

**Current issues of
security management
during martial law**

Scientific monograph

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The authors of the book have come to the conclusion that to ensuring the country's security in the conditions of military aggression, it is necessary to use the mechanisms of protection of territories and population, support of economic entities, international legal levers of influence on the aggressor country. Basic research focuses on assessment the resource potential of enterprises during martial law, the analysis of migration flows in the middle of the country and abroad, the volume of food exports, marketing and logistics system. The research results have been implemented in the different decision-making models during martial law, information and economic security management, formation of personnel potential and assets of enterprises, food, energy and environmental security management, use of budgetary levers and financial instruments. The results of the study can be used in the developing of directions, programs and strategies for the post-war recovery of Ukraine's economy and the attraction of foreign investments in the regions, decision-making at the level of ministries and agencies that regulate security management processes. The results can also be used by students and young scientists in the educational process and conducting scientific research on the problems of ensuring the country's security.

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INTRODUCTION

The modern security environment is characterized by a high degree of variability and unpredictability. Military aggression on the part of Russia requires quick actions to respond to new challenges for all branches of the national economy. The uncertainty of the situation significantly complicates the formation of national security policy by states, requires diversification of measures, strengthening of traditional security mechanisms with measures in the field of building national stability and security management. Therefore, the solution of many tasks of the functioning of the economy during martial law directly depends on the speed of making administrative decisions, the adoption of a number of regulatory and legislative acts, the activation of the international community and comprehensive support in the field of security. All of the above actualizes the search for new, theoretically grounded approaches to ensuring the security.

Ensuring security during martial law requires the accumulation of a significant amount of material, financial and human resources, the reorientation of the economy to military needs, support of the country's defense capability and adequate resource provision, the use of international legal measures to deter the aggressor country and the introduction of a significant number of sanctions, the implementation of mechanisms to support economic entities and the population, involvement of volunteers and donor organizations.

The purpose of writing this scientific monograph is to justify the theoretical and methodological foundations for security management during martial law.

The object of the authors' research was modern challenges and threats to the security of the state, the process of resources management of economic entities, tools for supporting the branches of the national economy, mechanisms for ensuring food, energy and environmental security, programs and projects of post-war reconstruction of the country.

The subject of the study was decision-making models during martial law, tools of territorial marketing, logistics and information technologies, mechanisms of industry development, tourism, increasing export potential and stimulating investments, restoring the country's security.

Chapter 1

MODERN CHALLENGES AND THREATS TO STATE SECURITY

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CURRENT ISSUES OF INFORMATION SECURITY MANAGEMENT DURING THE STATE OF MARTIAL

Abstract

The existing theoretical approaches to defining the content of the concept of “information security” are summarized and systematized. The authors’ interpretation of this economic category in the context of ensuring the national security of Ukraine is offered. On the basis of the analysis of analytical materials of international consulting companies and Ukrainian companies, actual problems, modern challenges and threats of information security management in conditions of war were identified.

Keywords: *national economy, national security, state information policy, information security, digital economy, digital technologies, challenges, threats, cyber-attacks, paradigm, concept, tools, mechanisms, competitiveness, sustainable development.*

Introduction

The modern world is rapidly changing and with it the business environment, information space, tasks, challenges and threats facing companies. As research shows (Kwilinski et al., 2019; Trushkina, 2019; Trushkina et al., 2020; Bezpartochna et al., 2021; Bezpartochnyi et al., 2022; Kryshchanovych et al., 2022), the rapid transition to digital technologies contributes to the acceleration of the processes of digitization of the development of the ecosystem.

This is due to the use of large databases, blockchain, hybrid (combination of online and offline) forms of work, the formation of digital platforms and national information infrastructure, the activation of electronic commerce, etc. However, this, in turn, leads to the appearance of information security threats and risks, including the absence of a comprehensive state information policy, information leakage, use of unlicensed software, data loss due to spyware, cybercrime (phishing, form jacking, crypto jacking), cyberattacks, cyberwars, cyberterrorism, hybrid aggression of the Russian Federation against Ukraine in cyberspace, etc.

According to the Ponemon Institute, 75% of surveyed IT professionals agreed that the risk of hacking through third parties is dangerous and will grow. A survey conducted by Soha Systems found that 63% of all data breaches can be directly or indirectly linked to third-party attacks. An international study on information security problems (Global Information Security Survey, GISS), which was conducted by the consulting company Ernst&Young, showed that in 2021, 77% of respondents in the world reported an increase in the number of serious cyber-attacks (in 2020 – 59%). And only 9% of respondents are confident that their company's existing cyber risk mitigation measures are capable of protecting it from serious cyber-attacks (compared to 20% in 2020). At the same time, it was found that despite the growing threat of cyber-attacks, the budget for cyber security is extremely small compared to the general costs for the use of information and communication technologies.

According to a survey of Ukrainian enterprises in the course of

the Global Study of Economic Crimes and Frauds conducted by PwC in 2020, it was found that 31% of respondents are faced with cybercrimes. According to the National Cyber Security Coordination Center under the National Security and Defence Council of Ukraine, more than 22 million cyber incidents were recorded between September 7 and December 6, 2020. The overall level of information and cyber security threats is 58%.

The Global Trust in Digital Technologies 2021 study by PwC shows an increase in the level of risks of cyber-attacks on businesses worldwide by approximately 24%. At the same time, only 20% of entrepreneurs in Ukraine consider cyber security as a modern necessity, are ready to adjust the strategy of ensuring information security in connection with the COVID pandemic and invest certain investment resources for its implementation.

In this context, issues of ensuring national security and its functional components become a priority for achieving sustainable development of the national economy, increasing its level of competitiveness and investment attractiveness (Pushak, Marchenko, 2017).

In this regard, the implementation of the state information policy should be aimed at informing society, protecting the digital environment from information and communication challenges and threats, guaranteeing information security in the national security system, and ensuring proper integration of Ukraine into the single European information space. And these issues are especially relevant in the conditions of martial law.

Materials and Methods

It is worth emphasizing that the development of information infrastructure, automation and the introduction of qualitatively new technologies that are related to the remote control of digital platforms and networks and Industry 4.0 (artificial intelligence, the Internet of Things, cloud technologies, online interfaces, cyber-physical systems, robotics, Big analytics Data, blockchain, e-commerce (Kwilinski, Trushkina, 2019; Trushkina, Bezpartochnyi, Shkrygun, 2020; Trushkina, Bezpartochna, Shkrygun, 2020; Bezpartochna, Trushkina, 2021 etc.)), increases the risk of cyber security.

This is confirmed by the results of the study “Record optimism in

the face of new challenges”, conducted in 2018 by PwC, it was established that cyber security has become one of the most pressing issues for business. And if in 2017 only 62% of the heads of the world’s largest companies were concerned about this, then in 2018 the value of this indicator increased to 80%. According to the forecast calculations of Cybersecurity Ventures, losses from cyber-attacks due to the use of ransomware and malicious software will amount to 11.5 billion dollars USA in the coming years.

According to the results of a survey of 600 top managers of large international companies conducted by Deloitte as part of the “Future of Cyberspace in 2021” study, it was found that 69% of respondents note a significant increase in cyber threats and risks to their business since the beginning of 2020. Almost 75% of respondents had an income of more than 30 billion dollars. The United States announced that it will spend more than 100 million dollars USA on cyber security.

The Global Information Security Survey showed that the company’s revenue in 2021 was approximately 11 billion dollars USA. While annual information security costs averaged only 5.28 million dollars USA. It was found that 56% of representatives of companies with insufficient budgets note the review of cybersecurity requirements. And 44% said they were forced to cut costs and focus on their legacy architecture and information systems. At the same time, 39% of respondents noted that the costs of cyber security are not properly taken into account in the cost of strategic investments related to the digital transformation of supply chains. 36% of respondents believe that they could face a serious breach of information security, which can be avoided if the company increases the number of investments in cyber protection tools.

In the Report “View of business leaders in Ukraine 2021”, which was prepared by KPMG in Ukraine, cyber threats are included among the key risks of companies’ activities in conditions of uncertainty. Only 58% of organizations in the world and 49% in Ukraine said that they are well prepared for cyber-attacks. Company leaders recognize the importance of collaboration and an adaptive approach to transformations – 54% of leaders in Ukraine and 70% worldwide note that new partnerships will be crucial for increasing the pace of digital transformation. According to the World Economic

Forum (WEF) Center for Cyber Security's Global Cyber Security Outlook to 2022 Report, 81% of respondents identify digital transformation as a key enabler to increasing cyber resilience by strengthening policies, processes and standards with third-party engagement. 84% of respondents say that cyber resilience is considered a business priority in their organization, supported by management. However, 68% of respondents see cyber resilience as a core part of overall risk management.

Thus, this problem determined **the purpose of this study**, which consists of the generalization and systematization of existing theoretical approaches to defining the content of the concept of "information security"; the author's interpretation of this economic category in the context of ensuring the national security of Ukraine; identification of urgent issues of information security management in war conditions.

To achieve the goal, the following general scientific research methods were used: analysis and synthesis; comparison and classification; expert survey; structural and logical generalization.

Results and Discussion

In order to minimize the negative consequences of cases of cybercrime and fraud, it is necessary to pay attention to:

- levelling of information security risks;
- improvement of legislation on the national security of the state;
- application of appropriate methodological tools;
- diagnostics and implementation of constant financial monitoring (Pushak, Trushkina, 2021a; Pushak, Trushkina, 2021b);
- creation of a national model of the digital environment;
- formation of information infrastructure;
- implementation of a complex of measures and mechanisms (normative-legal, institutional, financial, informational, organizational-economic);
- implementation of the national cyber security strategy.

As the analysis of special scientific literature shows, there is currently no single theoretical approach to defining the essence of information security. This is primarily due to the ambiguity and multifaceted nature of this concept. After all, this term is considered an object of research from the standpoint of public administration,

economic (Kwilinski et al., 2019), financial, and national security (Kryshtanovych et al., 2020) at different levels, investment, financial and strategic management.

V. Shulga (2015) considers it expedient to distinguish three main aspects of defining the essence of “information security”: regulatory, doctrinal, and encyclopaedic. The scientist claims that information security is a state of the information system in which it can resist the influence of internal and external risks, without initiating their occurrence for elements of the system and the external environment.

U. Ilytska (2016) emphasizes that there is no norm that would contain a definition of the concept of “information security”, considering the difference between the concepts of information security and information security. The researcher suggested considering the concept of “information security” as a state of security of data processing and storage systems, in which the confidentiality, availability and integrity of information are ensured, or a set of measures aimed at ensuring the security of information from unauthorized access, use, disclosure, destruction, the introduction of changes, familiarization, verification, recording or destruction.

H. Yarovenko (2018) singles out two directions for defining information security. The first concerns approach defines information security based on its functioning properties, as a state, process, and field of activity. The first approach associates information security with a state of security, which is not entirely true, as it provides it using different means. That is, such definitions emphasize the purpose of functioning information security. The second approach assumes that information security is a process that includes the application of various software, technical, legal, information and organizational tools to ensure the functioning of its main purpose. It would also be incorrect to consider information security only as a process, i.e. a sequence of actions related to protection, since it can predict the realization of a series of interrelated processes aimed at detecting and preventing threats. The third approach is quite broad, as it emphasizes that information security is a multidisciplinary field. Although one can agree with the fact that it is precisely the field of activity, such an approach makes it only a certain type of service provision. That is, the existing concepts

only reflect one aspect of information security related to its functioning, and do not reveal others that are quite important for understanding its essence. Since the consequences of information threats, the prevention of which is the main task of information security, are significant for society, we do not fully agree with such interpretations, as they reduce the value of information security for society.

The second direction reflects approaches that focus on the subjects of information security that provide it, namely the state, economic agents, and individuals. In this case, the emphasis is only on the one who implements, regulates and uses it. Also, these concepts do not take into account the common features of security for various subjects, which allow the use of common approaches and tools in the process of organizing information protection. All this limits the understanding of this concept only at the level of a separate subject or a separate sphere (Yarovenko, 2018).

Based on the generalization of the positions of scientists regarding the interpretation of the “information security” phenomenon, its essential characteristics are singled out, namely: it is a state of security of information space; the state of protection of Ukraine’s national interests in the information environment; security of the rules established by law, according to which information processes take place in the state; social relations related to the protection of the vital interests of a person and citizen, society and the state from real and potential threats in the information space; an integral part of political, economic, defines and other components of national security (Antonova, Martyniuk, 2019).

Based on the above, it can be noted that researchers mostly understand the term “information security” as the state, sphere of activity, system of guarantees, property of functioning, ability, the function of the state, public relations, the process of managing threats and dangers, etc.

In scientific sources, this economic category is usually interpreted as:

- the priority function of the state (U. Ilnytska);
- the state of legal norms and security institutions corresponding to them (Y. Zharkov, L. Besedina);
- a set of means of ensuring the information sovereignty of the state

(I. Bodnar);

state of protection (I. Panarin, B. Kormych, V. Petryk, O. Baranovskiy, V. Bogush, R. Kalyuzhnyi, V. Lipkan, A. Maruschak, Z. Zhivko, Yu. Maksimenko, V. Zhelikhovskiy, V. Ortynskiy, I. Kernytskiy, I. Markina, Yu. Garichev, S. Antonova, H. Martyniuk);

an integrated component of national security (U. Ilnytska);

a component of economic security (T. Mykytenko, I. Petrovska, P. Rogov, A. Harkusha);

the state of information work of business entities (M. Zubok);

the state of legal norms and their corresponding security institutions (V. Shulga);

object security from information threats or negative impacts related to information and non-disclosure of data (V. Shulga);

legislative formation of state information policy (V. Shulga);

guaranteeing the freedom of information activity and the right of access to information in the national information space (V. Shulga);

creation and introduction of safe information technologies (V. Shulga);

multi-aspect system from the standpoint of a systemic approach (H. Yarovenko);

multidisciplinary field (Y. Cherdantseva, J. Hilton).

Therefore, based on the generalization of conceptual provisions regarding this issue (Pushak, Trushkina, 2022a; Pushak, Trushkina, 2022b), the term “information security” is proposed to be considered:

1) from the standpoint of ensuring national security of the state;

2) as a key component of economic security at the macro, meso, and micro levels;

3) an important condition for increasing the level of competitiveness, investment attractiveness and achieving sustainable development of the national economy.

Conclusions

As a result of the research, it was established that at the current stage, the issues of ensuring information security of various spheres of life and business entities in Ukraine are becoming particularly relevant. And, first of all, it is connected with the full-scale invasion of Russia into Ukraine.

To date, the legal basis for the development of the information security system is regulated by the following legislative and regulatory documents: Law of Ukraine dated June 21, 2018 No. 2469-VIII “On the National Security of Ukraine”; Decree of the President of Ukraine dated September 14, 2020 No. 392/2020 “On the decision of the National Security and Defence Council of Ukraine dated September 14, 2020 “On the National Security Strategy of Ukraine”; Decree of the President of Ukraine dated August 26, 2021 No. 447/2021 “On the decision of the National Security and Defence Council of Ukraine dated May 14, 2021 “On the Cybersecurity Strategy of Ukraine”, etc.

At the same time, despite some positive legislative initiatives regarding the creation of an information security system as a priority for ensuring the national security of Ukraine, there are still certain problems of insufficiently effective regulatory and legal support in this direction. Most of the normative documents do not correspond with each other. Some of them only talk about information security in the national security system. However, general principles, appropriate institutional conditions, and appropriate mechanisms of organizational, economic and financial support for the functioning of the information security system from the point of view of the state’s national security have not been defined.

At the moment, the draft law “On Information Security of Ukraine”, the Information Security Strategy of Ukraine and the Concept of Information Security of Ukraine have not been developed. Although there were some attempts to develop the last two program documents. However, they remained unfinished and unapproved projects. Therefore, these issues require special attention from educators, scientists, representatives of state authorities and the business environment. And it should be done only with their joint interaction.

Prospects for further research consist in substantiating methodical approaches to the assessment of information security risks in the risk management system; developing practical recommendations for levelling cyber threats and a set of information security management measures; formation of a new paradigm of information security as an important component of the strategy of the post-war development of the national economy of Ukraine.

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**PECULIARITIES OF
TERRITORIAL
MARKETING IN
UKRAINE DURING
THE PERIOD OF
MARTIAL LAW**

Abstract

The successful completion of the decentralization reform in Ukraine in 2020, because of which local territorial communities received significant powers regarding management, financial independence, and ensuring competitiveness, motivates community management to search for innovative ways of modern management. Despite this, the modern challenges of the negative plan caused by Russia's war against Ukraine fundamentally change the approaches to the strategic directions of the development of territorial communities. Population migration flows, destruction of infrastructure, reduction of production rates, and growth of social needs, simultaneously with the activation of European integration processes in Ukraine, prompting the use of the most effective tool in community management, which is a complex systemic marketing approach. Marketing of territorial communities as an activity related to the delivery of a product – a “territorial community” product to a consumer who sees in it a defining consumer value about various target audiences: population, business, visitors, investors, and others, where the marketing environment is formed. Nowadays, in Ukraine, the availability of effective territorial marketing tools is insufficiently

substantiated, despite this, achieving indicators of successful development and high competitiveness is possible if there is a clear understanding of the directions for using the potential of communities based on a marketing approach.

Keywords: *territorial marketing, territorial community, marketing complex, target audiences (groups), “territorial community” product, marketing approach.*

Introduction

In Ukraine, in 2020, the reform of local self-government was completed, based on which the territorial administrative division of the country also changed: territorial communities became the basic administrative-territorial units, and the number of districts decreased. Reforming local self-government authorities by unifying settlements and communities, granting significant powers to united territorial communities regarding means of management, financial independence, expanding services, motivate community management to search for effective ways of community development. Territorial management takes place during preparation for Ukraine’s accession to the European Union, coordination of many integration directions, including in the field of the global marketing environment, logistics, development of digital integration markets, partnership in the fields of economy, cross-border cooperation, science, environmental projects, etc. Along with this, with the beginning of the large-scale invasion of Russian troops on the territory of Ukraine on the 24th of February 2022, the integration processes of the country into the European community have changed significantly, which directly affects the marketing environment of territorial communities, the activities of their target audiences. “However, Ukraine is a special case: on the one hand, the country is at war, on the other, it is carrying out reforms, the functioning of the market of goods and services continues, which is being actively demonopolized in certain industries” (Vovchanska & Ivanova, 2022).

Migratory flows of the population of Ukraine to European countries, other countries of the world, and within the country, the destruction of a significant number of infrastructure facilities, and businesses, radically change approaches to strategic visions of development of territorial communities, tools of territorial marketing,

formation of marketing complex of communities. Nowadays, the most effective tool for revitalizing socio-economic processes in the territories is a complex system marketing approach. Territorial communities in wartime and post-war times do not give up the struggle to increase competitiveness, attract investment resources, and preserve the attractiveness of the community's territory for visitors, and business activities. "Today, each territorial community has enough powers and opportunities to use the advantages of its management based on territorial marketing, but this direction requires the experience of specialists, scientific approaches to the development of methodology, drawing up a marketing plan, conducting marketing research, and using it to form the main planning documents of sustainable community development" (Oleksyuk et al., 2021).

Materials and Methods

When studying the peculiarities of territorial marketing in the conditions of martial law, the most accepted methods are the observation and analysis of changes occurring in socio-economic processes both in the state as a whole and in each region and territory. Nowadays, it is difficult to use comparative, rating methods for researching dynamic indicators of community development, as internal and external factors of influence, approaches to the formation of the basic principles of the potential of territories that undergo significant changes because of military operations have changed. A characteristic feature of modern territorial management was an insufficient understanding of the use of marketing tools contributing to the optimality and effectiveness of approaches to the conditions of modern challenges in the functioning of territorial communities. Competitive factors are intensifying at the same time as the factors of restoration and reconstruction of territories in the post-war period. Changes in the system of formation of the socio-economic potential of territorial communities, which occurred as a result of military operations in a separate part of the territory of Ukraine, affected each community in one way or another, regardless of the region. Urbanization processes are intensifying, including due to the relocation of residents from other territories where military actions took place to the country's large cities (Kyiv, Lviv, and other

relatively safe cities). Development scenarios of territorial communities are characterized by a transition from attractiveness due to natural resources (land, raw materials) to factors that contribute to the multifaceted development and production of goods (infrastructure, global communications, financial sector, production, energy, environmental security, etc.). Conditions of intensifying competitive struggle between territories to win the favour of the target segment (investors, tourists, consumers, migrants, and others) force local self-government authorities to turn to the tools of municipal marketing more actively, which allows using those advantages of the city that are ineffective in other areas of territorial policy. The selection of territorial marketing measures should be based on the components of the territory's potential (its internal environment) (Budnikevych and Havrysh, 2016).

Results and Discussion

The differentiation of the population by the life quality indicators is somewhat reduced due to military actions and the state, in particular, the loss of economic resources, housing, and other benefits that a person acquired in previous activities. The consumer's focus on the soft factors of the territory, such as the vision of the city, the brand, and the image in the imagination of the target audiences, is shifting towards security factors and guarantees. "Using marketing technologies in martial law conditions, one must understand that the war as a social phenomenon will end, and marketing activities will continue unabated" (Vovchanska & Ivanova, 2022).

Thus, the marketing of the territorial community is an activity, a set of territorial institutions and processes that ensure the creation and delivery of a municipal (territorial) product that has a determining value for the consumer sectors of the community (target audiences): population, business, visitors, investors, national projects, etc. The marketing environment of the territory of the territorial community is a set of conditions, forces, objects, and subjects that influence the functioning and development of the territory, interact with each other and integrate into their activities. There are internal and external marketing environments in the territorial community.

The internal environment of the territory is represented by three

components:

1. The entire complex of resources located on the territorial community's territory, in quantitative and qualitative terms.

2. Parameters of the socio-economic state of the territory.

3. Situational factors within the relevant local self-government authority of the territory, as a particular organization ("collective manager") performing management functions.

The set of resources can be conditionally divided into three consolidated groups:

– natural resources and geographical location – include natural bodies and forces (mineral resources and resources of the biosphere);

– technological resources – a set of resources allowing to conduct production activities on the territory;

– social resources are a set of relations arising between people inhabiting the territory.

The parameters of the socio-economic state are evaluated by groups of indicators:

– finances of the territory (local budget, cash flows of the production and economic sector);

– indicators of the economic and social well-being of the residents of the community;

– indicators reflecting the level of development of the production and non-production spheres in the territorial community.

Situational factors within the "collective manager" are the following:

– goals, structure, and tasks of the local self-government authority;

– management technology;

– staff that further determines the quality of management on the territory.

The external marketing environment of the territory of the territorial community consists of:

– consumers of the territory's resources and public services provided by the local self-government authority;

– other territories with which the territorial community cooperates and competes for financial assistance and attracting resources;

– main organizations and institutions, branches, and structural subdivisions carrying out their activities on the territory of the

territorial community;

– higher executive authorities performing their functions on the territory of the community.

The external marketing environment of the territorial community acts through groups of relevant factors:

- political and legal (normative and legal documents);
- macroeconomic factors (regarding implementation of financial, budgetary, tax policy, and general macroeconomic trends);
- sociocultural factors (quality and culture of national relations, cultural traditions, customs, etc.);
- technological factors (level of achievements of scientific and technical development and innovative technologies).

The marketing complex of territorial communities contains generally accepted elements of traditional marketing: product, price, promotion, and distribution, without optimization of connections in which real market processes cannot take place.

The set of territorial marketing of territorial communities includes 4 tools: territorial product, price, promotion, and localization.

A territorial community, as an independent entity, can be of interest as a place of permanent residence and/or temporary residence, a place of permanent and/or temporary activity, or a visit with the intention of business activity or spiritual and cultural development. In this way, the concept of the product “territorial community” is formed, the qualitative and quantitative indicators of which are evaluated differently by representatives of individual target groups. Despite this fact, one person can be a representative of the population, business, visitor, investor, and other segments of consumers, and their target audiences, defined according to the characteristics of the community. Nowadays, military operations and martial law in Ukraine have become the reason for the formation of a different vision of the development of communities on almost the entire territory of the country. Such a special target audience as internally displaced persons has emerged, and business relocation is being carried out, which requires a review of adopted strategies, and the development of new ones, considering the dangerous challenge (war) that destroyed territories, resources, and infrastructure (Oleksyuk et al., 2022).

The scope of application of territorial communities marketing, as

a system of actions and thinking, requires clarification of the entire territorial complex: structural elements (4P), means, tools, characteristics, and managed parameters of marketing.

Each target group defines for itself the territorial community as a product, but in the form of an interesting component:

- population – as a commodity, determines the territory in the evaluation of the standard of living, comfort, and access to benefits that ensure its vital activity;

- business – as a commodity, determines the territory in the assessment of efficiency, comfort, ease, lack of corruption and barriers to starting and running a business, industrial, agricultural production, development opportunities, profitability, sales markets, communication of all kinds in the internal environment and external relations. “All businesses that are not destroyed in the regions of hostilities have already reconsidered their marketing plans, many of them are relocating. But practically all subjects of economic activity need to change their marketing strategies due to the changing influence of factors of the macro- and micro-marketing environment” (Vovchanska & Ivanova, 2022);

- visitors – as a commodity, determine the territory as a place that will give them spiritual and physical satisfaction, fulfilment of wishes for rest, entertainment, knowledge, including historical and cultural heritage, and other attractive aspects;

- investors – as a commodity, determine the territory as an opportunity to develop local investment resources (land, natural resources, real estate, local traditional technologies, etc.), investing their capital with the greatest benefit (rate of profit, payback period, etc.) According to S.F. Smerichevskiy “In the conditions of growing competition for investment funds, marketing tools come to the fore, they should provide an opportunity to accurately assess the investment potential of the territory and decide on the means of its promotion. Territorial marketing should contribute to solving such issues” (Smerichevskiy & Sibruk, 2018);

- the government – defines the territory as a commodity, using the opportunity to create objects of national significance, national projects, etc., on the territory of the specified community.

Thus, the “territorial community” product is a set of decisions and institutions related to the formation of a territorial product, which is

used for “consumption” and satisfaction of the activities of various target audiences of the community, which will be presented on the domestic and foreign markets. Territorial goods can be the territorial community as a location, city services, public social services, infrastructure, economic resources, city programs, and other components by the features of the foundation and functioning of the community. That is, the territorial community is “sold” depending on the use of its advantages, competitiveness, and attractiveness, but within the parameters that the consumer of each target group defines for himself. In addition, the product can be a need considered jointly by all consumers: a safe social environment, socio-legal security, political legislative stability, administrative services, environmental and sanitary safety, general investment climate, cultural environment, historical heritage, etc. “A consumer in the public marketing system is a citizen of a certain state (a subject and bearer of basic civil rights that are exercised or should be properly exercised) or certain public communities whose consumption processes are in the sphere of influence of public administration through the mechanisms of execution by public management subjects (in particular, the state) of its main functions” (Romat & Gavrylechko, 2018).

The task of territorial marketing in the management of communities is the formation of a multi-level model of a multi-attributive territorial product such as a “territorial community” product based on a systemic approach: physical characteristics, and consumer perception.

The price of the “territorial community” product is the cost of expenses that a person will bear while living and/or carrying out activities on the territory of the territorial community, which is directly related to the acquisition and consumption of the territorial product.

Local self-government authorities by the Law of Ukraine “On Local Self-Government in Ukraine” were authorized to set tariffs (prices) for payment of household, transport, utility, administrative, and other services of municipally owned enterprises.

Tasks of price policy in territorial communities are the following:

- price monitoring according to the directions of the multi-attributive territorial product model;

- the cost of living in the territory of the territorial community;
- the cost of doing business, including the amount of local taxes and fees;
- the cost of visiting the territory by external individuals and legal entities for short-term needs (tourists, business events);
- the price of the territorial product for the investor;
- the cost of persons' staying in the process of temporary pendulum migration (morning-evening).

In the marketing set of the territorial community during the period of hostilities and martial law, a certain change in trends occurs in the pricing policy, which is primarily caused by the redistribution (loss, shortage) of resources for various reasons. The loss of financial resources for local communities is the termination of funding for certain capital construction and repair projects, the source of financing of which was the targeted state funds. There is a decrease in the rate of filling local budgets because of a reduction in production, the termination of several enterprises, an increase in unemployment, and internal and external migration of the working population. A significant part of territorial communities, especially in the front-line zone, or in places where enemy attacks take place, also loses natural resources (land, forests, raw materials, etc.), infrastructure facilities, social institutions, and other goods that require restoration, which causes an increase in the cost of services on these territories. Despite this, the quality of services may not depend on the price and its payment (utility services, transportation in public transport, administrative services, etc.).

The use of public places, spaces, parks, squares, street lighting, security of public order, etc., regardless of the payment of taxes paid by taxpayers to the local budget, remain stable services of local self-government, the maintenance of which requires appropriate resources.

The payment of utility services also has signs of a generalizing nature, as the producer almost does not depend on the consumer, but only on the administration of the territorial community. Therefore, the quality of services often does not have a choice (water, heat, public transport, etc.), which is fixed by agreement in the relevant management structures of the territorial community.

The calculation of housing and utility services prices and tariffs is carried out based on the cost method of pricing since the absence of a competitive market and a monopoly position makes it impossible to establish free pricing in the housing and utility services sector. However, in different cities of Ukraine, and territorial communities, the cost of services is different, based on the characteristics of cost components, local natural conditions, and local management approaches.

For visitors to cities that are attractive for tourism or recreation, the cost of tourist services depends on the image of the city, the importance of tourist infrastructure objects (UNESCO), the level of accommodation facilities (hotels), the quality of movement in public transport, taxis, etc., as well as the service in catering establishments.

For business (entrepreneurial sector), the cost of territorial services is calculated based on:

- amounts of local taxes;
- labour cost;
- expenses for utility services;
- expenses related to starting a business (registration, operation, liquidation, licensing, benefits, permitting procedures, subsidies, other preferences), for investors – the cost of investment resources belonging to the community (land, subsoil, real estate, etc.);
- the quality of territory management, particularly, the elimination of the corruption component;
- administrative support of the project (expenses of “investment nannies”).

Pricing is influenced by the zoning of the territory of settlements, the urban planning value of the territory (infrastructure, ecology, spatial arrangement), as well as the functional type of the territory.

By the Law of Ukraine dated the 9th of July 2022 No. 2389-IX “On Amendments to Certain Legislative Acts of Ukraine Regarding the Basics of State Regional Policy and the Policy of Restoration of Regions and Territories” based on the use of a territorially oriented and security approach, it is envisaged to define functional types of territories, on which the peculiarities of marketing principles and management will be formed. The range of pricing is wide enough, there are restrictions on special services and goods (housing and utility tariffs, transport tariffs) or maximum prices in prestigious

places (Law of Ukraine, 2022).

The following functional types of territories are defined for the planning of recovery and stimulation of the development of territories, the introduction of special mechanisms and marketing tools by authorities and local self-government bodies: territories of recovery, regional growth poles, territories with special development conditions, and territories of sustainable development. The assignment of territorial communities to the corresponding functional type is determined by the Cabinet of Ministers of Ukraine, and a list of indicators and requirements/parameters that will be evaluated during the determination procedure is established.

In this way, the approaches to establishing qualitative and quantitative indicators of the “territorial community” product, and the feeling and assessment of perception by various target groups are also changing. Nowadays, the qualitative component – safety, its indicators, and measure of risk in the present and future periods will have a special “value”.

The traditional marketing set includes an element of promotion or marketing communications. Product promotion is a set of activities aimed at conveying information about the product’s advantages to potential consumers and stimulating their desire to buy it.

The purpose of marketing communications is the formation, dissemination, support, and purposeful change of knowledge, attitudes, and behaviour of target audiences regarding the territorial product. The main task here is the formation of a positive image of the territorial community territory based on the historically formed positive sides of the territory or based on the currently created attractive features of the territory (advertising) for informing, persuading, and reminding buyers (consumers).

Today’s challenges, provoked by the large-scale invasion of Ukraine by Russian troops, change the means of communication in territorial marketing, in particular, the spread of communications in European countries, other countries of the world by temporary migrants (emigrants) about Ukraine, the territories from which they arrived, increase the possibility of informing the external interested environment among investors, visitors, etc. Despite this, a part of traditional marketing communications has been lost: mass media, Internet marketing, and advertising. Advertising means of a

commercial nature during the holding of sports and cultural and entertainment events, which today are usually held on a charitable basis, have practically been lost.

This element of the marketing set is differentiated for external and internal target segments: population, business visitors, tourists, workers occupying workplaces from other territories, investors, and non-residents.

Local self-government authorities are developing a specific complex program for the promotion of the territorial community, the region, which is based on the concept of integrated communications, and now also depends on the functional type of the territory. In particular, the combination of individual directions through integration for the maximum impact on the target audience, the formation of a special communication culture of the territory, and the combination of promotion objects (city, territorial community, region, a country in 3 vectors of communication appeal: inside the territory, outside the territory within Ukraine, from outside the territory – the international level). European integration processes, shifting the emphasis on socio-economic development of the state to safer western regions increase the role of cross-border cooperation. Given that in the system of cross-border cooperation, the governing authorities are local self-government bodies and local state administrations, one of the main tools of economic development should be the meso-marketing subsystem with its components: municipal and regional marketing (Gegedosh, 2022).

Nowadays, territorial marketing researchers focus not only on traditional marketing communication tools. Greater importance is attached to environmental and social aspects, especially measures of internal and external security.

The location of the “territorial community” product allows for evaluating its placement, distribution, and localization, when the territorial product is presented in two aspects:

1. This is an objectively existing, static, unchangeable localization, i.e. the territory of the community, as an object on the geographical surface.

2. Spatial location is an element of the production, consumption of goods, and movement of relevant flows (raw materials, human, financial, material, informational).

According to the direction of the sphere of distribution in territorial marketing, it is possible to determine: 1. Accommodation. 2. Stay. 3. Management. 4. Investment.

The peculiarity of distribution as an element of territorial marketing is the absence of the process of goods movement in its usual sense. Here, the element of distribution is provided by a system of actions, and processes in the marketing environment, which includes a set of measures, thanks to which the territorial (urban) product becomes available to all target audiences. This includes:

- Comprehensive evaluation of the territorial product (in statics and dynamics).
- Selection of the territorial product movement system through the channels by the criteria of their optimality.

When choosing distribution channels, it is necessary to take into account the level of development of society and the features of the modern administrative and territorial system. The functional type of the territory, its characteristics as an industrial environment – transport accessibility, placement of raw materials, material resources, personnel potential, consumer market, and the post-industrial environment – IT technologies, innovations, territorial clusters, and the development of various forms of interaction with regional, national and international partners. Nowadays, recovery territories have appeared in Ukraine, which after victory will require a fundamentally new marketing approach in terms of attracting sources of recovery, bringing the territories to a safe state for all target audiences, forming new industrial and socio-economic potential, settling residents, creating new places of work, etc.

Distribution planning in territorial marketing is carried out according to the directions: location and transport accessibility of the place of provision of services for different audiences, mobility of the use of modern technologies, and safe stay while receiving public services by representatives of all target groups.

In territorial marketing, there are no classic mediators of product distribution, but the following entities may be involved conditionally: local development agencies, authorities and public organizations, associations of the highest territorial level, chambers of commerce and industry, business centres, exhibition centres, fairs, transnational and other territorial subjects, mass media, tourist ones.

The community (staff) means not only the staff of local self-government bodies but the entire population of the territorial community, members of public organizations, activists, etc., who see the philosophy and idea of the territorial community in such a way that each member of the community feels that their implementation is intended for him/her: in a simple, accessible, tolerant way.

A manifestation of the influence of the community is the appropriate response of its members to certain processes of territorial development in the form of public hearings, protests, questionnaires, and surveys, based on which certain administrative and spatial decisions are made.

The political influence on the development of the territorial community can be exerted by the state management system through legislative and executive authorities: people's deputies, deputies to lower-level councils, state executive power (Cabinet of Ministers of Ukraine, branch ministries), whose strategic thinking is expressed through the adoption of relevant legislative and regulatory documents, determination of state regional policy, state financial support of territories in various directions, etc.

Despite several scientific studies on the strategic planning of territorial communities, the availability of effective tools, including a marketing approach, which would ensure the reality of achieving the defined strategic goals, moving away from declarative moments when developing strategies to understanding the complex mechanisms that ensure its implementation, is not sufficiently scientifically substantiated. "It should be noted that the set of problems of introducing the principles of marketing to the public administration system is currently insufficiently developed. It needs further in-depth theoretical development. In the end, this will make it possible to form an appropriate system of practical actions, tools, complexes, measures, and management technologies, which will be widely used in public management practice" (Romat & Gavrylechko, 2018).

Territorial communities should focus on the management of their territories based on marketing, forming a marketing complex in a specific sense – a "territorial community" product, which is evaluated from the consumer's point of view in the public administration system. The question of the requirements of the

central executive authorities for the mandatory development of marketing strategies of territorial communities based on the adopted methodology, in particular, simultaneously with the processes of forming plans – economic (Strategy), spatial (Complex plan for the spatial development of the territories of communities), compliance with the strategy implementation plan remains debatable.

Conclusions

After the completion of the decentralization reform in Ukraine, territorial communities received much wider powers regarding financial independence, and management of territories, which requires improvement of community management tools to ensure their comprehensive and systematic development. Achieving indicators of successful competitiveness today is possible only on the condition of understanding the features, uniqueness, and economic potential of the territorial community, and an effective mechanism for promoting these features in the relevant markets, which is the marketing of territories.

Ukraine is currently going through a special period in its development – on the way to joining the European Union and at the same time is fighting an external enemy due to the large-scale invasion of Russian troops on the territory of the state, as a result of which the processes of socio-economic development are shifting both in the economic and spatial direction. Territorial communities receive a significant number of internally displaced persons, on the one hand, when the target audience of the population changes qualitatively and quantitatively, and on the other hand, some of the residents of the community have moved to other countries. The perception and assessment of the territorial community as a product by these consumers have a different understanding, which must be considered when building marketing strategies.

Population migration flows, relocation of enterprises to safe regions of the state, and destruction of a significant number of infrastructure objects change the endogenous potential of territorial communities but do not change the general principles of socio-economic development, and the need to manage territories based on marketing only increases.

Territorial community marketing is a permanent systemic activity

that ensures the creation and delivery of public services of local self-government of various types (a territorial product) regardless of the conditions of influence of the internal and external environment. Thus, territorial marketing is necessary from the point of view of understanding and positioning the consumer environment of the territorial community for various target groups: the population, business, visitors, investors, etc., depending on the direction of their activity and the need for satisfaction, in combination with the general strategic directions of the development of the territorial community.

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**MIGRATION
VULNERABILITY OF
UKRAINE CAUSED BY
THE WAR**

Abstract

The publication is devoted to the analysis of scope and directions of forced migration from Ukraine caused by the Russian invasion. Ukrainian refugees` intentions to return are studied with the help of sociological researches. The tools for migration vulnerability reduction are developed.

Keywords: *refugees, vulnerability, forced migration, Ukraine.*

Introduction

Russia's full-scale genocidal war against Ukraine caused a mass movement of the population from the country. Only for the first month after the beginning of the invasion, 10% of its population left Ukraine. According to the UN High Commissioner for Refugees, Filippo Grandi, Ukraine is experiencing the fastest migration crisis since the Second World War (The Economist, 2022). Although it is not possible to make an accurate assessment of the human losses caused by military actions now, but it is already clear that, together with migration losses, they will lead to a large-scale demographic crisis. In turn, such a crisis endangers the social and economic development of the state and its existence totally. After all, in order to rebuild the destroyed cities, restore the infrastructure and ensure economic growth, the country will need significant human potential, including all its citizens who moved abroad. This actualizes the need to monitor forced migration, to study the most urgent needs of refugees, their interests and intentions, and further to develop effective mechanisms for their voluntary return.

We understand social vulnerability as a property of the social system, which characterizes the degree of its susceptibility, sensitivity to the harmful effects of hazardous events and, at the same time, the degree of ability to cope with, resist and recover after them. In this study the vulnerability of our country caused by the mass emigration is analyzed. Obviously, significant migration losses are very dangerous threats for demographical, social and economic development of Ukraine. That is why special political measures are needed to reduce this kind of vulnerability.

Materials and Methods

The study is based on the statistical data provided by the United Nations and on the results of several sociological researches conducted by the Kyiv International Institute of Sociology, Razumkov centre, the Polish agency EWL and the United Nations High Commissioner for Refugees (UNHCR).

With the help of the sociological method (survey) migrants' intentions and main motives to return were investigated. Besides, general scientific methods were used in the study, such as: analysis, generalization, systematization and graphical.

Results and Discussion

Due to the total Russian military invasion of Ukraine (24 February 2022) nearly one-third of Ukrainian population was forced to leave their homes in the search of safety, protection and assistance. Over 6.6 million people remain internally displaced by the war. According to the data of UN Refugee Agency, more than 11 million border crossing from Ukraine have been recorded since beginning of the war. At the same time over 4.7 million movements was recorded back into the country (UNHCR, Regional Bureau of Europe, 2022).

Mostly the countries Ukraine borders were the major recipients of displaced persons from Ukraine. Generally, 3.8 million of Ukrainian refugees were recorded in countries neighbouring Ukraine (UNHCR, 2022). In the first days of the war, these countries simplified the border crossing procedure. In the first period, Poland accepted the largest number of our citizens (2.9 million), which accounted for about 60% of all refugees. However, as of August 2022, there are 2.2

million refugees from Ukraine in the Russian Federation, and 1.3 million in Poland (UNHCR, 2022). The main problem is that people are forcibly taken to the aggressor state from the areas of hostilities, as repeatedly testified from Mariupol and other cities suffering consistent Russian attacks. Much fewer people have moved to Moldova (89 649) and other neighbors (Figure 1.1).

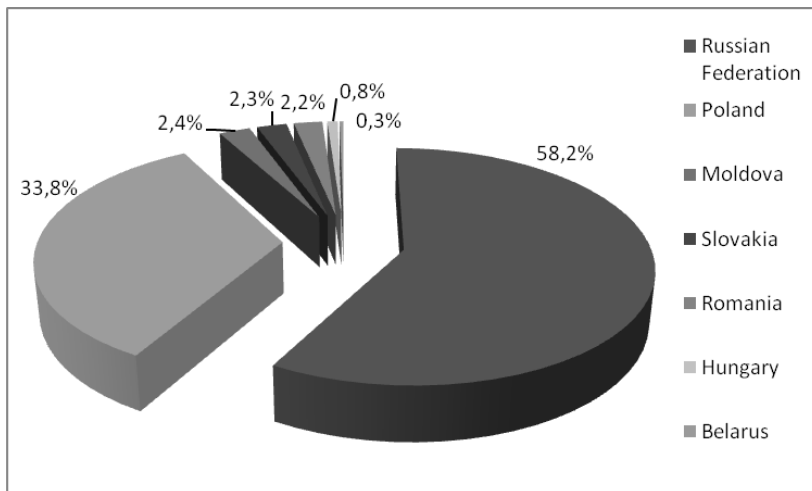


Figure 1.1 Refugees from Ukraine recorded in countries neighbouring Ukraine, %

Source: calculated and built by the author based on the UNHCR data

Among other countries, most refugees from Ukraine are recorded in Germany (971 000), the Czech Republic (413 121), Italy (159 968), Turkey (145 000), Spain (133 913) and United Kingdom (111 900) (UNHCR, 2022).

The massive fleeing of the population, in addition to military losses and substantial losses of civilians poses a threat to demographic, economic, and social security of the country. Therefore, the issue of returning our citizens to their Motherland will be of utmost importance after the end of the war. The solution depends on many factors. Naturally, Ukraine’s victory, creation of a safe and peaceful environment, and quick restoration of destroyed cities and settlements are the first and necessary conditions. It is important to note that not only the cessation of the active phase of

war, but also the conditions for its achievement are of fundamental importance. That is, a temporary truce not only will not lead to the return of temporarily displaced persons, but may cause a new wave of external migration. This statement may be confirmed by the results of a sociological survey conducted by the Kyiv International Institute of Sociology in May 2022. Thus, the majority of Ukrainians (85%) plan the future of their children and grandchildren in Ukraine in the event of the war ending due to the capitulation of Russia and its complete disarmament or Ukraine receiving significant security guarantees (for example, joining NATO). On the other hand, in the case of signing a truce, the share of such persons is only 55%.

The scale and speed of return largely depends on the motives and previous intentions of the displaced persons themselves. At first glance, the results of research of the Razumkov Center Sociology Service conducted in March 2022 at border checkpoints in Zakarpatska oblast seem to be quite optimistic. They show that most people leaving abroad due to hostilities were planning to return to Ukraine after the end of the war (79%) (Razumkov center, 2022). Only each tenth respondent expressed the determination to remain abroad, and the rest (11%) hesitated to answer. A little more than half of the respondents are residents of the East and South of the country, 45% are residents of the central regions, and only 4% are residents of the western regions of Ukraine. That is, the participants of the survey were mostly from settlements where hostilities took place directly, or those that were located near the contact line, or their settlement was subjected to shelling and airstrikes. Since the same research wasn't conducted at border checkpoints in Lvivska oblast, based on our own observations, we can assume that the percentage of those eager to return might have turned out to be much lower. Because a substantial share of people (mostly from western regions of Ukraine) used simplified entry terms to take children abroad (without a notarized parental consent) or realize their intentions to arrange their lives abroad. Yet, this issue needs detailed research.

It would be interesting to interview the same respondents, but already in the countries where they settled, after a certain period of time. There is a reason to believe that the percentage of those eager to return will be much lower. For example., the survey of displaced

people from Ukraine in Poland conducted by the Polish agency EWL revealed only 58% of those willing to return home (Mind, 2022). In addition, the results of a study conducted in mid-May-June 2022 by the United Nations High Commissioner for Refugees also serve as confirmation of the abovementioned hypothesis. 4 900 Ukrainians who moved to Poland, the Czech Republic, Moldova, Romania, Slovakia and Hungary were interviewed. Despite the fact that the majority of respondents dream of returning to their homeland, 65% still plan to stay in their current country in the near future, and another 9% plan to move to another one. For a third part of people intending to move further, the desired destination country is Germany. Only 16% of respondents declared their plans to return to Ukraine, while most of them (60%) have not yet decided when exactly they will do so. The main motive for returning was the awareness of the improvement of the situation in Ukraine, as well as the desire to return home and reunite with family members.

How quickly the refugees from Ukraine come back depends on the mode of their legal stay abroad (status of “forced” tourist, refugee, or temporary protection). Regarding the first option, it can be used by all holders of biometric passports that allow them to stay in the EU countries for 90 days. If they are provided with housing (stay with relatives or acquaintances), they do not need financial assistance and are not obliged to register in the host country. It is obvious that the category of displaced people will return first, and the percentage of returns in this group will be the highest.

However, most of those fleeing war formalize their refugee status or ask for temporary protection. Under these statuses, a person gets more or less similar rights (accommodation, right to employment, access to housing, medical and social assistance, access to education for children and teenagers), but the ways they get or lose them and regulations are different.

It is worth mentioning that the temporary protection period is one year with an opportunity to prolong it to three years. However, if the war ends and the situation in Ukraine stabilizes, the temporary protection period will cease earlier.

The refugee status guarantees the right to permanent residence in the respective country. Meanwhile, the refugee status application procedure has some peculiarities in different EU countries (passport

retention for application processing period that can last for 6-9 months, a ban to leave the country, and impossibility of employment during this period) (Hanziienko, 2022). Taking into account the advantages and disadvantages of each status, the choice of a displaced person depends on the motives mentioned above. So those eager to return home right after the hostilities end choose temporary protection.

Conclusions and recommendations

Such trends increase migration vulnerability of Ukraine and pose a threat to its demographic and socio-economic security:

- ✓ mass emigration of children and highly educated working-age people abroad;
- ✓ measures of other countries regarding the assimilation of our citizens, which contribute to the transformation of the temporary nature of migration into permanent;
- ✓ protracted nature of the war in Ukraine, its genocidal character, massive destruction of housing, civilian infrastructure, damage to property, which serve as additional pushing factors.

Obviously, the longer the war lasts, the more people will leave. In addition, for many Ukrainian temporary protection seekers such a period of time may be enough to settle into life abroad. Then, after the martial law termination, they may join other family members and men who currently do not have the right to travel outside of Ukraine. That is, according to a pessimistic scenario, the end of the war may lead to a new powerful wave of international migration of Ukrainian population. It may occur at the expense of relatives of those who moved abroad during the war, as well as those who will be driven by the fear of poverty (which is often a consequence of the post-war economic crisis).

The implementation of the optimistic scenario (the return of the majority of our citizens to Ukraine) depends on the promptness and comprehensiveness of the state and local authorities' actions. For this purpose, it is necessary to implement the following tools:

1. Establishment and support of social and cultural ties with forced migrants abroad.

For this, it is necessary to establish a system of legal and social

assistance to those migrants who need it; support the creation and operation of Ukrainian-language weekend schools or online educational projects (including providing the opportunity for refugee children to receive Ukrainian education abroad remotely); to intensify informational, educational, and educational activities; provide assistance in organizing the cultural life of Ukrainians abroad; ensure the opportunity for displaced persons to realize their civil rights. Informational, psychological and advisory support for migrants is also important, which will also make it possible to make an informed decision about the possibilities for returning to Ukraine. World practice shows that the presence of strong social contacts of migrants with the Motherland is one of the most important prerequisites for their return. It is obvious that in the conditions while the hot phase of the war is still going on and the threat of air attacks from the aggressor remains constant for the entire territory of Ukraine, it is inappropriate to talk about stimulating the return of refugees. However, it is extremely important at this stage not to lose ties with them, not to let them lose their sense of belonging and feeling that their country needs them.

2. Preservation and development of labor, social and economic relations.

The introduction of quarantine restrictions in connection with the COVID-19 pandemic (2020) prompted educational, research, etc. institutions and organizations to introduce distance learning and work. The use of this experience became extremely useful in the conditions of the war, which made it possible to ensure the continuity of the educational process, continue work and support the country's economy. However, the government's ban on remote job of public sector workers abroad (CMU Resolution No. 481 dated 04.26.2022) may cause their mass dismissal. It especially concerns the research field, where the need to make an immediate choice between a small salary, a dangerous existence in Ukraine, and possible better prospects in a foreign, but safe, peaceful country can prompt displaced persons to release and finally emigrate. Therefore, the government should introduce measures to preserve the jobs of employees of the public sector of the economy, as well as to make wider use of the investment and intellectual potential of Ukrainian migrants.

3. Restoration of the social infrastructure of Ukraine.

According to the Ministry of Reintegration of Temporarily Occupied Territories, 800,000 Ukrainian citizens have lost their homes or need to repair them. At the same time, studies show that the most important conditions for the return of foreign migrants are security and the availability of housing. Since housing problems require an immediate solution, simultaneously with the gradual restoration, reconstruction and renovation of the housing stock, it is necessary to expand the network of specialized houses for temporary residence of citizens. Along with this, other objects of social infrastructure (roads, transport connections, schools, kindergartens, etc.) need to be restored and modernized as soon as possible. Measures to return citizens to Ukraine can be effective only after solving these urgent problems.

4. Implementation of monitoring studies of current problems, needs and intentions of Ukrainian refugees.

The information basis for the development of the program for the return of our citizens after the war should be the results of regular sociological surveys of the displaced persons in order to monitor their current problems, interests and intentions. Such monitoring should also identify the main factors of return, as well as determine the relevance and possibilities of forming a circular migration model. Along with this, it is necessary to carry out an active information and campaign policy, which should form citizens' understanding and awareness of their importance, the significance of their contribution to the recovery processes of their Motherland.

5. Strengthening of cooperation with the countries that hosted the largest number of Ukrainian citizens.

Close cooperation with the countries that have become the main recipients of refugees from Ukraine (Poland, Germany, the Czech Republic, Bulgaria, Turkey, Italy, Spain, Moldova, Romania and Slovakia) is important for the joint organization of the necessary assistance to our citizens and the possibility of maintaining contacts with them in the future. Here, it is also advisable to activate the negotiation and contractual process regarding the settlement of issues of social support, employment and pension provision of displaced persons. The development and implementation of joint programs of circular migration, as well as targeted programs of voluntary return,

is relevant. Special assistance is needed for persons who, under certain circumstances, appeared on the territory of the Russian Federation. With the support of authoritative international organizations, the government of Ukraine should facilitate the voluntary return of Ukrainians home.

6. Russian rocket terror counteraction.

During the five months of the war, Russia launched more than 3,000 missiles on the territory of Ukraine. The aggressor's use of old-style (X-type) missiles in urban settlements and cynical targeted bombing of civilian objects and places of crowding make the entire territory of Ukraine unsafe for habitation. Such a situation pushes abroad not only people from occupied territories or places of hostilities, but also residents of settlements far from the front line. It is obvious that Ukraine's path to victory and peace is a long and difficult process, but only the reduction of missile terror would be able not only to reduce the scale of population migration abroad, but also to encourage a certain part of refugees to return to their Motherland. To achieve this goal, it is necessary to intensify the work on obtaining additional means of air defense protection, to increase international political and economic pressure, to find levers of influence on the leadership of Russia to ensure compliance with at least the rules of warfare or to achieve its recognition as a terrorist state.

7. Development of mechanisms for the voluntary return of Ukrainian refugees from abroad after the end of the war.

In the strategy of Ukraine reconstruction in the post-war period, which is being developed now, programs to stimulate the voluntary return and reintegration of refugees has also to be included. Such programs should contain not only guarantees of receiving basic assistance (in particular, for the restoration of destroyed or damaged housing), but also a number of measures to stimulate the employment of these persons, support the start-up of a private business, provide professional training and retraining services, psychological and medical assistance, etc.

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**POST-GLOBALITY AS A
CHANGING OF
CONDITION OF
INTERNATIONAL AND
DOMESTIC
OPPORTUNITIES AND
THREATS**

Abstract

The dialectics of external and internal threats is considered in unity with the formation of post-global conditions. The need for a post-global perception and strategy is being explored. The development potential is characterized, which allows you to take advantage of new opportunities and reduce / localize threats.

Keywords: *development, post-globality, post-globalism, opportunities, threats.*

Introduction

The purpose of this text is to identify the features of the period of changes that have begun for all of humanity and for its groups, characterizing the transition to post-globality as a condition of opportunities and threats. The importance of the topic is related to the need to understand and using the potential of the new era in the localization and containment of a new configuration of threats.

Materials and Methods

The methodology is based on the unity of theoretical research and practical structuring, analytical generalizations and historical specifics. The tendencies of changes in social integrity know both epochs with the dominants of one or another social paradigm, as well as moments of forced transition at the junction between them, characterizing the features of the unfolding historical process. The transitional period forces a choice. And the uncertainty is multiplied by the specifics of the superimposition of the characteristics of the interacting epochs and the period of forced transformations itself. The usual purity of forms, the predetermination of the “correct” are

leaving. Within the framework of the transition period, social eclecticism is ubiquitous, bizarre combinations of approaches of different quality coexist, and historical accidents abound. There is a complex movement that combines different (sometimes qualitatively) models, scenarios and processes. We are talking not only about the political conditions for the realization of freedom, but also about its much more global prospects associated with the dominance of tolerance and diversity. Changes are being made both in individual social institutions and in the entire cultural environment, relations, and structures. Heterogeneity, uncertainty, interpenetration and mutual resonance of fragments of various structures, the mobility of the boundaries of phenomena and processes are growing; the ratio of social norms and anomalies is radically transformed. When there is no stable external support in the form of a common ideology, a single culture, a stereotypical science, then it is necessary to recognize the right to the existence of the unlike, special and unusual. A change in geostrategic regional positioning during an interparadigm transition is always accompanied by an increase in socio-economic disorder and chaos. At the same time, effective management of chaos implies the priority of flexibility, the inclusion of stimulation of desirable behaviour, events and processes, maintaining a balance between the technique of change, tactics of action, strategy and mega-strategy of transformations. In particular, the use of the potential of regional management, which differs significantly from both state and corporate ones, incl. – a comprehensive natural use of local authentic approaches and reliance on autochthonous economic traditions and ways. The flexibility of the structures of negative and positive feedback makes it possible to suppress harmful impulses and strengthen useful ones, resulting in the improvement of the measure of development, growing subjectivity into reflexivity, allowing multiplying the specific advantages of the ratio of the cyclically repeated and the uniquely irreproducible. This circumstance actively includes the tools of future-diagnostics in the context of changes in science and society, and dictates the direction of research priorities. Since different cultural and civilizational worlds have a different and diverging ratio of advantages and points of vulnerability, the balance of methods and areas of competition preferred for each of them is

different. Accordingly, a series of Super-projects for life and development is based on many specific innovative clusters that embody basic goals and values.

Results and Discussion

The certainty of socio-economic processes is historical and changeable. Nowadays not only formal rules are being transformed, but also the socio-cultural fabric of society itself. This circumstance actively includes the tools of future-diagnostics in the context of changes in science and society, and dictates the direction of research priorities (Shedyakov, 2021; Shedyakov, 2022). The onset of the post-global era is reflected in the complex nature of the changes: both the post-global nature of the objective state and the post-globalism of awareness of what are happening (Flew, 2018; Shedyakov, 2016). Post-globality is a new reality in the social organism and world order. Post-globalism – it's reflecting (in particular, new understanding and strategy).

The transition currently being experienced by the ecumene is no longer the formation of a supra-biological, social form of development, but a movement towards the dominance of spiritual creativity. In turn, the flourishing of science, culture, art, technology requires freedom of thought in forms acceptable to the population, as well as release from the yoke of everyday worries and routine duties. Accordingly, the processes of change require the public protection of diversity, otherthinking. Transformations of the paradigm level, fixed as a movement towards a “knowledge society”, “smart society”, etc. suggest the transfer of the centre of gravity of social life and its regulation from the level of a separate “elite” to the sphere of multifaceted everyday relations, each element of which can become a node for the further development of the social rhizome. Social structures succeed where conditions are provided for socially beneficial development and the realization of the giftedness of everyone, which focuses on the priorities of the “tree of goals” of the new modernization. In this sense, the transitional inter-paradigm period is both a “return to oneself” and the implementation of modernization on its own basis. Polycentrism and rhizome development deliberately deny both the uniqueness of the “rallying point” of the future and the commonality of the development model.

A number of interacting centres are being formed, each of which cultivates convenient options for structuring social life and education. Yes, and they are interested in interaction and complementarity, as a rule, they are different from each other, and by no means uniform phenomena. At the same time, any attempts to “introduce uniformity” still hinder creative search and development. The structure of relations moves from the orderliness of the social system to the state of non-systemic integrity and flexible interaction of polysystems. So, from competition for the development of the optimal model, they are moving on to building their own unique options for structuring and developing based on their vision of the future. On the one hand, the world order was based on the international division of labour and global flows of capital, goods and services, in particular, the globalization of information and, accordingly, ideas about living standards, incl. education, healthcare, etc. Many of the signs of the formed supranational interaction are irreversible. The reproduction of the ecumene firmly linked the cultural and civilizational worlds, establishing the ratio of competitiveness / competitiveness and partnership / cooperation with varying degrees of complementarity or, on the contrary, hostility. On the other hand, there is a growing understanding of the value of one’s identity and the direct dependence of the quality of socioeconomic growth on the reality of sovereignty and the quality of socialization (Wallerstein, 2004; Shedyakov, 2017). Axial time is a period not only of awareness of one’s identity, but also of the struggle for its assertion. And since the cultural and civilizational worlds live their stages by no means synchronously, then the competition between them largely depends on the quality of the use of the specifics of conditions and characteristics chronologically layered on each other.

At the same time, on the one hand, a sufficient material and technical base has been accumulated on a global scale both to meet the needs and reproduce the ecumene, on the other hand, the technogenic pressure on the environment and humanity itself has become critical. Strengthening on a global scale of post-industrial features of production relations, the globalization of the international economy (in particular, competitive relations) creates objective prerequisites for ensuring the post-industrial level of industrial democracy and the development of ideas about the socially

responsible behaviour of everyone. The characteristic features of the new economic models include both the well-known humanization of the economy and the manifestation of elements of meritocracy. At the same time, models of an alternative way of life are being massively reproduced, and the significance of the non-productive dimension of life (primarily, learning and games) is increasing. The economic signs of a new stage of development are manifested, for example, in the formation of an unprecedented consumption pattern, when “spiritual food” and information, as well as the means of their delivery, processing and analysis, are increasingly becoming the main items of demand. In the economic structure, the service sector (in particular, information), as well as the leisure industry, is gaining priority. Meanwhile, even countries that managed to make a modernization breakthrough at some historically limited period of time and improve their position in the system of international economic relations by reducing costs, in particular, wages and pension payments, were subsequently forced to radically reconsider their attitude to this issue or missed the positive dynamics of economic growth. It is all the more difficult to count on a decent place for the national economy and the long-term competitiveness of domestic firms without the qualitative development of the corporate organization of relations of intellectual activity in the global division of labour that is being formed today on the basis of the knowledge economy. Factors of economies of scale in production cease to be decisive. At the same time, the flexibility and adequacy of changes in organizational and economic decisions (primarily, the combination of adjustability and self-regulation) makes it possible to successfully counteract excesses, creatively using the released economic energy.

International life is being radically reshaped (including by manipulative means). Part of the “backward South”, being modernized, “drifts” to the “North”, while the former “East” breaks up and, deindustrializing, falls away in fragments from the “North”, turning out to be a periphery and semi-periphery, previously usually associated with the “South” (Castells, 2010; Trout & Rivkin, 2001; Shedyakov, 2020). Among the many indicators of progress, the defining place belongs to two criteria: the value of human life (in particular, the state and dynamics of the basket of social, economic, political, environmental rights and freedoms, the availability of

medicine, art and education, the duration and quality of life, etc.) and layer of the total spiritual and material culture (the state and dynamics of industry, branches of scientific and technical progress, lines and enterprises of advanced technological structures, the structure of investments, etc.). Progress correlates with the strengthening of popular sovereignty (including political and economic). The radical restructuring of the global world order has already overcome its “point of no return”. It became quite noticeable not only the main solutions, but also the main features of the new structure of international architectonics, closely related to the characteristics of internal transformations. The signs of the former world order will sink into the past, despite the fierce resistance of its favourites. In the manifested tendencies, flows of self-organization and purposeful influence of different (in particular, states and supranational unions) forces, wills of individuals and organizations, cyclically repeated and irrevocably unique processes merge. During the inter-paradigm transition, turbulence naturally increases, and now this is happening rapidly and on many levels.

The transitional period, obviously, is not a time of increment on an established basis, not an era of prosperity, but an era of crisis, breaking the usual rules and bringing to the surface of accumulated contradictions, an unstable and changing balance of power, polarization of society and intensification of competition. Actually, confirming the well-known expression, a good theory directly demonstrates its practicality: the question of the practical truth of abstractions clearly becomes extremely acute. The vector of social movement set by current events predetermines not only the pace of subsequent transformations, but also the very orbits of transformations of cultural and civilizational worlds. The essence of the processes that fill the transition period is associated with the confrontation of various options for further changes, ideals and models of the future, and not only with the withering away of past strategies and the birth of future ones. This period radically expands the range of decisions, often provoking a more or less aggressive “escape from freedom”, a struggle for the usual outlines. The way of life and perception reflects the features of mental matrices and development. Territorial crowding and narrowness of thought are closely linked, giving rise to mass practices of aggression and only

fruitless dreams of freedom. On the contrary, the breadth of space and consciousness naturally translates into various forms of practical and mental freedom and purity. And the direction, ways, forms, rates, therefore, the results of transformations for different groups of the population and countries can be different too. And the point is not only in the potential as such, but also in the ability to manage it in changing conditions: not imaginary threats of phantom ideas, but real problems require the consolidated efforts of peoples. The emergence of global problems before humanity (largely because of its vital activity) did not at all give rise to a common understanding and pooling of opportunities. The expansion of technical and technological potential has by no means led to an equalization of the levels and quality of life. On the contrary, the breakthroughs of the leaders are also based on economic rudiments and the general archaism of the world periphery, robbed by them. The search for a new geostrategic order, models of development and interaction is intensifying, which are now being initiated in the range from the restoration of the archaic empires and reservations of the neo-caste society to the radical strengthening of democracy, self-government, and sovereignty. Of course, the process of transformation itself can take place with greater or lesser excesses. It is important that it does not become a rejection of modernity, counter-modernity, but expands the resource-methodological base of life and development of everyone precisely while integrating creative potentials, including both modernity and tradition. It is extremely important that the field of social and individual creativity increase, and the quality and duration of life of the population increase.

With the actualization of the potential for both development and suppression of the masses, the issue of social tension in countries – and, accordingly, the state of their immune systems, has become much more topical. Thus, the internal situation (in particular, the protest movements) turned out to be a significant factor in the end of both the Russo-Japanese and the First World Wars. Now, in relation to almost every state, one of the analysts of interested parties (including competing clans) is trying to see and justify the sprouts of internal weakness associated with social-class, racial-ethnic, religious, cultural-regional confrontation, and intra-elite conflict. The sophisticated and extensive range of information impact provides a

varied list of measures to antagonize the splits in public space. The use of the potential of the era, the reflection of old and new threats presupposes the support of the principle of the indivisibility of security. On the contrary, it is a deep conviction in the self-worth and self-sufficiency of one's own that correlates with the readiness to accept someone else's. The ability to think in broad public spaces, brought up and tempered by millennia of historical experience, while maintaining freedom of religion and socio-cultural styles, develops a "civilizational tact", forms the harmony of diversity. Thus, a model of integration without dissolution is realized; peoples are reunited while maintaining the features and characteristics of each of them, complementing each other. In this situation, ensuring a balance of the general and the particular in the correlation of interests, rights and obligations through the entire range of decentralization and regionalization, regulation and self-regulation makes it possible to influence the decision of the question of whether new trends will exacerbate the struggle of multi-level egoisms or strengthen the integration potential of catholicity as a heterogeneous unity. The law of uneven historical development characterizes the "zigzags of history" in which some "overtook without overtaking" others. One of the leading factors of this is the emergence and consolidation of the

The "genius of place" is becoming the most important factor in the revival and development in the post-global environment. The dialectic of "universal – special – individual" allows us to distinguish between positioning at the levels of meta-, mega-, macro-, meso-, micro-regions, using both the adaptive capabilities of territories and the prospects for selective adaptation of external developments to local conditions, to maintain a balance of decisions between the interests of "strong" and "weak", leaders and outsiders. The contradiction of tribal forces unfolds into social conflicts, causes models of sublimation. Moreover, history has known periods when either a refusal to develop or a negative moral force turned out to be a consolidating basis, for which later retribution came. In the information age, however, the corresponding component becomes the most important, and even predetermining the result in balance with measures of directive pressure. Attempts to preserve the templates of the former model of the world order are often associated with informational aggression, political and economic pressure, and

even direct military intrusion into regional leader countries to suppress competitors. In general, socio-political regression – individual reduction to animal instincts and social atomization – are stimulated by the environment of “twilight consciousness”, oriented towards consumerism and hoarding, rejecting the essential forces of man in favour of the fetishization of things and capital.

The adequacy of science to the demands of practice lies in its readiness to offer high-quality and timely tools for analysis, forecasting and constructive impact: both in terms of correcting one’s own behaviour and influencing the surrounding natural, socio-economic and value-semantic environment. Moreover, the increased power of mankind has turned it into a factor commensurate with nature. Emphasizing the reflexive nature of the ongoing transformations greatly increases the potential for conscious intervention in the trends of the historical level, in particular, with the resources of internal corporate management. At the same time, the preservation of both humanity itself and the world around it strictly requires the recognition of intrinsic value and the maintenance of complex processes of self-organization and self-regulation. The post-global world requires differentiation as a means of survival and development. The cultivation of originality becomes a condition for ensuring social cohesion and economic prosperity. In particular, the most important issue in the pipelining of time calls becomes the allocation of the unique and the common; unique and repetitive; non-renewable and renewable; national, regional and corporate – to take full advantage of the historical opportunity that is falling. It is especially important and difficult to find and implement this balance in the context of worldwide paradigm-level transformations that break the established position in the factors and results of competition. Thus, the ratio of centrifugal and centripetal tendencies is historical. At the same time, attempts to “introduce uniformity” with forcible stereotyped and standardization not only always cause rejection and rebuff, but also do not at all contribute to the disclosure of the diversity of talents and potential. In the context of strengthening post-global tendencies, this resistance to imposed canons can become one of the currents that feed separatism. At the same time, both the active participation of certain groups of the population in the general economic life and the transfer to the

regions of a significant part of socio-economic obligations by no means automatically become effective resources for ensuring integrity. At the same time, it is precisely attempts to resist the tendencies of decentralization of management that can become a significant obstacle to development and even integrity.

So, as before, knowledge, experience, objects of material and spiritual culture are scattered, obviously not centralized and not standardized – without significant damage to the result. As you know, myriad sociocultural styles coexist in the world, more or less complementary or hostile to each other, ready for competition and / or partnership. They are in different phases of their development; differ in the balance of their advantages / disadvantages, opportunities and potentials. Increasingly, the process of changes is manifesting itself in the post-global world, providing for the coexistence, intersection and mutual resonance of diverse and diverse development trends, among which (unlike the organizational and managerial models of tradition or modernity) none can claim such exceptional significance that would allow one to abstract from the others without harm. And the consequences of this are incalculable and essential. In particular, they concern the socio-economic and value-sense structuring of the ecumene, as well as the realization of the potential of post-non-classical science. In this case, it can be much more productive to study the comparative advantages and disadvantages of approaches, principles, rather than forms.

Conclusions

Interaction between cultural and civilizational worlds includes partnership / cooperation and competition / opposition. Its political and economic resources are quite diverse, and methods and technologies are improved according to the phases of transformation cycles, the stage in the megatrends of changes, sociocultural, technological dynamics, and combinations of subjective and objective factors among allies, opponents and neutrals. The globalization of the political and economic environment by no means completes the history of the ecumene. The completion of some strategies brings to life others. Humanity is already exhausting the potential of the former type of development, based on the desire for unlimited economic extensive growth, which required an increase in

the unevenness of social opportunities, expansion into new markets and, consequently, the constancy of consumer frenzy and military adventures. Moreover, world-historical transformations include processes that are repeatable, cyclical and irreversible, initiating the innovative nature of the geostrategic dominant. And post-globalism, as a natural trend of differentiation, brings regionalization to the forefront of world history, damping local and international changes, where obviously heterogeneous components, sometimes of a radically different nature, interact more and more effectively. Without a reliable regional-civilizational moral and ethical foundation, humanity is now able to inflict critical damage both on the environment and on itself. Traditions and values have always formed the forces of self-preservation and self-development of the ecumene. However, only now the threats have reached a planetary scale, forming challenges both to the value of human life itself and to the heritage of world (spiritual and material) culture. At the same time, the ecology of the individual presupposes a constant civic choice in favour of creativity as a manifestation of a purely individual combination of talents in a publicly provided form. If earlier a person, as a rule, was realized within the strict framework of a life path predetermined by birth, today, on a social scale, freedom of choice has replaced the former freedom from choice. At the same time, the strategy of building up one's own advantages becomes successful, and not eliminating deviations from the external template, stimulating desired changes, and not administration in order to uproot imaginary shortcomings, increase diversity, and not slavishly follow the uniformity of global canons and clichés. The skill is growing not so much of the struggle for the development of one's own cultural and civilizational world, as of individual entry as a building material into the most comfortable cultural and civilizational world at the moment. Under post-globalism, success quite naturally crowns fundamentally heterogeneous formations. We are talking about new types of organizational structure, the removal of rigid boundaries, the mosaic and blurring of managerial processes, the combination of different elements of power. In political and economic classicism and baroque, which emphasize the dominant of the integrity of the state, there is too little room for the political creativity of "other thinking". Post-globalism brings to life new

resources of self-activity, opens up scope for the self-deployment of tendencies, and eliminates the problem of norms and anomalies.

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**INFORMATION
TECHNOLOGIES OF
CONTROLLING IN
THE MANAGEMENT
OF TRADE
NETWORKS****Abstract**

A characteristic feature of the development of modern society is intensive informatization. Today, one of the main directions for improving the management system of trade networks is the implementation of information technologies.

The paper defines the essence of the term “information technology”. The components of information technology controlling in the management of trade networks are listed. The definition of the term “information technology of controlling in the management of trade networks” is given. The positive socio-economic results of the introduction of information technologies into the practice of the service of controlling trade networks are highlighted. The ways of implementing information technologies for the automation of controlling in trade

networks are outlined. The catalog of selection criteria for the integrated system of automation of the trade network is defined.

Information technology is an important element of the system of information providing of controlling. Its functioning in the management of trade networks consists in receiving, processing, summarizing, comparing and analyzing large arrays of information data. Under such conditions, the effective performance by controlling of its functions and tasks by controlling is impossible without the use of modern information technologies, which allow to improve the quality of information support thanks to the acceleration of information processing and to ensure the automatic implementation of the necessary analytical calculations. Effective use of controlling tools in enterprise management today requires automated processing of economic data.

Keywords: *enterprise, information technology, trade networks, information system, efficiency, competitiveness, productivity, finance, market, consumer.*

Introduction

In the conditions of the global financial and economic crisis and martial law in Ukraine and the need to ensure sustainable economic development, the role of trade is growing significantly. Trade ensures the formation of gross added value in Ukraine and jobs for the economically active population. A characteristic feature of trade is the development of trade networks. Trade networks contribute to the growth of domestic production, satisfaction of consumer demand for goods at stable prices, formation of a consumer culture among buyers, filling of the revenue part of budgets, establishment of social responsibility in society, etc. The concentration and centralization of capital in trade networks provides a sufficient financial basis for their further development. Increasing competition in the market of trade services, activation of the processes of economic activity diversification, instability of the external environment, complication of economic relations of trade networks, peculiarities of activity and territorial branching of divisions complicate trade management, which requires the introduction of new management tools.

Materials and Methods

The theoretical and methodological aspects of the implementation of information technologies of controlling in the management of

trade networks are highlighted in the works of Ukrainian scientists – L. D. Buryak, O. V. Olifirova, S. N. Petrenko, M. S. Pushkar, M. M. Stefanenko, M. G. Chumachenko and others; foreign ones – A. Becker, B. Wurm, L. Lakhnit, E. Mayer, H. Hungenberg, P. Horvath and others. The theoretical and methodological foundations and practical aspects of the introduction of information technologies of controlling in trade are highlighted in scientific works. However, thorough scientific developments regarding controlling in the management of trade networks and its features in the network trade business are insufficiently covered and therefore they require further research.

The purpose of the paper is to improve the mechanisms of information providing of controlling in trade networks.

Results and Discussions

A characteristic feature of the development of modern society (including management as an element of social relations) is intensive informatization, which allows for the activation of socio-economic and scientific-technical processes of creating optimal conditions for meeting information needs based on the development and use of promising technologies. Today, one of the main directions of improving the management system is the introduction of information technologies.

In modern economic reference books, information technology is considered as an organized set of processes, elements, devices and methods used for information processing. An information system is a human-machine system that provides collection, accumulation, storage, processing and provision of information in the form of data and knowledge, which necessary for management (Bereza, 2001). Thus, information technology contains both a methodical (set of methods for information transfer and processing) and a technical component – a communication system for collecting, processing and transmitting information at the enterprise, consisting of servers, client computers and network equipment.

The confirmation of the conclusion formulated above is the definition of the essence of the term “information technology”. Researchers define that information technology is a complex of methods and procedures, with the help of which the functions of

collecting, transmitting, processing, storing and bringing information to the user in organizational and management systems are implemented using a selected set of technical means (Sytnyk et al., 2001). Therefore, the effective functioning of information technologies of controlling is possible under the conditions of using only ultra-modern software, computers and network equipment.

Effective functioning of controlling information technologies in the management of trade networks is ensured by the organic combination of all components. The components of information technologies of controlling include: hardware as a physical structured set of computers, network equipment, etc.; software as a set of rules, basic principles and algorithms necessary to ensure the operation of the hardware; brainware as mental abilities of controllers and programmers that allow (depending on the planned, expected results and goals) to justify the feasibility of using hardware and software, as well as the configuration and requirements for it in each case. Thus, information technologies of controlling represent a system of components of hardware, software, technical and intellectual support, which are integrated with each other and interact with the purpose of effective automation of controlling (Figure 2.1).

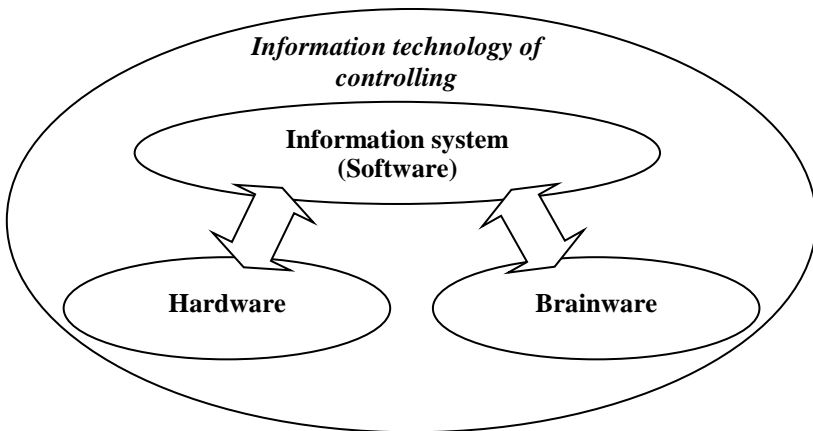


Figure 2.1 Components of information technology in the management of trade networks

Source: compiled by the authors

Among the components of the information technology of controlling, the information system occupied an important place, as a set of certain means, rules, methods, principles and algorithms for collecting, processing, storing and transmitting information. The software products just ensure the organized operation of the hardware and create conditions for the development of the intellectual potential of users.

Researchers of the problems of creation and functioning of management information technologies, in particular O. D. Serdyuk, define certain characteristics that can be fully applied to information technologies of controlling. Information technologies of controlling correspond to certain characteristics: informational support of controlling at all stages of information movement is carried out with the help of an integrated communication system and a complete database; the controller works by operating with unprogrammed data, displaying basic options on the monitor screen, outputting results to a printer or monitor screen, entering data using a keyboard, scanners, receiving data from the Internet or other network information systems, etc.; the work of the controller, which involves processing and fixing on paper media only the resulting documents, intermediate documents are created in electronic form, transmitted to other users via computer networks; there is an opportunity to quickly change the principles, methods and forms of collecting, processing and providing information (Serdyuk, 2004).

Taking into account the peculiarities and tasks of controlling and, in particular, system of its information support, it is possible to formulate such a definition of the term “information technology of controlling in the management of trade networks” as a system of hardware and communication tools, software products, the intellectual potential of controllers, which provides automated collection, reception, transmission, storage, and processing of information that necessary for the performance of controlling tasks in management.

The generalization of the experience of automation of controlling at enterprises of various economic spheres allows us to conclude that the introduction of information technologies into the practice of the activity of the controlling service of trade networks gives positive socio-economic results, which are manifested in: a rapid increase in

the scientific capacity of the controlling activities thanks to the implementation in the software environment of leading scientific developments in the field of management, economics, finance, analysis, etc.; the possibility of using expert systems in controlling thanks to the use of electronic advisors who, based on the information contained in the database, informally analyze the situation and provide advice on solving each specific task facing the controlling service of the subject of network trade entrepreneurship; increasing the efficiency of controlling activities thanks to the introduction of electronic document management tools, e-mail and computer networks, which allow rapid exchange of resources, and also provide the possibility of remote access to various information data; the presence of an early warning system, which allows controllers to promptly detect deviations of the actual values of key indicators of the economic activity of the network from their planned values, which ensures high efficiency in achieving the set planned tasks; creating conditions for increasing the education of controllers, which is provided through access to various scientific and educational resources, expanding self-education, the possibility of analyzing and evaluating the experience of solving certain management and controlling problems in divisions and other controllers of the trade network, creating conditions for distance learning in higher educational institutions; opportunities to develop proposals for optimizing the business model, thanks to which it is possible to optimize not only the business processes of the trade network, but also its organizational and financial structure (Lutskyy, 2007).

In the work of T. Davenport, another advantage of the use of information technologies in management is given – the possibility of controlling each component of the process and establishing the locations of difficulties (Davenport, 1993). Such opportunities are created by modern information technologies. Their use is especially important for controlling in the management of trade networks, since economic activity is characterized by a high level of business activity and the complexity of business processes, and the effectiveness of their performance significantly affects the activity results of the trade network as a whole. Thus, the implementation of modern information technologies in the work of controllers in the

management of trade networks contributes to increasing the productivity and effectiveness of controlling activities.

Implementation of information technologies for automation of controlling in trade networks can be carried out in several alternative ways: ordering and development of an automated information system individual for a certain network (“in-house automation”); the use of ready-made software for the automation of controlling activities in the trade network, which can be implemented by: introducing the most standardized product (“box version”); implementation of some modules of the integrated information system (“patchwork (local) automation”); implementation of a complete version of the integrated system (complex system). Each of the above methods of automating enterprise management has certain advantages and disadvantages. When choosing a method of automation, the leadership of the retail network should be based on a clearly formulated set of goals and a strategy for their implementation. However, most practitioners prefer to use a complex information system of the ERP class. Therefore, the use of the first approach allows you to create a software product that fully takes into account the specifics of the economic activity of the subject of network trade entrepreneurship and the information needs of its managers and controllers. However, its main drawback is that it requires significant financial costs, which make this approach practically unacceptable for most domestic trade networks (especially in the conditions of the global financial and economic crisis and during the military time in Ukraine). It is more promising to use the second approach for the implementation of the project of automation of controlling in networks, which is primarily due to the large number of ready-made information technology solutions available on the market. The main positive qualities of the ready-made software are: clearly defined functional framework; application possibilities independent of the enterprise; fixed prices; minimal need for program adaptation. The use of ready-made software for the automation of controlling has certain disadvantages, the main of which is its low adaptability to the specifics of the economic activity of a certain subject of network trading business and some inconsistency with the informational needs of management drivers and controllers. This shortcoming can be corrected by additional, usually expensive, software customization. Peculiarities of the

network trade business according to the testimony of practitioners force network managers to strengthen the support of their business with thorough developments in the field of information technologies that allow to control trade, accompanying production, provision of additional trade services, finance, marketing, personnel and other (Sokolov, 2007). Thus, for the automation of controlling activities and management of trade networks in general, it is advisable to use corporate information systems of ERP II class. Today, the most widespread on the market are complex information systems containing certain elements of controlling, including the developments of domestic and foreign companies: R/3 (SAP AG company), SAS System (SAS Institute company), Oracle Express (Oracle company), “Galactica” (Galactica company), Flagman (INFOSOFT company), M-3 (Client-Server Technologies company), Alaf (Alaf Consulting and Soft company) and others (Karminskiy & Zhevaga, 2002).

The reasonable cost of the standard software and minor costs for its additional configuration make it more attractive for automating the work of the controlling service in the management of trade networks. Managers and controllers of the subject of a network trade business face the task of choosing software products that more closely match the specifics of the business of a certain trade network and the information needs of the controlling service specialists.

According to experts' estimates, the total cost of implementation of the automated information ERP system project consists of separate cost items, the main of which are: license acquisition, consulting, specialist training, equipment purchase, interface development, premium fund, non-adjustable expenses, support services in the non-productive period. In the conditions of the global financial and economic crisis and in military time in Ukraine, the financial capabilities of network trade business entities are limited, and therefore complex automation is problematic. In this case, it is advisable to gradually automate individual business processes that have the greatest impact on the results of the trade network activity. This approach is acceptable in modern conditions, since the majority of integrated information systems have a modular structure, and allows for the gradual introduction of individual modules.

An effective means of preliminary selection of standard software

is the creation of a catalog of criteria, which will contain a list of mandatory functions. Practical experience shows that after preliminary selection, no more than 10 products should be left for further evaluation regarding the compliance with the needs of managers and controllers of the trade network. Otherwise, there is a high probability of unnecessary financial costs and delaying the process of implementation of the controlling automation project.

Based on the content of tasks and the function of controlling in the management of trade networks, the catalog of criteria for selecting an integrated network automation system can be supplemented with criteria characterizing its suitability for automating the work of the controlling service, which should include the following: the availability of tools for evaluating the effectiveness of the implementation of management functions, identifying the reasons that caused deficiencies; the possibility of assessing the coherence of the system of target performance indicators of all structural divisions of the trade network; monitoring of permissible limits of deviations of actual indicators from target ones; identification and establishment of causes of deviations, automatic generation of options for management measures to overcome them; integration with all information systems existing in the network; the ability to compare and identify the most effective management decisions of the managers of the trade network for similar business operations; the ability to automatically generate options for recommendations for typical management problems; evaluation of the results of management activities of managers of all levels; the ability to transfer reporting to consumers of controlling data. On the basis of the defined list of criteria, it is possible to evaluate the compliance of the controlling modules of the integrated information systems of ERP-class with the modern concept of controlling, as well as the information needs of managers and controllers of trade networks. For this, it is necessary to study the ERP systems presented on the domestic information technology market. Among the information technologies in which control automation solutions in enterprise management are implemented, the R/3 software product of SAP AG company is the most popular, which is primarily explained by a significant number of successful installations at enterprises around the world. However, the SAP R/3

system, due to the high cost of implementing the project, is acceptable only for large trade networks with large volumes of activity and a significant, territorially branched network of business objects. For trade networks with small volumes of activity, information systems of domestic developers, which in terms of functionality correspond to ERP class systems (for example, Parus and Galaxy systems) are more acceptable.

Conclusions

The functioning of controlling in the management of trade networks is accompanied by the acquisition, processing, generalization, comparison and analysis of significant arrays of information data. Under such conditions, the effective performance by the controlling of its functions and tasks is impossible without the use of modern technologies, the use of which allows to improve the quality of information provision of the controller thanks to the acceleration of processing and generalization of information and the provision of automatic providing of necessary analytical calculations.

Components of information technologies of controlling include hardware, software and brainware. Thus, controlling information technologies represent a system of integrated hardware, software, technical and intellectual support components that interact for the purpose of effective automation of controlling activities.

A special place among the components of the information technology of controlling is occupied by the information system, as a set of certain means, rules, methods, principles and algorithms for collecting, processing, storing and transmitting information, since the software products just ensure the organized operation of the hardware and create conditions for the application and development of the intellectual potential of users.

Based on the content of tasks and the function of controlling in the management of trade networks, the catalog of criteria for selecting an integrated system for automating the work of a trade network can be supplemented with criteria characterizing its suitability for automating the work of a controlling service, which should include: the availability of tools for assessing the effectiveness of the implementation of management functions; identification of reasons that caused deficiencies; the possibility of

forming informational and analytical internal management reporting based on the assessment results; the possibility of assessing the coherence of the system of target performance indicators of all structural divisions of the trade network; monitoring of permissible limits of deviations of actual indicators from target indicators; identifying and establishing the causes of deviations; automatic generation of options for management measures to overcome them; integration with all information systems existing in the trade network; the ability to compare and identify the most effective management solutions of network managers for similar business operations; the ability to automatically generate options for recommendations for typical management problems; evaluation of the results of management activities of managers of all levels; the ability to transfer reporting to consumers of controlling information data at all levels of management.

Just the SAP R/3 information system of the SAP AG company that best meets the information needs of managers and controllers of domestic retail networks. The SAP R/3 system, due to the high cost of implementation, is acceptable only for large trade networks with significant volumes of activity and a significant, territorially branched network of business objects. For trade networks with small volumes of activity, information systems of domestic and foreign developers are more effective, which in terms of functionality correspond to systems of the ERP class (“Parus” and “Galaxy”).

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**DECISION MAKING
MODELS IN ASSET
MANAGEMENT OF
TRADE
ENTERPRISES**

Abstract

The purpose of the study is to develop and substantiate a simulation model of management of inventories as a key element of the assets of the trade enterprise. Thanks to effective models of inventory management, trade is able to ensure the continuity and efficiency of its operations. The analysis of dynamics, structure, and efficiency of asset management (AM) at the trade enterprises of Ukraine is carried out. It was found that the main share of assets in trade is current assets, among which the decisive role in ensuring stable trade belongs to inventories. The expediency of implementing socially responsible management policy in the asset management system at the present stage of development is substantiated. In the context of the possibilities of applying the principles of socially responsible management, the need to take into account the needs and expectations of stakeholders in the AM processes of the enterprise has been proved. The conceptual model of material flows management in the general system of AM of the trade enterprise is presented. A model of inventory management of a trading enterprise with the use of probabilistic-automatic modeling has been developed. An integrated and adapted to the general AM system model of material flow

management in trade enterprises is a contribution to the development of asset management theory and practice.

Keywords: *asset management, decision making, inventories, probabilistic automata, simulation model of material flow, trade enterprise.*

Introduction

The concept of asset management (AM) is of considerable interest to scholars and practitioners. International Standards ISO 55000, 55001, 55002, and Global Forum on Maintenance&Asset Management were created to implement an effective asset management system, provide long-term goals to exchange, coordinate maintenance of assets of enterprises in different countries (ISO 55000:2014, 2014). Much research in the field of enterprise management is devoted to the problems of AM. For different types of enterprises, the priorities in the management of a particular type of asset may differ. Regardless of the industry, important decisions are made based on methods and theories that optimize management results. AM modeling allows you to maximize the efficiency of asset use while reducing risks.

Most research focuses on the management of non-current assets (mostly fixed assets) of industrial enterprises, due to their significant share in the overall structure of assets. In (Sun *et al.*, 2008) the general algorithm of decision making on asset management of industrial enterprises is presented. The material is presented in simple block diagrams, which are easy to use by engineers and business managers, but the efficiency criteria are not clearly defined. The paper (Komljenovic *et al.*, 2017). considers the issue of decision-making in the field of asset management in industry, taking into account regulatory constraints.

KPMG experts propose to apply a dual model of decision making in asset management. This model includes a bottom-up approach that analyzes the operational level of maintenance of physical facilities and reliable maintenance of fixed assets. A top-down approach involves the application of the principles of strategic asset management, for example, taking into account the emergence of new best technologies (Pairon, 2015).

As for trading enterprises, the share of non-current assets, including

fixed assets, in such enterprises is insignificant, so the main focus of scientists is on addressing issues of effective management of current assets. Scholars and practitioners pay more attention to the analysis and control of short-term financial decisions in the field of working capital management of a commercial enterprise than long-term (Vavdiichyk, 2019), (Blank & Stratiichuk, 2021).

The sphere of trade at the present stage of development is undergoing a transition period of digital transformation. Rapid changes in all areas are forcing trading companies to invest in new technologies to improve supply chain management and inventory management. According to KPMG, the retailer's global spending on artificial intelligence (AI) will grow almost fourfold, reaching \$7.3 billion by 2022. It is expected that such an investment will save \$340 billion. Effective implementation of robotic process automation (RPA) reduces costs by 25%-50% (All Retail, 2020). Accordingly, the issues of making effective decisions in the field of management of various types of assets of trade enterprises using modern information technologies remain relevant.

The formation of the AM system requires approaches and methods adapted to the needs and characteristics of each field of activity. For example, in retail outlets, the focus should be on inventory management, the share of which is predominant in the overall asset structure. In practice, there is a demand for specific models of the decision-making process. Development of the general model of decision-making of AM is a difficult task because of unequal periodicity of administrative decisions, contradictory purposes of use for various users. Therefore, it is advisable to focus on a separate part of the decision-making process.

The purpose of this study is to develop a simulation model of inventory management of a trading enterprise using the methods of automatic modeling. The built model has practical significance, as it allows to reproduce of the technology of material flow of goods and provide managers with the necessary metrics for decision-making. The implementation of the built simulation model can be carried out using general-purpose algorithmic languages and specialized modeling languages, simulation software packages, simulation programming automation tools, dialog, visual and intelligent modeling systems. The software helps optimize processes and

operations, save time, reduce costs and increase asset efficiency.

To achieve this goal, the following tasks were set:

to analyze the dynamics of the volume and structure of assets of trade enterprises, to assess the effectiveness of the AM system on the example of the studied country; define the concept of AM, goals and analyze the theoretical foundations of asset management methodology in the context of socially responsible management; to develop a model of inventory management of a trading enterprise using probabilistic-automatic modeling.

Materials and Methods

The research was conducted using the methods of scientific abstraction and systematization, quantitative and qualitative comparison, analysis, and synthesis. Methods of statistical analysis and grouping were used to assess the dynamics of the volume and structure of assets of commercial enterprises. The empirical basis of the study was formed according to the State Statistics Committee of the country.

The use of the method of logical generalization allowed us to analyze the theoretical foundations and determine the main purpose of enterprise asset management, management objectives in terms of stakeholder approach, models, and tools.

Empirical analysis of the performance of trade enterprises has shown that an important component that requires effective management in order to ensure the interests of consumers of retail trade are inventories.

The main focus is on the use of simulation models built using probability machines. This is due to the fact that most decisions related to the management of complex economic systems require prior simulation of a particular process or its parts.

Most of the processes taking place in the economy are stochastic. Accordingly, a simulation model of material flows of goods of the trade enterprise is built.

The use of simulation will automate the decision-making process in the management of current assets of the trading company.

The methodological basis of the study is the basics of enterprise asset management theory. The theoretical basis for building a simulation model of material flows of the trade enterprise is the

theory of probabilistic automata (Mironov, 2016).

General scientific and special research methods were also used:

- economic and statistical methods were used to assess the current state of trade in the country on financial and statistical indicators, return on assets, and the impact of factors on this indicator;
- tabular and graphical methods were used for visual display of indicators;
- system-analytical methods were used for the theoretical formulation of the concept of asset management of the enterprise and determine the place of the inventory management system;
- analysis and synthesis approach was used to detail the factors influencing the efficiency of assets in trade;
- abstract-logical methods were used for a reasonable formulation of the conclusions of economic research.

Results and Discussion

Features of the formation and use of assets of trade enterprises at the present stage

Asset management of trade enterprises is due to the very nature of this type of economic activity. Trade as a branch of the economy provides trade in the market and involves the provision of specific trade services. The largest contribution to the development of trade is made by trading enterprises, as they account for the largest volume of trade.

The volume of trade is influenced by a number of external factors, the most important of which is currently the COVID-19 pandemic. Thus, according to (WTO, 2021), trade in goods and commercial services in US dollars declined significantly in the early stages of the pandemic. However, in the second half of 2020, trade resumed sharply, but services continued to be burdened with travel restrictions. Exports of goods fell by 8% in 2020 to 17.58 trillion US dollars, while exports of commercial services fell by 20% to 4.91 trillion US dollars. The decline in trade in 2020 was less serious than experts predicted for a number of reasons. These include proactive fiscal and monetary policies that have boosted incomes and consumption, increased demand for technological innovations to facilitate teleworking, and restrained trade policies that have maintained supply chains.

In addition to external factors, the volume of trade depends on a number of internal factors, among, which is the management of assets of trade enterprises. This is due to the fact that the effective operation of these enterprises is not possible without the quality of the formation of appropriate tangible and intangible resources, which are its basis.

In order to study the peculiarities of the formation of assets in a trade, their dynamics and structure at trade enterprises of Ukraine were analyzed (State Statistics Service of Ukraine. 2020).

The data in Table 2.1 show a gradual increase in the total assets of trade enterprises and the growth of some of their elements. Thus, during the period under review, assets increased by UAH 89,111.6 million or by 49.8%. This is due to changes in the number of trade enterprises, which during this period increased from 82,192 to 98,369 units.

Table 2.1

**Dynamics and structure of assets of trade enterprises of Ukraine
(at the end of the year; bln. UAH)**

Indicator	2016	2017	2018	2019	2020	Absolute changes, UAH billion 2020/2016	Rate of changes.% 2020/2016
Non-current assets	243,23	276,87	299,29	347,60	370,35	127,13	52,3
share in total assets,%	13,6	13,9	12,9	13,9	13,8	0,2	1,7
including:							
fixed assets and intangible assets	127,05	141,33	157,58	212,09	228,61	101,57	79,9
depreciation of fixed assets	842,80	922,68	104,02	124,16	147,79	635, 14	75,4
investment property	1,81	2,08	9,52	2,68	4,15	2,34	129,4
Current assets	1546,40	1715,82	2013,85	2149,44	2310,39	763,98	49,4
share in total assets, %	86,4	86,1	87,1	86,1	86,2	-0,2	-0,3
including:							
stocks of goods	342,26	431,91	517,35	545,88	611,69	269,42	78,7
receivables	997,46	1063,05	1281,65	1386, 93	1458,02	460,56	46,2
Total assets	1789,63	1992,68	2313,15	2497,04	2680,74	891,11	49,8
% to Total	100	100	100	100	100	-	-

An important factor of influence is also the growth of sales of goods, which in 2020 increased compared to 2016 almost twice and amounted to 4068233.3 million UAH.

As for the structure of assets, it is asymmetric, with a predominance of current assets (about 86.5%). Non-current assets account for only 13.5% of total assets of trade enterprises and this trend remains stable. This is due to the main function of trade being the movement of goods from production to consumption, i.e. the formation of the mass of goods intended for sale. However, despite the active development of online trade, which transfers a significant part of transactions to the Internet, the volume of non-current assets of trade enterprises continues to increase and in 2020 amounted to UAH 370,353.7 million, which is 52.3% more than in 2016. This is due to both the further active development of offline trade formats, as evidenced by the growth of investment real estate (+129.4%) and the growth of the share of intangible assets, due to the processes of digitalization of trade.

Current assets grew by 49.4% in five years. The largest increase was in inventories, which are designed to ensure the continuity of the process of selling goods and customer service. For the whole period, they increased by UAH 269,424.7 million or by 78.8%.

Accounts receivable also almost doubled (+46.2%). Accounts receivable account for the largest share of current assets, in 2020 this figure was 63.1%. This is due to the peculiarities of sales in the B2B segment, i.e. in wholesale trade, where commodity lending is widespread and becomes one of the necessary conditions for accelerating the sale of goods.

In order to determine the effectiveness of asset management in trade, the return on assets (ROA) will be calculated according to the DuPont model based on (State Statistics Service of Ukraine, 2020) Table 2.2.

Despite the growth in assets, the amount of profit of trade enterprises since 2018, tends to decrease. A particularly significant decrease in profit occurred in 2020 when it decreased by UAH 82,680.1 million compared to the previous year. This also affected the return on assets, which is calculated as a fraction of the division of net income by the average annual value of assets. That is, it shows how much profit per 1 UAH assets of the enterprise. Return on assets in 2020 was only 0.84%, which is 3.35% less than in 2019. The decrease in this indicator was influenced by both a decrease in the rate of return on sales (-3.23) and a

slowdown in asset turnover (-0.12). The power of the first factor is more palpable. Thus, we can conclude that the efficiency of asset management in trade enterprises has decreased at the beginning of the COVID-19 pandemic.

Table 2.2

Dynamics of return on assets of trade enterprises of Ukraine according to the DuPont model

Indicator	2017	2018	2019	2020	Absolute change		
					2017/ 2018	2018/ 2019	2019/ 2020
Net profit, bln UAH	25,87	68,81	108,56	25,88	42,94	39,75	-82,68
Assets, bln. UAH	2233,03	2405,09	2588,89	3082,85	172,06	183,80	493,96
Sales volume, bln. UAH	3351,19	4110,09	4345,85	4519,52	758,91	235,76	173,67
Return on assets, %	1,16	2,86	4,19	0,84	1,70	1,33	-3,35
Profitability of sales, %	0,77	1,67	2,50	0,57	0,90	0,82	-1,93
Asset turnover ratio	1,50	1,71	1,68	1,47	0,21	-0,03	-0,21
Influence of factors on return on assets, %							
Profitability of sales					1,35	1,41	-3,23
Asset turnover					0,35	-0,08	-0,12

The sphere of trade at the present stage of development is in the stage of digital transformation. It should be noted that COVID-19 has accelerated the development of new trends that most significantly affect the activities of trade enterprises: the evolution of the business model, the focus on reducing costs, increasing the impact of consumers and other stakeholders.

Traditional business models are gradually being pushed out of the market. Even if offline stores continue to operate in the usual formats, they diversify their activities by trading online. At the same time, this does not mean giving up physical assets, as the goods must be delivered to warehouses, shipped, transported, and accepted at another point. Selling goods from the supplier's warehouse potentially reduces costs, but requires accurate information about the number of goods, prices, shipping time, and so on. The level of logistical uncertainty is growing, i.e. the complexity of delivery from the warehouse, the probability of mismatch of the declared data with the factual data on the availability of goods. This should be based on the quality of service for the end-user. The requirements for the quality of the information system of data on

the balance of goods, prices for each product item, for each warehouse of the supplier are high.

Asset management system of trade enterprises in the context of socially responsible management

In the process of activity, each enterprise forms operational, investment, and financial resources. The results of business operations largely depend on the effectiveness of asset management and use. Optimal asset management is playing an increasingly important role in the activities of trade enterprises and involves decisions that have significant technical and financial implications.

Effective asset management requires decisions about their optimal size and composition, taking into account risk and efficiency, costs and benefits. Balanced development of all components of management in the enterprise allows achieving high financial results at optimal levels of resource use. A special place in the general system of financial management belongs to the assets management of the enterprise.

Enterprise asset management is a system of principles and methods of development and implementation of management decisions for their formation and effective use; this area of management is aimed at solving various problems. From a practical point of view, this process is a set of interrelated measures and consistent actions required to make optimal decisions in asset management, which are taken in conditions of limited resources.

According to the stakeholder approach, the company is considered as a network of stakeholders entering into a relationship of exchange of resources, where each of the participants seeks to ensure effective exchange. The use of resources in business processes creates results that contribute to the development of the company as an independent market player in the long run and at the same time satisfy the interests of stakeholders (Sytnyk et al., 2021). Improving the efficiency of asset management is the key to increasing cash flow and increasing the value of the enterprise. The Value Model is a model that describes how asset management can bring value to businesses and stakeholders.

Asset management goals, both financial and non-financial, are often interdependent and represent the interests of different

stakeholders. Any business is able to grow dynamically, taking into account the interests of various stakeholders, not just owners. The so-called, stakeholder theory, the founder of which can be considered R. Freeman (Freeman, 1984) was the beginning of modern research in the field of socially responsible management. The concept of value creation for all stakeholders integrates two relevant concepts of strategic management: positioning and resource. Stakeholder management coordination is an integral component of organizational value formation (Post et al., 2002). Thus, modern companies, which are focused on the implementation of the principles of corporate social responsibility, assess not only their own risks, efficiency, costs, and benefits but also the impact of activities on public interests and the environment. From these positions, we can consider corporate social responsibility as a management concept in which companies integrate social and environmental issues into their business processes and operations. The general concept of enterprise management and resource management focuses on achieving corporate goals in the context of public benefits.

The basic principles of socially oriented management include the following: partnership, interaction with stakeholders, compliance with legal norms, responsibility, and tolerance.

Each group of stakeholders: owners, staff, partners, the state has its own needs, which can be taken into account in the strategy, processes, and management of assets or other resources of the enterprise. Taking into account the needs and expectations of stakeholders, providing value for each group of stakeholders becomes the main goal of management, which is embedded in the company strategy. The value that is formed in the process of managing the assets of the enterprise for different groups of stakeholders is expressed by different indicators. For employees this is safety, for customers this is quality-price, level of service; for investors this is financial stability, the level of financial return on investment; for owners (shareholders) this is the return on assets (ROA), return on net assets (RONA), return on investment (ROI), return on equity (ROE), dividends, the market price of shares. Environmental safety and social values are universal indicators of the company's performance for various stakeholders. The use of assets also involves reputation risks.

Full compliance with corporate goals and the adopted asset management model ensures their optimal contribution to the enterprise. Such compliance can be achieved provided that decisions are coordinated at all levels of the company, taking into account strategic goals, tactical implementation, and operational implementation of processes.

Based on this approach, in the management of enterprise assets, the concept of a balanced scorecard (Balanced Scorecard, BSC) D. Norton and R. Kaplan, which is an integrated management system for performance indicators (Kaplan & Norton, 1996). The use of the "Efficiency Prism" model contributes to the formation of a system of key performance indicators in the context of taking into account the interests of different stakeholders (Neely et al., 2002).

In retail trade, inventories have a significant impact on the efficiency of the asset management system. Inventories provide the required volume of trade, meet consumer demand, form the competitive advantages of trade and the effectiveness of its assortment policy. The main task facing the trading company is to identify urgent problems in inventory management and the use of modern methods of their analysis in the event of a crisis in the economy. The scientific approach to inventory management is to solve the problem of optimization of inventories under the condition of forming a stable supply of goods by the trade enterprise.

Restrictions due to COVID-19 have not only become a powerful driver of innovation in the retail business but have also led to changes in consumer characteristics that are becoming increasingly demanding. Companies are inventing new ways of personalization, expanding the use of artificial intelligence. A new trend is the so-called hyper-personalization. In order to attract and retain customers, companies must be able to meet the demand for any product in any volume in the shortest possible time. Accordingly, inventory management requires the formalization of decision-making processes. The inventory management model and its integration into the overall AM system will optimize many processes and increase their efficiency (Figure 2.2).

Experience in the use of dynamic models shows the feasibility of using the method of probabilistic-automatic modeling, the advantages of this method include: simplicity and clarity, structural

and algorithmic reflection of the features of real systems; the presence of theoretical justification, which determines the reliability and adequacy of automatic models to real systems; application to a wide class of real systems; possibility of analytical research; docking with other methods.

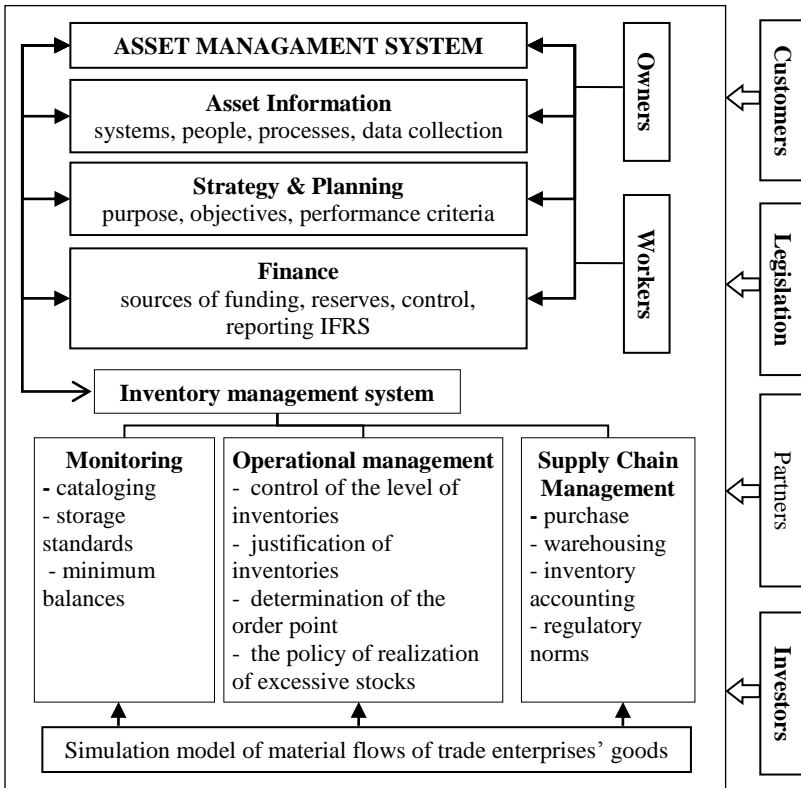


Figure 2.2 Model of management of material flows of goods in the general system of AM trade enterprise

Model of a trading enterprise asset management

In the process of asset management, various methods and tools are used, their choice depends on many factors: the specific object of management (intangible assets, tangible non-current assets, tangible current assets, cash); asset life cycle; goals and objectives of management.

The inefficiency of AM in the enterprise is often the result of the so-called “manual” management process, which is typical for small companies. Large companies use software to track assets and optimize the costs associated with their formation and implementation.

The use of software can help automate asset monitoring, maintenance, and generate real-time reporting. The software helps optimize processes and operations, save time, reduce costs and increase asset efficiency.

Information support for decision-making in the management of enterprise assets plays an important role. Reliable statistical, reporting, resource, and normative data allow full and timely analysis, assessment of time and resources, formulate goals, limitations, solutions. The need for a large amount of information requires the construction of its rational structure. Dynamic stochastic simulation models describe the most complete functioning of complex real socio-economic systems.

Information support for decision-making in the management of enterprise assets plays an important role. In order to model the material flows of the trade enterprise, automatic modeling methods were used. One of the advantages of this method is the reproduction of the manufacturability of the material flow of goods and the provision of the necessary metrics of the decision-making system for the management of assets of trade enterprises. By probability automata, we mean an object that has an internal state and is able to perceive the input signal and output the output. When using the machine at any given time, three different values must be considered: internal state, input signal, and output signal. Each of these quantities can be either scalar or vector. In other words, it is necessary to set for the machine its internal alphabet (set of allowable values of the internal state), input and output alphabets (sets of all possible values that can receive input and output signal). To build a model, we describe a formalized scheme of the process, which will reflect the main features of the system of probabilistic automata. We will consider the system of material flows of goods as the main part of the trade enterprise, which has its own warehouses with a certain range of goods.

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process, which will reflect the main features of the system of probabilistic automata. We will consider the system of material flows of goods as the main part of the trade enterprise, which has its own warehouses with a certain range of goods.

The model of material flows of goods of the enterprise can be set in a formalized form as follows: $F = \{Q_F, R, E, T\}$, where the parameter Q_F corresponds to the numerical sequence of values of material flow in the interval of its operation at time t ; R is the quantitative value of the result of the material flow transformation at time t ; E is the value of the total cost of material flow per unit time t ; T is the value of the specified time interval of operation of material flows of the trade enterprise.

The number of suppliers with which the trade enterprise can interact is equal to N . The trade enterprise has I goods, and the demand for goods of the appropriate name appears during the day with a probability of p or does not appear with a probability of $(1 - p)$. If the demand is not met, the system incurs costs in the amount of α conditional units (c.u.) per day. If at the time of demand for goods that are not in the warehouse of the enterprise, they can be purchased in other trade organizations, where an additional stock of the appropriate range of goods.

Appeal to other companies, delivery of the required goods leads to costs in the period of time, which is denoted as θ_a . Each company is assigned a value of L , which is the rate of insurance stock of goods. Additional inventories that are in the warehouse of the enterprise above the norm of insurance stock L , can be sold to other trade enterprises, such accumulation is typical, for example, for seasonal stocks. During storage of goods in the warehouse during the day, the system incurs costs in the amount of β c.u.

The order to replenish the stock of goods at the enterprise is made after a period of time τ . Each time the quantity of goods is ordered, which supplements the available stock to the order norm L . The order is executed partially or completely and simultaneously after a period of time $k \times \tau$, where k is an integer.

The purpose of modeling the analyzed system is to determine such norms of insurance stock L of goods and order K of goods for the trade enterprise so that the total cost of storage of goods and costs (transport and time) when applying to other enterprises were

minimal.

Let's make such formal assumptions about the shipment of goods from the warehouse and meet the needs of the stock of other enterprises. On the day the goods arrive at the warehouse, they are not released but released only the next. If the own stock is not enough, the demand remains unsatisfied that day and is satisfied the next day.

We choose one day as a unit of discrete-time. This choice is convenient because the study of the behavior of the model does not require too much machine time and the resulting deviations do not have a significant impact on the optimal organization of the system.

The automatic model of the system is built with the help of 16 machines. Eight of them reflect the main part of the system, and the other eight machines are indicators.

The state of the machines was determined as follows:

$a(t)$ is the level of stocks of goods in the warehouse of the enterprise;

$b(t)$ is the current demand for goods in the enterprise;

$c(t)$ is unsatisfied demand at the enterprise;

$d(t)$ is time remaining before the next order;

$e(t)$ is time remaining before the next delivery of goods;

$f(t)$ is the size of the order for the next delivery;

$g(t)$ is the size of the order for the next delivery;

$h(t)$ is the size of the last order;

$T(t)$ is system operation time;

$P_1(t)$ is accumulated costs for the period of time $[0, t]$ for storage of stocks of goods;

$P_2(t)$ is accumulated costs for the period of time $[0, t]$ of unsatisfied demand;

$P_3(t)$ is accumulated costs for the period of time $[0, t]$, arising from the satisfaction of demand by purchasing goods from another company;

$z_1(t)$ is the approximate value of the mathematical expectation of the cost of storage of goods, obtained by averaging over time $[0, t-1]$;

$z_2(t)$ is the approximate value of mathematical expectation due to unsatisfied demand, obtained by averaging over time $[0, t-1]$;

$z_3(t)$ is the approximate value of the mathematical expectation of costs arising from the satisfaction of demand through the purchase of

goods from other enterprises, obtained by averaging over time $[0, t-1]$; $s(t)$ is an approximate value of the average total costs in the whole system, calculated for time $[0, t-2]$.

The state of the system describing the material flow of goods at any time can be characterized by the Markov vector $S(t) = (a(t), b(t), c(t), d(t), e(t), f(t), g(t), h(t), T(t), P_1(t), P_2(t), P_3(t), z_1(t), z_2(t), z_3(t), s(t))$, the components of which are the states of automata at time t .

The states of automata a, b, c characterize the state of stocks of goods and demand for goods of the enterprise at the input of the system, and, accordingly, at the output of the system at time t . The components of the vector of the initial states of the automatic machines of the model during its simulation are chosen close to the average real values of the characteristics of the material flow of goods. In this case, the initial states of all automata indicators P and Z are assumed to be zero.

The state of the automata at time $t-1$ is determined in accordance with Table 2.3 of the conditional transition functionals.

We believe that for all machines, except E and D , the output signals coincide with the states of the corresponding machines. Therefore, in the table of conditional transition functionals (TCTF) for these machines instead of the symbols of individual signals, we will use the symbols of the states of the machines. For the automata E , the output signals are defined as follows: $v_1(t) = 1$ under the condition $e(t) \leq 1$ or $v_1(t) = 0$ under the condition $e(t) > 1$. For the automata D , the output signals are defined as follows: $v_2(t) = 1$ under the condition $d(t) \leq 1$ or $v_2(t) = 0$ under the condition $d(t) > 1$.

Random variables take part in the functioning of the system: μ - share of the fulfillment of the order for replenishment of goods in the warehouse; η is the current demand for goods at time t . The distribution of random variables is set on the basis of the results of a statistical study of the functioning of the trade enterprise system. The states of these automata can also be arbitrary predetermined sequences of numbers.

The level of stocks of goods in the warehouse of the enterprise at time $t + 1$ is calculated as the sum of two terms: the balance of stock of goods and incoming goods.

The first term is calculated as follows: from the level of stock of goods at the enterprise at time $t(a(t))$ is deducted the volume of

Table 2.3

Conditional functional of automata transitions of the simulation model

Automata	Conditional functional of automata transitions	
A	$\max \{0, a-c-b -\max (0, \max \{0, a - c - b - L\} - \max \{0, \max \{0, a- c- b -L\} \} - \sum_{j=1}^n c_j) + v_1 \times \mu \times f$	
B	η	
C	$\max \{0, c + \max \{0, b-a\} - \max \{0, a-b\} -\max \{0, \sum_{j=1}^N \max \{0, a - L\} - \sum_{i=1}^{n-1} c_i\}\}$	
D	$d>1$	$d \leq 1$
	$d-1$	τ
E	$e>1$	$e \leq 1$
	$e-1$	3τ
F	$(1- v_2) \times f + v_2 \times g$	
G	$(1- v_2) \times g + v_2 \times h$	
H	$(1- v_2) \times h + v_2 \times (k \cdot a)$	
T	$t = t+1$	
P ₁	$P_1 = P_1 + \beta \times \sum_{i=1}^N \alpha_i$	
P ₂	$P_2 = P_2 + \beta \sum_{i=1}^N \alpha_i \times c_i$	
P ₃	$P_3 = P_3 + Q \times \sum_{i=1}^N \alpha_i \times \max \{0, b - a - c\}$	
P _k (k=1,2,3)	$P_k: \max \{1, t\}$	
S	$Z_1 + Z_2 + Z_3$	

demand for goods arising for the period (t, t+1) \times (B(t)), unsatisfied demand, accumulated at time t in this enterprise e(t), and the value determined by the formula:

$$\max (0, \max \{0, a - c - b - L\} - \max \{0, \max \{0, a- c- b -L\} \} - \sum_{j=1}^n c_j) \quad (2.1)$$

and reflects the volume of goods sold by another enterprise from the excess insurance reserve. Since the stock level is always non-negative, if the term calculated in this way is negative, it must be replaced by zero.

If in the time interval $(t, t + 1)$ the next delivery of goods is performed, i.e. $v_1(t) = 1$, the second term can be represented as the product of the size of the next supply of goods for the share of this supply. Moreover, the share of delivery coincides with one of the implementations of the random variable μ , the value of which belongs to the interval $[0, 1]$. Otherwise, i.e. when the fair event $v_1(t) = 0$ (replenishment of goods does not occur), the second term is zero.

Thus, in general, the receipt of goods can be defined as the product of $v_1(t) \times \mu \times f(t)$.

The state of the automata \mathbf{B} at time $t + 1$ coincides with one of the realizations of the random variable η , which determines the current demand for goods of the trade enterprise.

Unsatisfied demand at the enterprise at time $t+(c_i \times(t+1))$ will be determined as follows: to unsatisfied demand accumulated at time t ($c_i(t)$), we have to add unsatisfied demand over time $(t, t + 1)$, i.e. $(\max\{0, b - a\})$ and subtract the part that can be satisfied from the company's stock, namely: $(\max\{0, a - b\})$, as well as the part that is satisfied at the expense of stocks of goods of other enterprises:

$$\max \{0, \sum_{j=1}^N \max\{0, a - L\} - \sum_{i=1}^{n-1} c_i\} \quad (2.2)$$

If the calculated states of the automata c_i turn out to be negative, then we replace these values with zeros, as above, when calculating $a(t + 1)$.

The description of the distributions of independent random variables involved in the functioning of the model is based on the results of statistical research of the real system, ie the activities of the trading company.

The vector of initial states is chosen arbitrarily so that the initial states of individual automata were as close to their average values. Zero initial states are taken for indicator machines.

Using the functional $t(t + 1) = t + 1$ recalculates the state of the automata T , which simulates the operation of the simulation time.

Setting the value of the simulated time interval t equal to 30 days, we obtain at the established norms of stocks of goods L thirty values of the states of the system. To determine the optimal size of stocks L and size of orders K set some intervals of their values, close to

expectations. By changing these values in a given interval, we obtain a set that makes it possible to determine those values of L and K at which the system will achieve the lowest cost. That is why this model can be used in a dialog mode to develop sets of alternative solutions as part of the decision-making system for asset management of trade enterprises.

As already mentioned, the ultimate goal of the study is to find for the actual values of the input data such as values of adjustable parameters at which the objective function becomes the minimum value.

The selection of the initial parameters of the system is as follows. The probability \mathbf{p} of demand for goods of a certain name during the day is determined on the basis of statistical data collected at the stage of formation of the information base of the enterprise. The time intervals between successive orders to replenish the stock of goods τ are determined on the basis of data obtained on the basis of operating activities of the trading company. The duration of the order, i.e. the time interval $k \times \tau$, is also based on practice data. The time interval $k \times \tau$ is selected not less than the guaranteed delivery time \mathbf{R} :

$$\mathbf{R} = \mathbf{R}_{av} + \mathbf{R}_{ins} \quad (2.3)$$

where \mathbf{R}_{av} is the weighted average delivery time; \mathbf{R}_{ins} – insurance time of delivery.

The random variable μ , which characterizes the share of the next delivery with probability \mathbf{w} , becomes 1, and with probability $(1 - \mathbf{w})$ – the value of the interval $(0, 1)$ according to the truncated normal law of probability distribution.

Using the built simulation model of a trading company as part of an asset management decision-making system is possible by developing a software product using the Python programming language and the built-in Transitions library, or by implementing this model in the MatLab software product.

Inventory management requires not only hardware and software and the necessary knowledge but also appropriate corporate policies. Effective inventory management allows the organization to meet and exceed customer expectations, to achieve high profitability of investments in inventory.

Conclusions

The dynamic development of the trading business is possible provided that the interests of different stakeholders are taken into account. Effective decision-making in the asset management system in modern conditions is associated with the implementation of interdependent goals that take into account the interests of different stakeholders. Among the external stakeholders of the trade enterprise, the dominant role belongs to consumers.

In retail, consumer value is formed mainly in the process of inventory management. The best and fastest solutions in this direction are possible through the use of tools for analyzing large amounts of information, its structuring, and building a rational model. The developed simulation model of inventory management is part of the overall decision making system of AM, its practical application is aimed at optimizing the management of material flows of goods and, as a consequence to provide value to consumers.

Effective asset management requires optimal decisions regarding the repair, renewal, and replacement of physical long-term assets and operational actions in the field of current assets management. In the process, AM managers can choose between multiple models, allowing for better coordination of efforts within the company to provide added value for it as well as aimed at external consumers.

As a result of the use of scientifically sound methods and models of inventory management, trade enterprises are able to modernize or significantly improve internal management. Under such conditions, traders are able to avoid unnecessary costs, achieve better financial and economic results and better ensure the interests of their stakeholders.

The simulation model proposed in this study is a reasonable proposal to solve the problem of optimizing the level of inventories at the trade enterprise and increase the efficiency of trade flows. Achieving AM's goals in a complex and volatile environment the right decisions must be made quickly, which is not possible without automating the process. Models adapted to solve certain decision making problems will be useful in this case.

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**DEVELOPMENT
OF PERSONNEL
POTENTIAL OF
ENTERPRISES IN
WARTIME
CONDITIONS**

Abstract

The peculiarities of the formation, preservation and development of high-quality professional personnel potential of enterprises in wartime conditions were studied. The main elements and principles of ensuring the development of personnel potential were determined; the factors of the external and internal environment affecting its formation were analyzed. An organizational and management model of the development of the personnel potential of the enterprise in wartime conditions was developed, its key tasks, functions, and elements were determined. It was established that the implementation of the model will contribute to the increase in the effectiveness of management of the development of

personnel potential of enterprises in wartime conditions based on the application of the organizational-management, substantive, evaluation-diagnostic and methodological-target components of the model.

Keywords: *personnel potential, principles, functions, organizational and management model for personnel potential development.*

Introduction

One of the priority directions of the enterprise's management activity is the formation, implementation, development and preservation of personnel potential, which is especially important in wartime conditions. According to this aim, purposeful and systematic work is carried out on training and selection of personnel, ensuring the formation of a personnel reserve, implementation of measures to prevent personnel turnover and the loss of highly professional competitive employees in the conditions of wartime and the uncertainty of the external environment. Monitoring of the existing professional and labor potential of employees is carried out, the results of which are the basis for strengthening motivational levers to stimulate professional growth. An important influence on the development of personnel potential in the conditions of martial law has the personnel policy of the enterprise and the rational distribution of funds to the directions of its financing.

Materials and Methods

The formation of high-quality and professional personnel potential of the enterprise is a complex and important aspect that allows to determine promising areas of work, to study the potential opportunities and abilities of employees, as well as to achieve competitive advantages. Effectively formed personnel potential is the key to the success of any enterprise and ensuring its competitiveness.

The mechanism of forming the personnel potential of the enterprise involves a set of certain stages of work, the implementation of which is aimed at achieving the final result (Boykivska et al., 2019; Donchak et al., 2018; Semenova et al, 2016).

The components of ensuring the development of the company's personnel potential are shown in Figure 2.3.

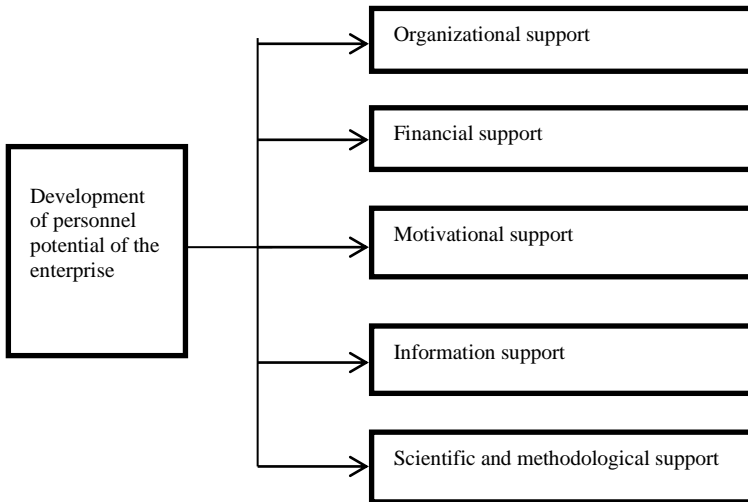


Figure 2.3 The components of ensuring the development of the company's personnel potential

Source: Boykivska et al., 2019

The main goal of forming the personnel potential of the enterprise is to provide the enterprise and its structural divisions with the necessary employees. The realization of this goal requires the effectiveness and efficiency of the company's personnel policy aimed at recruiting personnel, its continuous training, professional development, stimulation and motivation, ensuring the career growth of employees, using a system of fair evaluation of the work of each employee, etc. It should be noted that each enterprise has its own specifics of work (economic activity), industry affiliation, and management apparatus, therefore enterprises approach the formation of personnel support individually.

The main goal of the personnel potential formation of the enterprise determines the main general principles, that is, provisions and rules that should be followed when interacting with personnel.

As noted by H. M. Boykivska and L. H. Donchak, the main principles of forming the personnel potential of the enterprise are (Boykivska et al., 2019):

- the principle of systematicity, according to which personnel potential is considered as a complete system consisting of a certain

set of interconnected elements;

- the principle of unity, according to which all goals and tasks set for employees must be jointly implemented and aimed at achieving the general goal of the enterprise;

- the principle of integrity, which provides for the unity of the main elements of the personnel potential of the enterprise;

- the principle of equal opportunities, according to which there is equality between all employees, regardless of their social, religious, gender, national or other affiliation;

- the principle of justice, which provides for providing each employee with the same opportunities for development, equal working conditions, fair remuneration for work results;

- the principle of responsibility, which provides for the responsibility of each employee for the results of his work;

- the principle of complexity, which ensures the systematicity of analysis, evaluation, planning and modeling of all works related to the formation of personnel potential.

The change in the volumes of the personnel potential of the enterprise occurs due to (Dashko, 2017):

- movement of personnel (dismissal, additional hiring of employees);

- changes in qualification both due to its increase and decrease (moral aging of knowledge, loss of skills);

- changes (increase or decrease) in employee motivation;

- creation of conditions that contribute to display the individual qualification potential and professional characteristics of the employee;

- occurrence of conflict situations in the team.

When forming the personnel potential of the enterprise, it is advisable to investigate and take into account the influence of possible internal and external factors. Thus, the internal factors that affect personnel potential and its formation include company policy, social and psychological climate in the team, the level of social and legal protection of employees, organizational culture, employee motivation and incentive system, working conditions, etc. (Boykivska, 2012).

In addition, an important internal factor that has the greatest influence on the formation of effective personnel potential is the

personnel management system. In order to achieve the desired results, it is necessary to be able to properly organize employees, promote a positive climate in the team, ensure appropriate working conditions, etc. (Donchak et al., 2018).

As for the factors of the external environment of the personnel potential of the enterprise, they should include the level of education, the state of the labor market, the demographic situation, the legislative framework, the standard of living of the population, social factors, economic and political factors, etc.

Results and Discussion

Effective management of the development of personnel potential at enterprises in wartime conditions requires the development of an effective and efficient organizational and management model that would provide solutions to current and strategic personnel issues and help the enterprise preserve and increase its specific human capital in the conditions of dynamic changes in the market environment.

In our opinion, the organizational and management model for the development of the personnel potential of the enterprise should solve same tasks:

- to determine the characteristic features of managing the development of personnel potential;
- coordinate the selected standards, features of the enterprise's functioning, and the specifics of managing the development of personnel potential;
- to form a high-quality relationship between subjects of personnel management;
- to improve the methodological base for managing the development of personnel potential.

In addition, the organizational and management model for the development of the personnel potential of the enterprise in wartime conditions should consist of the following components: organizational-management, substantive, evaluation-diagnostic, methodological-target, which are integral stages of the complex management process and, along with this, have their own purpose of implementation and the content of the application.

The structure of the organizational and management model for the development of personnel potential of business entities under martial law is shown in Figure 2.4.

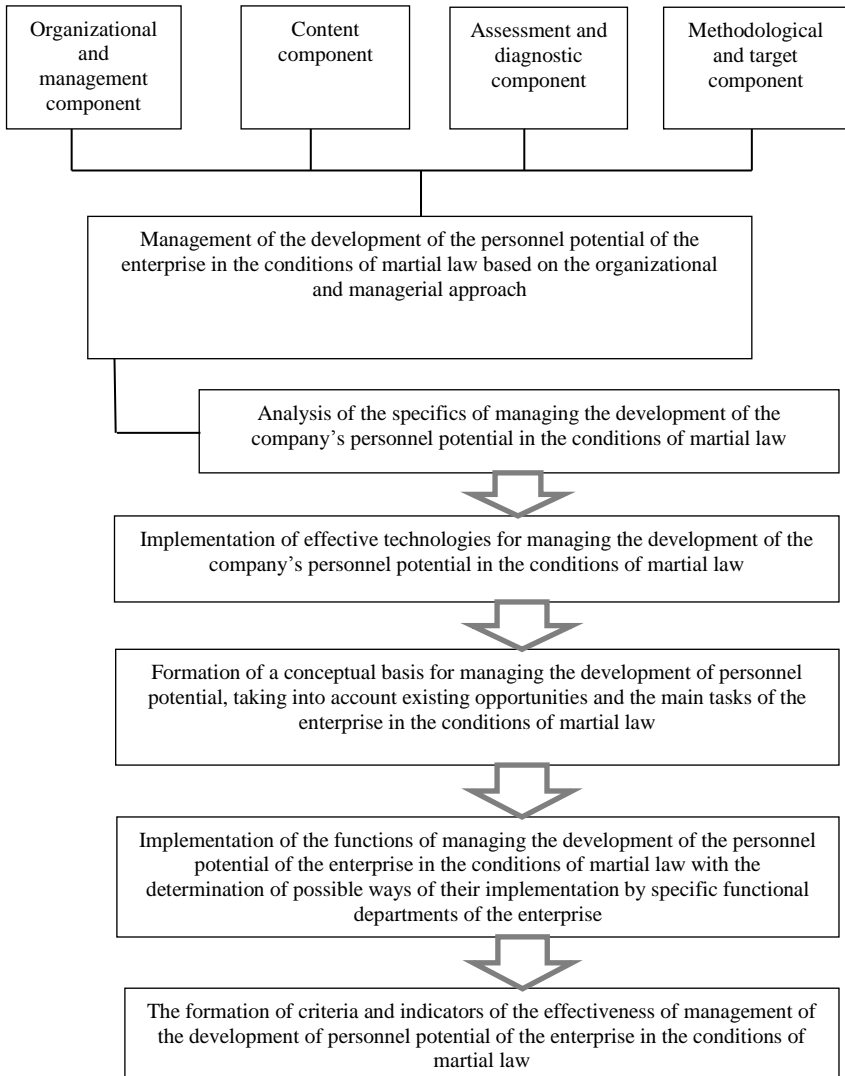


Figure 2.4 The structure of the organizational and management model for the development of personnel potential of business entities under martial law

The organizational and management model for the development of personnel potential of business entities ensures the performance of functions:

- organizational (creation of a single organizational and management space);
- informational and methodical (providing normative, methodical information);
- analytical and prognostic (processing of information regarding the effectiveness of managing the development of personnel potential, clarifying problems, determining guidelines for personnel activities);
- evaluative and diagnostic (assessment of management effectiveness, dynamics of changes, monitoring of effectiveness);
- innovative and implementing (use of managerial experience);
- regulatory (making management decisions and ensuring their implementation).

The implementation of the organizational and management model involves the formation of a single organizational and management environment of the enterprise for the development of personnel potential in the conditions of a changing external environment.

The methodological-target component contains the main goal and key tasks, principles of implementation, functions, scientific approaches to ensuring the management of the development of personnel potential of business entities during martial law.

In general, the organizational and management model for the development of personnel potential is worked out to increase the effectiveness of management of the development of personnel potential at enterprises and is created to solve the following tasks of their activities:

1. Personnel management.
2. Formation of personnel strategy and personnel policy in the conditions of martial law.
3. Ensuring the possibility of introducing modern personnel technologies.
4. Development of professional management competencies.
5. Improving the qualifications of employees.
6. Ensuring the organization of employee certification.
7. Informing employees about the results of the enterprise.

8. Ensuring the increase in the efficiency of management of personnel potential and its development.

9. Increasing motivation of employees based on work results.

10. Monitoring the effectiveness of managing the development of personnel potential.

11. Ensuring self-realization and professional growth of employees.

In our opinion, the process of managing the development of personnel potential of economic entities in the conditions of martial law based on the organizational and management approach involves the implementation of the following stages:

1) analysis of the specifics of managing the development of the company's personnel potential under martial law conditions;

2) implementation of effective management technologies for the development of the enterprise's personnel potential under martial law conditions;

3) formation of a conceptual base to ensure the management of the development of personnel potential, taking into account the existing opportunities and the main tasks of the enterprise;

4) implementation of the functions of managing the development of the personnel potential of the enterprise in the conditions of martial law with the definition of possible ways of their implementation by specific functional divisions of the enterprise;

5) formation of criteria and performance indicators for managing the development of the company's personnel potential under martial law conditions.

The organizational and management model is part of the management process of business entities under martial law and includes the following stages: implementation of employee development planning; assessment of personnel potential; determining the goals of personnel management; formation of a personnel potential management strategy; ensuring the conditions for the implementation of the personnel potential development strategy; monitoring the implementation of the strategy and evaluating its implementation.

The implementation of the personnel development model at the enterprise is connected with the further improvement of the existing mechanisms for improving the motivation of employees and ensuring their professional growth.

Conclusions

The implementation organizational and management model for the development of personnel potential will contribute to the increase in the efficiency of management of the development of personnel potential of enterprises in the conditions of martial law based on the application of the relevant components:

1) organizational and management (includes subjects and objects of management of the development of personnel potential; directions of management; forms and methods of management. Connects all existing elements of the management system into a single whole, while ensuring effective communication with the operating environment);

2) substantive (contains internal regulations, regulatory acts regulating the management of the company's personnel policy, practical principles and theoretical basis of managing the development of personnel potential);

3) evaluation-diagnostic (contains criteria and levels of effectiveness of managing the development of personnel potential, the expected result, which is represented by the formed system of monitoring the effectiveness of management of the development of personnel potential, which is implemented on the basis of the developed diagnostic tools;

4) methodological and target (contains the main goal, defining tasks, specific functions, basic principles, approaches to managing the development of the company's personnel potential).

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**MODERN FEATURES
OF PERSONNEL
MANAGEMENT IN
THE MANAGEMENT
SYSTEM OF
ECONOMIC ENTITY**

Abstract

In the article the important aspects of ensuring the effective personnel management of an economic entity under modern conditions are considered. The key groups of work motives are highlighted; the general characteristics of the motivational process and the author's vision of the work motivation of economic entity's personnel are presented. The gradation of its potential employees and the components of approach to personnel management under modern conditions of the personality growing role of each employee are proposed. The motivational methods of personnel management of economic entity are grouped and considered. The main trends in the development of work motivation systems and economic thought regarding personnel management of economic entity in today's conditions are highlighted. It is proposed to make a transition to new understanding of the importance of personnel – as a resource of economic entity, and to perceive its development as an investment project. In particular, for a manufacturing enterprise, along with a plan for production and sale of products, a financial plan, it is proposed to develop a comprehensive plan for improving the quality of products, development and increasing the efficiency of production

with economic evaluation of each planned event as a whole. A generalized version of the mentioned plan's structure is presented, and indicators of the predictive assessment of its effectiveness are indicated. To ensure the implementation of this plan, management functions of strategic planning and personnel management are recommended to centralize and give to the Deputy General Director for future development, reconstruction and personnel. Within the framework of these recommendations to the economic entity, in particular, to the manufacturing enterprise, should switch to a new management structure, which would provide for four directions: production; commercial; technical; prospective development, reconstruction and personnel. Principal problems of personnel management, which have particular importance during the formation of the personnel policy of economic entity, are highlighted. The role of control in the management of an economic entity and certain rules for ensuring the success of its implementation are formulated.

Keywords: *personnel management, economic entity, work motivation, management motivational methods, complex plan, control.*

Under modern conditions the effectiveness of personnel activities largely depends on the extent to which the purposes of each employee correspond to the purposes of the organization. The success of companies operating in the international market is increasingly determined by whether they have been able to form an effective personnel management system, to eliminate friction in relations between subordinates and managers with different cultural traditions and different nationalities.

Personnel management of any organization will be as effective as its employees fully and skillfully use their labor capabilities, physical, mental, entrepreneurial abilities in the course of achieving key organizational and economic purposes. Like any other investment, investing in the development of personnel management requires a constant assessment of how the costs related to personnel development have affected or will affect in the future the growth of the company's performance. At the same time, in today's highly competitive environment, it is necessary to increase and develop labor potential in order to successfully implement the business strategy and ensure high competitiveness of organization

(Maslennikov et al., 2016).

Today, there is no doubt that the most important resource of any economic entity is its employees. However, not all managers understand how difficult it is to manage this resource. The success of any economic entity depends on how effective the work will be. The task of managers is to use the capabilities of the personnel as efficiently as possible. No matter how strong the decisions of managers are, the result from them can be obtained only when they are successfully implemented. And it can happen only when the personnel is interested in the results of work. Here we are faced with an important management function – motivation.

Motivation contains the internal state of a worker, called a need, and something outside is a stimulus or task. The behavior of the employee is determined by the need that dominates at the current moment. From the point of view of psychology, needs are psychological or physiological feelings of lack of anything.

Since every worker has needs, they create a focus on their satisfaction (Durakova et al., 2008).

Inducement is a state of scarcity of anything that has a certain focus. Inducement is a behavioral manifestation of a need and is focused on achieving a goal – satisfying a need. Psychologists note that the inducement to satisfy a need serves as a motive to act.

Based on needs, we distinguish the following groups of work motives:

- content of work group;
- group of social utility;
- status group associated with social recognition of labor productivity;
- group related to obtaining material benefits;
- group oriented to a certain intensity.

We note that often a motive expresses several needs at once.

Thus, the motives for obtaining material benefits are related to the needs for social recognition, respect, protection, safety and, finally, with physiological needs, which requires the satisfaction of primary human needs.

An important feature of work motives is their focus on giving back to society and receiving something in return. That is, the larger the gap, the less important it is for the worker to have a duty to

people and society as a whole. This is most clearly seen when the existing salary level of the employee is much less than the cost of the products he needs (Koverga, 2009).

Sometimes human resources workers during the involvement of personnel are guided primarily by the professional level of the person. However, for everyone it is necessary to set what exactly is the driving motive in his actions. Knowing the needs of a person, it is possible to set how to stimulate the employee so that the return from his activity is maximal. The point of view has become widespread, according to which the leading incentive factor is the size of wages. At the same time, other factors do not matter much, and the involvement of skilled labor is often due to offers of high wages to employees, which, in principle, can only be considered as a special case, since there are many other motivational elements that make up the concept of motivation, and which, to a greater or lesser extent, are inherent in each person (Hryvkivska et al., 2008).

Summarizing the above, the general characteristic of the motivational process can be imagined through the interaction of needs, motives and goals.

The needs can be considered as a state of person who feels the need for an object that is necessary for him to exist. Needs are the cause, the source of targeted active human actions.

Motives can be considered as a person's motivation for actions aimed at achieving a set goal.

Goals are a desired object or its state to which a person aspires.

We consider personnel motivation as a factor of the employee's attitude to work and work behavior, and needs as the most important prerequisites for motivation. At the heart of the motivation of work are not only the most significant needs of the employee, but also the extent to which the employee is able to satisfy them and what prospects he sees for their satisfaction in the future.

So, motivation, as a tool, plays a special role in the functioning of the personnel management system of the economic entity. And in modern conditions, when personnel management turned into the independent scientific discipline – staff management, and in the practice of economic entities – into the complex personnel management system with certain subsystems, evaluation and motivation of work became one of the subsystems of this system.

One of the main tasks for economic entities in modern conditions is the search for effective methods of labor management that have the ability to ensure the activation of human factor. Therefore, the motivational aspects of the mentioned management are widely used in developed countries (Kirilenko et al., 2010).

The concept of labor motivation reflects the close connection of the individual psychological and managerial content of motivation, based on the fact that, unlike the management of technical systems, the management of a social system and a human contains the necessary element of matching the goals of the subject and the object of management (Makhsma, 2009).

Taking into account the above, it is possible to formulate the following definition of the motivation of economic entity's personnel: motivation is a continuous process of creating the individual system of motives for each employee, based on personal needs and interests, which motivate him to work through the awareness and desire to satisfy existing needs through the realization of interests in the course of work or by its results.

Work motivation is the most important factor in employee productivity. It forms the basis of his labor potential, which, in turn, consists of psychophysiological potential, i.e. the inclinations and abilities of the worker, his state of health, endurance, work capacity, type of nervous system and personal capabilities.

To imagine the role of work motivation in the effective management of economic entity, managers should answer the questions about which employee is most interested. The answers may be very different, but as practice shows, the employee's skills will not bring results if he is not interested in the result.

The solution of the problem of ensuring the effective personnel management, first of all, comes down to improving the skills of employees and finding the best ways to encourage them to work effectively. Taking into account these factors, it is possible to propose the following gradation of potential employees of the economic entity:

- competent and motivated;
- insufficiently competent, but motivated;
- competent, but insufficiently motivated;
- insufficiently motivated and insufficiently competent.

It is important for a manager to determine the relationship to a certain group of job applicants and to set priorities correctly when recruiting and assigning personnel. Obviously, any manager would like to work with competent and motivated personnel, but, very often, it turns out that among job applicants there are not enough these specialists (Kochetkov et al., 2007).

The key task of personnel managers is their orientation towards achieving the objectives of the economic entity.

Accounting the motivational factors of employees from the position of personnel should be the basis for the formation of effective system of work stimulation. In the current conditions of informatization and automation of production, increasing the level of education, professional training of staff, social expectations of employees, the value of assessment and motivation in personnel management has increased significantly, and, accordingly, the content of this type of management activity has become more complicated.

Modern meaningful theories of motivation pay the main attention to defining the structure and list of human needs. The most famous among them are the theories of Maslow, McClelland, and Herzberg. Maslow identifies five basic types of needs in the hierarchical structure. McClelland, in addition to the needs according to Maslow's classification, introduces the needs of power, success and belonging. Herzberg's theory is based on the analysis of factors that affect a person during work and influence the satisfaction of needs. Factors are divided into hygienic (interpersonal relations, working conditions, the nature of control – they only do not allow to develop a state of dissatisfaction with work) and motivating (career advancement, feeling of success, recognition, growth of opportunities, responsibility). For motivation, the second type of factors is determinative (Nikiforenko, 2013).

Process theories refer to the most modern theories of motivation. The main among them are the theory of expectations, where the main incentive of people to act is a certain expectation of reward, results; justice theory, where the main motive for people's activities is the assessment of the fairness of placing certain responsibilities on them and the reward for the outcome; Porter-Lower's motivation model, which suggests that the effectiveness of labor and the degree of effort

applied by employee depends on his assessment of the value of reward and confidence in its receiving.

It can be noted that under the influence of various theories in the 1960s and 1970s, meaningful work with personnel transformed from episodic activities into the permanent process, performed by specific professional managers – personnel managers.

In modern management science motivation plays a key role. There are a number of different motivational theories and models that, even, sometimes, contradict each other.

Naturally, that various researchers offered their own approach to the problem of motivation. Managers of economic entities should not look for ready-made recipes for motivation in these works, however, having learned for themselves their basic provisions, you should create your own system of motivation for workers for your own organization, based on the situational approach proposed by Prof. V.K. Zbarskyi. Its essence is that it is important to know the weaknesses and strengths of each theory and in a particular situation to use the positive provisions of that one, which will quickly ensure the implementation of objectives. In other words, almost every economic entity should have its own personal program that takes into account all the peculiarities of the production and economic activity of this organization.

An important feature of personnel management in today's conditions is the growing role of the employee's personality.

The current situation in Ukraine brings both great threats and great opportunities for each individual in sense of stability of the situation.

So, here we consider it necessary to create a new approach to personnel management, which consists of the following:

- formation of personnel management philosophy;
- formation of qualified personnel management services;
- use of new technologies in the management of employees;
- formation of values system and social norms common to all personnel of the economic entity, which regulate the behavior of each individual employee.

The philosophy of personnel management involves the formation of behavior of individual employees in relation to development objectives of the economic entity. In such conditions, the motivation

of employees takes on a special importance.

In the organization's personnel management, motivation is the process of activating the motives of employees (internal motivation) and creating incentives (external motivation) to ensure their inducement for effective activity. In this regard, as synonyms of the term motivation, the terms stimulation and motivation are also used (Libanov et al., 2002).

Motivation can be defined as the driving force of human behavior, which is based on the interrelationship of human needs, motives, and goals.

Today, the prevailing opinion is that the personnel of the economic entity are one of the main resources that ensure the competitive advantages and the implementation of business development strategy. In this regard, personnel management functions include: personnel planning; its selection and election; adaptation, training, development; assessment and certification; motivation and stimulation.

The real reformation of existing economic entities, in particular enterprises of various branches, is possible only in the recognition, that in modern conditions personnel, which have access to information and are endowed with a high culture, are considered not so much as one of the economic factors, but as a key resource, the effective use of which becomes the central task of management.

We note that the most well-known classification of motivational methods is the division into organizational-administrative, economic, and social-psychological ones (Bashuk, 2009). This classification is based on the motivational orientation of management methods (Zaiats et al., 2008).

In the practice of management, different methods and their combinations are often used at the same time. For effective motivational management, it is necessary to use all three groups of methods, that is, to use the previously mentioned situational approach. This classification of methods is classic.

Other methods and approaches are used in modern management.

All existing motivational methods can be grouped into the following stimulating types: economic; management by objectives; enrichment of work; systems of participation.

1. Economic incentives are wages in all their forms, including

benefits, bonuses, interest-free loans, insurance, etc. The success of their influence depends on the extent to which the collective recognizes the specified incentives as fair (including the specifics of encouragement and punishment) and understands the principles of the incentive system.

2. Management by goals means setting a chain of goals for a person, aimed at solving the main task of the economic entity (achieving certain qualitative or quantitative levels, improving qualifications, etc.). Achieving each goal means an increase in the salary level, or the inclusion of other forms of incentives.

3. Work enrichment involves providing the workers with more promising, meaningful work, significant independence in determining of using the resources and work regime. Increasing the social status is also important here.

4. Participation systems are currently used in various forms: from wide involvement of employees to decision-making, beginning on the most important problems of management and production, to acquisition of property through shares or stocks of their own organization on preferential terms.

Within the specified groups of methods, separate systems of motivation, staff stimulation, and various methods are being developed at domestic economic entities today.

The theoretical foundations of motivation were laid down by process and meaningful theories of motivation. In modern management, attempts are being made to revise classical theories of motivation in order to adapt them more to the modern structure of needs (Yelisiaieva et al., 2006).

In the process of forming the motivation system, it is necessary to focus on the fundamental principles of the theories known today, guided by them, managers should adapt or build their own motivation system, which takes into account the peculiarities of the economic entity, the specifics and modern methods of motivating its personnel.

The main trends in the development of the theoretical and methodological foundations of motivation systems for the personnel of economic entities in today's conditions are: strategic orientation; attention to the internal motives of labor activity; implementation of the participatory approach to the motivation process, active

development of social-psychological and economic methods of stimulation.

In its development, economic thought gradually came to understanding that the effective activity of economic structures, ensuring the maximum profit are possible only when the interests of the company coincide with the interests of employees.

In the last time, in the science of organizational management we can observe a significant change in ideas about the role of personnel in the activities of economic entity. In contrast to the previously prevailing opinions, when personnel costs were subject to strict control, and employees, perhaps, to reduction, the concept of human resource management appeared, according to which personnel are one of the most important resources of economic entity, which requires multifaceted management. It includes, as a necessary condition, ensuring the professional, structural and social development. According to modern views, the personnel management strategy is an important element of the economic entity's strategy and should be formed and implemented in accordance with the prospective tasks of its development.

It should be noted that the theory and practice of management and, above all, the management of people in the process of economic activity have been considered by different authors from different positions. For example, R. Scott considered the theory and practice of management in development from two points of view: from the point of view of open and closed systems and from the point of view of social and rational factors. He identified four stages in the development of management theory and practice. At the same time, by an open system, as opposed to a closed one, he understood a system that perceives and reacts to external influences, whether it is price change, increased competition or other factors (Yuryk, 2015).

In the last time, the integrated personnel management strategy is increasingly being used. According to this concept, a working person thinks independently and is interested in work. Therefore, each employee is perceived as a value, as the main resource, his development is stimulated and used according to his personal capabilities. Highly qualified employees are attracted here precisely with the desire to work. For employees are assigned tasks, that would allow them to fully realize their existing qualifications and ensure

their improvement. The function of salary becomes not so much a means of achieving the greatest productivity, but its equivalent, achieved through high qualification, conscious attitude to work and compliance with professional norms (Maslennikov et al., 2016).

A simple reduction in the number without simultaneous increase in the quality of personnel does not give the expected effect. It is necessary to move on to new understanding of the importance of personnel – as a resource of economic entity, and its development should be perceived as an investment project. In particular, for a manufacturing enterprise, along with the plan of production and sale of products, financial plan, the complex plan for improving the quality of products, development and increasing the efficiency of production is being developed with economic evaluation of each planned measure as a whole. The generalized variant of the plan structure includes the following sections:

- research, development, design works;
- mastering new technique;
- modernization of products;
- introduction of advanced technology, automation and mechanization of production processes, loading and unloading, warehouse work;
- improvement of product quality, certification, metrological support of production;
- ensuring production with personnel resources of required quality;
- work motivation, improvement of working conditions and safety procedures;
- fire safety;
- production information support and standardization;
- protection of the air pool, water bodies and other environmental measures;
- marketing;
- saving material resources;
- reconstruction, repair, capital construction and improvement.

The forecast assessment of effectiveness of the complex plan is performed according to the following indicators:

- costs;
- total profit:

including:

- through the increase in the volume of serial products production;
- through the introduction of new technique;
- through technology improvement, modernization;
- saving material resources;
- through personnel improvement
- profit of the following years.

The effectiveness of sections of the plan is evaluated according to the following indicators:

- estimated profit;
- implementation costs;
- cost items: cost price, profit.

To ensure the implementation of this plan, management functions of strategic planning and personnel management should be centralized and given to the Deputy General Director for future development, reconstruction and personnel. It is necessary, that the economic entities, in particular the manufacturing enterprises, switch to a new management structure, where four areas would be provided:

- production (production preparation, technical support, dispatching);
- commercial (marketing and sales, planning, economic functions, financing);
- technical (technological support, engineering developments, quality management);
- prospective development, reconstruction and personnel (engineering networks, capital construction, personnel, social and cultural life).

Among a number of different problems related to formation and management of personnel, let us highlight the fundamental ones that are especially important for the personnel policy of the economic entity.

1. Business career management.
2. Work with the personnel reserve.
3. Recruitment methods.

During recruitment, psychological testing and interview with a psychologist should be carried out.

Despite the existing surplus of labor, the high unemployment rate

in the country, it should be noted a large number of economic entities that have difficulties in recruiting.

The modern method of personnel management is management control.

Control is a process that ensures the achievement of the objectives of an economic entity and is necessary to establish and solve the problems that have arisen, before they can become very dangerous. Control can also be used to stimulate active successful personnel activities.

Managers have to be able to control, should clearly assess their actions in each case and choose the most appropriate forms of control.

To ensure the success of the control, certain rules should be followed:

1. Control should not be limited by incidents.
2. Total control makes worker as a non-self-contained and unsure person.
3. Control must be opened.
4. Control must cover not only the most famous areas of activity.
5. Control cannot be converted to pro forma.
6. You should not control because of distrust.
7. You should not keep your conclusions to yourself.

Any employee cares what the manager thinks about him. If the results of the control are not discussed, they are infertile. Only conclusions brought to the employee in time will allow him to draw conclusions.

In conclusion, we note that in modern conditions, even a very experienced manager is not always able to objectively compare the advantages and disadvantages of variants for solving problems in the field of personnel management and choose the best one without using the special management methods and tools.

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Chapter 3

SUPPORT TOOLS FOR ENTREPRENEURSHIP AND INDUSTRIES OF THE NATIONAL ECONOMY DURING MARTIAL LAW

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BUDGET IMPORTANT REGULATIONS OF THE ECONOMY UKRAINE IN MILITARY CONDITIONS

Abstract

The purpose of this study is the need to substantiate the features of the budget component of the national security of Ukraine on the example of

the analysis of expenditures and the formation of budget requests under the legal regime of martial law. To repel military aggression, Ukraine accumulates all available resources, so the defence budget is $\frac{3}{4}$ of the entire State budget. Trends in how the state finances expenditures are explored by analysing current legislation, proposals from fiscal authorities and open statistical data. The forecasts of the influence of the economy on the budget process in the conditions of martial law are described.

Keywords: *martial state, budget, leverage, national security, economic regulation, Ukraine.*

Introduction

Under martial law, the risks and threats to budgetary security have grown exponentially. Therefore, the needs of scientific research of budgetary levers are actualized in order to effectively bias and proper state regulation of the economy.

Study of mechanisms aimed at eliminating and reducing the influence and neutralization of phenomena and factors that pose a threat to national security in the public sector. United States budgetary costs and obligations of post-9/11 wars through FY2020 (Crawford, 2019); assessment of the state of budgetary security of Ukraine (Dakhnova & Gorodetska, 2018); NATO expansion and alternative future security alignments (Morrison, 1995); financial security of the state (Rieznik, etc, 2020); state policy for ensuring budgetary security of Ukraine in terms of financial globalization (Varnalii, etc, 2020); international experience in ensuring the budgetary safety of the country (Bartashchuk, 2021); the institutionalization of state financial and control activities as an instrument of the country's budgetary security (Gritsishen, etc, 2021); budget security as a concept of modern monetary science (Zahozhaj, 2018); conceptualization of public administration in the field of budgetary security (Svirko, 2021); budget safety: place and role in the modern mechanism of public administration (Svirko & Tarasova, 2021); financial policy and budgetary safety of Ukraine (Tarasova, 2018); characteristics of statistical indicators in assessing the level of the country's budgetary security (Fatyukha & Manukovskaya, 2021); the budget as an instrument of economic growth (Chugunov & Aristov, 2021); analysis of the financial share

of the national security of Ukraine (Leontovych, Radchenko & Melnichuk, 2021), state regulation of financial security under military condition (Tulush, Leontovych & Radchenko, 2022) etc.

The current Recommendations on Capability-Based Defense Planning (Recommendations, 2017), where clause 6.4.2 stipulates that, unlike threat-based planning, efforts are focused not on creating new organizational structures, but on developing existing capabilities, its concentration on the main directions for the effective implementation of certain tasks. The target package for financing defence capabilities and composition of forces is based on a two-year budget planning, also takes into account the possibility of attracting international technical assistance, adjusting defence spending to inflation, price index.

A study of US military spending sources during the Korean and Vietnam Wars; Russia and Japan in the Russo-Japanese War, Great Britain in the Crimean and World War II (Capella, 2012) shows that military efforts are financed by taxes in case of significant support for the war among the population, and Governments resort to foreign loans only when their own currency reserves are exhausted.

However, under the legal regime of martial law, certain methodological and theoretical issues remain fully disclosed, rely on an outdated methodological base and require revision and adjustment. Therefore, the purpose of the study is to highlight the features of the use of budgetary levers to regulate the economy in a state of martial law on the example of Ukraine.

Materials and Methods

The following methods were used to achieve setting goals, namely: a monographic method was used to review scientific publications of researchers and the regulatory framework for budget security, empirical, systematic and comparative analyses and synthesis for monitoring indicators of budget indicators and the state of the economy, a graphical method to reflect the dynamics of the studied indicators, a statistical method to identify the integration of budget expenditures and financial, abstract and logical for theoretical generalizations and conclusions.

Results and Discussion

One of the main segments of public administration is the budget

component, which is the financial embodiment of the national policy. Fiscal security is in the coordinates of hybrid threats to the financial system (Budget Security of Ukraine, 2017). First of all, this is the protection of the vital economic interests of the Ukrainian nation (Concept, 2019).

In 2009-2014, the defence budget of Ukraine reached from 1 to 1.11% of GDP (Kuryliak & Sokhatsky, 2018), which became one of the reasons for the country's unpreparedness for military aggression. Therefore, in the future, in accordance with the Decision of the National Security and Defence Council (Decision, 2019), the Ministry of Finance of Ukraine was recommended to provide for expenditures on national security in the Budget Declaration in the amount of at least 5% of the planned gross domestic product. Dynamics of functional expenses of the State Budget of Ukraine, Dynamics of functional expenses of the State Budget of Ukraine, including for defence in 2014-2022 is shown in the Table 3.1.

Table 3.1

Dynamics of functional expenses of the State Budget of Ukraine in 2014-2022, UAH million

	2014	2018	2019	2020	2021	2022*
Budget expenditures	430217	985851	1075122	1127944	1490258	1036725
Defence spending	27363	97024	106627	120374	127527	334118
Defence expenditure, %	6,34	9,81	9,91	9,28	8,56	32,23
Spending on the economy	34410	63600	72364	168990	180980	26163
Economy in expenses, %	8,00	6,45	6,73	14,98	12,14	2,51
Expenditures on social protection	80558	163865	218628	322720	333280	210372
Social protection in expenditures, %	18,72	16,62	20,34	28,61	22,36	20,27

* for the II quarters of 2022

Source: compiled according to NBU data. Available: <https://bank.gov.ua/>

For 2022, state budget revenues were envisaged at UAH 1,322 billion, and expenditures at UAH 1,497 billion. At the same time, the security and defence sector was supposed to receive about UAH 286.6 billion, or almost 6% of GDP. The budget of the Ministry of Defence of Ukraine in 2022 was set at the level of UAH 133.488 billion, of which: UAH 99.887 billion to ensure the activities of the Armed Forces of Ukraine; UAH 28.438 billion for the development, purchase, modernization and repair of weapons, military equipment, facilities and equipment. In reality, financing of the defence sector under martial law has grown rapidly, and if earlier the annual budget of the Ukrainian army was about UAH 156 billion, then with the introduction of martial law, its monthly amount is about UAH 130 billion (Minfin, 2022). As evidenced by the given data of the Table 3.1 financing of defence expenditures in 2022 increased by 23.67 p.p. against the level of 2021 and by 25.89 p.p. against the level of 2014.

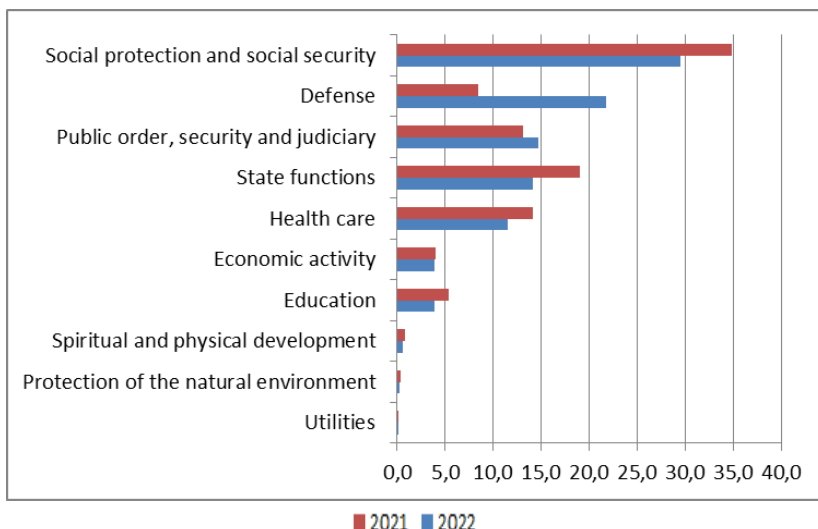


Figure 3.1 Structure of expenditures of the State Budget of Ukraine for the 1st quarter of 2021-2022, %

Source: compiled according to NBU data. Available: <https://bank.gov.ua/>

The state has abandoned all expenditures that should be spent on capital construction or development, which is about UAH 140 billion according to the estimate of the State Budget plan for 2022. In practice, funds are spent only in three areas: defence, pensions, public sector salaries, and servicing the public debt.

According to the Ministry of Finance (Minfin, 2022), in January-March 2022, the spending plan was only 67.8% fulfilled due to the urgent need to meet defence needs. As evidenced by the above data, funding for defence spending in 2022 increased by 11:22 p.p. compared to the level of 2021, spending on the economy decreased by almost 4 times, spending on social protection increased.

At the same time, expenditures on the economy decreased by almost 4 times, and expenditures on social protection increased. From March to June 2022, the Government financed the needs of the security and defence sector from the reserve fund 17 times (Didenko, 2022). The main recipient of assistance from the reserve fund was the Ministry of Defence, which received 61.9% of all funds. In January-March 2022, cash expenditures of the general fund of the state budget were carried out in accordance with the list and amounted to UAH 356.4 billion, or 67.8% of the list for the reporting period.

For the second quarter of 2022, the volume of expenditure financing is shown in Figure 3.2. An absolute advantage in the 2nd quarter of 2022 against the same period in 2021 is defence spending. In addition, the Verkhovna Rada approved a bill to allocate an additional UAH 270 billion for security and defence. Thus, the total spending on security and defence this year will reach UAH 1.2 trillion.

According to the State Treasury Service of Ukraine, for January-July 2022, the cash expenditures of the state budget amounted to UAH 1,218.0 billion, including the general fund – UAH 1,147.7 billion, or 80.7% of the list of the reporting period.

According to the Budget Code of Ukraine, article 24, the source of budget support under the legal regime of martial law is the resources of the budget reserve fund. There are three main sources of funding: money printing (seigniorage), tax increases, and borrowing. Printing money can be effective in moderation.

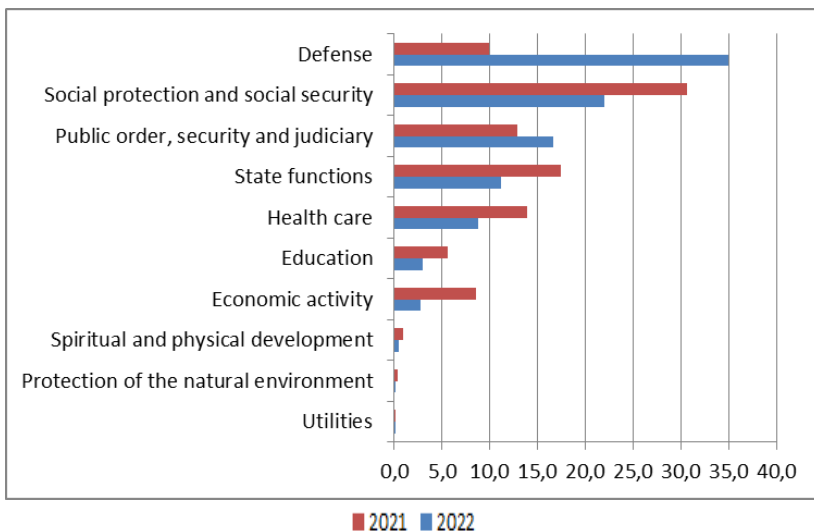


Figure 3.2 Structure of expenditures of the State Budget of Ukraine for the II quarter of 2021-2022, %

Source: compiled according to NBU data. Available: <https://bank.gov.ua/>

Tax increases can take the form of financial repression, with the government capping interest rates and restricting the public's ability to invest in anything other than government debt. Borrowing is the largest source of expenditure financing. So far, there is no consensus on the optimal ratio of taxes and borrowed funds to finance the war, since each of the sources has drawbacks.

The state budget of Ukraine is filled mainly with revenues from internal taxes on goods and services. So, in 2021, in the total structure of tax revenues of UAH 1,107.09 billion, their share was 63.13%. In 2022, the Ministry of Finance planned to collect UAH 405 billion of VAT, UAH 76 billion of excise tax (alcohol, cigarettes and energy products), UAH 37.5 billion of duties. In general, only indirect taxes on imported goods should amount to almost UAH 520 billion – 40% of all budget revenues.

Under the martial law of the economy, only 1/5 of the planned revenues were collected in the first quarter. Instead of the expected UAH 39 billion, the budget received UAH 7 billion. The situation is the same with taxes on exports and imports: their income is at the

level of 15-20% of the pre-war figures. The main reason is the closure of many enterprises, the destruction of warehouses and industrial facilities. The main risks are the growth of inflation due to the imbalance of supply and demand and the loss of the possibility of further financing of budget expenditures. Budget revenues for the second quarter of 2021 were as follows (Figure 3.3).

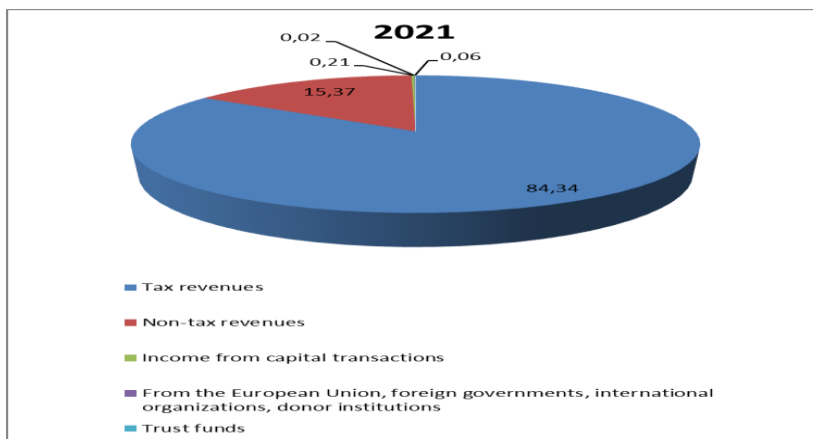


Figure 3.3 Structure of revenues of the State Budget of Ukraine for the II quarter of 2021, %

Source: compiled according to NBU data. Available: <https://bank.gov.ua/>

For the II quarters of 2022, the structure of revenues is shown in Figure 3.4. For January-July 2022, the state budget was implemented with a deficit in the amount of UAH 412.0 billion, including the general fund – in the amount of UAH 411.3 billion, against the planned deficit of the general fund for January-July 2022 in the amount of the amount of 743.4 billion hryvnias. Actual state borrowings to the general fund of the state budget for January-July 2022 amounted to UAH 613.8 billion or 115.6% of the planned amount.

UAH 402.1 billion was attracted from the placement of domestic state loan bonds (DSLБ) to finance the state budget, including UAH 44.2 billion in foreign currency (USD 1,066.1 million and EUR 388.3 million). At the same time, UAH 344.5 billion was raised through the issuance of military government bonds, including UAH

255.0 billion through acquisition by the National Bank of Ukraine (NBU).

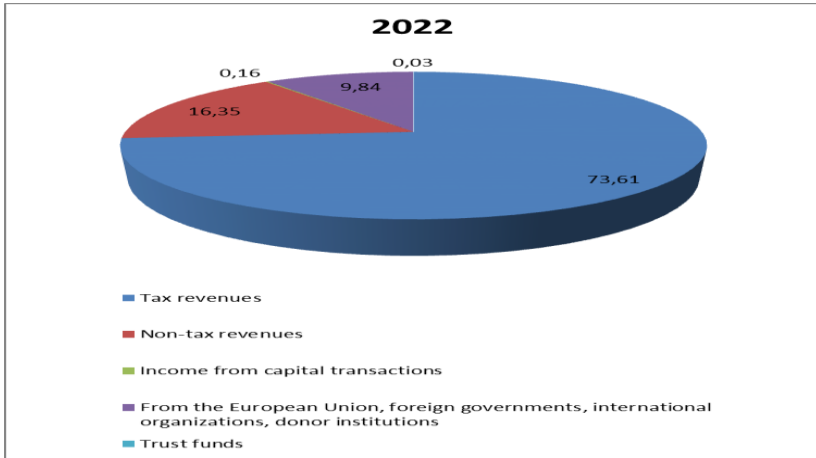


Figure 3.4 Structure of revenues of the State Budget of Ukraine for the II quarter of 2022, %

Source: compiled according to NBU data. Available: <https://bank.gov.ua/>

The NBU predicts extremely negative consequences of macroeconomic stability from excessive monetary financing of the state budget deficit. Such consequences are most clearly manifested in the impact on the foreign exchange market. The hryvnias put into circulation enter the foreign exchange market and put pressure on the exchange rate. To meet the demand for foreign currency, the NBU constantly conducts interventions, the volume of which increases monthly, which depletes international reserves. This reduction in international reserves has not yet been offset by international assistance. If the NBU's international reserves dry up due to emission financing of the budget, this will create the threat of a significant currency devaluation and a rapid acceleration of inflation, which exacerbates the risks to financial stability.

To support business, the authorities simplified tax and customs regulations for the duration of the war (Review, 2022). In particular, a business with a turnover of up to UAH 10 billion can switch to a simplified taxation system and pay only 2% of income, regardless of

the number of employees. Also submitted for consideration is draft law No. 7311 on amendments to the Tax Code, which proposes, in particular, to increase the size of the military tax from 1.5 to 3 per cent. Amendments have been made to the customs and tax codes of Ukraine regarding a simplified declaration procedure, exemption from customs payments, etc.

In general, the war radically changed the state and its financial system, shifted the foundations of financial planning and the current indicators of financial security, went beyond purely financial policy and concerns literally all spheres of national and world security.

The negative impact of hostilities on the territory of Ukraine and the current inability to determine the consequences of Russian aggression make it impossible to develop realistic forecasts for the economic and social development of the country and, as a result, budget indicators for the medium term. Therefore, the Ministry of Finance of Ukraine, in accordance with Article 34 of the Budget Code of Ukraine, in order to draft the State Budget of Ukraine for 2023, has developed instructions for the preparation of budget requests (Minfin, 2022), which introduce financial restrictions, organizational and other requirements.

In particular, it was determined that after a decline of 33.1% in 2022, the economy is expected to start recovering – next year at the level of 2.5%. It is likely that the recovery of industrial activity in the country will be driven by domestic demand due to the gradual return of the population from abroad and the growth of employment, as well as improved logistics, which will contribute to a better use of existing external demand. The resumption will take place in conditions of high price dynamics caused by the action of significant cost factors caused by the disruption of production and logistics chains, the negative impact of external factors. The main macro indicators of the economic development of Ukraine for budget planning are given in Table 3.2.

In particular, clause 7 (Ministry of Finance, 2023-2025) defines national security and defence expenditures for the general fund for 2023, based on the expected forecast of cash expenditures for 2022, taking into account the savings in funds for 2023 as a result of updating payments monetary security provided for by Government Decree No. 168 of February 28, 2022. The task of the National

Academy of Sciences of Ukraine is also to work out issues and provide proposals for ensuring the direction of expenditures under the budget program under the CPCCC 6541230 “Support for the development of priority areas of scientific research” for the implementation of applied scientific research (experimental) developments in the interests of national security and defence.

Table 3.2

Main macro-indicators of economic and social development of Ukraine for budget planning

Indicators	2021 report	2022 plan	2023 forecast
Nominal gross domestic product, billion UAH	5 459,6	4 688,0	6 371,3
Real gross domestic product, growth rate, %	103,4	66,9	102,5
Consumer price index, %	110,0	131,5	130,0
Producer price index, %	162,2	135,6	135,0

Source: (Ministry of Finance, 2023–2025)

Prospects for the post-war recovery of the Ukrainian economy and investment priorities (Kuhar, 2022) predict that the cumulative fiscal gap in the budget of Ukraine in 2022 will be 1.2 trillion hryvnia (35 billion dollars), Figure 3.5.

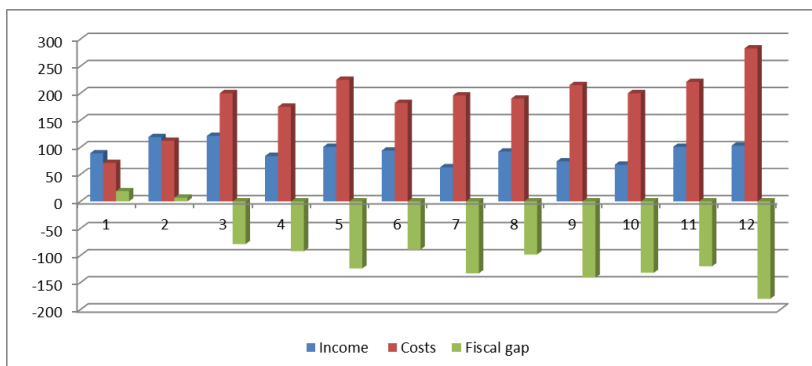


Figure 3.5 Expected dynamics of the State Budget of Ukraine in 2022, UAH billion

Source: (Kuhar, 2022)

While the optimal mix of funding sources is often about long-term considerations, the short-term macroeconomic effects of war financing are now important for Ukraine (Horodnichenko & Talavera, 2022). An analysis of the impact of shocks of the macroeconomic environment on budgetary indicators for each of the shocks is presented in Table 3.3. This estimate is a preliminary-oriented calculation of the impact of only changes in real GDP on the budget revenues without taking into account the impact of other factors based on the value of elasticity coefficients for each type of income in terms of GDP calculated for Ukraine for the 2004-2016.

Table 3.3

Effect of changes in budget indicators in 2022 in case of materialization of risks in the macroeconomic environment, UAH bln

Variables	Increasing threats to the national economy from the Russian Federation	Exit of non-residents from OVDP	Curtailement of foreign investments	Low credit activity of banks	Insolvency of subjects of economic activity	Low yields
Budget revenues	2,4	-1,2	-8,5 -	1,2	-1,1	-8,5
Personal income tax	-0,6	-0,3	-2,0	-0,3	-0,2	-2,0
VAT on imports	-0,9	-0,5	-3,3	-0,5	-1,1	-3,3
Income tax	-0,5	-0,2	-1,6	-0,2	-0,2	-1,6
Import duty	-0,1	-0,1	-0,4	-0,1	-0,1	-0,4
Excise	-0,2	-0,1	-0,8	-0,1	-0,1	-0,8

Source: Fiscal risk information, 2022

Thus, the war has a colossal destructive effect on the economy of Ukraine and the whole world, it is even important to trace the real losses. Losses affect investment, trade and the financial market, the level of GDP growth, external debt balances, the redistribution of exports and imports, and all these components are related to budget planning. However, in spite of everything, the budget of the legal regime of martial law should harmonize revenues and expenditures, focusing primarily on vital items for the preservation of the state, population, and economy.

Conclusions

The budget levers for regulating the economy of Ukraine under martial law are based on traditional forms of filling the budget and financing expenses. At the same time, many changes have been introduced at the level of legislation regarding budget procedures, revenue and expenditure parts.

In general, measures of budgetary regulation of national security under martial law come down to promoting the preservation and stabilization of critical areas, primarily the defence sector and social spending.

The state's ability to finance defense and other areas depends on the speed of economic recovery and Ukraine's integration into the European economic space. Sources of filling the budget are dominated by international assistance and, to a lesser extent, tax revenues. To this end, measures are being taken to stimulate the attraction of international borrowings and domestic demand for services, the resumption of entrepreneurship, and the facilitation of doing business.

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**DEVELOPMENT OF
UKRAINE'S ECONOMY
THROUGH THE PRISM
OF INVESTMENT
STIMULATING PROCESS**

Abstract

The object of the research is the development of the investment process of Ukraine after the martial law. One of the most urgent questions are the curtailment and complication of investment activity in Ukraine, the deterioration of financial results of enterprises against the background of reduced public funding, the war with the Russian Federation, limited and inefficient use of intangible assets. As 19 regions of Ukraine are borders, and the eastern and southern regions of the country are currently occupied. Therefore, it is necessary to create favourable conditions for the formation and development of special economic zones and clusters at the legislative level after the deoccupation of Ukraine.

The study used approaches to improve the investment process in Ukraine, identify problems and develop recommendations for stimulating and building the country's economy after the martial law. They provide the analysis of the current situation and problems of intensification of the investment process in Ukraine and identify ways to stimulate investment activity after the martial law. For their implementation, an open, export-oriented model has been proposed, which would increase the level of activity of both foreign and domestic investors in Ukraine, the intensity of international capital movements and the division of labour.

It was found that it would possible to conduct an optimal investment policy of the Ukrainian government in such key areas as: tax incentives for investment, the application of accelerated depreciation, the creation of favourable conditions for the foreign investors after the war with the Russian Federation, a support and encouragement of the innovative activity, stable working conditions for long-term investments where there will be no place for forced capital withdrawal and arbitrariness of power, and creating a reliable system of insurance after the martial law.

Keywords: *development of the country's economy, investment process, investment activity of domestic enterprises.*

Introduction

The deterioration of the financial results of enterprises against the background of reduced public funding, the war with the Russian Federation, limited and inefficient use of intangible assets, increasing of the share of overdue payable accounts, curtailment of emission activities due to the low investment attractiveness of domestic issuers led to the reduced investment activity.

Ten regions of Ukraine hostilities accounted for half of the country's GDP. The most important areas are: Kharkiv, Kyiv and Mariupol, which have made a very significant contribution to GDP. Many logistics chains were completely broken, many businesses were physically destroyed, some of them could not work during the war, and a lot of workers simply left. According to the Ministry of Economy, the losses would be from one third to one half of GDP. In our opinion, it could reach even up to 500 bln USD.

The Customs houses of Odessa did not function, which brought up to 20% of revenues. Kyiv customs also stopped, only the western direction was functioning. In the first days, the National Bank of Ukraine transferred a part of the income, state-owned banks paid dividends, and many companies paid taxes in advance. All this made it possible to reimburse VAT, make social payments and service the debt. The government was actively working with international partners (the IMF decided on RFI, the World Bank provided 700 mln USD, and the EU – 1.2 bln EUR), the debt problem was not a priority. The government has issued so-called wartime bonds. Almost 8 bln UAH was raised at the first auction and 7 bln UAH at the second one. They could be bought by foreign investors.

Given the martial law, it was impossible to enter the open market without guarantees from other governments. The example of the United States, which guaranteed such bonds during 2014-2016, was very illustrative. The World Bank attracted funds from Ukraine under guarantees from other countries. The government negotiated with the IMF on the allocation in favour of Ukraine a part of the SDRs issued in 2021 for developed countries.

Materials and Methods

The object of research is the development of the investment process in Ukraine after martial law. The investment process should be understood as the organic unity of practical actions, economic relations of investment entities to contribute property and intellectual values in the growth of tangible, intangible and financial assets of enterprises in order to make a profit or achieve a social effect.

The curtailment and complication of investment activities in Ukraine has led to the fact that it, having material, energy and capital-intensive production, has become virtually insensitive to the requirements of scientific and technological progress. In view of this, the state policy of stimulating the investment process needs radical changes and should be conducted at a qualitatively high level. It should be based on ensuring the sustainable recovery of Ukraine's economy by reforming all its components, such as: the financial and credit system, property relations, legislation, but, of course, in peace in the country.

The purpose is to study the state of the investment process in Ukraine in recent years, identify problems and develop recommendations for its stimulation and development of the country's economy after martial law. The following scientific objectives have been identified to achieve the goal of the study:

1. To analyze the current state and problems of intensification of the investment process in Ukraine.
2. To identify the ways of stimulating of the investment process in Ukraine after martial law.

Overview of the relevant literature

The study of the investment process as a part of a more general problem, the mechanism of the capital market, was conducted by A. Marshall, a representative of the neoclassical school. In this case, the capital market is shown by the interaction of supply and demand, and market participants are individuals who have different motivations for their activities. For the first time in economic theory, A. Marshall determined that supply is governed by the bank interest rate, which acts as the supply price in the capital market, and demand – the rate of return on invested capital received by the entrepreneur (Cavalieri, 1992). Much attention is paid by the author to the analysis of the cost structure of the entrepreneur and the problem of discounting, i.e time

measurement of securities and returns from them. Thus, he has developed a very specific mechanism for making investment decisions.

A significant revision of the positions of the classical and neoclassical schools on the regularity of investment processes was conducted by J.M. Keynes after the economic depression during 1929-1933, which affected all developed countries with market economies. According to J. Keynes, the economic system separates the functions of saving and investing. One part of the savings can be invested directly, the other one refers to economic entities for future costs (consumer or investment) (Walsh, 2021).

Despite the significant differences in the definitions of the French scholar P. Massé and the English J. Keynes, they trace the general macroeconomic methodology. P. Massé made the following definition: “the investment involves the act of exchanging the satisfaction of today’s needs for those expected in the future (Massé, 1962). Thus, the characteristics of the essence of investments, their duality – the cost of resources and the results of these costs are revealed here. According to J. Keynes, the investment is a part of income for a given period that has not been used for consumption. It is “the purchase by an individual or corporation of any property, old or new”, where a new investment means “the purchase of a capital property at the expense of income”.

In the tradition of the Keynesian model, Campbell McConnell and Stanley Brue treat investments by applying a new approach to disclosure of investments from a microeconomic standpoint. Economics sets out the concept of “gross domestic investment”, so-called “investment costs of American business structures”. They include: the purchase of machinery, equipment, changes in the inventories, which in the case of an increase of “unconsumed product”, that “there is nothing but investment” (Brue et al, 2013).

L.J. Gitman and M.D. Joehnk called the investment as a way of allocating the capital, which should ensure the preservation or increase in the value of capital and bring income. Free money cannot be an investment, because the value of cash can be destroyed by inflation and then they will not bring any income. When the same money is placed in bank accounts, then they can already be called investments, as it will be guaranteed to receive a certain income

(Smart et al, 2016). Edwin Dolan and David Lindsey explain the essence of investment from the standpoint of microeconomics, meaning investment as “increasing the amount of capital that operates in the economic system, i.e increasing the proposed number of means of production created by people” (Dolan et al, 1994).

In Ukraine, the problem of theoretical justification of the category of “investment” began to be studied in the early 90’s. Nowadays the Ukrainian school of economics considers the concept of “investment” more broadly than the classics of foreign economic literature. Despite the diversity of views, almost all researchers agree that the investment is a contribution in fixed assets to make a profit and further increase it (Gogek et al, 1993).

However, even today in the economic literature the term “investment” is interpreted differently by different scholars, sometimes even erroneously. It is often identified with the term “capital investment”. This is not surprising, because instead of the concept of “investment” in the economic literature used the concept of “capital investment” (Isayeva, 2019). In particular, the great Soviet encyclopedia defines the investment as a long-term investment into the industry, agriculture, transport and other sectors of the economy both within the country and abroad, reflecting the former monopoly of state property in the economic sphere (Bol’shaya, 2020). A similar definition exists in almost all economic encyclopedias and dictionaries. The concept of “investment” means long-term investments in various sectors and sectors of the economy (Mochernyy et al, 2020).

Of course, the vast majority of investments are long-term. However, investing in short-term financial instruments (savings certificates, bonds, etc.) for a period not exceeding one year is also an investment, but a short-term one.

In our opinion, the definition of investments as investments in the form of cash, which is more in line with the definition of credit, reflects the lack of completeness. After all, investing can be done not only in cash but also in other forms – movable and immovable property, various financial instruments (stocks, bonds, deposits), intangible assets (patents, licenses, know-how) etc. A number of scholars agree with the content of the concept of “investment” specified in the Law of Ukraine “On Investment Activity” (Pro

investytsiynu, 1991). Moreover, the definition of the investment given in the law is accepted by many Ukrainian scholars as a definition.

As a result of the analysis and generalization of a theoretical research, methodological approaches of leading domestic and foreign economists, it is concluded that the investment is associated with factors, such as: the risk, uncertainty and time, as the investor risks without getting the desired result by the investing property and intellectual values a certain period of time. Based on the above, the definition of “investment” is given, which fully takes into account all the features of the investment process and means all types of property and the intellectual property invested in various activities for a certain period in order to make a profit (income) or social impact in conditions of the risk and uncertainty.

Such a variety of interpretations of the concept of the investment suggests that their implementation is a multifaceted area of economic activity, which can not be described by one definition. However, most modern authors have somewhat different, but generally similar definitions of “investment” or “investing”. They agree that investing is an investment of funds (assets) to increase their value or increase of the capital, and investments are assets that are spent to make a profit or ensure a positive increase in income.

However, this definition of the nature of the investment is also incomplete. It does not reflect investments to restore or improve non-productive fixed assets and environmental measures. For example, investing into improving a soil fertility, land reclamation, conservation measures and others.

In our opinion, investments should be understood as investments of the property and intellectual values in the growth of tangible, intangible and financial assets, as well as non-productive (natural) means of production, which are objects of business and other activities, in order to make a profit or achieve social effect.

According to the existing literature, investments are made in the form of individual investment projects. There are different views on this concept in modern literature. Some authors understand the investment project as a limited time and budget plan for a long-term investment in any enterprise for the profit, and the real investment project – a reasonable investment in the restoration of fixed assets

and increase inventories (Peresada, 2016). However, investments can be long-term and not only in the company. Other researchers define an investment project as a system set of organizational and legal and settlement and financial documents or a document. There is also a definition of a real investment project as a specially designed proposal to change the activities of the enterprise, which has a specific purpose.

However, the investment project may not be documented, but exist in the form of a plan. The investment project is also interpreted as a systemically limited and completed set of measures, documents and works, the financial result of which is a profit (income); the tangible result is new or reconstructed fixed assets, or the acquisition and use of the financial instruments or tangible assets income.

This definition also does not fully define the investment project, as it may have been incomplete, and its result may be not only a profit but also a social impact. There is also the definition of a real investment project as a project of investing money into an enterprise in order to solve specific development problems. But you can invest not only money. V.M. Popov notes that an investment project is ultimately the creation of the new production but the result of an investment project can be an investment within an existing enterprise or unit, etc. (Popov et al, 2020). All these definitions reveal the essence of the investment project to some extent, but there is no acceptable definition of an investment project.

Therefore, from the point of view of investment management at the enterprise level, we propose to define an investment project as a plan for investing property and intellectual property in fixed and current assets, managing this process and obtaining benefits. The project has specific objectives, budget and expected results and can exist in the form of a plan, document or electronically. Similar to this, there is a definition of the investment project of I.O. Blank (Blank, 2019), who under the investment project means the object of real investment, which is planned for implementation in the form of the acquisition, new construction, expansion, reconstruction, etc. based on the review and evaluation of the business plan. L.I. Brovko and I.I. Stalev (Brovko et al, 2021) define an investment project as a set of interrelated measures in conditions of limited financial, time and other resources.

Factors that affect the amount of investment are quite numerous. First of all, the amount of investment depends on the distribution of income for consumption and savings. Most of them are used for consumption in conditions of low income. Due to the growth of income, their share increases, which is directed to savings, which serve as a source of investment resources. Thus, the growth of the share of savings leads to a corresponding increase in the investment and vice versa. The expected rate of return has a significant impact on the volume of investments. It happens because profits are the main driver of the investment. The higher the expected net profit margin, the higher the amount of investment and vice versa.

The interest rate also has a significant effect on the volume of investment. If the expected rate of return on interest exceeds the loan interest rate, thus the investment will be effective. Therefore, an increase in the interest rate leads to a decrease in the investment and vice versa. It should also be noted the expected rate of the inflation among the factors that significantly affects the volume of the investment. The higher this figure, the more the future return on the investment will depreciate and, accordingly, the less incentive there will be the increase of their volume (this factor plays a special role in the process of the long-term investment).

Studies show that the investment process is a complex and little-studied economic phenomenon. There is no consensus among scholars on the economic content of this category. Thus, S.O. Gutkevych and others believe that the investment process is a process that should be considered in the dynamics between the subjects of investment, who are interested in achieving the same goal: a profit or social effect (Gutkevich, 2020).

A completely different meaning in this concept is invested by V.Sh. Rapoport and others who understand the investment process as an inseparable unity of financial, logistical and innovative resources (Rapoport, 2019). But even these examples are not without inconsistencies. In the first case, the main focus is on the subjects and objectives of the investment, and in the second – the resource approach is used where logistical and innovative resources are objects of the investment, and financial resources are their sources, which, in our opinion, is not correct to unite in this context. However, most researchers are unanimous in the components of the

investment process and include the investment, investment activity, investors and investing. Some include the investment sphere but this category is more relevant to the investment process at the state level. We believe that the investment process should also include the investment attractiveness.

General scientific and special research methods were used during the work. Historical and logical analyses were used in the study of the essence of the investment process; structural-logical, comparative economic analyses, statistical, and graphic analyses – in the study of the current problems of intensification of the investment process in Ukraine; a systematic approach and method of causation – in determining the ways to stimulate the investment process in Ukraine. The information base of the research was scientific publications of Ukrainian and foreign scientists, official data of the State Statistics Service of Ukraine, publications of periodicals and specialized Ukrainian and other world publications.

Results and Discussion

An enterprise's investment is the investment of the capital in all its forms in various objects (instruments) of its economic activity for getting a profit, as well as to achieve other economic or non-economic effects, the implementation of which is based on the market principles, time, risk and liquidity (Yaremenko, 2019). According to the contributions, investments are divided into capital (real) and financial. The capital (real investment) is the investment in tangible and intangible assets. Tangible objects of investment include: buildings, structures, equipment, precious metals, collections, and other inventory. This group includes the investment in reproduction and fixed assets, which are made in the form of capital investment. The investment in intangible assets include the investment in patents, licenses, know-how, technical, scientific-practical, technological and design estimates; in property rights arising from copyright; in intellectual values; the right to use land, water, resources, buildings, equipment (rent), and other property rights.

The development of Ukraine's economy is related to the financial condition of economic entities that depends on the activity of their investment activities. Due to the global economic crisis, the

purchasing power of Ukraine's population has significantly declined in recent years. The military conflict continues in eastern Ukraine, international economic relations are leading to an influx of cheap imports, so the share of unprofitable enterprises in Ukraine is significant (Table 3.4).

Table 3.4

Financial results of enterprises before taxation

Indicator	Year						
	2013	2014	2015	2016	2017	2018	2019
Number of enterprises that made a profit of the total number of enterprises, %	65,9	66,3	73,7	73,4	72,8	74,3	74,0
Number of enterprises that suffered a loss of the total number of enterprises, %	34,1	33,7	26,3	26,6	27,2	25,7	26,0

Source: compiled according to the State Statistics Service of Ukraine

This situation is associated with a low level of the capital investment by enterprises, and as a result, a high degree of depreciation of fixed assets of enterprises. In 2019, domestic enterprises produced products by fixed assets that were 58.1% worn out. It led to an increase in its material consumption, energy consumption, price, lag in terms of technology compared to products of the foreign enterprises in the domestic market.

Declining corporate profits leads to a reduction in the investment activity, as most investments are made by domestic enterprises at their own expense, while the share of investments by foreign investors is insignificant, which indicates the low investment attractiveness of Ukraine (Table 3.5).

As can be seen in Table 3.5, during 2017-2019 there was a negative trend in reducing of lending to enterprises by foreign investors and individuals for their needs in the technical re-equipment, technology modernization and others. This situation was associated with economic instability and high financial risks. And enterprises in these conditions also did not have their own funds in sufficient quantities to carry out the investment activity and ensure their sustainable development.

Table 3.5

**Investment by financing sources in actual prices,
UAH million and percentage of total**

Indicator	Year						
	2013	2014	2015	2016	2017	2018	2019
State budget funds	6498 2,4%	2739 1,2%	6920 2,5%	9264 2,6%	15295 3,4%	22814 3,9%	30834 4,9%
Funds from local budgets	7219 2,7%	5918 2,7%	14260 5,2%	26817 7,5%	41566 9,3%	50356 8,7%	56480 9,1%
Own funds of enterprises and organizations	170676 63,8%	154630 70,5%	184351 67,5%	248769 69,3%	310062 69,1%	409585 70,8%	408276 65,4%
Funds of foreign investors	4881 1,8%	5640 2,6%	8185 3,0%	9831 2,7%	6206 1,4%	1795 0,3%	4664 0,7%
Population funds for housing construction	28345 10,6%	22064 10,0%	31985 11,7%	29933 8,3%	32803 7,3%	34646 6,0%	32422 5,2%
Bank loans and other loans	40878 15,3%	21739 9,9%	20740 7,6%	27106 7,5%	29589 6,6%	44825 7,8%	67233 10,8%
Other sources of funding	9231 3,4%	6690 3,1%	6675 2,5%	7496 2,1%	12941 2,9%	14705 2,5%	24070 3,9%
Total	267728 100%	219420 100%	273116 100%	359216 100%	448462 100%	578726 100%	623979 100%

Analyzing a structure of the capital investment by the type of the economic activity in 2019, the largest share of them fell in industry – 32.8%. It accounted: 17.3% of the processing industry; 6.3% of the investment in the extractive industry and quarrying; 8.6% invested in the supply of electricity, gas, steam and air conditioning; 0.6% of the investment in water supply; sewerage, waste management (State Statistics, 2022).

In Ukraine in 2019 the capital investment was unevenly distributed by regions. According to the State Statistics Service, Kyiv accounted for almost a third of all investment – 96810.7 mln UAH. The best regions for business were Kyiv region (31057.7 mln UAH), Dnipropetrovsk region (30806.4 mln UAH), Lviv region (16970.8 mln UAH) and Kharkiv region (15700.3 mln UAH). The least investment activities were in Bukovyna (2444.9 mln UAH), Luhansk region (2910.4 mln UAH), Zakarpattia region (3721.4 mln UAH) and Rivne region (4086.7 mln UAH) (State Statistics, 2022). As a result, the investment process of one part of the regions was in a state of degradation, and in the other part accumulated the bulk of

investment and was the main investment turnover.

The investment activity was determined by the real profitability of the economy. However, due to the low level of competitiveness and inefficiency of the tax system, the Ukrainian economy remained relatively unprofitable, that was confirmed by low rates of profitability of operating activities of domestic enterprises (Figure 3.6).

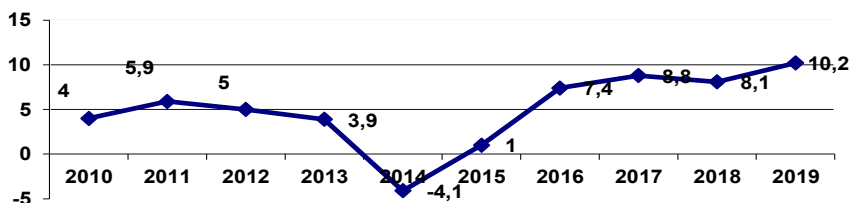


Figure 3.6 Profitability of operating activity of domestic enterprises

Source: State Statistics Service of Ukraine, 2022

A low level of the profitability meant a decrease in income that was the main source of the investment. It led to a decrease in own funds that made the investment. The decrease in the investment, in turn, according to the logic of the chain reaction, led to negative processes in the innovation. Due to the insufficient investment in fixed assets, the innovation activity was very low. So the introduction of advanced technological processes, integrated mechanization and automation was insignificant, which negatively affected macrostability and caused deep structural distortions and asymmetries in a social and economic life.

The world practice showed that countries with limited budgetary resources could not overcome the economic crisis on their own without attracting foreign investment. The increased investment activity was also associated with a well-known economic phenomenon of recent times – the rapid economic rise of the “new industrial countries” of Asia: South Korea, Taiwan, Singapore, and Hong Kong. In these countries, in a relatively short period of time, stable economic structures were created with a large and dynamic export potential, able to adapt quickly to market conditions’ changes, the transition to broad frontal development of modern knowledge-

intensive industries. At the same time, opening of the country to foreign investors should not take place spontaneously. It was possible to achieve the optimal compliance of the interests of exporters of capital to the needs of the recipient country only with the successful use of the system of incentives, restrictions and benefits.

According to the World Bank, the nature and volume of the foreign investment in Ukraine met the conditions of doing business, where an improvement of one percentage point of the index led to an annual increase in foreign direct investment by 250-500 mln. USD. Although Ukraine was gradually improving its position in the ranking (80th place in 2019 against 83rd in 2016), among the Eastern Partnership countries, it still ranked unsatisfactory in terms of the foreign direct investment per capita. Thus, in the beginning of 2019, Ukraine was more than six times lower than Azerbaijan, five times – than Georgia, and almost twice lower than Belarus and Armenia [Analychna dopovid', 2019]. The dynamics of foreign direct investment in Ukraine was shown in Figure 3.7.

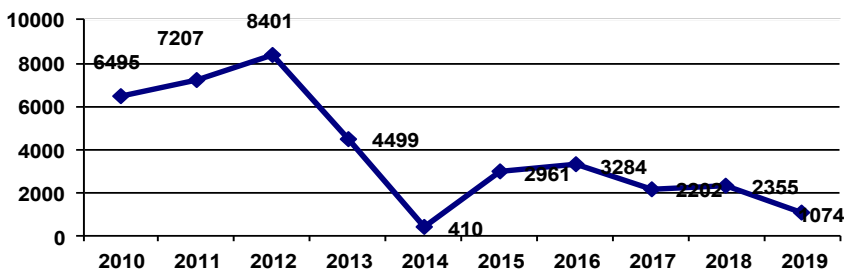


Figure 3.7 Dynamics of foreign direct investment in Ukraine

Source: Pryami inozemni investytsiyi

According to Figure 3.7, there was a decrease in the foreign investment in Ukraine’s economy. Despite the difficult economic situation and declining of GDP, Ukraine was an active donor to the world economy, so the real inflow of foreign investment – about a third of the amounts that were contributed. The rest was offshore, the money of oligarchs from their foreign companies. In our opinion, the main factor for foreign investment was the regulatory and political

turmoil of the country, the war in Ukraine, a macroeconomic slowdown, shutdown of a number of industrial enterprises, a rapid devaluation and inflation, declining consumption and the fact that investor protection remained unsatisfactory.

Thus, the investment was the locomotive that moved the entire economic system forward. Increasing labour productivity, the introduction of modern technologies and the introduction of new capacity as a result of investment activities led to the increased production, product competitiveness and as a result of the general economic recovery.

However, the deterioration of the financial results of enterprises against the background of reduced public funding, limited and inefficient use of intangible assets, increasing the share of overdue accounts payable, curtailment of issuance due to the low investment attractiveness of domestic issuers led to the reduced investment activity of domestic enterprises. The main problem of investment was the reduction of the demand for manufactured products. The solvency of the population deteriorated significantly that contributed to the reduction of consumer activity of most enterprises, as almost all of them were focused on the domestic market. While export-oriented industries were low value-added.

Domestic financial resources are insufficient for economic development and increasing the competitiveness of Ukraine's economy. There has been a negative trend of capital outflows, low purchasing power and the level of savings for many years. Therefore, there is a need to stimulate the investment process in the country in order to attract effectively external investment resources.

One of the important factors influencing the investment process is the legal framework. Nowadays the investment activity in Ukraine is regulated by many legal acts, including the Laws of Ukraine "On Investment Activity", "On Foreign Investment Regime", "On Protection of Foreign Investment in Ukraine", "On Foreign Economic Activity", "On Joint Investment Institutions", Laws of Ukraine on Special Economic Zones and Special Regime of Investment Activity in Priority Development Areas, Resolutions of the Cabinet of Ministers of Ukraine, "On Approval of the State Strategy of Regional Development during 2021-2027", "On Approval of Regulations on State Registration of Foreign

Investments”, “On approval of the Regulations on the procedure for state registration of agreements (contracts) on joint activities with the participation of a foreign investor”, etc.

In order to increase the protection of the investment on March 16, 2000 the Parliament of Ukraine ratified the Washington Convention on the Procedure for Resolving Investment Disputes between States and Foreign Persons of 1965. According to the Law of Ukraine “On Investment Activity”, the investment includes all types of the property and intellectual values that are invested in objects of entrepreneurial and other activities, as a result of which profit (income) or social effect is achieved (Zakon Ukrayiny, 1991, 1992).

A state regulation of the investment activity is carried out in order to implement economic, scientific, technical and social policy and includes management of public investment, as well as regulation of the investment activity and control over its implementation by all investors and participants. The Law of Ukraine “On the regime of foreign investment” establishes that foreign investment is values contributed by foreign investors into the investment activity in accordance with the laws of Ukraine in order to make a profit or achieve a social effect (Zakon Ukrayiny, 1991, 1992).

Despite negative international ratings, Ukraine still remains attractive to foreign investors because it is characterized by extremely favourable its geopolitical and geographical location, namely located at the crossroads of Europe – Asia, North – South, close to the world markets of the European Union, Russia, Middle East, a developed system of transport communications, natural resources, huge labour, scientific and scientific-technical potential.

The main factors influencing the investment process of the state include as follows: economic, political, legal, social, foreign investor status, investment infrastructure and geographical location, natural resource potential. It can be improved by various measures, including a clear legal framework for the investment, macroeconomic and political stability, the introduction of tax and customs benefits, grants, subsidies, subventions and budget loans to develop priority areas of the economy, overcoming bureaucratic barriers, corruption, ensuring legal protection of the investment, improving of the information support and investment infrastructure (Figure 3.8).

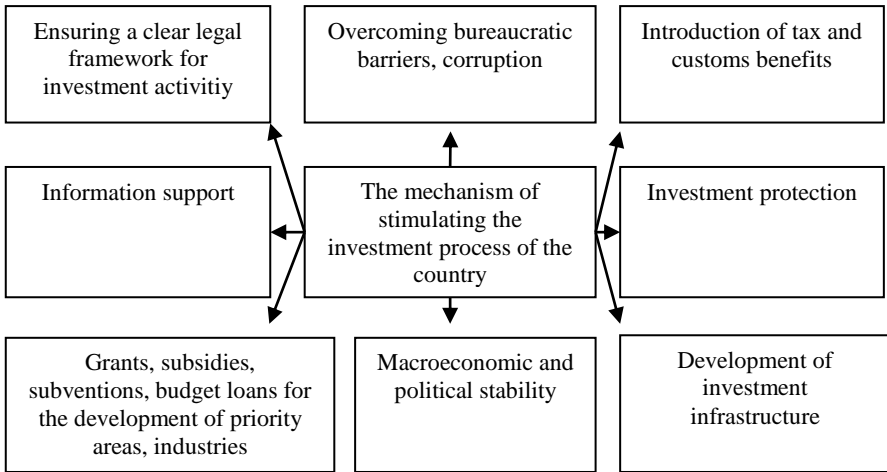


Figure 3.8 The mechanism of stimulating of the investment process in Ukraine

Source: Isayeva, 2019

In order to stimulate the investment process, it is necessary to pursue an effective policy to reduce inflation and inflation expectations, as well as to resolve the problem of a public debt, to ensure the procedure for protecting the rights of owners and investors. That is to create such favourable conditions under which the international image of the country will increase, and the investor will be interested in working on the territory of Ukraine in the long run.

It should be noted that the liberalization and openness of the domestic market in recent years have negatively affected the economic situation in the country. The country mainly imported products and exported the ferrous metallurgy, iron ore, coke and others. Therefore, we consider it necessary to pursue a policy of import substitution by supporting domestic producers due to the direction of investment resources for the introduction of innovative technologies in production and policy to develop the export potential of high-tech goods by supporting domestic exporters on the world market.

In order to ensure the balance and structural changes in the economy and the balance of the domestic market, it is necessary to

promote those sectors of the economy that have a chance to become competitive in both domestic and foreign markets. It applies primarily to mechanical engineering and other industries that implement resource-saving and innovative technologies in production, which will allow Ukraine in the future not to be dependent on imports of goods and services of other countries, to export finished quality products.

We consider that it is expedient to use investment resources rationally and efficiently, to focus on the introduction of the innovative technologies and know-how in the production of Ukrainian enterprises to increase the competitiveness of their products on domestic and global market.

SWOT-analysis of research results

Strengths. The strengths of the study of optimal ways to invest after the martial law in Ukraine are the measures that can improve the final result of the implementation in order to pursue an effective foreign economic policy to improve the structure of exports and imports of goods and services through a rational combination of the open economy and protectionism.

Weaknesses. Ukraine needs new mechanisms of the investment policy aimed at stimulating the investment process of the state, including creating a clear legal framework, ensuring macroeconomic and political stability, establishing effective and efficient relations between the regions and the center, directing investment resources primarily to priority areas of the national economy, which have great chances to become competitive in both domestic and international markets, namely engineering, tourism, agriculture, light, food, pulp and paper and others.

Opportunities. To stimulate the investment process in Ukraine, we consider it necessary to create an effective system of public loans for investment projects in priority areas of the national economy, as well as through a system of tax and customs benefits, tax holidays, tax cuts, customs duties on imports of new technologies, equipment, know-how, export of priority products of Ukraine.

It is also necessary to create a mechanism to subsidize promising and priority research and development, which will significantly increase the competitiveness of the national economy, to begin work on defining strategic directions of investment policy at both national

and local levels, to create conditions for investment infrastructure (investment funds, audit and insurance companies), favourable conditions not only for foreign investors but also for domestic ones. It is necessary to define closed productions from foreign investments for the purpose of economic security of the state.

Threats. Given the global trends of increasing the competitiveness of national economies due to the development of clusters in Ukraine, they also need to pay due attention, including cross-border. As 19 regions of Ukraine are borders, and the eastern and southern regions of the country are currently occupied. Therefore, it is necessary at the legislative level to create favourable conditions for the formation and development of special economic zones and clusters after the deoccupation of Ukraine.

Conclusions

It is determined that to stimulate the investment process in Ukraine it is advisable to create an effective system of public loans for investment projects in priority areas of the national economy, as well as to begin working on defining a strategic investment policy at both national and local levels. The main task will be to restore business, infrastructure, jobs and return home millions of migrants.

It was found that it is necessary to create an open, export-oriented model at the state level that would increase the activity of both foreign and domestic investors in Ukraine, the intensity of the international capital movements and the division of labour. The optimal investment policy of the Ukrainian government should be conducted in the following main areas, such as: tax incentives for investment; the application of accelerated depreciation; creating favourable conditions for foreign investors after the war with the Russian Federation, supporting and encouraging innovation; stable working conditions for long-term investments, in which there will be no place for the forced withdrawal of the capital and arbitrariness of power; creation of a reliable system of the insurance against non-commercial risks after martial law.

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**MARKETING AND
LOGISTICS IN THE
SYSTEM OF
SUPPORTING
ECONOMIC
SECURITY OF THE
ENTERPRISE****Abstract**

In today's competitive environment, sales is an important link in the development of communication between enterprise and consumers. The essence and elements of the sales system has been revealed in this paper, has been identified the relevance and objectives of its organization, and substantiated the need for integration of marketing and logistics in the joint application of their methods and approaches during the sales system organization. Most attention has been paid to the disclosure of the essence of marketing and logistics as a tool to ensure a stable competitive position of the distribution system, its

functions, place and role in a competitive sales system formation of the enterprise. It has been found that its organization fits into the corporate strategy. This allows you to make economically sound decisions to modify or maintain the existing sales channel, or select the optimal sales channel based on the marketing and logistics principles. It is concluded that the synergetic economic effect of marketing and logistics of the sales system is manifested in its functions and roles implementation: analytical and forecasting, transport and warehousing, information and communication, service and distribution and coordination. Increasing the role, using the strategic potential of marketing and logistics is a condition for the implementation and development of integrated competitive potential of the enterprise its sales system competitive advantages.

Keywords: *marketing; logistics; marketing logistics; competitiveness; sales system; enterprise, economic security of the enterprise.*

Introduction

The development of economy of Ukraine focuses on additional management tools that will be able to provide a competitive advantage for companies in the market. One of the most progressive scientific and applied areas is marketing and logistics to ensure the enterprises efficiency. Currently, many Ukrainian companies are moving from the traditional scheme of organizing the sale of products to the system of marketing (distribution) logistics, the function of which is the organization and planning of movement and products sale. However, we note that the effectiveness of marketing and logistics of the enterprise depends on its competitive position in the market, consumer products, quality of advertising and sales processes service support.

We understand that the sale of products is not an arbitrary (natural) process, but requires purposeful activities to coordinate and manage. Thus, the set of functions of marketing and logistics and management of the process of selling products (works, services) is a sales activity at the enterprise.

We believe that conceptually important is the approach in which sales activities should be considered as a process of organizational and economic operations, containing the logistics aspect (transportation, warehousing, inventory management, order

processing), and marketing aspect (research and analysis of market conditions, definition sales volumes, selection and management of distribution channels), and is carried out to achieve economic results from the sale of products to consumers and create a positive image of the enterprise in the market. One should mention that the marketing direction of sales activities positions material values as an object of the market.

In our opinion, the main tasks of sales logistics (dispensation, distribution) as an organic part of production and information activities in the general management system of the enterprise are: search for channels for further development of production and ensuring its profitable activities; increasing the level of competitiveness of the enterprise by optimizing the existing sales network taking into account such criteria as proper preparation of goods for sale (in fact, it is a continuation of the production process) by increasing the efficiency of the supply system; optimizing the speed of processing and processing orders, increasing the level of logistics service, reducing the number of complaints, fines, etc.

The main sign of the changes that are emerging in today's reality is the existence of management difficulties due to the synergistic effect of combining the effects of increased complexity and increasing environmental variability. Therefore, the dual positioning of the sales process as a logistics and marketing activity requires an effective enterprise management system. External and internal challenges initiated by logistics and marketing, facing the management of the enterprise, require the development of an effective sales policy of the enterprise. Taking into consideration changes in the external and internal environment in the dynamic transformations of the post-industrial economy requires the adoption of operational management decisions in the field of sales. In our opinion, the operational management of marketing and logistics of sales activities is based on timely, reliable and relevant accounting information.

Literature review

The dominant reality of modernity is globalization and integration of world economic processes as a phenomenon formed by the modern division of labor, production and services, which

significantly affects the enterprise economy. The development and application of scientifically sound business management strategies are the main prerequisites for Ukraine's participation in European integration processes and adaptation of enterprises in the complex conditions of the global market economy. Exacerbation of negative phenomena significantly affects the economic performance of enterprises and requires effective management of marketing and logistics infrastructure and the rational use of effective approaches to managing the internal and external enterprise environment .

O.O. Krasnorutsky detailed the question of the marketing and logistics relevance of the enterprise and concluded that the implementation result of competitive sales strategy of the company is to cover a certain market share, so marketing and logistics components can be considered as tools for sales policy enterprises that are involved as a result of the information (marketing) component mobilization (Krasnoruczkyj, 2012).

N.M. Gudzenko in his research proved that sales is a subsystem of economic activity, which includes the process of moving products from producer to consumer (sales); market research; meeting the needs of the buyer; management of the movement of material values with the definition of the financial result, which is formed when creating new value in the production process (Gudsenko, 2002).

E.V. Krykavsky, studying the integration of marketing and logistics functions, determined that the success of integration of marketing and logistics strategies depends on the specific conditions of the chosen competition strategy in relation to the external and internal environment of the enterprise (formation of logistics cooperatives, logistics warehousing, packaging, handling, commission infrastructure) (Krykavs'ky, 2004).

According to experts, the cost of production and sales exceeds the world by 2, and in some cases by 8 times; the lack of an organized and logically developed system of product distribution in general, and export in particular. Thousands of intermediary structures sell Ukrainian products. Their activities lead to chaos and transaction costs rising, which are 2-2.5 times higher than the price of finished products. Almost 2,000 enterprises manufacture export products in Ukraine. 520 thousand intermediary firms are engaged in distribution of export production; processes of finished metal products delivery

take place under the conditions of old technologies of transportation with backwardness, and sometimes absolutely absence of a transport infrastructure; high degree of rolling stock wear, both physical and moral wear. Transportation costs in Ukrainian conditions increase due to the fact that more than a third of highways and road and railway bridges simply do not meet modern requirements for engineering structures; low level of production development and technical base of warehousing; weak level of modern types of containers and packaging production development ; etc.

M.A. Aucklander, analyzing the state of distribution at domestic enterprises, stated: “The first stage of distribution as a developing process in the Ukrainian trade system has already been passed. This is evidenced by the fact that according to one of the laws of dialectics, quantity has passed into quality, i.e. the number of accumulated representatives of trading firms is two orders of magnitude higher than the number of domestic producers and has reached a critical value for the economy. Given the economic approach, this is characterized by various goods transition of distributors that makes up the intermediary environment, in the status of perfect (pure) competition, which neither theoretically nor practically can last long. That is, we can conclude that in the structure of Ukraine’s economy, there is an unstable balance of fiercely competing, but, meanwhile, representatives of the intermediary environment, which differ little from each other, that environment can be destroyed by little effort. This is the phenomenon synergy. There are two possible extreme cases: either the domestic trade degradation or a stable equilibrium that is gaining strength in the commodity market by improving the distribution network” (Oklander et al.).

We consider that the relationship between marketing and logistics is insufficiently studied, as these two realities are closely linked by a single algorithm – business process management. In this paper, we detail the study of the relationship and interaction of these functional areas in the process of strategic management of sales activities of the enterprise.

Without diminishing the importance of modern scientific developments, it should be emphasized that a certain range of tasks remained underdeveloped. The importance and relevance of solving

the above problems of marketing and logistics to ensure effective approaches to the organization of supply, production and marketing activities of enterprises, as well as a wide range of scientific research in this important area of economics led to the choice of this scientific article.

The complexity and depth of the development of functional tasks in sales depends on the management level, so let's consider the marketing and logistics of the enterprise sales system in more detail.

Materials and methods

In modern conditions of business development, among the activities that determine the commercial success of the firm in the market, the main function belongs to sales activities. In the last 10-15 years in the West, due to the rapid development of economics, the emphasis has shifted somewhat and "blurred" the boundaries between sales, marketing and logistics. Increasingly, sales functions are identified with marketing and logistics. In the foreign literature there is also no clear distinction between the goals and functions of sales, marketing and logistics. Most authors hold to the point of view that sales are part of a firm's marketing.

At the same time, a number of Ukrainian researchers believe that the main difference between sales and marketing is the existence of a well-established distribution network and economic relations for the supply (sale) of goods to consumers. Marketing is characterized by an increase in sales by developing new market segments or expanding existing ones by changing the product range, improving product promotion policies, etc. However, the basic concept of marketing is that profitability is more important than sales volumes. It is believed that the result of the logistics use is customer service.

When researching the essence of marketing and logistics of sales activities, you should first focus on such key points as distribution or physical distribution. These two concepts are identified. At the same time, in recent years there has been a clear trend of broader interpretation of distribution in the sense of including in its scope additional functions for sales of products and services. Moreover, the most costly part of the service is directly related to the distribution of goods to the consumer.

So, not by accident, in the United States, the Physical Distribution

Management Board was renamed for the Logistics Management Board in 1991, and the first fundamental work, Physical Distribution Management, was published in 1961 and 1968 in Logistics Management. “Logistical Management”, which survived four editions: 1974, 1978, 1986 and 1996.

The connection of logistics as a flow (rational organization of movement of goods and material flows and their management) and marketing as a market management concept (definition of consumers and their preferences, establishing relationships with them and their content) creates additional opportunities to increase the usefulness and value of the product for consumers. Marketing analytics explores and forecasts the needs of customers, allows the use of logistics tools for the use of transport and warehousing resources and optimization of flow.

In our opinion, it is important to develop a product that meets consumer demand and meets its needs, as well as ensuring its availability to the target market segment. Sales is a sphere of commodity-money exchange between economically and legally free market participants who participate in the creation of added value and the movement of goods from producer to consumer. As the foundation of exchange, this systemic activity in the field of commodity relations, which forms the infrastructure of the market, aimed at organizing sales, and sales of products.

Since a quick response to demand is possible with a well-established logistics system, the company’s marketing policy should be complemented by logistical support (identified by marketing demand must be met in a timely and quality manner through fast, uninterrupted and accurate delivery). Accounting for changes and meeting demand, thus, are possible with a well-established logistics system, that complements and develops marketing, “combining” the consumer, transport and supplier in a mobile coordinated system with feedback from a single technique and technology. Both tools solve different problems, and their joint use (synthetic approach) can guarantee and increase the production efficiency and marketing activities of the enterprise.

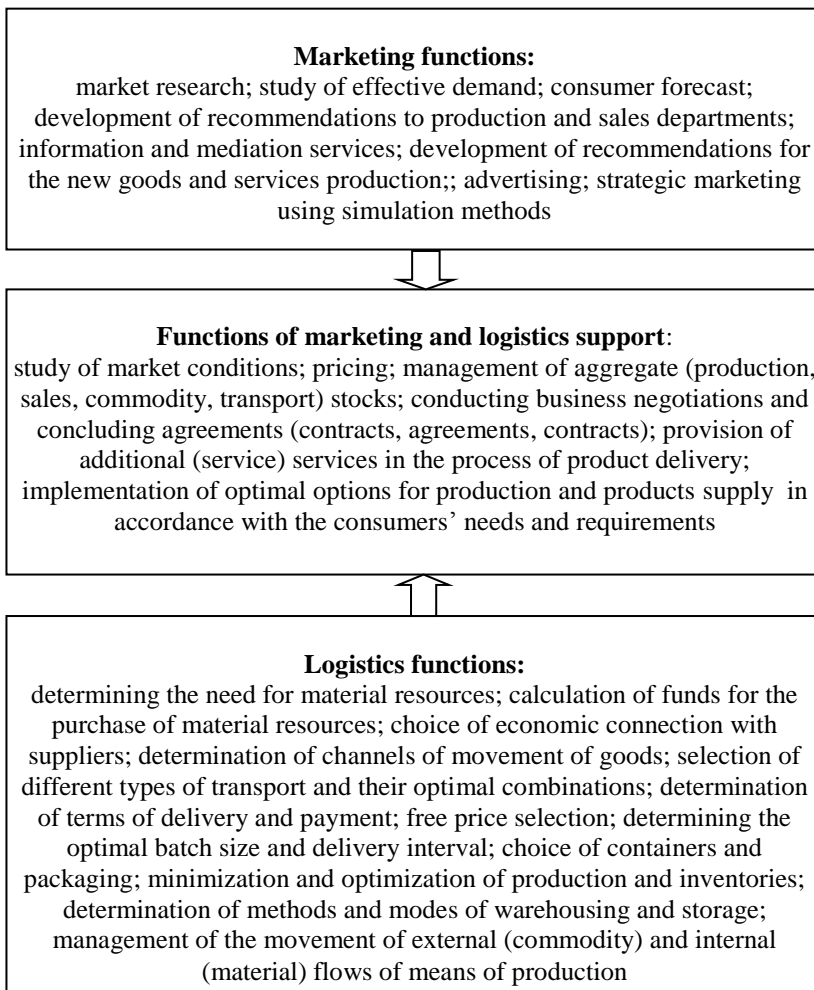


Figure 3.9 Functions of marketing and logistics support of the sales system of the enterprise

Source: formed by the authors

The sales system consists of a set of marketing and logistics functionalities that ensure the sale of products and bring it to consumers in a given volume (Lubochnov, 2009). Its main task is: to create conditions for the transformation of the needs of a potential

buyer into a real demand for a particular product. The organization of the sales system corresponds to the general business concept and operates in accordance with the implemented product, price and sales policy of the enterprise. The development of the latter is preceded, firstly, by the market of goods the analysis (its geographical and cultural uniqueness, sales mechanisms, accounting for regulatory aspects that impose restrictions on it), market capacity and structure, assessment of the company's position in the analyzed market, analysis of its competitors and buyers. Secondly, it is preceded by the effectiveness of the existing sales system an assessment as a whole and its individual elements are: sales channels, subsystems for planning and forecasting sales, control of its results, subsystems of information, marketing and logistics.

Quantitative indicators of sales by product and by region, as well as the whole range of factors influencing the sales size in commodity markets (Shilko, 2013). Carrying out their comprehensive analysis is a condition for improving the efficiency of the sales system and sustainable development of the enterprise as a whole. To achieve and strengthen its competitive advantages, it is necessary to reasonably approach the choice of sales channel (take into account the costs associated with its construction) and determine its structure, develop new methods of marketing based on the integration and interaction of marketing and logistics concepts.

Marketing analytics uses the logistics tools of the enterprise sales system. Logistic optimization of flow is complemented by marketing support: the demand identified by marketing must be met in a timely manner and quality through fast, uninterrupted and accurate delivery, with minimal costs. Thus, the joint use of the marketing principles and logistics can guarantee and increase the commercial activities efficiency of the enterprise on sales.

We believe that the integration of two market-oriented management concepts is the basis of marketing and logistics. Its role in the sales system formation is that it ensures the organization of a reliable and secure supply of goods, as well as maintaining the market share of the enterprise. The competitiveness of the enterprise is realized if its product has a stable sale. Marketing and logistics support, is a tool for the formation of stable competitive positions on sales.

Results and discussion

Combining marketing and logistics processes under a common management principle has a reserve for improving the socio-economic efficiency and sustainability of the sales system, as it allows you to use all channels and tools for its planning, organization and control. For example, its planning includes the choice of scheme, traditional forms of sales organization. It allows to provide conditions of profitable work of all elements of system and to coordinate their interests thanks to use of principles of marketing and marketing logistics.

Similarly, the choice of which products will be sold, the choice of its main characteristics (temporary performance of transactions, trade stocks and transport, the density of the sales network).

To facilitate the choice of sales channel, you can use the criteria, each of which can be assigned a coefficient of significance (Table 3.6).

Table 3.6

Indicators of the choice of sales channels and their scoring

Name of indicators	Coefficient of significance	Channel options and levels		
		direct	conventional	vertical
Strategic goals fulfillment				
Achieving target customers	0,3	3	5	5
Economy	0,2	1	2	4
Opportunity to demonstrate the product benefits	0,15	5	1	3
Ability to control				
Receiving a report on the work done	0,2	4	0	3
Ability to control the display of goods at retail outlets	0,15	4	1	3
Total	1,0	3,16	2,2	3,8

Source: formed by the authors

Data analysis of Table 3.6, allows us to conclude that a vertical marketing system with vertical distribution channels, in which channels from the manufacturer and one or more intermediaries act

as a single system, has advantages over a particular intermediary in terms of: its access to target markets, opportunities in sales, business reputation, range of services and working conditions, the ability to participate in achieving strategic commercial goals of the enterprise, the enterprise ability to influence the relationship with the intermediary and control it, and others.

Thus, the competitiveness of the sales system is an opportunity for sustainable profitable sales compared to a similar sales system of competitors, which allows you to maintain and increase market share and provides the company with the necessary financial flow for its successful operation. This is the ability to produce, maintain and increase the competitive advantages of the enterprise in the field of ensuring the profitability of the trade agreement for each of the business partners, taking into consideration the interests of consumers.

The competitiveness of the sales system is a decisive factor in its commercial success in a developed competitive market. As a relative concept, it is tied to a specific market and sales channel, time and place of sale. As the product begins to expend its competitiveness potential after entering the market, the possibilities and tools of marketing logistics can slow down this process.

Marketing and logistics interact with each other, mainly in the sales system of the enterprise. Logistics, responsible for the physical distribution of products, plays an important role in sales. In some cases, physical distribution can be a key element and a critical factor in the implementation of marketing strategy and tactics of product sales. Marketing logistics is responsible for the formation (marketing) and implementation (logistics) of demand. It is an integrated system of planning and organization of providing the relevant authorities of the economic system of the enterprise the required number of necessary types of goods, which is presented provides a profitable demand, at the right place and time, at optimal prices and with minimal costs.

The tasks of marketing and logistics interaction in the sales system, which determine the role of marketing logistics in its organization. There is no clear line between the tasks and the role of marketing logistics in the formation of the enterprise sales system. For example, forecasting of cargo transportation and analysis of the

situation on the transport market correspond to the information-communication and analytical-forecasting role; coordination involves the exchange of information within units and between them.

Creating a competitive sales system is a strategic task of any enterprise in today's turbulent economy and fierce competition. Mistakes in its development and identification of development trends can eventually lead to its bankruptcy. Since the main functional blocks of the sales system, which are in continuous interaction with each other, are sales channels (marketing channels) and distribution logistics, the strategic interaction of marketing and logistics can prevent and correct them.

Synergetic economic effect of marketing and logistics, as a basis for improving the efficiency of marketing management of enterprise processes in the field of distribution and sales, is manifested in the implementation of its functions and roles: analytical and forecasting, transport and warehousing, information and communication, service and distribution and coordination. A comprehensive solution to the problems of forming a system of marketing and logistics will contribute to the efficient delivery of goods to consumers with a high level of service and optimal costs.

Conclusions

Getting the maximum possible result while minimizing commercial risks is possible due to coordinated actions and strategic interaction of all participants in marketing channels as logistics partners. Marketing and logistics support is a comprehensive system that involves the study and optimization of all types of flows that accompany the physical movement of goods through the selected channel – from producer to end consumer in order to fully, timely and qualitatively meet effective demand while minimizing logistics costs. distribution and movement chains. The total cost of forming a system of marketing and logistics of the enterprise should include a detailed structure of current costs and possible capital costs that are necessary for the implementation of the technological process of marketing and logistics in relation to the specific situation, taking into account the state of the environment.

Increasing the role, realization of the strategic potential of marketing logistics is a condition for the development of integrated

competitive potential of the enterprise and the formation of competitive advantages of its sales system.

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EXPORT LOGISTICS OF AGRICULTURAL PRODUCTS OF UKRAINE IN THE CONTEXT OF ENSURING FOOD SECURITY DURING MARTIAL LAW

Abstract

The study determined the dynamics of growing grain crops in Ukraine and the geography of their export. The problems of ensuring export logistics as a result of military aggression by Russia in the context of ensuring food security are pointed out. The main directions of export logistics of grain crops from Ukraine and the peculiarities of transportation by railway, river and road transport were studied. The directions of diversification of export logistics of grain crops from Ukraine during martial law in the context of ensuring food security have been determined. Further ways of ensuring the development of the export of grain crops from Ukraine and improving the logistics infrastructure are substantiated. A description of the directions of cooperation between Ukraine and the European Union countries regarding the promotion and support of export logistics to the main countries of importers of agricultural products to ensure food security is provided. Ways of post-war restoration of the logistics of export of agricultural products from Ukraine and ensuring the sustainability of agricultural producers are considered.

Keywords: *agricultural products, grain, logistics, export, food security, infrastructure, transport, war, Ukraine.*

Introduction

As a result of the full-scale aggression of Russia and the blocking of regions and ports of Ukraine, agricultural enterprises faced problems of exporting products, which threatens the food security of the world. The logistics of exporting agricultural products is forced to look for new ways of transportation outside the country. There was a need at the state level to seek help and support from the international community and the possibilities of European logistics. In the pre-war period, there was a sharp dissonance between the productivity of crop production, grain logistics and the need to fulfill export agreements for the supply of various types of products to foreign buyers.

The geography of supply of agrarian products of agriculture of Ukraine is quite wide and involves cooperation with partners from more than 180 countries of the world. And distant China and India, Egypt, Saudi Arabia, and Iran are in the first places in terms of grain exports. Turkey and the countries of the European Union hold a significant share of exports.

The logistics infrastructure of the export of agricultural products in Ukraine faced the problems of providing these countries, first of all, with grain crops. Currently, the largest channel for exporting agricultural products from Ukraine is border crossings with the European Union countries. Shipment of agricultural products is carried out mainly through land railway crossings on the border of Ukraine with Poland, Romania, Slovakia and Baltic countries.

Materials and Methods

The research used data from the State Statistics Service of Ukraine on the economic results of agricultural enterprises and USDA – export data. The research period covers 5 years (2018-2022). The research used methods of economic analysis.

Results and Discussion

Assessment the volume activity of agricultural enterprises of Ukraine and the geography of exports

Traditionally, in Ukraine, the lion's share of the gross harvest of

grain was exported, and on average over the last three seasons, it fluctuated between 70-73%, while the share of the harvest needed for domestic needs did not exceed 30%. A significant advantage of export over domestic demand is characteristic of the main cereals, wheat and corn, while the reverse trend is observed for niche crops, and in the barley segment, the share of export slightly exceeds its domestic consumption.

It should be noted that before the military invasion of Russia in Ukraine, the export potential of barley was realized by 95% (estimated at 6.0 million tons in February 2022), wheat by 81% (22.5 million tons), and corn by 60% (30.0 million tons).

With the beginning of the war, the Government of Ukraine imposed a ban on the export of certain grain crops, such as oats, millet, buckwheat and rye, to ensure food security in the country during martial law, and also introduced mandatory export licensing of wheat and corn. Subsequently, for corn, this procedure was canceled at the request of market participants due to the significant excess of the grain harvest over its internal need and the expectation of record high transitional crop residues at the end of 2021/2022 against the background of the limited possibility of further realization of its export potential.

Cultivation and export of wheat

Ukraine is among the top-5 main exporters of wheat. According to the USDA, its share in the world market for the last three seasons averaged 9%. From 2018/19 to 2020/21, the ratio of grain shipped to the foreign market to its production in the country fluctuated between 63-73% (Figure 4.1).

The 2021/2022 season was marked by a new maximum in the gross crop harvest (32.2 million tons, +29% to the 2020/2021 harvest), and a new record level of grain exports was also expected. As a result of the impossibility of operation of the ports in the waters of the Azov and Black seas, the shipment of wheat to the foreign market has practically stopped, because the main buyers of grain are the countries of North Africa, Southeast and South Asia, and the Middle East, to which grain is delivered by sea transport. Thus, in 2021/2022 wheat exports from Ukraine are expected at the level of 18.6 million tons (+12% to the 2020/2021 season).

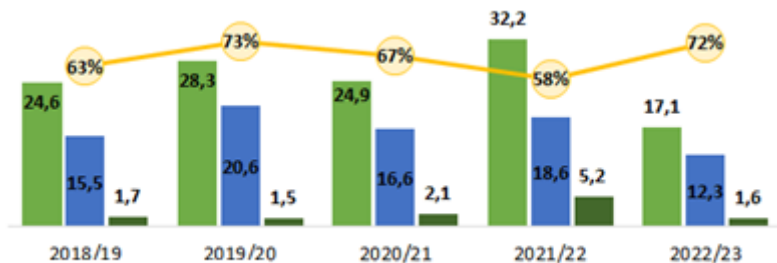


Figure 4.1 Dynamics of wheat cultivation and export, million tons

Notes:



Source: created by authors' based on State Statistics Service of Ukraine

Egypt and Indonesia remain the main importers of wheat from Ukraine for more than one season, their share in the total volume of grain logistics to the foreign market is about 15-16% (Figure 4.2).

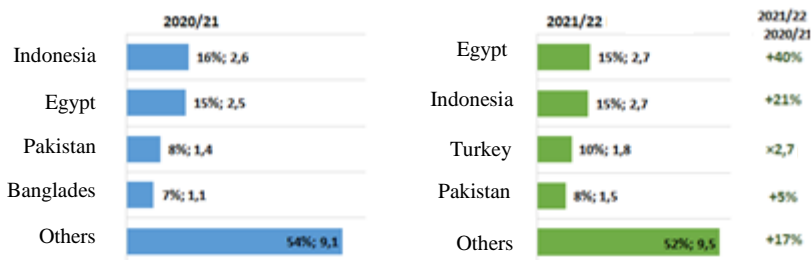


Figure 4.2 Geography of wheat exports from Ukraine, million tons, July-February

Source: created by authors' based on USDA

Indonesia covered 24-27% of its import needs at the expense of Ukrainian grain crops over the past three seasons. Since the peak of grain purchases by Indonesia from our country falls in August-November, for 8 months of 2021/2022, Ukraine has already provided 24% of the expected import demand in this direction, which,

according to USDA experts, is expected at the level of 11.0 million tons. The Indonesian market in the wheat segment is quite diversified, the need for grain crops is also covered by supplies from Canada, Argentina, the USA and Australia, therefore, if the war in Ukraine drags on, the presence of these countries in the specified market may increase significantly.

The share of Ukraine's presence in the Egyptian grain market from 2018/2019 to 2020/2021 averaged 22% and reached a maximum of 29% in the 2019/2020 season. During the 8 months of the current season, Ukraine managed to export 2.7 million tons of grain crops to Egypt, which is 23% of the expected import (12.0 million tons according to the USDA forecast).

Since August 2020, Pakistan also actively began to buy Ukrainian grain crops (in 2020/2021, the government of this country allowed private businesses to import wheat to stabilize domestic prices and build reserves to ensure food security due to the coronavirus pandemic in the world), and, according to the results of 2020/2021, its share in the total export of Ukrainian grains was 8% (1.4 million tons), while the presence of Ukraine in the Pakistani wheat market was 39%. In the 2021/2022 season, Pakistan managed to import 1.5 million tons of grain crops from our country (+5% compared to the same indicator in 2020/2021), which corresponds to 77% of its expected import (1.9 million tons according to USDA forecasts). In connection with the blockade of Ukrainian seaports, this country may switch to the purchase of wheat, for example, from India, Australia or European Union countries.

As for Bangladesh, the volumes of wheat exports from Ukraine in the specified direction gradually decrease with each season, and if according to the results of 2020/2021, this country occupied the fourth position in the ranking of the main importers, then according to the results of 8 months of the current season, it dropped to the seventh place.

Turkey's entry into the top-3 main importers of Ukrainian grain crops in 2021/2022 is of a temporary nature, since the sharp increase in its purchases is associated with a significant decrease in its own wheat production in 2021. Ukraine's presence on the grain market in Turkey, with the exception of 2021/2022, does not exceed 13%.

With regard to 2022/2023, due to a possible reduction in the

cultivation of grain crops in Ukraine in relation to the harvest of the current season by 47%, to 17.1 million tons, their export potential may amount to only 12.3 million tons, which is 34% below the indicator 2021/2022. A reduction in the volume of shipments of Ukrainian grain crops will reduce the presence of our country in the markets of its main importers, and buyers will have to look for alternative logistical ways of suppliers of grain crops to cover the import need.

Corn

According to USDA data, since 2008/2009, Ukraine has been consistently among the top-5 main exporters of corn. In 2018/2019, corn shipments reached an all-time high, amounting to almost 30.0 million tons, which corresponds to 17% of the total global export of the crop. In the 2021/2022 season, a new record was reached for the gross harvest of corn, which, according to the State Statistics Service of Ukraine, amounted to 42.1 million tons (+39% compared to the 2020/2021 harvest), and the export potential of Ukrainian corn was estimated at 30.0 million tons. However, against the backdrop of the blockade of Ukrainian seaports due to the military invasion of Russia, the corn export forecast has been reduced to 20.8 million tons (-13% compared to the 2020/2021 indicator), and the transitional balance at the end of the current season is expected to be at a record high level (12.3 million tons, which is 6.1 times more than the 2020/2021 indicator) (Figure 4.3).

The main importers of Ukrainian corn are traditionally China and the European Union, in 2020/2021 their shares in the total export of corn amounted to 36% and 24%, respectively (Figure 4.4).

From 2018/2019 to 2020/2021, corn exports from Ukraine to China more than doubled, from 3.8 million tons to 8.5 million tons, while, according to the USDA, the Chinese market's need for imported corn increased during the above period 5 times, from 4.5 million tons to 29.5 million tons, which caused a decrease in the share of Ukrainian corn in China's total imports from 85% to 29%. During the 5 months of the current season, Ukraine managed to export 5.5 million tons of corn in this direction, which is 17% more than the same indicator in the previous season and is 24% of the expected import by China (23.0 million tons according to the USDA

forecast). Further export of Ukrainian corn in this direction is currently impossible due to the shutdown of seaports as a result of constant shelling of the territory of Ukraine. Therefore, it is most likely that the presence of American corn will increase on the Chinese market in the current season, and purchases of grain from the European Union and Argentina are also possible.

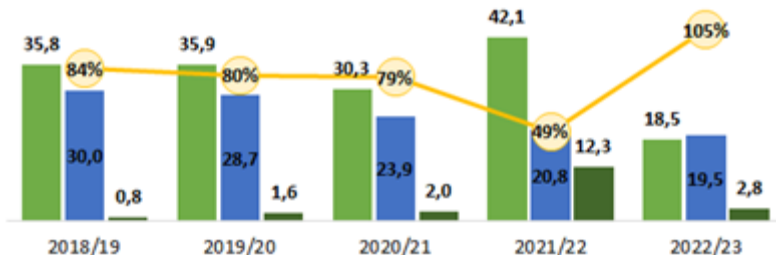


Figure 4.3 Dynamics of cultivation and export of Ukrainian corn, million tons

Notes:



Source: created by authors' based on State Statistics Service of Ukraine

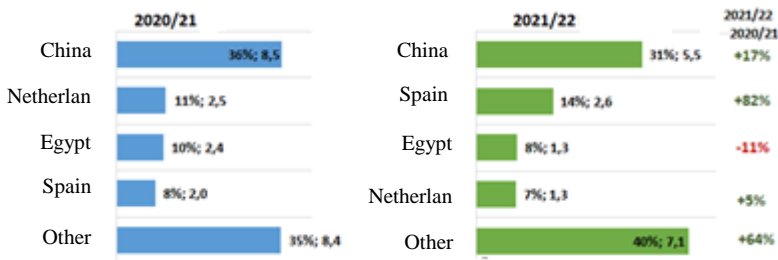


Figure 4.4 Geography of corn exports from Ukraine, million tons, October-February

Source: created by authors' based on USDA

European Union countries covered an average of 60% of their import needs over the past three seasons at the expense of Ukrainian

corn. Of this volume, about 59% of the corn in total went to the key buyers of Spain and the Netherlands. In 5 months of 2021/2022, these countries managed to import from Ukraine 2.6 million tons and 1.3 million tons of corn, respectively, which is 82% and 5% higher than the same indicator a season earlier. At the same time, the total volume of Ukrainian corn logistics to the European Union from October to February of the current season amounted to 7.4 million tons, exceeding the 2020/2021 indicator by 69%. At present, the European Union countries are the only available destination for the export of corn from Ukraine.

Egypt also occupies a significant place in the ranking of key importers of corn from Ukraine, but the volume of its purchases gradually decreases with each season. If according to the results of 2018/2019, the share of Ukrainian corn in the total import of Egypt was 32%, then in 2020/2021 it decreased to 24%. Egyptian corn imports are quite diversified, in addition to Ukrainian corn, the country buys Argentinian, Brazilian and Romanian corn in significant volumes.

As for the forecasts for 2022/2023, with the expected reduction of corn cultivation in relation to the harvest of the current season by 56%, to 18.5 million tons, and due to the record transitional crop residues at the end of 2021/2022 at the level of 12.3 million tons, its export potential may amount to 19.5 million tons, which is 6% lower than the 2021/2022 indicator.

Types and ways of export logistics of grain in Ukraine

Currently, three types of grain logistics are common in Ukraine – rail, water and motor transport. Their choice depends on the distance and final point of transportation. The leading position is occupied by railway transport, but in recent years, we have observed a reorientation towards road transport. The river method has the smallest share in the overall structure of the logistics of grain crops.

Export logistics of grain by rail transport

In the field of railway transportation of grain, there is a stable shortage of special grain wagons, especially during the harvesting season of certain crops. Periodically, “Ukrzaliznytsia” declares its ability to transport up to 47 million tons.

This applies both to its delivery to sea and river ports, and to transportation to neighboring countries. During martial law, the need for rail transportation increased. There is a high traffic load and a shortage of wagons, which is why many agricultural producers and grain traders faced problems during the export logistics of grain to the European Union countries.

Thus, there are six railway border crossings for the land export of grain from Ukraine to the European Union countries: on the border with Poland, they are Izov – Hrubeshiv, Mostyska – Medyka and Yagodyn – Dorogusk; with Romania – Vadul-Siret – Dornesti, with Slovakia – Chop – Chierna nad Tisou, with Hungary – Chop – Zahony. Their total throughput per day is 534 grain wagons.

In the current conditions, the load on the railway logistics of Ukraine has increased many times, and the throughput capacity of railway border crossings is significantly inferior to the indicators of the port infrastructure, so the railway system of Ukraine and the railways of neighboring countries need time to adapt to a sharp increase in the volume of Ukrainian cargo transportation.

There are a number of technical difficulties for the development of alternative routes. For example, a double change of trolleys on wagons during delivery to the Baltic ports, dimensional restrictions when moving through the territory of the European Union, which do not allow the use of Ukrainian wagons in certain sections, the overloading of the railway infrastructure of the European Union with its own cargo.

It is worth noting that, according to experts, only 55-60% of the available cargo transportation potential through western border crossings is used, which is due to a number of factors, such as: uneven use of border crossings by market participants, lack of rolling stock of foreign carriers, limited capacity of individual sites, the need to build new logistics chains on the territory of neighboring countries, bureaucratic delays in customs, phytosanitary, veterinary registration, etc.

Nevertheless, according to railway statistics, in March-April 2022, 921.6 thousand tons of corn, 7.0 thousand tons of wheat and 4.9 thousand tons of barley were loaded for export through land border crossings.

A significant part of the fleet of domestic grain wagons is

outdated and needs either capital repair or total write-off. In recent years, more and more market participants are trying to overcome the problem in a radical way, creating their own fleet of grain wagons and ordering dozens of them. This approach is quite promising, but it also has a number of problems. First, purchasing hoppers is a rather expensive investment. At the same time, it should be taken into account that the capacities of domestic enterprises for the production of grain wagons are not unlimited. It takes a long time to process an order and receive it. Secondly, the issues of independent transportation of private wagons with grain from elevators to railway lines remain not fully agreed upon.

In recent years, the practice of loading grain into railway platforms by container method is becoming more and more widespread. That is, the logistics of grain in special, most often, 20-ton containers. This approach also has a number of both advantages and disadvantages. On the one hand, the transportation of grain in containers to foreign buyers guarantees the quality of the products, provides convenience in handling them, and makes it possible to clearly separate different batches of products. The use of containers for grain makes it possible to partially eliminate the shortage of hopper wagons and the huge problem of transporting crops by highways. On the other hand, not all elevators have the technical possibility of loading grain into containers. According to official statistics, containers with agricultural products destined for export contain only 20% of grain.

In order to increase the efficiency of the use of railway transport during martial law and ensure the export logistics of grain, the Prime Ministers of Ukraine and Poland signed a Memorandum on strengthening cooperation in the railway sector. It provides for the creation of a joint logistics enterprise of the two countries. The effective mechanism of cooperation between PKP and “Ukrzaliznytsia” will allow to increase the volume of rail transportation of Ukrainian exports to the European Union and to world markets through the Polish ports of Gdynia and Gdansk. But for this, it is necessary to define a list of infrastructure investments and look for sources of financing in the European Union (in the form of grants and financial assistance from the European Commission) for cross-border infrastructure projects.

Export logistics of grain by river transport

During martial law, a significant volume of grain was transported by river transport as an alternative to sea transport. Potentially, this is the cheapest method of cargo logistics, which is more profitable, compared to rail. The potential of river transportation of grain in Ukraine exceeds the indicator of more than 15 million tons, but in fact, it is much smaller. The reason for the incomplete realization of the potential of this logistics direction is the need to carry out large-scale dredging of rivers, first of all the Dnieper, the lack of cargo ships and the need to develop the river port infrastructure as a whole.

In the current conditions, market participants together with the Ukrainian authorities continue to search for opportunities to redirect export supplies to the European Union by alternative routes – by river transport along the Danube River to Romania. The possibility of Ukraine transporting grain to importers through Lithuanian and Latvian ports is being considered, and a ship with 71,000 tons of Ukrainian corn has already left the Romanian port of Constanta.

European ports are able to handle about 1.5 million tons of Ukrainian grain and about 250,000 tons of oil every month.

Export logistics of grain by road transport

The issue of automobile transportation of grain crops remains the most problematic. The condition of domestic highways, especially in the central and southern regions of Ukraine, has turned into a problem of national importance. Ukraine is suffering huge losses due to the poor condition of the roads. One of the reasons for this is non-observance by agricultural producers of the rules of grain transportation by motor vehicles regarding the limitation of loads. Due to efforts to reduce the cost of transportation and the difficulty of overcoming routes with broken roads, many agricultural producers deliberately violate the rules of transportation of grain crops – they overload transport with grain. Some of them go to the elevators, but many go directly to the ports. The share of the latter is constantly growing due to the fact that more and more owners of medium-sized and even small agricultural farms prefer to export grain on their own. Accordingly, they are forced to take care of its supply to ports or large hub elevators.

More and more owners of agricultural enterprises have realized that having their own fleet of grain trucks significantly expands their

capabilities, reducing dependence on third-party companies and making the transportation of grain by motor vehicles cheaper.

The most effective way to ensure the optimal logistics of grain crops to transshipment complexes is considered to be the establishment of mutually beneficial partnership relations with those companies whose capabilities make it possible to guarantee the fulfillment of their obligations. These are companies that have been working on the market for a long time, have their own elevator and transshipment facilities, as well as a transport fleet for the timely transportation of grain across Ukraine in the required volumes.

It should be noted that the European Commission canceled tariffs and quotas on Ukrainian exports for a year, which will contribute to the growth of supplies to the European market. With the efforts of representatives of the railways of Ukraine and European countries, plans are being actively developed and implemented to increase the capacity of border stations and optimize transportation through the European Union. However, in the near future, it is unlikely to realize the remaining export potential of the current season only at the expense of European Union demand and delivery through the European Union infrastructure to third countries. In addition, not all grain crops are in significant demand in European countries, and for some, Ukraine and the EU are competitors on the world market. Therefore, it is likely that in the near future the structure of trade, as well as the structure of production in the grain segment, will undergo significant changes.

Risks and support directions of export logistics of agricultural products of Ukraine

The suspension of foreign trade has an extremely negative impact on the country's economy due to the lack of foreign currency earnings and directly reflected on Ukrainian farmers, who have concentrated significant reserves of raw materials and most of whom remained in a very difficult situation before sowing.

We have identified internal negative factors that have impact on export logistics of grain and the activities of agricultural producers:

- rising prices and fuel shortages;
- significant increase in prices for transshipment of agricultural products;
- bureaucratic delays in customs, phytosanitary, veterinary

registration of products;

- difficulties of obtaining licenses by motor carriers for the ability to carry out transportation in the European Union countries;
- uneven use of border crossings by market participants, load on the western transitions when exporting products;
- significant queues at railway crossings.

That is why, from the very beginning of the war, the search and establishment of new ways of exporting Ukrainian products, as well as the modernization of existing logistics facilities on the western border of the country, were important both for the Ukrainian side and for the main importers. Since, Ukraine is territorially bordered by the European Union countries, it is quite logical that the main flow of exports is currently directed in this direction, but logistics remains a weak point in the almost established sales chain.

It is quite clear that it will not be possible to reach the pre-war export volumes through the western border, but it will be possible to unload the internal infrastructure in a few months and free the warehouses before the start of the new harvest, at least partially.

In addition, it is very important that the European Union and Great Britain canceled all tariff quotas and import duties for Ukrainian products for one year.

In the medium- and long-term perspectives, the European Commission will work on increasing the infrastructure potential of new export corridors and establishing new infrastructure ties within the framework of the reconstruction of Ukraine. The next round of applications for funding from the Connecting Europe Facility (CEF) fund will support projects that improve transport links with Ukraine, including for railway connections and railway terminals. Therefore, on 12 May 2022, the European Commission adopted a Decision regarding the signing of a high-level Memorandum of Understanding between the European Union and Ukraine regarding indicative maps of the Trans-European Transport Network (TEN-T) in Ukraine. In the high-level Agreement signed with the European Commission, the logistics corridors of Ukraine (railways, roads, waterways) were included in the TEN-T maps.

The development of export logistics of grain crops will be possible in case:

- unblocking and development of sea ports, creation of alternative

export routes;

- transformation and full provision of the environment for sustainable economic viability of all entities of the agro-industrial sector;

- rapid recovery, formation of new economic chains and support of competitive functioning of the processing industry;

- restoration of safe physical and ecological condition of lands;

- achieving the optimal level of physical and economic food security;

- timely fulfillment of Ukraine's obligations to harmonize national legislation with EU legislation within the framework of the Association Agreement.

Conclusions

Ukraine is one of the key exporters to the foreign market of grain crops, their domestic production significantly exceeds domestic consumption. However, due to the full-scale military invasion of Russia on the territory of Ukraine, it led not only to disruptions in the supply chains of agricultural products in the domestic market and destroyed export logistics. Accordingly, Ukrainian agricultural products cannot be delivered on time to their destination, which threatens global food security.

The Ukrainian agricultural sector is looking for ways to optimize export logistics of grain through alternative directions and solutions to the challenges it faces. The main ones include: low capacity of railway stations on the border with European countries; bureaucratic state obstacles in European countries regarding import and certification of grain; limitation of freight transportation by land routes; lack of a sufficient number of European wagons for grain transportation; limiting the capacity of European logistics centers; lack of drivers for international road transportation, etc.

The main obstacle during martial law is the lack of stable logistics chains that can ensure the necessary volumes of export of grain.

However, the Government of Ukraine and the international community are implementing various programs to support and stabilize export logistics of grain through cooperation in the field of rail and road transportation, using the capabilities of small rivers, and delivering products to the seaports of the European Union countries.

All these steps are able to save Ukrainian exports of grain, and, accordingly, to preserve the financial stability of agricultural producers and the country, which is extremely important for defeating the aggressor and ensuring food security in the world.

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**UKRAINE'S
POSITION IN THE
GLOBAL WHEAT
SUPPLY:
ECONOMIC AND
LOGISTIC
DIMENSIONS**

Abstract

Every war interrupts ordinary economic activities and restrains products, and consequently, income flows. Comparable circumstances have occurred since the 24 of February when Russia invaded Ukraine. Most of the regular economic activity has been constrained in Ukraine. The invasion was a crucial issue for agricultural commodities, especially the cereal sector. Ukraine is among the most important producers of agricultural commodities in the world. In the cereal sector, its contribution to global production is significant for barley, wheat, and maize. Nowadays wheat supply logistics from Ukraine have become a crucial issue worldwide, as wheat and its products are the basis of people's nutrition in many countries (especially in Egypt). So, there are reasons to consider disruption's threats of the supply chain and, consequently, malnutrition and hunger in undeveloped countries.

Keywords: *food security, Ukrainian wheat export, supply logistics, logistics costs, grain storage, wheat export price, demand variability, ABC-XYZ analysis.*

Introduction

Since 24 February, concerns have existed that the continuation of war may increase food insecurity and malnutrition, not only in Ukraine but primarily in underdeveloped countries. There could have been at least two reasons for the widening of food insecurity. The first one, keeping food prices high consequently purchasing power of the population would decrease, and the second was the lack of safe logistic channels. Disruptions in supply can cause incomplete or even below the minimum level of satisfaction of need in this product. So, there are reasons to talk about the probability of a food crisis in the world.

Wheat is, along with corn and rice, one of the most widely produced and sold grains in the world. The wheat's position results from its longevity, durability, and demand for it as flour.

The main producers of wheat in the 2021/2022 marketing year remain China, India, Russia and the USA. Since 2014, Ukraine has entered the top-10 wheat-producing country. Now Ukraine is in the 7th place (Figure 4.5).

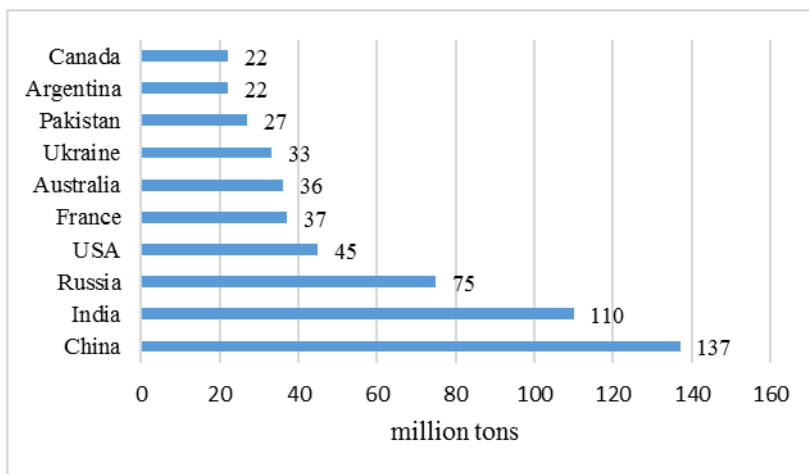


Figure 4.5 Major wheat producers in the world in the 2021/2022 marketing year

Source: latifundist.com, 2022

Because of Russia's military actions in Ukraine, according to USDA forecasts for the next 2022/2023 marketing year, world wheat production will decrease to 774.8 million tons, as it is predicted that the volume of wheat production in Ukraine will decrease by 35%, the harvesting area will decrease and the yield will be significantly lower (latifundist.com, 2022).

According to wheat export indicators in the 2021/2022 marketing year, Ukraine is in the top-5 country (Figure 4.6). China, the main producer of wheat was not included in this list, as almost all grain is sold within the country, and no more than one million tons of wheat is exported. India, another powerful producer of wheat, being ready to compensate for insufficient delivery from Ukraine, limited exports because of abnormal heat and partial loss of the harvest. So, the wheat supply system undergoes changes not only due to economic, political, military factors, but also due to uncontrollable natural and climatic factors. And an important task should be to establish a supply system for Ukrainian wheat, including its remnants from the past harvest, in order to maintain the required level of food security in the world.

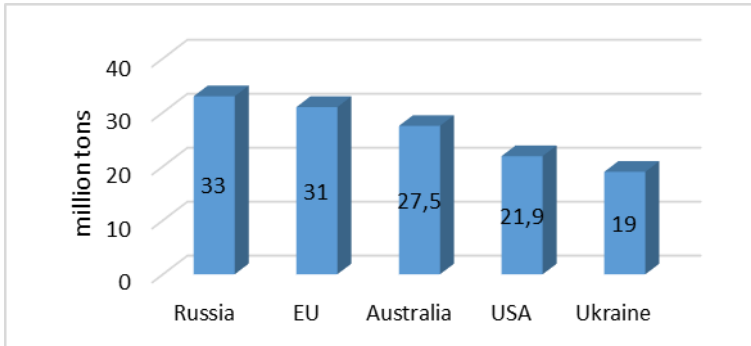


Figure 4.6 TOP-5 wheat exporting countries in 2021/2022 marketing year

Supply logistics involves not only the consumer needs meeting but also achieving maximum economic efficiency for both parties, the manufacturer and the buyer. From this, the purpose of the article is to develop a model of the Ukrainian wheat supply chain in conditions of war in the context of groups of importing countries on

volume and stability of supplies, taking into account the factors that affects the way both parties act to ensure food security in the world.

The tasks of the research are:

- to indicate the role of Ukraine on the global wheat market;
- to rank the importing countries of Ukrainian wheat on the results of the ABC-XYZ analysis;
- to identify the groups of countries that at the time of war between Ukraine and Russia are the most dependent on Ukrainian wheat supplies, and which provide the main share of Ukrainian exports;
- to reveal the changes that took place in the logistics system of Ukrainian wheat supply after the beginning of the war.

Materials and Methods

The article aims is to develop a model of the wheat supply chain from Ukraine to ensure food security in import-dependent countries under war conditions. The importing countries were divided into groups, according to volume and stability of supplies. The ABC-XYZ-analysis method was used to divide the importing countries of Ukrainian wheat into groups based on the volume of purchases and the level of fluctuations in demand for grain. ABC-XYZ analysis is a method of grouping planning objects based on their value and dynamics of consumption or sales. During the analysis, the planning objects are assigned one of the classes of ABC and XYZ simultaneously. The ABC-XYZ analysis method is used to optimize economic decisions and strategies in enterprises as well as in the national economy. Taking into account the aim of the article, there were also used quantitative methods. Those methods were employed to emphasize objective, statistical measurements for example volume of production as well as export and import of wheat. Quantitative research was focused on gathering statistical data from official institutions the Food and Agriculture Organization and the State Statistics Service of Ukraine, as well as analytical reports of agricultural and financial organizations.

Results and Discussion

In Ukraine during 2010-2021, the share of wheat exports in the total volume of production increased from 28 to 70%, or from 4 to 20 million tons. Since the beginning of the war about 4 million citizens

have left Ukraine, so domestic demand for wheat will be reduced and this allows to increase the volume of exports. Stocks of wheat remain available for further export. The main reasons of the reserves formation are shown in Figure 4.7.

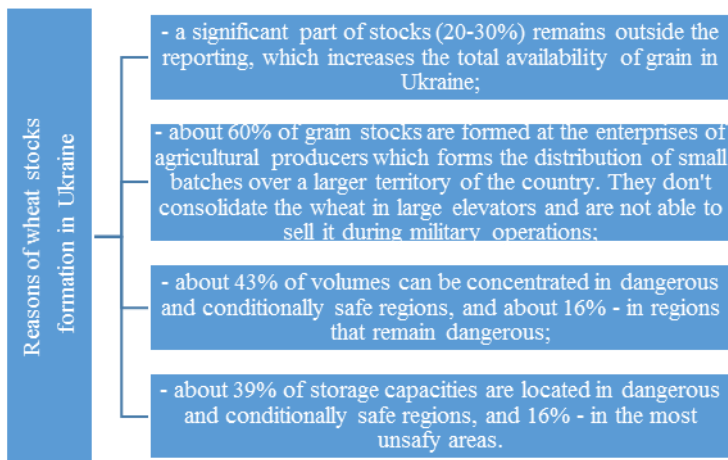


Figure 4.7 Factors of wheat stocks formation in Ukraine

Source: APK INFORM, 2022

An important factor that determines the volume of exports and the formation of demand for Ukrainian wheat is the export price. During 2010-2021, the price increased from 186 to 250 dollars per ton (34.5%). First of all, it was connected with the growth of production costs. In 2022, the factors of export price formation changed.

The price increase was influenced by the blocking of Black Sea ports through which 80% of agricultural products are exported. In such conditions the monthly export volume decreased 5-6 times from 5 to 1 million tons of grain. And logistics costs increased 5-7 times (Kurkul, 2022). If before the war Ukrainian farmers had received 80% of the value of a ton of grain, today it is only 20% (Latifundist.com, 2022). Therefore, the need to cover logistics costs became the reason for the price increase.

The increase in logistics costs is associated with the increase in the price of fuel and lubricants, an increase in the distance of transportation, the need to transship grain from Ukrainian broad-

gauge wagons to European narrow-gauge wagons. There was also a need for longer storage of grain during its transportation and customs clearance. And foreign partners, which carry out transshipment and transportation of Ukrainian wheat, raised the cost of their services by 3-7 times (Tkachev, 2022).

After the partial unblocking of the Black Sea ports at the end of July, there were no significant price changes. There is no complete guarantee of safe transportation of goods, and therefore insurance companies are reluctant to take responsibility for their insurance. And expectations of future supply disruptions are also pushing up the price.

It should be noted that the export price growth was slowed down due to the formation of large temporary wheat residues inside the country and the desire of farmers to sell them in order to free up capacities for the new crop. The favorable weather for the development of spring grain crops also contributed to the price reduction.

Such countries as Indonesia, Lebanon, Libya, Thailand, Tunisia, the Philippines, and the Republic of Korea remain the main importers of Ukrainian wheat for a long time. During 2019-2020, Bangladesh and Egypt increased the share of Ukrainian wheat in the import structure. And Israel, conversely, in 2020 reduced purchases of Ukrainian wheat, although in previous periods its share reached 40%.

These countries are most dependent on imported Ukrainian wheat: their share in the total wheat demand of the countries ranges from 15 to 95%. For example, in Lebanon, this share increased from 22 to 87% (Figure 4.8, line D(%)). In 2020, Lebanon had a total need for wheat of 770,549 tons (140,000 tons of domestic production and 630,549 tons of imports), including 669,663 tons of wheat purchased from Ukraine. That is, Ukraine provided almost 90% of Lebanon's wheat needs. But the share of Ukrainian wheat exports to this country in the total Ukrainian wheat exports (E(%)) remained at the level of 2-4%. It is profitable for Lebanon to purchase smaller volumes in Ukraine than to load large ships from other countries. So such countries need to be paid attention to in order to ensure their food security.

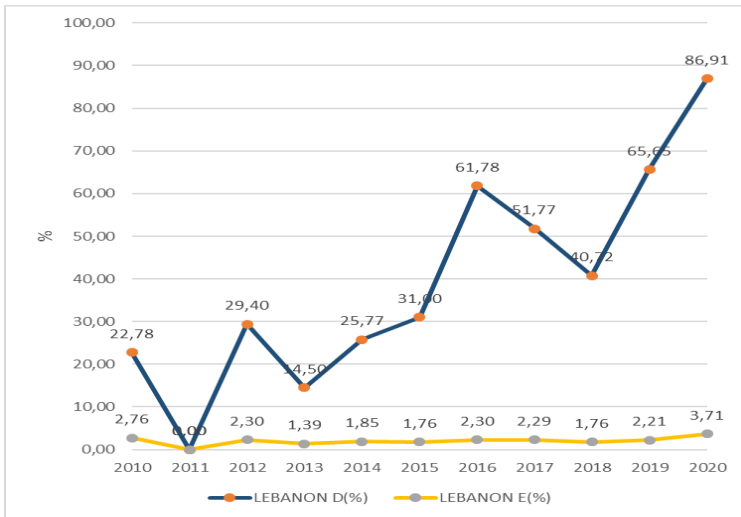


Figure 4.8 Dynamics of the share of Ukrainian wheat in the total demand in Lebanon (D(%)) and the share of Ukrainian wheat exports to this country in the total Ukrainian wheat exports (E(%))

Source: State Statistics Service of Ukraine, (2010-2021); Food and agriculture organization, 2022

According to the logistics concept of supply both consumer and manufacturer must satisfy their needs and obtain the necessary level of economic efficiency. So the main part of orders should form the large batches. Such orders can cover logistics costs. And orders for small batches should make up an insignificant share.

The major customers of Ukrainian wheat are Bangladesh, Egypt, Indonesia, and Thailand. Table 4.1 shows the dynamics of the share of Ukrainian wheat in the total demand of countries (D(%)) and the share of Ukrainian wheat imports in each country in the total Ukrainian wheat export (E(%)).

According to Table 4.1, the listed countries, except Israel and the Philippines, increased supplies of Ukrainian wheat until 2019, reducing the volume of their own production and supplies from other producers. In 2020, grain supplies decreased due to expectations of a good wheat harvest, as well as high transitional residues. However, these countries remained the leading importers of Ukrainian wheat.

Table 4.1

The dynamics of the share of Ukrainian wheat in the total demand of importing countries and the share of Ukrainian wheat imports in the total Ukrainian export of wheat

Importing country / Period	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
BANGLADESH D(%)	10,1	2,9	-	7,4	10,1	16,2	27,3	24,7	15,4	40,8	21,5
BANGLADESH E(%)	8,6	2,9	-	4,4	4,2	6,3	10,5	11,4	5,6	11,4	8,4
EGYPT D(%)	4,4	2,0	12,5	9,9	14,2	8,9	11,8	12,5	6,7	18,6	17,0
EGYPT E(%)	16,1	9,0	29,1	25,2	27,0	13,4	13,4	15,4	8,5	17,7	17,0
ISRAEL D(%)	27,0	22,0	39,6	18,5	21,6	35,3	28,6	29,7	28,5	25,7	16,4
ISRAEL E(%)	10,1	9,1	8,9	3,8	3,7	4,3	3,0	3,0	3,4	2,3	1,6
INDONESIA D(%)	-	-	-	4,0	4,2	13,1	20,1	19,7	25,8	27,6	26,4
INDONESIA E(%)	-	-	-	3,5	3,0	7,2	11,8	11,9	15,9	14,8	15,1
LEBANON D(%)	22,8	-	29,4	14,5	25,8	31,0	61,8	51,8	40,7	65,7	86,9
LEBANON E(%)	2,8	-	2,3	1,4	1,8	1,8	2,3	2,3	1,8	2,2	3,7
THAILAND D(%)	-	-	-	21,9	28,1	37,2	43,4	29,4	20,1	31,5	18,2
THAILAND E(%)	-	-	-	5,0	4,1	12,6	11,1	4,6	3,5	4,3	3,1
PHILIPPINES D(%)	7,1	-	-	9,6	9,7	19,0	20,4	15,9	26,2	14,2	10,3
PHILIPPINES E(%)	2,7	-	-	3,0	2,6	4,8	5,3	5,1	10,7	5,1	3,5

Source: State Statistics Service of Ukraine, (2010-2021); Food and agriculture organization, 2022

Israel and the Philippines, on the contrary, reduced supplies of Ukrainian wheat. During the years 2010-2019, Israel supplied 20-40% of its domestic demand for wheat due to supply from Ukraine, and in 2020, Ukraine's share decreased to 16.4%. Thus, Ukraine lost part of the market, and Israel's share in the structure of wheat exports decreased from 10% to 1.6%. Although in 2021 and 2022, Israel doubled its imports of Ukrainian wheat again. Such supply instability may lead to a loss by Israel the priority in the Ukrainian wheat supply system.

The Philippines increased its dependence on Ukrainian wheat in 2016 and 2018 to 20-26%, and in 2020 this share decreased to 10.3%. Rice becomes an equivalent substitute for wheat in the country. The share of the Philippines in Ukrainian exports during 2018-2020 decreased from 10.7 to 3.5%, in 2021 the trend was similar and deliveries from Ukraine decreased by 35%.

ABC-XYZ analysis was conducted to identify strategically important wheat customers for Ukraine.

According to the results of the ABC analysis, the groups of countries on export volume were formed. The largest share of Ukrainian wheat exports is made up of orders from Egypt and Indonesia, 16.5 and 15%, respectively. The next countries are

Turkey, Pakistan, Bangladesh and others. Countries like Nigeria, Vietnam, Iran and others are in Group B. Italy, Tanzania, Sri Lanka and others are in Group C.

XYZ-analysis allows to divide importing countries into groups depending on the stability of their demand for wheat. According to the results of the analysis, four countries were included into the group X with the most stable demand for Ukrainian wheat: Indonesia, Morocco, Egypt and Yemen. The countries of Libya, Lebanon, Tunisia, and Israel are included into the group Y with an average level of demand variability. Mexico, Italy, Turkey, Thailand, the Philippines, Bangladesh and others showed the least stable demand during the analyzed period. Most countries have unstable demand for Ukrainian wheat (group Z).

As a result of combination of ABC analysis and XYZ analysis, a matrix was received (Figure 4.9).

	A	B	C
X	EGYPT INDONESIA MOROCCO YEMEN	BX	CX
Y	TUNISIA LEBANON LIBYA	ISRAEL	CY
Z	TURKEY PAKISTAN BANGLADESH SAUDI ARABIA ETHIOPIA PHILIPPINES REPUBLIC OF KOREA	KENYA THAILAND NIGERIA VIETNAM IRAN (ISLAMIC REPUBLIC) OMAN Djibouti MEXICO MAURITANIA ALGERIA SPAIN	ITALY TANZANIA, UNITED REPUBLIC SRI LANKA JORDAN MOZAMBIQUE SUDAN UGANDA SOMALI

Figure 4.9 ABC-XYZ matrix of importing countries

According to this matrix, such countries as Egypt, Indonesia, Morocco and Yemen, which are included into the AX group, and Tunisia, Levan, Libya, which are included into the AY group, are

strategically important partners for Ukraine, as they have stable demand for Ukrainian wheat and provide the main share of supplies from Ukraine.

Such countries as Israel (group BY), Turkey, Pakistan, Bangladesh, Saudi Arabia, Ethiopia, the Philippines, the Republic of Korea (group AZ), have medium demand and are also important for Ukraine, as they place orders for significant supplies of Ukrainian wheat.

The rest of the countries, such as Kenya, Thailand, Nigeria, Italy, Tanzania, have unstable supplies in small volumes. Based on the experience of these countries, they can partially rely on their own production or diversify supplies from the list of countries which are the most profitable for them in terms of price, quality, distance and other delivery conditions.

As the issue of food security is acute today, placing a certain country into the ABC-XYZ group of the matrix can be done not only by the level of its priority in wheat supplies. Financial, social, demographic indicators of the country's development, climatic conditions of own wheat cultivation, geographical location relative to possible suppliers, etc. should also be taken into account. For example, if in the 2020/2021 marketing year, Turkey planned to reduce wheat imports waiting for a good harvest, then next year it plans to increase imports because of drought and giving up the main supplier – Russia.

Considering the previous experience of the cooperation of the importing countries of Ukrainian wheat with its direct producer Ukraine, their state of development, the conditions of their own wheat cultivation, it can be concluded that Ukraine remains a strategically important supplier for these countries. However, it is necessary to take into account the new changes that have taken place in the logistics system of grain supply from Ukraine (Table 4.2). The analysis in terms of such factors as optimal transportation routes, terms of payment, choice of transport mode, grain storage conditions, insurance was conducted.

According to Table 4.2, the price of the ukrainian wheat supply system increased during the war. Therefore, the price remains an important factor in grain sales.

Table 4.2

**Characteristics of changes in the logistics system of the
Ukrainian wheat supply during the war**

Before the war in Ukraine	During the war in Ukraine
Transportation routes	
The export by sea prevailed, seaports accounted for 80% of the agricultural products export. Most of the wheat was sent to countries in the Middle East and Africa, such as Egypt.	Transportation by land and rivers prevails. Most of the Ukrainian grain is taken to Europe.
Choice of transport	
The using of water transport prevailed.	The transition to the use of rail and road transport has occurred.
Grain storage conditions	
The total volume of operating grain storage capacity is 75 million tons.	Only 45% of warehouses remain active and free; temporary polyethylene grain sleeves, handling equipment and longer-term modular storage are used.
Cargo insurance	
Insurance in accordance with international rules and conditions of delivery	Insurance companies are not ready to insure on the territory of Ukraine, as it is not known whether the safety of the Odesa region will be guaranteed when the ports are opened.
The structure of logistics costs	
Logistics costs are 20% of the price. The cost of transshipment is 5-6 euros.	Logistics costs are almost 80% of the price. One fifth of the logistics costs are the railway costs, the rest are the costs on border terminals, Romanian and Polish carriers, transshipment terminals. The cost of transshipment is 25 euros.
Terms of payment	
A significant part of Ukraine's grain agreements are the forward agreements.	The volume of forward contracts is higher than last year. After the expiration of the contracts, they are re-signed with the adjustment of the wheat price in force majeure conditions.

Source: based on Latifundist.com, 2022; Tkachev, 2022; Ministry of Agrarian Policy and Food of Ukraine, 2022; European business association, 2022; Food and agriculture organization, 2022; Lebid', 2022; Agropolit.com, 2021

It is expected that the next 2022/2023 marketing year the imports in Africa, Southeast Asia and the Western Hemisphere will increase. At the same time most of the world's leading wheat producers will have smaller yields because of fertilizer shortages and hot weather. So, both sides – the customer and the supplier are forced to review contracts, to diversify supplies, and also to change the policy of formation and use of temporary wheat residues.

As of August 12, 2022, threshed 3.8 million hectares of wheat, harvested 15.4 million tons of corn, the yield is 40.1 t/ha (Slovo i dilo, 2022). Therefore, the volume of harvested wheat is 52% less than the 2021 harvest. Last year wheat residues amountes to 6 million tons. The domestic use of wheat before the war averaged 8 million tons, including 4-4.5 million tons for consumption. Taking into account the fact that about 4 million citizens of Ukraine have gone abroad and the fact that because of occupation, the cultivated areas have decreased by 20-30%, the consumption of wheat will decrease. No more than 10 million tons of the threshed 15.4 million tons can be sent for export, that is, half of the level of the previous year in 2021.

As of August 2022 during the operation of the grain corridor, it was possible to export more than 650,000 tons of wheat (Slovo i dilo, 2022) from Ukraine to seven countries (South Korea, Italy, the Netherlands, Lebanon, Turkey, China). In the previous year, more than 2 million tons were already exported during this period. Transient wheat residues need to be sold more quickly, since their further storage affects the quality.

Conclusions

Ukraine is among the most important producers of agricultural commodities in the world. In the cereal sector, its contribution to global production of wheat in 2020 reached 3.7 percent.

Making general conclusions, it should be noted that wheat supplies both from Ukraine and from other countries are subject to changes because of the need to ensure food security. Each producing country will limit exports, and importing countries, in case of insufficient supplies, will be forced to consider an alternative to wheat, for example, corn and corn flour. Thus, China, worried about the growth of domestic consumption of wheat, limited exports and started stockpiling. Even Australia, which has already received

record harvests (more than 36 million tons) for two years, and leads the USA and Canada, taking third place in the rankings of world exporters, predicts a decrease in the harvest for the 2022/2023 marketing year by 17% because of a decrease in area and yield.

It should not be forgotten that for many countries the problem of food shortages arose even before the war in Ukraine. Therefore, maximum attention should be paid to such importing countries of Ukrainian wheat so that the crisis does not turn into a dead end.

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**FINANCIAL
INSTRUMENTS IN
THE CONDITIONS
OF MARTIAL
STATE: ANALYSIS
FOR THE
AGRICULTURAL
SECTOR OF
UKRAINE****Abstract**

The purpose of this study is to highlight the role of financial instruments in supporting the economy and the agricultural sector of Ukraine under martial law by analysing the practice of their regulatory modernization in accordance with the needs of maintaining production, ensuring food security and fulfilling international obligations.

Keywords: *martial law, budget, loans, insurance, taxes, financial instruments, Ukraine, agrarian sector.*

Introduction

Support for the agricultural sector has traditionally been in the focus of attention of governments, and Ukraine is no exception. The volumes and forms of providing financial support are regulated by law and depend on the financial capabilities of the state. Since the agricultural sector forms food security, the state is constantly dealing with the problems of financial support for agricultural producers and the entire food value chain. However, under the legal regime of

martial law, the problems of financial support for the agricultural sector have become especially important, which requires scientific monitoring of the state's capabilities.

The International Monetary Fund (IMF Country Report, 2022) predicts a 35% decline in the Ukrainian economy in 2022. As for the agricultural sector, the risks are even greater, requiring an adequate level of compensation, primarily financial instruments.

Materials and Methods

The following methods were used to achieve setting goals, namely: a monographic method was used to describe the regulatory framework and official government communications on wartime finances, statistical open data, comparative analysis and synthesis to compare the development indicators of the agricultural sector of the pre-war and wartime periods, a graphical method to reflect the dynamics of macroeconomic indicators of the economy of the agricultural sector, logical for theoretical generalizations and conclusions.

The study is based on the calculations and forecasts of the Government and international organizations regarding the state of the research object (Table 4.3).

Using such methodological tools, this study analyses mainly the aspects and possibilities of financial instruments of the first group, primarily budgetary ones.

Results and Discussion

Under the conditions of military aggression of the Russian Federation, the subjects of the Ukrainian economy are experiencing a shortage of resources. Such a shortage of resources is a consequence of the destruction, cessation or decline in business activity of enterprises, forced relocation, loss of human, physical and financial capital, reduction in the activity of market institutions, deterioration of the investment climate, destruction of communications. Therefore, in order to generate a sufficient volume of financial resources, the state should introduce effective tools for their mobilization, intensify investment processes to restore GDP growth and regulate the activities of economic entities. One of the directions of the support mechanism is the development of the financial instruments market.

Table 4.3

**Ukraine: Selected Economic and Social Indicators, 2019-2022,
UAH billion**

Indicators	2019	2020	2021	2022*	change, %, ± p.p.
Nominal GDP	3977	4192	5288	5667	142.5
Real GDP, % change	3.2	-4.0	3.2	-10.0	-13.2
Domestic demand	3.0	-5.7	3.6	-10.5	-13.5
Consumption Personal	8.1	1.0	5.4	-3.7	-11.8
State	-2.6	-0.6	0.0	1.6	+4.2
Investments	-2.6	-6.2	-1.8	-8.4	-5.8
Foreign investment	3.4	-0.1	3.1	1.0	-2.4
Consumer prices	7.9	2.7	9.4	22.6	286.1
Fixed capital (in % of GDP)	17.6	13.0	15.7	5.5	-12.1
State debt	50.5	61.0	50.2	60.3	119.4
Money supply, (% change)	12.6	28.6	12.0	5.0	-7.6
Balance of payments (in % of GDP)	-2.7	3.3	-1.1	0.7	+3.4
Reserves, USD billion	25.3	29.1	30.9	27.8	109.9
State budget income	1566.3	1675.4	1982.7	1870.3	119.4
Tax revenues	1358.6	1446.4	1816.8	1707.7	125.7
Expenses	1644.5	1925.3	2198.3	2248.7	136.7
Social payments	589.5	657.4	724.5	764.7	129.7
Overall balance of public administration	-78.2	-249.9	-215.6	-378.4	483.9
Government funding	78.2	249.9	215.6	147.7	188.9
External funding	2.5	101.8	118.3	130.3	5212.0

*forecast

Sources: IMF Country Report No. 22/74, 2022

The financial market is the main intermediary in the processes of movement of financial resources, which is served by a large number of instruments that formalize and accelerate the turnover of capital; therefore, by areas of the financial system, they can be divided into instruments of the state, municipal finance and financial market sectors (Dropa, 2017). The first group includes monetary, budgetary, tax, state and financial market instruments. The second group covers

municipal borrowing, third party loan guarantees, tax and budget instruments. Credit instruments and securities belong to the third group.

The pre-war practice of managing the financial stability of Ukraine was based on the mutually agreed application of tools to ensure the operation of individual sectors (monetary, budgetary, tax), as well as policy directions (debt, currency, exchange rates, etc.). Due to the fact that the Strategy for the Development of the Financial Sector of Ukraine until 2025 (Strategy, 2022) does not take into account the scale of instability that occurred as a result of the war, as part of updating the methodology for supporting the financial stability of Ukraine, the National Bank (hereinafter referred to as the NBU) adopted the updated Fundamentals of Monetary Policy for the period of martial law (NBU, Basic Principles, 2022), which summarizes the strategic course of regulators.

The government has also adopted a number of regulatory documents to support farmers due to the partial guarantee of loans from commercial banks for the sowing campaign; cancellation of additional procedures for certification of seed material; permission to operate agricultural machinery without their registration for the period of martial law; reduction of VAT on fuel; expansion of the list of goods of critical import; provision of humanitarian assistance in terms of fixed and working capital; expansion of logistics capabilities, etc. (Table 4.4). Currently, the development and search for options for expanding the financial and material support of agricultural producers are ongoing.

According to the analysis of the legislative field, financial instruments to support the agricultural sector under martial law can be conditionally divided into blocks: direct support of the industry through budget financing; organizational and regulatory support to preserve the structure of the industry and its horizontal-vertical links. The basis for the formation of financial conditions for ensuring food security is the Decree of the President of Ukraine No. 64/2022 On the introduction of martial law in Ukraine, where clause 4, par. 2, it is envisaged to provide funding and take other measures related to the introduction of martial law within the limits of authority.

Table 4.4

Separate measures to support the agricultural sector during martial law

Document	The content of state support
Law of Ukraine “On Amendments to the Tax Code of Ukraine and other legislative acts of Ukraine regarding the validity of the norms for the period of martial law” (No. 7137-d dated 14.03.2022)	The changes imply: the establishment of the features of taxation by a single tax; setting the rate of excise tax on fuel in the amount of 0 euros and 7% VAT; abolition of land taxation; abolition of payment of the minimum tax liability
Law of Ukraine “On Amendments to Certain Legislative Acts of Ukraine on the Creation of Conditions for Ensuring Food Security under Martial Law” No. 2145-IX dated March 24, 2022	regulates most issues of land use for agricultural production and the location of the corresponding production infrastructure
Decree of the Cabinet of Ministers of Ukraine “On Amendments to Certain Acts of the Cabinet of Ministers of Ukraine on Providing Credit Support to Agricultural Producers” dated March 12, 2022 No. 274	A mechanism has been introduced to provide preferential loans exclusively to small and medium-sized agricultural producers with a turnover of no more than 20 UAH million euros per year, which is the equivalent of an enterprise that processes up to 10,000 hectares for 50 UAH million
Decree of the Cabinet of Ministers of Ukraine “Some issues of financial support for supporting entrepreneurship, in particular agricultural producers, under martial law” dated April 12, 2022 No. 438	Decision to direct the remaining funds of the special fund to the programs: “Leadership and management in the field of agriculture”, “Conducting an inventory of land”, “Measures to improve the access of agricultural SMEs to export markets”

Source: compiled according to the given normative acts

Based on the fact that the classical definition of the term “financial instrument” is a product of the financial market, in the form of a contract or agreement and used to raise financial resources by one party and receive profit and / or economic benefit – by

another (IFRS 9), not all of the listed categories government support are strictly financial instruments. The exception is the instruments for attracting financial resources of the state (taxes and fees), since they are regulated by law and are mandatory, therefore their administrator (government) receives income to form budgetary resources, with their help the state redistributes GDP (Dropa, 2017).

Agricultural sector support mechanisms that have a financial component include the Budget Process, Taxation, Funding from the State Budget, Lending, Agricultural Insurance. Since they are concentrated under the leadership of the Government to ensure a stable financial condition of the industry, they can be conditionally considered a “support portfolio”, similar to the “financial portfolio”, which is a set of financial investment instruments, in order to provide additional income and protect against inflation (Seliverstova, 2018). The content of each direction in accordance with the agrarian financial policy of the Government (Minagro, 2022) is given in Table 4.5.

Table 4.5

Normative base of tools to support the agricultural sector of Ukraine

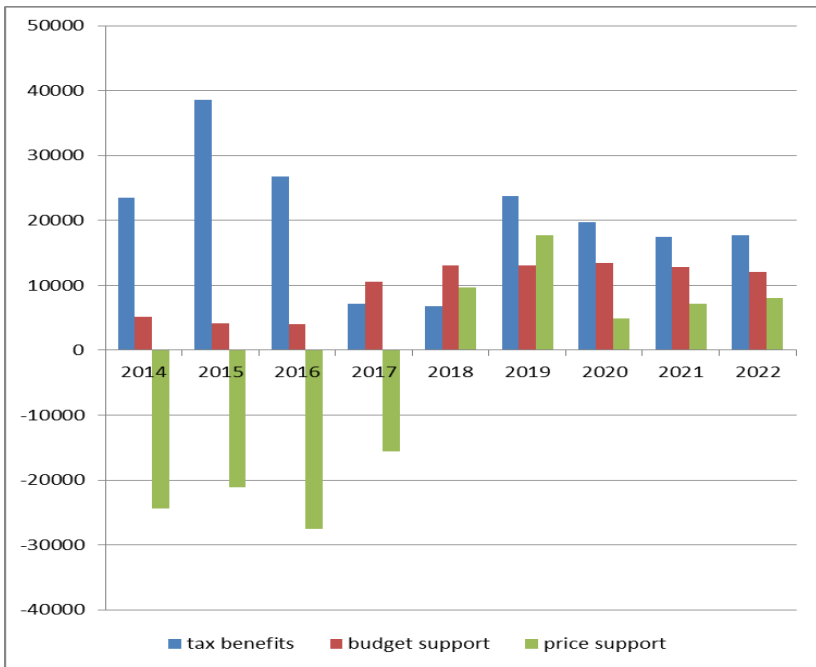
Tools	Normative base
Budget process (except fundraising)	Law of Ukraine On the State Budget Budget requests. Procedures for using funds Passports of budget programs
Debt policy (in terms of budget lending)	According to the totality of sources of filling the budget: 1) domestic state loan bonds (OVDP), military bonds; 2) loans from international financial organizations; 3) bilateral loans and grants
Funding from the budget	Law of Ukraine On State Support of Agriculture. Agrarian expenditures of the State Budget
Taxation	Tax Code of Ukraine. Special tax 3 groups. Tax rates. Benefits for farmers
Lending ort	Lending with government support. Programs
Agricultural insurance	Law of Ukraine On the peculiarities of insurance of agricultural products with state support Insurance product
Price support	State regulation of pricing (export or import restrictions)

Source: (Minagro, 2022)

According to the review of state support for the agricultural sector by the relevant ministry (Minagro, 2022; Review, 2021), the support portfolio for 2014-2022 is dominated by support at the expense of

tax benefits.

These benefits are estimated as the difference between the potential and actual tax burden of enterprises in the agricultural sector, resulting from the special single tax regime of the 4th group of the simplified taxation system. Until 2017, the biggest source of tax benefits for farmers was the special VAT regime. The level of budget support is estimated according to the functional expenditures of the state budget for the industry, and price support, regulated by the state until 2017, is estimated according to the OECD methodology (OECD, 2022).



2022* – forecast at the level of 2021

Figure 4.10 Structure of state support for the agrarian sector of Ukraine for 2014-2022, UAH million

Source: according to the State Treasury of Ukraine. Available: [https://www.treasury.gov.ua/ru.](https://www.treasury.gov.ua/ru;); OECD STATS, 2022; Review, 2021

In the first months of the war, the state financial system of Ukraine actually abandoned such a source of income as taxes and contributions. The government comprehensively promoted the support of business under martial law. The package of measures aimed at helping business entities included: reducing the percentage or cancelling the payment of ERUs for certain categories of citizens; tax deferral for small and medium-sized businesses; the abolition of all measures of market and consumer supervision on all issues, except for price regulation and price control; establishment of a moratorium on business inspections, etc. (Funding, 2022). For the agricultural sector, these measures were also embodied in additional legislation (Table 4.4).

Thus, according to the National Bank of Ukraine (NBU, 2022), budget revenues decreased, in particular, due to preferential taxation of imports, while expenditures increased significantly, primarily for military needs and social programs. In January-June 2022, revenues (balance) to the consolidated budget amount to UAH 526.1 billion, which is 16.1% more than last year. At the same time, the government's monthly financial needs are estimated at about \$5 billion.

Since the beginning of the large-scale aggression of the Russian Federation against Ukraine, government support from the National Bank has become prevalent, but it cannot be an alternative to financing the budget deficit from other sources, such as attracting international and market financing. Before the war, the state budget was more or less balanced, but now tax revenues cover only about 40% of government spending. At the same time, military spending accounts for more than 60% of the budget (Tulush, 2022).

According to the analysis of the Ministry of Finance (Information on fiscal risks, 2022), the payers of the third group of the single tax can now be individual entrepreneurs and legal entities without restrictions on the number of persons in labour relations with them with an income of up to UAH 10 billion (previously 7.6 million UAH). The single tax rate for single tax payers of the third group using such features of taxation is set at 2% of income. An analysis of the influence of this lever on the state of agricultural producers was carried out (Tulush, 2022a), the transition is unprofitable for almost every link in the formation of the value chain in the agro-industrial

complex. At the same time, food industry enterprises may suffer economic damage from such a state decision, even in an attack when they do not take advantage of the provided “opportunity” to switch to 3% EN. This can happen when counterparties switch to paying the EH 3 group – first of all, from among buyers (networks).

Budget financing was a capacious volume in the structure of the “support portfolio” of the agricultural sector (Figure 4.10), but its volume directly depends on the possibilities of the State budget. Since 2017, funding has been almost stable – about UAH 12 billion per year. However, these funds, even fully allocated in 2022, are not significant for the industry, compared to its already incurred losses as a result of military operations. The adjusted budget financing plan is given in Table 4.6.

Table 4.6

Adjusted plan for budget financing of the economy and the agricultural sector of Ukraine for 2022, UAH mln

	2022			2021		
	plan	correct	fact in 2 quarters	plan	correct	fact in 2 quarters
Ministry of Agrarian Policy	6797	1945	685	6854	6857	1087
Ministry of Economy	20822	42221	35972	9461	10703	4244
Total State Budget	2081189	2117766	1035504	1335162	1373926	633631

Source: compiled according to NBU data. Available: <https://bank.gov.ua>

Presenting information on existing fiscal risks (Information on Fiscal Risks, 2022) in the field of public finance increases the degree of validity of decisions in the implementation of the budgetary policy of the agricultural sector. Additional changes have been made to the provision of the Law of Ukraine “On the State Budget of Ukraine for 2022”, in particular, to support farms and other agricultural producers through the Ukrainian State Farm Support Fund. The volume of state budget expenditures was increased to UAH 2,117.7 billion, and the financing of the agricultural sector was reduced from UAH 6,797 million to UAH 1,945 million, or by 71.38%.

The activities of the Ministry of Agrarian Policy are focused on lending under state guarantees, establishing logistics routes for the sale of agricultural products, as well as simplifying the preparation of

all documentation as much as possible. In addition, during martial law, an agrarian platform was launched to collect the actual needs of farmers for sowing in real time: <https://agrostatus.org>; an online platform was created to improve the logistics routes of farmers under martial law: <https://prodsafety.org> (Minagro, 2022).

As for the financial instruments of lending, then, as in the pre-war period (Lupenko, 2020), the government pays special attention to lending to small and medium-sized businesses under the program “Affordable loans 5-7-9%” (Affordable loans, 2022) for the purchase of agricultural machinery, replenishment of working capital, purchase of seeds, fertilizers and fuels and lubricants. Under martial law, the program has been expanded to medium-sized enterprises with an annual income of up to €50 million (previously €20 million) and to large enterprises with an income of over €50 million, regardless of the number of employees. The maximum loan amount increased from UAH 50 million to UAH 60 million with an interest rate of 0% per annum, without collateral, by covering 80% with a state guarantee.

Agricultural insurance also received a boost, the Law of Ukraine No. 5104 was adopted, which amends the Tax Code and regulates relations related to the insurance of agricultural products with state support. The tax rate on income under insurance contracts for agricultural products is increased by 0.5 percentage points to 3.5% in order to further channel these funds to support insurance of agricultural products.

The work was carried out as part of the development of the GDR by the NSC “Institute of Agrarian Economics” “Theoretical and methodological support for financial regulation of the sustainable development of the agricultural sector and rural areas” (2021-2026); No. 0121U108624.

Conclusions

Thus, the fiscal regulation of the development of the agro-food sector of Ukraine under martial law is focused on the fact that the government has introduced tools to support farmers through tax easing, budgetary and international financial support, insurance, partial guarantees of loans from commercial banks; cancellation of additional licensing procedures; expansion of the list of goods of

critical import; provision of humanitarian assistance in terms of fixed and working capital; targeted support for individual industries, farms, value chains, expansion of logistics capabilities, etc.

Financial instruments of state support for the agricultural sector of the Ukrainian economy should solve the problems of stabilization and growth of agricultural investment in the war and post-war periods. Effective policy implementation requires the coordinated work of the involved branches of government and proper regulatory support in terms of taxation, credit, insurance, income support, marketing, export and security at all levels.

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**FORMING A NEW ENERGY SECURITY
PARADIGM AND ENVIRONMENTAL
SECURITY DURING MARTIAL LAW**

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**DIRECTIONS OF
MARKETING
STRATEGY
DEVELOPMENT FOR
AGRICULTURAL
PRODUCTION
ECOLOGIZATION IN
UKRAINE**

Abstract

The article explored the ecologization strategy, presented its objectives in the field of agriculture, the basic categories of strategic directions and implementation of ecologization marketing strategies.

It is determined that marketing strategy of ecologization of agrarian production is a strategy of innovative development that can solve problems of economic growth, increase of competitiveness of agrarian industry, provide high quality of life, national security, environmental protection and high technical level of agricultural production in Ukraine.

Algorithm of environmental marketing strategies in agricultural production is developed, environmental, economic and environmental and economic tools to implement them are determined.

Keywords: *ecologization marketing strategy, natural resource potential, agricultural production.*

Introduction

The ecological situation in Ukraine in recent years has deteriorated so much that now both the economic status of business entities and food security of the country depend on it. One of the most important components of the economic security in the agrarian sector is the provision of its ecological and economic components in the agro-food market. In its turn, provision of the economic security of agrarian production cannot be separated from the environmental basics of the production sector.

The output of domestic agricultural products on the European market today acquires a new socio-economic content, and it is necessary to change the priorities in the system of agrarian relations. That is why today there is a process of reconsidering the role of economic and environmental priorities and the obvious advantage is given to the environmentally safe development of the agrarian production. The priority place in the agrarian system should be taken by the environmental quality criterion at the national level, and the need for greening the agrarian production. It is beyond any doubt and requires an immediate search for radical ways for its global implementation.

Particularly relevant issue of rational and sustainable use of natural resources is presented in the agricultural sector, which is the most sensitive contact zone in the system of mutual economic and environmental interests of humanity. For many years in agriculture destructive effect on the environment increased.

This necessitated fundamentally new vision capabilities ensuring the environmental and economic balance in the agribusiness.

Today ecological improvement of economic activity is an important; it suggests the ecological balance between the consumption of natural resources, agriculture and possibility of recovery of environment.

Problems in the field of agriculture and improvement of its competitiveness can be addressed through effective strategies and mechanisms for innovation. Such innovation strategy, in our opinion, should be the ecologization marketing strategy of agriculture that ensures high quality of life, national security, environmental

protection and high technical level of agricultural production in Ukraine. This marketing strategy is capable of ensuring principle of unity for economic and ecological processes in the management of agricultural production and promote radical restructuring of the relationship of the production process from the environment.

However, the problem of implementation of environmental marketing in agricultural production is still insufficiently investigated both in theoretical and practical aspects. There is a need to deepen theoretical research and methodologies associated with the formation of environmental marketing strategies as a component of ecological and economic mechanism of agricultural production.

Materials and Methods

The basis of the formation of a marketing strategy for the ecologization of agrarian production is the systematic approach, which is based on the existence of implementation mechanisms that ensure system consistency, its purposefulness; interdependence; interdependence and complexity of its elements determines the integrity of the system; all tasks that execute individual elements of the system are interconnected; system elements and their associated actions have a certain subordination that builds hierarchy; the system changes under the influence of specific factors, which determines its dynamism; the ability of the system to adapt to the variability of the external environment, while not losing its own individuality. The base for the methodological approaches while developing the innovative model of greening the production of the agrarian enterprise were methods of economic and strategic analysis, due to them diagnostics, and estimation of ecological and economic potential of the field were made; potential opportunities connected with strategic tasks were determined.

Results and Discussion

Despite the potential of natural resources, favorable climatic conditions, as a result of certain socio-political and environmental factors there is the decrease in agricultural production and a significant deterioration of its quality (Hromushyna, 2008, pp. 55–58).

Ecological and economic crisis in the agricultural sector, in our opinion, can be caused by the following problems:

- degradation, pollution and land exhaustion;
- loss of natural and assimilative capacity of natural resource potential of agricultural production;
- imperfection of the standardization of agricultural products;
- imbalance between the production process and the environment;
- lack of government regulation, regulatory and legislative framework of ecological and economic relations entities;
- non-compliance with modern requirements and technical base for the development of new technologies for the production of agricultural crops;
- lack of understanding in society priorities of environmental preservation and sustainable development benefits.

In recent years the market environment, in which economic actors operate is changing significantly: growing its degree of uncertainty, there are unmeasured risk factors (Bochko, 2007, p. 280).

Marketing in the agricultural sector and the development of environmentally oriented marketing meet the requirements of social responsibility agricultural production, development of economic management mechanism on environmental and economic grounds, and is an integral part of environmental and ecosystem management in the agriculture (Voronetska, 2011, pp. 112–115).

In our opinion, adaptation of marketing processes based on environmental requirements is essential for the effective implementation of marketing in agriculture. Thus, it is not just a one-time use innovation to achieve instant benefits but the continuous, detailed planned strategic innovative development, which is based on methods of ecological and economic management. Just through environmentally oriented marketing strategy the contradiction between the economic interests of producers and preservation of the environment, that is ensuring of environmentally safe life conditions, can be solved (Kalinichenko, 2014).

The emergence of environmental marketing is the result of increasing consumer demands for quality and environmentally cleanliness of the products they buy, its impact on human health and environment (Mishenin and Yarova, 2009, p. 55).

With forming of ecologization strategies for agriculture production, we propose use of the key strategic categories: mission statement, goals and objectives; strategic analysis of macro and

micro factors; choice of priority strategic directions, forming tools for the implementation of this strategy; assessment and monitoring its implementation.

The process of developing a ecologization marketing strategy should be began with identification of key industry issues: economic, political, social, technological and environmental, which need strategic analysis.

Formation of the mission and goals has to be made only after a detailed analysis of strategic problems occurring in the industry and its external surroundings.

The main purpose of the ecologization strategy mission is to ensure sustainable development of the agricultural sector that respects the balance between the economic system and the natural environment.

Formulating goals, marketing objectives and environmental objectives should be done at the national, regional level and at the entity level.

The main purpose of environmental marketing at national and regional levels is to create conditions for economic entities in which they are interested in maintaining and restored natural resources while implementing innovative approaches in their work (Minkova, Kalinichenko & Galych, 2016).

We have attempted to summarize the positive and negative factors motivating agricultural producers regarding the use of environmental marketing (Table 5.1).

At the entity level environmental marketing main goal is to develop economic organization and economic mechanism of agricultural enterprise using its main components: planning, promotion (motivation), organization management, control and so on. It is necessary to orient production to meet the environmental needs of consumers (Melnyk & Egorova, 2014, pp. 114–117).

The objective of environmental marketing for agricultural producers is assistance to reducing the burden on the environment in the planning, coordination and control of all management operations.

Environmental marketing has to become a link between company, market, and society. It should follow up public opinion and market conditions concerning to the protection of environment (Voronetska, 2011, pp. 112–113).

Table 5.1

Factors of positive and negative motivation for agricultural enterprises to adopt environmental marketing strategies

Factors of positive motivation	Factors of negative motivation
Cost savings due to conservation of resources	Imperfect legislation concerning to rules and regulations for production of “clean” products
Reduced costs for risks of environmental charges	Lack of clearly defined development strategy with appropriate information and legal support
Improved natural resource and market potential.	Lack of state support for producers of ecologically safe products and control system links all product life cycle
Improving the overall image of the company	Lack of economic instruments to encourage the production of ecologically clean products
High competitiveness of environmentally safe products	Risks of crop losses and lack of Compensation associated with the production of ecologically clean products
The emergence of new environmental needs (need for environmental safety), environmental interests and culture of the population	Speculative price premium processing enterprises and traders, because of which agricultural producers of organic products loses a significant amount of money as a result of its implementation, and the bulk of the profits remain in the sector of processing and trade
	Too high prices for environmentally safe products in trading networks of Ukraine deprive consumers of the opportunity to buy these products
	In fact, lack of the infrastructure ecologically clean products market

Source: authors' study

We believe a significant role in the elimination of negative factors in the market belongs to the state.

The effectiveness of state regulation of agriculture in the market depends on the criteria that were formed for a long time and that can be divided by priority (Table 5.2).

Component part of formation of ecologization marketing strategy is analysis of macro- and micro-surroundings, analytical assessment of its parameters and adjustment of marketing strategy in accordance with the dynamic changes in the environment (Kudenko, 2012, pp. 126–128).

Table 5.2

Criteria for effective state regulation of agricultural production

Types of criteria of state regulation	Essence and efficiency features
Self-sufficiency of food	Self-sufficiency ratio is defined as the ratio of total volume of domestic food production to the volume of its domestic consumption. To support sovereignty state is to reduce dependence on imported food, especially for those products that can be produced on its territory.
Trends related to population income	Criterion takes into account the trend of slowdown in revenue growth of agricultural enterprises in relation to other economic sectors. It is one of the criteria for support of agricultural production of the state. State regulation is intended to support the current level of prices.
Development of the social sphere	Recognizes the trend of decline in the share of the agricultural sector in national economies of the developed countries and Ukraine in particular. This is reflected in the disappearance of entire rural landscapes. It is one of the criteria which points to the need of state support for Ukrainian village, because it allows to keep rural way of life.
Environmental criteria	The most important criterion for state intervention in the development of agricultural production. Factors of negative effects are becoming increasingly visible environmental degradation indexes. Negative externalities should be regulated by the state.

Source: authors' study based on Zastrozhnikova, 2013

From the above information be noted that there is quite a lot of negative factors motivating agricultural producers of ecologically clean products, the main of which is the inefficient functioning of the market of environmentally safe products and its slow development in Ukraine (Danylyshyn & Lubchenko, 2008).

Economic management methods in the ecologization of nature management should include the creation of economic conditions that would encourage land users to achieve better results in their work.

The state should perform important functions to stimulate agricultural growth, social protection, rise of quality of life. This priority role of state regulation of agriculture in any case does not

reduce the importance of market self-regulation. Mechanisms of state actions should focus on supporting private initiatives aimed at the development of new technologies, stimulate innovative activity in rural areas (Shkuratov, 2012, pp. 10–12).

Table 5.3

Economic management methods of agricultural production

Economic incentives	Economic sanctions
Providing favorable short- and long-term loans to implement projects of ecologically safe and economically effective technologies	introduction of compensation for losses related to the impact on the environment
Partial or complete exemption from income tax in the case of funds for the purchase of ecologically safe fixed assets	Increase and differentiation of the range of payment systems for the irrational nature management, above-limit usage of natural resources, and environmental pollution to uneconomical levels for the agricultural entities
Preferential taxation and crediting for agricultural enterprises producing ecologically safe products and environmentally friendly production	differentiation of the land tax depending on its quality of locality
Ecological adaptation of tax and price systems	Constant evaluation of the quality of soil and products to collection of appropriate penalties for improper use of land and the production of low-quality products
Encouraging employees of enterprises producing ecologically clean products and compliance with environmental legislation (soil fertility, quality standards of production, improvement of environmental parameters)	Comparison of the factors of positive (gain on disposal of waste benefits tax credit benefits, price increments) and negative motivation (payment for excessive use of natural resources, fees for excess pollution, waste disposal fees, fines, additional tax) expressed in environmental costs
Development of the possible variants for refund of damages related to crop shortfalls in the production of ecologically safe products	

Source: authors' study based on Hromushyna, 2008

Economic instruments include promotional leverage, the use of preferential taxation and credit, and price incentives of environmental activities.

Environmental management tool provides certification and labeling of ecological products, which prove that they comply with the identified facility specific regulations. The process of certification and standardization should be conducted according to international standards, adapted to the conditions of Ukraine (Sadchenko, 2002).

Ecological and economic tools, in our opinion, are the part of an environmental marketing and include:

- ✓ Production of ecologically safe agro products and its environmental positioning;
- ✓ Pricing taking into account environmental costs;
- ✓ Development of ecologically safe products market, which is based on international standards for ecological agricultural production;
- ✓ Distribution of ecologically safe food products;
- ✓ Establishment of Information and Communication promoting agrarian food products.

Formation of strategy of environmental marketing in the agricultural sector, in our opinion, is the integration of all administrative functions that also contribute to the ecologization of agricultural production, allocation, planning and forecasting of business initiatives for investment basis, which is linked to production, formation and stimulate demand for ecosafety agro products, and agricultural products and ecosystem services.

Conclusions and recommendations for further research

Marketing is a tool for environmental management and can be implemented by forming appropriate environmentally focused strategies, which can ensure the principle of unity of economic and ecological processes in the management of agricultural production and promote radical restructuring of relations of production with the environment.

Environmental marketing involves environmental awareness; formation of environmental needs, social responsibility, marketing strategy, marketing management, environmentally focused market

research, environmental and economic tools of marketing management in manufacturing environmentally safe agricultural products (product, price, distribution, promotion system).

In forming of the ecologization marketing strategy for agriculture key strategic categories are to be used: mission statement, goals and objectives; strategic analysis of macro and micro factors; choice of priority strategic directions, forming tools for the implementation of this strategy; assessment and monitoring of its implementation.

Combination of environmental, economic instruments at state regulation of environmental and economic components is important in implementing of the ecologization marketing strategy for agricultural production.

State policy on ecologization of the agricultural sector should be aimed not only at solving global environmental problems but also on current issues concerning to the transition of the national agriculture to manufacturing of ecologically safe products.

Implementation of environmental marketing in practice will help to identify new market niches, empower diversification of agricultural enterprises. The production of environmentally friendly and safe products can generate additional revenue, because these products are of higher quality. Environmental marketing can act as an effective instrument for economic development mechanism and to be the basis for environmental security of the national economy.

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**PRIVATE-LEGAL AND
PUBLIC-LEGAL ASPECTS
OF DEFINING THE
DEFINITION OF
“ECOCIDE” DURING
MILITARY AGGRESSION**

Abstract

This part of the monograph deals with issues that became relevant during the military aggression of Russia and Ukraine, namely ecocide. A comparative analysis of the composition of the crime “ecocide” and “ecocide during military operations” is provided, the need to distinguish between these concepts is argued, since the emphasis in these cases is on the nuances of defining the object of the crime, its objective side, subjective side and subject. It is indicated that the blurring of the concept of “ecocide” due to evaluative judgments does not allow to fully bring the guilty parties to justice.

Also, in addition to the public-legal characteristics of ecocide, attention is drawn to the need to compensate for damage caused through instruments of a private-legal nature.

Issues of collective responsibility are highlighted, which is usually not inherent in criminal law, but under certain conditions is more effective than individual responsibility, for example in the case of ecocide during military operations.

It is proposed that in the case of recognition of a state as an aggressor and a terrorist, based on signs without the ratification of any conventions on its part, the peacekeeping contingent of those countries that have decided on its illegal status should be forcibly introduced to it.

Keywords: *ecocide, international crime, military aggression, damage compensation, natural environment.*

Introduction

Since the beginning of Russia's military aggression against Ukraine on February 24, 2022, among others global crimes, the problem of ecocide became very noticeable as a crime that lies

directly in causing damage to the surrounding natural environment. It is worth noting that such term is used very rarely in international and domestic Ukrainian environmental and criminal law. It is so because of the key features of this crime's components, which consists in intentionally causing damage to the surrounding natural environment.

The monograph researches the issue of ecocide as a crime that should become the fifth serious crime to be considered by the International Criminal Court. Currently, the development of the theoretical base is quite necessary in view of its subsequent application within the framework of russia's military aggression in Ukraine. The definition of the crime of ecocide in the Criminal Code of Ukraine is being considered, but only the one, that can be applied to peacetime. It is noted that such a definition may deny the responsibility of the aggressor country due to blurred definitions, value judgments and imperfect practical application. The combination of Ukrainian scientific opinion with the opinions of foreign scientists regarding ecocide and the proposal to combine private-law and public-law aspects of the definition of ecocide at the legislative level for further application in national and international legislation is an interesting idea.

Materials and Methods

Nowadays, the problems of compensation for the consequences of ecocide remain unresolved both at the domestic and international level, since it concerns such evaluative concepts as ecological and anthropogenic risk, which cannot be determined by calculation. Such categories require more thorough research due to the high level of damage caused to the surrounding natural environment. For this, the historical-legal method, the method of comparative analysis, a combination of logical-empirical research methods and traditional imperative and dispositive methods justifying the research topic are used.

Looking on the current situation unfolding in Ukraine, during russian tries to keep doing war crimes, the fact of ecocide becomes obvious not only for Ukraine, but for many countries in the world, due to fact that natural environment is not limited by national borders. Therefore, an important aspect of covering the issues of this

article is the possibility of defining the concept of ecocide during russia's military aggression, overcoming the consequences of ecocide, forming preventive measures to prevent further harmful actions against the natural environment in the future. The materials of the study are a number of international acts related to the protection of the natural environment, which must be adapted to the time of war.

Results and Discussion

There are not that many scientists that worked on this problem. Among them, you can determine K. Ambos, H. Voigt, G.V. Gabrelyan, T. Sadova, V. Ukolova and others. But they researched the legal relationship of ecocide before the precedent of the threat of ecocide during military aggression appeared, in particular by russia in Ukraine. That is why their works in this sense have a generalizing character.

Researching the definition of “ecocide” in general, it should be noted that its definition as a crime is contained in Article 441 of the Criminal Code of Ukraine and is defined as “mass destruction of flora or fauna, poisoning of the atmosphere or water resources, as well as the commission of other actions that can cause an ecological catastrophe” (Criminal Code of Ukraine, 2001). Of course, such a concept, since it is contained in the Criminal Code of Ukraine, cannot have ambiguous interpretations and be perceived through evaluative judgments. This refers to the very essence of those actions that can cause or have already caused an ecological catastrophe. Currently, one of a three parts of Ukrainian lands have already been affected by the war. Soils are heavily damaged: on average, every 100 hectares of land now contains 50 tons of metal and chemical compounds .Recovery would take hundreds of years. It is so not only with lands. We can use those environmental crimes caused by russia in Ukraine during the military invasion of our country as an example, There are plenty of them: the occupation of the Chernobyl NPP facilities by russian troops and war machines, in particular, the storage of spent nuclear fuel and the “Shelter” facility caused an increase of radiation background around the exclusion zone; missile fire in the direction of the dam of the Kyiv Reservoir caused the destruction of the dam and the threat of flooding of Kyiv and the

danger to other dams further down the Dnipro; the oil warehouse in the city of Okhtyrka was bombarded with russian vacuum bombs – oil warehouse containers were blown up; shelling of the nuclear facility of the Kharkiv Physical and Technical Institute, which has the status of a nuclear agent – the threat of destruction of the facility has been created, as a result of which there is a threat of the release of nuclear fuel and radioactive elements; after the tragedy in Mariupol and Berdyansk due to the russian occupation, there is a threat of extinction in the Sea of Azov; the fauna of the Black Sea is on the verge of survival due to russia’s mining the Black Sea and polluting it by rocket and other types of fuel, also, such noise waves are unusual for marine inhabitants; the ongoing threat of constant shelling from russia and the deliberate placement of russian military equipment at the Zaporizhzhya NPP base may cause an environmental catastrophe of a global scale.

Therefore, today the most urgent thing not only for Ukraine, but also for the world community is to confront the threat of ecocide caused by russia not only by fighting back, but also in the legislative regulation of issues of prevention (passage of laws) and compensation for damage caused by ecocide.

When studying such a legal structure, it is necessary to carefully determine how it is possible to find out what actions can cause an environmental disaster and what exactly an environmental disaster is in the opinion of the legislator.

An interesting interpretation is given to this article by reading “other harmful actions” as “actions against animal and plant life, the atmosphere and water resources or actions against other natural objects (for example, the earth and its subsoil), or against the natural environment in general (for example, destruction of the ozone layer)”. It is noted that each of the actions specified in Article 441 of the Criminal Code of Ukraine is characterized by the fact that it can cause an environmental disaster by itself. This is a key difference to separate this crime from other crimes against the environment provided by Articles 236-254 of the Criminal Code of Ukraine.

An environmental disaster is a particularly serious consequence that must be determined in each specific case, taking into account certain criteria: 1) a large area of territory where adverse changes in the environment have occurred; 2) significant limitation or exclusion

of human activity or the life of plants or animals in a certain territory; 3) duration of adverse changes in the surrounding environment or their inevitability; 4) significant negative changes in the ecological system, for example, the disappearance of certain species of animals or plants, changes in the circulation of substances or other biological processes that are important for the ecosystem as a whole” (Commentary on the Criminal Code of Ukraine).

Regarding the current situation during the war with Russia, with its aggressive actions towards Ukraine, and in particular, the environment, it is very appropriate to make a research using Russia's war crimes as an example of ecocide.

It should be emphasized, that the majority of scientists during their researches, are focused on peacetime and did not pay attention to ecocide as a form of a war crime, that has to cause legal consequences for the ones, who made it.

Researchers studying the theoretical concepts of ecocide note that ecocide is considered completed when any of the above-mentioned actions, which could cause an ecological disaster, have been committed. That is, either 1) a large area of territory where adverse changes in the environment have occurred; 2) significant limitation or exclusion of human activity or the life of plants or animals in a certain territory; 3) duration of adverse changes in the surrounding environment or their inevitability; 4) significant negative changes in the ecological system, for example, the disappearance of certain species of animals or plants, changes in the circulation of substances or other biological processes that are important for the ecosystem as a whole. But all these are not clearly defined concepts and have the character of value judgments that have no place in criminal law and will enable war criminals to object to almost every point mentioned above.

Therefore, it is considered expedient to enshrine a separate article “ecocide during war” at the legislative level.

It should be noted that a feature of the general design of the crime of ecocide in peaceful conditions is its difference from typical formal structures. When bringing to responsibility under this article, it is necessary to establish in practice, in addition to the act, the creation by this act of a real, not a potential danger, the occurrence of consequences in the form of an ecological disaster. For comparison,

in other crimes against the environment, the occurrence of an ecological disaster is not necessary for the crime to be considered completed.

Regarding the subjective side, this is definitely a deliberate crime. As for the subject, the Criminal Code of Ukraine defines a subject as a person who has reached the age of 16. Such approach to the subject composition is quite appropriate in peacetime. But during the war, the subject should be defined, in the opinion of the author.

The difficulty lies in the fact that, at the level of Ukraine, only an individual can be held criminally liable. Separate issues of collective responsibility were considered by O. Borshevska and O. Ivanova regarding the expediency of combining the instruments of criminal liability and civil legal liability as a symbiosis of the institutions of compensation for damages and punishment for the committed crime, as well as the expediency of introducing, along with crimes against national security, which provide for measures of criminal of a legal nature for legal entities, include articles of the Criminal Code of Ukraine, which provide for criminal liability for crimes against the environment, providing under certain conditions for measures of a criminal legal nature for legal entities (Borshevska & Ivanova, 2020, p . 466).

Agreeing with the authors, it should be determined that such emphasis should be placed not only on such a subject as legal entities, but also on the state precisely in the concept of causing damage through military aggression to the surrounding natural environment.

Regarding the subject of the crime, and the state itself (any) cannot be the subject of the crime, it is necessary to find a certain construction that would satisfy the logical construction of legal concepts regarding responsibility for committing ecocide during military aggression.

An interesting example is the experience of Estonia. Penitentiary Code of Estonia in Art. 104, without directly referring to ecocide, provides responsibility for causing damage to the environment as a method of waging war (Estonian Penitentiary Code, 2001). Starting from 2015, the responsibility under this article rests with legal entities, which are punished with a fine.

Poland also sets its proposals for the use of ecocides. Yes, in this

country, like most European countries, there is a rule that provides for the possibility of direct application of international law regarding the criminality of this or that act. So, for example, Article 5 of the Criminal Code of Poland provides for the limits of the application of the Polish Criminal Law. This concept is that Polish criminal law does not apply if “an international treaty to which the Republic of Poland is a party establishes otherwise” (Codex karny, 1997).

The definition of ecocide in the Criminal Code of France in 2021 is seen as the most successful and almost devoid of evaluation structures. According to the Criminal Code of France, ecocide is a deliberate act of harm to health, flora or fauna, as well as pollution of air, water or soil on a national scale. Such actions are punishable by a fine of up to 4.5 million euros and up to 10 years in prison (<https://www.dw.com/ru/parlament-francii-odobril-tjuremnoe-nakazanie-za-jekocid/a-57429523>).

But based on the fact that environmental law is a strategic branch of law, the natural environment usually has no borders thanks to the globalization of natural resources, the problem of ecocide should be considered at a more powerful hierarchical level – at the level of international law. Thus, the Convention on the Prohibition of Military or Any Hostile Use of Means of Influence on the Natural Environment prohibits the participants from military or any other hostile use of means of influence on the environment through the deliberate management of natural processes to change the dynamics, composition and structure of the Earth, including its biota, lithosphere, hydrosphere, atmosphere or outer space (Convention on the prohibition..., 1978). The convention prohibits weather warfare, that is, the use of weather modification techniques to cause harm or destruction. Additional Protocol I to the Geneva Conventions in Part 3 of Art. 35 provides for a ban on the use of methods or means of conducting military operations, which are intended to cause or, as can be expected, will cause extensive, long-term and serious damage to the natural environment (Additional protocol..., 1977).

This is really happening in Ukraine at the moment. Now Ukraine is considered the most mined country in the world. As recently as August 29, 2022, the Russian occupiers ransacked the Zaporizhia nuclear power plant. The roof, in which nuclear fuel is stored, was breached. The landing site is next to the nuclear reactor. Phosphorus

shells, rocket fuel, etc., cannot be recognized as fertilizers or neutral substances for the natural environment. Moreover, it should be noted that in the theory of environmental law, the objective side of the crime is distinguished as economic damage that can be calculated using calculation, environmental damage that can be determined only potentially, since the damage is caused to the surrounding natural environment, individual objects, and objects that could not be taken into account during the assessment of damage and its analysis, including for a long time (anthropogenic damage), may remain outside the attention zone.

Therefore, in cases of ecocide, it is considered more rational and effective to turn to international institutions that are able to use legal levers to level the damage and impose responsibility on the guilty.

Currently, such international documents exist, but the specific weight of consideration of cases with such composition is negligible.

In light of this, the question arises regarding the documents of higher legal force and the practice of their application for such types of crimes. For example, Article 5 of the NATO charter says that an attack on one of the members of the alliance is an attack on all its members (and on each in particular) (NATO Charter, 1949). Such an interesting approach regarding the responsibility of the state itself is accidental from this position, since as it has been repeatedly pointed out, environmental damage is such that it causes damage depending on the degree of severity for many countries, since certain natural resources – water, air, animals, etc., are not recognized administratively-territorial boundaries, where the crime was committed, and according to the laws of nature, pollution is spread along natural corridors. Of course, Ukraine is not a NATO member country, but using such a formula it is easy to assume, and then collect evidence regarding the application of environmental protection on the territory of NATO member countries that border the territory of Ukraine.

But here it should be noted several problems, firstly, the NATO charter is an international document, the purpose of which is an organizational and declarative statement of positions regarding the activities of the alliance, and secondly, it is not a special document that would regulate the issue of criminal responsibility. It can only be an auxiliary document on which the NATO member states rely in

order to use the principle of collective defense, which is that an attack on any of the member states of the Alliance is considered as an attack on all of them. But of course we are not talking about ecocide.

In general, the term “ecocide” is not officially used in international criminal law. Such a prohibition, in particular, is provided for in Additional Protocol I to the Geneva Conventions for the Protection of War Victims of 1949 (Additional Protocol, 1949) and the Convention on the Prohibition of Military or Any Other Hostile Use of Means of Influence on the Natural Environment of 1976 (Convention on the prohibition..., 1976).

Recently, scientists proposed to amend Article 8 of the Rome Statute of the International Criminal Court (ICC) on ecocide. She emphasized that in general the Statute deals with crimes that are considered to be of international interest and relevance, and therefore, it is believed that the time has come to expand the protection of serious environmental damage, which is already recognized as a matter of international concern. Therefore, they wrote for the purposes of this Statute, “ecocide” means illegal or reckless actions committed with the knowledge that there is a significant possibility of serious and widespread or long-term damage to the environment caused by these actions.

For the purposes of paragraph 1:

a. “Reckless” means recklessly ignoring harm that would be clearly excessive in relation to the expected social and economic benefits;

b. “Severe” means damage that involves a very serious adverse change, disruption or damage to any element of the environment, including serious impact on human life or natural, cultural or economic resources;

c. “Wide spread” means damage that extends beyond a limited geographic area, crosses national borders, or affects an entire ecosystem or species, or a large number of human beings;

d. “Long-term” means damage that is irreversible or that cannot be repaired naturally within a reasonable period of time;

e. “Environment” means the Earth, its biosphere, cryosphere, lithosphere, hydrosphere and atmosphere, as well as outer space (Independent expert panel...).

Again, it is impossible to see the clarity of the wording regarding the practical definition of this crime and the delineation of its subjects.

Moreover, the International Criminal Court can consider cases under three conditions:

- state signed and ratified the Rome Statute.
- the UN Security Council refers the case to the International Criminal Court.
- When a state party to the Rome Statute itself initiates a case at the International Criminal Court.

But Ukraine still has not ratified the Rome Statute. This was not done before the war, but currently it is the only mechanism for holding Russia accountable at the international level for crimes committed in Ukraine, including ecocide, which, by the way, has not yet been included in the Rome Statute.

It should be emphasized that the ratification of the Statute is an obligation of Ukraine in accordance with Articles 8 and 24 of the Association Agreement with the EU (Association Agreement...). But Ukraine had to bring domestic legislation (in particular, the Criminal Code) into compliance with the norms of the Charter. The Law of Ukraine “On Amendments to Certain Legislative Acts of Ukraine Regarding the Implementation of International Criminal and Humanitarian Law” No. 2689 of December 27, 2019, which was adopted on May 20, 2021 (On making changes, 2019), is aimed at this. However, as of today, it has not yet been signed by the President of Ukraine, and therefore has not entered into force.

In fact, it solves almost nothing, since no changes regarding ecocide have been made to this Statute and Draft Law of Ukraine No. 2689 has not been signed. Although in the previous monitoring of the impact on the environment, the UN Environment Program warned that Ukraine will be left with a toxic ecological legacy for future generations (Holfström).

The inclusion of ecocide in the Rome Statute will add a new crime to international criminal law. It will be the first adopted since 1945. It will build on the existing crime of serious environmental damage during armed conflict, while reflecting the fact that the most serious environmental damage to date occurs in peacetime, a situation that does not currently fall under the jurisdiction of the

International Criminal Court. This definition of ecocide offers States Parties to the Rome Statute an opportunity to address current challenges. Acknowledging the crime of ecocide can help shift consciousness in support of a new direction that will improve environmental protection and support a more shared and effective legal framework for a shared, secure future for the planet as a whole. It offers a new and practical legal tool. This work was prompted by earlier attempts, in 1945, to formulate definitions of new international crimes, including “genocide” and “crimes against humanity”. Ecocide draws from both terms, in form and content. Given these two crimes, as well as war crimes and the crime of aggression, one can hope that ecocide can take its place as an international crime. Currently, according to the Rome Statute, the International Criminal Court can hear questions related to four categories of crimes: genocide, war crimes, crimes against humanity and crimes of aggression. All of them relate exclusively to the well-being of people. Ecocide harms not only humanity, but also the environment. Its recognition as the fifth most serious crime offers a new, non-human-centered approach, and puts the environment at the center of international law. Today, there is no legal basis for combating ecocide at the international level. Accordingly, there is no mechanism for bringing to justice corporate, public persons and states that make decisions that are criminal for the environment, which caused oil spills, the disappearance of forests, pollution of the world ocean in peacetime, and during armed conflicts in general, ecocide can have unpredictable consequences, but it has to be regarded as an intentional crime, since war itself is a crime and actions resulting from it are also, accordingly, presumptively a crime. The inclusion of ecocide in international law will allow the prosecution of environmental criminals.

It is also necessary, in the context of determining the definition of ecocide, to compare the application of this concept in international humanitarian law and international human rights law. Thus, these two branches of international law developed in different trajectories of legal science, but have one goal – the protection of human rights. In international humanitarian law, it is the protection of human rights during armed conflicts, in international human rights law, during peaceful life. But although the legal toolkit of protection may be

different, the goal is always the same – the greatest effectiveness of protection of human rights in order to preserve his health and life.

Therefore, in the conditions in which Ukraine currently finds itself due to the military invasion by Russia, it is necessary to investigate the legal tools of both directions, which can more effectively affect the protection of human rights.

Therefore, the main principles of international humanitarian law are the distinction between civilian and military targets, proportionality in the use of force and precautionary measures during an attack. International human rights law establishes a list of rights and obligations that are under international protection, which is an international legal mechanism for the implementation and protection of the fundamental rights and freedoms of the individual, which are recognized by the international community.

Thus, regarding the demarcation of the spheres of application of international humanitarian law and international human rights law, the International Court of Justice of the United Nations expressed its attitude to this issue in an advisory opinion regarding the legality of the threat of nuclear weapons and its use (Advisory opinion...).

In this advisory opinion, the Court formulated the *lex specialis* principle of international humanitarian law in relation to international human rights law, namely that during armed conflicts priority is given to international humanitarian law in the regulation of legal relations, while international human rights law, having a constantly wide scope both in peacetime and during armed conflicts, has less impact and degree of legal detail. That is, international humanitarian law more specifically regulates those rights and freedoms of a person that arise only with the onset of a legal fact – the beginning and/or end of an armed conflict.

By the Law of Ukraine from May 22, 2022 No. 2265-IX “On the prohibition of propaganda of the Russian Nazi totalitarian regime, the armed aggression of the Russian Federation as a terrorist state against Ukraine, symbols of the military invasion of the Russian Nazi totalitarian regime in Ukraine” Russia was recognized by the state as an aggressor and Ukraine called on other countries to recognize Russia as an aggressor country (About the ban on propaganda..., 2022). If this is done at the international level, the norms of international humanitarian law will have a higher priority in

resolving issues related to the crimes of the Russian Federation, including ecocide. It should also be noted that the life and health of a person is only part of the subject of the crime “ecocide”, since the definition of ecocide is much broader and is aimed at harming the surrounding natural environment. But a person can be both a subject and an object of the natural environment. That is, the surrounding natural environment and a person with his natural rights are considered as common and private. Therefore, it is possible to speak within the scope of the crime of ecocide also about a person and his rights to a safe environment, and at the same time to the right to life and health.

It should be noted that like all other human rights, the right to health involves three levels of obligations for states: to respect (refrain from directly obstructing the exercise of the right); protect (prevent others from interfering with the exercise of the right); and implement (take measures to ensure the implementation of the highest possible level of implementation of this right). And such principles of commitment levels are inviolable within the framework of theoretical research and their practical implementation.

Particular attention should be paid to Article 12 of the International Covenant on Economic, Social and Cultural Rights, which includes the right of every person to the highest attainable level of physical and mental health (International Covenant..., 1966). This right, as well as other economic, social and cultural rights, should be considered in a long-term perspective, which clearly follows from the general obligation provided for in Art. 2 (1) of this International Covenant on Economic, Social and Cultural Rights, according to which each state participating in this Covenant undertakes individually and in the order of international assistance and cooperation, in particular in the economic and technical fields, to take within the maximum limits of available resources, measures to ensure the progressive full realization of the rights recognized in the present Covenant by all appropriate means, including, in particular, the adoption of legislative measures. Based on this, Ukraine can initiate before the international community the protection of the rights of Ukrainians in relation to crimes caused by Russia's criminal actions, in particular ecocide. At one time, the UN Committee on Economic, Social and Cultural Rights issued General Comment No.

14, which explained the various components of the right to health and specific obligations arising from Art. 12 of the International Covenant on Economic, Social and Cultural Rights.

Interesting in the framework of responsibility is paragraph 40 of these Notes, which assigns the duty to member states in accordance with the Charter of the United Nations and the relevant resolutions of the General Assembly of the United Nations and the World Health Assembly to bear not only individual, but also collective responsibility for establishing cooperation in the provision of assistance in the event of natural disasters and humanitarian assistance in emergency situations, including assistance to refugees and internally displaced persons. That is, the issues of collective responsibility are not rejected, and therefore it can become a guarantee of determining the subject of the crime of ecocide at the level of the aggressor state.

It is known that not only at the theoretical level, the issue of consideration of the crime of ecocide as a crime committed by the entire state in relation to the natural environment of another country or states is considered, and this includes the life and health of people. Thus, practicing lawyer Professor K. Ambos emphasized the usefulness of a separate definition of “ecocide”, pointing out that “the main existing international crimes that have an environmental component and on which the draft resolution on ecocide is partially based”. Professor K. Ambos specifically refers to Article 8 (2) (b) (IV) of the Statute of the International Criminal Court, which defines an international war crime against the environment (Ambos, 2021). As a result, he regards ecocide as a legal phenomenon equivalent to an international war crime against the environment.

But H. Voigt noted that the damage to the natural environment, including the damage associated with military actions, is quite limited, because it does not take into account the damage to the environment that can be caused in peacetime (Voigt, 2021). As a result, an important feature of the crime of ecocide is its execution both during an armed conflict and in peacetime. This crime is aimed at undermining or destroying such an environment and thus causing deterioration of the welfare of the population, its health, or provoking the total or partial extinction of the population.

In international law, there is also an approach according to which

ecocide is understood as the use of geophysical, meteorological and other means with the aim of changing the dynamics, composition or structure of the Earth, including its biosphere, lithosphere, hydrosphere and atmosphere, as well as outer space, which can entail or has entailed mass destruction flora or fauna, poisoning of the atmosphere, water resources or other serious consequences (Commentary on the Criminal Code of Ukraine).

Thus, in accordance with Article 1 of the Convention “On environmental impact assessment in a transboundary context” there is an obligation not to resort to military or any other hostile use of means of environmental impact, “which have wide-ranging, long-term or serious consequences, as ways of destroying, harming or causing harm to any other participating state”. The term “means of influence on the natural environment” refers to any means to change through deliberate management of natural processes, dynamics, composition or structure of the Earth, including its biota, lithosphere, hydrosphere and atmosphere, or outer space (Convention on environmental impact..., 1991).

“The simultaneous development of international environmental protection law and the violation of the principle of prohibition of the use of force raise the question of whether these phenomena give an idea of the general understanding of international law” (Krieger & Nolte).

Therefore, in modern conditions politically unstable the situation is of great concern causes positioning russia his own neglect international law, in particular it was enshrined in federal law dated December 8 , 2020 No. 428-FZ “On introduction changes in individual legislative Acts russian federation in part prevention application of international rules contracts russian federation in a conflicting interpretation constitution russian federation”. That is, a country that potentially can harm your own actions, too maybe referring to your own national legislation that does not recognize priority international law, it is impunity not to comply international Conventions on their own discretion, in particular aimed at environmental safety marine environment.

However, “the United Nations Environment Program (UNEP) has conducted more than twenty post- conflict assessments since 1999, using modern science to determine the impact of war on the

environment. From Kosovo to Afghanistan, Sudan and the Gaza Strip, UNEP has found that armed conflict is causing significant damage to the environment and communities that depend on natural resources. Direct and indirect environmental damages lead to environmental risks that may threaten human health, life and safety” (Society of the Red Cross of Ukraine).

Today in Ukraine enough relevant becomes development such field of law as international humanitarian law, which is part of international public law and is applied during armed conflicts in order to limit the means and methods of conducting military operations, which provides the environment with both general and special protection. According to the general provision, “the natural environment has a civilian character and cannot be attacked, except in the case when it turns into a military objective, which is enshrined in the Convention on the prohibition of military or any hostile use of means of influence on the natural environment” (Convention on the prohibition...).

From the interpretations of the provisions of the Vienna Convention on the Law of International Treaties of 1969 on the impossibility of performance and fundamental change of circumstances (Articles 61 and 62) it follows that “war is not a reason for the automatic termination of treaties, including environmental treaties, to which the participants in the armed conflict became parties in peacetime” (Vienna Convention..., 1969). But some countries, ratifying this Convention, defined for themselves the non – obligation of certain articles regarding implementation. Thus, a conflict arises between the ratification of such an international act and the exclusion for the fulfillment of certain of its norms.

In view of this, the important levers of environmental safety and the prevention of environmental risks are the awareness that by causing damage to the surrounding natural environment, the attacking party potentially damages its own interests as well. But such moral principles should be mediated at the legislative level. It is considered more expedient to establish an established practice at the international level, according to which any party that has caused damage to the natural environment as a result of an armed conflict, in particular in the maritime space, must in any case compensate it either voluntarily or, in the case of its refusal, in the order of

imposing sanctions or contributions, in the order determined by international law. For this, the author believes, it is not necessary for the state causing the damage to even ratify the relevant Convention. It should be a measure of a coercive nature, as a presumption, because the damage caused to the surrounding natural environment, especially ecological, cannot be leveled or justified, as it affects generations not only of modern people, but also of people of future generations.

One of the ways out of such a situation due to reluctance to compensate for damage is to create a mechanism by signing a multilateral agreement, thanks to which any natural person, legal entity or even the state will be able to receive compensation for their losses. On the basis of such a treaty, russian funds and property in the jurisdictions of partner states should be seized or frozen, and then confiscated and directed to a specially created fund from which all those affected by russian aggression will be able to receive appropriate compensation. This can be done through the mechanism of collective responsibility by identifying the property of russian residents with russia as an aggressor country.

For this, you should remember the principle “Liberum veto”, which was known in the Polish-Lithuanian Commonwealth, which allowed a deputy to stop the discussion of any issue in the Seimas by opposing it. A number of historians highlight it as one of the reasons that led to the disintegration of the Polish-Lithuanian Commonwealth. And today, history is repeating itself in the European Union and NATO. Where is the decision, which determine the global stability and security of Europe, can be blocked by a conditional Hungary or even the same russia. That is, we should move away from the false principle “one against – the decision is blocked”, especially if we are talking about the huge scale of the catastrophe on a global scale.

Conclusions

So, in order to fulfill the tasks of preventing ecocide, and in the event of the consequences, which may entail the mass destruction of flora and fauna, poisoning of the atmosphere or water resources, as well as the commission of other actions that may cause an ecological catastrophe as a result of armed conflicts, it is necessary:

1. Add the crime of “ecocide” to the Rome Statute, adding a new crime to international criminal law. Currently, according to the Rome Statute, the International Criminal Court can solve a questions related to four categories of crimes: genocide, war crimes, crimes against humanity and crimes of aggression. All of them relate exclusively to the well-being of people. Ecocide harms not only humanity, but also the environment. Its recognition as the 5th most serious crime offers a new, non -human- centric approach, and puts the environment at the center of international law. Today, there is no legal basis for combating ecocide at the international level. Accordingly, there is no mechanism for bringing to justice corporate and state entities that make environmentally criminal decisions that have caused oil spills, the disappearance of forests, pollution of the world’s oceans, etc. The inclusion of ecocide in international law will allow the prosecution of environmental criminals, even at the level of countries.

2. Ukraine should ratify the Rome Statute for consideration of cases related to ecocide due to russia’s armed aggression in Ukraine.

3. To accept the collective responsibility of the residents of the aggressor country for crimes committed by this state due to aggressive military actions on its part.

4. Define a new version of the crime “Ecocide during armed conflicts”, namely,

“Ecocide – massive infliction of any economic, ecological and anthropogenic damage to the surrounding natural environment, including the life and health of people, their right to a safe environment as a result of the conduct of aggressive military actions by a country that has violated territorial boundaries”. Having thus defined the object – the surrounding natural environment in general, as well as in particular the life, health of a person and his rights for a safe environment, the objective side – as economic, ecological and anthropogenic damage, which is a consequence of ecocide, subjective part in the form of intention by default, since crossing the border of another state, either physically or with the help of weapons, already implies the occurrence of the consequences of ecocide, as well as the subject – the aggressor state (collective responsibility).

5. Add into international humanitarian law the option that if a state is recognized as an aggressor, a terrorist, according to the signs,

then it is necessary to forcibly introduce a peacekeeping contingent which decided on its illegal status. Even if the aggressor country has not ratified such a convention. This should be established at the international level. The principles of democracy from this point of view are inadmissible because any delay and waste of the time may let the ecological catastrophe happen (public- legal aspect), and from the side of compensation for damage, including for the caused ecocide – forced mandatory compensation (privately – legal aspect).

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**PROBLEMS AND
PROSPECTS OF
FORMING THE NEW
PARADIGM OF
ENERGY SECURITY
OF UKRAINE
UNDER AND AFTER
THE MARTIAL LAW**

Abstract

The problematics of forming the new paradigm of energy security of Ukraine under and after martial law is investigated in the article. Modern trends in the development of energy security of the leading countries of the world are analyzed, and it is recommended to apply their experience to the energy sector of Ukraine during and after the war.

Keywords: *energy security, energy sector of Ukraine, diversification, martial law, energy resources.*

Nowadays, energy in the global economic system under highly dynamic conditions of development is considered the most influential factor of security, growth and effective development (Heiets, 2007; Koshlak, 2021; Pavlenko, 2021). Energy is one of the most important material needs of life-activity. Energy production (like any other activity) is associated with the use of the environment (its significant pollution, because the side effect is a large volume of emissions of pollutants, which are formed mainly by burning fossil (traditional) fuels). The issues of rational use of available natural resources (in particular, energy resources), environmental pollution, the search for innovative solutions to improve existing production systems, recycling, disposal of production (primarily energy) waste are extremely urgent problems of modern world development. Global demand for energy is constantly growing due to a number of key factors: a significant increase in population on the planet (growth of demand for consumption of all types of resources, including energy resources), especially in recent decades, rapid global socio-economic development, depletion of available conventional fossil fuels, irrational economic management (inefficient use of resources), significant climate change (mainly negative).

Today, traditional fossil fuels are simply no longer able to meet all the growing energy needs. The constant increase in the consumption of traditional fuel and energy resources leads to the fact that they are on the verge of exhaustion. Traditional approaches to energy generation are gradually becoming economically unreasonable. In the near future, this may lead to a financial and economic crisis, negative environmental, social and other consequences (Heiets, 2007; Koshlak, 2021; Pavlenko, 2021).

The effect of such changes in the consciousness of society is the emergence of new fields of knowledge, such as, for example, “ecological” economy, “ecological” management. Also new terminology has appeared, such as “harmonic” development (Heiets, 2007; Koshlak, 2021; Pavlenko, 2021) (although in Ukrainian scientific works the name “sustainable” development is found, but it is impossible to develop stable (invariably), so we suggest using the term “harmonic” development), a significant component of which is “eco-development”.

The demand for energy resources (energy carriers) has a

pronounced tendency to increase (growth). This occurs even with the active implementation of programs for economical consumption of energy. This is especially characteristic of economies with a fairly high rate of development, namely: China, India, Brazil. Energy sector in Ukraine (Koshlak, 2021; Pavlenko, 2021) is distinguished by the same pattern, just in a much smaller scale and volume. A significant number of both domestic and foreign scientific studies are devoted to the problems of management of the energy sector, the application of modern experience of the leading countries in reforming the energy sector of Ukraine under highly dynamic conditions of development. Researchers of the problems of reforming the energy sector, ensuring energy conservation, increasing the level of energy efficiency, in particular, D.V. Bizonych, O.V. Bondar-Pidhurska, V.M. Heiets, V.M. Hryhorovskyi, V.V. Dzhedzhula, A.A. Dolinskyi, S.F. Yermilov, H.V. Koshlak, M.O. Kuznetsov, V.E. Lir, A.M. Pavlenko, O.O. Ruban-Maksymets, O.Y. Shevtsova, T.S. Yarovenko, Yu.P. Yashchenko, etc. pay attention to different aspects of solving the problems of forming the organizational and economic mechanism of energy saving, increasing energy efficiency level at the state level and economic entities in their research.

For more than 50 years, among the basic prerequisites for financial and economic development, political stability, national security, and for both industrially developed countries and those that are only developing, the problem of the level of supply of energy resources occupies one of the priority places. It is mentioned at all international conferences, summits, etc. Oil, gas, on the same level with financial sources are the “blood” (by analogy with a living organism) of the economy, without which the functioning of all industrial sectors is simply impossible.

Increasing levels of prices for oil, gas and, simultaneously with the increase in the level of demand for them, the prospect of a gradual reduction of hydrocarbon deposits, etc. turn the need for stable access, controlling the level of prices over them into complex foreign policy, foreign economic problems directly related to both diplomatic and military-political aspects (a striking example of the Russian war against Ukraine in 2014-2022, the annexation of the Crimean Peninsula).

Ukraine belongs to the subcategory of energy dependent states, sensitive not only to the level of prices for energy raw materials (energy resources), but also to a large extent politically connected with the subjects of supply (again the example of a monopolist, though already former (Russia) in the supply (import) of basic energy resources). Therefore, each of the Ukrainian governments had to first of all address the issue of stability of energy raw material supplies, its price level, and only then the diversification of oil and gas flows, i.e. their sources, routes, etc. That is why the “Russian” (“Putin’s”) factor was undoubtedly decisive, providing powerful “impulses” for formation of the basis and principles of the foreign policy course of Ukraine and having a significant influence on the positions of one or another government. Being “tied” to the monopoly importer did not allow Ukraine to maneuver in foreign policy, fulfilling the “will” (political and economic) of the “brotherly” people.

Only the diversification of importers, import routes, energy resources, reforming the energy sector, European integration contributed to the long-awaited “rupture” of these relations.

It is on this basis that it is necessary to form a new paradigm of energy security of Ukraine under and after martial law.

The current state of international relations, the leading trends in foreign economic activity constantly require Ukraine to search for new segments on world markets, primarily in the East Asian direction (a large market, significant sources of investment, etc.). On this market, Ukraine has certain competitive advantages (industry, agriculture). It is advisable to activate, develop and expand these competitive advantages. Military actions, which limited the export of agricultural products, showed a high level of dependence of a large part of the world on our products. Thanks to the negotiations we have been able to make some progress and continue exporting, although in significantly limited quantities.

Undoubtedly, the development of these industries will require additional resources (including, above all, energy resources). At the same time, it is also advisable to develop and cultivate, grow, process and use bioenergy resources as one of the promising and environmentally friendly energy sources. Ukraine has sufficient potential (fertile soils) and favorable conditions (climate, territory,

etc.) for the development of this sphere of energy.

Fundamental studies of the first decade of the 21st century (Yermilov 2009) showed that, unfortunately, nothing has changed for the energy sector in Ukraine in the next decade. In the world, the level of energy efficiency is positioned as one of the most important indicators of the level of competitiveness of products (works, services), the level of energy security, and the level of innovative development of the country's economy. As the study showed, the year 2021 is characterized by the beginning of the world "renaissance" (revival) of the nuclear energy (Table 5.4).

Table 5.4

The volume of production and consumption of nuclear electricity by the major countries in 2021

Countries	Volume of production, TWh	Shares of the country in world volumes, %	Installed capacity, TW	Share of nuclear energy production in the country's electric energy balance, %
USA	843	30,2	97	19,2
France	399	14,3	61	69,9
China	348	12,5	48	4,6
Canada	101	3,6	14	15,7
Sweden	66	2,4	7	39,3
Japan	64	2,3	32	6,1

Source: Key World Energy Statistics, 2021

The leaders of the world's leading countries have come to the conclusion that nuclear energy will become one of the main driving sources of the harmonious growth of the world economy and its decarbonization in the coming years. This is explained by the fact that this energy is able to quickly replace declining coal generation and prevent a global energy crisis. As of the beginning of 2022, there were 440 nuclear reactors operating in 32 countries, 50 are under construction (mainly in Asia) (Key World Energy Statistics 2021). Despite these indicators, the International Atomic Energy Agency has not yet given clear and unequivocal forecasts of the future importance of nuclear power plants in the production of world electricity, since it will largely depend on whether it will be possible to effectively build new capacities to replace those that will be

decommissioned, because more than 50% of active reactors have been generating energy for over 30 years.

Today, the nuclear energy accounts for 10% of global electricity production. According to the “low” forecast of the International Atomic Energy Agency by 2050 this share will decrease to 6%, and according to the “high” forecast it will increase to 12% (World Energy Balances 2020). The most important cause of uncertainty is the problem of nuclear energy safety. As the study shows, practically the same countries are among the top five producers, consumers of renewable energy (wind, solar, as well as hydro) (Tables 5.5-5.7).

Moreover, China occupies a leading position in almost all indicators (Tables 5.5-5.7), yielding only the share of production in the energy balance. The reason for this is significant shares of natural gas and oil. In the future (until 2025), the Energy Strategy of Ukraine predicts an increase in the share of renewable energy to the level of 12% and 25% by 2035 (Energy Strategy of Ukraine until 2035, 2018).

Table 5.5

Major producers of wind power by countries in 2020

Countries	Volume of production, TWh	Shares of the country in world volumes, %	Installed capacity, TW	Share of wind energy production in the country’s electric energy balance, %
China	406	28,4	210,3	5,4
USA	298	20,9	103,7	6,8
Germany	126	8,8	60,9	20,7
India	70	4,9	37,7	4,3
Great Britain	64	4,5	24,0	19,9

Source: Key World Energy Statistics, 2021

It is clear that in order to achieve these indicators, it is necessary to attract investments. The countries of the “Top Twenty” have already invested more than 900 billion US dollars in alternative energy and its development. In 2020, the world invested an unprecedented 501.3 billion US dollars in low-carbon assets (303,5 billion US dollars in new renewable energy capacities with a record installed capacity during its entire existence (solar – 132 GW, wind – 73 GW) of power plants (Key World Energy Statistics 2021).

Table 5.6

Major producers of hydroelectric power by countries in 2020

Countries	Volume of production, TWh	Shares of the country in world volumes, %	Installed capacity, TW	Share of hydroelectric power production in the country's electric energy balance, %
China	1304	30,1	356	17,4
Brazil	398	9,2	110	63,5
Canada	380	8,8	81	58,8
USA	311	7,5	103	7,1
India	172	4	49	10,6

Source: Key World Energy Statistics, 2021

Table 5.7

Major producers of solar power by countries in 2020

Countries	Volume of production, TWh	Shares of the country in world volumes, %	Installed capacity, TW	Share of solar energy production in the country's electric energy balance, %
China	224	32,9	205,2	3
USA	94	13,8	75,7	2,1
Japan	69	10,1	63,1	6,6
India	51	7,4	37,6	3,1
Germany	46	6,8	49,2	7,6

Source: Key World Energy Statistics, 2021

And starting from 2015 until now (Figure 5.1), the first place in terms of investment belongs to China (more than 83 billion US dollars). The second place is occupied by the USA.

In 2020, Ukraine improved the investment climate, took the 15th position in the world ranking by the volume of investment in renewable energy.

However, since the introduction of the “green” tariff in 2008 and until 2020, the total amount of investments in renewable energy in Ukraine is \$12 billion (Key World Energy Statistics 2021).

For Ukraine, as a country that does not possess sufficient energy resources of its own, the completeness and timeliness of the supply of energy to the economy is of particular importance.

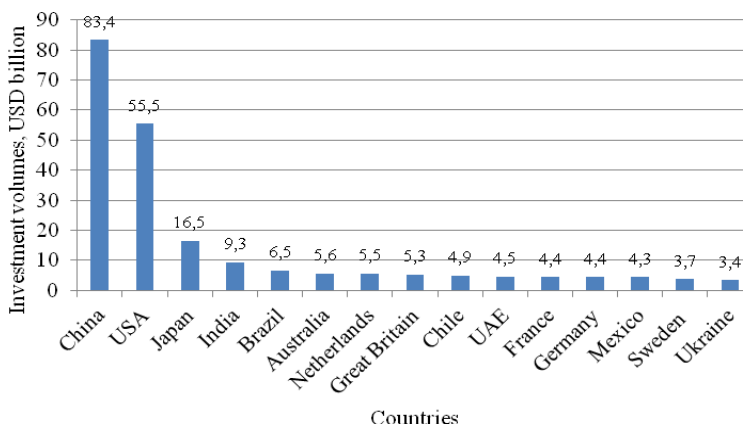


Figure 5.1 Investment volumes in renewable energy in 2020

Source: Key World Energy Statistics, 2021

For the harmonious development of our country, when forming the main indicators of the system of fuel and energy resources, it is advisable to adhere to the following principles (Table 5.8) (Bondar-Pidhurska, 2012; Ruban-Maksymets, 2009; Dzhedzhula, 2011; Bizonych, 2021).

Table 5.8

Recommended principles of formation of the main indicators of the system of fuel and energy resources of Ukraine in order to increase the level of energy security

Recommended principles	Brief characteristics of the principles
1	2
The principle of hierarchy	The actual indicators should be formed on the basis of a “bottom-up” approach according to the relevant hierarchical chains of production-economic and financial-economic activities, the use of fuel and energy resources
The principle of objectivity	Indicators should reflect the essence of the processes and phenomena they characterize
The principle of authenticity	The possibility of real determination of indicators of the level of energy efficiency, based on the arrays of information formed by energy business entities, is contained in national statistics

Table 5.8 (continued)

1	2
Principle of prevention of duplication	Absence of double accounting when calculating energy resource costs, indicators characterizing activity results (at the same hierarchical levels, when moving from lower to higher)
The principle of practicality	The expediency of setting indicators from the point of view of their further practical application in strategic energy supply
The principle of identification	Correctness of comparison processes of indicators of energy efficiency levels determined in different countries
The principle of potential strength	The indicators should take into account the presence/absence of the country's own energy resources

So, summing up, it should be stated that Ukraine, striving for revolutionary dynamism in the field of energy consumption (reduction and complete cessation of unreasonable energy consumption, implementation of energy efficiency policy, formation of energy saving oriented society, etc.) should follow the experience of leading developed countries.

Highly positive experience of reform, adapted to our own conditions and peculiarities of energy sector development in our country, shall contribute to harmonious development of its energy sector and improve the level of energy security in Ukraine.

The most important areas of cooperation with the world's leading countries in the energy sector should be the following: investment; adopting successful experience; cooperation in the development, transfer of energy innovative technologies, etc. It is these that will contribute to the formation and development of the new paradigm of energy security of our country during the war and after the end of martial law.

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DEVELOPMENT OF PROGRAMS AND PROJECTS FOR RECONSTRUCTION OF THE COUNTRY AFTER MARTIAL LAW

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**WAR AND POST-WAR
CHALLENGES TO THE
DEVELOPMENT OF
UKRAINE INDUSTRY IN
THE CONTEXT OF
INCREASING THE
STABILITY AND
SECURITY OF THE
STATE**

Abstract

The narrow points of Ukraine's economy are shown which emerged during the war and led to large-scale economic losses. Possibilities of implementing elements of state entrepreneurship to ensure effective recovery and accelerated development of the Ukraine's economy are suggested. The strategic priorities of the country's development, their corresponding sectoral priorities of industry, the stages of its recovery and the main organizational measures to be taken by the state to implement are highlighted.

Keywords: *war, development challenges, post-war recovery, industrial policy.*

Introduction

Russia's full-scale military aggression against Ukraine, which began in February 2022, caused enormous destruction and damage to the national economy, raising the question of the country's existence and the physical survival of Ukrainians. However, when the war is over, the question of post-war economic recovery will arise. Today there are many opinions on the directions of recovery, in which

common is the awareness of the need to develop a qualitatively better economic system than the one that existed before the war, which caused the country's significant economic, technological and military backwardness, its inability to resist the aggressor on its own (Halasiuk, 2022; Danylyshyn, 2022; Reznikova, Panchenko, 2022; Svyrydenko, 2022; Becker, etc., 2022). Obviously, there is no way out without reviving and developing one's own industrial production capable of overcoming this backwardness. Therefore, the paper aims to uncover the key war and post-war challenges to Ukraine's industrial development in the context of increasing the state's stability and security.

Results and Discussion

The targeted destruction of important industrial, infrastructural, and logistical facilities of civilian and military significance became a key tactical objective of the Russia's military aggression against Ukraine. The enemy is constantly launching missile and air strikes against these facilities and persistently trying to seize industrial cities in the east of the country. The occupiers' tactic is aimed at rapidly undermining the country's economic potential and depriving it of its ability to resist aggression effectively and for a long time. The enemy is deliberately creating a humanitarian catastrophe by destroying businesses whose activities are directly related to the livelihood of civilians in the cities and the country as a whole.

The speed and quality of the country's post-war economic recovery depends directly on the state of industry and the extent to which it was destroyed and preserved, both in sectoral and spatial terms. This renewal should be a window of opportunity to create a modern, developed industry in product, technological and organizational terms.

Admittedly, the pre-war weakness and underdevelopment of Ukraine's economy is directly related to the decline of domestic industrial production, its de-industrialization, and the inadequate attention by the government to the problems of industrial production over the past three decades (Kindzerskyi, 2017). It is clear that such weakness was a prerequisite for the Russian Federation to plan a military campaign of conquest in Ukraine, as our country is significantly inferior in its economic and industrial potential not only

to the aggressor country, but also to all developed countries of the world (Kindzerskyi, 2021a). With the outbreak of military aggression, this had a severe impact on Ukraine's lack of modern weapons, which should have been produced in sufficient quantities for defense purposes by Ukraine's military-industrial complex enterprises, and prompted the country's leadership to turn to industrially developed allied countries for weapons and logistical support for the army.

The war in Ukraine showed a number of extremely acute shortcomings of the national economy and the organization of defense, which affected the ability to resist aggression, namely:

- significant structural, and spatial unevenness in the distribution of industrial potential over the territory of the country, its predominant concentration in the eastern regions and in certain large cities. This unevenness led to a disproportionate reduction in the country's economic activity and budget revenues compared to the size of the territories where production facilities are located and where active hostilities are taking place. As an example, the sudden shutdown of just one Azovstal plant in Mariupol during the hostilities resulted in a 30% reduction in metal production in the country with a corresponding loss of budget revenues and foreign exchange earnings;

- extremely low diversification of production, the predominance of a narrow range of industrial and agricultural products of intermediate consumption with a low degree of processing. The negative effect on the economy due to military action is the same as that caused by excessive spatial concentration of production – sudden economic and budgetary losses due to the stoppage or destruction of production capacity for such products, which cannot be compensated for;

- the external critical dependence of production and defense on supplies of components, the monopolistic external dependence on the aggressor country and its satellites for supplies of fuel and energy resources, in particular gas and oil products, against the background of the closure before the war of most Ukraine's oil refineries and the destruction during the war of the few enterprises that remained. Against the background of the simultaneous destruction by the aggressor of the storage infrastructure and storage bases of fuel and

lubricants throughout the country, the lack of own production of these products and the problems of diversification of sources of supply and payment for them create a high risk of a sudden collapse of the economy and defense of the country, a threat to food security by preventing agricultural activities;

- the inflexibility and narrowness of certain elements of transport and logistics infrastructure in exporting industrial and agricultural products and receiving import deliveries. Firstly, we are talking about the rail and road infrastructure is connected with seaports, which served as hubs for Ukrainian foreign trade in pre-war times; secondly, the extremely low capacity (narrowness) of rail and road infrastructure, which does not compensate for the capacity of ports due to the forced redirection of cargo flows abroad by overland routes. The blockade and seizure of seaports, sea coasts and maritime transport corridors by the aggressor effectively stopped foreign economic activity, from which about 50% of the country's GDP was generated in the pre-war period. The high level of wear and tear and the extremely insufficient number of rail and road vehicles, and the lack of logistical hubs not connected to the sea, prevent the country from quickly reorienting its foreign trade turnover geographically and technically to use only railways and road vehicles. This poses additional risks of economic collapse for the country;

- high vulnerability to destruction of industrial, logistics, municipal facilities, residential and social buildings, due to their design and construction according to peacetime standards, which did not take into account the probability of significant destruction as a result of military actions. This fact determines the additional losses of the economy and the subsequent considerable costs of rebuilding what was destroyed, while the resource (financial, material and technical) base for recovery was substantially reduced as a result of the war;

- the country's critical dependence on external military-technical aid from allied countries, in particular the supply of modern lethal weapons and non-lethal military-technical equipment, against the background of the actual decline of Ukraine's military-industrial complex, the state's failure to pay sufficient attention to the problems of its reform and modernisation, the establishment of its own scientific and technological production of high-tech and high-

precision weapons, while external military threats intensified over the past decades.

Due to these shortcomings, together with the technological and structural backwardness of production, economic losses due to military action and the damage it caused during the first six months of the war, since the full-scale invasion by the Russian Federation, according to preliminary estimates of the Ukrainian Ministry of Economy, already total over USD 600 billion. This includes the destruction of industrial, military, civilian, and infrastructural facilities. Experts estimate that Ukraine's GDP will fall by 35 to 50% in 2022 and it will take 15 to 25 years to recover to the 2021 level at an annual average prewar growth rate of 2.9% (Korablin, 2022).

In order to prevent the collapse of the economy during martial law, the government took a number of urgent measures to deregulate economic activity to support businesses and the population. In particular: radical changes were made in the taxation system to significantly reduce the tax burden on entities and, for certain categories of individual entrepreneurs, to abolish mandatory tax payments; a list of critical imports was defined to avoid exchange rate appreciation and inflation from increased demand for foreign exchange for imports amid a sharp drop in exports and foreign exchange earnings; import duties were abolished and customs clearance procedures were minimized; introduced a program for the relocation of industries from regions where there is active fighting to regions where there is no such action; expanded the program of concessional lending for small and medium-sized businesses and increased the limits of concessional loans; introduced a program of material and product support for IDPs; started building temporary housing for IDPs, etc.

It should be noted that the temporary measures adopted are a continuation of the deregulation policies that took place before the war. They lacked measures aimed at improving the structure of the economy and overcoming the technological backwardness of production, given the approaches to structural transformation taken in developed countries (Kindzerskyi, 2021b). The rapid and insufficiently justified introduction of certain measures further opened Ukraine's market to imports, far from being critical or important for the military economy, resulting in additional pressure

on Ukrainian producers.

At the same time, once the war and martial law are over, the government is already considering legitimizing the measures taken and making them permanent (Svyrydenko, 2022b). This is reflected in the draft recovery and development plan of Ukraine presented at the International Ukraine Recovery Conference, held in July 2022 in Lugano, Switzerland (The National Council..., 2022). Officials believe it will help ensure a rapid post-war recovery. They base it, as before the war, on an exogenous growth model, namely an orientation towards foreign markets with increased exports of products for which Ukraine already has a competitive advantage, namely food and metal (Svyrydenko, 2022a). In order to increase its export capacity, Ukraine needs to build fast logistics, and to boost its export revenues it must stimulate domestic processing of agricultural commodities and the sale of higher-value-added finished products abroad. In order to increase processing, just as before the war, the focus is on attracting foreign investments, further deregulation and liberalization of economic, labour and land relations, and greater decentralization (Becker, etc., 2022), maintaining the course of agrarianization of the economy with a “new agrarian policy”¹ among the government priorities – everything that did not work for the structural transformation of the economy as a whole and industry in particular.

In this regard, we note that the successful experience of post-war recovery of countries indicates that it should be based on a mobilization model of development with an increased coordinating and entrepreneurial role and share of the state in economic processes, clear and comprehensive planning and projecting of balanced economic, social and spatial development, rather than further deregulation in conditions of ruined markets, which in Ukraine even before the war led to weakness and backwardness in economic and military terms. Post-war recovery, as already noted, should not only be seen as a return of the economy to its pre-war level, but should aim at its structural transformation, re-industrialization and a radical increase in productivity. Post-war recovery policies should therefore have a different content, based on the use of structural and

¹ For more details see (Decree..., 2022).

fundamental development factors (McMillan, Rodrik, Sepulveda, 2017). This means both the allocation and state support of sectoral development priorities that will become growth drivers, as well as the development of education, infrastructure, R&D deployment for own innovative civilian and defense products and technologies. The development should be catch-up in terms of accelerated overcoming the backwardness of developed countries. Given the actual destruction of Ukraine's science and the shortage of ready-to-implement own innovative developments, it should be based on borrowing foreign technologies and organizing licensed production. In parallel, Ukraine's science should be developed to generate its own developments, the implementation of which will be necessary after the completion of the catch-up stage and the exhaustion of growth potential through technological borrowing.

The list of sectoral priorities for structural transformations in industry should be formed on the basis of previously identified key problems that post-war recovery should focus on, as well as the formation of new, highly productive and technologically advanced processing industries. Similarly, to the EU approaches, it is advisable to consider addressing these problems as strategic priorities for the country's development (Mazzucato, Kattel, Ryan-Collins, 2020), taking into account its national interests (Reznikova, Panchenko, Bulatova, 2018). In organizational and management terms, the achievement of each priority should be pursued through relevant national projects. These could be: 1) *comfortable housing and smart cities*; 2) *efficient logistics and infrastructure*; 3) *medicine, health rehabilitation, pharmaceuticals*; 4) *food security*; 5) *national defense*; 6) *green economy and circular production*.

The post-war reindustrialization of the national economy should not only change the structure of Ukraine's exports towards a substantial increase in the volume of sophisticated high-tech end-use products, but also focus primarily on the development of processing industries for consumer, investment, social, health needs of Ukraine's market, and the modernisation of all types of infrastructure, maximizing the provision of the state's defense needs, taking into account the need for a "green transition", decarbonization of production, elimination of external energy dependence and military threats.

Based on these strategic priorities for the country's development, sectoral priorities should be identified for the advanced development of individual sectors and industries, with appropriate state support for both R&D and the organization of production. Depending on the priority tasks of post-war recovery, the development of industry should be divided into certain stages.

The first stage is in the short term (1-3 years) to solve immediate problems by resuming and increasing pre-war production with its modernization based on borrowed technology. Priorities:

- production of building materials and products for the rapid rehabilitation of the destroyed housing stock in the cities, the provision of temporary housing for the population, subsequent replacement of the deteriorated and obsolete housing stock in the cities;

- rehabilitation of oil refining to provide the economy with fuels and lubricants;

- restoring and expanding the capacity of the defense industry to overcome arms shortages. Launching of ready-made Ukraine's innovations; establishment of licensed production of foreign weapons;

- the restoration of industries that had export-oriented production prior to the war (metallurgy, agro-industrial complex) to provide foreign exchange earnings in the post-war period and use them for further industrial development in the next stages.

The second stage – in the medium term (4-7 years) modernisation of existing and establishment of new enterprises to lay the foundation for long-term structural changes in production, reindustrialization, and improvement of economic productivity through borrowing/acquisition of foreign technologies and licenses with government assistance in the absence/deficit of own ready-to-implement scientific and technological developments and technologies. Priorities for development should include mechanical engineering, chemicals, food processing, textiles and clothing manufacturing, in particular:

- transport engineering – production of vehicles for road, water and rail passenger and freight transportation, taking into account the need to restore and reorganize Ukraine's logistics network and modernize the railway fleet. The main focus should be on restoring

the potential of Ukraine's shipbuilding, carriage building, and expanding the range of road transport products;

- agricultural machine building – manufacturing of complex agricultural machinery with increased ergonomics and efficiency for soil and plant cultivation, sowing and harvesting, mechanization in animal husbandry; technological equipment for land reclamation, storage of crops, processing of agricultural products and the food industry;

- power engineering – increasing production of products for modernisation of existing and construction of new nuclear, thermal and hydroelectric power plants, expansion or start of production of technological equipment for production of electricity from alternative sources, in particular for wind, solar, hydrogen power;

- “ecological” engineering – special machines and equipment for cleaning soils, industrial and domestic wastewater, air, separate recycling and disposal of industrial waste, household waste, old consumer items (household appliances, cars, clothes, etc.); systems for controlling pollution levels of the natural environment;

- high-tech chemical and petrochemical production, in particular the production of rubber and plastic products for industrial and domestic purposes, synthetic fibers for fabric production, recycling of rubber and plastics; production of a wide range of own fuels and lubricants according to European environmental safety standards; expansion of the range of chemical products for the needs of the agricultural sector, in particular, the transition from predominantly nitrogen-based to predominantly complex and organic mineral fertilizers, the establishment of in-house production of plant and soil protection products and food additives for livestock farming;

- pharmaceutical production – Ukraine's production of a wide range of generics, introduction of own advanced pharmaceutical developments, production of medicines for veterinary medicine; production of own active pharmaceutical ingredients and independence of drug producers from their external supplies;

- textile and clothing production – development of the raw material base through in-depth processing of linen, leather raw materials; renewal of production of natural, synthetic and combined fabrics, development of the clothing design sector, promotion of own brands of clothing for the mass consumer to the market.

The third stage – in the long term (from 7-10 years) the preferential development of high-tech industries in line with the above-mentioned strategic priorities of the country, based on borrowed and own “green”, “circular”, and “smart” technologies.

The development of the relevant priority sectors and industries should take place with the active participation of the state based on the implementation of the concept of modern state entrepreneurship (Mazzucato, 2013). In this regard, the focus should be on creating the state’s own strategically important for the economy and security large national vertically integrated companies in industry and critical (energy, transport) infrastructure with maximum localization of technological chains of production within the country, a network of related industries included in these technological chains and interconnected on the basis of industrial-regional clusters, starting with the production and supply of mineral resources, manufacturing of industrial goods, and ending with the production of final consumption products for Ukraine’s market and exports. The state should organize the establishment of such companies on the basis of public-private partnerships, participation (full/share) in the capital of the companies, investment and innovation support for their activities.

Particular attention should be paid to creating a chain link between production and consumption of the products of these companies, using the institution of state order and public procurement to appropriately shape markets in related sectors and areas. It is not only a question of requiring localization of production during procurement, but also of implementing projects for the development and modernisation of related sectors that will become consumers of these production facilities in parallel with the establishment of production facilities. In particular, for example,

- the development of transport engineering (railway, aviation, maritime transport) should be accompanied by a simultaneous restructuring of railway, aviation and port infrastructure, renewal and expansion of railway rolling stock, national airlines’ fleet of aircraft, sea and river vessels;

- the development of medical instrumentation and pharmaceuticals, with simultaneous development, modernisation and expanded networks of state and non-state medical, diagnostic, rehabilitation facilities, expanded programs of affordable medicines;

– the production of passenger and special municipal transport and equipment should be carried out simultaneously with the implementation of large-scale programs for the development of municipal infrastructure in cities (renewal and expansion of the municipal transport fleet, development of the network of municipal transport routes, modernisation of urban life support systems);

– the production of energy plants for conventional and renewable energy should be accompanied by a simultaneous modernisation program for power generation and distribution companies and the expansion of the renewable energy network.

It would be advisable to nationalize large private companies in strategic industrial and infrastructure sectors (primarily energy companies) or to enter the capital of such companies by applying the mechanism of state aid conversion and investment in shares of companies with at least a controlling or blocking stake. This would increase budget revenues, subordinate the activities of companies to national interests, introduce long-term planning for the activities and development of companies, reduce negative manifestations of market power and abuse of such companies in relation to other players and public administration (neutralizing the oligarchy phenomenon), and increase their transparency and public accountability.

In order to ensure the localization of production using its own mineral and raw material base, the current policy regarding the export of critical raw materials for production (metal scrap, mineral ore for the production of rare earth and non-ferrous metals, wood) should be revised, regarding the hasty privatization of industrial enterprises (including the extraction of the specified critical raw materials), in relation to public procurement (in terms of setting requirements for localization), in relation to state development programming in terms of legislative and regulatory support for the launch and implementation of national projects and the inclusion of national industry in their implementation.

Conclusions

The full-scale war against Ukraine unleashed by the Russian Federation exposed a number of significant shortcomings in the reform of the national economy over the past decades, which led to technological backwardness, economic weakness, and military

vulnerability. The country's post-war renovation policy should take into account preliminary development blunders, namely recovery should be seen as a window of opportunity to form a new, highly productive economy, an important component of which should be modern industry. The leading role in re-industrialization should be played by the state, and state enterprise as a modern model of state behavior in the economy should lay down long-term positive trends of structural industrial and social transformations based on the principles of rationality, national interest, and general welfare. The achievement of the country's strategic development priorities must be based on a complementary combination of structural and fundamental development factors. Highlighting sectoral priorities as growth drivers and shaping these priorities by large national companies is the basis of structural factors. Encouraging the transfer of foreign technology, the simultaneous development of Ukraine's science and education, the modernisation of infrastructure, and the development of the medical and social spheres should form the fundamental factors of the country's sustainable development.

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**ECONOMIC
SECURITY OF THE
SPHERE OF
TOURISM BUSINESS
IN THE POST-WAR
PERIOD****Abstract**

The materials are devoted to the formation of economic security of domestic tourism companies. Considered the problem of ensuring the economic security of the tourist business in modern conditions. It was established that the focus of attention of business subjects in the post-war reconstruction of the service sector should be the safety of the tourist at all stages of his journey. It was determined that within the concept of “security of the tourism sphere” one should distinguish the safety of tourists, the safety of subjects of tourism activity, the state, and the safety of the business environment. In general, in order to ensure economic security, all threats that can cause damage to the tourist enterprise should be anticipated.

Keywords: *tourism, economic security, business, enterprise.*

Introduction

The formation of a modern highly efficient and competitive tourist complex in Ukraine requires solving a number of tasks, in particular: improving the legal framework and the system of state regulation of tourist activities, creating a modern domestic tourist market based on the development of competition, deepening specialization and cooperation in the work of tourist enterprises, ensuring conditions the development of various types of domestic and inbound tourism, the integration of Ukraine into the world tourist market and the development of international cooperation in the field of tourism. After the victory, these tasks require an accelerated solution to implement the trend “Ukraine that won the war”.

Materials and Methods

The analysis of theoretical and practical studies, Internet resources, and literary sources made it possible to comprehensively evaluate the problems of economic security of tourism business companies and to draw a conclusion about the inadequacy of traditional methods of studying the applied nature of the phenomenon. Possessing significant tourism and recreation resources, Ukraine in the post-war period has all the prerequisites to become a country with a developed tourism infrastructure. In view of this, it is necessary for specialists and analysts to analyze tourism as a sphere of socio-economic activity of a person, to understand the meaning and meaning of the concept of “tourism”, to adapt the existing conceptual apparatus to the conditions of the nation in the new environment. The methods used in the materials are: analysis and synthesis, the principle of systemic general communication and development, the principle of axiology, the situational approach, review methods, and a sample survey.

Results and Discussion

Traditionally, many enterprises, firms and organizations are involved in serving tourists (Zaitseva, 2021). The transformation of the tourist business into a global service is due to the intensive development of regional and international tourist exchanges and the strong disconnection of the consumer and the producer of tourist

services (hotels, restaurants, etc.) both in time (packing and selling tours in advance) and in space (different locations, countries, even continents of travel). Therefore, the activity of a tourist enterprise today represents organized work, during which capital, recreational resources, means of production and labor are used for the production and sale of a complex tourist product.

When talking about a tourist enterprise, we mean those firms whose main activity is the provision of tourist services, and all other types of activities are related, secondary, additional. But not every enterprise or organization can be called a tourism firm, since they can operate both on a commercial and non-commercial basis. A commercial tourist enterprise has the goal of its activity to make a profit through the provision of various types of tourist services.

A tourist enterprise is an independently managing entity with the rights of a legal entity, which, based on the use of property by the workforce, produces and sells products, performs work, and provides services. It has the right to engage in any economic activity or business that is not prohibited by law, to independently form its program, to choose service providers and consumers of its products, to freely dispose of the profit that remains after paying taxes and making other mandatory payments and fees (Kyfiak, 2020).

Commercial organizations that are residents of Ukraine work mainly in tourism. All commercial and non-commercial legal entities in the process of production of tourist products are subjects of economic activity – economic subjects (Melnychenko et al., 2017).

Thus, the key subjects of tourist activity that interact in the process of developing and implementing a tourist product, provision and consumption of tourist services and services are:

- manufacturer (organizer) and wholesaler of the tour (operator);
- providers of tourist services (counterparts) – enterprises and companies that provide separate accommodation, food, transport, excursion, insurance services, services related to the issuance of foreign passports and visas, booking and purchase of tickets, etc., which are included in tourist package, tour – these are restaurants, hotels, transport companies (carrier companies), cultural enterprises (museums, theaters), sports (clubs, stadiums), recreational, medical facilities, excursion enterprises, etc. They act as national or foreign counterparties that supply tour operators with tour services;

- retailer – travel agent;
- tourist (consumer) – any natural person who uses, buys or intends to buy tourist services (tourist product) for personal needs.

It is allowed to combine some of the listed functions by individual entities (functions and activity schemes of service or service organizers and sellers of tourist products). An organization or an entrepreneur who, on the basis of a license, carries out activities related to the formation, promotion and sale of a tourist product, is classified as a tour operator. An organization or an entrepreneur who, on the basis of a license, carries out activities for the promotion and sale of a tourist product, is called a travel agent (Zaitseva, 2010).

Tour operator companies more often organize communication with consumers through travel agents. The latter, on a contractual basis, receive the right to sell the formed tourist product. The set of functions of a travel agent depends on the agreement with the tour operator. In some cases, an agency company can perform most of the functions of a tour operator. In fact, acting as intermediaries, travel agents (small firms with little capital and a limited market) depend on the activities of large tour operators and transport companies. However, they play an important role in the market, because it is through them that the vast majority of tours are sold and delivered to the final consumer – a tourist product that is formed by a operator.

Tour operators play a leading role in tourism, as they form packages of tourist services, tours, tourist products and sell them to various users (agents) for sale to tourists. According to experts, the biggest influence on the development of safe tourism is made by: hotel business, transport, travel agencies, tour operating and global computer reservation and reservation systems. Hotel enterprises are the base of any tourist product. Accommodation is always included in the package (set) of services, whatever the travel or rest. A person is already arranged in such a way that once a day he must rest, have a night's stay in a place of stay or a certain location.

The focus of attention of domestic business subjects in the post-war recovery of the service sector should be the safety of the tourist at all stages of his journey. From this position, it can be argued that the safety of the tourist enterprise is a component of the consumer's safety; its basic element is economic security (Korniienko, 2010).

In our opinion, the economic security of an enterprise is a state of

protection of the enterprise's activity from the negative effects of the external and internal environment, as well as the ability to quickly eliminate various threats. The content of this concept includes a system of means that ensure the competitiveness and economic stability of the enterprise. The main goal of the economic security of the tourist enterprise is to guarantee stable and maximally effective functioning at this time and a high development potential in the post-war period. It is appropriate to note that within the concept of "security of the tourism sphere" one should distinguish the safety of tourists, the safety of subjects of tourism activity, the state, as well as the safety of the environment. Each of these mentioned concepts is multifaceted and complex and requires specific analysis and understanding. In a general sense, the category "security" can be interpreted as a state of protection of vital interests of all security objects (state, society, individual) from real or potential external and internal dangers of different origins: political, economic, military, informational, environmental, etc. Among the publications, there are many definitions of "safety in tourism activities" (Hostiuk, 2010).

According to the authors, the economic security of a tourist firm (enterprise, organization) is such a state of corporate resources (capital resources, operator-managers, information) and entrepreneurial opportunities that guarantees the most effective non-use of them for stable functioning and dynamic development, prevention of internal and external negative influences (threats).

In the period of post-war recovery of the tourism business in Ukraine and its further development, increased competition between business entities, the problem of forming and ensuring economic security arises, which is the main prerequisite for maintaining stable positions of enterprises on the domestic and international markets.

Based on all of the above, we will conclude that the structure of economic security of the tourism sector will have the following components: environmental, financial, investment, social, innovative and functional components (Zaitseva et al., 2021) (Figure 6.1).

Thus, the composition of the economic security of a tourist enterprise should be expressed by the following components: tourist, technical and economic; financial, personnel, informational (Figure 6.2).

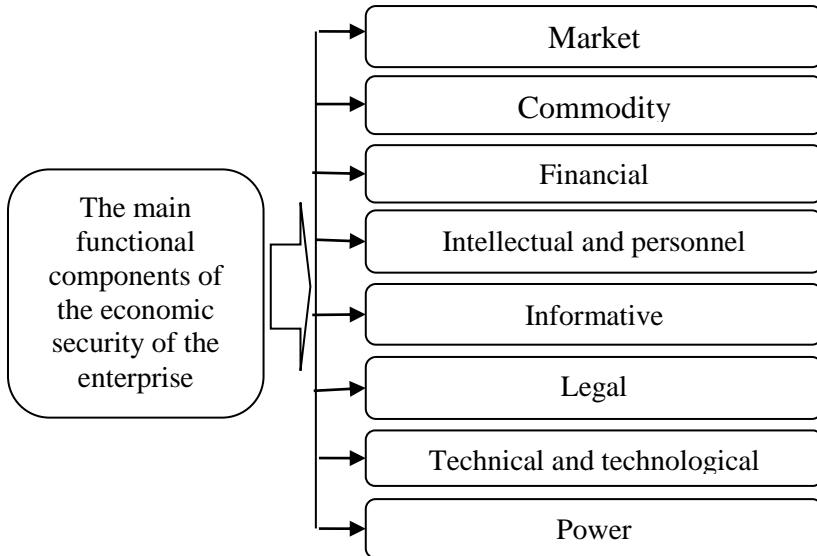


Figure 6.1 The structure of functional and economic components of the economic security of a tourist enterprise

The success of a tourist enterprise in competitive conditions is determined by the constant monitoring of market positions, the study of the strengths and weaknesses of one’s own economic activity and competitors, and the ability to adapt to changes in market situations.

Based on this, it was concluded that the concept of “safety in tourist activity” contains a large number of interpretations. But it is possible to highlight the main components of this concept: safety of tourists; security of the subjects of tourist activity and the state; environmental safety (Zaitseva et al., 2021).

It should be noted that economic security covers all spheres of operation of a tourist enterprise, and therefore requires close attention, constant supervision and monitoring by all services, since a slight change in the level of its individual component can lead to a significant change in economic security in general due to the interaction of these components themselves. As the practice of building retail networks for the sale of a tourist product shows, it is the synergistic effect that makes it possible to achieve the high rates of development necessary to maintain the network’s competitiveness in the post-war retail tourism market.

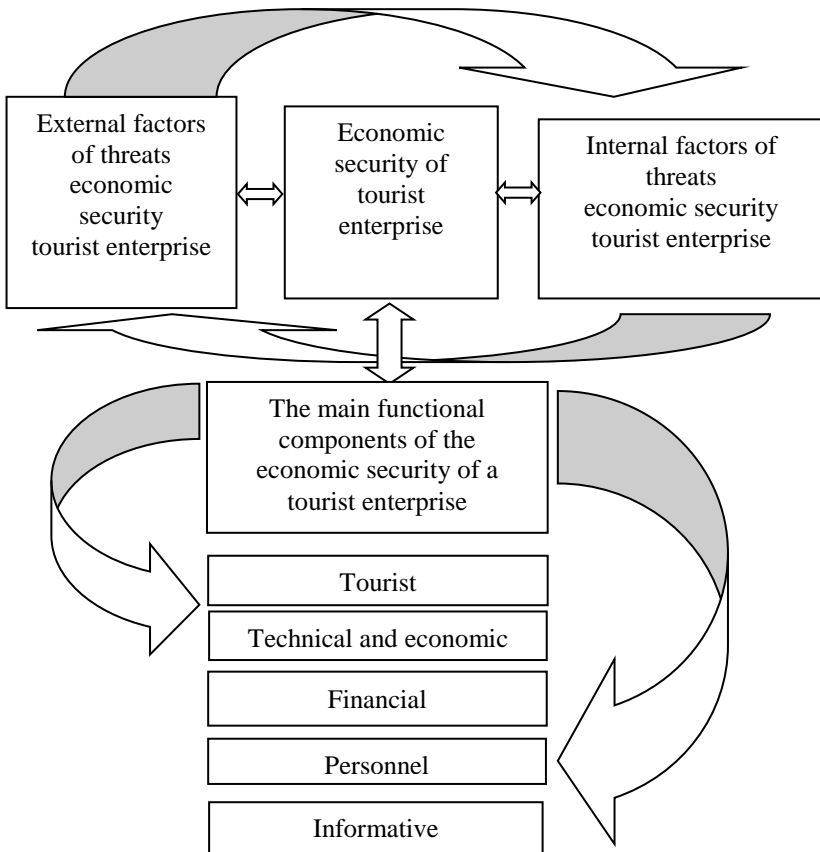


Figure 6.2 System of economic security of the tourist enterprise

In order to ensure economic security, it is necessary to anticipate all threats that may cause damage to the activity of a tourist enterprise (Serdyuk, 2010). The analysis of various sources regarding this problem gives reason to understand that there is no single classification of threats. Most often, scientists single out only internal and external threats, without specifying a specific classification.

To determine the economic security of a tourist enterprise, scientists should use a system of indicators (indicators) of economic security that demonstrate the level of ensuring economic security at a retail enterprise (Kvasnii, 2015).

Ensuring the economic security of a domestic tourist enterprise should provide for the identification, analysis and assessment of existing threats for each of the functional components and the development of a system of countermeasures based on them to prevent the onset of negative phenomena in the activity of a certain enterprise.

The system of evaluation and analysis of economic security should include a set of consecutive, interconnected blocks, stages of activity, methods, methods, and models systematized and adapted to these tasks, which make it possible to identify, evaluate, and reduce the effect of economic risks to an acceptable level with minimal costs corporate resources (Tsviliy et al., 2020).

The need for post-war provision and observance of economic security in tourism is conditioned by the objectively available task for each business entity to ensure the stability of functioning and the achievement of the main goals of its activity.

The level of post-war economic security of a domestic tourist enterprise depends on how effectively its leadership, specialists and managers will be able to avoid possible threats and eliminate the harmful effects of certain negative components of the external and internal environment. Sources of negative effects on the economic security of a retail enterprise can be:

- 1) conscious or unconscious actions of individual officials and business entities (state authorities, international organizations, enterprises (organizations) – competitors);

- 2) the coincidence of objective circumstances (the state of the financial situation in the markets of a certain enterprise, scientific discoveries and technological developments, force majeure circumstances, etc.). Depending on subject conditioning, negative impacts on economic security can be objective and subjective in nature. Such negative impacts are considered objective, which do not arise due to the fault of a specific enterprise or its individual employees. Subjective influences occur as a result of inefficient work of the enterprise in general or of its individual employees (primarily managers and functional managers).

It must be emphasized that economic activity or business is always burdened with risk, which may be smaller or larger, but it is impossible to completely avoid it. The environment of business

entities is becoming more and more “hostile”, which introduces additional elements of uncertainty, expands the boundaries of risky situations. Under these conditions, there is uncertainty about obtaining the final result, and the degree of risk also increases.

The functioning of the tourism business from the standpoint of the influence of military factors is constantly under threat of worsening the results of activity, because there is always a possibility of disruption of the necessary regional, branch and inter-branch flows. Such threats also apply to the actions of various partners of the enterprise – suppliers, consumers, investors, etc.

It is known that only those possible changes in incoming and outgoing flows that cannot be predicted in advance and unambiguously should be considered risk factors. According to this understanding of the problem, today the economic risk has very high indicators for every subject in the field of tourism business of Ukraine.

Traditional threats to the tourism business remain. Since the risk has an objective basis due to the uncertainty of the external environment and a subjective basis, due to the decision-making by a specific person, then successes and failures in entrepreneurial activity should be considered as an interaction of a number of factors. Some of them are external to the business entity in the tourism business, and others are internal (Tsviliy et al., 2021).

Factors consisting of indicators of the internal activity of the tourist enterprise are internal. The parameters characterizing the environment external to the enterprise are external factors. In the analysis of risk in post-war conditions, the division of factors into controlling (regulated) and non-controlling (unregulated) factors will be of particular importance.

The main external factors affecting the economic risk of a tourist enterprise can be conditionally divided into factors of direct and indirect action. Factors of indirect action include the following: regulatory framework (1); weather conditions (2); socio-political situation (3); level of entrepreneurial activity in the region (4); socio-demographic situation in the region (5); state of the consumer market (6); purchasing power of the national currency (7); standard of living in the region (8). Factors of direct action include the following: consumers of products (1); consumers of information (2); consumers

of labor (3); authorities and management (4); consumers of technology (5); tax organizations (6); suppliers (7); market information providers (8); labor suppliers (9); local administration (10); technology developers (11); investors (12); banks (13).

It is difficult to identify the priority of one or another factor, because they are related to each other: a change in one factor can lead to a change in others, and therefore their impact on the level of risk is interconnected. The number of external risk factors and their list may change over time. The division of factors into two groups – factors of direct influence and factors of indirect influence is connected with the fact that the factors of the first group directly affect the level of risk, i.e. changes in legislation, relations with partners, competition and so on. Factors of indirect influence, i.e. the political situation, the economic situation, international events, natural disasters may not have a direct effect on the level of risk, but contribute to its change.

Undoubtedly, the basis of practical actions to ensure security is the development of relevant scientific approaches, which, first of all, should be carried out in such directions as: 1) development of a unified scientific terminology; 2) study of security management informatization problems; 3) development of management technologies, alternative to risk technologies, which provide prevention of risks and dangers; 4) formation of an organizational and economic mechanism for managing the economic security of the post-war development of the tourist enterprise.

The correct solution to the problem of ensuring the safety of subjects of economic activity in tourism is directly dependent on the unequivocal understanding by all officials involved in this activity of the main categorical apparatus used in its implementation and, above all, clarification of the content of such categories as “danger”, “security”, “risk”, etc. The mentioned and other concepts that characterize this activity are interconnected, and that is why each of them has only relative independence. This means that revealing the essence of some concepts is possible only with an adequate understanding of the meaning of others. It is important to pay special attention to this circumstance, because the disclosure of the content of safety as a state, and the concept that reflects this state, is possible only when the meaning and essence of the danger is clarified.

Conclusions

Based on what has been said, it can be concluded that security means the absence of a real threat of causing any activity, values or persons the specific harm that was previously feared. To ensure safety, it is important to be able to correctly assess the situation and establish the presence or absence of danger. The latter can be real or imaginary.

In the presence of the first type of danger and failure to take preventive security measures, the possibility of causing damage will be realized. In the presence of the second type of danger, that is, not a real, but an imaginary danger, the adoption of security measures will turn out to be excessive, unnecessary, and the very costs of implementing security measures will be irrational.

Along with the assessment of specific facts that indicate the existence of a real threat of causing harm to someone, the factors that create a potential real threat should be identified. These include non-competitive methods of behavior of suppliers, buyers and direct competitors. Such methods have a negative impact on the activities of economic entities.

If danger is characterized by the presence of a threat to specific subjects, collectives and society, then security is characterized by the absence of a threat at a specific moment in time. Since security frees a person or an economic entity from psychophysiological tension and related negative consequences, it is necessary, which determines the search for ways to ensure it.

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GRANTS AS AN INSTRUMENT FOR THE IMPLEMENTATION OF THE NEW “MARSHALL PLAN” FOR THE RESTORATION OF UKRAINE’S SECURITY

Abstract

The scenarios of the end of the war in Ukraine were considered and the possibility of external management of United territorial communities was determined. The changes in the priorities of activity in Ukraine are analyzed, the current priorities and directions of their activity in the field of local economic development are listed, and the list of grant programs, which were launched by the Government of Ukraine after the war. Special attention is paid to the legal combination of procedures for issuing small grants by groups of participants of the international technical assistance project. Four options for the implementation of grant projects were considered. It is determined that within 2022-2032 years Ukraine will strengthen its capacity under 15 national programs, which envisages three stages.

Keywords: *restoration, local economic development, grant programs, procedures for grants, implementation of grant projects.*

Introduction

The only countries participating in the Second World War, which at the time of its end showed economic growth were the USA and Canada. One of the few problems their economies faced was small exports. Therefore, according to the Secretary of State George Marshall, achieving economic stability in Europe was best in the interests of the US, which viewed the region as a potentially large export market.

The reconstruction plan of European countries, with which George Marshall on June 5, 1947 spoke at Harvard University, found support, and already on July 12 in Paris gathered representatives of 16 countries of Western Europe.

According to the decision of the Paris Conference in 1947, the Administration of Economic Cooperation was established, and in the USA – the Government Committee on studying the economic situation of countries that expressed a desire to receive assistance and their possibilities to accept such assistance. The implementation of the Marshall Plan began on April 4 1948 with the adoption by the U.S. Congress of the Law “on Economic Cooperation”, which provided for a four-year program of economic assistance. One of the conditions for receiving assistance was the removal of Communists from the government, which was carried out in all countries of Western Europe.

By December 1951, the US provided \$13.3 billion (148 billion in 2013 prices) to 13 European countries, most of which were received by the United Kingdom (2,8 billion), France (2.5 billion), Italy and Germany (1.3 billion). Supplies from the USA were directed at the prevention of hunger (provided in the form of subsidies), development of industry (industrial equipment) and consumption market (industrial goods, raw materials, small machine-building).

The Marshall Plan was one of the most successful economic programs in history – in a short time the economy was restored and the competitiveness of European exports was significantly increased, European countries were able to pay off external debts and the influence of the USSR and the Communist movement was weakened.

In four years, the gross domestic product of Western European countries increased by 33%, agricultural production increased by 11%, industrial production – by 40%, and trade – by 40%.

In 1951, the Marshall Plan was replaced by the mutual Security Act, under which the US allocated \$ 7.5 billion annually for military and economic cooperation with Western European countries. In 1961, the US foreign aid program was reorganized into the United States Agency for International Development (USAID).

In general, the Marshall Plan was the first successful step in transatlantic integration, in which the US firmly played a dominant role, and thus they and Western Europe created an atmosphere of cooperation, mutual assistance and support. It found expression in the military-political sphere – on April 4, 1949 the North Atlantic Treaty Organization (NATO) was established, the main principle of which is the collective defense system (Berezovska, 2022).

The ways of countries' recovery in the post-war period were different, priorities were determined by the needs and characteristics of specific cities. Now, when formulating a plan for the reconstruction of Ukraine, it is important to take into account the economic, geopolitical, social, and cultural peculiarities of the state and the requirements of modern urban governance. It is not enough to repair the damage – we have the chance to rethink our space (Pylypenko, 2022).

Materials and Methods

The current military situation has four major scenarios of the end (suspension) of the war:

1) after the “great battle” in Donbas, which did not reveal the winner, the parties will go to the position of war. At the same time, Ukraine remains de facto within its borders. In this option, no freeze of the conflict is in question. The duration of the active phase is 3-6 months.

2) after the “big battle” in Donbas Russia is fixed on certain newly conquered territories a certain agreement is signed, and the war goes into the position or even frozen phase (duration 2-6 months).

3) after the “great battle” in Donbas, the Russian Federation tries to seize the territory of Ukraine on the Dnieper and create a land

corridor to Moldova (duration of 6-18 months).

4) after the “big battle” in Donbas, Russia tries to seize the territory of the whole of Ukraine and establish its puppet government (a few years long).

Now the Russians do not have a clear plan to do with the occupied territories: The creation of a quasi-Republic, the creation of a quasi-Republic with further integration into the Russian Federation, or the unification of these quasi-republics into a certain confederation.

At the same time, the active phase of the war in Ukraine created preconditions for the re-loading of the authorities and the deeper processes – the transformation of social relations. The war was a shock to society, but in particular, it was a mobilization factor.

The response to calls of individuals and groups allows:

- to conduct a “purge” of political elites, deprived of those who did not meet expectations or simply revealed a lack of confidence, inability to act effectively. Society will support such measures after the active phase of the war;

- the actions of the President of Zelensky resulted in increased support in society. This process will be maintained for at least the first post-war months. However, no more than a year. That is, for basic decisions there is a time of up to 12 months;

- the economy built based on a “contract” of several oligarchic groups is destroyed. Its renewal in the old format (even the model of 2021) is too resource-intensive. This allows restarting of relations between the authorities and big business by offering a new system of interaction. That is, to conduct depolarization;

- returning to full democracy in the first post-war months is impossible without a transition period. Moreover, such steps will lead to a partial collapse of the system of state power and economy. Thus, the country (for survival) will have to go through a transition period.

Similar challenges were faced by de Gaulle in 1946-1959 (ended with the drawing of the V Republic), Lee Kuan Yew in the first stage of modernization in 1965-1975, Park Chon XI in the re-loading of the political system of South Korea (1963-1979).

Accordingly, it is appropriate to use a part of the mechanisms used in the above cases. Key are:

- setting priorities against the background of resource incapacity;
- mobilization of society and concentration on issues of process control;
- resolving the issue of personnel and restarting the system of recruitment of citizens into the government.

Therefore, it is logical to leave the system of concentration of powers for an effective response to external and internal challenges for some time. This can be done by switching the country from a military to an emergency state. The legal basis and logic of the decision in this is the scale of tasks of post-war reconstruction.

However, to prevent the creation of an “authoritarian regime”, it is necessary to determine at once that the state of emergency should end before the date of the next elections to the VR – by autumn 2023.

Moreover, society should be presented with a comprehensive list of restrictions concerning political rights.

Namely:

1) partial rejection of the “national information marathon” regime. However, with the exclusion of restrictions for the mass media: Limitations of owners in the possibilities of influence on information resources, the possibility of introduction of external management at the time of the National Assembly;

2) restrictions on the activities of political parties, namely, the ban on the establishment of new parties, the regime of suspension of activity of the PP, which are threatening national interests, restrictions on the conduct of mass political events;

3) the possibility of introducing external management of OSH in case the local authorities are unable to implement the state program of restoration (with available resources for implementation).

The key decision at this stage is that the Rada should adopt an amendment to the Law “On the Legal regime of Emergency State”, concerning the regime of its extension for more than 30 days. As well as to introduce restrictions concerning mass media and political parties in favor of the Article. 18 (NS at threat of public order) to Art. 16 and 17.

In general, the NS regime should work on the principle: Maximum concentration of powers at the national level, strict management in the areas of defined priority directions, and at the

same time – maximum freedom at the local level on freedom of business.

Key features of the NS regime:

1) setting priorities for resource allocation. Among these are:

a) transformation of the system of analysis of public resources: Key change in the management system. Creation of a structure based on the Accounting Chamber (more precisely its scale), which has full and comprehensive information on the real state of affairs: Resource base, human potential, the efficiency of management decisions, operational analysis and statistics;

b) reinforcement of the power unit. These are the restoration of the enterprises of the defense industry, the provision of power structures, the reform of the management system, taking into account the experience of active combat actions;

c) restoration of critical infrastructure (roads, electricity, gas, water);

d) provision of food and fuel security. On the one hand, the import of critical goods, on the other hand, is the introduction of a special regime for businesses ready to create a production on the territory of Ukraine. Guarantees of privileges for at least 10 years.

Maintaining restrictions in the political sphere. Including the regime of suspension and liquidation of parties and movements, which are dangerous to the interests of Ukraine. Keep control of the information field. Partially possible weakening of the present “single marathon”. However, control over the media remains. Owners are limited in making managerial decisions.

Access to real de-oligarchization. The owners of the largest financial-industrial complex are offered a new system of cooperation with the authorities. The state guarantees:

support of exports;

– protection of the interests of large Ukrainian businesses on external sites;

– a regime of support during the creation of new (technologically rich) production and attraction of technologies to the country;

– the adoption of the law on lobbyism, which will become an instrument of influence (legal!) The Federal Tax Code for political decision-making.

Instead, the state demands:

- the departure of the financial and economic entities (and big business in general) from attempts to create political objects and shadow lobbying (money should be left by the Council);
- the removal of the largest mass media from the influence of the financial and industrial groups. A possible legislative division that restricts media owners in political activity.

The concentration of external assistance on several state programs, as well as on the program of support of regions affected by war. Kyiv controls external funds, which are received centrally. At the same time, local authorities are not limited (and vice versa) to finding and obtaining additional funds for their development. In case of failure of the terms of realization. The concentration of external assistance on several state programs, as well as on the program of support of regions affected by war. Kyiv controls external funds, which are received centrally. At the same time, local authorities are not limited (and vice versa) to finding and obtaining additional funds for their development (Ukrainian Institute of the future, 2022).

In our opinion, it is necessary to pay attention to the grant preconditions for the transformation of social relations taking place today in Ukraine. At that, each international financial organization applies its financing mechanisms and different conditions of funds provision in Ukraine. Grants are the most common form of project financing by donor organizations, which has changed priorities since the independence of Ukraine until today (Table 6.1).

Grants provide resources in the form of non-refundable financial assistance, charitable contributions and voluntary donations, which are targeted and aimed at solving a certain socially significant problem. Grants can be a significant tool for financing local economic development (MFIS), as well as often carry out supporting functions for other instruments, including material and technical assistance (MTAs) and loans from international financial organizations (MFIs), which are aimed at supporting economic reforms and infrastructure projects, first of all, energy conservation, environmental protection and transport infrastructure development. Grants as well as the MTD can provide in the form of property, works or services, intellectual property, as well as financial resources.

Table 6.1

Change of priority in grant activities in Ukraine

Stages	Actual directions of grant programs
1. 1991 – 1997	Attention was paid to infrastructure development in Ukraine and its approach to European standards.
2. 1997 – 2012	the issues of structural, legal reforms, the democratization of society, ensuring sustainable growth, support for environmental and nuclear safety, raising the level and improving living conditions of people in the regions, revival of culture and spirituality were discussed.
3. 2012 – 02.2022	The real breakthrough in the humanitarian sphere of relations between Ukraine and the countries of distant foreign countries both in the West and in the East was carried out. Dozens of universities, educational centers, business schools, colleges, schools established contacts and established fruitful cooperation in educational, organizational-methodical, scientific, financial fields with universities.
4. 02.22 and until now	support of social initiatives that solve humanitarian problems of the civilian population in the conditions of war; protection of civilian population; expansion of economic opportunities for internally displaced women; strengthening and support of public organizations and their adaptation to military conditions, creation of safe conditions for them, monitoring of the situation in the country.

Source: Marchenko & Suchko, 2018

Irrevocably financial assistance is the sum of funds, transferred to a certain person/organization according to the agreements of giving, other similar agreements or without conclusion of such agreements. The charitable contribution is the free transfer of funds, other property, property rights to the property of beneficiaries to achieve certain, before the determined goals of charitable activity. Voluntary donation – giving real and movable things, including money and securities, natural persons, legal entities, the state, territorial community for their achievement of certain, pre-determined goal.

Thus, the marked features of the grant programs are irritability, free payment and targeted allocation of the transferred resources. Such conditions are mainly fixed in the grant agreement – an agreement between the donor or the executive and the recipient on

the transfer of financial resources (grants) in the national or foreign currency within the scope of the project (program).

The donor organization that provides grant resources should understand the institution that provides financial, material or technical assistance to other organizations and institutions on a free and irrevocable basis to solve certain social, economic or other problems following clearly defined rules and priorities.

Program priorities for grants for MFIS are set by donor organizations themselves taking into account their mission and goals. At the same time, program priorities are not static: Their evolution determines changes in the needs of potential grantees and recipient countries, as well as new opportunities for relevant donor organizations. Among the main priorities in the area of support MFIS is the creation of preconditions for long-term economic growth of territories, the realization of the local potential for ensuring economic development on a sustainable basis, the increase of the capacity of the jurisdictions to realize their economic potential, etc. The activities supported by donor organizations often involve not only the allocation of funds for the implementation of the relevant projects but also training on various aspects of MFIS.

Grants provide resources in the form of non-cash financial assistance, charitable contributions and voluntary contributions.

The experience of many countries in a state of transformation shows that a significant part of the funding for the implementation of key initiatives in MFIS is obtained through participation in various programs and projects supported by local and international donor organizations. At the same time, in economically developed countries, grant funds make a small share in financing the MFIS. In developing countries, however, where access to other sources of financing is difficult or limited, it is grant funds that are often crucial to the acceleration of MFIS.

Most of the grant programs provide not only funds for the implementation of the MFIS, but also for training and advice on their effective implementation. Support for social initiatives (community centers, libraries, etc.), which strengthen the capacity of local communities, is being strengthened.

Among the current priorities and directions of their activity in MFIS are the following:

1) strengthening the institutional capacity of local self-government bodies (LSGB) in the area of economic policy implementation;

2) promoting sustainable partnership between local authorities, communities and businesses in MFIS;

3) strengthening the capacity of the LSGB and local groups to implement the initiatives in MFIS;

4) support for the creation and dissemination of innovative models of MFIS;

5) improvement of the system of development planning, urban development and improvement;

6) reform of the housing and communal services system (HCS), support of new forms of management of apartment buildings;

7) support energy and resource conservation activities in the communal and municipal economy;

8) development of tourist activity (in particular, green tourism);

9) support development and protection of interests of small business entities MFIS at the local level (Marchenko & Sushko, 2018).

Today the Government supported the launch of three programs aimed at stimulating business activity and creating new jobs within the military time economy.

The first program introduces micro-grants up to UAH 250 thousand for every Ukrainian who wants to start their first business or develop an existing enterprise:

– microgrants are provided for the creation and development of own business – up to UAH 250 thousand, provided that two jobs are created and up to UAH 150 thousand – one job;

– JSC “Oschadbank” acts as an authorized bank of the program;

– Ukrainians will be able to apply for grants through the portal or in any branch of JSC “Oschadbank”;

– holders of micro-grants will be able to draw up an additional investment loan under the program “5-7-9%” in the amount of up to 2,5 million UAH according to the standard terms of this program.

The second grant program is aimed at the creation or development of gardening, berry-making and wine-making:

– the state co-finances the garden together with the entrepreneur (we plan to support the creation of 10 thousand hectares gardens);

- the state grants a grant in the amount of 70% of the project cost (without VAT), 30% – at the expense of the recipient’s funds.

The third program is granted for the creation or development of a greenhouse economy:

- each investor can build a light greenhouse module of about 2 hectares for vegetable production;

- one applicant can build one greenhouse module;

- for the first 1000 applicants, the state grants a grant in the amount of 70% of the project cost (without VAT), but not more than UAH 7 million, 30% – at the expense of the recipient’s funds;

- all the following applicants receive a grant for 50% of the project cost (without VAT), but not more than UAH 5 million, 50% – at the expense of the recipient’s funds;

- the program will provide one recipient with up to 40 new jobs.

“In the war, the transition to an economic model, when large contributions to GDP make micro, small and medium-sized enterprises, is very important. Therefore, entrepreneurship should become a new national idea for Ukrainians. The functioning of the economy on such a principle will stimulate the creation of a strong middle class and give impetus to the emergence of new jobs in the military time”, said first Vice Prime Minister – Minister of Economic Affairs of Ukraine Yulia Sviridenko (Ministry of Economy of Ukraine, 2022).

To coordinate the work related to the attraction, provision and effective use of the assistance provided under the International Technical Assistance Project, the legal combinations of procedures for the issuance of small business grants by groups of participants of the MTAs are considered in this study.

Table 6.2 below provides definitions to explain the status of each participant in the entire process of implementation of the international technical assistance project and business grant recipients.

It is also advisable to separate the obligations that are imposed by Article 43- 45 of Order No. 153 on the recipient.

The recipient of the International Technical Assistance Project performs the following:

- investment provides targeted use of international technical assistance in the implementation of projects (programs);

Table 6.2

Main definitions of the status of participants of the international technical assistance project

International technical support	Financial and other resources, services are provided by donors on a free and irrevocable basis following international agreements of Ukraine to support Ukraine. Types of international technical assistance: • works and services; • intellectual property rights; • financial resources (grants) in national or foreign currency; • other resources not prohibited by law, including scholarships.
Beneficiary	The central executive body, the Council of Ministers of the AR of Crimea, the regional, Kyiv, Sevastopol city state administration, whose competence includes the formation and/or implementation of state policy in the relevant branch or region, where the implementation of the project (program), which is interested in the results of the project (program) is envisaged, Secretariat of the Cabinet of Ministers of Ukraine, Presidential Administration
Civil society institutions	Public associations, religious, charitable organizations, creative unions, professional associations and their associations, employers' organizations and their associations, non-governmental mass media, were legalized following the legislation of Ukraine
Recipient	Resident (individual or legal entity) who directly receives international technical assistance under the project (program)
Contractor	Any person (resident or non-resident) who has a written agreement with the donor or an authorized donor and ensures the implementation of the project (program), including on a paid basis
Project	Document defining joint actions of project participants (donors, implementers, beneficiaries, recipients), as well as resources, international technical assistance, including co-financing from other sources, within established timelines, is needed to achieve the goals of providing international technical assistance
Grant agreement	Agreement between the donor or the executive and the recipient on the transfer of financial resources (grants) in national or foreign currency within the framework of the project (program).

Source: Marchenko & Suchko, 2018

– ensures that information about the conclusion of a grant agreement is made public on its website or in the mass media within 10 calendar days from the date of its entry into force;

– currently, the funds used are recorded in the form of financial resources (grants) provided through international technical assistance.

We will consider four options for the implementation of grant projects: 1) through local administrations; 2) through the provision of business loans; 3) through the involvement of civil society institutions; 4) by recognition of business associations and individual entrepreneurs as recipients of the project.

Let's focus on 1 option – the project implementation through local administrations.

This option provides for small business grants from recipients – Luhansk and Donetsk regional state administrations (military-civilian administrations) (hereinafter – state administrations) to final beneficiaries (any organizational legal form). At the same time, the following legal nuances should be taken into account in this variant.

The Law of Ukraine “On local state administrations”, articles 17-18, the Law of Ukraine “On military-civilian administrations”, article 4 defines the powers of military-civilian administrations. The powers of state administrations include:

1) preparation and approval of programs of socio-economic and cultural development of relevant administrative-territorial units, target programs on other issues of local self-government;

2) ensuring balanced economic and social development of the respective territory, efficient use of natural, labor and financial resources;

3) attraction on a contractual basis of enterprises, institutions and organizations regardless of the form of ownership to participation in the complex socio-economic development of villages, settlements, cities, coordination of this work on the respective territory;

(...)

9) attraction on a contractual basis of funds of enterprises, institutions and organizations regardless of the form of ownership located on the respective territory and funds of the population, as well as budgetary funds for construction, expansion, repair and maintenance of social and production infrastructure facilities and

environmental protection measures;
and other powers.

Thus, the state administrations within the framework of the current legislation have all the authority to carry out programs of social and economic development and to grant business grants to end-beneficiaries (LLC, NGOs, FOP) received within the framework of the MTD project.

According to the legislation, state administrations are budget institutions.

The Budget Code of Ukraine (Article 13, part 4) defines the components of the budget of budget institutions. Common and special funds are the constituent parts of the budget.

The special fund includes its own revenues from budget institutions. The second group of revenues belongs to its own revenues, which is defined as “other sources of its own revenues of budget institutions”. The second group includes sub-groups, including sub-group 1 – charitable contributions, grants and gifts.

Article 69-1 p. 12. The Budget Code of Ukraine defines the receipt of a special fund of local budgets, which is received within the framework of the programs of assistance and grants of the European Union, governments of foreign states, international organizations, donor institutions.

Thus, state administrations have the right to receive funds of international technical assistance and direct them to implement programs of social and economic development.

Serving as a recipient, who in turn is a sub-guarantor for final beneficiaries, state administrations should:

1) fulfill the obligations concerning compliance with procedures defined by the Law of Ukraine other sources of its revenues of budget institutions “On Public Procurement” (hereinafter – Law No. 922).

In this version, end-beneficiaries have signs of “customers” in the meaning of Law No. 922. The final beneficiary is the recipient of the budget funds by Law No. 922.

MTD funds received by budget fund managers are included in the current legislation for local budget revenues and are used by the procedure established by the budget legislation.

2) make changes to the budget of the special fund of state

administration.

A separate procedure for drawing up, considering, approving and basic requirements for the execution of budget institutions' budgets, approved by the Cabinet of Ministers of Ukraine Resolution No. 228 of February 28, 2002 (p. 18), provides that in the process of forming a special fund of the project, the estimate of the planning of own revenues of budget institutions is carried out according to groups And sub-groups defined by the Budget Code of Ukraine.

This procedure defines that the budget institution makes up individual budget estimates, plans of allocation of the general budget fund, plans of granting credits from the general budget fund to ensure its activity, the plans of the special fund, the construction of the indicators of the special fund are estimated at each budget program executed by it (function).

To receive money from the MTD project as a recipient and to grant business grants to end-beneficiaries, the State Administration should adjust the special fund and other necessary plans and budgets by the budget legislation (Table 6.3).

Table 6.3

The tax burden for end-beneficiaries in project execution through local administrations

Name and rate of tax	Enterprise society on the general system	The enterprise company on a single tax	non-profit organization	FOP on the general system	FOP on a single tax	physical person
VAT (20%)						
Income tax (18%)	+					
Unified tax (5%)		+				
Personal income tax (18%)				+	+	+
Military tax (1.5%)				+	+	+

Source: Ministry of Economy of Ukraine, 2022

We will move on to the second option of realization of grant projects using business loans. This option provides financing for legal entities and FOP by providing business loans.

The UNDP rules provide for certain conditions for granting financial assistance under the terms of the credit line. The tax consequences of this operation and lack of legal authority for the executive are the main obstacles to the project realization through business lending using international technical assistance.

Within the framework of the Agreement between the Government of Ukraine and the United Nations on the establishment of the United Nations Mission of 06.10.1992, Article 3 of the Agreement defines the legal entity and the strive of the United Nations, its institutions, programs (including UNDP) and funds which are sought:

- (a) conclude agreements;
- (b) to buy the movable and immovable property and dispose of it;
- (c) to act as a plaintiff in the court.

According to Article 2 of this Agreement, the United Nations, its agencies and programs co-operate with the Government of Ukraine within the framework of assistance programs aimed at promoting economic development and social progress through, inter alia, economic and social research, implementation of technical cooperation, training of personnel and dissemination of information.

Moreover, the United Nations, including the United Nations, its assets, income and other property:

- (a) exempt from all direct taxes, value-added tax, fees, charges or duties;
- (b) exempt from customs duties, import and export bans and restrictions upon the importation and exportation of items for official use by the Office;
- (c) exempt from customs duties and restrictions on the import and export of their publications. (Article 6 of the Agreement).

Within the framework of the current international agreement on the establishment and activities of the United Nations and its agencies, programs, there is no possibility of carrying out activities of a commercial nature, or that provides for generating income, for example, from interest on loans, etc.

According to another international agreement, namely the Framework Agreement between the Government of Ukraine and the Commission of European communities of 03.09.2008 (Article 3), tax privileges on taxation of activities financed in general or partially at the expense of the Community are granted and are not subject to

taxes, customs meetings, or other charges of the same nature, in particular:

- any goods imported for the realization of measures financed by the Community shall not be subject to customs duties and customs duties, taxes and similar payments of the same nature collected by the Government or any of its bodies (p. 3.1);

- contracts financed by the Community are not subject to VAT, stamp, registration or other similar fees in Ukraine, regardless of whether such fees exist or should be introduced, and whether these contracts are concluded with persons from Ukraine or other countries (item 3.3).

This international agreement does not provide for the receipt of financial interest for assistance and no exemption from taxation of interest or payments arising from financial activities under such projects or as to the income that may be generated under such a project.

Open sources provide information on the implementation of international technical assistance projects and programs that provide grants to beneficiaries on loan terms. But for such projects there are legal prerequisites, namely:

- the existence of an international agreement or the existence of a separate law, which allows the establishment of investment (credit) funds/institutions;

- the availability of benefits for profit from such projects.

According to the reference number 91/2 of other tax privileges, as of 01.01.2019, for participants of the listed international agreements, the following codes provide for privileges:

1) benefit code “11020186”. Reason: The Law of Ukraine “On ratification of the Agreement between Ukraine and the European Community on Scientific and Technological Cooperation” and the Tax Code of Ukraine, paragraph 3.2 of Article 3 of section I. The content of the privileges: “If specific forms of scientific and technological cooperation provide for direct or indirect financial assistance of the European Community, through the organizations established with the participation of the European Community, the participants of the Ukrainian Party, Any such grants, financial or other assistance provided by the European Community to Ukrainian participants to support their scientific and technological activities are

subject to tax and customs privileges.

Such grants will be exempt from duty payment by the Ukrainian party, any customs duties, income taxes, and all other similar taxes and duties”. For example, privileges under the international agreement are provided by the Agreement between the Government of Ukraine and the EBRD on Cooperation and activities of the EBRD Permanent Representative Office in Ukraine dated 12.06.2007. (Project of international technical assistance on the registration number of the project No. 3397).

2) benefit code: “11020217”. Reason: The Law of Ukraine “On ratification of the Agreement between the Government of Ukraine and the European Bank for Reconstruction and Development on Cooperation and activities of the permanent representative office of the EBRD in Ukraine” (Section 8.03. Article 8 of the Treaty). The content of the benefits: “The cost of services provided within the framework of technical assistance and the cost of all grant funds are exempt from the tax on profits of enterprises collected by Ukraine or on the territory of Ukraine, and will not be whether it is considered to be a tax benefit or a taxable income of an organization that can receive direct or indirect benefits from such technical assistance or grant funds”.

Another example of lending and investment activities in the field of entrepreneurship is the lending programs under the MTD projects of the Western EN-I-EU Enterprise Fund (USA). The activity of this Fund is regulated by a separate Law of Ukraine, which approves the “Regulations on the activities of Western EN-I-EU Enterrays Fund” (USA). The activity of this Fund is regulated by a separate Law of Ukraine, which approved the “Regulation on the activities of Western EN-I-EU Enterprises of the Fund” (USA) and its credit and financial institution in Ukraine” No. 269 of 01.11.1995.

In the case of lending to legal entities and individuals resident in Ukraine, UNDP risks recognizing the income received by a non-resident with a source of their origin from Ukraine, which is taxed in order and at rates determined by the Tax Code of Ukraine.

The following revenues are:

(a) interest, discount income paid for the benefit of a non-resident, including interest on loans and debt obligations issued by (issued) resident;

b) dividends paid by the resident;

c) royalty;

(...)

e) revenues from joint activities in Ukraine, revenues from long-term contracts on the territory of Ukraine (p. 141.4.1. Article 141).

At that, the income of non-residents in the form of interest on loans or financial credits given to residents is taxed at a rate of 5% from the source of payment “funds provided by a non-resident on a loan or financial loan are attracted to grant (directly or indirectly) a loan or financial loan to the resident (p. 141.4.11. Article 141)”.

Article 1 of Procedure No. 153 defines the term “international technical assistance”, which defines such assistance as financial and other resources and services, which are provided by donors on a free and irrevocable basis irrevocably with international agreements of Ukraine, to support Ukraine.

Implementation of the project with assistance on loan terms or a revolving basis is possible in cooperation with the executing agencies – credit institutions for which the privileges provided by international agreements are provided.

Let us move on to the third option of realization of grant projects using attraction to cooperate action of institutes of civil society.

This option provides that recipients of the MTD project are institutions of public society. In the definition of order No. 153 – institutions of public society – these are public associations, religious, charitable organizations, creative unions, and their associations, organizations of employers and their associations, non-governmental mass media, legalized in any legislation of Ukraine.

The following legal issues should be taken into account when executing the project under this option.

1. To comply with the requirements of the Tax Code of Ukraine (Article 133.4.1 OF THE CODE), civil society institutions must have the status of a non-profit enterprise, institution or organization. This organization must be submitted by the controlling body to the register of non-profit institutions and organizations (keeping of the register is carried out according to the rules of order No. 440 of 13 July 2016).

The constituent documents (Statutes) of non-profit organizations shall determine the directions of activity, which provide financing or

administration of business grants to other legal entities and individuals for creation.

Tax legislation clearly defines the rules of work of non-profit organizations, not taxpayers of profit tax.

This requirement is that: “Income (profits) of a non-profit organization are used only for financing expenses for maintenance of such non-profit organization, the realization of the goals (goals, tasks) and directions of activity defined by its constituent documents”.

2. If in this option the applicant (administrator of business grants) will be a charitable organization, it is advisable to take into account the provisions of Article 3 p. 1. Law of Ukraine “On Charity Activity and Charitable organizations” No. 5073.

By the above article, the charitable activity aims to assist in the legal interests of beneficiaries in the spheres of charitable activity defined by this Law, as well as the development and support of these spheres in the public interest.

The beneficiary is the beneficiary of charitable aid (individual, non-profit organization or territorial community), which receives assistance from one or more benefactors to achieve the goals defined by “On Charity activities and Charitable organizations”.

Granting of business grants under target financing agreements can be a kind of charitable activity (p. 2. Part 1 of Article 5 of the Law on Charitable Activity and Charitable organizations) only on the condition that the charity gives funds or property free of charge, beneficiaries, by the directions set out in the statute, and by the aims of establishing such a charitable organization. The transferred property should be used only for the development and support of spheres of charitable activity in social interests.

In case of failure to comply with the requirements mentioned above, there is a possibility that in the framework of this transaction the amounts which will be directed on granting business grants to other legal entities and individuals for use in economic activity, when checked by controlling bodies may be transferred to the rank of inappropriate use of funds according to the goal of creation of organization and directions of activity of the non-profitable organization.

By the current provisions of the Tax Code of Ukraine, such non-

profit organization will be obliged to submit within the term determined for the monthly tax (reporting) period, a report on the use of income (profits) of a non-profit organization for the period from the beginning of the year to the last day of the month, in which the violation was committed, and specify the amount of the self-accrued tax obligation on the profit tax. Tax liabilities are calculated based on the amount of the operation of non-target use of funds. The profit tax rate as of the date of the survey is 18%.

In the future, such non-profit organization is excluded by the controlling body from the register of non-profit institutions and organizations and becomes the taxpayer of income tax on the general basis from the first day of the month following the month in which such violation was committed. (For example, the letter of the DSU No. 33649/7/99-99-15-02-01-17 from 17.10.2016).

3. According to Procedure No. 153, and for the realization of the right to tax privileges, provided by the legislation and international agreements of Ukraine, at registration of the project MTD is submitted by a certified donor or an executive and agreed with the beneficiary plan of purchase of goods, works and services purchased with the funds of international technical assistance (next – the purchase plan).

The proposed purchase plan for this project contains categories related to the issue of business grants in the following categories:

- providing funds to the winners of programs for small and medium-sized business development,
- services on the institutional development of business infrastructure and business associations;
- consulting services on business plans creation and search for alternative sources of financing;
- other services.

According to UNDP low-value grant procedures, the grant threshold is US\$ 150 000 for an individual grant and US\$ 300 000 for a total of one period of the program.

According to the rules of tax legislation (p. 197.11, p. 197), VAT-exempt operations on goods and services supply on the customs territory of Ukraine and import of goods as international technical assistance to the customs territory of Ukraine. According to the international agreements of Ukraine, the agreement on the obligatory

nature of which is given in the procedure established by the legislation.

At that, the MTD project should be registered by Order No. 153, which is confirmed by its registration card and availability of the purchase plan. Thus, operations on goods/services supplied within the framework of the MTD project and within the framework of the approved plan of purchase of goods, works and services purchased by the implementing agencies of the MTD projects at the money of the MTD, are exempt from VAT. (Letter of the Federal State Fund of Ukraine dated 15.08.2017 No. 1614/6/99-99-15-02-02-15/IPC).

According to this option (Table 6.3), recipients (institutions of civil society) will be provided grant funds to legal entities and private individuals-entrepreneurs under target charity assistance agreements (or donations).

In the future such recipients will not be able to realize the right to tax privileges for the purchase of equipment or materials for the development or creation of business, these goods, works, services not declared by the donor for transfer of the recipient within the framework of MTD project to the purchase plan. This procedure for the dismissal of purchases that are purchased with the funds of international technical assistance by the end beneficiary is not included in Ukrainian legislation.

Let us move on to the fourth option of realization of grant projects using recognition of business associations and individual entrepreneurs as recipients of the project. Under this option, the recipients are legal and natural person entrepreneurs who carry out business activities and who will be granted business grants within the framework of the MTD project.

The recipient is recognized as a resident (natural or legal person) who directly receives international technical assistance under the project (program) and has a grant agreement between the donor or the executive on the transfer of financial resources (grants) in national or foreign currency within the project (program). (Item 2 of Order No. 153).

This option is in line with the directions and tasks identified by component 2 under the EU Support Program for the East of Ukraine (ENI/2017/040-554 of 08.12.2017) – in the future the Program, considering that the tasks defined in paragraph 2.2 of the Program

“stolen and Flexible Access to Loans and Financing” are the following areas:

- identification of opportunities and needs for further investments of MSME, including identification of target value chains and identification of acceptance criteria for various investment projects and beneficiaries (Program Item 2.2.1);

- the creation of a grant pool for enterprises to facilitate their access to credit products of financial institutions for equipment leasing, equipment purchase, investment in farming, business and logistics, seasonal trade credits etc. (p. 2.2.2. Programs);

- the creation of a grant pool for enterprises to facilitate their access to credit products of financial institutions for equipment leasing, equipment purchase, investment in farming, business and logistics, seasonal trade credits etc. (p. 2.2.2. Programs);

- launching of a grant program to finance seasonal trade (investment), small investments in machinery, equipment and infrastructure through potential investment channels (grants, project co-financing, etc.) based on pre-defined criteria (p. 2.2.4. Programs);

- considering that one of the options of realization of the program of granting business grants is the attraction of legal entities, which carry out economic activity in different organizational and legal forms, natural persons of entrepreneurs, as well as private educational institutions or public-private partnership institutions, it is advisable to take into account the requirements to the legal entity of such participants.

The most common forms of business entities are:

- private Limited Liability Companies;

- private enterprises;

- a separate category of individual entrepreneurs.

When engaging LLC as a partner-implementing project (recipient) or selection of a recipient of a business grant should take into account the following nuances.

The Limited Liability Company acquires civil rights and duties and carries out them through its bodies, which act by the constituent documents and the law. A limited liability company must be registered by the legislation.

In June 2018, the Law of Ukraine “On Limited and Additional Liability Companies” came into force, which made significant

changes in the procedure of creation, activity and termination of the LLC and introduced the concept of the Corporate Agreement. Under this Law, a transitional period in 1 was established to amend the Articles of the LLC to bring them into compliance with this Law. For those companies that do not bring the Articles into conformity with the new Law, their activity may be suspended, because the provisions of the statutes of such companies are not changed.

To implement the agreements that provide for the taking of the LLC on itself certain obligations should be duly executed under the powers of the representative of the LLC. Since the agreements concluded without proper powers, having received financing unfair LLC may in court order invalidate the agreement without the return of proper financing.

The legal entity of the LLC, especially in such spheres as education, medical activity, certain kinds of production (for example food products), rendering of financial services, services on the generation of alternative sources of energy and others, provides the presence of license or permit documentation.

The participants of the MTD project have permission documentation in a certain area. It is advisable to include in the criterion of the acceptability of such a subject in the implementation of the planned project, as the sanction of Article 164 of the KUPAP, which establishes a violation of the procedure of economic activity, that is, without state registration as an economic entity or without obtaining a license to conduct a certain type of economic activity, subject to licensing by the law or carrying out such types of economic activity with violation of licensing conditions, and also without permission, another document of a permitted character, if its receipt is provided by law (except for cases of application of the principle of speech consent), imposes a fine of one thousand to two thousand tax-free minimum incomes of citizens with the configuration of manufactured products, the know-how of production, raw materials and money received as a result of this administrative offense, or without such. Therefore, targeted funding is directed to support or develop a business project or its administration may not reach its goals, and the declared purchase of equipment for the project implementation may be confiscated.

When engaging legal entities engaged in economic activity as a

recipient or final grantee, it is advisable to develop appropriate legal means of protection and to provide for the respective contract's responsibility and dispute resolution procedure.

In the work modern and special methods of research are used: Research, namely: Formal and dialectical logic, qualitative analysis and synthesis, system approach (definition of priorities of activity in Ukraine and direction of local economic development; method of comparison (analysis of scenarios of the end of the war in Ukraine and consequences of the introduction of the legal regime of the state of emergency; analysis of the list of grant programs initiated by the Government of Ukraine after the beginning of the war; substantiation of methods of implementation of grant projects); decomposition method (distribution of the list of national programs of the plan of restoration of Ukraine for 2022-2032 to 15 separate programs).

Results and Discussion

Thus, the paper presents four options for implementation of grant projects: 1) through local administrations; 2) through the provision of business loans; 3) through the involvement of civil society institutions; 4) through recognition of business associations and individual of entrepreneurs as recipients of the project. This means a combination of different parties, which will be connected with the implementation of the grant project.

President Volodymyr Zelensky outlined the following priorities in the country's military recovery: "Digitalization, security and defense potential in synergy with the completed judicial, anti-corruption and other reforms. All this should work on a specific vision of what Ukraine will be in a year after the war, in 5, 10, 20 years. What will be important for our people, for global business, what number of jobs and in which industries will be accessible to Ukrainians".

The big conference on Ukraine's reconstruction took place on July 4–5, 2022 in Lugano, defined the Ukrainian Marshall Plan with a budget of 750 million dollars, which envisages not only the reconstruction of infrastructure destroyed by the war but also the construction of a completely new – more efficient, modern and ecological one.

Implementation of the plan should start in 2022 – regardless of whether the fighting is stopped. According to the authors of the

document, in ten years in Ukraine, there will be Eurokolia, new blocks of NPP, eceduks, manufacture of windows and glass, new industrial clusters.

The Ukraine Recovery Plan presented in Luhansk consists of 15 national programs in different sectors of the economy and social life (Table 6.4). Each contains several key projects, which should be launched in 2022.

Table 6.4

List of National programs of the Plan of Ukrainian Recovery for 2022-2032

The name of the program	The expected amount of funding	The result of the program implementation
1	2	3
Defense and security	about \$ 50 billion	The program envisages the rearmament of the defense forces and the development of the defense-industrial complex. In particular, the Defense Technology Agency and Defense Accelerator Diva Tech and Defense are planned to be established in Ukraine to develop and manufacture modern types of weapons.
EU integration	about \$ 1 billion	The program envisages synchronization of Ukrainian and European legislation.
Environment and Sustainable Development	about \$ 20 billion	Among the projects is the rehabilitation of salt mines in Sotkiv village in Transcarpathia, reduction of the Chornobyl Exclusion Zone from 30 km to 15 km, construction of 142 complexes for household waste processing, ten natural parks, 15 eceduks and ten centers for the rehabilitation of wild animals.
Energy security	about \$ 130 billion	Among the projects are the construction of nuclear power plants and power plants at renewable energy sources with a capacity of 5-10 GW, completion of two power units at the Khmelnytskyi NPP, modernization of other nuclear power plants, construction of infrastructure for the production of green hydrogen.

Table 6.4 (continued)

1	2	3
Business environment	about \$ 5 billion	The program will implement deregulation and digitization of business-to-state interaction.
Access to funding	about \$ 75 billion	It is about insurance of investment projects against military risks, state grants and programs on interest reduction on loans for the period of war and after its completion, support of bank capital, stimulation of mortgage crediting, creation of development bank based on the state bank.
Macroeconomic stability	\$ 60-80 billion	The program envisages raising funds to cover the state budget deficit.
Sectors with added value	about \$ 40-50 billion	The funds will go to the development of agriculture (construction of systems of agricultural production for 1 million ha, processing of raw materials), manufacture of furniture (creation of cluster in the west of the country), mechanical engineering, metallurgy and it. The goal is to develop processing and transition from the raw material model of economy.
Logistics and communications	\$ 120-160 billion	The goal is to diversify the export routes and restore the destroyed infrastructure. It is about the construction of 200 km of the European-style railway track (width – 1,435 m, standard in Ukraine – 1,52 m), transborder agrostorages and terminals, three new automobile checkpoints with the EU. It is planned to update 5.8 thousand cars, 190 locomotives, repair 25 thousand km of roads, five or seven damaged airports.
Modernization of regions and housing construction	\$ 150-250 billion	It is planned to implement the project of increasing energy efficiency of residential buildings, to build new and repair damaged houses. Water supply, water supply and heating systems will be modernized. Localization of production of glass, windows and thermal insulation materials will take place.

Table 6.4 (continued)

1	2	3
Modern social infrastructure	\$ 30-35 billion	The funds will be spent on the modernization of social objects by the principles of energy efficiency and safety, restoration of destroyed objects, construction of industrial parks.
Education	up to \$ 5 billion	It is about updating its IT-programs for the leading universities, reforming of “New Ukrainian School”, investments in the creation of research centers in universities.
Healthcare	up to \$ 5 billion	It envisages the launch of a national program to support the mental health of war-affected people, the development of a network of specialized health care institutions, and the creation of digital services.
Culture and sport	\$ 15-20 billion	Objects for restoration of destroyed cultural institutions, museums, memorials, cultural centers and the school, development of digital culture and cinema.
Social support and migration policy	up to \$ 7 billion	It provides for the introduction of the second level of the pension system, program of integration of veterans, program of access to housing.

The amount of funding for programs will vary, but in the next ten years it is necessary to attract about \$750 billion. This sum does not include investments in the defense and security of the state.

The plan for Ukraine’s recovery is designed for ten years and has three stages. The first will begin shortly. “When talking about reconstruction, often incorrectly accent. This is not only about what we should do after our victory or in the next years, but also about what we should do now”, said Vladimir Zelensky.

In 2022, within the framework of the Ukrainian “Marshall Plan” it is necessary to attract 60-65 billion dollars and another 15-20 billion dollars – for security and defense. Among the priority projects for 2022 – 5% of the country’s territory, preparation of the energy system for the winter period and gas accumulation, insurance of investments against military risks, beginning of construction of a

cargo corridor to Lithuanian Klaipeda via Poland, repair 20 thousand and construction of 100 thousand houses. More than half of the \$65 billion needed in 2022 will go to finance the budget deficit. Even without the realization of large-scale projects, the monthly lack of funds in the state treasury exceeds \$ 5 billion.

The second stage of implementation of the Marshall Plan is reconstruction. It will start in 2023 and will last until the end of 2025. This will not be about supporting the urgent needs of the state, but about restoring destroyed infrastructure and building a new one by European standards. At this stage, it is planned to realize most of the projects: 580 out of 850. At this stage, it is planned to realize most of the projects: 580 out of 850. For such an ambitious goal it is necessary to attract considerable funds. According to the authors of the plan, it is about \$ 300 billion.

The third stage – modernization – will last from 2026-2032. During this time, Ukraine plans to implement 270 projects. The need for financing will exceed \$ 400 billion. Most of them expect to receive from private investors.

Funds for the reconstruction of Ukraine are planned to be received from various sources. Russian reparations and frozen assets of the aggressor country and its oligarchs should become a priority source. Likely, the process of recovering funds from Russia by the principles of the rule of law will not be fast, so Ukraine should rely on other sources for the rapid implementation of the recovery plan.

Among them are receiving grants, preferential loans from partners and attracting private investments. Demand for 2022, \$ 60-65 billion, Ukraine expects to be mostly covered by grants. The second and third stages in the form of grants should get \$200-300 billion. The same amount of funds are planned to be attracted in the form of partner loans. At the same time, private investment should increase: From \$ 50 billion in 2023-2025 to \$ 200 billion in 2026-2032.

International partners should play a key role in financing the country's reconstruction during and after the war. According to Bloomberg, the European Commission is planning to allocate 523 billion dollars for these needs. The EU is also preparing to organize several donor conferences for Ukraine, which will be held in autumn.

Instead, the Ukrainian government promised to implement several institutional reforms. In the end, most of them are necessary for

Ukraine itself – first of all, as a prerequisite for full membership in the EU.

For example, in the area of the rule of law, it is necessary to complete the re-establishment of the anti-corruption system (Special Anti-Corruption Prosecutor's Office and National Anti-Corruption Bureau), adopts legislation on the Supreme Qualification Commission of judges and higher Council of Justice, reduce the punitive functions of the SBU and strengthen the independence of the Bureau of Economic Security.

Ukraine will also have to work on anti-monopoly legislation, complete the corporatization of state companies and privatize non-critical state enterprises. One of the points of institutional reform should be the reform of the civil service, which will include a reduction in the number of officials, simplification of the organizational structure of public services and digitization of public services.

To ensure transparency of the use of funds, Ukraine must digitize state registers and provide limited access to them. Funds for reconstruction are planned to be raised through the International Reconstruction Platform of Ukraine, which the European Commission has proposed. The platform will consist of three levels.

At the highest level, it will be represented by the leaders of the partner states, on average – their executive bodies and international financial organizations, on the last – 24 expert groups, which have worked out the plan for the country's recovery. The platform will have offices in Washington, Brussels and London. The head office will work in Kyiv.

Conclusions

The scenarios of the end of the war in Ukraine are considered, and the possibility of external management of United territorial communities in case the local authorities are unable to implement the state program of restoration is determined. The changes in the priorities of activity in Ukraine are analyzed, the current priorities and directions of their activity in the field of local economic development are listed, and the list of grant programs, which were launched by the Government of Ukraine after the war. Special attention is paid to the legal combination of procedures for issuing

small grants by groups of participants of the international technical assistance project. Four options for implementation of grant projects were considered: 1) through local administrations; 2) through the provision of business loans; 3) through the involvement of civil society institutions; 4) through recognition of business associations and individual of entrepreneurs as recipients of the project.

It is determined that within 2022-2032 years Ukraine will strengthen its potential under 15 national programs. This will take place in three stages: Stage 1 (2022); Stage 2 (2023-2025); Stage 3 (2026-2032). The measure of the successful realization of the whole Ukrainian “Marshall Plan” will be the growth rate of the economy (more than 7% annually) and the entry of Ukraine to the list of 25 leading countries by the index of human capital (in 2020 – 53 position) and by the index of economic component (in 2019 – 47 place).

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CONCLUSION

During martial war, the country faced new challenges and tasks of ensuring security, related to the extended functioning of economic entities, the organization of territorial defense of communities, evacuation of the population, social protection of internally displaced persons, etc. Overcoming these challenges is helped by the unprecedented cohesion of Ukrainian society, which has become a reliable basis for the social stability of the state and national resistance to the Russian invasion. Such a quick unification of Ukrainian society and public institutions happened primarily because Ukraine underwent processes of democratization of social relations based on national values during all the years of its independence. Institutions of civil society quickly modified their activities in accordance with the conditions of martial law, reorienting them to help the defense and security forces, the implementation of humanitarian, informational, educational, scientific projects, the development of horizontal relations with other institutions of civil society, public authorities, business and international organizations.

International support and partners play a significant role in achieving Ukraine's victory over Russia. Many countries of the world, in particular the USA, Great Britain, European Union countries, Canada and others, help Ukraine with weapons, military equipment, medicines, products, funds, and also by accepting more than 5 million Ukrainians on their territories.

At the same time, the number of socio-economic and security problems does not decrease, which necessitates the search for new, more effective and scientifically based approaches to their solution both at the current stage and in the future.

The results of the authors' research in the scientific monograph are devoted to solving the problems of ensuring the security of the country and certain branches of the national economy, accumulating the resource potential of economic entities during martial law, developing strategies to overcome threats and challenges associated with military aggression, and forming programs for the post-war recovery of Ukraine.

The research results presented in the scientific monograph reflect the theoretical, methodological and practical aspects of security

management during martial war through regulatory and legislative mechanisms, directions of support of state authorities and international institutions.

Since the beginning of the full-scale aggression, the country's government has been stimulating supply through centralized ordering for enterprises of food products, medicines, etc., providing premises and equipment for the production of such important defense enterprises today. Simplified taxation was introduced – the tax burden was reduced – enterprises were given the opportunity to switch to simplified taxation system, special tax regime for residents was introduced, entrepreneurs were released from responsibility in the event that taxpayers cannot fulfill their obligations.

According to the results of the research, it was established that the formation of information security during martial war is a complex technical-political and legal activity of authorized bodies, aimed at protecting the state, society and population. During martial war, the protection of the state's information security is a priority because the safety of society and people directly depends on it. During martial war, public legal protection goes beyond traditional regulation and absorbs private legal relations. Preservation of the fundamental principles based on the political and legal interaction of information security mechanisms protects the foundations of democracy and the system of general principles of law from being destroyed by voluntarist decisions.

Millions of people in Ukraine left their homes through of the war. Some of them moved within the country, and some went abroad. Some people moved for a certain time and have already returned to their places of permanent residence, and for some the question of leaving may arise later. The sudden displacement of large populations as a result of war creates new challenges and exacerbates existing ones, both for host communities and for communities from which people are leaving. Displacement processes and their consequences must be assessed and taken into account in the development of national and local policies.

Research shows that due to active hostilities and occupation, the population in the southern and eastern regions of Ukraine is decreasing. Due to the movement of people within the borders of Ukraine, the population in the western regions is increasing. The

increase in the population affects the urban infrastructure; in particular, it increases the load on housing, transport, social and administrative infrastructure. In the medium and long term, the overloading of the social infrastructure may cause an increase in social tension and discriminatory treatment of internally displaced persons.

During martial war, enterprises from the eastern and southern regions were forced to move production to safer regions. Zakarpattia, Lviv and Chernivtsi regions are most often chosen for relocation. The longer the war lasts, the more businesses will have to relocate. For the communities that receive them, this will mean an increase in the number of jobs, in particular for internally displaced persons. In the long term, this may affect the increase in the population of these cities. The primary task of economic recovery is minimizing the consequences of humanitarian problems, preserving human potential, which is a significant source of business activity, and ensuring the most important state functions.

The conducted research of ensuring food security made it possible to draw the following conclusions: complete chains of supply of agricultural products and food products (from primary production to sales of products to the consumer) are broken, as well as activities related to the creation of added value in the agricultural sector, related to production, processing, distribution, consumption and utilization of food products; disruption of the sowing campaign, which is especially threatening, given the high global prices for gas and, accordingly, fertilizers; decrease in yield, export of grain; complicated export of Ukrainian products to foreign markets due to blocking of Ukrainian ports; the consequences will lead to the emergence of serious threats to global food security – a further increase in world food prices.

In order to minimize the manifestations of the global food crisis, it is necessary to protect and support the production of agricultural products in Ukraine in during martial law, taking advantage of the opportunities influence of Ukraine on global food policy, which it has gained thanks to the achievement of leading positions in the world markets of certain types of agricultural products, as well as the activation of cooperation with international and intergovernmental organizations, in particular FAO, regarding the transformation of

food systems.

During martial war, the Ukrainian energy industry faced a list of new, even more threatening challenges, such as nuclear terrorism with the seizure of nuclear power plants, numerous damages to critical infrastructure – electric and gas networks, a critical decrease in demand for energy products due to the departure of the population and the cessation of business, an even more critical reduction in the level of payments in the energy system, and the decision to continue synchronizing the energy system of Ukraine with the energy system of Europe despite the hostilities throughout the country. Ukraine's obtaining the status of a candidate for joining the EU poses additional challenges for the energy industry and the regulation of this industry. Improvement of the system of protection of critical energy infrastructure needs to be reflected in the entire state management system.

Prolonged hostilities threaten ecological danger – the air, water resources, soils are polluted, and forests are destroyed, ect.

Research show that during martial war in the sphere of state finances of Ukraine, the following trends were manifested: significant increase in total state budget expenditures and the share of budget financing of the security and defense sector; nominal decrease in budget revenues due to the narrowing of economic activity and the provision of tax benefits to Ukrainian businesses; active attraction of state loans and accumulation of state debt to counteract the decrease in tax revenues in conditions of increasing state expenditures; intensification of grant and credit support from external official creditors as a form of manifestation of solidarity with Ukraine by the world's leading states; de facto closure of external private sources of funding for the Government for an indefinite period of time; the issuance of domestic military bonds by the Government and the attraction of emission resources of the central bank to maintain the desired volumes of bond placement with weak participation of private investors.

In general, the authors of the scientific monograph are convinced that Ukraine will win the war and will be able to developing plans for the country's recovery by intensifying its own efforts and international support.

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