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Kateryna Kraus, Bohdan Khmelnytskyi National University of Cherkasy
Candidate of Sciences (Economics), Associate Professor, Senior Research Officer

Nataliia Kraus, Separate Structural Unit "Institute of Innovative Education of the Kyiv National University of Construction and Architecture"

Doctor of Sciences (Economics), Professor, Professor of the Department of Development and Spatial Planning;

National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"
Professor of the Department of International Business and Logistics

Oleksandr Marchenko, Poltava institute of economics and law higher education institution "Open international university of development people "Ukraine""

Candidate of Sciences (Economics), Associate Professor, Associate Professor of the Department of Law and Finance

IMPACT OF THE SHADOW ECONOMY ON THE DEVELOPMENT OF AN INCLUSIVE LABOR MARKET

ВПЛИВ ТІНЬОВОЇ ЕКОНОМІКИ НА РОЗВИТОК ІНКЛЮЗИВНОГО РИНКУ ПРАЦІ

Анотація: Розвиток інклюзивного ринку праці важливий в часи воєнного і повоєнного відновлення економіки країни. Мета статті полягає у тому, щоб визначити основні аспекти становлення інклюзивного ринку праці в умовах тіньової зайнятості, воєнного стану і цифрової трансформації бізнесу. У статті вказано роль розвитку інклюзивного ринку праці для подолання безробіття і вирішення питань соціального захисту українців. Розглянуто фактичні відсоткові зміни розміру середньомісячної заробітної плати штатних працівників за видами економічної діяльності в Україні в 2021, 2024–2025 роках. Науковці стоять на позиції того, що інклюзивний ринок праці в Україні потребує належної інституційної підтримки та розуміння всіма членами суспільства.

Abstract: The development of an inclusive labor market is important for the country's economic recovery. Overcoming the shadow economy, both at the macro and micro levels, is a guarantee, in part, of ensuring official employment of the population, increasing its economically active part, and reducing the share of

unprotected Ukrainians who have shadow employment and are unprotected by labor laws.

The purpose of the article is to determine the priorities for the formation of an inclusive labor market in the conditions of shadow employment, martial law and digital transformation of businesses; to indicate the opportunities that a worker with physical disabilities may have if he works in a digitized and official business; to reveal tools and ways to support e-businesses working with a workforce from the inclusive market.

To achieve the specified goal, the work used methods of analysis and synthesis, generalization, and comparison, which allowed for a comprehensive study of existing scientific achievements on the issues of inclusive development of the labor market under the influence of the existing shadow economy, to solve the tasks set for scientists, and to outline the prospects for future research on the legalization of employment and overcoming unemployment among the population with physical disabilities.

The place of development of an inclusive labor market to overcome unemployment and address issues of social protection of Ukrainians is substantiated. It's noted that shadow employment doesn't guarantee paid maternity leave for childcare, preferential rest for children, or receiving a minimum old-age pension. The actual percentage changes in the average monthly salary of full-time employees by type of economic activity in Ukraine in 2021, 2024, and 2025 were considered.

The practical value of the study lies in the author's suggestions provided, in particular: in conditions of martial law, there's a need for additional training of members of society in digital skills and sign language, courses to improve the mental health of Ukrainians, courses on tolerance and integrity; an inclusive labor market in Ukraine requires proper institutional support and understanding by society.

Keywords: *gig work, gig labor market, inclusion, official unemployment, shadow employment, e-business, shadow economy, corruption, bribery, social protection*

Ключові слова: *гіг-праця, гіг-ринок праці, інклюзивність, офіційне безробіття, тіньова зайнятість, е-бізнес, тіньова економіка, корупція, хабарництво, соціальний захист*

Statement of the problem. In the last two decades, the labor market can be conditionally divided into shadow and official. This's due to high taxes on wages, progressive poverty among the population, poor tax policy, ineffective social policy, high taxes on business activities, low level of education, undeveloped ethical norms of society, lack of proper functioning of

the institute of life insurance of individuals, low level of financial literacy.

The shadow economy (SE) doesn't provide social protection for its employees. Individuals working in the informal sector don't have pensions and disability benefits. Informal employment doesn't guarantee paid maternity leave for childcare,

preferential rest for children. Work in the informal sector of the economy is labor-intensive, which makes the goods sold by informal production expensive and uncompetitive. It's "wages for labor that are the dominant source of income for most people. Therefore, an inclusive labor market is key to ensuring inclusive growth" [1, p. 2].

Analysis of recent research and publications. The focus of scientific attention of foreign scholars Z. Younas, A. Qureshi, M. Al-Faryan is focused on studying the impact of financial inclusion and the growth of the SE on economic growth using the Granger causality method [2]. Researcher S. Li concluded that for business, digitalization makes "economically efficient work, but at the same time requiring adaptive strategies for managing a decentralized and flexible workforce" [3, p. 275]. The issues of combating discrimination and finding compromises between different dimensions of labor market inclusiveness are the subject of a study by the publication team [1]. Scientists R. Espada-Chavarria, M. Diaz-Vega, R. Gonzalez-Montesino analyzed the implementation of open innovation programs to gain access to internships for university students with disabilities [4].

The scientist C. Ozgen studied the economic impact on innovation, productivity and the labor market [5]. The researcher F. Schneider paid attention to the development of the SE, analyzed undeclared work in OECD countries and indicators of informal employment [6, p. 1]. The scientist G. Lisi studied the relationship between the SE and labor market outcomes and "introduced tax evasion and undeclared

work into the reference macroeconomic model of the labor market" [7].

We consider the conclusions based on the results of the study by Professor G. Filiuk and researcher A. Posokhova in the study of the impact of AI on employment in business [8] to be valuable. They managed to present the level of predicted automation of professions and the growth in the number of jobs by 2030 [8, p. 42] and indicate the effects of productivity and capital accumulation that occur as a result of automation of business processes [8, p. 38].

We studied the importance of supporting the development of social capital in terms of inclusive development [9], the emergence of "silver" and cross-cultural entrepreneurship during the post-war economic recovery of the country [10].

Setting the task. The purpose of the article is to analyze the impact of the SE on the formation and development of an inclusive labor market; identify the features of businesses operating in the "shadow"; outline the dangers that exist for members of society who have shadow employment; assess the tools to support e-businesses operating with labor from the inclusive market.

Methods. To achieve the goal of the scientific research, a solid database was taken as a basis. A significant role belongs to theoretical and research developments on the threats of shadow business, presented in scientific publications indexed in the Scopus database, which's noted for the high quality of scientific articles and openness. This provides the work with representative and relevant materials on the issues of an inclusive labor market,

its digital development and barrier-free work.

The scientific work used various methods, in particular, the statistical method to present the volumes of the shadow sector in different countries of the world and the size of social protection in Ukraine, as well as to specify the amounts of expenditures by unemployment function. The comparison method helped to present the change in the volume of the official average monthly salary of full-time employees by type of economic activity in 2021, 2024, 2025. The methods of analysis, synthesis, induction and deduction were used to present the authors' scientific ideas on the legalization of shadow activity in business and the inclusive development of the labor market in the conditions of digital transformation and martial law.

Presentation of the main research material. Currently, four principles are identified that embody an inclusive labor market. These are accessibility, fairness, protection, and the right to vote [1, p. 2]. In the 21st century, as a result of the digital transformation of the economy, it's difficult to fully adhere to all these principles, as one has to function in the exabyte and gig economies, which are undergoing a stage of institutional formation. These economies "are defined as temporary and adaptive working conditions that facilitate digital platforms, have experienced unprecedented growth in recent years, profoundly changing the dynamics of the labor market" [3, p. 275] by digitizing it and creating a new form of employment – freelancing.

The digital transformation has led to multiple consequences for

workers, as it simultaneously provides people with increased autonomy, the opportunity to develop multiple sources of income, and an improved work-life balance that allows them to shape their own career paths, while on the other hand, growing concerns about job security, workers' rights and protections, and employment benefits are sparking debates about the economic well-being of gig workers. Signaling a new era in labor market dynamics, the gig economy is changing the "rules of the game" for the workforce and traditional employment models [3, p. 275].

Often in practice, registered businesses operating officially may be guided by vacancies in both the formal and informal sectors in order to maximize overall profits. The unemployed may seek work in both sectors. Working in the informal sector is dangerous for both the employer and the employee, as tax audits allow businesses that evade taxes to be legally and economically punished [7].

When analyzing the volume of the shadow sector in some countries of the world in 2023 (Fig. 1), it's worth paying attention to countries that are world economic leaders and set innovative, technical and technological development trends. China, the USA and India have the highest indicators of the SE, while Singapore, the UAE, Israel, Denmark, Norway and Austria have some of the smallest shares of the SE in the world. "The most influential factors in the growth of the shadow labor force are tax policy and state regulation" [6, p. 1].

In Ukraine, the volume of the shadow sector in 2023 amounted to \$34.5 billion, which for a country in

which a full-scale war was going on for the second year in a row at that time is a critical indicator and required

decisive action and an effective de-shadowing policy from the authorities.

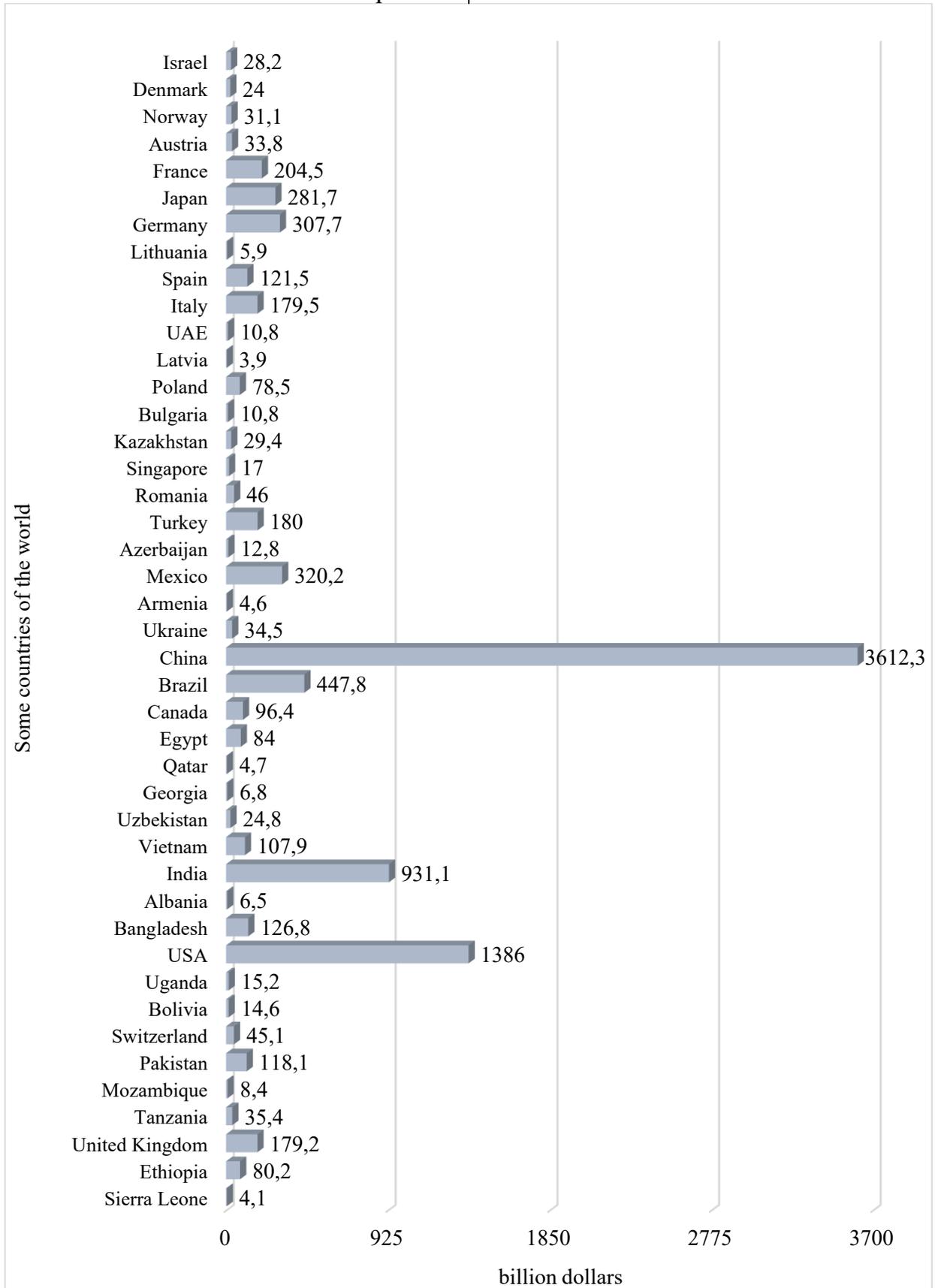


Figure 1. The volume of shadow sector in the countries of the world in 2023

Source: compiled based on sources [11]

In 2024 and 2025, the share of the SE in Ukraine grew, and the revealed facts of corruption and bribery continue to “undermine” the level of people’s trust in the government and the legislative branch of power. Currently, effective steps are needed to partially develop measures and mechanisms for a tough anti-corruption policy at the highest level. The country is dominated by the so-called institutional corruption (for example, “one political force – another political force”), but interpersonal corruption also became widespread during the war years (“an individual who wants to solve an issue quickly – a person who holds a position and uses his official position to solve a commissioned issue”).

It’s worth paying attention to the group of countries with a post-socialist past, because in most of them there was and isn’t such a scale as in Ukraine. For example, Georgia, Armenia, Azerbaijan, Latvia and Lithuania have small volumes of the SE. After joining the EU, Lithuania, Latvia, and Poland have pursued a policy of formal employment, and they are characterized by transparent conduct of official business. “Spatial selectivity of migration and diversity at the regional level, caused by immigration, can increase labor productivity and wages through the creation of new jobs, the spread of knowledge and entrepreneurship” [5, p. 1170].

But given the rapid digitalization and growth of the gig economy, workers have objective reasons to choose an alternative. Flexibility in the 21st century is the main attraction for

workers to abandon traditional ways of working, which allows them to work at an indefinite time and place, without a schedule and lower the barrier to participation in the labor market [3, p. 2760]. Individual income earned in the SE is classified as “labor income and less likely as capital income. The expected costs of non-compliance with tax legislation arise from the deterrent measures taken by the state” [6, p. 7].

In Ukraine, with the beginning of the war, many Ukrainians decided to officially resign in order to avoid mobilization. But life goes on and such Ukrainians still need to eat and pay for utilities. Such Ukrainians are not deprived of the opportunity to get sick, and therefore need treatment, they have children who need to be supported and such people still need to work, albeit unofficially. That’s, they joined the ranks of unofficially working workers in the shadow employment market.

Fig. 2 shows the indicators of social protection in Ukraine in the pre-war year 2021 and the indicators of 2023, the second year of the war. It’s worth noting that expenditures on social protection of the unemployed decreased by 11,904.9 million UAH over the 2 years under study. In 2023, expenditures on social protection in case of temporary disability decreased by 1.77 times. The reasons for this are the reduced official labor market as a result of the closure and relocation of enterprises, the mobilization of men, the migration of women, and the expansion of the unofficial labor market due to draft evaders from the ranks of the Armed Forces of Ukraine.

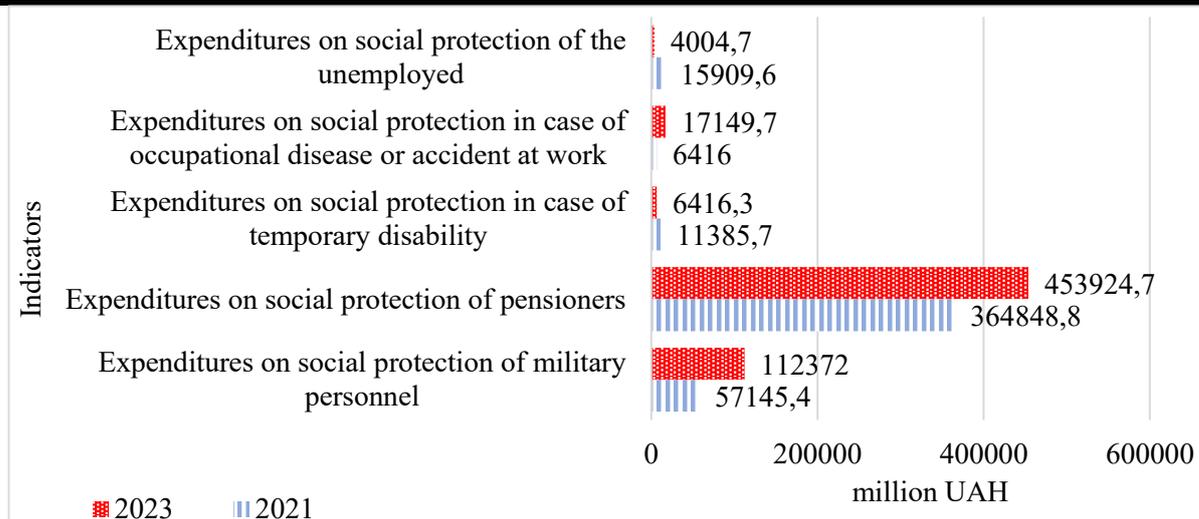


Figure 2. Some indicators of social protection in Ukraine in 2021 and 2023

Source: compiled based on sources [12]

But despite some items of expenditure that have decreased, there's still an increase in expenditure items during the analyzed period. Thus, in 2023, expenditures on social protection in case of occupational disease or accident at work increased by 10,733.7 million UAH, expenditures on social protection of pensioners by

89,075.9 million UAH, expenditures on social protection of military personnel by 55,226.6 million UAH (Fig. 2). Assistance in kind without means testing increased by 20.8 million UAH (Fig. 3), but we have a reduction in 2023 compared to 2021 in the amount of periodic payments of cash assistance without means testing by 4.18 times.

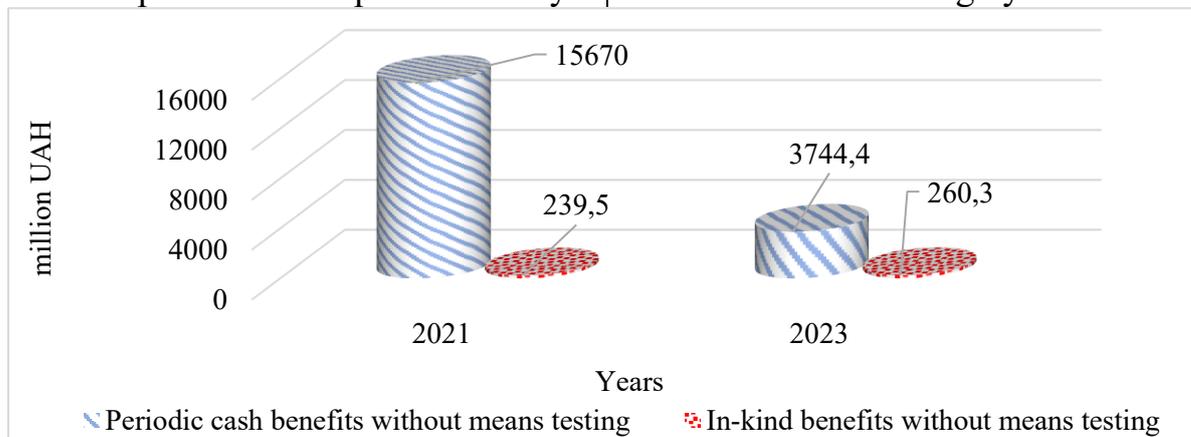


Figure 3. Specification of expenditures by unemployment function in Ukraine in 2021 and 2023

Source: compiled based on sources [12]

The experience of a number of countries around the world and Ukraine shows that working in the SE hides many dangers for a person – lack of official work experience for timely retirement and receiving decent pension payments; lack of payments in case of loss of job; lack of payments in

case of temporary disability, that's, social benefits guaranteed by the state. If a person works officially, then he can claim social benefits by age or according to situations that occur in his professional life. At the same time, in all countries and Ukraine in particular, official wage increases are held, which

also automatically receive an officially working worker or employee.

Fig. 4 presents a comparison of official data on the average monthly salary of full-time employees by type of economic activity in Ukraine for January-March 2025, 2024 and 2021, which shows that the highest salary was in information and telecommunications, financial and insurance activities in each of the analyzed years. The lowest was and

remains in the field of agriculture, forestry and fisheries (2.15 times), forestry and fisheries (2.15 times), education (1.32 times), construction (2.01 times), healthcare and social assistance (1.51 times), activities in the field of creativity, art and entertainment (1.24 times). It's worth noting that inflation and devaluation occurred in Ukraine during this period, which essentially nullified these salary increases.

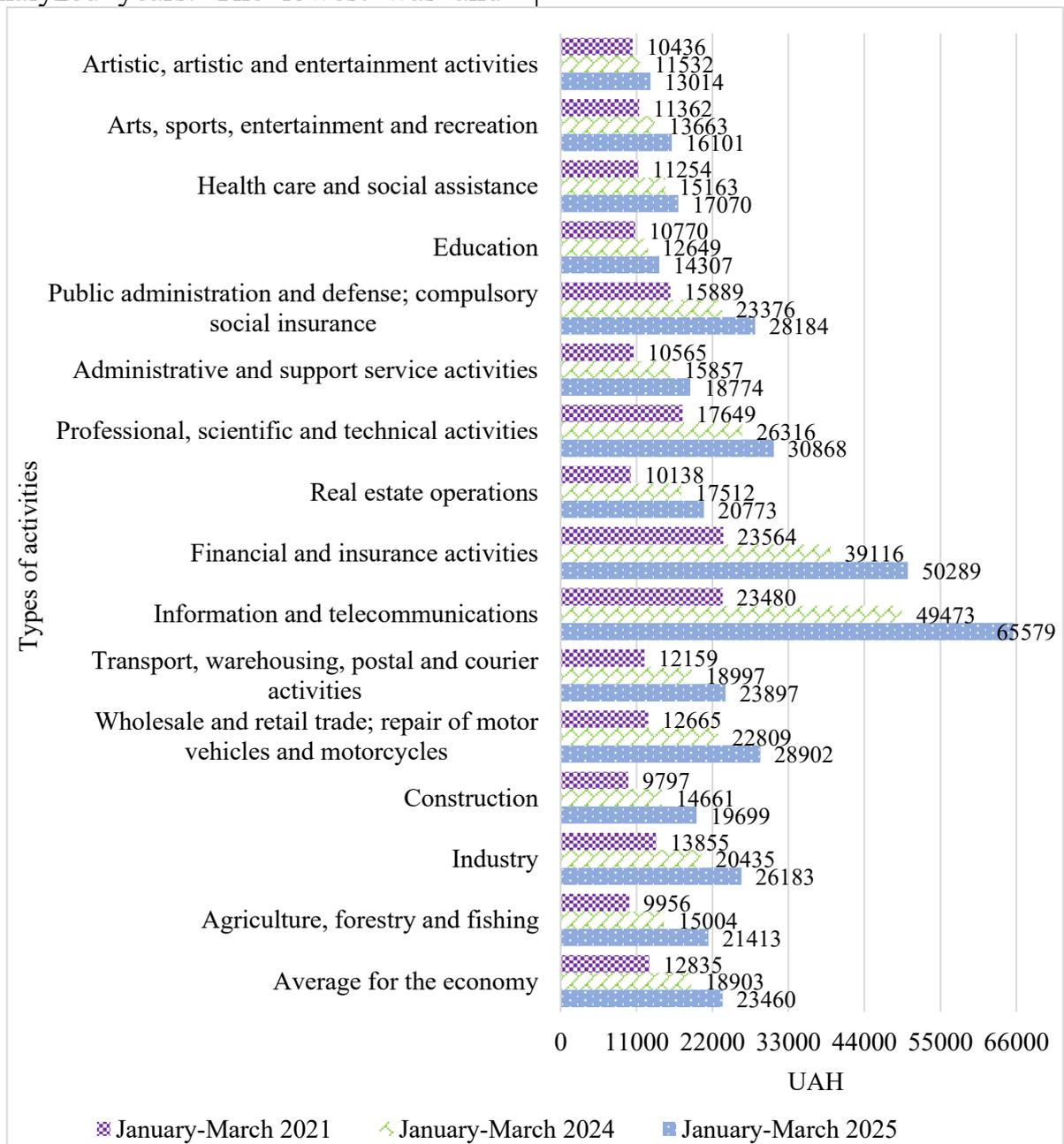


Figure 4. Average monthly salary of full-time employees by type of economic activity in Ukraine for January-March 2021, 2024–2025

Source: compiled based on sources [13]

Fig. 4 shows the change in the average monthly salary of employees in Ukraine and it's interesting that in percentage terms, the fluctuation of change is the same for almost all types of economic activity (Fig. 5), but in monetary terms, the changes differ by 25,000–51,000 thousand UAH (Fig. 4).

It's worth noting that “financial inclusion involves access to financial products and services, such as savings certificates, business transactions,

business loans, and insurance, that can help meet people’s financial needs. Due to rapid progress in financial inclusion, activity in the informal economy has declined significantly” [2]. Deviations from inclusiveness in the labor market can arise due to supply and demand factors, cyclical or structural dynamics, and other market failures, such as insurance problems or “unhealthy” competition [1, p. 20].

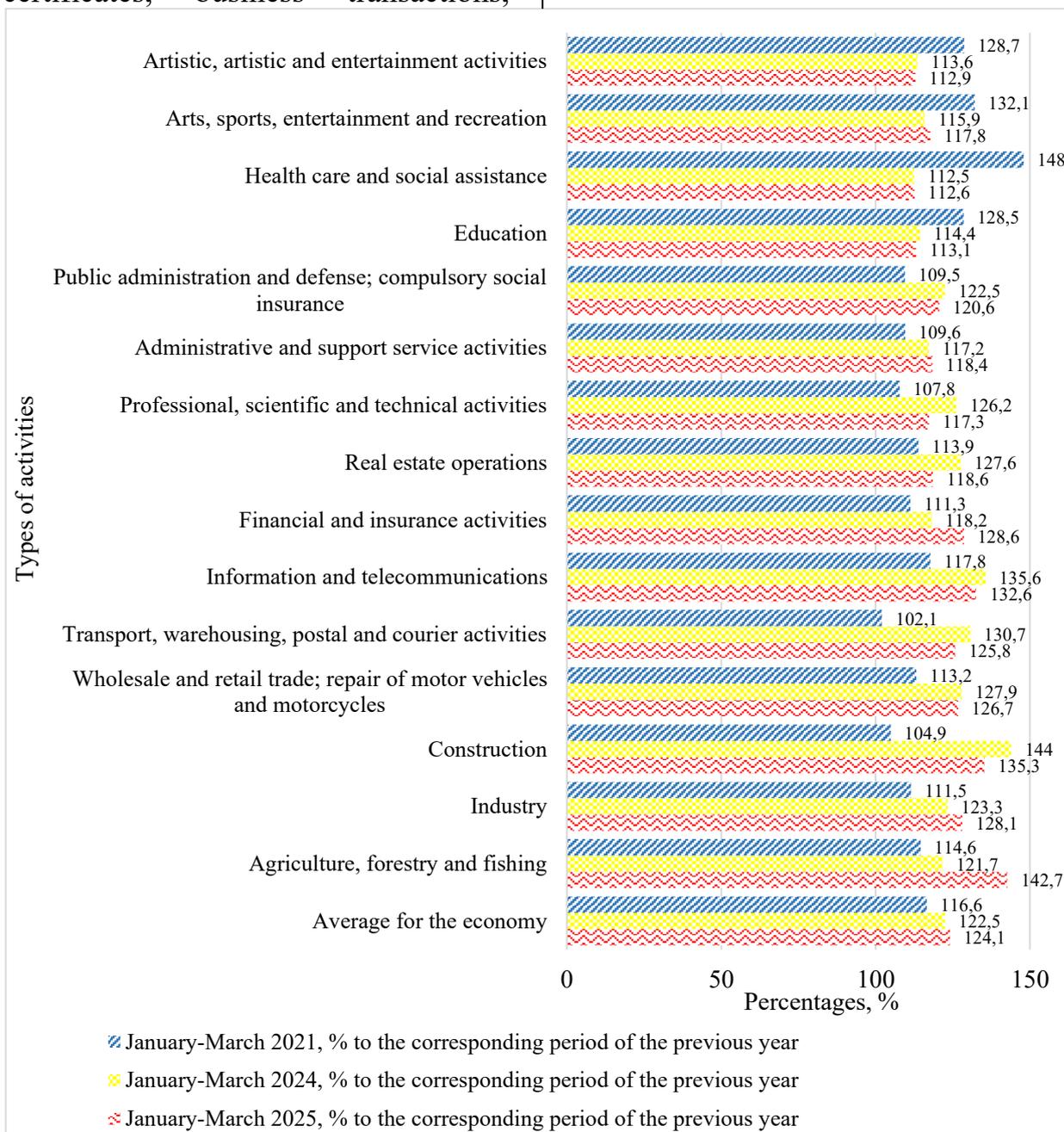


Figure 5. The average monthly salary of full-time employees by type of economic activity in Ukraine for January-March 2021, 2024–2025

Source: compiled based on sources [13]

The work performed by workers with disabilities has a positive impact on their perception of quality of life, increases social demand for them. Open innovations strengthen cooperation between employers and workers with disabilities, ensure accessibility and equality of employment [4, p. 1]. Knowledge about disability and its consequences in the workplace will increase the level of involvement of people with disabilities in the labor market [4, p. 15].

Digital transformation has brought both opportunities and challenges for both businesses and workers, changing the labor market as part of its inclusive development. Digital platforms, military conflicts, monetary factors and shadow economic relations have contributed to the development of the gig labor market. However, despite the fact that gig work provides organizations with flexibility and access to a range of skills, it's still accompanied by financial instability and the absence of traditional protections [3, p. 280].

Non-compliance with tax legislation depends on state audit activities. Individual morality also takes place in the form of psychological costs for a person engaged in shadow activity. This includes shame or regret, as well as additional monetary costs if, for example, it leads to a loss of reputation [6, p. 7]. In addition, tax audits are becoming a key tool for reducing the SE of businesses without undue harm to labor market outcomes. Tax audits have a small impact on unemployment [7], but the fear of

having an impoverished pension may motivate those employed in the shadow labor market to want to work officially and increase the chances of workers receiving a decent pension.

Conclusions from the study.

An inclusive labor market in Ukraine requires institutional support and acceptance by society. It's strongly influenced by the SE. There's now a need for additional training of members of society in digital competencies and sign language, courses on improving the mental health of Ukrainians, courses on tolerance and integrity.

In order to legalize shadow activity, the legislative branch of government should review the existing rules for conducting a classic business, but in which people with physical disabilities work, in particular, tax breaks for such business entities. If this's a virtual business, then there's a need to oblige it in particular to hire employees from the inclusive market, because the opportunity to work remotely, on a freelance basis, would allow solving the issue of employment for a number of Ukrainians with physical disabilities.

Further scientific research should be conducted in the direction of developing effective mechanisms for de-shadowing business and reducing institutional corruption. There's a pressing need to develop an inclusive labor market and prepare for the fact that after the end of the war, thousands of military personnel will have to join the ranks of the country's actively employed population.

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