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## Sectoral Distortions of the Labour Market in Ukraine: Analysis and Prospects<sup>1</sup>

**Abstract**

The labour market in Ukraine has undergone significant changes in recent years, driven by both pre-war economic processes and the full-scale war that has been ongoing since 2022. Key challenges include shifts in the employment structure, intensified migration processes, sectoral imbalances and the impact of economic instability on socio-labour relations. Research on this topic is highly relevant as it allows for an assessment of the crisis phenomena affecting the labour market and the identification of possible ways to stabilise and develop it. Another important aspect is the analysis of regional employment characteristics and the identification of the most vulnerable population groups facing difficulties in finding employment. *Practical implications.* The present study is devoted to the analysis of sectoral imbalances in Ukraine's labour market, which have emerged as a consequence of economic, social, and political transformations that have transpired in the context of the pre-war era and the ongoing war. A particular emphasis is placed on sectoral imbalances, employment levels, and migration processes, with an investigation into their impact on the labour market. *Methodology.* The research is grounded in a comprehensive analysis of statistical data from the State Statistics Service of Ukraine, the State Employment Service, official reports, and academic publications. A range of analytical methods are employed to assess labour market changes, including comparative analysis, structural analysis and statistical approaches. *Research objective.* The primary objective of this study is to identify key trends and imbalances in Ukraine's labour market, forecast its future development, and formulate recommendations to mitigate the negative impact of war and economic factors on employment. *Conclusions.* The study confirms the presence of significant sectoral distortions in Ukraine's labour market, which have been exacerbated by the war. The research has identified that economic instability, mobilisation, forced migration, and infrastructure destruction have resulted in alterations to the employment structure. There is an increasing demand for blue-collar workers, IT specialists, healthcare professionals, and the military-industrial sector. Concurrently, conventional industries such as trade and services have experienced substantial losses. The document puts forward a series of recommendations for adapting the labour market to contemporary challenges, including the establishment of retraining programs, support for small businesses, digitalization of employment, and stimulation of innovative economic sectors.

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labour market,  
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## 1 Introduction

The labour market constitutes a pivotal component of any nation's socio-economic structure, as it facilitates the effective distribution of labour resources, thereby ensuring the optimal functioning of the economy. In Ukraine, significant changes in the labour market have been observed over the past decades, driven by both internal structural issues and global challenges. Of particular pertinence are sectoral distortions, which engender an imbalance between labour demand and supply. These imbalances have been a feature of the pre-war period, but have been exacerbated significantly by the outbreak of the full-scale war in 2022.

The relevance of this study is determined by the need to analyse the profound transformations occurring in Ukraine's labour market and to identify effective mechanisms for its stabilisation. The profound economic instability, military actions, involuntary migration, and the destruction of enterprises have exerted a substantial impact on employment levels and the composition of labour resources. It is also important to consider the long-term consequences of these changes, which may shape the trajectory of the labour market for decades to come.

The purpose of this study is to identify key trends and imbalances in the Ukrainian labour market, analyse the main challenges and determine the prospects for its development. To achieve this goal, the study has the following objectives:

- To analyse the state of the Ukrainian labour market in the pre-war period;
- to identify the key transformations that took place as a result of the war;
- to assess the impact of migration processes on the employment structure;
- to identify trends and forecast further development of the labour market;
- to offer recommendations on how to adapt the labour market to new challenges.

The logical structure of the study is based on a sequential analysis of labour market changes over recent years. Initially, the state of the labour market in the pre-war period is examined, thereby enabling an assessment of initial conditions and general trends. Subsequent analysis focuses on war-induced transformations, with a particular focus on sectoral imbalances and regional employment patterns. A particular focus is given to the impact of migration processes and demographic changes. The final section of the study summarises the findings and provides recommendations for labour market stabilisation in response to current challenges.

The objective of this study is to explore fundamental aspects of Ukraine's labour market functioning and to develop recommendations for its future enhancement.

## 2 Analysis of the Labour Market Before the War

In the period preceding the full-scale war that broke out in February 2022, the Ukrainian labour market exhibited several salient features that exerted a profound influence on its subsequent evolution. These included regional and sectoral imbalances, a high level of informal employment, and the influence of external factors, including migration processes and global economic challenges.

According to the State Statistics Service of Ukraine, in 2021, the labour force amounted to 16.6 million people, indicating the active participation of a significant portion of the population in the country's production processes. The employment rate among individuals aged 15–70 was 61.8%, which was slightly below the average European levels but aligned with overall trends observed in Eastern European countries (State Statistics Service of Ukraine (3)). The proportion of the working-age population fluctuated between 2010 and 2021 (see Figure 1).

In 2021, the Ukrainian labour market showed signs of recovery after the crisis caused by the COVID-19 pandemic, which had a significant impact on the level of employment and the structure of the labour force in the country. Throughout 2020, there was a significant decline in economic activity, leading to an increase in unemployment and a rise in the share of informal employment. However, by 2021 the Ukrainian economy was gradually recovering, with a positive impact on labour market dynamics.

An important aspect of labour market analysis is its sectoral structure (see Figure 2). A considerable proportion of the employed population was engaged in agriculture, forestry, and fisheries, industry, trade, education, and healthcare. Concurrently, the proportion of the population employed in high-tech industries, knowledge-intensive production, education, healthcare, and social assistance remained comparatively low, thereby impeding the future economic development of the nation.

Notwithstanding the numerous challenges and crises experienced in the pre-war period, the employment rate in Ukraine remained relatively stable. This finding suggests that, prior to the full-scale invasion by Russia, the Ukrainian labour market exhibited resilience, with a substantial proportion of the population being formally employed in their places of work.

A distinctive feature of Ukraine's labour market was its significant regional disparities. For instance, the employment rate in western regions of the country was traditionally lower due to high labour migration, while in major industrial centers such as Kyiv, Kharkiv, Dnipro, and Odesa, higher levels of economic activity were observed.

Another challenge for Ukraine's labour market in the pre-war period was informal employment, which, according to various estimates, covered 20–35%

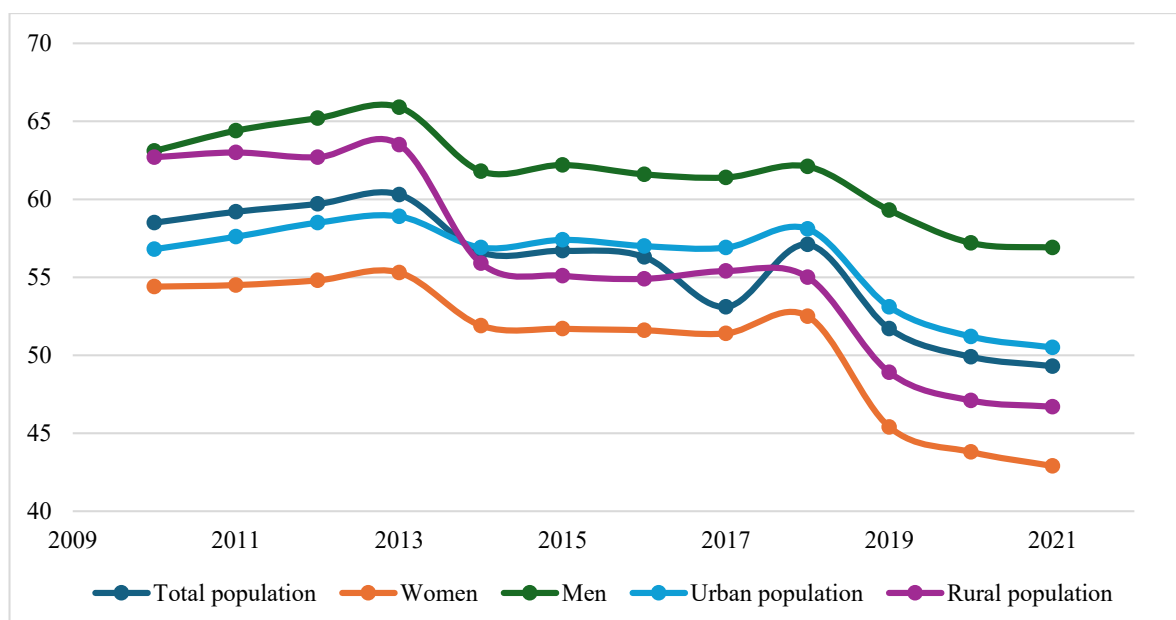


FIGURE 1 Employment rate by gender and place of residence from 2010 to 2021

Source: created by the authors on the basis of (State Statistics Service of Ukraine (3), 2010-2021)

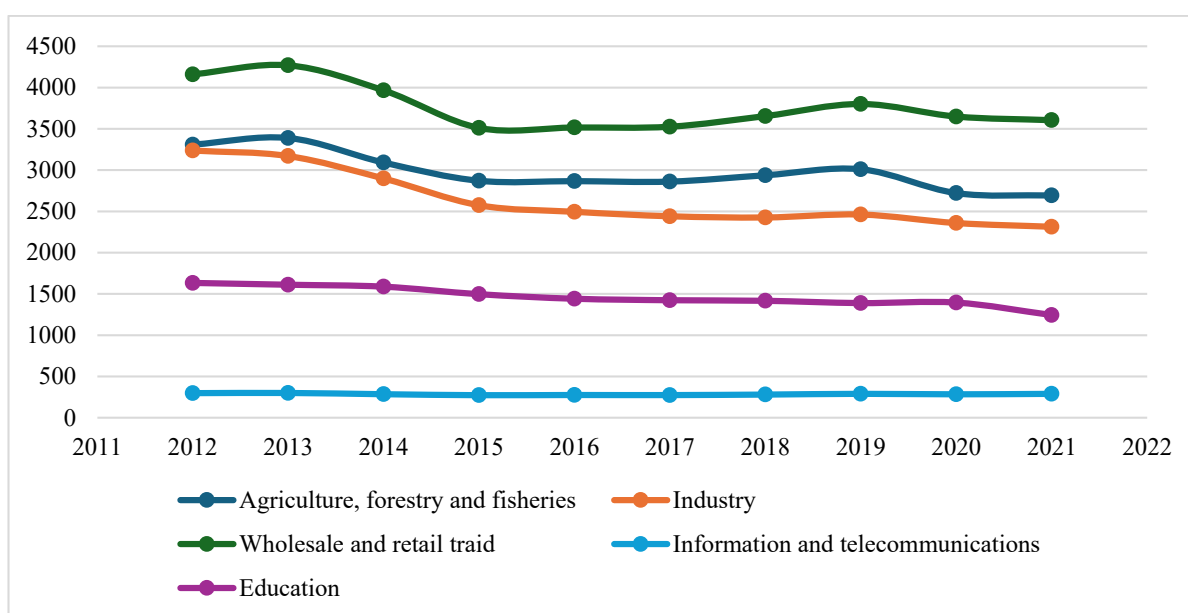


FIGURE 2 Employed population by five main types of economic activity in 2012-2021 (aged 15-70 years; thousand people)

Source: created by the authors on the basis of (State Statistics Service of Ukraine (2), 2012-2021)

of the economically active population. In 2021, the level of informal employment in Ukraine reached 32% of the economically active population (Interfax-Ukraine, 2022). This state of affairs had deleterious effects on the social protection of workers, on the revenues of the state budget, and on the development of effective employment policies.

Consequently, Ukraine's labour market prior to the war exhibited a combination of favourable developments, stemming from the economic recovery

following the pandemic, and substantial challenges that necessitated a strategic approach to their resolution.

### 3 Analysis of the Labour Market in Wartime

The labour market is widely regarded as a primary barometer of a nation's socio-economic stability. The war, which has been ongoing since February 24,

has led to massive changes in the employment structure, unemployment levels, migration processes and labour market policies. The situation in Ukraine's labour market has become extremely unstable, as hostilities, infrastructure destruction, mobilisation, and mass migration have radically affected labour supply and demand.

On the one hand, the loss of production capacity and disruptions to supply chains have forced many companies to close or significantly reduce their operations. On the other hand, some positive changes have taken place, including business adaptation, growing demand for new occupations and the expansion of the digital economy.

In the context of the war, a significant number of males were conscripted into the Armed Forces of Ukraine, resulting in a labour shortage in specific industries. This has resulted in a notable increase in the involvement of women in professions that have historically been considered male-dominated. According to the Ministry of Economy, the number of women registered as sole proprietors increased to 58.8% in the first quarter of 2024, which is 7.8 percentage points higher compared to the same period in 2021 (Ukrinform, 2024).

In order to analyse Ukraine's labour market, statistical data on job vacancies is examined (see Figure 3). For the purpose of comparison, the number of open vacancies in Ukraine as of January 1, 2022, was 41,042, whereas as of January 1, 2025, this figure had increased to 51,463.

As demonstrated in Figure 3, the dynamics of the number of vacancies and the number of individuals with unemployed status from January 1, 2022 to

February 1, 2025 are shown. At the commencement of 2022, the unemployment rate was notably high (294,968 individuals), and a peak was observed in the middle of 2022 (316,448 individuals). Thereafter, a precipitous decline ensued. Throughout 2023, the number of unemployed individuals decreased significantly, reaching a stable level of approximately 100,000. In the 2024-2025 period, the unemployment rate demonstrated stability, exhibiting minimal fluctuations. Concurrently, the number of vacancies in 2022 was minimal but underwent a gradual increase. A discernible escalation in job offers was observed in 2023, a trend that persisted in 2024-2025, signifying an amelioration in the labour market. A comprehensive analysis reveals that positive trends are emerging, even during the period of the full-scale war in Ukraine. The number of unemployed individuals has decreased significantly, while the number of vacancies has increased. The most pronounced period of unemployment was observed in 2022, after which the situation stabilised. The continuation of this favourable trend is likely to result in a further improvement in employment and economic recovery.

A significant aspect of the war has been the involuntary displacement of millions of citizens. As of 2024, the number of Ukrainians who had left the country stood at over 8 million (Wikipedia, 2024), with a further 4.6 million having become internally displaced persons (Yurchenko, 2024). This has resulted in an imbalance in the labour market, with western regions experiencing an oversupply of labour, while de-occupied territories face a severe labour shortage.

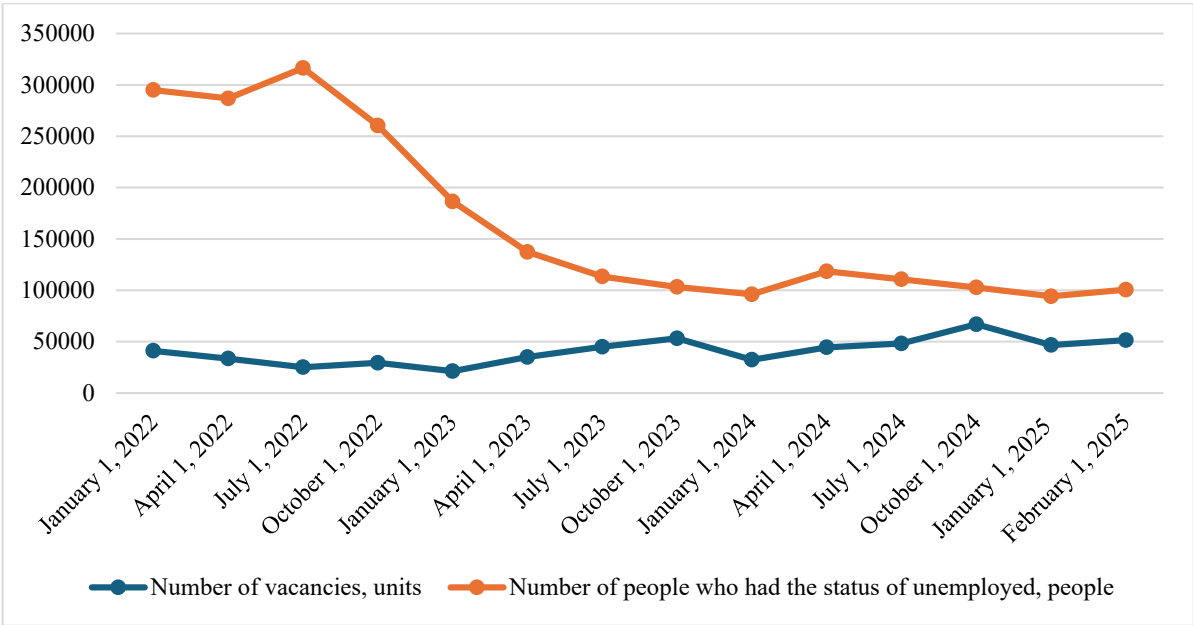


FIGURE 3 Number of vacancies and persons registered as unemployed during the legal regime of martial law in Ukraine

Source: created by the authors on the basis of (State Employment Service of Ukraine, 2022-2025)

The increase in the average monthly wage of employees in Ukraine in 2022-2024 (Figure 4) was caused by several key factors. First, the economic situation caused by the war affected the labour market, leading to a shortage of labour in certain sectors, which in turn contributed to an increase in wage levels. Many companies were forced to adapt to the new realities by raising wages in order to retain staff and attract new employees.

Inflation and the depreciation of the national currency also played a significant role in the growth of nominal wages. In response to rising prices for goods and services, employers were compelled to recalibrate salary levels in order to maintain the purchasing power of the population. This phenomenon was particularly evident in the financial and insurance sectors, where wage levels exhibited the most pronounced increase. These sectors are intricately linked to the broader macroeconomic landscape and possess a high degree of resilience in periods of economic turbulence.

Another significant factor was the increase in minimum wage and social guarantees, implemented by the government to provide support to citizens. Government measures aimed at stimulating the economy, financial support for businesses, and the adaptation of the labour market to new conditions contributed to the overall rise in salaries across most sectors. Conversely, sectors such as construction and transport exhibited more modest growth, which may be attributed to logistical challenges, infrastructure damage, and a decline in investment. Figure 4 provides an overview of the average salary in Ukraine for the most prevalent types of activities.

The rise in wages observed between 2022 and 2024 can be attributed to a confluence of economic, political and social factors. Notwithstanding the crisis phenomena, business adaptation and government policies have been instrumental in facilitating the maintenance of income growth, a pivotal element in the economic recovery process.

The Ukrainian labour market underwent significant changes under the conditions of war, caused by mobilisation, migration, destruction of infrastructure and the general decline in economic activity. Unemployment reached high levels in 2022, but gradually began to decline thanks to adjustment processes and government programmes. There has been a significant redistribution of labour resources between regions, resulting in an oversupply of labour in some areas and a severe shortage in areas that were no longer occupied. The sectoral structure of employment underwent significant changes, with certain fields, such as the military-industrial complex, information technology, healthcare, and agriculture, demonstrating growth. Conversely, industry, trade, and the service sector experienced substantial impact due to the ongoing conflict. In response to these developments, the government implemented policies designed to support the unemployed, including the provision of retraining programmes, financial compensation for employers, and the promotion of small business development. These measures contributed to a partial stabilisation of the situation. Nevertheless, the Ukrainian labour market remains unstable due to the ongoing impact of the war on the country's economy.

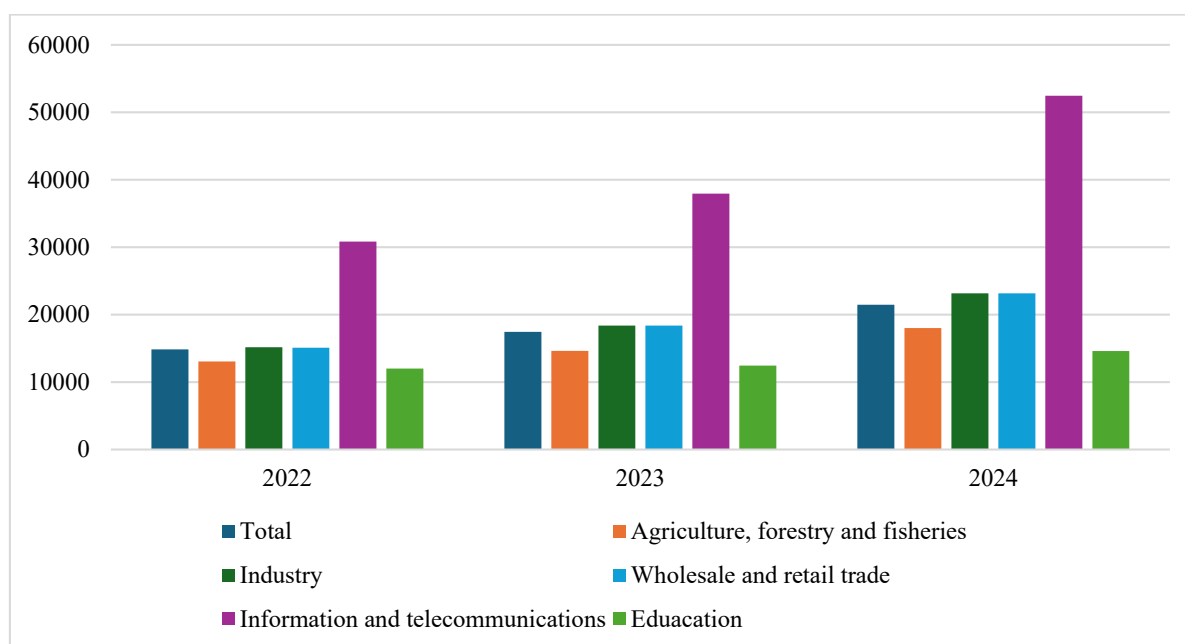


FIGURE 4 Average monthly salary of salaried employees for the 5 main types of economic activity

Source: created by the authors on the basis of (State Statistics Service of Ukraine (1), 2022-2024)



#### 4 Prospects and Recommendations for the Ukrainian Labour Market

Ukraine's labour market is experiencing substantial transformations, attributable to both global economic trends and domestic factors, including armed conflict, the demographic crisis, and digitalisation. In such circumstances, the labour market is under constant pressure to adapt to new challenges, particularly the rapid development of technologies and the changing structure of labour demand. Specifically, Ukraine is characterised by an imbalance between the demand for labour and its supply, leading to significant territorial and sectoral distortions. Consequently, certain regions and economic sectors are characterized by high employment levels, while others are confronted with high levels of unemployment. Internally displaced persons (IDPs) who have become refugees due to war face particular difficulties in the labour market. They are often unable to adapt quickly to new living and working conditions due to low levels of education or lack of the necessary skills to meet employers' needs. However, this problem can be addressed through effective adaptation programmes in local labour markets aimed at increasing labour mobility and introducing retraining systems.

In the context of economic instability, it is of particular importance to maintain employment levels at a point that ensures economic development and supports social peace. In the contemporary era, it is imperative to establish conditions conducive to the development of high-tech and innovative sectors of the economy. Specifically, the growth of the information technology, finance, and green energy sectors is important for development, as these create new jobs and help address issues related to low qualifications in traditional sectors. Concurrently, there is a necessity to introduce innovative approaches into traditional industries such as agriculture and industry. This approach is expected to enhance the competitiveness of these sectors and safeguard employment opportunities.

One of the main tasks at this stage is to create conditions for stable employment. An important condition is to actively support the development of small and medium-sized enterprises, as this sector is one of the main employers in Ukraine. To achieve this, administrative barriers should be reduced, access to finance should be improved, and entrepreneurship should be supported through the development of infrastructure for business startups. At the same time, social entrepreneurship needs to be actively promoted, as it can become an effective tool for creating jobs for vulnerable groups, such as internally displaced persons or people with disabilities.

Another important factor is the development of flexible forms of employment, such as freelance, remote, temporary and part-time work. In the context

of modern economic and technological change, such flexibility is necessary to maintain a high level of labour mobility. Strategies must also be developed to ensure an adequate level of social protection for workers in flexible forms of employment.

In light of the prevailing changes in the labour market, there is an imperative to foster the development of competencies in high-tech and innovative domains. Concurrently, there is a need to refine the education system to ensure a congruence between the labour market's demands and the qualifications of the workforce. The development and implementation of retraining programs for workers in industries experiencing crises or production cuts is imperative. Educational reform should encompass not only the preparation of highly qualified personnel for modern sectors of the economy, but also the improvement of skills for employers with the aim of enhancing competitiveness in the international labour market.

One of the government's priorities is to support programmes that will help solve the problem of unemployment among young people and the elderly. It is important to create a system of institutional support for these people through social programmes that will help them find a job or start their own business.

In the context of the perpetual shifts occurring within Ukraine's labour market, it is imperative to deliberate the contemporary recommendations for its advancement and to assess the potential outcomes that may ensue from their implementation. Table 1 delineates the principal domains necessitating modification and illustrates the opportunities that emerge for the labour market as a consequence.

As illustrated in Table 1, there is an imperative to encourage the creation of novel qualifications, provide support for innovations, and streamline the conditions for entrepreneurs. This will empower the Ukrainian labour market to adapt swiftly to changes and generate new opportunities for citizens.

#### 5 Conclusions

The research undertaken has identified the key trends and challenges that are currently characterising Ukraine's labour market, both in the period preceding the war and during the ongoing hostilities. The analysis demonstrated that until 2022, Ukraine's labour market exhibited stable yet contradictory trends, characterised by a high level of informal employment, regional disparities, and limited opportunities for the development of high-tech industries. The war has precipitated substantial structural transformations, including a decline in employment in traditional sectors such as industry, transportation, and trade, while concurrently increasing demand for specialists in IT, the defense industry, and healthcare.

TABLE 1 Recommendations and prospects for the Ukrainian labour market

Direction	Recommendations	Prospects
Education and qualifications	The enhancement of education quality can be achieved through curriculum modernisation, the introduction of market-driven specialised courses, and the expansion of dual education that integrates academic study with practical experience. Furthermore, the fostering of collaboration between universities, businesses, and IT companies, in conjunction with the promotion of employee retraining in response to labour market dynamics, is of paramount importance.	To increase the demand for highly qualified professionals, to enhance the competitiveness of graduates, to improve their adaptation to real labour market conditions and to create new career opportunities in modern sectors of the economy.
Innovation and technology	In order to enhance digital transformation, it is essential to implement a multifaceted approach encompassing enterprise investment, government support for the IT sector, and the cultivation of a startup-friendly environment through the establishment of technology incubators. It is also crucial to integrate artificial intelligence and automation in manufacturing while increasing funding for research and development to drive technological innovation.	The creation of employment opportunities within the IT sector, the augmentation of successful Ukrainian startups, the enhancement of the level of digitalisation within the economy, the strengthening of the country's position in the global technology market, and the improvement of business efficiency through innovation are all objectives of paramount importance.
Entrepreneurship	Simplifying business registration and cutting red tape, reducing the tax burden on small and medium-sized enterprises, and providing government support for export-oriented companies. Key factors include developing business incubators and accelerators, improving access to finance for entrepreneurs and creating a favourable investment climate.	Development of small and medium-sized businesses, increase in the number of jobs, increase in the contribution of entrepreneurship to the national economy, enhancement of the competitiveness of Ukrainian companies in the global market, and stimulation of the development of innovative business models.

Source: created by the authors on the basis of (Cheryomukhina & Chalyuk, 2022)

A salient challenge confronting the nation was the precipitous escalation in unemployment in 2022, consequent to the dissolution of enterprises, mobilisation, and mass migration of the population. However, in the 2023-2024 period, the labour market began to demonstrate signs of adaptation, including employment recovery, an increase in job vacancies, and a rise in self-employment. Government support measures, including retraining programs, business subsidies, and the development of the digital economy, played a crucial role in this process.

The findings of the research indicate that significant regional disparities in the labour market persist. Migration has led to an oversaturation of labour resources in the western regions of the country, while de-occupied regions are experiencing a labour shortage. This necessitates the implementation of government strategies that are designed to facilitate the equitable distribution of the workforce and the creation of favourable conditions for entrepreneurship in the affected regions.

The potential for Ukraine's labour market to evolve is contingent upon its capacity to adapt to evolving economic circumstances. A key task is to

increase investment in human capital, support small and medium-sized businesses, stimulate innovation-driven industries, and enhance the competitiveness of the Ukrainian workforce on the international level. In particular, there is a necessity to continue the development of retraining programmes, to intensify support for remote and flexible employment, and to attract foreign investments into high-tech sectors.

Further academic research in this field could concentrate on the development of effective mechanisms for adapting the labour market to wartime and post-war challenges. Such mechanisms would need to be analysed in terms of their long-term consequences for the population and the impact of digitalisation on employment. In addition, it is imperative to study international experience in labour market recovery after crisis periods, allowing for the implementation of best practices in Ukraine's economic model.

Consequently, Ukraine's labour market is undergoing transformations due to the influence of contemporary challenges, and its stability will be contingent on a comprehensive approach to economic and social policy reform.

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