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UKRAINE' WORKFORCE AND EMPLOYMENT SPHERE: MILITARY ACTIONS' IMPACT

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Abstract

The article examines and summarizes approaches to assessing losses in the employment sphere of Ukraine as a result of military actions. The negatives and losses generated by the armed conflict will have a direct or indirect long-term impact on the quality of national human potential reproduction, its productive implementation in business and non-economic spheres of life. The development of methodological and methodical approaches to the systematization of losses in the employment sphere of Ukraine due to military operations on its territory will create the prerequisites for the most complete consideration of the urgent and remote problems and risks generated by them in the consistent strategy and state policy of post-war revival, as well as the acceleration of socio-economic development. In this context, it is appropriate to allocate public costs for ensuring the functioning and maintenance of the employment sphere under martial law conditions, some of which are forced within the framework of the fastest possible increase in the efficiency of the country's economy functioning according to the criteria of optimizing its crisis resistance and defense capability. In terms of the impact on the prospects of post-war revival and socio-economic development acceleration of Ukraine, the most significant are the losses in the employment sphere due to: death, disability, reduction of life expectancy, deterioration of the quality of living, reproduction, professional and qualification potential of the workforce; destruction, reduction of the production base, destruction of schemes and mechanisms of supply, sales, logistics of enterprises, institutions, certain economic activities and specialization branches of territorial economic subsystems and the country as a whole; increase in business insurance and investment risks.

Keywords: employment sphere, workforce, socio-economic development strategy, state policy, assessment of losses and damages, war in Ukraine.

Introduction. Large-scale military actions on the Ukraine's territory continue to inflict increasingly painful losses on its economy, whole society and communities; their consequences will be felt for a long time in the periods of post-war revival and stabilization of the socio-economic situation. The negatives and losses generated by the armed conflict will have a direct or indirect impact on the quality of national human potential reproduction, its productive realization in business and non-economic spheres of life. In addition to the workforce' physical destruction and disability, to the production base' destruction of a range of sectors and branches, engineering and social infrastructure, to the deterioration of their material and technical support and logistics, the economy and the employment sphere of Ukraine suffer from losses due to:

- disparities' strengthening in the production' and business' territorial organization;
- unbalancing mechanisms and schemes of resource supply (including personnel) and products' sales of a wide spectrum of economic branches and activities;
- deepening problems with matching supply and demand in regional and local labor markets (including as a result of the qualified workers' cross-border outflow, the structural unemployment spread, a decrease in the living standards of the economically active population as a factor of its marginalization and de-skilling), as well as with the guaranteeing employees' social and labor rights.

The constructiveness of Ukraine's post-war socio-economic revival strategy will directly depend on the

systematic consideration of damages and losses caused to the workforce and the employment sphere by military actions. This approach will allow to increase the quality of measures for their mitigation, replacement or even elimination, as well as to build up and adjust an effective system of relevant state policy priorities for the short-term and long-term perspective.

Brief Literature Review. The principles and results of assessing the losses and damages caused to economy and society during armed confrontations were widely covered at world history' various stages in scientific sources, developments of relevant state and public institutions. In the recent historical period, their basis consists primarily of studies on national security, sustainable development, resilience of the spectrum of life spheres of countries and territorial communities, marketing and enterprise management, riskology [1–12].

With the beginning of the armed conflict and anti-terrorist operation (united forces' operation) in the eastern regions, similar studies became more active in Ukraine. The state and advisory public structures' developments, first of all, highlighted methodological and methodical approaches, quantitative and qualitative assessments of losses in: labor force' psycho-physiological potential, partial / full working capacity of employed; jobs' offer – both for employees, as well as for regions and local territorial communities; production base, conditions of business and sales – for employers (large, medium, small ones) and self-employed [13; 14].

With the significant expansion of the military operations' scale in February 2022, there were brought up to date the issues of a comprehensive study of the spectrum of losses and damages for the professional and qualification potential and the employment sphere aimed at accelerating the responses to the needs of internally displaced persons, businesses from the list of specialization branches and critical imports, military needs' ensuring and engineering infrastructure, as well as at substantiating requests for attracting donor and credit assistance from international and foreign organizations [15–19].

In this context, **the aim of the article** is to develop methodological approaches to the systematization of damages and losses in the Ukraine' employment sphere due to military operations on its territory as a prerequisite for the fullest possible consideration of the urgent and remote problems and risks, generated by them, in a consistent strategy and state policy of accelerating socio-economic development.

Main results. Determining the genesis, conducting quantitative and qualitative assessments of losses in the employment sphere of Ukraine as a result of military actions, outlining the prospects for their mitigation / replacement / leveling in the process of post-war revival, it is appropriate to divide the totality of negatives, problems and losses into:

- irreversible losses of labor force and persons younger than working age (employees, children and adolescents, their psycho-physiological, professional and qualification, reproductive potential);
- losses, the basis of which was laid by pre-war disproportions in the location of the production base, resources, peculiarities and shortcomings of economic practices of their use, instability and degradation of natural reproduction processes (of: resources; population, communities, settlement systems and resource, including personnel, component of their economies);
- losses that were formed and exacerbated directly due to military operations, and therefore they are subject to remediation by more or less long-term targeted measures, the passage of time, or revision of approaches to the territorial organization of settlement and economic systems.

A number of modern studies of the armed conflicts' consequences in the countries all over the world and in Ukraine [5–8; 13; 19], while assessing the damage to the territorial communities' human potential, certain economic activities and enterprises (including the current situation and prospects of their staffing, dynamics in the hired labor' conditions and remuneration level), usually considers in general the following main factors of the multiplier negative impact of military actions:

- shelling, destruction of: production base, enterprises' engineering and auxiliary infrastructure (power supply network, gas and water pipelines, etc.); residential and public buildings, as well as industrial and social infrastructure of territorial communities and regions (roads, bridges, pipelines, engineering systems of living support, provision of socially necessary services and the population social protection, etc.);
- forced shutdown of: technologically hazardous enterprises, the technological cycles of which are

classified according to their threats to the environment, settlement systems, and own employees; the spectrum of types of communal infrastructure of residential, public, industrial buildings that suffers from energy resources' lack;

- death, injury, disability, forced resettlement or evacuation of the population, which cause the workforce loss (full or partial) – in skilled workers, support staff, as well as in the human potential for its replenishment and reproduction;

- mining, seizure, appropriation, evacuation, utilization, conservation, theft (including equipment removal) of enterprises; loss of control over production resources, possibilities of their exploitation, logistics schemes and transit supply routes;

- narrowing, lack of opportunities and markets for product sales; the occurrence and growth of additional costs for restoring and preserving the enterprises' capacity, as well as losses from a certain number of failures to receive economic benefits; additional state costs for the purchase of lost resources and products on foreign markets (including resources and products from the critical import list) for national enterprises, which increasingly reduces the prospects for financing and investing the rest of the economic entities and sectors of Ukrainian economy (and therefore stimulates delays, lowering the wages' level, dismissal of their full-time and non-regular personnel).

At the same time, the negatives, losses and damages caused by military actions serve as incentives for expansion, revitalization, improvement of technological support of both the military-industrial complex, cross-border transit and logistics sectors, as well as the rest of economic activities involved in: national security' defense and maintenance (its information, energy, sanitary-epidemiological, food subtypes); import and sales of fuel and lubricant materials, products and components for autonomous electricity and heat generation, water supply systems; provision of communication, information, transport services to the population. Military equipment', weapons' expenditure and destruction stimulate the functioning of enterprises that specialize in their production, import, storage, sales, as well as in the defense infrastructure' development and maintenance. The most resistant to the military conflicts' influence, as researchers have shown, are IT enterprises, the least resistant ones are a range of industrial enterprises and trading companies that were operating in macro-regions around the armed conflicts' zones [7].

On the other hand, the forced redirection of budget and investment funds to defense sectors instead of innovative and social ones, that haven't direct relations to military operations' conduction and maintenance, became an additional factor in destabilizing the socio-economic situation in general, reducing the demand for qualified and non-regular personnel, worsening the level and proper periodicity of their salaries, workforce' cross-border migration, marginalization and de-skilling, spread of structural unemployment (both in resettlement systems near the front line and in the rear regions).

Summarizing all above-mentioned (including the dual nature of the armed conflicts' impact on economic trends and priorities, formation of workforce' demand

and supply in territorial labor markets), we should outline the following public costs for ensuring the functioning and maintaining the employment sphere in military operations' conditions:

- guaranteed expenses for wages, payments of a range of benefits and allowances to military personnel, law enforcement agencies' employees, as well as to employees at enterprises of the military-industrial complex, defense, transport and other critical infrastructure of the national, regional and settlement levels;
- expenses for wages and / or targeted assistance to employees (including those who forced to be unemployed – partially or completely due to hostilities) of a range of enterprises and organizations of the pre-war economy' structure and specialization in the territories that are not covered by military operations;
- expenses for ensuring enhanced modes of functioning, personnel potential strengthening, jobs' deployment in additional capacities of:
 - enterprises and organizations of the military-industrial complex, defense, transport and other critical infrastructure at the national, regional, settlement levels;
 - the State Employment Service structures, which take care for the formation of registers of the unemployed and people who are seeking for permanent and temporary employment, services for retraining and advanced training among local residents, forced migrants and refugees, as well as for the calculation and payment of unemployment benefits for the relevant categories of the population;
 - socio-cultural enterprises and institutions, primarily of vocational and higher education, involved in the implementation of social protection programs for local residents, forced migrants, refugees (in particular, for their professional training, retraining, advanced training, assistance in employment), as well as in the implementation of defense orders, including within the framework of the personnel training' target order, volunteer cooperation with the military-industrial complex and Armed Forces of Ukraine;
 - expenditures on logistical measures for the relocation of full-time employees of enterprises, organizations and institutions that being evacuated from front-line territories and combat zones, as well as their family members;
 - expenses within the framework of state measures regarding:
 - payment of established compensations to entrepreneurs and their employees who lost their jobs due to hostilities;
 - creation, staffing, ensuring the functioning of military and other facilities, capacities, infrastructure that are significant for increasing the country's defense capability.

A certain part of the listed costs for providing and maintaining the employment sphere are forced expenses within the framework of the country's economy fastest transition to functioning under martial law conditions, which contribute to increase of its crisis resistance (resilience) and defense capability.

In turn, direct losses in the employment sphere

during military operations, which can be quantified, include:

- a significant (up to critical) reduction in the jobs' supply in the territories of hostilities and in the regions of the civilian population mass evacuation;
- expenses for wages and / or targeted assistance to employees of the economy' state and communal sectors, who were forced to become unemployed during the martial law period, as well as for compensations and / or targeted assistance to entrepreneurs of other ownership forms, their employees, certain categories of self-employed, who were addressed to the State Employment Service within the framework of the relevant government measures [14; 16–18];
- expenses for moving capacities and staffs of enterprises and institutions of various specializations from the combat zone and front-line regions to the rear.

The above-mentioned direct losses are supplemented by indirect ones related to:

- a decrease in productivity and wages, a reduction in total and paid working hours, an increase in personnel turnover during the period of the socio-economic situation' military destabilization and at the post-war revival initial stage;
- estimates of the losses for the workforce, its productive potential (current and prospective), labor productivity in the economic activities' spectrum (both in relation to the situation at the beginning of hostilities, as well as to the forecast prospects for the development of these economic activities and the economic complex of the whole country) due to the death, injury, disability, life expectancy reduction, forced relocation of the pre-working' and working age' population;
- the expected deterioration of the physical parameters and socio-economic environment of the reproduction of the labor force and its productive potential due to large-scale economic losses, a probable decrease in living standards in the war and post-war periods, a noticeable increase in the mortality of the pre-working and working age' population, and among these categories – of reproductive age' persons.

The effects' assessment of the listed negative factors and consequences of military actions can be carried out at the macro-, meso- and microeconomic levels, that is, in relation to the whole Ukrainian economy and its territorial subsystems, certain branches and types of economic activities, individual business entities of the same, similar and different specialization. At the estimations' initial stage, the components of direct and indirect damages and losses for the workforce, employment sphere and enterprises it is expedient to determine in natural units, some of them that are related to wages, other payments, property, real estate, production resources and consumables, etc. – in value terms. While advancing, methods that are widely used in the world usually standardize quantitative and qualitative natural assessments (in particular, losses of productivity, psychophysiological labor potential of the employed and able-bodied population) through: current and comparable prices for resources and products of economic entities in comparison with nominal, actual, comparable cost of workforce, data on the labor activity duration of an average individual in different economic sectors; experience in insurance of

property, real estate, risks of business entities, as well as mandatory and voluntary personal and corporate insurance of life, health, productive potential, labor safety in production; already developed court precedents for establishing the content, volume and cost of losses.

In the modern world-wide practice estimation of losses and damages due to military actions often used for: substantiating the cost and content of donor and credit (financial, resource) aid programs of foreign and international structures; determining a value (market, insurance, collateral, investment), creditworthiness, as well as risks of enterprises and companies management. Therefore, in general, the methodology of the losses' research covers: quantitative and qualitative assessment of damages and consequences caused directly by military actions; quantitative and qualitative assessment of possible risks and negative consequences of losses and damages in a more or less distant perspective; quantitative evaluation of internal and external possibilities of losses compensation (volume, sources, ways), as well as their qualitative assessment for a number of such parameters. In particular, the assessment of the losses and damages of a separate enterprise generated by military actions stipulates opportunities' identification and measures' determination for their minimization, compensation, leveling through involving production capacities, resources, other property and the workforce of the business entity itself.

The possibility of the most complete assessment of losses and damages for the Ukrainian labor force and employment sphere, generated by the military confrontation, we should admit as relative. Generalized damage from the impact of military operations' negative factors, as well as the costs of their consequences' eliminating after the end of the martial law period (i.e., the totality of relevant direct and mediated losses) can be described and calculated for each specific moment of time, as well as reassessed in the future with the additional information obtaining about the current events and their distant consequences for the national economy, its demographic, professional and qualification potential, productivity on the scale of the whole state and territorial communities.

Conclusions. The development of methodological and methodical approaches to the assessment of the Ukrainian employment sphere losses due to military operations is a necessary component of substantiating the priorities and measures of the strategy of post-war revival and socio-economic development acceleration, including through the tools' application of external and international grants, donor aid and loans, stimulation of internal and cross-border business and investment initiatives, improvement of quality and resilience of mechanisms and processes of workforce reproduction, use and social protection.

While characterizing the losses and damages caused to the employment sphere during the armed conflict, which will complicate the post-war revival problems, primarily it is reasonable to single out the public costs for ensuring the employment sphere functioning and maintenance in the hostilities' conditions. Part of such expenditures (in particular, for: raising the level of wages, assistance and additional payments to military personnel, employees of enterprises of the military-industrial complex, defense, transport

and other critical infrastructure; expansion of such objects' and facilities' network, provision of enhanced operation modes of a range of enterprises and institutions, including socially oriented ones; relocation of enterprises and workers from front-line territories and combat zones to rear regions, etc.) are forced measures within the framework of the country economy' fastest possible transition to functioning in martial law conditions, which contribute to increasing its crisis resistance and defense capability.

At the same time, we should singled out direct losses in the employment sphere during the war, caused primarily by: workforce' death, disability; destruction, reduction of enterprises, institutions, as well as job offers in the territories of hostilities and in the regions of the civilian population mass evacuation; expenses for wages, compensations, targeted assistance for employees, entrepreneurs, self-employed, who were forced to be unemployed. In turn, indirect losses from the armed conflict include: a decrease in productivity and wages, a reduction in total and paid working hours, an increase in staff turnover, a spread of the workforce' structural unemployment, marginalization and de-skilling in territorial communities; losses from causing damage to life, health, reproduction, psycho-physiological, professional and qualification, as well as other components of the workforce' productive potential in the multi-term perspective of the post-war period; various manifestations of the deterioration of the socio-economic environment of the workforce' living and reproduction generated by military actions.

In the context of the impact on the prospects of Ukraine' post-war revival and socio-economic development acceleration, the most significant are the employment sphere losses due to: death, disability, reduction of life expectancy, deterioration of the life quality, reproduction, professional and qualification potential of the workforce; destruction, reduction of the production base, breaking of schemes and mechanisms of supply, sales, logistics for enterprises, institutions, certain economic activities and specialization branches of territorial economic subsystems and whole country; increase in insurance and investment risks of business.

On the other hand, it is advisable to take into account the double genesis of war-generated employment sphere losses, which manifests itself through the allocation of losses that were formed and exacerbated directly due to military actions, as well as the consequences of the negative factors' influence, the basis of which was laid by pre-war disparities in the location of the production base, resources, workforce, as well as by features and shortcomings of social and business practices of their use, reproduction.

Overcoming the problems of the economy and its employment sphere, threats and risks to the productive functioning and reproduction of the Ukraine' labor force, that continue to be inflicted by military actions, requires long-term close cooperation of the state, business entities, external and international donors and borrowers within the framework of the strategy of accelerating and increasing the socio-economic development resilience on the basis of diversification, territorial organization improvement, innovative modernization of the national economy. It is expedient to base the selection and content of priori-

ties and areas of such cooperation primarily on assessments of direct and mediated damages, losses and negative consequences of the armed conflict in the near and distant perspective.

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