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# STRATEGIES OF DEVELOPMENT OF PRODUCTION ENTERPRISES IN UKRAINE: POST-WAR RECONSTRUCTION

The conditions of war can lead to significant losses for domestic manufacturing enterprises, which are caused by many factors. These losses are caused by a catastrophic decrease in demand for domestic products and the overall quality of life of the population, which also reduces the demand for products and further complicates the already difficult situation for the relevant economic entities. In addition, such losses are caused by negative changes in the market and other environments, which may require changes in approaches to production and product sales. This situation is not simple; however, if production enterprises manage to maintain their functionality or potential for recovery during the post-war reconstruction period, these entities will have significant development opportunities provided that situational strategies for post-war development are developed. Therefore, the article examines the peculiarities of forming a situational development strategy for production enterprises in Ukraine during the post-war reconstruction of the national economy and infrastructure of the country. The article emphasizes the basic attention to the fact that the content of development strategies for production enterprises in Ukraine during the post-war reconstruction is situational. This specificity is since only situational strategies and reactive measures characteristic of them are always used depending on current circumstances to ensure success in a particular situation. Signs of situational strategies may include adaptability (developed to address specific problems or situations, thus they can be changed or adapted depending on circumstances), short-term focus (oriented towards achieving a specific goal or solving a specific problem within a limited time frame), experimental nature (as such strategies may be experimental involving new ideas and approaches to problem-solving or improving outcomes), innovativeness (can stimulate innovative approaches and practices that help solve problems and develop the enterprise). For further research in this direction, it may be useful to examine in more detail specific ways and methods of attracting investments to restore production capacity, as well as to study the experience of other countries in post-war recon-struction and industrial development. Additionally, it would be worthwhile to explore the potential applications of innovative technologies in restoring production capacity, which could contribute to a rapid and effective recovery of the country's economy.

*Keywords:* action plan, reconstruction of production enterprises, unproductive constraints, restoration of functionality. *JEL classification:* A14, C80, C88

## СТРАТЕГІЇ РОЗВИТКУ ВИРОБНИЧИХ ПІДПРИЄМСТВ УКРАЇНИ: Повоєнна відбудова

Умови війни можуть призвести до значних втрат для вітчизняних виробничих підприємств, які зумовлені багатьма факторами, зокрема катастрофічним зниженням попиту на вітчизняну продукцію, зниженням якості життя населення (що також скорочує попит на продукцію та ускладнює ситуацію для відповідних суб'єктів економічної діяльності). Крім того, такі втрати зумовлені негативними змінами ринкового та іншого середовища, які можуть вимагати змін у підходах до виробництва та продажу продукції. Таке становище не є простим. Проте, якщо виробничим підприємствам все ж таки вдається зберегти свою функціональність або потенціал для її відновлення до відновлення економіки, інфраструктури, міст та інших інституцій після війни, ці суб'єкти отримають значні можливості для розвитку за умови розробки ситуативних стратегій повоєнного розвитку. Відтак, у межах статті реалізований розгляд особливостей формування ситуативної стратегій розвитку виробничих підприємств України в умовах відновлення національної економіки та інфраструктури країни після війни. Основний акцент зроблено на тому, що зміст стратегій розвитку виробничих підприємств України в умовах повоєнної відбудови має бути пов'язаний з ситуацією, в якій потрібно приймати рішення або діяти.

Ключові слова: план дій, відбудова виробничих підприємств, непродуктивні обмеження, відновлення функціональності.

**Statement of the problem.** The conditions of war have caused significant losses for domestic manufacturing enterprises, which the IMF estimated as of March 2022 at 35% of GDP [4]. These losses are caused by several factors. Firstly, they are due to the catastrophic significant reduction in demand for domestic products (which in turn led to a decrease in production and profits). For example, in just January-February 2023, the volumes of steel produced by metallurgical enterprises decreased by 79.3% compared to last year's figures [4–5]. The largest operator in this market, "Metinvest," has announced that its metallurgical enterprises are in a mode of hot conservation or tem-

the decrease in the overall quality of life of the population, which also reduces the demand for products and further complicates the already difficult situation for the relevant economic entities. Thirdly, such losses are caused by the negative changes in the market and other environments (which lead to a shortage of electricity, an increase in production costs, and a decrease in demand) that may require

porary conservation of technological equipment. Similar

trends are characteristic of enterprises in other industries.

According to the latest surveys by the EBA, only 17% of

companies are working at full capacity, while one-third are

not working [4]. Secondly, the losses are directly related to

changes in approaches to production and sales of products (related to a maximum reduction of product range, reduction in production process control costs, etc.). The current situation is not an easy one. However, if manufacturing enterprises manage to preserve their functionality or potential for its restoration until the recovery of the economy, infrastructure, cities, and other institutions after the war, these entities will have significant opportunities for development provided that situational post-war development strategies are developed.

Analysis of recent research and publications. The significant contribution to the research on the problem of forming adequate and effective action plans that could ensure post-war recovery for enterprises was made by Ukrainian scientists such as Voloshyna-Siydey V., Yevsieieva O., Maslyhan O., Syrtseva S., Nesterenko O., Harkusha S. [1], and Rikhlytskyi V. [4]. Highly appreciate their contribution to solving various theoretical and practical issues related to the industrial enterprise's development in Ukraine. However, it should be noted that many post-war recovery problems remain controversial and insufficiently studied, making it difficult to ensure effective solutions in the future. In particular, these issues may become relevant again by the end of 2023 if Ukraine reaches the state border of 1991.

**Objectives of the article.** The purpose of the article is to discuss the peculiarities of forming a situational strategy for the development of production of Ukraine enterprises under the restoration conditions of the national economy and infrastructure after the war.

Summary of the main results of the study. The authors draw attention to the fact that the end of military actions creates conditions for active post-war reconstruction. For example, after the Second World War, Ukraine suffered significant losses, which amounted to more than 25% of the total volume of industrial production in the country. However, after the war ended, the restoration of production enterprises from 1945 to 1950 was widespread, thanks to the use of strategies for restoring production capacity. We can state that the classic post-war reconstruction of production enterprises is a situational process that involves reactive restoration and development of production capacity that was damaged or destroyed as a result of the war (the volume depends on the scale and consequences of military actions, which are currently not completed) [1]. In the Ukraine of that time, such reconstruction had an atypical character, since the arsenal of response measures within the strategies for the reconstruction of production enterprises was limited due to Soviet occupation. However, even the examples of industrial restoration at that time are considered a vivid confirmation of the similarity of the process that is launched even in conditions of limited resources and unproductive constraints on economic activity (which were imposed by the system of planning the development of production enterprises introduced by the Soviet authorities), and therefore also available to strategic production enterprises. In particular, a significant number of industrial enterprises were built and restored within five years after the war. According to official statistics, by 1950, 90% of Ukraine's industry had already been restored to the level of 1940. Furthermore, many enterprises were modernized, which allowed for an increase in their productivity and the quality of their products.

According to forecasts, there are currently good chances to liberate the occupied part of the southern regions,

advance in the east, and create at least the conditions for the return to Crimea. Therefore, the process of post-war reconstruction in Ukraine, which began on Thursday at 3:40 am on February 24, 2022, is considered the nearest perspective, driven by natural processes of responding to the tasks of destruction and the need for restoration (including the need to eliminate the destructive consequences of the conflict and rebuild production capacities, infrastructure, and the social sphere).

Ukraine has rid itself of Soviet occupation and achieved independence through legal means (following the adoption of a series of documents proclaiming state sovereignty). Therefore, this time the post-war reconstruction is expected to be faster and more flexible, as it will not be constrained by situational factors and will have a high level of responsiveness (as it will occur without unproductive restrictions in the arsenal of development strategies for industrial enterprises).

Therefore, the outlined reconstruction requires a series of measures implementation aimed at the situational replenishment of human and material-technical potential of enterprises, as well as attracting investments to finance the recovery process. Among the main strategies for the development of Ukrainian industrial enterprises that can be used in the context of post-war reconstruction, we have identified:

1. Strategy of functionality restoration (applied in the case when the production facilities of the economic entity have not been affected or are characterized by minor damages that can be quickly rectified). This strategy aims to return the enterprise to its operational state and achieve or improve its production processes. Therefore, its content depends on the condition of the economic entity. Possible directions of such a strategy are shown in Figure 1. In particular, these directions include:

1) Restoration of production processes and elimination of weak points.

2) Diversification of production through the creation of innovative products, restoration, and expansion of the product range.

3) Implementation of advanced technologies and improvement of production processes to enhance efficiency and competitiveness.

So, the direction of restoring production processes and eliminating weak points formed by destruction or damage during the war is applied if the enterprise is in a state of conservation.

Note that within this direction, an essential component of the strategy is a plan for restoring production processes, which includes measures such as:

1. Reconstruction of damaged facilities.

2. Replacement of faulty production machinery and equipment.

3. Restoration of power grids and other communication systems that ensure uninterrupted operation of the enterprise.

The development of this plan should be preceded by diagnosing the condition of all production facilities, machinery and equipment, and communications to identify those that were not damaged as a result of the war and are capable of functioning fully. This plan includes measures such as:

1. Additionally, a component of the functionality restoration strategy is a plan for eliminating weak points that have arisen due to destruction or damage, which includes measures such as:



Figure 1. Directions of the strategy for restoring functionality of production enterprises in Ukraine during the post-war reconstruction period

Source: formed based on [1; 3; 6]

2. Replacement of faulty equipment and repairs.

3. Testing of production processes to reduce costs and increase productivity.

4. Implementation of new technologies and production methods to improve efficiency and product quality.

5. Enhancement of employees' qualifications and ensure the necessary level of motivation and comfort in the workplace.

The development of this plan should be preceded by a review of production processes to identify problem areas and determine the causes of their occurrence. As other essential components within this direction, we can highlight a personnel policy plan (since the restoration success depends on the quality and motivation of the employees). Various measures can be utilized for this purpose, such as training and development of staff, creating comfortable working conditions, and implementing incentive systems. The components mentioned essentially create the responsiveness of strategic measures.

Another direction of the strategy for restoring the functionality of production enterprises during the post-war reconstruction period in Ukraine is the diversification of production through the creation of innovative products, as well as the restoration and expansion of the product range. This approach is ideal for enterprises that have not been at full capacity operating.

It should be noted that to implement this strategy in this direction, several preparatory measures need to be taken, including [1; 6]:

1. Studying the technological capabilities of the enterprise.

2. Assessing the available resources and the need for additional investments.

3. Researching market trends and consumer needs.

4. Evaluating the competitiveness of the company's products compared to competitors.

5. Analyzing the risks and opportunities of implementing the diversification strategy.

An essential strategy component for developing new products or modifying creation plans existing ones to meet market needs and support business growth. As a result, this plan should include flexible and responsive measures (Figure 2) to adapt to market demands.

Based on the given information, it is evident that the variability and responsiveness of the outlined measures are generated and directed by market research and consumer requirements analysis. This will enable the identification of potential markets for new or modified products. Additionally, the variability and responsiveness of the measures can facilitate competitors and their product analysis, as well as the identification of the key competitive advantages and disadvantages of the manufacturer's products in the context of post-war recovery.

As additional essential components in this direction, one can highlight the personnel policy plan, which should ensure the formation of a team of professionals responsible for implementing the strategy and definition of their tasks and responsibilities.

The direction of the strategy for restoring the functionality of production enterprises in Ukraine during the postwar reconstruction period involves the implementation of advanced technologies and the improvement of production processes to enhance efficiency and competitiveness. This direction is recommended if the production enterprise did not cease operations during the military conflict



Figure 2. Steps in the plan for creating new products or modifying existing ones

Note: Areas of variability and responsiveness: (1) directions for creating technical capabilities of the enterprise; (2) directions for selecting and formatting the necessary resources for product production; (3) appearance, shape, color, materials, etc.; (4) functional and technical characteristics of the product.

Source: formed based on [1–2]

but requires restoration of efficiency and competitiveness due to the complications in functioning and development caused by the conflict, including restrictions on sales, logistics, and loss of skilled labor.

It should be noted that an essential component of the strategy in this direction is a plan for implementing new technologies and improving production processes, which may include measures such as:

1. Development and implementation of advanced technologies that meet the requirements of the modern market.

2. Optimization of production processes to reduce production costs and increase productivity.

3. Enhancement of staff qualifications to adapt to new technologies and production processes.

4. Introduction of innovative solutions to improve the competitiveness of products.

It should be noted that each of the outlined measures has significant variability and reactive content, depending on the format of the analysis results of the current state of production, identified weaknesses, and problematic areas. This is illustrated by the data in Figure 3.

New technologies can potentially reduce production costs and improve product quality, enabling businesses to compete in the market and ensure operational stability. However, implementing cutting-edge technologies and refining production processes can be quite costly, so it is important to weigh the costs and expected benefits of such measures.

2. The strategy for the restoration of our own production capacities is focused on rebuilding specialized production facilities, such as profile workshops and studios, through attracting investments to replenish capital and finance post-



Figure 3. Steps of the plan for implementing new technologies and improving production processes

Note: Areas of variability and responsiveness: (1) new technologies, opportunities, and technology implementation projects, timelines, and expected results; (2) directions for increasing efficiency and competitiveness; (3) processes and technologies that will be used (including those for reducing human dependence and increasing process accuracy and speed); (4) specifics of personnel training and preparation, the peculiarities of implementing new technologies into the production process; (5) reduction in production time, increased labor productivity, waste reduction, and product quality improvement; (6) product quality and loss levels, the process of raw material and material supply, production planning, and product distribution; (7) the level of production organization and cost control.

Source: formed based on [1-2]

war reconstruction efforts. This will be achieved through investment proposals and promoting the business potential of the enterprise at the international level. This strategy will encompass specific measures, which may vary significantly, as depicted in Figure 4.

Based on the provided information, it is evident that the variability and reactivity of the outlined measures are produced and directed by the results of the analysis of the residual internal capacities of the enterprise and determination of the necessary efforts to restore its operations after the war, as well as the search for investment sources and development of investment proposals to attract investors.

The variability of the outlined measures creates a significant diversity and lack of stability in terms of the components of the strategy in this direction. In our opinion, it can be shaped by the following plans: 1) a plan for restoring own production capacities; 2) a plan for attracting investments for projects to restore own production capacities; 3) a plan for preparing personnel to work in the conditions of enterprise restoration after the war; 4) a plan for the development of new production capacities.

3. The strategy of joint recovery of production capacities is oriented toward partnership with other enterprises and institutions to jointly implement large-scale projects for creating new universal production facilities (factories, plants with capacities for the various products production). This strategy summarizes homogeneous reactive measures (Figure 5).

Based on the provided information, it is evident that the responsiveness of the outlined measures is generated and directed based on the results of searching for potential partners (among other enterprises and institutions with relevant production capacities and technologies), joint market needs analysis, and the development of a joint project concept, as well as the search for funding and attracting investments from potential investors.

Indeed, in this context, the content of the outlined strategies is situational, meaning it is flexible and can be adapted and adjusted depending on changing conditions and needs.

**Conclusions.** Based on the research findings, it has been noted by the actor that although the content of the strategies for the development of production enterprises in Ukraine in the conditions of post-war reconstruction should be linked to the situation where decisions or actions need to be taken (including whether to apply conservation



Figure 4. Measures of the strategy for restoring own production capacities

Note: Areas of variability and reactivity: (1) directions for attracting investors; (2) content of projects for restoring own production capacities; (3) directions for improving the qualifications of employees and attracting new specialists; (4) directions that allow the enterprise to maintain competitiveness and develop in the future; (5) development of new workshops and production areas.

Source: formed based on [1–3; 6]





Note: Areas of variability and responsiveness: (1) directions for management and coordination of all project stages; (2) list of responsible individuals and partner departments involved in project implementation; (3) content of technical specifications and planning of production processes for new versatile production facilities; (4) directions and specifics of work execution and production launch.

Source: formed based on [1-3; 6]

of production capacities, operate at reduced capacity, or full functionality), the overall goal of all strategies will be the restoration and development of production capacities, attracting investments, and recovering lost markets.

The characteristics of situational strategies can include adaptability (developed to address specific problems or situations, so they can be modified or adapted depending on circumstances), short-term focus (aimed at achieving a specific goal or solving a specific problem within a limited timeframe), experimental nature (as these strategies can be experimental, involving new ideas and approaches to problem-solving or improving outcomes), and innovative-ness (they can stimulate innovative approaches and practices that help address problems and develop the business).

As such, the arsenal of these strategies is quite specific and may include:

1. Indicators of situational strategies can include adaptability (developed for the Recovery Strategy, which can be applied if the production facilities of the economic entity have not been affected or are characterized by minor damages that quickly repaired).

2. The strategy for restoring its production capacities can be applied provided that the reconstruction of specialized production facilities, such as profile workshops and studios, is necessary. To achieve this, various measures are required, including attracting investments to replenish capital and financing post-war reconstruction. This can be done through investment proposals and by promoting the business potential of the enterprise at the international level.

3. The strategy for joint restoration of production capacities can be applied provided that the need arises

for universal production facilities, such as factories and plants that have the capacity for manufacturing diverse products. To achieve this, conventional measures focused on partnerships with other enterprises and institutions are required for the collaborative implementation of large-scale projects aimed at creating something new.

For further research in this direction, it would be worthwhile to explore in more detail specific ways and methods of attracting investments for the restoration of production capacities. Additionally, studying the experiences of other countries regarding post-war reconstruction and industrial development would be beneficial. Furthermore, investigating the possibilities of utilizing advanced technologies in the restoration of production capacities is also advisable, as it can contribute to a fast and efficient recovery of the country's economy.

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