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SHTUNDER Iryna,

Doctor of Sciences (Economics),
Associate Professor, Professor at the Department
of Economics and Competition Policy
State University of Trade and Economics
19, Kyoto St., Kyiv, 02156, Ukraine

ORCID: 0000-0001-7778-3072

i.shtunder@knute.edu.ua

SHKUROPADSKA Diana,

PhD (Economics), Associate Professor at the
Department of Economics
and Competition Policy
State University of Trade and Economics
19, Kyoto St., Kyiv, 02156, Ukraine

ORCID: 0000-0002-6883-711X

diana.shkuropadska2016@knute.edu.ua

DETERMINANTS OF LABOR MARKET RESILIENCE

It is noted that the resilience of the labor market is an important category of social and economic development in conditions of permanent shocks and uncertainty. Global challenges, the unpredictability of cyclical fluctuations of the economy, information asymmetry of the market, the influence of behavioral factors often determine the dynamics and movement vectors of various types of markets, including the labor market, raising the question of strengthening its fundamental foundations and effective functioning despite numerical limitations and risks. Hence the need to study all the multifaceted factors and challenges to the functioning of the labor market and to substantiate on this basis the paradigm of resilience of the labor market in conditions of systemic uncertainty. It is substantiated that the determinants of the labor market resilience are cyclical and structural factors that determine the ability of the labor market to avoid, withstand or recover from shock effects. Significant demographic changes in the number, gender-age composition of the population, changes in technological patterns, and introduction of technological innovations, often repeated cyclical economic downturns; military and political conflicts change the sphere of employment of the population in various countries of the world and demonstrate the general internal

ШТУНДЕР Ірина,

д. е. н., доцент, професор кафедри
економічної теорії та конкурентної політики
Державного торговельно-економічного
університету
вул. Кіото, 19, м. Київ, 02156, Україна

ORCID: 0000-0001-7778-3072

i.shtunder@knute.edu.ua

ШКУРОПАДСЬКА Діана,

доктор філософії з економіки, доцент кафедри
економічної теорії та конкурентної політики
Державного торговельно-економічного
університету
вул. Кіото, 19, м. Київ, 02156, Україна

ORCID: 0000-0002-6883-711X

diana.shkuropadska2016@knute.edu.ua

ДЕТЕРМІНАНТИ СТІЙКОСТІ РИНКУ ПРАЦІ

Стійкість ринку праці є важливою категорією соціально-економічного розвитку в умовах перманентних потрясінь та невизначеності. Глобальні виклики, непрогнозованість циклічних коливань економіки, інформаційна асиметрія ринку, вплив чинників поведінкового характеру часто визначають динаміку та вектори розвитку зокрема і ринку праці, ставлячи питання про посилення його фундаментальних основ та ефективне функціонування, попри чисельні обмеження і ризики. Звідси й випливає потреба у дослідженні усієї багатоманітності факторів та викликів функціонуванню ринку праці й обґрунтування на цій основі парадигми стійкості ринку праці в умовах системної невизначеності. Детермінантами стійкості ринку праці є циклічні та структурні чинники, які визначають здатність ринку праці уникнути, витримати або відновитися від шоківих впливів. Істотні демографічні зміни в чисельності, статевовіковому складі населення, зміна технологічних укладів, впровадження інновацій, часто повторювані циклічні спади економіки, військово-політичні конфлікти змінюють сферу зайнятості населення у різних країнах світу та демонструють загальну внутрішню чутливість ринку праці до шоківих впливів.



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sensitivity of the labor market to shock effects. It is emphasized that the task of the state and business is to ensure macroeconomic stability, develop human capital, social protection of the population, increase the level of employment, stable and predictable economic growth, and promote the flexibility of the labor market through the development of various forms of employment, such as remote or part-time. As a result, a favorable market environment will serve as an indicator of the development of innovations, the successful functioning of small and medium-sized enterprises, which will form innovative workplaces in the future and increase the resilience of the labor market as a whole.

Keywords: labor market, resilience, unemployment, employment, Russian-Ukrainian war.

Завданням держави та бізнесу є забезпечення макроекономічної стабільності, розвиток людського капіталу, соціальний захист населення, підвищення рівня зайнятості, стабільне і прогнозоване економічне зростання, сприяння гнучкості ринку праці шляхом розвитку різних форм зайнятості, як-от дистанційна або часткова. Як наслідок – сприятливе ринкове середовище слугуватиме індикатором розвитку інновацій, успішного функціонування малих та середніх підприємств, які формуватимуть інноваційні робочі місця у майбутньому та підвищуватимуть стійкість ринку праці в цілому.

Ключові слова: ринок праці, стійкість, безробіття, зайнятість, російсько-українська війна.

JEL Classification: E24, J21, J60, J68.

Introduction

Conditions of global instability, including financial and economic crises, political and military conflicts, pandemics and other force majeure circumstances, have a significant impact on labor markets, creating new challenges for employers, employees and public institutions.

Ukrainian and foreign scientists are actively studying the issue of ensuring the resilience of labor markets in various countries. A study by Martínez et al. (2023) is devoted to the financial crisis that hit the world economy in 2008 and negatively affected the entire spectrum of European economies, in particular, causing a drop in economic activity, as well as a deterioration in labor market indicators. The analysis by researchers of the labor markets of European countries reveals the existence of certain factors related to its resilience, including economic, social, professional, demographic and political, despite the varying degree of intensity of influence of these factors on European markets and the existence of territorial differences in their functioning.

The work of Mustra et al. (2020) concerns the relationship between regional innovation performance and labor force resilience among EU regions after the Great Economic Crisis. The scientists came to a conclusion about the differentiated effect of innovative influence on different phases of economic sustainability. The authors' approach is based on the heterogeneous trajectory of resilience across EU regions, providing evidence that a regionally tailored innovation approach embedded in a smart specialization strategy is a key to achieving a more resilient workforce.

Diodato & Weterings (2015) investigate the determinants of the resilience of regional labor markets to economic shocks; namely, the localization of the supply network is used to model shock propagation, the possibility of inter-industry and inter-regional labor mobility to analyze post-

shock recovery. The authors emphasize that labor markets in central and service-oriented regions have, on average, a higher recovery rate, regardless of the type of shock that affected the economy.

The overall positive impact of cohesion policy in supporting the resilience of European regional labor markets during economic shocks and the presence of regional differences in the resilience of regional labor markets over the past three decades are also a debated topic among scholars (Caro & Fratesi, 2022).

Hijzen et al. (2017) argue that labor market resilience is crucially dependent on macroeconomic and labor market policies. Macroeconomic policy should be based on limiting the reduction of employment during economic downturns and preventing cyclical unemployment from transforming into structural unemployment. The authors mostly focus on active labor market policies that would respond decisively to limit cyclical unemployment. Instead, excessive employment protection for casual workers reduces resilience by promoting the use of temporary contracts and slowing job creation in the recovery process. According to the authors, the determinants of the resilience of the labor market are coordinated systems of collective bargaining, which contribute to resilience by facilitating the processes of adjusting wages and working hours.

Stimulation of inclusiveness in regional labor markets, namely: the factor of territorial location of the labor market, fundamental changes in the very concept of labor and strengthening of the efficiency of regional management, are recommended to be considered as determinants of the resilience of the labor market (Dijk & Edzes, 2016).

Employment is a factor contributing to the resilience of the labor market. Full-time employment has the strongest effect on resilience, while other employment categories such as self-employment, part-time employment and unemployment have about half the effect. This finding is an important dimension for policymakers to consider, not only in creating macroeconomic conditions conducive to sustainable employment, but also in considering how workplaces can better prepare workers to deal with adverse events (GALLUP, 2024).

Groups of factors that determine the resilience of the labor market are also studied by Ukrainian scientists, such as Blyzniuk & Yatsenko (2023), focusing on economic, social, political, demographic, institutional and technological factors. In their opinion, ensuring the resilience of the labor market requires a complex mechanism of state regulation as a system of levers of influence of an organizational, economic, administrative (normative) and psychological nature. The action of such levers is aimed at balancing supply and demand in the labor market, coordinating the interests of the leading participants in the production process, and mitigating the consequences of unemployment.

Therefore, although many problematic aspects regarding the nature of the resilience of the labor market have already been revealed in the special scientific literature, the issue of determining and evaluating the determinants affecting the resilience of the labor market in Ukraine and the EU, especially during armed conflicts, pandemics, financial instability, large-scale migration processes, needs further attention of scientists. This has become the focus of this research.

The hypothesis of the article is that the level of resilience of the labor market is determined by structural and cyclical determinants, which are ensured by measures of macroeconomic stability, increasing the level of employment, development of human capital, flexibility of the labor market, social protection, development of technologies and innovations, regulation of labor migration.

The aim of the article is to determine the key factors and directions for ensuring the resilience of the labor market in conditions of shock effects.

To achieve the aim of the research, a complex of general scientific and special methods was used: the method of theoretical generalization is to reveal the content of the concept of resilience of the labor market; methods of system analysis and systematization are to identify key global challenges that determine trends in labor market development; statistical method and grouping method are for analyzing the level of resilience of the labor markets of EU countries and Ukraine; the method of scientific abstraction is for substantiating directions for ensuring the resilience of the labor market and conclusions to the conducted research.

The structure of the article is as follows: first, the trends and key challenges of the labor market in conditions of global instability are analyzed; then the level of resilience of the labor markets of EU countries and Ukraine is assessed according to cyclical and structural factors; at the end, directions and measures to ensure the resilience of the labor market are highlighted.

1. Trends and challenges of the labor market in conditions of global instability

In the process of global transformations of the economy, the labor market reacts sensitively and undergoes rapid changes both in its structure and in development priorities. Profound demographic changes, military-political conflicts, and the introduction of technological innovations are changing the spheres of employment of the population of various countries around the world. Countries that managed to realize these trends in advance and adapt to the challenges of the times can not only solve the pressing problems of the labor market with fewer losses, but also provide a stable basis for increasing labor productivity, improving the quality of life of the population, and increasing the efficiency of the national economy in general (Kolot & Gerasimenko, 2020). In the social and economic development of

any country, the labor market is almost the most sensitive to changes in the market situation, which is manifested in a quick reaction to manifestations of macroeconomic instability, economic turbulence and challenges of a global nature (*Table 1*).

Table 1

Global challenges of labor markets

Challenges	Consequences
The COVID-19 pandemic	Immediately after the start of the pandemic, many enterprises were forced to stop their activities due to quarantine measures, which led to a significant increase in the unemployment rate. Industries related to tourism, hotel and restaurant business, entertainment and transport were particularly affected. The popularity of flexible work schedules and temporary contracts has increased, which has enabled enterprises to adapt to unstable conditions. The demand for specialists in the field of information technology, logistics, online education and e-commerce has increased
Demographic crisis	The decline in the number of young people leads to a reduction in the size of the working population, which creates labor shortages in many sectors of the economy, especially those that require manual labor or specialized skills. An aging population means that there will be more retirees in need of pension benefits and medical services. This increases the burden on country budgets and social systems financed by taxes on working citizens
Russian-Ukrainian war	Millions of Ukrainians were forced to leave their homes because of the war and seek refuge in European countries. This has led to increased competition in the labor market in refugee-hosting countries. European countries face the challenges of integrating a large number of Ukrainian refugees into their labor markets, which requires additional efforts in the field of training, retraining and social support
Migration crisis	The migration crisis, which became particularly acute after 2015, when refugees from the Middle East, Africa and Asia started arriving in Europe, had a complex impact on European labor markets. The arrival of large numbers of migrants has boosted the working-age population in many European countries, reducing labor shortages, particularly in sectors that have experienced worker shortages such as construction, agriculture, aged care and low-wage services. European countries are increasingly turning to immigration as a way to replenish their workforce. This has both positive effects (reducing labor shortages) and challenges (social integration of migrants)

Source: compiled by the authors.

In the social and economic reality of the 21st century, under the influence of various factors, the labor market acquires a new meaning with its inherent challenges and opportunities. In particular, the COVID-19 pandemic dealt a devastating blow to the economy and the labor sphere in Ukraine and the world, causing triple social and economic consequences and having a significant impact on economic growth in the future.

The first is a supply shock. The bodies of legislative and executive power and local self-government administratively suspended the economic and entrepreneurial activity of a number of sectors of the economy, including tourism, public catering, transport, the sports and entertainment industry. The second is a demand shock. We are talking about the fact that the incomes of

economic entities related to the sectors of the economy, the activities of which are suspended, prohibited or limited, have sharply decreased. Thus, the vast majority of households have limited spending due to lower incomes, worsening consumer sentiment and the unpredictability of their future. Household consumption was concentrated primarily on basic necessities. The demand for other goods decreased sharply, which had a negative impact on all spheres of economic activity. The third is the shock of international trade. Restrictions on the free movement of goods and personnel, a significant reduction in migration flows, and tourist trips have led to the disruption of global logistics chains, a shortage of intermediate goods from countries that have suffered the greatest losses associated with the COVID-19 pandemic. This brought significant changes to all components of the global and national labor markets and, as a result, affected the demand, supply and price of labor services (Kolot & Gerasimenko, 2020).

Among the modern trends of a demographic nature that have a manifestation at the global level, the most significant are: a reduction in the rate of population growth, an increase in the average age of the population, a decrease in the share of children and young people in the general structure of the population, an increase in the share of older age groups, an increase in the demographic burden on working people, decrease in the number of able-bodied persons, intensification of migration processes, increase in the share of working pensioners among the labor force. It follows from this that the socio-labor vector of the development of the global labor market in the first decades of the 21st century. is formed taking into account the reduction in the number of young people, the growth among working people of older age, the decrease in the number of working people who are of working age, and the increase in the number of employed persons working pensioners.

EU member states face various demographic challenges. For EU citizens, the most urgent demographic problems are the aging of the population and the reduction of the working-age population and the labor shortage. EU citizens agree that current demographic trends threaten the long-term economic prosperity and competitiveness of the EU and cause labor shortages. Accordingly, 85% of respondents agree that managing demographic change requires close cooperation between all relevant levels of government (EU, national, regional and local authorities) (European Commission, 2023).

Changes in the number and structure of the country's population play a significant role in determining the scale of national production. Demographic resilience is closely related to the efforts of the governments of countries to concentrate on their territory the necessary number of qualified workers for the implementation of national macroeconomic strategies, preserving the usual living conditions for citizens and established communication (Nikolaiets et al., 2023).

In the EU countries, in particular Poland, Hungary, Slovakia, and the Czech Republic, the level of demographic resilience shows generally average values and ranges from 60 to 67% (Shkuropadska et al., 2024). This result is largely influenced by natural demographic processes, in particular, the increase in average life expectancy and the "aging" of the population, which is characterized by an increase in the share of elderly people in the general structure of the population.

In Ukraine, according to the Institute of Demography and Quality of Life Problems of the National Academy of Sciences of Ukraine, at the beginning of 2022, the population, taking into account the annexed Crimea and the temporarily occupied regions of Donetsk and Luhansk regions, amounted to 42 million people. Already at the beginning of 2024, this number has decreased to approximately 35 million. According to the IMF, in 2028, the population of Ukraine will be 36.1 million, while the Institute of Demography calls the number 33.1 million (Khludzynskyi, 2024). This number can be significantly adjusted taking into account demographic transformations under the influence of natural anthropogenic processes, as well as the duration of the Russian-Ukrainian war and its consequences.

The challenges and restrictions caused by the Russian-Ukrainian war for the world economy and the labor market are associated with social and economic destabilization, an increase in inflation and unemployment, the emergence of a food crisis, an increase in world prices for raw materials, and an increase in the migration crisis. The negative impact of the war in Ukraine is felt by many countries of the world, and the destructive effect will depend on its dynamics and duration. The most significant losses caused by the war are human losses, as well as economic problems that are felt far beyond the borders of Ukraine (Dijk & Edzes, 2016). Huge economic losses and a large-scale migration crisis became the main factors in the deterioration of the situation in the labor market of Ukraine. By the end of 2022, the country's GDP has decreased by more than 30%, the national currency has significantly depreciated, prices have risen, and the level of income of the population has fallen significantly. The result of the Russian Federation's full-scale aggression against Ukraine was the mass departure of Ukrainian citizens abroad due to threats to their personal safety. According to experts' estimates, during 2022, almost 8 million people left, almost 5 million became internally displaced persons. An important factor affecting the labor market and employment of the population was the introduction of martial law and general mobilization: the volume of hiring and movement of personnel changed, the shortage of workers of certain categories and groups on the labor market increased. Along with the migration processes, the mobilization directly affected the aggravation of the problem of the shortage of qualified personnel, technical workers, the shortage of which was observed in the labor market of Ukraine even before the full-scale invasion. The process of mobilization expanded the boundaries of informal employment due to the reluctance of some men to go to work and enter into labor agreements in order to avoid mobilization. Such circumstances, according to experts, to

some extent supported small businesses in such areas of economic activity as construction, woodworking, and trade. In general, all these factors in a certain sense affect the supply of labor and change the trajectory of the development of the domestic labor market (Sudokov & Lisogor, 2023).

The migration crisis has become a controversial topic in the EU countries in the last decade. It influenced the holding of the Brexit referendum in 2016 and the exit of Great Britain from the European Union as a result. Thus, in 2015, 1.3 million people requested asylum in European countries due to the war in Syria and the seizure of power in certain regions of the country by the Islamic State group. The members of the EU presented different arguments on this issue. In particular, there were discussions about how many refugees each country could accept. Some EU countries expressed confidence that the community is obliged to accept as many refugees as possible, while others, on the contrary, considered it necessary to avoid these processes.

Thus, in 2023, more than 220,000 people applied for asylum in Germany – most of them from Syria, Afghanistan, Turkey, Moldova and Georgia – and about 240,000 people applied a year earlier. However, this number pales in comparison to the 1 million refugees who arrived in Germany in 2015–2016, most of whom were fleeing war and persecution in the Middle East and Afghanistan (Wesolowski, 2023). Since the beginning of the large-scale Russian invasion of Ukraine, more than 8 million Ukrainian refugees have been recorded in Europe, including those citizens who returned home or went to other countries of the world (Apostrof, 2023). The first burst of Ukrainian migration was caused by panic, the second and third by large-scale destruction of Ukrainian cities, as a result of which refugees lost their homes. As of March 3, 2022, one week after the Russian invasion, more than 1 million refugees (2.3% of Ukraine's population) have been forcibly resettled in European countries, including Poland, as well as Hungary, Moldova, and Slovakia. The largest number of Ukrainian refugees is in neighboring Poland – 1.577 million people, in Germany – 922,000, and in the Czech Republic – 502,000. Over 123,000 Ukrainian citizens received protection in Romania, 112,000 in Slovenia, over 173,000 in Italy, more than 171 thousand – in Spain and more than 191 thousand Ukrainians – in Great Britain (Nikolaets et al., 2023).

Despite the difficulties and uncertainty, Ukrainian migrants who arrived in the EU as a result of the Russian-Ukrainian war are adapting well compared to the experiences of other refugee groups. Thus, in 2023, in Poland, where a powerful Ukrainian community already lives, 71% of refugees from Ukraine found work, in Germany the employment rate among refugees was somewhat lower – 24% (Wesolowski, 2023). According to experts, if the Russian-Ukrainian war drags on, many Ukrainians who emigrated from Ukraine will be able to adapt well abroad, as a result of which many men will go abroad with their wives and children after the end of the war (Libanova, 2022). Employment rates for Ukrainians in EU countries are high due to the fact that they got access to the labor market from the first day of their arrival, many of them are highly qualified workers, while there was a labor shortage in the local labor market; in

addition, migrants had the opportunity to rely on national communities that had already formed in many countries.

Therefore, modern global challenges not only shape the trajectory of the development of labor markets, but also affect their level of resilience, prompting to adapt to shocks and increase the efficiency of human resources management in order to ensure the resilience of economic systems.

2. Assessment of the resilience level of labor markets

The Global Labor Resilience Index is an annual publication of the international consulting company Whiteshield, which ranks 136 countries of the world according to the level of resilience of their labor markets. A stable labor market is defined as one that creates stable demand for a wide range of occupations and provides quality work. Resilience is defined in terms of the social and economic cost of economic downturns, that is, the ability of the economy to limit permanent deviations of production and labor market outcomes from pre-crisis trends after adverse cumulative shocks (Whiteshield, 2024). Labor market shocks are sudden and unexpected changes that significantly affect employment levels, wages, working conditions, and overall economic stability.

Resilient labor markets are inclusive, stable and able to withstand shocks due to their flexibility and adaptability. Labor market resilience can also be defined as the ability to avoid, withstand and recover from shocks, regardless of their nature. The structure of the labor market resilience index focuses on two determinants: structural and cyclical (*Figure*).

Structural, 33%	Cyclical, 67%
<ul style="list-style-type: none"> • Demography: the share of the population older than the working age • Country’s capabilities: the economic complexity factor • Economic development and macroeconomic stability: GDP per capita; share of services in GDP; availability of natural resources; the amount of public debt • Trade vulnerability: export concentration index; diversification of the economy; balance of payments • Inequality: an indicator of income inequality of the population 	<ul style="list-style-type: none"> • Absorptive capacity: support and protection of workers; employment level; promotion of the labor market; inclusiveness of youth; gender inclusiveness; health and well-being of the population • Adaptation possibilities: flexibility of labor policy; business regulation, access to financial regulation, quality of infrastructure, mechanisms of redistribution and flexibility, skills and adaptability of employees, entrepreneurial activity, access to loans • Transformative ability: regulation of the development of information and communication technologies, costs on R&D, protecting intellectual property rights, investing in the future workforce; penetration level of information and communication technologies; innovative environment; innovativeness of trade development; technology and digital economy; green transition ; innovative products ; level of education and qualifications of the future workforce • Institutional capacity: social capital, statistical potential, statistical completeness of the labor market stability index

Structural and cyclical factors (indicators) of the Global Labor Market resilience Index

Source: compiled by the authors from data (Whiteshield, 2024).

The structural component assesses a country's internal vulnerability or protective factors that may interact with shocks to further amplify or reduce their intensity. These factors tend to be more difficult to change in the short term and include, for example, demographics, levels of economic development and macroeconomic stability, country capabilities, trade vulnerability and social inequality.

The cyclical opportunity factor measures the strength of labor markets' response to shocks. The cyclical factor focuses more on how current policies can change the level of disorganization in a given labor market. The cyclical factor is divided into four subcategories of opportunities:

- absorption capacity is defined as the ability to contain shock impact and minimize damage to workplaces and workers;
- adaptive capacity is as the ability to quickly recover and create new jobs;
- transformative capacity is defined as the ability to adapt to future trends and transform long-term stresses into opportunities.

institutional capacity acts as an end-to-end factor that facilitates a sustainable response to all types of disruptions and at all stages of a crisis.

In the *Table 2* it is shown the data of the Global Labor Resilience Index for EU member states and Ukraine in 2024, based on which the overall rating by country and by structural and cyclical indicators was formed.

The Global Labor Resilience Index is measured on a scale from 0 to 100 points, according to which 5 levels are distinguished. A high level of resilience is measured between 80 and 100 points and indicates that countries have very strong labor markets with a high capacity for adaptation and transformation, strong institutions, high levels of innovation, stable economic conditions and effective political systems.

The level above average resistance is from 60 to 79 points. EU countries with this level of labor market resilience in 2024 include Denmark, the Netherlands, Germany, Sweden, Finland, Austria, Luxembourg, France, Belgium, Ireland, Estonia, the Czech Republic, Slovenia, Spain, Slovakia, Portugal, Poland, Lithuania, Hungary, Malta, Italy, Latvia, Cyprus, Croatia. These countries have developed labor markets that demonstrate the ability to respond effectively to shocks, good infrastructure and social protection systems, but may need improvement in some areas.

The average level of resilience of the labor market is measured from 40 to 59 points. In 2024, Romania, Bulgaria, Greece and Ukraine showed such a level of resilience among EU member states. They are characterized by a moderate ability to adapt to shocks. Their labor markets often face certain structural problems that slow down their recovery from crises.

Table 2

Global Labor Resilience Index of EU countries and Ukraine in 2024

Country	General rating (among 136 countries)	Points	Rank by structural indicators	Points	Rank by cyclical indicators	Points	Trend in 2019– 2024
Denmark	2	78	2	76	2	79	+2
Netherlands	3	77	3	76	5	78	+6
Germany	5	77	1	77	6	77	+10
Sweden	6	75	5	75	8	76	0
Finland	7	75	22	70	4	78	-2
Austria	8	74	4	76	12	73	+10
Luxembourg	9	74	8	74	11	74	-1
France	11	72	13	73	13	72	+8
Belgium	12	72	12	73	14	72	0
Ireland	15	71	14	72	20	70	+6
Estonia	18	70	25	67	18	71	+6
The Czech Republic	19	70	10	73	23	68	+6
Slovenia	21	69	11	73	24	67	+8
Spain	23	67	24	67	26	67	+16
Slovakia	26	66	18	71	32	64	+4
Portugal	27	66	36	64	25	67	+5
Poland	29	65	17	71	34	62	+4
Lithuania	30	65	34	64	27	66	+4
Hungary	31	65	27	66	30	64	+9
Malta	32	64	39	63	28	65	+3
Italy	34	64	26	67	35	62	+7
Latvia	35	63	44	61	29	64	+3
Cyprus	37	62	54	59	31	64	0
Croatia	40	61	30	65	43	59	+24
Romania	41	59	38	63	47	58	+5
Bulgaria	42	59	55	59	42	59	+29
Greece	52	56	71	55	53	56	+14
Ukraine	55	55	50	60	57	53	-1

Source: compiled by the authors based on data from (Whiteshield, 2024).

The level below the average resistance is from 20 to 39 points. Countries with this level have weak institutions and economic conditions, which hinders the ability of their labor markets to adapt quickly. They have some problems with unemployment and insufficient social support.

Low level of resilience is from 0 to 19 points. Countries with this level of resilience are characterized by very weak labor markets that have virtually no capacity for effective adaptation and recovery. They have significant economic and political problems that hinder their development.

It is worth noting that the Global Labor Resilience Index was also calculated in 2019. The analysis of the dynamics of the index makes it possible to understand how the labor markets, in particular, reacted to the COVID-19

pandemic and the Russian-Ukrainian war. The best results during this period were achieved by Bulgaria (up 29 positions in the ranking), Croatia (+24 positions), Spain (+16), Greece (+14), Germany and Austria (+10).

Ukraine dropped from 54th to 55th place in the rating for 2019–2024. Russia's military aggression and related economic difficulties have significantly affected the labor market in Ukraine. However, the country is taking important steps in the direction of stabilizing the situation, which includes: improving social protection mechanisms for internally displaced persons; ensuring the gradual integration of people who moved from the temporarily occupied territories into the host communities; encouraging unemployed forced migrants of working age to get a job. Due to the significant outflow of the able-bodied population from the labor market, in particular to the ranks of the Armed Forces of Ukraine, territorial defense forces, volunteer organizations, there is a growing need for the most rational use of the workforce and ensuring a favorable level of adaptability of the able-bodied population to changes in the labor market, and this requires balanced state decisions (NISD, 2022).

3. Directions for ensuring the labor market resilience

The resilience of the labor market, under the influence of modern challenges and threats, lies in the plane of modification of relations between the state, the market and the business environment for the approval of a new format of interaction of these institutions in the paradigm of the new economy of the 21st century (Kolot & Herasymenko, 2017). This process includes the redistribution of roles and responsibilities between the participants of the triad, which contributes to increasing the efficiency of economic activity and ensuring stable macroeconomic development. So, the proposed directions for ensuring the resilience of the labor market in the *Table 3*, contain measures that take into account the triad "market – state – business".

The state is actively working to ensure macroeconomic stability, development of human capital and social protection, contributing to an increase in the level of employment and stable economic growth. The market is a catalyst for the development of innovations, supporting small and medium-sized enterprises that create new jobs. The business provides initiative and flexibility in the labor market by developing different forms of employment, such as telecommuting or part-time employment. In addition, the business actively influences the market adaptation of employees by providing training programs, training and retraining of personnel that meet the needs of the modern labor market. Interaction in the triad "market – state – business" is necessary to achieve a balance between social, economic and innovative aspects of development, which ensures the resilience of the labor market.

Table 3

Directions and measures to ensure the resilience of the labor market

Directions	Activities
Macroeconomic stability	Controlling inflation and maintaining a moderate interest rate
	A balanced fiscal policy that prevents large budget deficits
	Ensuring stable economic growth through stimulating investment and entrepreneurship
Increasing the level of employment	Active employment programs, including training and retraining
	Investment in infrastructure that creates new jobs
	Support for small and medium-sized businesses, which are a key source of jobs
Development of human capital	Ensuring access to quality education and training programs
	Developing the skills needed for the labor market, including digital and technical
	Vocational guidance and career counseling for young people and the unemployed
Flexibility of the labor market	Modernizing labor laws to ensure a balance between worker protection and flexibility for employers
	Promoting the development of various forms of employment, including remote work and part-time employment
	Encouraging entrepreneurship and self-employment
Social protection	Development of the social protection system to support the unemployed and low-income people
	Ensuring a minimum level of income and social benefits
	Protection of workers' rights, including occupational safety and health
Innovations and technological development	Stimulation of scientific research and development
	Integration of new technologies into production processes
	Support for startups and innovative companies
Regulation of labor migration	Creation of conditions for legal labor migration
	Integration of migrants in the labor market
	Protection of the rights of labor migrants

Source: compiled by the authors.

In September 2015, at the UN Summit on Sustainable Development within the framework of the 70th session of the UN General Assembly in New York, the global development goals until 2030 were defined. When formulating them, the specifics of national development of countries are taken into account. The following benchmarks have been defined for Ukraine in terms of the functioning of the labor market: provision of comprehensive and fair quality education and provision of lifelong learning opportunities for all categories of citizens; promoting progressive, inclusive and sustainable economic growth, full and effective employment and decent work for all; creation of sustainable infrastructure, promotion of comprehensive and sustainable industrialization and innovation (Decree of the President of Ukraine "On the Goals of Sustainable Development of Ukraine for the period until 2030", 2019, September 30).

The vectors of the transformation of the labor market, which in the future should contribute to the creation of a qualitatively new paradigm of its development in Ukraine and the world, should be:

- implementation of an innovative employment model based on the growth of the tertiary sector of the economy and innovative types of economic activity;
- improvement of regulatory support, organizational and information measures, social responsibility at all levels;
- increasing the level of competitiveness of workplaces and the use of a workforce with high professional competences;
- improvement of the collective agreement regulation regarding the provision of occupational safety and occupational health of personnel based on preventive principles;
- implementation by state bodies, trade unions and employers' organizations of specific practical means for developing joint decisions and reaching agreements based on the concept of decent work;
- improvement of income policy based on modernization of social standards;
- development of a social state model based on the formation of socio-economic prerequisites for a high level of quality of working life;
- in the field of corporate social responsibility, modernization of the policy on strengthening the professional resilience of employees, increasing the efficiency of interaction between companies and stakeholders.

In the conditions of martial law, the labor market of Ukraine needs significant financial support for further recovery and development. According to the Program of financial support of Ukraine from the European Union during 2024-2027, 50 billion euros will be directed to financing the state budget, stimulating investments, as well as technical support in its implementation. The program defines a number of reforms that, in particular, relate to the development of human capital, the sphere of employment and the labor market with the aim of returning citizens to Ukraine. For this you need:

- adopting a new employment policy and creating competitive working conditions;
- creation and expansion of new social housing programs;
- development of an extensive system of professional education, social protection and health care;
- development of labor culture and international relations;
- ensuring gender equality (Ukraine Facility, 2024).

The implementation of these measures will make it possible to create favorable conditions for living and working in Ukraine, ensure stable economic development and increase the level of well-being of the population, which, in turn, will facilitate the return of citizens to their homeland and stop the outflow of labor force abroad.

Conclusions

Large-scale changes at the global level, high turbulence and unpredictability of the economic system actualize the issue of ensuring its resilience. The labor market is an important element of the economic system and reflects its nature, affects the stability, well-being and quality of life of the population, forms the basis for effective reproduction of the workforce.

The trends in the development of the labor market in recent decades are determined by the impact of crises, geopolitical upheavals, globalization shifts, the intellectualization of labor, and the virtualization of social and labor relations under the influence of the COVID-19 pandemic, the transformation of social, economic, political and social network relations. This is accompanied by a weakening of the resilience of the economic system in general and the labor market in particular.

The article identifies the key factors of ensuring the resilience of the labor market in conditions of shock effects. To measure the level of resilience of the labor market, it is necessary to take into account both structural and cyclical factors (determinants). Structural factors such as demography, country capabilities, economic development, macroeconomic stability, trade vulnerability, and social inequality provide an estimate of the internal vulnerability of the labor market to shocks. Cyclical factors are absorptive capacity, adaptation, transformational capacity; institutional capacity determines how the current state policy can change the level of disorganization in a specific labor market.

Directions for ensuring the resilience of the labor market are proposed, which involve the interaction of the state, the market and business in the process of implementing measures:

- macroeconomic stabilization (inflation control, moderate interest rate support, balanced fiscal policy);
- increasing the level of employment (active employment programs);
- development of human capital (development of skills necessary for the labor market, including digital and technical);
- promotion of innovation and technological development (support of startups and innovative companies);
- formation of a flexible labor market (supporting the development of various forms of employment, including remote work and self-employment);
- social protection of seeds (development of the social protection system to support the unemployed and low-income people);
- regulation of labor migrations (protection of labor migrants' rights, creation of conditions for legal labor migration, integration of migrants in the labor market).

Human capital is the most valuable asset of any country, but this is especially felt in the conditions of martial law. The Ukrainian authorities should strive to do everything to ensure that citizens have the opportunity to compete on equal terms in the labor market, to develop skills in accordance with its requirements, including development trends in the direction of

digitalization and high technologies. In the light of European integration processes, this will contribute to raising the level and quality of life, improving the demographic situation and economic recovery in general.

The issue of institutional provision of the labor market resilience of Ukraine will be the subject of further scientific research.

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