prospects for its development constitute an important task for shaping effective state employment policy and ensuring stable economic development of the country.

In the scientific literature, the labor market is considered as a system of socio-economic relations between employees, employers, and the state regarding the formation of labor supply and demand, the conditions of its utilization, wage determination, and ensuring employment of the population. A distinctive feature of the labor market is that its object is labor power – the ability of a person to work <sup>1</sup>.

The functioning of the labor market is ensured through the interaction of its main elements: labor supply and demand, wages, employment, and unemployment. The demand for labor is formed by employers and depends on the level of economic development, production volumes, investments, and technological changes. The supply of labor is determined by the size of the working-age population, the level of education, socio-economic living conditions, and migration processes. The interaction between labor demand and supply determines the level of wages, which act as remuneration for labor and at the same time as a stimulus for increasing productivity. Important indicators of labor market functioning include employment and unemployment levels, which reflect the efficiency of using the country's labor potential.

The development of the labor market is influenced by economic, social, and demographic factors, including economic growth rates, the structure of the economy, the level of education of the population, and migration processes. Crisis phenomena also have a significant impact – economic crises, pandemics, and military conflicts – which cause structural changes in employment and the redistribution of labor resources between sectors of the economy.

Thus, the labor market can be considered a complex socio-economic system of interaction between employees, employers, and the state.

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<sup>1</sup> OECD. Labour Market Reforms in Ukraine. Paris: OECD Publishing, 2022. Available at: <https://www.oecd.org>; Kolot, A. M. Transformation of the wage institution under global challenges. *Economy of Ukraine*, 2017, No. 7, pp. 3–18.; Libanova, E. M. Human Development in Ukraine: Priorities of Social Policy. Kyiv: National Academy of Sciences of Ukraine, 2019.; Hrishnova, O. A. Labour Economics and Social and Labour Relations. Kyiv: Znannia, 2014.

### **29.1. Impact of the War on the Labor Market of Ukraine <sup>2</sup>**

The full-scale invasion has caused a profound transformation in the functioning of Ukraine's labor market. Military actions have led to a decline in economic activity, destruction of infrastructure, suspension of enterprises in frontline regions, and displacement of a significant part of the population. As a result, employment indicators, unemployment rates, and the sectoral structure of the labor market have changed.

One of the most noticeable consequences of the war has been the reduction in employment and the increase in unemployment. Many enterprises were forced to suspend or limit their activities, especially in regions where active hostilities occurred, which resulted in job losses and an increase in the number of job seekers.

Mass labor migration has also become an important factor in the transformation of the labor market. A significant number of Ukrainians have left the country, which has led to a reduction in labor supply within the country and the emergence of labor shortages in several sectors of the economy. This shortage has been particularly noticeable in construction, transport, industry, and healthcare.

Internal displacement of the population has also had a significant impact on the labor market. Millions of citizens were forced to leave their homes and move to safer regions of the country, which caused changes in the regional employment structure and increased pressure on labor markets in certain regions of Ukraine.

At the same time, significant changes have occurred in the structure of labor demand. During the war period, the demand for workers increased in the construction sector, logistics, defense industry, and among IT specialists. At the same time, demand for labor decreased in sectors that suffered the greatest losses due to the war, particularly tourism, entertainment, and part of the service sector.

In addition, the war accelerated the development of new forms of employment, including remote work, freelancing, and flexible forms of labor

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<sup>2</sup> International Labour Organization. ILOSTAT Database. Geneva: ILO, 2024. Available at: <https://ilostat.ilo.org>; United Nations High Commissioner for Refugees. Ukraine Refugee Situation. Geneva: UNHCR, 2024. Available at: <https://data.unhcr.org>; Ministry of Economy of Ukraine. Analytical Report on the State of the Labour Market of Ukraine. Kyiv: Ministry of Economy of Ukraine, 2023. Available at: <https://www.me.gov.ua>; European Commission. Ukraine Labour Market Analysis. Brussels: European Commission, 2023. Available at: <https://ec.europa.eu>; International Labour Organization. The Impact of the Ukraine Crisis on the World of Work. Geneva: ILO, 2023. Available at: <https://www.ilo.org>

organization. These forms allowed some enterprises to maintain economic activity and support employment even under the difficult conditions of wartime. The dynamics of the main indicators of Ukraine's labor market for the period 2010–2025 are presented in Table 1.

An analysis of statistical data (Table 1) shows that in 2010–2013 the labor market of Ukraine was characterized by relative stability. The number of employed persons exceeded 19 million, while the unemployment rate fluctuated within 7–8%. During this period, the economy was gradually recovering from the global financial crisis.

After 2014, following the annexation of Crimea and the beginning of hostilities in eastern Ukraine, a significant decline in employment and an increase in unemployment were observed. At the same time, a new socio-economic challenge emerged – internal displacement of the population, which significantly affected the regional structure of the labor market.

In 2015–2019, there was a gradual recovery of economic activity and stabilization of the labor market, although labor migration remained substantial. Many Ukrainians worked in European Union countries, which led to an outflow of labor resources.

In 2020–2021, the labor market was negatively affected by the COVID-19 pandemic, which caused a temporary increase in unemployment and a decline in employment.

The most significant changes occurred after 2022, when the full-scale invasion by Russia led to a sharp rise in unemployment and large-scale migration processes. The number of employed people decreased by more than 2 million compared to the pre-war period, while the number of Ukrainians staying abroad increased significantly.

At the same time, in 2024–2025 there are signs of gradual recovery of the labor market, which is associated with the partial restoration of economic activity, the development of remote employment, the relocation of enterprises, and the beginning of the implementation of post-war economic recovery programs.

It should be noted that the war has become a key factor in the transformation of Ukraine's labor market, causing changes in the structure of employment, migration scales, and labor demand. The further development of the labor market will depend on the pace of economic recovery, the effectiveness of state employment policy, and the return of labor resources to Ukraine.

Table 1

**Main indicators of Ukraine's labor market for the period 2010–2025**

Year	Employed population, million persons	Unemployed (ILO methodology), million persons	Unemployment rate (ILO), %	Labor migrants abroad, million persons*	Internally displaced persons, million persons
2010	19,2	1,7	8,1	1,2	–
2011	19,3	1,6	7,9	1,3	–
2012	19,3	1,6	7,5	1,4	–
2013	19,4	1,5	7,2	1,5	–
2014	18,1	1,9	9,3	1,8	1,2
2015	16,4	1,7	9,1	2,7	1,5
2016	16,3	1,7	9,3	2,8	1,6
2017	16,2	1,7	9,5	3,0	1,5
2018	16,4	1,6	8,8	3,2	1,5
2019	16,6	1,5	8,2	3,0	1,4
2020	15,9	1,7	9,5	2,7	1,4
2021	16,1	1,6	9,3	3,0	1,4
2022	14,8	3,4	18,5	6,0	4,9
2023	14,2	3,3	19,1	6,3	4,8
2024	14,6	3,1	17,5	6,1	4,6
2025*	15,0	2,9	16,0	5,8	4,3

\* 2024–2025 – estimates based on economic recovery trends and analytical forecasts of international organizations.

Source: compiled by the authors based on data from the State Statistics Service of Ukraine <sup>3</sup>, the labor market statistics database of the International Labour Organization (ILOSTAT) <sup>4</sup>, analytical materials of the Ministry of Economy of Ukraine <sup>5</sup>, as well as reports of international organizations on the impact of the war on Ukraine's economy <sup>6</sup>

Before analyzing the impact of military and economic processes on the functioning of the labor market, it is advisable to consider the structure of employment in Ukraine by main types of economic activity. Such analysis

<sup>3</sup> State Statistics Service of Ukraine. Labour Market of Ukraine: Statistical Yearbook. Kyiv: Derzhstat, 2021. Available at: <https://www.ukrstat.gov.ua>; State Statistics Service of Ukraine. Economic Activity of the Population of Ukraine. Kyiv: Derzhstat, 2020. Available at: <https://www.ukrstat.gov.ua>

<sup>4</sup> International Labour Organization. ILOSTAT Database. Geneva: ILO, 2024. Available at: <https://ilostat.ilo.org>

<sup>5</sup> Ministry of Economy of Ukraine. Analytical Report on the State of the Labour Market of Ukraine. Kyiv: Ministry of Economy of Ukraine, 2023. Available at: <https://www.me.gov.ua>

<sup>6</sup> World Bank. Ukraine Rapid Damage and Needs Assessment. Washington, DC: World Bank, 2023. Available at: <https://www.worldbank.org>; International Labour Organization. The Impact of the Ukraine Crisis on the World of Work. Geneva: ILO, 2023. Available at: <https://www.ilo.org>

makes it possible to assess the distribution of labor resources among economic sectors, identify structural changes in employment, and reveal long-term trends in the development of individual sectors of the economy.

The employment structure is one of the key indicators of the development of the national economy, as it reflects the level of diversification of economic activity, technological changes, transformation of the sectoral structure of production, and the characteristics of labor demand. Changes in the employment structure are often caused by economic crises, technological transformations, globalization processes, and socio-political factors.

During the studied period, noticeable structural changes occurred in the distribution of employment among sectors of the Ukrainian economy, caused by economic transformations, the military conflict, the development of the digital economy, and changes in the international division of labor. In particular, after 2014 there was a gradual decline in employment in industry, while the share of employment in services and information technology gradually increased. The full-scale war of 2022 also caused changes in the sectoral structure of employment, particularly an increase in demand for labor in construction, logistics, and IT.

For a more detailed analysis of labor market transformation, Table 2 and Figure 1 present the dynamics of the employment structure of Ukraine's population by main types of economic activity for the period 2010–2025.

The analysis of the dynamics of the employment structure of Ukraine's population by types of economic activity reflects significant structural changes that occurred during 2010–2025:

- in 2010–2013, the largest share of employment was concentrated in the trade sector, industry, and agriculture, which reflected the traditional structure of the Ukrainian economy, where industrial enterprises and the agricultural sector played a significant role.

- after 2014, a gradual decline in employment in industry was observed, which was caused by the economic crisis, the loss of part of the industrial potential in eastern Ukraine, and a decrease in investment activity; at the same time, the share of employment in agriculture and trade slightly increased;

- starting from 2016–2019, the share of employment in information technology and information services gradually increased, which was associated with the active development of the IT sector in Ukraine and the integration of the national economy into global digital markets;

- after 2022, the employment structure underwent further changes under the influence of the full-scale war; in particular, there was a significant decline in the share of employment in industry due to the destruction of production

facilities and the relocation of enterprises. At the same time, the share of employment in agriculture, logistics, and information technology increased. The share of employment in construction is also gradually increasing, which is associated with the need to restore destroyed infrastructure and implement post-war reconstruction programs.

Table 2

**Dynamics of the employment structure of Ukraine's population  
by main types of economic activity (2010–2025), %**

Type of economic activity	Values by year, %											
	2010	2012	2014	2016	2018	2019	2020	2021	2022	2023	2024	2025*
Agriculture	15,5	16,1	17,0	17,7	18,0	18,2	18,5	18,7	19,5	20,0	19,7	19,0
Industry	17,8	17,5	16,8	16,2	15,7	15,5	15,0	14,8	13,5	13,0	13,2	13,8
Construction	4,3	4,5	4,0	3,8	3,9	4,0	3,8	3,9	3,6	3,7	4,0	4,5
Trade	21,0	21,3	21,8	22,0	22,3	22,5	22,7	22,9	22,0	21,5	21,3	21,0
Transport and logistics	6,2	6,3	6,2	6,1	6,0	6,0	5,9	5,8	6,2	6,5	6,7	6,9
IT and information services	1,2	1,4	1,6	2,0	2,5	2,8	3,1	3,4	3,8	4,2	4,5	4,8
Education	8,7	8,5	8,3	8,1	7,9	7,8	7,8	7,7	7,6	7,5	7,4	7,3
Healthcare	6,4	6,3	6,2	6,1	6,0	6,0	6,1	6,1	6,3	6,5	6,6	6,7
Other services	18,9	18,1	18,1	17,9	17,7	17,2	17,1	16,7	17,5	17,1	16,6	16,0

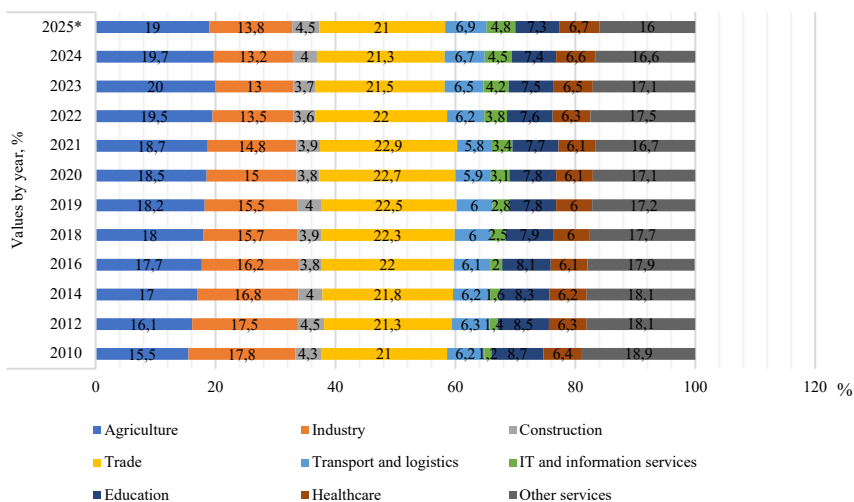
\* 2024–2025 – estimates based on analytical forecasts and economic recovery trends.

Source: compiled by the authors based on statistical data from the State Statistics Service of Ukraine <sup>7</sup>, analytical materials of the Organisation for Economic Co-operation and Development (OECD) on labor market development <sup>8</sup>, as well as economic studies of the World Bank on the transformation of the employment structure in Ukraine <sup>9</sup>

<sup>7</sup> State Statistics Service of Ukraine. Labour Market of Ukraine: Statistical Yearbook. Kyiv: Derzhstat, 2021. Available at: <https://www.ukrstat.gov.ua>; State Statistics Service of Ukraine. Economic Activity of the Population of Ukraine. Kyiv: Derzhstat, 2020. Available at: <https://www.ukrstat.gov.ua>

<sup>8</sup> OECD. Labour Market Reforms in Ukraine. Paris: OECD Publishing, 2022. Available at: <https://www.oecd.org>

<sup>9</sup> World Bank. Ukraine Rapid Damage and Needs Assessment. Washington, DC: World Bank, 2023. Available at: <https://www.worldbank.org>; World Bank. Ukraine Economic Update: Jobs and Labor Market Recovery. Washington, DC: World Bank, 2024. Available at: <https://www.worldbank.org>



**Figure 1. Dynamics of the employment structure of Ukraine’s population by main types of economic activity (2010–2025), %<sup>10</sup>**

Thus, the employment structure of Ukraine’s population has undergone significant transformation during the studied period. The main trends include a decline in the role of industry, a gradual increase in the share of the agricultural sector, the development of the service sector, and the rapid expansion of the IT sector. In the future, further changes in the employment structure will largely depend on the pace of economic recovery, the development of new technologies, and Ukraine’s integration into the European economic space.

Under wartime conditions, the structure of labor demand in Ukraine has changed significantly due to the destruction of infrastructure, relocation of enterprises, transformation of logistics routes, and increased needs of the defense sector. As a result, some sectors of the economy demonstrate growing

<sup>10</sup> State Statistics Service of Ukraine. Labour Market of Ukraine: Statistical Yearbook. Kyiv: Derzhstat, 2021. Available at: <https://www.ukrstat.gov.ua>; State Statistics Service of Ukraine. Economic Activity of the Population of Ukraine. Kyiv: Derzhstat, 2020. Available at: <https://www.ukrstat.gov.ua>; World Bank. Ukraine Rapid Damage and Needs Assessment. Washington, DC: World Bank, 2023. Available at: <https://www.worldbank.org>; OECD. Labour Market Reforms in Ukraine. Paris: OECD Publishing, 2022. Available at: <https://www.oecd.org>; World Bank. Ukraine Economic Update: Jobs and Labor Market Recovery. Washington, DC: World Bank, 2024. Available at: <https://www.worldbank.org>

demand for workers, while others face a significant reduction in the number of jobs. To analyze these changes, it is advisable to examine the dynamics of vacancies across different sectors of the economy (Table 3).

The analysis of the data presented in Table 3 indicates a significant transformation in the structure of labor demand in Ukraine during 2019–2024 under the influence of economic crises and wartime events. In particular, after 2022, there has been an increase in the number of vacancies in construction, transport and logistics, as well as in the information technology sector, which is due to the need to restore infrastructure, reorganize logistics routes, and continue the digitalization of the economy.

Table 3

**Dynamics of vacancies by selected types of economic activity in Ukraine for 2019–2024, %**

Sector of the economy	Values by year, %					
	2019	2020	2021	2022	2023	2024
Construction	100	92	105	95	118	125
Transport and logistics	100	95	108	103	120	128
Information technology	100	110	130	115	135	140
Security and defense sector	100	102	110	160	175	180
Tourism and hotel and restaurant business	100	70	85	60	72	80
Entertainment and cultural services sector	100	65	80	58	68	75

Note: 2019 is taken as the base year (100%).

Source: compiled by the authors based on statistical materials of the State Employment Service of Ukraine <sup>11</sup>, data from the State Statistics Service of Ukraine <sup>12</sup>, analytical reports of the Ministry of Economy of Ukraine <sup>13</sup>, as well as international labor market studies of the International Labour Organization <sup>14</sup>

<sup>11</sup> State Employment Service of Ukraine. Analytical and Statistical Information on the State of the Labour Market. Kyiv, 2024. Available at: <https://www.dcz.gov.ua>

<sup>12</sup> State Statistics Service of Ukraine. Labour Market of Ukraine: Statistical Yearbook. Kyiv: Derzhstat, 2021. Available at: <https://www.ukrstat.gov.ua>

<sup>13</sup> Ministry of Economy of Ukraine. Analytical Report on the State of the Labour Market of Ukraine. Kyiv: Ministry of Economy of Ukraine, 2023. Available at: <https://www.me.gov.ua>

<sup>14</sup> International Labour Organization. ILOSTAT Database. Geneva: ILO, 2024. Available at: <https://ilostat.ilo.org>; European Commission. Ukraine Labour Market Analysis. Brussels: European Commission, 2023. Available at: <https://ec.europa.eu>

At the same time, in the tourism, hotel and restaurant business, and entertainment sectors, there has been a significant decline in labor demand due to decreased economic activity and restrictions on consumer demand under wartime conditions. Thus, the obtained results confirm the presence of structural changes in labor demand and the formation of new priority areas for the development of Ukraine's labor market.

In addition, wartime conditions have intensified competition for qualified specialists in strategically important sectors of the economy. Employers are increasingly seeking workers with technical skills, digital competencies, and experience in project management. This trend contributes to the growing importance of professional training and continuous skill development among employees. Consequently, the transformation of labor demand also stimulates changes in the system of professional education and workforce training.

Under wartime conditions, new forms of work organization have become significantly more widespread, allowing enterprises to maintain economic activity and employees to retain employment regardless of their place of residence. The most common among them are remote work, freelancing, and flexible forms of employment. The spread of such forms of employment is associated with the development of digital technologies, the possibility of organizing work regardless of employees' location, the expansion of online communication opportunities, and the need to adapt the labor market to wartime conditions. In addition, the use of remote and flexible employment contributes to increasing labor mobility and the integration of Ukrainian specialists into the international labor market.

The dynamics of the spread of new forms of employment in Ukraine during 2019–2024 are presented in Table 4.

The analysis of the presented data shows a steady trend toward the expansion of new forms of employment in Ukraine during the studied period. In particular, the share of employees working remotely or in a hybrid format increased from 8% in 2019 to 40% in 2024, reflecting a significant transformation in work organization. At the same time, the number of Ukrainian freelancers working on international digital platforms has increased, indicating the integration of domestic specialists into the global labor market. The spread of flexible forms of employment is also confirmed by the growing share of enterprises that use such models of work organization, which contributes to increasing the adaptability of the economy to modern challenges.

It should be noted that under the conditions of the full-scale war, the Ukrainian labor market is characterized by significant imbalances between labor supply and demand. Mass labor migration, population mobilization,

relocation of enterprises, and structural changes in the economy have led to labor shortages in a number of sectors. These shortages are particularly noticeable in sectors that ensure the functioning of critical infrastructure, economic recovery, and the development of high-technology industries (Table 5).

Table 4

**Dynamics of the spread of new forms of employment in Ukraine, 2019–2024**

Indicator	Values by year, %					
	2019	2020	2021	2022	2023	2024
Share of employees working remotely or in a hybrid format, %	8	18	22	30	37	40
Number of Ukrainian freelancers on international platforms, thousand persons	120	160	190	230	260	280
Share of enterprises using flexible forms of work organization, %	15	24	27	30	33	35

*Source: compiled by the authors based on data from the International Labour Organization<sup>15</sup>, analytical materials of the World Bank on the development of the digital economy<sup>16</sup>, as well as studies on migration processes conducted by the International Organization for Migration<sup>17</sup>*

An analysis of the data presented in Table 5 shows that the largest labor shortages in 2023–2024 are observed in construction, transport, and logistics, which is associated with the intensification of reconstruction activities and the restructuring of logistics systems during wartime. A significant labor shortage is also characteristic of industry, where the lack of qualified workers is exacerbated by labor migration and mobilization.

<sup>15</sup> International Labour Organization. ILOSTAT Database. Geneva: ILO, 2024. Available at: <https://ilostat.ilo.org>; International Labour Organization. The Impact of the Ukraine Crisis on the World of Work. Geneva: ILO, 2023. Available at: <https://www.ilo.org>

<sup>16</sup> World Bank. Ukraine Rapid Damage and Needs Assessment. Washington, DC: World Bank, 2023. Available at: <https://www.worldbank.org>; World Bank. Ukraine Economic Update: Jobs and Labor Market Recovery. Washington, DC: World Bank, 2024. Available at: <https://www.worldbank.org>

<sup>17</sup> International Organization for Migration. Migration in Ukraine: Facts and Figures. Kyiv: IOM, 2023. Available at: <https://iom.org.ua>

Table 5

**Sectors with the greatest labor shortages in Ukraine in 2023–2024**

<b>Sector of the economy</b>	<b>Occupations with the greatest labor shortages</b>	<b>Share of vacancies remaining unfilled, %</b>	<b>Main reasons for labor shortages</b>
Construction	builders, electricians, civil engineers	35–40	destruction of infrastructure, increase in reconstruction works
Transport and logistics	truck drivers, logisticians, dispatchers	30–35	changes in logistics routes, increase in transportation volumes
Industry	fitters, turners, welders, mechanics	28–32	mobilization of workers, labor migration
Information technology	programmers, data analysts, cybersecurity specialists	20–25	growing demand for digital services and cybersecurity
Healthcare	doctors, nurses, pharmacists	18–22	migration of medical workers, increased workload on the healthcare system
Agriculture	machine operators, agronomists, tractor drivers	15–20	seasonal nature of work, labor migration

*Source: compiled by the author based on statistical materials of the State Employment Service of Ukraine <sup>18</sup>, data from the State Statistics Service of Ukraine <sup>19</sup>, analytical reports of the Ministry of Economy of Ukraine <sup>20</sup>, as well as studies of international organizations on the state of the labor market, including the International Labour Organization <sup>21</sup>*

At the same time, a stable demand for highly qualified specialists is observed in the information technology sector, which remains one of the most dynamic sectors of the Ukrainian economy. Another important issue is the shortage of medical workers, which is associated with the increased workload on the healthcare system and the migration of some specialists abroad.

<sup>18</sup> State Employment Service of Ukraine. Analytical and Statistical Information on the State of the Labour Market. Kyiv, 2024. Available at: <https://www.dcz.gov.ua>

<sup>19</sup> State Statistics Service of Ukraine. Labour Market of Ukraine: Statistical Yearbook. Kyiv: Derzhstat, 2021. Available at: <https://www.ukrstat.gov.ua>

<sup>20</sup> Ministry of Economy of Ukraine. Analytical Report on the State of the Labour Market of Ukraine. Kyiv: Ministry of Economy of Ukraine, 2023. Available at: <https://www.me.gov.ua>

<sup>21</sup> Hrishnova, O. A. Labour Economics and Social and Labour Relations. Kyiv: Znannia, 2014; International Labour Organization. The Impact of the Ukraine Crisis on the World of Work. Geneva: ILO, 2023. Available at: <https://www.ilo.org>

Thus, labor shortages in key sectors of the economy represent one of the major challenges for the functioning of Ukraine's labor market. Overcoming this imbalance requires an active state employment policy, the development of vocational education, worker retraining programs, and the creation of incentives for the return of labor migrants.

## **29.2. Problems of the Modern Labor Market of Ukraine** <sup>22</sup>

The modern labor market of Ukraine operates under conditions of significant socio-economic changes caused by wartime events, demographic shifts, migration processes, and structural restructuring of the economy. Under these conditions, a number of problems arise that affect the efficiency of using the country's labor potential and require comprehensive solutions at the level of state employment policy.

One of the most pressing issues is the shortage of qualified personnel. In many sectors of the economy, employers face a lack of workers with appropriate qualifications, particularly in construction, industry, transport, healthcare, and the information technology sector. The main reasons for this shortage include the mobilization of part of the working-age population, labor migration, demographic decline, and the insufficient alignment of the education system with the modern needs of the labor market. As a result, enterprises are forced to allocate additional resources for training employees or attract workers from other regions.

Another important problem remains the outflow of young people and qualified specialists abroad. In recent years, a significant number of Ukrainians have left to work or study in countries of the European Union. The main reasons for such migration include higher wages, better working conditions, and broader opportunities for professional development abroad. As a result, the national economy loses a considerable part of its labor potential, which negatively affects the development of certain sectors and reduces opportunities for economic growth.

Another significant issue is the imbalance between labor supply and demand. In some sectors there is a considerable shortage of workers, while in

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<sup>22</sup> State Statistics Service of Ukraine. Labour Market of Ukraine: Statistical Yearbook. Kyiv: Derzhstat, 2021. Available at: <https://www.ukrstat.gov.ua>; International Organization for Migration. Migration in Ukraine: Facts and Figures. Kyiv: IOM, 2023. Available at: <https://iom.org.ua>; OECD. Labour Market Reforms in Ukraine. Paris: OECD Publishing, 2022. Available at: <https://www.oecd.org>; Hrishnova, O. A. Labour Economics and Social and Labour Relations. Kyiv: Znannia, 2014; State Employment Service of Ukraine. Analytical and Statistical Information on the State of the Labour Market. Kyiv, 2024. Available at: <https://www.dcz.gov.ua>

others there is an excess supply of labor. Such imbalances are often associated with the mismatch between the professional structure of the workforce and the needs of the economy, regional disparities in economic development, and insufficient population mobility. For example, in technical and skilled trades occupations, demand for workers significantly exceeds supply, while in some humanities-related specialties the number of graduates exceeds the needs of the labor market.

A serious challenge for the development of the labor market is the growth of informal employment. Informal employment involves performing work without official labor contracts or without paying the required taxes and social contributions. This form of employment is often widespread in trade, construction, agriculture, and parts of the service sector. Informal employment reduces the level of social protection for workers, decreases revenues to the state budget, and complicates the implementation of effective state employment policy.

Another important challenge is the need for worker retraining. Structural changes in the economy, the development of digital technologies, and the transformation of the labor market create a need for the continuous updating of workers' professional knowledge and skills. Some employees who have lost their jobs due to enterprise closures or changes in the economic structure require retraining in order to find employment in new sectors. In this regard, the development of vocational education systems, retraining programs, and professional development initiatives becomes particularly important, as they contribute to the adaptation of the workforce to modern labor market requirements.

It should be noted that at the current stage the labor market of Ukraine faces a complex set of problems related to shortages of qualified personnel, labor migration, structural imbalances, the spread of informal employment, and the need for professional adaptation of workers. Overcoming these problems is an important prerequisite for the effective functioning of the labor market and for ensuring sustainable socio-economic development of the country.

### **29.3. Economic Recovery and Future Changes in the Labor Market** <sup>23</sup>

Post-war economic recovery in Ukraine will become one of the main factors transforming the labor market in the coming years. Large-scale destruction of

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<sup>23</sup> World Bank. Ukraine Rapid Damage and Needs Assessment. Washington, DC: World Bank, 2023. Available at: <https://www.worldbank.org>; National Bank of Ukraine. Inflation Report. Kyiv: NBU, 2024. Available at: <https://bank.gov.ua>; European Commission. Ukraine Labour Market Analysis. Brussels: European Commission, 2023. Available at: <https://ec.europa.eu>; World Bank. Ukraine Economic Update: Jobs and Labor Market Recovery. Washington, DC: World Bank, 2024. Available at: <https://www.worldbank.org>

industrial, transport, and social infrastructure requires significant investment and the creation of a large number of new jobs. In this context, the labor market will gradually adapt to new economic conditions, accompanied by changes in the structure of employment, increasing demand for certain professions, and the emergence of new employment opportunities.

One of the key directions will be the development of construction and infrastructure reconstruction. As a result of military actions, a significant number of residential buildings, transport facilities, industrial enterprises, and energy infrastructure objects have been damaged or destroyed. The implementation of large-scale reconstruction and economic modernization programs will stimulate the construction sector and create new jobs. Consequently, demand will increase for builders, engineers, architects, designers, electricians, and other specialists involved in construction and infrastructure projects.

During the process of economic recovery, demand for engineering and technical professions is also expected to grow. The development of industry, energy, transport, and high-tech manufacturing will require a significant number of engineers, technicians, mechanics, automation specialists, and other technical professionals. Therefore, modernization of the vocational education and training system in accordance with modern technological requirements becomes particularly important.

An important role in the future structure of the labor market will be played by the development of high-technology sectors of the economy, particularly information technology, digital services, cybersecurity, e-commerce, and innovative production. Ukraine's IT sector already demonstrates significant development potential and is one of the important sources of foreign currency revenues. Further digitalization of the economy, implementation of new technologies, and integration into global technological markets will contribute to growing demand for programmers, data analysts, cybersecurity specialists, and other highly qualified professionals.

A promising factor in the development of the labor market may be the return of labor migrants to Ukraine. After the end of hostilities and the stabilization of the economic situation, a gradual return of some citizens who temporarily left the country is expected. This will contribute to restoring the country's labor potential, increasing employment levels, and utilizing new knowledge and experience gained by Ukrainians while working abroad.

State employment policy will also play an important role in shaping an effective labor market. The success of economic recovery and the stability of the labor market will largely depend on the effectiveness of government

programs supporting employment, entrepreneurship development, professional training, and social protection of the population.

Under the current conditions of economic transformation, the formation of an effective state employment policy becomes particularly relevant. Such policy should be aimed at ensuring the effective use of labor potential, reducing unemployment, overcoming structural imbalances in the labor market, and creating favorable conditions for economic development.

One important direction is the implementation of retraining and professional development programs for workers. Due to structural changes in the economy, many workers need to acquire new professions or improve their professional skills. The organization of professional training and retraining programs will contribute to increasing workforce competitiveness and ensuring a better balance between labor supply and demand.

Another important direction of state policy is stimulating the return of labor migrants. To achieve this, it is necessary to create favorable economic conditions, including competitive wage levels, improved working conditions, entrepreneurship development, and the creation of new jobs. It is also advisable to introduce special support programs for citizens returning from abroad who wish to start their own businesses.

Support for small and medium-sized enterprises also plays a significant role in the development of the labor market, as they are an important source of job creation. State support for entrepreneurship may include financial assistance, preferential lending, tax incentives, and consulting support for entrepreneurs.

Another important direction is the development of the vocational education system, which must correspond to the modern needs of the economy. Strengthening cooperation between educational institutions and employers, implementing dual education systems, and updating educational programs will help train specialists who possess relevant knowledge and practical skills.

In addition, an important strategic direction is the integration of Ukraine's labor market into the European economic space. This involves harmonizing labor legislation, implementing European employment standards, developing international cooperation, and creating conditions for increasing the competitiveness of Ukrainian labor in the global labor market.

In our opinion, the transformation of Ukraine's labor market during wartime has not only a crisis nature but also a structural and modernization character. Improving state employment policy should become one of the main factors in stabilizing and developing Ukraine's labor market in the conditions of post-war economic recovery. The implementation of effective government programs will

contribute to job creation, increasing employment levels, and ensuring sustainable socio-economic development of the country.

## CONCLUSIONS

Ukraine's labor market under wartime conditions has undergone significant transformation manifested in changes in the structure of employment, redistribution of labor resources between regions and sectors of the economy, and the emergence of new models of work organization. Military actions have led to a decline in economic activity, destruction of infrastructure, relocation of enterprises, and large-scale migration processes, which resulted in a decrease in employment levels and an increase in unemployment.

Analysis of the dynamics of the main labor market indicators showed that after 2022 significant structural changes occurred in employment. In particular, there has been a reduction in the share of employment in industry and some service sectors, while the role of agriculture, logistics, construction, and information technology has increased. These changes are caused both by economic transformations and by the need to restore infrastructure and adapt the economy to wartime conditions.

An important factor in the transformation of the labor market has been the spread of new forms of employment, including remote work, freelancing, and flexible models of work organization. The development of digital technologies and the use of online communication have contributed to maintaining employment and integrating Ukrainian specialists into the international labor market. At the same time, several problems remain, including shortages of qualified personnel, increased labor migration, imbalance between labor supply and demand, and the spread of informal employment.

Prospects for the development of Ukraine's labor market are largely linked to the processes of post-war economic recovery. Implementation of programs for infrastructure reconstruction, industrial modernization, development of innovative sectors, and integration into the European economic space will contribute to job creation and increased employment levels. An important role in this process will be played by effective state employment policy aimed at developing vocational education, supporting entrepreneurship, retraining workers, and creating conditions for the return of labor migrants.

Thus, the transformation of Ukraine's labor market during wartime has a complex character and is accompanied by both crisis phenomena and the emergence of new opportunities for economic development. Further improvement of state employment policy, modernization of the workforce training system, and development of innovative sectors of the economy will

contribute to more efficient use of labor potential and ensure sustainable socio-economic development of Ukraine.

### **SUMMARY**

The chapter is devoted to the analysis of the transformation of Ukraine's labor market under conditions of martial law and contemporary socio-economic changes. The main trends in the functioning of the labor market are examined, including changes in the structure of employment, redistribution of labor resources between sectors and regions, and the impact of migration processes on the formation of the country's labor potential. Particular attention is paid to the development of new forms of employment such as remote work, freelancing, and flexible models of work organization that are expanding under the influence of economic digitalization. The growing spread of remote and hybrid work as well as the increasing participation of Ukrainian specialists in international digital platforms are highlighted. Key challenges of the modern labor market are outlined, including shortages of qualified personnel, increasing labor migration, and the spread of informal employment. The dynamics of the spread of new forms of employment in Ukraine during 2019–2024 are presented. The importance of digital technologies and flexible work models for maintaining employment is emphasized. Special attention is paid to the role of state employment policy and vocational education in shaping an effective labor market. Post-war economic recovery in Ukraine is associated with the need for rational use of labor potential and the creation of new jobs.

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**Information about the authors:**

**Tetiana Skliaruk**

PhD in Economics, Associate Professor,

Lviv Polytechnic National University

5 Mytropolyta Andreia Str., Building 4, Room 314, Lviv, 79000, Ukraine

**Svitlana Hladun**

Senior Lecturer at a Higher Education Institution,

Head of the Department of Employment and Industrial Relations,

Lviv Polytechnic National University

5 Mytropolyta Andreia Str., Building 4, Room 314, Lviv, 79000, Ukraine