

## Секція 1

# ІННОВАЦІЙНІ ТРАНСФОРМАЦІЇ ОБЛІКОВО-АНАЛІТИЧНОГО ЗАБЕЗПЕЧЕННЯ УПРАВЛІННЯ БІЗНЕСОМ НА ШЛЯХУ ДО ЄС

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### **ASSESSMENT OF THE WAR IMPACT ON THE SUSTAINABLE DEVELOPMENT GOALS: ACCOUNTING AND ANALYTICAL PROVISION**

The war has a significant impact on all aspects of the society, including the Sustainable Development Goals achievement. In the context of armed conflict, it is especially important to assess how it affects economic, social and environmental indicators of the Sustainable Development Goals achievement. Accounting and analytical provision plays a key role in this process, providing business structures with the data and analytical tools necessary for well-informed decisions making. Accurate accounting and in-depth analysis make it possible to identify the main problems and develop effective strategies of minimizing the negative effects of the war on the Sustainable Development Goals achievement.

Military operations in Ukraine have become an existential challenge for domestic businesses. Many successful businesses have been destroyed or displaced and are forced to start from scratch. However, despite the difficult process of relocation, entrepreneurs continue to work, strengthening their resilience and ability to adapt to the uncertainty and chaos caused by the crisis, and formulate strategic guidelines for the accelerated economic growth during post-war recovery. One of the reasons for the emergence of crises both on a national scale and at an individual enterprise during martial law and post-war recovery may be the imperfection of the accounting system, which manifests itself in the lack of the ability to timely reflect the emergence of risks and threats to the activities of enterprises and directly affects economic activity. As Professor V. Zhuk rightly noted, the role of accounting sciences in solving the problem of assessing the damage and losses caused to enterprises by the war, informing the policy of compensation and reimbursement, and making management decisions on the further use of damaged assets of enterprises and business transformation is extremely important [1].

Development of new business models for commercial activities under martial law and their digitalization increase the information flows and requirements for the efficiency and quality of data recording, processing and analysis for effective management decision-making in compliance with progressive socio-ecological and economic life standards for current and future generations. The practical solution of information provision of management decisions making issues depends on the development of adequate accounting and analytical methodology. Solution of this complex and multifaceted problem requires modernization of accounting and analytical technologies in order to develop a single information and communication space of relevant data focused on meeting the information needs of users at all levels through accountable recovery management.

In 2021 United Nations Conference on Trade and Development (UNCTAD) updated the recommendations for reporting of the sustainable development indicators, which were set out in «Guidelines for Core Indicators for Reporting by Business Enterprises on their Contribution to Sustainable Development Goals» [2]. Working groups headed by deputy ministers have been set up to develop a national SDG monitoring system with statistical data on the national indicators established for each goal. Government officials, in cooperation with partners from international organisations such as the UN and UNDP, have updated the targets for achieving the SDGs in Ukraine. As Deputy State Secretary of the Cabinet of Ministers Oleh Voitovych noted: «The main results of our work are that we now have updated targets for all 17 Sustainable Development Goals. They were developed taking into account the martial law, the practice of ministries and the State Statistics Service. In total, we have 100 national targets and 305 indicators that will characterize the achievement – or failure to achieve – these targets» [3].

To determine the impact of the war on the identified 305 Sustainable Development Goals achievement indicators it is advisable to adapt the methodology developed by Mario Arturo and Ruiz Estrada, which is based on the war economic destruction level simulator computing (WEDL-Simulator) and involves a number of key indicators determination, namely: the war damage level rate; the armed attacks intensity rate; the war destruction magnitude rate; the inflation and unemployment levels in war ratio. These indicators show simultaneously the different levels of vulnerability and devastation arising from any war crisis. These five indicators are determined by the collection of historical data from any war that have impacted any worldwide, whereby any war crisis is defined according to certain intervals of time and the magnitude of destruction on loss of material resources (infrastructure) and non-material resources (human lives). According to WEDL-Simulator, analysis of any war crisis event from an economic point of view must take into account the production reduction (national output) and human capital mobility (immigration) [4]. Today, due to the war, Ukraine is facing production decline due to the infrastructure destruction as well as significant outflow of human resources that are inherent in our country and have the greatest impact on its economy. At the same time, the war in Ukraine is ongoing, which makes it difficult or impractical to determine individual indicators. Therefore, we suggest to turn to the experience of natural disaster vulnerability assessment (NDVE) [5].

Our country has been at war for the ten years already, and despite the fact that the intensity of hostilities is changing, we propose to proceed from the assumption that irregular fluctuations of various kinds of hazards occur constantly. This applies to the economic, social and environmental consequences of war and, accordingly, will potentially affect the level of all indicators of the Sustainable Development Goals achieving. In order to adapt the NDVE Model, we propose to calculate the growth rate of the war's impact on the achievement of the relevant SDGs over the past 10 years, which corresponds to the SDG Monitoring Roadmap and the period during which Ukraine has been suffering from Russian aggression consequences. To calculate the level of influence on individual indicators, we apply the formula where  $(\alpha_i)$  equals the total amount of a particular type of military effects during the current year ( $\Sigma\lambda_0$ ) minus the total amount of the same type of military effects over the past 10 years ( $\Sigma\lambda_{n-1}$ ), divided by the total amount of the type of military effects over the past 10 years ( $\Sigma\lambda_{n-1}$ ) (formula 1). Computing the impact of military effects on different SDG indicators provides us with different growth rates, which, when aggregated into an integral indicator, allow not only investigate the impact of war on the individual SDGs achievement, but also estimate level of national vulnerability to military action.

$$\alpha_i = \Sigma\lambda_0 - \Sigma\lambda_{n-1} / \Sigma\lambda_{n-1} \quad (1)$$

where  $i$  - indicator serial number.

At the business entities level accounting and analytical processes play an important role in the sustainability reporting. An important aspect of those processes is the development of systems of metrics and methods of financial and non-financial indicators assessing. The proposed technique ensures accurate and reliable assessment of the company's performance in various areas and can be used as a basis for determining sustainability indicators at the national level.

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