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ПОЛІТИЧНІ ПРОБЛЕМИ МІЖНАРОДНИХ ВІДНОСИН

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MILITARY AND POLITICAL CHANGES IN NATO AS RESPONSE TO RUSSIA'S FULL-SCALE INVASION OF UKRAINE

ВІЙСЬКОВО-ПОЛІТИЧНІ ЗМІНИ В НАТО У ВІДПОВІДЬ НА ПОВНОМАСТАШБНЕ РОСІЙСЬКЕ ВТОРГНЕННЯ В УКРАЇНУ

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Abstract. *The article identifies seven key changes within NATO following the invasion: the approval of a new NATO Strategic Concept, the extension of the American troop presence in Europe, reinforcement of the eastern front, development of consistent plans for defense against Russia, increased defense spending, Sweden and Finland's membership in the NATO, and improved political solidarity among the member countries. These changes highlight NATO's efforts to anticipate new security threats in Europe and are a manifestation of the changes in this organization's response to threats in the geopolitical sphere.*

Keywords: *Russia's war in Ukraine, NATO, security policies, international security system, NATO Strategic Concept.*

Анотація. *У статті визначено сім ключових змін у НАТО після вторгнення: затвердження нової Стратегічної концепції НАТО, розширення присутності американських військ у Європі, зміцнення східного фронту, розробка узгоджених планів оборони від Росії, збільшення витрат на оборону, членство Швеції та Фінляндії в НАТО і посилення політичної солідарності між країнами-членами Альянсу. Ці зміни підкреслюють зусилля НАТО щодо передбачення нових загроз безпеці в Європі і є проявом змін у реагуванні цієї організації на загрози в геополітичній сфері.*

Ключові слова: *Війна Росії в Україні, НАТО, політика безпеки, система міжнародної безпеки, Стратегічна концепція НАТО.*

Introduction. North Atlantic Treaty Organization (NATO) has been one of the cornerstones of transatlantic security since its establishment in 1949. Formally NATO was created as system of collective defense against potential assault from the Soviet Union and was a first step in the construction of so called “block-system”. Global political modifications and the appearance of new security challenges led to the ongoing transformation of the alliance.

The end of the Cold War period saw NATO change from a purely defensive alliance to an instrument of proactive crisis management and cooperative security. However, the scope of the annexation of Crimea in 2014 and the full-scale invasion of Ukraine in 2022 on the part of Russia plunged the alliance into deep military and political implications. Not only have these events been a test of the core principles of NATO, but also of its operational readiness in a situation that calls for a redefinition of its strategic posture and defense mechanisms.

The Russian invasion of Ukraine in 2014 acted as a booster in the rapid taking up of initiative by NATO on collective defense, raising military expenditure from member states and enhancing deterrence measures on its eastern flank. The escalation of Russia’s military actions in 2022 and later resulted in the Sweden and Finland rejection of their neutrality status and joining the NATO. Even though Sweden is not currently a full member of the alliance, all calculations (budget and military plans) are made taking into account its future full participation (*NATO, 2024*).

The purpose of the article. This article examines the military and political changes in NATO in response to Russia's full-scale invasion of Ukraine in February 2022 and as an element of the policy established in 2014 after the illegal annexation of Crimea. The article also explores how the Alliance has restructured its military strategies and political cohesion, as well as how it has reshaped its security policy.

Literature review. Existing literature highlights that NATO's response to Russia's invasion has involved significant shifts in both military posture and political strategy. Researchers such as R. McDermott, S. S. Cohen, and L. Freedman have documented NATO's enhanced military readiness and the deployment of additional troops to Eastern European member states as deterrence measures. These studies emphasize NATO's strategic recalibration, including the adoption of a more robust forward defense posture and increased military exercises aimed at demonstrating solidarity and readiness. Political responses within NATO have also been a focus of scholarly attention. Works by J. Goldgeier, M. Smith, and K. E. Brummer have explored the alliance's internal political dynamics, noting how Russia's actions have spurred greater unity among member states. These scholars argue that NATO has strengthened its political cohesion and decision-making processes, despite pre-existing tensions among members over burden-sharing and defense spending. However, while the existing literature provides a robust foundation for understanding NATO's responses to Russia's invasion of Ukraine, further research is necessary to uncover the complexities of these military and political transformations.

It is quite clear that the issue is not left out of the research of Ukrainian specialists, among whom it is worth mentioning M.G. Kapitonenko (*Kapitonenko M. (2024)*), H.M. Perepelytsia (*Perepelytsia H.M., 2021; Perepelytsia H.M., 2022; Perepelytsia H.M., 2023*), N.L. Yakovenko and others. However, for the most part, these studies cover issues of regional and international security, without focusing specifically on the transformation of the alliance in this context.

Main results of the research. Since the early 1990s the international security system was based on a complex network of security agreements, alliances, institutions and international organizations aimed at ensuring global peace and stability. The main principles of this system were collective security, deterrence and diplomacy.

Russia's invasion of Ukraine demonstrates the vulnerability of this security system. By violating the principles of sovereignty, territorial integrity and the prohibition of the use of force, and by exposing the weaknesses of collective security, it challenges the very foundation of the international system designed to prevent such conflicts.

That’s mean we have two principal options: try to transform the existing system or create the new one. Here we need to remark that there were a lot of discussions about the existing international system, characterizing it as “hybrid”, “transitional’ or “developing”. In such a way

different analytics tried to underline the temporary and unfinished status quo. That means that the new attempt to rebalance the powers on the international arena is a question of time.

In this context Russia's aggression against Ukraine (since 2014), escalation in the Middle East (Israeli-Hamas war, Syria etc.), periodical tensions in China-Taiwan contractions could be the signs of such dynamics.

Established to provide collective defense, NATO's role has evolved in response to the transformation of the global security structure and during the post-Cold War created the system of collective security based on solidarity, cooperation and actions in very spread areas, not only traditional military spheres, but in civil security, science, public communication.

Russia's invasion of Ukraine not only violated the fundamental principles of the modern security system, but also posed a serious challenge to NATO. The first decisions on changes in its activities reflecting the Russian actions were made by NATO at the Wales Summit in 2014, which took place after the illegal annexation of Crimea. These decisions were developed during next years and concentrated on such issues: financing, readiness and development of the eastern flank.

Financing of the NATO activity was a crucial issue for a long period. Due to the changing security situation and position of Donald Trump there was agreed a Defense Investment Pledge NATO (called for member states to meet the 2% of GDP for defense spending and the 20% of annual defense expenditure guideline on major new equipment by 2024). Since Russia's full-scale invasion of Ukraine in February 2022, most Allies have committed to investing more, and more quickly, in *defense (NATO, 2024)*.

The NATO Response Force (NRF) has such components: land, air, maritime and Special Operations Forces (SOF); High mobility, technological level and multilateral character. The Alliance began using these forces in the 2000s, but the mechanism was fundamentally developed because of the 2014 Wales Summit decision and became a response to Russia's activities.

The aim of the NRF is to provide a rapid military response to an emerging crisis, whether for collective defense or other crisis response operations. At the Wales Summit in 2014, NATO Allies decided to strengthen the NRF by creating a "forward presence" known as the Very High Readiness Joint Task Force (VJTF). The strengthening of the NRF is one of the measures of the Readiness Action Plan (RAP) agreed by Allies to respond to changes in the security environment.

According to official position NATO has increased its military presence in the eastern part of the Alliance as a direct result of Russia's behavior, which reflects a pattern of aggressive actions against its neighbors. The several stages of development of eastern flank could be identified: Wales Summit, 2014; Warsaw Summit, 2016 (allies agreed to establish NATO's forward presence in both the northeast and southeast of the Alliance); 2022 – the Russian full-scale invasion of Ukraine reinforces the existed battle forces and creates new.

Although Ukraine is not a NATO member, the Alliance provides significant support, including military assistance and intelligence sharing. The Russian-Ukrainian war has reinforced the importance of the Alliance in maintaining European security. Russia's invasion of Ukraine has forced NATO leaders to make quick decisions to adapt to the new security reality in Europe. Therefore, it is important to consider the major military and political changes in NATO caused by Russia's full-scale war against Ukraine. Seven key changes in NATO have been identified for analysis.

The first change is the approval of the new NATO Strategic Concept. The 2022 NATO Summit in Madrid was the first summit in the new geopolitical reality. The aim of the summit was to adapt the Alliance to changes in the international security system. Although the process of change had begun before the summit, it was the decisions taken and recorded at the summit that laid the foundation for the Alliance's further transformation (*NATO, 2022a*).

At the Madrid Summit, the leaders of the member states approved the new NATO Strategic Concept. The new concept changes the strategic direction of the Alliance, focusing on an increased focus on strengthening deterrence and defense, along with a new emphasis on building resilience identifying Russia as the "most significant and direct" threat to the Alliance the first-ever reference

to China as a strategic challenge and a statement that developments in the Indo-Pacific region affect the security of Allies (*NATO, 2022b*).

The new Strategic Concept reaffirms that NATO's primary task is to provide collective defense based on a 360-degree approach. It defines three fundamental tasks of the Alliance, namely: deterrence and defense; crisis prevention and management; and cooperative security (*NATO, 2022b*).

The Strategic Concept states that the Russian Federation's war of aggression against Ukraine has shaken the world and significantly deteriorated our security environment. Moscow's behavior reflects a pattern of aggressive actions against Russia's neighbors and the transatlantic community. Widespread instability, rising strategic rivalries and the spread of authoritarianism pose a challenge to the Alliance's interests and values.

In the new document, NATO emphasizes that the Russian Federation is also a model of how serious a threat authoritarian regimes pose to the world in principle. The Strategic Concept states that the Russian Federation is the most significant and direct threat to the security of the Allies and to peace and stability in the Euro-Atlantic area. The Alliance has accused Russia of systematically using coercion, subversion, nuclear blackmail, aggression and annexation as instruments of foreign policy (*NATO, 2022*).

NATO's Strategic Concept 2022 reflects a shift to addressing more diverse and complex threats, recognizing the changing geopolitical landscape and emphasizing the need for adaptation and resilience in the face of new and emerging challenges.

The second change is an increase in the US military contingent in Europe. In view of the escalating conflicts and threats globally, America has made a historic move of boosting its military force in Europe to a troop strength of more than 20,000 (*U.S. Department of Defense, 2022*). This takes the United States just a few thousands of troops shy of the 100,000 troops mark in its forces in Europe for the first time since 2005 (*Vandiver, J., 2022*).

With the decision of the further raise of the number of U. S. troops in Europe it is willing to stress strategic goals and to maintain stability with partners there. This step also relates to an increased focus of the USA on Europe as one of the most important strategic zones and one of the main theaters of operations for the defense of its interests and security within NATO.

The rising of troop levels must be at the same time when the level of security threats and mostly coming from Russia increases and would need counteraction. Additional forces mean the commitment of the United States to its friends and its willingness to respond to threats that question the principles of the modern world and the rules that regulate life in Europe and the rest of the world.

The third aspect of the transformation process is the military strengthening of the eastern flank, that was mentioned above. As Russia launched its full-scale invasion of Ukraine in February 2022, Allies agreed to change their approach on how to respond to the situation by boosting defense presence in the region. This decision also involved sustaining the present battlegroups and constituting four new multinational battlegroups in Bulgaria, Hungary, Romania and Slovakia. These steps have added the total to eight, NATO's multinational battlegroups (*NATO, 2023a*).

New battlegroups formed in Bulgaria, Hungary, Romania and Slovakia are for enhancing the protection and to counter possible threats in the region. All of them are groups of military personnel from NATO member countries, which once again illustrates the unity in the ranks of the Alliance in conditions of a tense situation in the world.

Thus, in general, the number of permanent bases of NATO has even increased, and the number of its personnel in Eastern Europe has doubled. This enables the Alliance to provide a better handling of probable security threats and boost the defense capacities of its members.

Today NATO troops are present forward along the entire eastern frontier of the Alliance from the Baltic to the Black Sea region. To achieve the desired combat readiness, international battlegroups are permanently stationed in the Baltic States, Poland, Bulgaria, Hungary, Romania and Slovakia.

This forward presence is as of now a significant component of the deterrent and proves NATO's commitment to protect each one of its members. It also gives a message to any attacker that the Allied forces are prepared and determined to stand as one through collective defense mode to maintain order and avoid warfare in the area.

The fourth change is the development of a detailed defense plan in case of war with Russia. In a long and elaborate diplomatic process, NATO countries have agreed on regional plans, which outline the actions of the Alliance in case of an attack by Russia.

These are: formation of several "land corridors" that will allow movements of U. S troops and armor to possible battlefronts in the case of a large-scale ground war with Russia in Europe. These corridors will be configured for quick arrival and thus, fast deployment and quick movement in case of a conflict for NATO forces. The plans also include the introduction of other contingents and strategic reserves in significant areas as a response to threats from Russia (*Barnes, J., 2024*).

Such an integrated approach to defense enhances the security of NATO in the region and shows the unity of actions in front of the modern challenges and threats in the contemporary world.

The fifth change is an increase in defense spending. NATO has significantly increased its 2024 budget; it proves the alliance is determined to match Russian aggression and enhance its defense. The NATO civilian budget will increase by 18.2% to €438.1 million, while the military budget will be reinforced by 12% to €2.03 billion (*NATO, 2023c*).

This is the cost of personnel, operating, and program expenditures for NATO Headquarters, as well as international staff. The military budget comprises running costs on a day-to-day basis of the NATO Command Structure Headquarters, all missions, and operations across the globe. The third vital component of the common funds at NATO is the NATO Security Investment Program (NSIP), comprising the main works of construction and command and control systems investment. The 2024 NSIP ceiling is €1.3 billion, representing an increase of 30% compared to 2023 (*NATO, 2023c*).

Indeed, the increase in budgets for NATO is a clear signal that the Alliance is unwilling to tolerate the aggressiveness of Russia and shows solidarity and readiness to defend values and freedom among each member of the Alliance.

The sixth change is the accession of Sweden and Finland to the Alliance. The Russian attack on Ukraine was the principal event that made Finland and Sweden give up their long-standing policy of neutrality and seek a NATO membership in May 2022. To both these Nordic countries, the Russian invasion signified intrusion of aggression from the east which threatened the security of the countries.

Finland became part of NATO on the 4th of April in 2023 while Sweden became on the 7th of March in 2024. Its accession contributed to enhancing the military potential of the Alliance in the northern zone in a rather meaningful extent (*NATO, 2023b*).

Ukraine is also aspiring into the NATO, having applied for an early July 2022 admission. As for NATO membership of Ukraine is concerned, there are certain difficulties now because of some of the members of the Alliance. Nevertheless, Ukrainian Euro-Atlantic fantasies are apparent and unshaken, as joining this organization is viewed as the insurance of the state's stability and autonomy in the distant future.

This war led by Russia to Ukraine has certainly led to reforms in European countries so as to 'unite' hence pressing for the enhancement of partnership at NATO.

The seventh change is the strengthening of political cohesion among NATO member states. The invasion of Ukraine by Russia has made the member states of NATO to increase the cohesion and cooperation within the alliance. At first, the cooperation was based on the concept of collective security, however, actions of Russia served here as a manifestation that it is not only a theory, but a necessity. Member states began increasing their finances for the conducted joint military programs, exercise, and defense facilities, thus increasing the level of interaction and the military readiness.

These actions have also assisted NATO capitals to be more attentive to security as well as defense issues. This means that national governments have augmented their budget towards

defense, they have developed their own power of support and communication and coordination with the other allies to boost up the security.

Thus, the actions of Russia in Ukraine have produced not only words of political condemnation and sanctions, but also actual transformations in NATO and its activity as well as the improvement of the system of collective security and effectiveness of actions by the members of NATO in the defense.

Conclusions. NATO's response to Russia's invasion of Ukraine has marked a significant evolution in both its military strategies and political cohesion. This research has illuminated how NATO, originally formed to deter Soviet aggression, has adapted to confront modern security challenges, particularly in the wake of Russia's actions in Ukraine. The Alliance's approval of a new Strategic Concept, bolstering of its military presence in Europe, and fortification of its eastern flank underscore NATO's proactive stance in safeguarding its member states and reinforcing collective defense. Additionally, the development of detailed defense plans, increased defense spending commitments, and the accession of Sweden and Finland demonstrate NATO's resilience and expansion of its strategic reach. Moreover, the enhancement of political unity among member states signifies a renewed commitment to solidarity and shared values in confronting external threats. Together, these responses affirm NATO's enduring relevance and adaptability in safeguarding transatlantic security and stability amidst evolving geopolitical dynamics. As NATO continues to navigate these challenges, its ability to uphold collective security remains crucial in ensuring a peaceful and secure future for its member states and beyond, even in the time of global instability and insecurity.

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EU ENERGY RISK MANAGEMENT CONCEPT IMPLEMENTATION AMONG MEMBER STATES: CASE STUDIES OF POLAND

ВПРОВАДЖЕННЯ КОНЦЕПЦІЇ УПРАВЛІННЯ ЕНЕРГЕТИЧНИМИ РИЗИКАМИ В КРАЇНАХ-ЧЛЕНАХ ЄВРОПЕЙСЬКОГО СОЮЗУ: CASE STUDY НА ПРИКЛАДІ ПОЛЬЩІ

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***Abstract.** This article explores the fulfilment of energy risk management concept among European Union (EU) member states, with a particular focus on Poland. It analyzes the strategies employed to mitigate risks to energy security, including diversification of sources, energy efficiency measures, and regional collaboration within the EU framework. The analysis highlights the challenges and opportunities that arise from applying risk-focused decision-making processes within the unique regulatory and geopolitical landscape of the EU. Through a comprehensive case study of Poland, the article demonstrates how these concepts have been translated into practical measures and the potential implications for other member states.*

***Keywords:** European Union, Poland, risk management, energy security, solidarity, diversification, renewable energy sources*

***Анотація.** У цій статті досліджується реалізація концепції управління енергетичними ризиками в країнах-членах Європейського Союзу (ЄС), зокрема на прикладі Польщі. У ній аналізуються стратегії, що застосовуються для зменшення ризиків для енергетичної безпеки, включаючи диверсифікацію джерел, заходи з покращення енергоефективності та регіональне співробітництво в рамках ЄС. Аналіз висвітлює виклики та можливості, що виникають при застосуванні ризик-орієнтованих процесів прийняття рішень в унікальному регуляторному та геополітичному ландшафті ЄС. На прикладі Польщі показано, як ці концепції були втілені на практиці, а також потенційні наслідки для інших країн-членів ЄС.*

***Ключові слова:** Європейський Союз, Польща, управління ризиками, енергетична безпека, солідарність, диверсифікація, відновлювані джерела енергії*

Introduction. The current geopolitical changes in a tense international environment are a catalyst for corresponding transformations in the concepts of energy security. Global and regional actors play different roles in the global energy balance, but their resource potential or availability of technology determines their place in the international arena. In particular, diversification of energy supply sources to overcome dependence on foreign energy and investment in the development of renewable energy sources are becoming more and more important.

An equally crucial part of the energy security concept is the development of risk management mechanisms. As the energy crisis worsens, states need to respond appropriately to certain threats in order to minimise losses. And coordinating efforts can become a tool for ensuring both national and regional security.

The European Union (EU), a leading normative and technological power, presents a unique case study in energy risk management. As a bloc, the EU has established a comprehensive approach that prioritizes the diversification of energy sources to mitigate dependence on any single supplier. This strategy is further bolstered by robust energy efficiency measures aimed at reducing overall consumption. Recognizing the interconnectedness of the energy market, the EU also actively promotes regional cooperation under the solidarity principle to ensure a stable and secure energy supply.

Poland's relevance as a case study stems from its status as a crucial part of the EU economy, significant dependence on fossil fuels amid a push for cleaner energy sources, ongoing efforts to diversify its energy supply, and a strong emphasis on national energy security, by which it may neglect some European standards.

The aim of the article is to identify the specifics of European Union's risk management approach towards energy security on the example of interaction with Poland as a member state. Taking into account the aim of the article, we have defined the following objectives:

- To identify the specific features of the risk mitigation process within the European Union.
- To explore how the approach to risk management has evolved over time within the EU.
- To perform a critical review of the case of Poland as an evaluation of EU energy risk management implementation efficiency.

Literature review. To gain a deeper understanding of risk management on both sides, a variety of sources was thoroughly examined. Andrea Sangiovanni provides an understanding of the concept of EU solidarity (*Sangiovanni: 2013*), while Oksana Okhrymenko and Iryna Manaienko elaborate on this principle in the context of energy security (*Okhrymenko & Manaienko: 2022*). Bernardo Delogu reveals the multidimensionality of the concept of "risk" and the importance of its assessment in EU decision-making (*Delogu: 2016*). Matúš Mišík and Andrej Nosko explore the paradoxical nature of EU energy solidarity (*Mišík & Nosko: 2023*). The peculiarities of the Polish national energy policy and its adaptation to EU standards were reviewed by Krzysztof Tomaszewski (*Tomaszewski: 2020*).

Statistical information made by International Energy Agency (*International Energy Agency: 2017*), regulations, strategies and other publications of the EU institutions were also used in the study.

Main research results.

EU risk management approach in energy security

The European Union's energy security concept is based on the principles of solidarity and cooperation in various scopes (technological, economic, scientific, political, etc). According to Andrea Sangiovanni, solidarity is the desire of member states to help each other overcome the crisis and preserve the unity of the EU (*Sangiovanni: 2013*). He stresses that this assistance can be both financial and technical, and can include the exchange of knowledge and experience. In the context of energy security, this means that EU countries work together to solve problems that may arise in the supply of energy resources and provide support in the event of an energy crisis.

According to O. Okhrymenko and I. Manaienko, European energy solidarity is primarily a set of principles, goals, mechanisms, and rules of conduct for energy market actors, whose goal is not

only to produce and supply energy resources but also to meet the needs of all stakeholders in ensuring energy security in response to new threats and challenges (*Okhrymenko & Manaienko: 2022*). This can be done by managing specialized risks against relying on regional needs. At the present stage, in the spirit of solidarity, the REPowerEU platform was formed, which sets three strategic priorities: to secure, to diversify, and to produce. This includes reducing natural gas consumption and, consequently, import dependence primarily on Russian energy, producing safe and affordable energy, and complying with the European Green Deal in the context of the comprehensive implementation of renewable energy sources (*European Commission: 2024a*).

The European Commission defines risk in its Better Regulation Toolbox. It states that risk is the probability (high or low) of hazard causing harm to someone or something. It also proposes a risk formula - a hazard (expressed in terms of its negative impact) multiplied by the probability of its occurrence, vulnerability, and exposure. The document defines the concept and algorithm of risk assessment. Risk assessment is the basis for risk management, which is the development and implementation of measures that help reduce and, if possible, eliminate the likelihood of exposure to a hazard, as well as reduce and minimize the consequences. The risk-based approach in legislation is aimed at controlling or limiting the impact of a hazard and can be conducted in three steps: determining the threat, evaluating the probability, and characterizing the risk itself by using quantitative and qualitative methods (*European Commission, 2023*). The level of importance of a risk is based on specific criteria. These criteria can include scientific limits, how easily the risk can be controlled, the balance between the risk and its benefits, public perception of the risk, and societal values like fairness and individual freedom. They might be outlined in existing laws or regulations, or based on how risks have been handled in the past. By comparing the assessed risk to these criteria, those responsible for managing risk can decide if the risk is acceptable or not.

According to Bernardo Delogu, regardless of how risk is defined in specific situations, it is clear that it is largely not reducible to a single indicator. Comparing risks requires a thorough analysis of all their aspects and dimensions. At the same time, the concepts of risk and risk assessment are the basis for decision-making and regulatory practice in many areas of EU policy, including health, food safety, consumer protection, environmental and climate protection, and the harmonization of technical standards for the internal market (*Delogu: 2016, p. 101*).

General or special-purpose legal acts define the possibility of energy security risks. For example, the European Commission's Communication on the Economic Strategy of the European Union of 20 June 2023 states that one of the serious threats to European economic security is the existence of risks to the stability of supply chains, price spikes, unavailability or shortages of critical products or inputs in the EU, including those related to the "green transition" necessary for a stable and diversified energy supply (*JOIN/2023/20 final*).

The EU's risk management mechanisms were revised during the gas conflicts between Ukraine and Russia back in 2006 and 2009. As a logical consequence, the European Energy Security Strategy was adopted in 2014, and the Sustainable Energy Union Strategy in 2015. These documents state that energy security is a key to the existence of the European Union. Internal synergies should be built between member states, and the EU, in turn, should intensify the process of diversifying energy supplies by building cooperation with exporting countries, as the main risk is a disruption of uninterrupted supply of resources against the background of possible geopolitical tensions (*COM/2014/0330 final*).

In the briefing 'Four challenges of the energy crisis for the EU's strategic autonomy', the European Parliament identifies the following risks and, accordingly, challenges in the following sectors:

- **Network interconnection:** lack of reliable networks, breach of stability.
- **Security of supplies:** significant dependence on external energy carriers, the need to compensate for them to ensure autonomy, reduction of reserves.
- **Renewables efficiency savings:** insufficient investment in green energy, unwillingness to reduce the use of fossil fuels, primarily coal.

• **Energy market:** market fragmentation, nationalisation of industry, further rise in energy prices (*European Parliament: 2023*).

One of the risks to the energy security of the European Union at the present stage is the violation of the above-mentioned principle of solidarity. In the first year of Russia's full-scale invasion of Ukraine, the European Commission decided to stay put with the EU's energy mix in favor of the aggressor country. Within the framework of the REPowerEU platform, the member states were proposed to voluntarily reduce natural gas consumption. However, this initiative was met with resistance from traditional eurosceptic countries, including Hungary. In particular, it was Hungary that blocked the decision to impose an embargo on Russian oil in May (*Abnett et. al.: 2022*). Several other countries called for a "reconsideration of solidarity" in favor of uninterrupted natural gas supplies rather than restrictions, which is why this principle was perceived differently by each member state (*Mišík & Nosko: 2023*).

Climate change, which is becoming increasingly evident to society, is driving political transformation, stimulating a shift towards clean energy sources such as solar, wind, and water. This process, known as the energy transition, is leading to the decarbonization of the economy and the development of low-carbon energy. The European Union has set itself the ambitious goal of becoming a global "green economy" leader by providing technologies and standards to other countries. The EU has developed a set of mechanisms for risk management within the framework of the European Green Deal. What is more, the Fit for 55 package plays a crucial role in EU energy security risk management. By establishing ambitious targets for reducing greenhouse gas emissions and transitioning to renewable energy sources, the package aims to reduce the EU's dependence on fossil fuels, particularly natural gas from Russia. This transition not only contributes to climate goals but also strengthens the EU's energy resilience by diversifying its energy mix and reducing exposure to volatile global energy markets. Additionally, the Fit for 55 package promotes investments in energy efficiency and renewable energy infrastructure, enhancing the EU's energy independence and reducing its vulnerability to supply disruptions (*European Council: 2024*).

Together, they form the following mechanisms for ensuring energy security. The first mechanism is formed as a set of legislative regulations such as the European Climate Law, the Renewable Energy Directive, the Energy Efficiency Directive, the EU Emissions Trading System, etc. It promotes sustainable practices in the energy sector, as well as legal clarity and consistency, reducing regulatory risks for businesses.

The second is a combination of financial instruments. The EU uses the European Green Deal Investment Plan and the Just Transition Mechanism, which aim to attract investments from states and organizations in sustainable projects, especially in those regions that suffer the greatest losses from the transition to a green economy.

The third one is identified by research and innovation. Certain specialized EU institutions (European Environment Agency), scientific committees established by the European Commission, and groups of technical experts may be involved in assessing and developing strategies to overcome risks. In addition, grants aimed at adapting to new technologies, overcoming climate change, and sustainable development may be provided for individual projects under the above financial mechanisms.

The final mechanism concerns international cooperation. The European Green Deal aims to promote multilateral cooperation in tackling climate change and promoting sustainable development. To address geopolitical, economic, and social risks, the EU is trying to engage its partners in the provisions of international agreements (the Paris Agreement). This will help transform risks into opportunities for experience exchange and broader cooperation (*COM/2019/640 final*).

Hence, as highlighted by recent events such as geopolitical tensions and supply disruptions, the European Union (EU) faces various challenges in ensuring a stable, resilient energy supply. To navigate these complexities, the EU has adopted the mechanisms, incorporating risk mitigation in diversification of energy sources, enhancement of energy efficiency, and promotion of renewable energy technologies. However, the path toward comprehensive energy security demands continual

adaptation and collaboration among member states, stakeholders, and international partners. By fostering innovation, modernizing infrastructure, and enhancing the solidarity principle, the EU can fortify its energy security framework, safeguarding against potential hazards.

Poland case study

As a member state of the European Union, Poland is obliged to harmonize its national energy policy with EU norms and standards. This applies not only to diversifying energy sources, reducing dependence on fossil fuels, and increasing energy efficiency but also to the wider use of renewable energy sources. However, this harmonization process is accompanied by a set of risks.

The main ones include the high cost of modernizing energy infrastructure, the need to attract significant investments in the latest technologies, overcoming the socio-economic consequences of fossil fuel abandonment, and the impact of the Russian-Ukrainian war and the global energy crisis on the geopolitical situation in the region. At the same time, there is a solidarity dilemma: will energy and climate issues be a high priority for EU member states, as well as for supranational institutions?

There is a gap between the EU's ambitious plans for renewable energy development and the complex reality in Poland, where numerous systemic problems are holding back the implementation of these plans. These are largely complex and include the following aspects:

- Legal: changes in the legal and regulatory framework to encourage investment in renewables and facilitate their implementation.
- Technological: modernizing infrastructure and improving technologies to increase the reliability and efficiency of renewable sources.
- Social: social issues associated with the transition to renewables, including the impact on employment in traditional energy sectors (oil, gas, coal).

At the current stage, the European Commission is trying to act in two different ways towards Poland. On the one hand, the EU recognizes the positive steps taken by Poland to support its energy transition and promote energy security. The development of renewable energy sources and steps to diversify sources of raw materials were praised. On the other hand, the EU expects Poland to move more rapidly, including legislative changes implementation aligned with the Fit for 55 package. For example, the European Commission, as noted, requires Poland to liberalize its renewable energy legislation to encourage onshore wind projects (*Kardaś: 2023*). Nevertheless, under the pretext of protecting its sovereignty, Poland is trying to obstruct the EU's activities in the field of climate protection and energy, although this only weakens its negotiating position. There are several reasons for this. Firstly, the lion's share of the energy sector is made up of fossil fuels. In particular, coal-fired power plants generate about 71% of the country's electricity (*International Energy Agency: 2022*). However, the rapid transition to renewable energy sources also includes the loss of jobs in the coal industry and economic stability in the regions that are most dependent on this type of fuel. Secondly, it is the need to modernize the country's energy infrastructure to accommodate renewables, which involves significant investments. Finally, there is the political background. The Polish government, dominated by Law and Justice, has favored short-term economic benefits over long-term climate goals and has often claimed that EU regulations are more likely to infringe on national sovereignty (*Strzałkowski: 2024*).

Speaking about Poland's energy mix, the share of renewable energy sources in the country is currently around 12%. At the same time, Poland continues to rely heavily on solid fossil fuels (primarily lignite), which account for almost 43% of its primary energy balance (*Eurostat: 2023*). However, there has been a positive trend in the production of electricity from renewable sources since 2015, when the share of RES was up to 10%. Back in 2015, solar energy wasn't actually utilized according to the statistics. Wind energy accounted for 7.5% of total electricity generation. Nowadays, wind and solar energy account for the largest share among the RES: 14.6% and 8.7% respectively (*Notes from Poland: 2024*).

It is also important that according to the Energy Strategy of the Republic of Poland, which was adopted back in 2021, there is no talk of building a power plant powered by solid fossil fuels (*Ministry of Climate and Environment, Republic of Poland: 2021*). Although this means less

environmental pollution, Krzysztof Tomaszewski, who is an Associate Professor at the Faculty of Political Science and International Studies (University of Warsaw) believes that Poland's generating capacity is insufficient and that electricity demand is expected to grow in the coming decades (Tomaszewski: 2020). However, the lack of a clear vision for reducing the share of coal in the country's energy balance while avoiding the issue of lack of generating capacity could become a serious obstacle for Poland in the process of transforming its energy sector and achieving the goals of the new European Green Deal.

Another cornerstone between Poland and the EU is the risk of the country's failure to implement the Emissions Trading Scheme. Poland is considered to be one of the most carbon-intensive countries among the EU. The average rate of carbon emissions per person in the country is 8.5 tonnes (Ritchie & Roser: 2023). Poland was the only country to vote against the Carbon Border Adjustment Mechanism in April 2023 (Europe Daily Bulletin: 2023). Its government demanded a reduction in the cost of allowances, even though the country's emissions exceeded it. Despite attempts to reform the system, the European Commission decided that emissions would be charged to the heating and automotive sectors (Gramwzielone.pl: 2023). The reason for this is the above-mentioned dependency on solid fossil fuels while Poland is taking steps to develop and, what is more crucial, implement a long-term strategy.

According to the European Parliament and Council Directive on renewable energy sources, EU member states, including Poland, are obliged to increase the share of RES to 32% by 2030 (DIRECTIVE 018/2001). In 2019, Poland adopted the National Energy and Climate Plan 2021-2030 (NECP), which emphasized the importance of decarbonization and diversification of energy sources amid growing demand (Ministry of State Assets: 2019). The European Commission and the Polish government are continuing consultations on the further development of a NECP, which is a mandatory requirement for EU member states. The advantage of such regulatory instrument is that it paves the way towards a long-term lowering of carbon emissions and implementing EU energy security standards along with taking into account national peculiarities in such scope. Poland demonstrated a strong will to transform its economy sustainably, but the main risk is so-called "challenging domestic conditions", including a pro-coal energy mix. For its part, the European Commission recommends that Poland reduce greenhouse gas emissions by 17.7% by 2030 and increase the share of renewable energy sources to 32%, although in the first version of the Plan Poland set a target of 29.8% (European Commission: 2024b). Poland's divergence from the European approach in its National Energy and Climate Plan stems largely from its reliance on coal as a primary energy source. This reliance is deeply ingrained in the country's economy and energy infrastructure, providing employment and supporting industries. Rapidly transitioning away from coal would pose significant economic and social challenges, particularly in regions heavily dependent on coal mining. Additionally, Poland's geopolitical situation, located on the eastern frontier of the EU, has influenced its energy strategy, prioritizing energy security and independence.

Regarding the social aspect of risks, Poland can attract funds from the EU Social Climate Fund and the Just Transition Fund to comply with the energy transition plan. The first one is aimed at financing activities and investments aimed at supporting households and small businesses. This, in turn, will allow Poland to establish an efficient "energy dialogue" with the EU and improve its political position. In turn, the second fund, designed to address the country's energy transition challenges, provides €3.85 billion. These costs are directed to the regions that are most dependent on coal (Silesia, Lesser Poland, Greater Poland, etc.). The Just Transition Fund will help the population of these regions in the transition to green energy, create new jobs, and contribute to a cleaner environment (European Commission: 2022). In general, such financial instruments may be a good incentive for a member state. However, Poland lobbies a National Recovery Plan, which also includes costs for energy sector transformation, to be revived.

Thus, the case of Poland and the EU's common dialogue towards energy risk management demonstrates the confrontation between supranational standards and national peculiarities. Poland is still relying on coal which has a greater share in its energy mix. Nevertheless, a dialogue between

EU and the member state is pivotal and the harmonization of policies is an important step towards complete solidarity.

Conclusions. The European Union's approach to risk mitigation in the energy sector is characterized by a multifaceted strategy that combines EU-wide policies, national initiatives, and international cooperation. Key features of this process include risk identification and assessment, risk mitigation measures, crisis management, and a focus on enhancing energy security and resilience. Solidarity among EU member states plays a crucial role in mitigating energy risks. By sharing resources, coordinating responses, and supporting vulnerable member states, the EU can collectively address challenges such as supply disruptions and price volatility. The Green Deal and the Fit for 55 package are essential components of the EU's risk mitigation strategy. These initiatives promote the transition to a clean energy economy, reduce dependence on fossil fuels, and enhance energy security. By investing in renewable energy, energy efficiency, and infrastructure, the EU can diversify its energy sources, reduce its vulnerability to geopolitical shocks, and build a more resilient energy system.

However, Poland, due to its location and recent energy issues, probably doesn't think that a pre-made risk management plan is enough to keep its energy safe. Even though the EU has helpful tools and guidelines, Poland's specific problems—like using too much coal, its location, and the complicated political situation in the area—need a more customized solution. A good risk management plan for Poland would need a mix of EU-wide plans, Polish laws, and maybe even agreements with other countries. This plan should consider many different risks, like political problems, problems with getting supplies, cyberattacks, and climate change. It should also be able to change and adapt to new problems and opportunities in the energy industry. Further research of the topic of this article is needed to explore the long-term effectiveness of these mechanisms, particularly in the face of evolving geopolitical dynamics and the ongoing shift towards renewable energy sources. The relevance is higher when it comes to the member states which are not eager to drastically change their energy mix and traditional suppliers in accordance with EU common energy policy. It is also crucial to examine how EU-level policies and initiatives can better support national efforts, ensuring a more resilient and secure future for all member states.

In general, the examination of energy risk management within the EU, with a spotlight on Poland, reveals a complex landscape shaped by diverse energy mixes, varying degrees of reliance on external suppliers, and the overarching goal of a sustainable energy transition. While the EU provides a framework for cooperation and coordination, individual member states like Poland must tailor their strategies to their unique circumstances. The Polish case highlights the importance of diversification, investment in both fossil fuel and renewable energy sources, and a proactive approach to risk assessment and mitigation. Lessons from Poland's experience can inform other EU nations as they navigate their own paths toward energy security in an increasingly uncertain global environment. That is why developing a common approach is highly important for the EU to ensure its role as a normative and technological power and take the leading place in the global energy mix.

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FRANCISCO FRANCO: AN EXPERIENCE IN VISUAL-ANALYTICAL PORTRAIT OF A DICTATOR (PART 2).

ФРАНСІСКО ФРАНКО: ДОСВІД ВІЗУАЛЬНО-АНАЛІТИЧНОГО ПОРТРЕТУВАННЯ ДИКТАТОРА (ЧАСТИНА 2).

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Abstract. *The purpose of the article is to construct a profile-typological characteristic of individual meso-identities of the Spanish dictator F. Franco, his individual bodily-morphological, psycho-behavioral, physiognomic, non-verbal-communicative, visual-symbolic features, as well as visual features of everyday life based on stories from everyday life.*

Franco's character as a recursion of a set of his identities (primarily religious and professional - military) acted simultaneously as a reflection of the habitus of the military class of Spain and a determinant of the regime he built, which combined the features of Catholicism and clerical integral nationalism. The features of the dictator's behavior presented in the photographs and videos, as well as in the descriptions of various authors (Lewis, 2002; Payne, 2011; Preston, 1994), create the necessary empirical basis for a fragmentary diagnosis of his character as an obsessive-compulsive narcissistic psychopathy with a strongly expressed narcissistic deficiency and peripheral signs of an oral-schizoid constitution.

Such a multi-base character structure corresponded, on the one hand, to Franco's Jewish (Marrano) identities, and, on the other hand, to a set of Ibero-Mediterranean ethnocultural identities expressed in the anthropological and physiognomic features of the dictator's appearance and observed behavior in different periods of his life. Franco's strategy of life activity reflected the results of the completed ethnocultural assimilation of his ethnic identities by the national-territorial (civil-state) identities of Spain, which received a specific refraction in the choice of Falangist symbols. The unconscious motivational background of her choice was determined by both a number of generalized socio-cultural factors and the psychobiographical features of Franco, oriented toward the image of the Trastamara dynasty as a referential identity, including for the restoration of the monarchy in Spain. Franco the restorer himself perceived himself as a caudillo (leader) with monarchical powers obtained not in line with traditional monarchical legitimacy, but as a result of a new type of crusade (against the communists and liberals), which implied a counter-modernization understanding of the socio-historical mission of Spain in Europe.

Key words: *Francoism, ethnic identities, professional identities, types of character organization, visual symbols, nonverbal communications.*

Анотація. *Мета статті – побудувати профільно-типологічну характеристику індивідуальних мезоідентичностей іспанського диктатора Ф. Франко, його індивідуальних*

тілесно-морфологічних, поведінкових, фізіогномічних, невербально-комунікативних, візуально-символічних особливостей, як а також візуальні особливості повсякденного життя на основі історій із повсякденного життя.

Характер Франко як рекурсія набору його ідентичностей (передусім релігійної та професійної – військової) виступав водночас як відображення габітусу військового класу Іспанії та детермінанта побудованого ним режиму, який поєднував риси католицизму та клерикалізму. інтегральний націоналізм. Особливості поведінки диктатора, представлені на фотографіях і відео, а також в описах різних авторів створюють необхідну емпіричну основу для фрагментарної діагностики його характеру як обсессивно-компульсивна нарцистична психопатія з різко вираженим нарцистичним дефіцитом і периферичними ознаками орально-шизоїдної конституції.

Така багатоосновна структура характеру відповідала, з одного боку, єврейській (марранській) ідентичності Франко, а з іншого — набору іберо-середземноморських етнокультурних ідентичностей, виражених в антропологічних і фізіогномічних особливостях зовнішнього вигляду диктатора та спостерігав поведінку в різні періоди свого життя. Стратегія життєдіяльності Франко відображала результати завершеної етнокультурної асиміляції його етнічних ідентичностей національно-територіальними (громадянсько-державними) ідентичностями Іспанії, що отримало своєрідне заломлення у виборі фалангістської символіки. Неусвідомлене мотиваційне підґрунтя її вибору було зумовлене як низкою узагальнених соціокультурних чинників, так і психобіографічними особливостями Франко, орієнтованими на образ династії Трастамари як референтної ідентичності, в тому числі для реставрації монархії в Іспанії. Сам Франко-реставратор сприймав себе як каудильйо (лідера) з монархічними повноваженнями, отриманими не в рамках традиційної монархічної легітимності, а в результаті нового типу хрестового походу (проти комуністів і лібералів), який передбачав контрмодернізаційне розуміння суспільно-історична місія Іспанії в Європі.

Ключові слова: франкізм, етнічні ідентичності, професійні ідентичності, типи організації характеру, візуальні символи, невербальні комунікації.

Introduction. This article reflects the results of the author's previous research (*Romanenko, 2021, 29-47; Romanenko, 2022, 1(55), 9-16; Romanenko, 2023, 1 (57), 5-14; Romanenko, 2023, 1(58), 12-27; Romanenko, 2022, 93, 38-61; Romanenko, 2022, 94, 8-30; Romanenko, Svyatnenko, 2023, 98, 40-51; Romanenko, 2023, 97, 42-56; Romanenko, 2024, 101, 40-57*) in the first part of the article, which gives the author grounds to consider it necessary to refer to already published works in order to avoid repetitions.

In the second part of the article, the author continues the fragmented visual-analytical identification of the morphotypological, psycho-behavioral, anthropological-physiognomic, visual-symbolic features of Franco's personality and visual images in the cultural and social environment-space constructed by his regime.

The purpose of the article. The purpose of the article is to construct a profile-typological characteristic of individual meso-identities of the Spanish dictator F. Franco, his individual bodily-morphological, psycho-behavioral, physiognomic, non-verbal-communicative, visual-symbolic features, as well as visual features of everyday life based on stories from everyday life.

Literature review. The works that were used as a basis for writing the article can be divided into 4 groups.

The first group presents publications previously written by the author of this article, dedicated to other dictators and despots, where the techniques of cultural and socio-systemological and visual-analytical identification of identities were used (*Romanenko, 2021, 29-47; Romanenko, 2022, 1(55), 9-16; Romanenko, 2023, 1 (57), 5-14; Romanenko, 2023, 1(58), 12-27; Romanenko, 2022, 93, 38-61; Romanenko, 2022, 94, 8-30; Romanenko, Svyatnenko, 2023, 98, 40-51; Romanenko, 2023, 97, 42-56; Romanenko, 2024, 101, 40-57*).

The second part of the works is devoted to the topic of studying Francoism as a national-integralist regime of the fascist type, which pays attention to both Franco's personality and the features of the state he built. (Brovko, 2002; Casanova, 2010; Franco, 1981; Lewis, 2002; Moradiellos, 2022; Payne, 2011; Preston, 1994).

The third group of works presents psychoanalytic studies and works on anthropological physiognomy, which allow us to additionally identify part of Franco's ethno-anthropological identities (Hödl, 2004; Hödl, 1997; Lowen, 1969; Lowen, 1958); McWilliams, 1994; Ostrovsky, 2008; Presner, 2007; Szegeda, 2009).

The fourth part of the works is represented by articles on visual anthropology and sociology of visual images, which present an analysis of the everyday life of the population of Spain during the Franco period (Di Febo, 2011; Dunai, 2019; Goma and Tomas, 1938; Haz y Yugo; Otero-Gonzalez, 2021; Ruiz, 2022; Solé, Dra, 2017).

A separate group of supporting works for the article are articles on social philosophy, which allow for a better understanding of the socio-cultural context of Francoism, in particular, on the Spanish version of M. Unamuno's philosophy of life, including commentary articles on the designated topic, as well as the works of Franco himself (Franco, *Francisco (Jakin Boor)* (2003). Kovalchuk, Yu (2015). Ortega y Gasset, Jose (1957). Unamuno, Miguel de. 1913).

Since this article is the second part as a logical continuation of the previously published first part, which presents a detailed review of the sources used, as well as a number of other similar publications, the author considers it unnecessary to do this again and refers interested readers to previous publications that have a common theoretical and methodological foundation.

Main results of the research. Morphotypic and psycho-behavioral features of the visual image of the dictator. The description of Franco in a significant part of the articles and monographs makes it possible to imagine the image of a schizoid body, endowed with signs of thinness, subtlety, shyness and emotional detachment / unsociability in relation to the social environment. Franco, according to the characteristics of his colleagues, was thin as a match, for which he received the corresponding nickname. To this visual image was added a short stature (164 cm), which could create some additional affective complexes.

However, the central affective complex of a schizoid personality is described in the work of A. Lowen betrayal of the body (Lowen, 1969, 41-59). It is worth noting that Lowen himself associates the affective complexes of the schizoid personality with the dual affect of horror before absorption/destruction and the desire for all-consuming activity. It is this all-consuming activity that schizoid personalities prefer to contacts with people, which in their psycho-behavioral characteristics is consistently associated with communicophobia and sociophobia. Maintaining a distance, avoiding emotionally charged discussions, pronounced introversion, the ability to move away from interest in personalities to the plane of the suprapersonal complement this psychological portrait.

Franco's psycho-behavioral repertoires as a representative of the military caste could not be separated from his military career. But a military career in general requires a psychopathic character organization (McWilliams, Nancy 1994, 167). Without psychopathic fanaticism, will to power, cold rationality, the ability to show cruelty towards enemies, an instrumental attitude towards human resources (for psychopaths, people are nothing more than a resource for profitable use), total extraction of benefits, a continuous philosophy of the rational-utilitarian with the subordination of everything ethical and aesthetic to the instrumental-rational component - in such markers, psychopathy reveals itself to the environment.

But no psychopath could have succeeded without a hero's career, since the "mission" of a psychopathic personality requires grandiose results and the accompanying glorification. Franco was no exception here. He entered the Army Academy in Toledo precisely in order, by his own admission, to become a man.

Psychopathic courage in characterology can be revealed through the confrontation of a psychopathic personality and a superior force of any origin. It is important that in this confrontation

the postulate that it is worthy to be proud of a worthy enemy, and unworthy enemies dishonor the one who opposes them, is confirmed for psychopaths.

Completing the characterological structure from schizoidism to psychopathy involves role models that become constitutive prototypes for idealizations and devaluations. In Franco's relationship, it is worth noting the split between the images of his father and mother as poles of devaluation and idealization. From a psychoanalytic point of view, the pole of devaluation can be a stronger pole than the pole of idealization, since the unwanted and externally rejected, according to the paradoxical logic of the unconscious, turns out to be stronger and more influential than the desired and deified.

Franco idealized his devout Catholic mother, the personification of piety, restraint, self-discipline and traditionalism/conservatism. Most of his own voluntarily ethical defenses and inhibitions of obsessive-compulsive origin were derived from his Catholic upbringing and the corresponding "inoculations" of the morally idealized image of a worthy son, who, due to his physical-constitutional and, in part, mental weakness, was forced to fight "on two fronts": to correspond to the ideal mother and, in parallel, in the mode of methodically overcoming the difficulties of a military career that did not suit him, neutralize the continuous devaluations of his father. He devalued him (the nonconformist father) as a troublemaker, a reveler, a womanizer, and his relationship with his father did not go well because of his lowest filial rating.

As a result, the identification program was realized on the basis of identification with the mother's behavior patterns to realize the perfect version of the father's image. Franco became the best version of his father, which represented the full realization of the revenge program, since the avenger cannot fully take revenge if he does not morally surpass the object of revenge and does not assert "higher morality" with his methods of revenge.

Franco Pilar-Jaraiz (*Franco, 1981*) described Franco's father's devaluation of him as a son. His father always devalued him, while building a chain of humiliating comparisons to Franco's disadvantage between his brother Ramon (the most talented), Nicolás (whom his father called a liar), and Poquito (a diminutive nickname for Francisco), whom his father called a fool. Franco Sr.'s attitude toward his son did not change even after Franco had won the dictator's victory and the title of caudillo. His father never missed an opportunity to ridicule him in this image, which, of course, contributed to the incitement of hostility. For Franco, his father became not just the embodiment of adultery, drunkenness, and a dissolute lifestyle. He was the first prototype of a phenomenon that was unfolding on the public plane - anarchy.

As already noted in the first part of this article, Franco's psychopathy was able to receive a value supplement/superstructure in the Latin Catholic vision of the mission of Spain by a number of Spanish philosophers and scientists, whose ideas were, as they say, well-known in the discourse of the elites and, in part, the general public. This includes, in particular, M. Menendez y Pilayo, J. Ortega y Gasset and, first of all, Miguel de Unamuno (Unamuno, 1913; Ковальчук, 2015).

Unamuno considers agony as the vital foundation of human existence, accessible, however, not to the masses, but to the elites. The struggle as the leitmotif of agonal philosophy is understandable as the unity of preserving faith in immortality with simultaneous doubt in this faith (an allusion to Tertullian's *credo quia absurdum est*) of the agonist individual. Unamuno, in the name of an ideal that seems madness to reason and common sense, in imitation of S. Kierkegaard, discredits common sense and good taste.

The philistines, who daily drink the poison of "stale common sense", are opposed by barbarians living with an agonal consciousness, Don Quixote madness. Unamuno's antagonist Millán de Astray (in the understanding of Unamuno - a barbarian) turns out to be paradoxically the most educated in his ignorance and the most learned in his barbarism. He, like a barbarian, bursts into the field of activity from another space, where other concerns, other prejudices reign - and who does not have them? - with a completely different view of the world and a different sense of life. J. Ortega y Gasset (*Ortega y Gasset, 1957*) should be considered no less significant for understanding the agonal-messianistic philosophy of the schizoid psychopath Franco, which was revealed in his

military career. It is no coincidence that P. Sainz-Rodriguez considers Franco to be obsessed with a military career.

The caste spirit of the Spanish military and its moral code contained elements of arrogance in relation to small people who preserve themselves for the sake of small joys of life. Ortega y Gasset describes the corruption of the mass man by such small joys of life in his work "The Revolt of the Masses" (*Ortega y Gasset, 1957*) which simultaneously expresses the class arrogance of a Don Quixote aristocrat and the psychopathic philosophy of a superman who follows the path of self-overcoming through agony and love for the Motherland. A psychopathic personality as a heroic personality requires initiation, either prosocial and value-ideal, or criminally base and dirty. This does not change the very need for such an instrument of "remelting and reforging" a non-man of yesterday who has already become a man today. Franco's psychopathic initiation took place in Morocco (1912-1926), where Spain was waging a colonial guerrilla war against the natives. The advance into Moroccan territory was extremely slow and difficult. In Franco's memoir "Morocco. Diary of a Flag," Franco describes it as follows:

"The military campaign in Africa is the best practical school (and perhaps the only one) for our army, it tests values and positive qualities, because the officers who fight in Africa must one day become the nerve and soul of the Iberian army. At noon I will receive permission from the general to punish those settlements that have been the source of resistance, from which the enemy attacks us. This is a difficult and pleasant task; to our right the terrain descends in the form of a ravine to the beach and at the foot is a long strip of small villages. While one unit opens fire on the houses to cover the maneuver, another cuts off the retreat by the shortest route, surrounding the settlements, and massacres all the inhabitants. Flames rise above the roofs of the houses, and the legionnaires pursue their inhabitants" (*Морадельос, 2022, 35*).

Franco's initiation ended with a bullet wound to the stomach during the battle near Ceuti, which behaviorally expresses the courage corresponding to the schizoid-psychopathic character organization. In this case, the courage itself is derived from the schizothymic temperament according to Kretschmer, whose bearer is predisposed to desensitization and significant insensitivity/insensitivity both in relation to his own body and the physical suffering of others. In the portrait of the schizoid organization of character by A. Lowen (*Lowen, 1969, 41-59; Lowen, 1958, 368-393*) in connection with Franco, it seems interesting to note the physical clumsiness/awkwardness and lack of coordination of body movements. As will become clear from the examination of the physical block, the schizoid block of the character structure manifested itself in the awkward, inappropriate gestures of the dictator.

The psychopathic component manifests itself in the predominance of the emotion of anger, sublimated and redirected for the purposes of disciplining oneself, personnel (subordinates) and the use of military terror tactics both in the colonial wars and subsequently in the civil war.

Regarding the latter, Franco's behavior displayed both psychopathic and compulsive features. The obsessive-compulsive character block was laid by maternal upbringing and demonstration of examples of restraint and piety. However, the formation of obsessive-compulsive behavioral traits is not limited to restraint and self-discipline, but also intolerance of disorder, as well as the tendency of the obsessive-compulsive personality to use time-consuming procedures for maintaining and restoring order. In the context of compulsive characterology, it becomes clear why Franco rejected the blitzkrieg strategy proposed by his German and Italian allies. The obsessive-compulsive component of character is responsible for the predominance of "cold" anger/rage over "hot".

Franco, as a compulsive psychopath, was not satisfied with quick success, since, in his words, it produced "moral liberation of the occupied territories" and the eradication of anarchism as an ideology of disorder. A quick conquest was not suitable for showing cold and slow anger towards communists and anarchists. Explaining this to the Italian ambassador R. Cantaluppo, Franco contrasted his obsessive-compulsive gradualism and the "iterative" nature of the occupation of Spanish territory ("city after city, village after village, one railroad after another...") (*Морадельос, 2022, 60*).

Physionomic features of Franco. Physiognomically, the forehead and nose dominate Franco's face (*Franco con uniforme de alferez, 1910*). The forehead is characterized by pronounced bald spots. The nose contains a clearly expressed elevation-convexity on the bridge of the nose, and has a characteristic sharpening at the tip. In general, the facial profile is anthropologically dominated by the features of the Indo-Mediterranean racial subgroup.

This racial subgroup lives, according to S. Szegeda (*Cezeda, 2009, 260*) in the Pyrenees, the Apennine Peninsula and the Balkans among the Spaniards, Portuguese, southwestern French, Italians and southern Greeks. The bearers of this racial subgroup are characterized by dark skin, dark curly hair, predominantly brown eyes (in some groups, according to the author, mixed shades are present in the amount of 10-25%), a straight narrow nose with a high bridge of the nose, average development of tertiary hair, dolicho- or mesocephalism, predominantly average height.

The fold of the upper eyelid is poorly developed, epicanthus is absent. Body proportions are often leptosomal (asthenic). In the archival photo of 1910, where Franco is captured in military uniform, the facial features are physiognomically isomorphic to the portrait sample of representatives of the Indo-Mediterranean racial subgroup, presented in the educational and scientific study of S. Szegeda. Of the anthropological features of the structure of the face and body of Franco, dolichocephaly, dark skin, dark hair, leptosomal (asthenic) features of the build are expressed (from the descriptions of the authors cited below).

The pronounced frontal bald spots of the schizoid type according to Lowen are complemented in this photo by close-set eyes with a characteristic downward bend of the outer ends and protruding ears towards the outer contour. The correlation of close-set eyes with narrowly focused visual perception and predominantly command-oriented single-tasking is confirmed by the characteristics of Franco's contemporaries, in particular, the German ambassador to Spain, General Wilhelm Faupel, and the Italian ambassador, Count Ciano (Mussolini's son-in-law).

In addition to the narrow vision of the theater of military operations, the tendency to unconditional obedience, physiognomically correlated with the lowered outer corners of the eyes, was associated with Franco's intolerance of criticism and discussions, a peremptory command and authoritarian management style, which was transferred to non-military spheres, from which the latter were specifically deformed (*Franco con uniforme de alferez, 1910*). Wilhelm Faupel privately characterized Franco, noting his advantages as courage, energy, sense of responsibility, sympathy, which he evokes with his open and honest character. At the same time, Faupel notes Franco's unsuitability for leading operations on the scale of a civil war (*Casanova, 2010*).

Count Ciano points to the same deficiency in a holistic concept of war, stating Franco's ability to conduct military operations as a good battalion commander and the capture of territory as the main goal. Ciano is surprised at Franco's lack of understanding that a war can be won by destroying the enemy, after which (destroying the enemy) "the capture of territory becomes a fairly simple task." (*Морадіельос, 2022, 60-69; Бровко, 2002*).

The protruding/pressed ears as a physiognomic dichotomy correlates with the pre-tuning of auditory perception to the current or remembered (imprinted in long-term memory) auditory experience. In general, current experience in any instrumental activity (including military) is served by empirical (technological) thinking, which is exactly what Ciano's characterization of Franco corresponds to.

Franco, as a "good battalion commander," had the necessary tactical thinking, which, however, did not prevent him from becoming the youngest general in Europe and being honored with the wedding escort of Alfonso XIII. However, Franco was all the more valuable as a general precisely because he had made his career from the lowest levels, confirming his strategic military competence with the skills of impeccable observance of orders from the high command in subordinate positions.

Some authors (of non-scientific origin) believe that Franco ethnically belonged to the Sephardim (Spanish Jews), linking his Jewish origin, including his surname (Franco), which means "honest". Thus, V. Ostrovsky in an article published in the magazine "Migdal" writes the following about Franco:

"They started talking about Francisco Franco's Jewish origins immediately after the war - and we must give credit to the Spanish ruler, who was considered a fanatical Catholic: he never stopped these conversations.

And it would be absurd to stop them: the surname Franco, a number of researchers suggest, spoke for itself and sounded to the Sephardic ear approximately the same as Fishman or Grinshpun sound to the Ashkenazi ear. In Spain, Jewish surnames derived from the names of settlements were generally widespread. By the way, not only in Spain, among the Ashkenazi Jews there were many Vilnius, Kishinevs, Varshavskis and Podolskis...

Franco is the name of a settlement in Galicia, where many Jews lived. Among the equally common Jewish surnames derived from geographical locations are Medina, Cordova, Toledano (very common among the Sephardim in Israel).

His ancestors on both his mother's and father's sides served in the navy - though mainly as administrators and quartermasters: it was believed that a Maran could not be a combat officer. Finally, one of Franco's ancestors at the end of the nineteenth century acquired a certificate of "purity of blood", and since then the men of this family have been naval officers without any quartermaster admixtures. But even the more than a century-old certificate did not save Franco from a purely Semitic appearance and, in particular, from his characteristic nose.

A gloomy and sinister figure, a tyrant, a dictator, a generalissimo-caudillo looked older than his years. "He had an unpresentable appearance - short (157 cm), short-legged, inclined to be overweight, with a thin, shrill voice and awkward gestures. His German friends looked at Franco with amazement: Semitic features were clearly visible in his face. There were enough reasons: on the Iberian Peninsula, the number of Jews in the Cordoba Caliphate reached one eighth of the population..." (*Островский, 2008*).

The generalized characteristics of the Semitic ethno-anthropological features of Franco's face are supplemented by data from other researchers, in particular K. Hödl and the authors he refers to in his works. In particular, we are talking about the shape of the head, which resembles an inverted pear and pronounced bald spots in the frontal part of the face, a hooked nose, characteristically heavy eyelids, a "goose" chin with a double fold, which is especially noticeable in photographs of the 60-70s, a reduced earlobe and a characteristic tilt of the ear (deviation from a straight line in the profile projection of the face) (*Hödl, 1997, 212-230; Hödl, 2004; Presner, 2007*).

Separate non-verbal-communicative features of Franco's behavior. According to L.-S. Fernandez, a thin and squeaky voice, which was combined with the asthenic-thin build of the "major", as his colleagues called him, thereby emphasizing the microid nature of his height and build. Such auditory features accompanied underdeveloped oratorical skills. Franco did not possess the ability to impromptu public speech like the hysterical psychopaths Hitler and Mussolini, whose speeches turned into real shows for the crowds. Fernandez notes Franco's mainly animated ability to voice the text from a piece of paper and read it without looking up from the score.

As V. Brovko notes in his essay (*Бровко, 2002*) on Franco, "circumstances that were extremely important not only for him, but for the country as a whole intervened in the fate of the future leader of Spain. We are talking about the war that broke out in 1898 between Spain and the United States of America. This war also adjusted the biography of Francisco Franco: he had to part with his dreams of a naval career." As the author further notes, the Spanish-American War nullified the potential of the Spanish fleet, at the same time, the country's economic capabilities did not allow the state to restore it. This led to structural unemployment of naval officers and a collapse of state orders, respectively, tightening the conditions for admission to the naval academy.

The severity of the admission conditions predetermined Franco's father's choice in favor of the infantry academy. The father, apparently, quite realistically assessed the psychophysical capabilities of his son (short stature, physical weakness) and did not wait for better times. Franco himself did not object to his father's will, successfully passing the entrance exams and becoming a first-year cadet of the Toledo Infantry Academy at the age of 14.

V. Brovko writes: "The first acquaintance with the harsh life of the Alcazar was quite a difficult test for Francisco. The short, delicate to the point of fragility teenager was subjected to a lot

of ridicule from his comrades - for his height, which was less than 160 cm, and for the fact that among the more than 300 first-year students at the academy, he was the youngest. To top off the troubles, the commander of the cadet company gave a humiliating order for Franco to issue him a rifle for drill exercises shortened by 15 cm, which caused a storm of ridicule from his classmates. They began to call him Franquito, or Paquito. However, for Franco this was secondary. During the late Francoism, the peculiarities of Franco's non-verbal-communicative behavior became the subject of ridicule and symbolic protest. At the same time, as G.-R. notes, Ruiz, jokes about the caudillo's physical features, which could be laughed at, such as his high voice, were not very popular..."(Бровко, 2002).

In Franco's characterology, obsessive-compulsive components seem much more explicable, which were accompanied by ascetic behavior both in terms of relations with women and the absence of any deviations, including, among other things, a lack of interest in art. More common, due to the high voice, were irreverent comments that questioned the dictator's biological masculinity, as well as his sexual orientation. These expressions, which tried to insult his honor as a man, mainly took the form of curses and other popular expressions.

G. Ruiz describes one such insult in February 1965, uttered by an unnamed author "by a resident of Plasencia (Cáceres) while attending a party to celebrate the inauguration of the new mayor." The heavily intoxicated participant, in the presence of local authorities, declared that "Franco has no balls."(Ruiz, 2022, 177-179).

Another story described by the author took place in April of the same year (1965). Its participant was already a French citizen, who, while in a bar in Figueres (Girona) in the company of other Frenchmen, made fun of a photograph of the caudillo hanging on one of the walls of the establishment. Once outside, the Frenchman repeated three times that Franco was a "faggot." Despite the fact that there were few people around when he made these statements, he was sentenced by the Court of Public Order to six years in prison..."(Ruiz, 2022, 177-179).

Francoism in the stylization of women's clothing. Obsessive-compulsive manifestations as a continuation of Franco's Catholic religious and military professional identity were related to the ethical concern about the indecency and immodesty of women's clothing. In general, the history of censorship of women's clothing styles in Spain began much earlier and has numerous moralizing precedents in pro-Catholic literature.

The Catholic Church constantly exaggerated the topic of decency, modesty and propriety, and this exaggeration itself resulted in the release of pastoral letters, circulars, bulls, tabooing and stigmatizing immorality in women's clothing. It is easy to guess that the topic of moral purity, decency, moral concern about nudity and exposure has an obsessive-compulsive origin. Obsessive-compulsive symptoms manifest themselves in the desire to express anger/rage, which are under control, and compete with the fear of being punished for impulsively satisfying a forbidden need, which restrains anger/rage. In the psychoanalytic understanding, the cathectic motivation of the obsessive-compulsive personality competes with a powerful counter-cathexis in the form of repression, both external and subsequently internal (censorship) origin.

The researcher of the prehistory of Catholic moralizing of the Francoists Isidro Goma y Tomás in his work *Las modas y el lujo* (Fashion and Luxury) (Goma and Tomas, 1938, 43-50, 149-150) condemns the failure to maintain modesty in the stylization of women's clothing when choosing certain "cuts, fabrics, folds and colors, which the priests of fashion do, with the aim of defiling ... bodies and turning them into bait for sin". The author moralizes that modesty must be an internal quality, because it is "not enough" for a woman to appear modest; she "must be." "Modesty," the author argues further, "as a Christian virtue, is reflected in "decency in clothing," which, according to the moralist, runs the risk of "great lawlessness" on the part of the artist or stylist." The risk is that artists and stylists, as those who dress people, possess a special "art of undressing decency."

The above quotation is a value model for reproducing Catholic discourse on the stylization of women's clothing. Incidentally, the cited work underwent a number of reprints (1926, 1938) and became paradigmatic for school literature during the Franco period. Thematically, such publications were oriented towards stating the fact of the "decline in morals" of women, accompanied by the

corrupt aesthetics of Art Nouveau, oriented towards women's emancipation in everything, including clothing, as G. Di Febo points out in his work (*Di Febo, 2011, 126-147*).

The aesthetic leadmotive of the stylization of women's clothing for the Francoist regime was the restitution of Catholic censorship and the restoration of patriarchy as a gender order, which corresponded to the gender identities of Franco and his Falangist, Carlist, and National Integralist supporters. The religious and ideological management of the stylization of women's clothing through propaganda functioned as an instrument of symbolic repression (symbolic violence), intended to achieve the Catholic-understood "humility" of women and their restoration to the image of "sacrificial mother and housewife, limited to the domestic space."

Censorship of women's appearance covered a wider range of visual images than clothing, affecting other non-verbal communications, including the use of cosmetics, the stylization of hairstyles, gestures and pantomime, as well as bodily behavior, postures and expressions and, more broadly, physical self-perception and self-awareness. U. Otero-González (*Otero-González, 2021, 582-602*) in his article cites the code of "rules of female modesty" by Primate E. Pla y Daniel (1941-1968), which, in turn, was cited by other authors.

"1. Dresses should not be so tight as to provocatively expose the shape of the body. 2. Dresses should not be so short as not to cover the best part of the legs; it is inadmissible for them to end at the knee. 3. Low necklines are contrary to modesty, and there are some that are so daring that they can be gravely sinful because of the dishonest intentions they reveal or the scandal they provoke. 4. It is illegal not to cover the arm at least to the elbow. Those who always wear long sleeves that go below the elbow and cover the entire arm are highly commendable. 5. It is illegal not to wear stockings. 6. It is also against the law to wear transparent dresses or dresses with lace in places that should be covered. 7. Girls' skirts should reach to the knee, and those over twelve years old should wear stockings. 8. Boys should not show their bare thighs. 9. When going to church, it is necessary to wear long sleeves that cover the arm and forearm, with stockings and dresses that cover most of the legs, without low necklines or transparent fabric or lace. 10. Girls' teachers - especially religious ones - should know that the Sacred Congregation of the Council ... commands that they should not admit into their schools and convents those who wear less honest clothing, and that even if those already admitted do not make amends, they are to be expelled. ... 12. It is a sin against Christian modesty and honesty for men and women to bathe together; mixing — in bathing suits — during games or entertainment or wearing indecent and revealing bathing suits that hide from view the most elementary rules of modesty."(*Otero-González, 2021, 582-602*).

Visual analysis of phalangist symbols. Phalangist symbols are represented by the coat of arms, the flag of the phalanx, uniforms and anthem. Considering the meaning of the symbols that form the basis of the visual composition of the coat of arms, it is worth noting their agrocentric and pre-modern origin. The studied sources note that the yoke and arrows refer to the first two letters of the proper names of the Spanish king Ferdinand II of Aragon and Isabella II of Castile (YF) (*Haz y Yugo, 1933*).

Accordingly, the etymology of the words "yoke" and "arrows" (Spanish yugo) and arrows (Spanish flechas) should directly correlate the characters of the queen and king with their symbolization in the emblems. Isabella acted as the very "yoke" for Ferdinand, which was their long-term marriage (35 years), the result of which was the unification of Spain and preparation for the reign of Charles V of Habsburg (Carlos I). The question of the symbolism of the yoke is also raised in the plane of preserving pre-modern (feudal) vestiges, in particular, despotic forms of integration of class society (*Haz y Yugo, 1933*).

For this, Ferdinand put a yoke on the free in the literal sense of the word, using an armed organization of knights, called the "holy hermandad" (brotherhood). It is the hermandad that can be considered the prototype of the phalangist paramilitary formations. Initially a voluntary association, it later became a yoke imposed on the free knights, which allowed the king to fight the feudal fronde. Ferdinand's Caesarist monoreligiosity (the transformation of Spanish society into a society of pure Catholics) was combined with political multi-vectorism and maneuvering.

The image of this multi-vectorism was presented both by Ferdinand and by Franco, who, using dictatorial methods, asserted multi-directional geopolitics and was a technocratically oriented dictator in domestic politics. Technocracy in this sense did not mean recognizing the supremacy of the class of scientific and technical intellectuals (and intellectuals in general) in politics. Technocracy as performed by Franco meant the transformation of politics into something like military disciplinary practices. It became the same as Catholicism became during Ferdinand's reign, namely, Caesarean papacy.

The symbolism of a bundle of arrows as a variety of of the ruled force, which is an expression of the culture of the potestary medieval society, expresses the counter-reformation and counter-modernization characteristic of Spain. It is also worth paying attention to the fact that the image of Ferdinand itself reflects the static-despotic self-understanding of royal masculinity, since it is represented by a yoke. The image of Isabella is visualized as masculine-phallic and is a symbolic expression of the intentional-dynamic principle of the imperial policy of Spain (*Haz y Yugo, 1933*).

The authors of the article understand the yoke going before the plough as a symbol of national agriculture, that is, “the national field that feeds national life”. The bundle of arrows is interpreted by the Falangists in a fascist or fascist way as a bundle of “hearts, brotherhood, guild, union”, pathetically describing the iron arrowheads in connection with their forging by ancient fire, a symbol of war. Further, the national-unionist fantasy symbolically connects the yoke and arrows as a cross, since they “form a cross” and historically allude to the crusaders for the Falangists, since “every great company was a cross at the crossroads of times”.

This is followed by a very transparent symbolic allusion to the stimulation of the peasantry and other social groups with violence (although the stimulus is always near the yoke. The Latin-speaking peasants stimulated their bulls – near the neck – with an arrowhead on the end of a stick.” This whole interpretation ends with the construction of a connection between the past and the future, where the yoke (horizontal) represents the past, and the arrows (vertical) the future, as well as a phallogentric-pansexual analogy between the conquest of Spain and the conquest of a woman, whom “we will have to win back our country with arrows and love. With love. Violently” (*Haz y Yugo, 1933*).

In the coat of arms of Spain during the Franco period, Falangist symbolism appears in the restoration of some elements originally used by the House of Trastamara, such as the eagle of Saint John, the yoke and the knot. This stamp depicted a tetrad in which in the 1st and 4th quadrants Castile and Leon were replaced in the 2nd and 3rd by Aragon and Navarre, Ente en Point by Granada. The coat of arms is surmounted by an open royal crown placed on an eagle depicted on a sable, surrounded by the Pillars of Hercules, the yoke and the bundle of arrows of the Catholic Monarchs.

Franco's unconscious attraction to the heraldic elements of the Trastamara dynasty seems no coincidence, both in the context of his psychobiography and his set of ethnic identities. Franco, in his unconscious self-perception, was “twice illegitimate” (Lopez, 106-121): at the level of ethnic identities – as a descendant of the Marranos, at the level of family identities – as an unloved outcast son who became the black shadow of his father, a kind of container for negative projections. The third confirmation of Franco's “quasi-bastardism” was his marriage, which was in fact a misalliance from the beginning, in which Franco's wife, the all-powerful María del Carmen Polo y Martínez Valdés, actually became a “dictator over a dictator”, part of his internalized maternal censorship and mother-mentor, a substitute for the Virgin Mary.

Franco was under the influence of her shadow management, including in the sphere of public communications, since Carmen was not just a continuation of his Catholic mother for him, she was an image of the Spain that Franco conquered during the civil war and in the post-war period. And for her sake, he was ready to endure both the initial humiliations (*Ashford, 2002, 256-257*) (with which their relationship began in the premarital period), and toxic intrigues built on the involvement of male competitors in the circle of Franco's internal communications. It is worth noting that such involvement, as well as attempts to favor the involved relatives or friends (R.-S. Sunera, K.-A. Navarro, L. Carrero Blanco) were accompanied, according to a number of authors, by humiliating

comparisons of Carmen and Franco's personality with her potential favorites. The attributive and symbolic expression of the first and second is associated with a number of facts that are represented by socio-historical parallels in the history of Spain, in particular:

- Spain, along with Portugal and the Netherlands, was one of the first colonial states that deployed multi-vector and multi-continental colonial expansion (in Latin America and Africa, including the Middle East frontier, which remained a problematic borderland until the beginning of the 19th century). Franco implemented a course of multi-vector cooperation with the countries of the fascist axis, which, however, was emphatically ethnocentric and nationalistic, as opposed to fascist (on the emblem of the phalanx, crossed arrows come out from one center).

One of Franco's supporters, Manuel Azaña, back in 1933, not accidentally noted the futility of the very emergence of a fascist regime for Spain, given the presence of many fascist parties in Spain. The statement was not accidental for a regime that positioned itself as a military dictatorship, balancing between the extremes of clerical monarchical traditionalism and fascism, which implied cultural, political, and economic modernization of society (*Морадіельос, 2022б 164*).

That is, with the multi-directionality of the Francoists on forming alliances with the fascists, they, paradoxically, sought to maintain a certain nationalistic middle ground with an attributive set of "anti". Spanish Falangist nationalism, thus, turned out to be a fragile Bonapartist balance, consisting of anti-communism, anti-liberalism, anti-Masonry and a program for the protection of pre-modern social institutions with the help of a military dictatorship.

- King Ferdinand turned the Inquisition into an institution of political police, giving it extensive powers to interfere in the private lives of subjects, putting on them, in the literal (not figurative) yoke of numerous restrictions. At the same time, Franco managed to build a maneuverable system that was symbolically multi-vector, since it allowed the party to penetrate into the organs of state administration and amalgamate with self-organized communities and institutions. In this aspect, the counter-reformation and counter-modernization of the Francoist regime was manifested, which, with its symbolic presence in various informal and self-organized communities, "weighed down" (another yoke!!!) the life of these communities with its emissariat and its ideological censorship. At the same time, - as I. Saz emphasizes, - the "yoke" of the regime was symbolically consistently manifested in the fact that the "politics of prisons, churches and barracks" expressively dominated the "politics of the squares".

In the Falangist anthem "Facing the Sun" the text is constructed as an appeal to a beloved who has prepared her beloved for the sacrifice and farewell (the symbolism of the shirt embroidered in red, which refers to the blue shirt with the Falangist emblem described above).

A Falangist stands in line with his comrades under the "unperturbed stars" (a symbol of cosmic eternity and, at the same time, a cold and indifferent universe that contemplates his and his comrades' tireless work). Such anthropomorphic symbolization of the stars, their animistic presentation to listeners cannot but reflect the image of a cold and indifferent world, hostile to Spain, in which a conspiracy of Masons, communists and liberals reigns. Such an image of the world corresponded to the worldview of J.A. Primo de Rivera, and Franco himself, who in one of his few works entitled "Freemasonry" wrote the following on this subject:

"We do not attack English Freemasonry, it would interest us little if it were limited to the natural limits of the British Empire. We are not interested in its peculiarities, but in its desire to go beyond these limits. Freemasonry is an English product, just as communism is Russian. In other countries: in the United States and especially in France, it has acquired national characteristics, like communism in Yugoslavia. But just as the communists in France and Italy do only what their masters in Moscow tell them to do, the Spanish Freemasons carry out orders from London or Paris. No one can deny that Freemasonry has carried out active subversive activities against our Empire. It has achieved the expulsion of the Jesuits, which has caused great damage to our possessions in America. It organized a revolt in our colonies and turned our nineteenth century into an endless series of revolutions and civil wars. For England it was a means of dismembering an empire that was in their way, for France it was the best way of eliminating a rival on their southern border. Neither of these two countries ever needed a strong Spain. She had to be squeezed like a lemon to

achieve their goal. If someone considers this natural and humane, then it would be more logical, natural and humane to get rid of such "generous" friends, of the plague that they send upon us under cover of friendship. Never have Franco-English maneuvers done us more harm than when they were covered by a friendly smile. In international politics, friendship and sentiment mean nothing. Never has any country worked for the sake of others against its own interests. It is the current coin, and we must pay with it. And since every country has the right to self-defense, Spain, defending its independence and its national interests, must be wary of Freemasonry" (*Franko, 2003, 2*).

Francoism in the symbols of everyday life of Spanish society. G. Rozhdestvensky notes the cognitive dissonance that arose in his mind when visiting Spain, which arose due to the discrepancy between the stereotype formed by Soviet propaganda before his visit to Spain. The communist-oriented publicist managed to comprehend two features of Francoism in everyday life: its ideological indifference with pragmatic intolerance to left-radical ideologies, on the one hand, and its civil-integralist orientation, on the other hand. As the author writes in his journalistic essay "My Spain", before his visit to the country, the idea of Franco was quite demonized. The author imagined him as a "disgusting fascist", a "bloody caudillo" who had "placed half of the population of Spain in the dungeons of the Madrid prison of Carabanchel, and deprived the other half of any freedoms" (*Островский, 2008*).

Rozhdestvensky notes elements of a peculiar cult of personality of Franco as a dictator and absolute "master" of Spain. "In every institution, every tavern, his portrait hung". The real confusion of the visitor's consciousness occurred "in a large bookstore", where the author "discovered a complete collection of Lenin's works in Russian and Spanish". The Francoist regime, therefore, did not extend censorship to the sphere of spiritual production, while at the same time demonstrating political and police intolerance towards projects for the implementation of left-radical ideas (*Островский, 2008*).

Franco tried to show solidarity with his own victims, as well as with his supporters who fought on his side. He perceived them as Spaniards, and the Valley of the Dead serves as a symbolic confirmation of this. According to the dictator's plans, the Valley of the Dead was to become a monument to Spanish nationalism (national Catholicism) and amaze the public with its gigantic size. In the imperial and statist worldview of the Francoists, Spain became a real Golgotha, which is why the center of the architectural composition is a huge cross (150 m high, visible from a distance of 40 km) (*Solé, 2017, 3-21*).

The dictator's rather peculiar patriarchal-Catholic (largely Hispanocentric) identities manifested themselves in the sector of gender biopolitics and somatopolitics, where an ideological order was created for the corresponding normative discourses in the sphere of health.

In general, the cult of a healthy body, the propagandistic idealization of the image of a warrior-athlete, capable of feats, ascetically mobilized and workaholic-charged, seemed very important for the ideology of fascist regimes, including Francoism. The Francoists did not lag behind their satellite "colleagues" (fellow party members) from Italy and Germany in this respect, popularizing sports, physical education and other practices for raising the level of physical culture of the population as part of the national-integralist doctrine.

In Spain, biopolitics and somatopolitics, however, underwent a number of modifications in accordance with the gender culture and specific gender stereotypes of Spanish society. As S. Dunay notes in her study, "Spanish medical experts and intellectuals discussed the appropriate level of health necessary for Spaniards depending on their age, gender and health status. Many doctors retained a patriarchal bias in their approach to science, believing that biological determinism shapes gender in society. Through ideology and medical discourse on nutrition, Spanish culture was oriented toward women's physical health." (*Dunai, 2019, 161-165*).

It is worth noting that the extremely strict attitude to the forms and proportions of the female body had its source in court incidents. Thus, Joana of Portugal (the second wife of Enrique IV and the daughter of Duarte I and Eleanor of Aragon, the sister of the Portuguese king Afonso V the African) became pregnant by her lover in 1468. In order to hide the fact of pregnancy from Enrique, she decided to use a metal corset. This instrument of tortural aesthetics of the female body,

consisting of steel rings connected by bolts that covered the body from the chest to the lower abdomen, and pulled together all the bulges of the figure, for a long time became part of the female body image and technologies of normalizing female corporality in Spain.

Ten years later, Queen Isabella introduced the fashion for corsets for all her maids, obliging them by a separate decree to maintain ideal waist proportions (they should be no more than 32.5 cm in circumference, which was approximately equal to the circumference of a twelve-year-old girl's arms). From everyday wearing of corsets, 10 maids died in the first months of the decree. The decree was in effect until 1908.

The Spanish Inquisition became interested in the corset within the framework of its usual ideas about female "morality" in a misinterpreted Christian ethics. With the help of corsets, women were forced to hide the "sinful charms of the body" by flattening the figure, since a lush bust was clearly related to signs of physical temptation. In addition, girls were tied lead ingots at night to slow down the growth of their breasts. The level of physical torment can be imagined by imagining 25 kg of metal (that's how much the corset weighed) on the body of an eight- or nine-year-old girl. It is no coincidence that such corsets were compared to knight's armor. Wearing corsets not only prevented the normal development of the body, but also caused various diseases, ranging from skin diseases to displacement and/or compression of the liver and stomach, deformation of the ribs, and circulatory disorders.

These echoes of the aesthetics of the Middle Ages and the Proto-Renaissance during the Franco period began to appear in public publications for Spanish city women in hybrid discourses of ideological moralizing, medical mentoring, and consumerism in connection with women's weight-loss pills. A number of researchers cited by S. Dunay note the regime's peculiar "obsession with the female body, arguing that control and regulation of the human body was a form of biopower exercised by the totalitarian regime."(*Dunay, 2019, 161-165*).

The above statement could well be supplemented by the idea that the historical roots of cultural control of the female body can hardly be considered specifically Francoist. Moreover, the transformation of female body aesthetics into the mainstream of public media pursued entirely utilitarian goals - saving food during food crises. Therefore, the reasoning of the "expert pool", revolving around the topic of women realizing their feminine purpose through suitable pills, slyly concealed entirely pragmatic motives.

According to the Francoist patriarchs, Spanish women simply had to eat less during the period of food shortages. To this end, the Francoist media doctors and newsmakers turned the obesity problem into a rationalistic, moralistic wrapper around the hunger problem, and anxiety about female obesity into anxiety about food shortages. It got to the point where a certain K.-B. Soler called obesity such a serious global problem at the time that the only solution was to reduce world food supplies. This "empirical evidence" was immediately seized upon by Francoist activists, who began to popularize the campaign to reduce food consumption among women.

As S. Dunay notes, the Francoists' inquisitorial concern was aimed at a specific demographic group, namely middle-class Spanish women. The women's magazine *Menage*, published in Barcelona in the 1940s, periodically advertised diet pills from companies such as Sabelin. Advertisements for diet pills could be heard on the radio during women's programs. She, as the author notes, appeared in the women's sections of the leading newspapers of that time, since the strictly controlled economy, in the ideas of the Francoists, should correspond to an economical and restrained (thin) body shape (*Dunay, 2019, 161-165*).

Visual Reality in Everyday Stories of Franco's Spain. Everyday stories occupy a special place in identifying the symbolism of everyday life, the presentation of which makes it possible to obtain extensive empirical material for putting forward analytical hypotheses.

Thus, a Spaniard born in 1961 (he was only 14 years old when Franco died) describes the life of the village of El Carpio in the south of Spain, where living conditions were much worse than in Madrid and on the east coast. The author of the story notes the low level of motorization in the community, in which there were "only two or three cars", while "one belonged to the mayor, another to a rich man in the city, and another belonged to a policeman"(What was it...). Thus, "in

the countryside", the narrator concludes, "a car was a luxury that almost no one could afford" (*What was it...*).

The narrator concludes that the situation with cars in large cities such as Madrid or Barcelona differed from villages in favor of cities. The above leads to an analytical hypothesis regarding the rhythm of social time. Less mobile spatial structures also correspond to temporal settings of time dilation. But when time flows more slowly, people have the opportunity to reduce social distance and look at each other (with fewer people in a village compared to any city). Cobblestone streets also correspond to time dilation, which the narrator explains by the lack of need "to pave them if only a few cars drove along them," (*What was it...*). which is quite logical.

On the other hand, the visual culture of mass consumption in Spain at that time was in its infancy, if not to say completely absent. "In my village," the narrator notes, "there were more people who had a television than people who had a car, but still not everyone had one. In fact, when there was a big football match or something like that, people would gather in houses where there were televisions."

The emphasis in the sphere of mass consumption was connected with the radio. In general, radio as part of everyday culture is an internally-oriented communication tool and predisposes to internal dialogue and thinking, unlike television, which is externally-oriented to visual perception and predisposes rather to passive-receptive processing of information. In Spain in 1975, radio was accessible and everyone had it, so people usually entertained themselves with radio (broadcasts of football matches, soap operas and music of that time were carried out in radio format) (*What was it...*).

The author of the story also notes the patriarchal nature of Spanish society during the late Franco period, associating it with both the patriarchal organization of the family ("women did not work, they were just housewives, in the last period of Franco's regime there was a certain improvement in this regard, but at least in my city I did not notice it"), and with manifestations of intolerance towards religious or gender deviations (we are talking about homosexuality or atheism, which were subject to moral condemnation and, in rare cases, criminal repression). The storyteller explains this by the fact that "...you were not put in prison, but if you were, you kept silent about it (*atheism or homosexuality – Yu.R.*), because perhaps even your own family does not support you and turns away from you." (*What was it...*).

The detail about the influence of the Catholic Church is quite expected for the storyteller, which, however, should be attributed to ritual Christianity, that is, the catechism form of education that was practiced in Spanish schools. At the same time, the narrator draws attention to the juxtaposition of Christian and Falangist symbols, since "... in the classroom on the wall next to the blackboard there was a cross, and usually to the right and left of the cross there was also a portrait of Franco and one of José Antonio Primo de Rivera." (*What was it...*). Part of the political ritualism was the performance of Face to the sun (the Falangist anthem "Face to the sun") with raised hands before classes in schools, but the narrator notes that in his case "this was not so." (*What was it...*). Face to the sun was indeed taught, and apparently memorized, including in the 60s and 70s, but he "did not encounter this (*daily performance – Yu.R.*), but remembers that the Falangist anthem was sung on "important" days, but not every day." (*What was it...*). According to the example given by the storyteller (the performance of the anthem on November 20, the anniversary of the death of José Antonio Primo de Rivera), it seems that this refers to holidays that had clerical and/or political-ideological significance for the Francoists.

The appearance of industrial infrastructure objects in rural areas (the opening of a sugar factory with an abundance of jobs and stimulation of the city's economy), individual law enforcement relics from the Middle Ages, such as the civil guard, and the passive attitude of this very civil guard to meetings of communist party cells, serve as symbols in terms of changing the spatial-visual reality for the narrator. As the storyteller concludes, "in general, it would be possible to live comfortably, If we weren't talking about politics, but perhaps my verdict is so good because I'm talking about my experience from the late 60s to the mid 70s." (*What was it...*).

One of the narrators writes about the presence of the secret police on university campuses, where the latter carried out open repressive actions aimed at intimidating potential political opposition among students. According to the narrator, the police, in order to remind people who was in charge, would burst into a student café on campus and start beating students over the head with truncheons. The storyteller points to censorship in the field of printed materials containing critical statements about the authorities, as well as the excessive police presence and the severity of punishments, which, from his point of view, were consistent with the low crime statistics.

The narrator also notes the fact that the patriarchal Francoists were intolerant of wives leaving home without good reason. Wives who left their tyrant husbands could go to prison for this crime, which in Spanish was called "abandono del hogar" (*What was it...*). The issue was "failure to comply with economic and parental obligations" and the impossibility of "automatic dissolution of the marriage bond", as well as abandonment of the child, which did not release the spouse who did so from marital or parental obligations. The consequences of leaving home for women could include not only the loss of the benefits of the marriage union and the deprivation of parental rights in the event of the birth of children, but also imprisonment.

The description also noted the symbolism of student fees, which coincided with tuition (less than 50 US dollars per year), as well as the cheapness of lunches (A lunch of paella, a small amount of fish or meat, salad, bread and diluted wine cost less than the equivalent of 1 US dollar).

Conclusions. Franco's character as a recursion of his set of identities (primarily religious and professional - military) acted simultaneously as a reflection of the habitus of the military class of Spain, and a determinant of the regime he built, which combined the features of Catholicism and clerical integral nationalism. The features of the dictator's behavior presented in photo and video materials, as well as in the descriptions of various authors, create the necessary empirical basis for a fragmentary diagnosis of his character as an obsessive-compulsive narcissistic psychopathy with a strongly expressed narcissistic deficiency and peripheral signs of an oral-schizoid constitution. Such a multi-base character structure corresponded, on the one hand, to Franco's Jewish (Marrano) identities, on the other hand - to a set of Ibero-Mediterranean ethnocultural identities, expressed in the anthropological and physiognomic features of the dictator's appearance and observed behavior in different periods of his life. Franco's strategy of life activity reflected the results of the completed ethnocultural assimilation of his ethnic identities by the national-territorial (civil-state) identities of Spain, which received a specific refraction in the choice of Falangist symbols.

The unconscious motivational background of its choice was determined both by a number of generalized socio-cultural factors and by the psychobiographical characteristics of Franco, oriented towards the image of the Trastámara dynasty as a referential identity, including for the restoration of the monarchy in Spain. Franco the restorer himself perceived himself as a caudillo (leader) with monarchical powers received not in line with traditional monarchical legitimacy, but as a result of a new type of crusade (against the communists and liberals), which implied a counter-modernization understanding of the socio-historical mission of Spain in Europe.

Early Franco with his bodily-morphological features in characterology corresponds to the oral-schizoid type, which undergoes transformations in the direction of compulsive psychopathy in the course of military-expeditionary socialization in Africa, while maintaining a pronounced narcissistic deficit. The latter was conditioned both by the complex dynamics of the relations of Franco's ethnic subgroup with Spanish society and its ethnospecific defenses, and by object relations in the family, in which the experience of Franco's personality being devalued by his father and the idealization of his mother created the prerequisites for the specific suggestibility of the dictator on the part of his wife along the line of his positive mirroring. The misalliance of Franco and his wife in family identities turned into one of the prerequisites for the cronyism and favoritism of the late Francoist regime.

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DYNAMICS OF US-UKRAINIAN DEFENCE COOPERATION (2014-2021): FROM B. OBAMA TO J. BIDEN

ДИНАМІКА СПІВПРАЦІ США ТА УКРАЇНИ В ОБОРОННІЙ СФЕРІ (2014-2021): ВІД ОБАМИ ДО БАЙДЕНА

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Abstract. *The article is devoted to the study of the features of military-technical cooperation between Ukraine and the United States in 2014-2021. In particular, the volumes, nomenclature and goals of American military assistance to Ukraine currently, the main directions of bilateral defense cooperation are described in detail. It is determined that despite certain differences in approaches and emphasis in providing military assistance to Ukraine, the administrations of B. Obama, D. Trump, and J. Biden's administrations demonstrated consistency in logic and goals: Washington provided limited defensive military assistance necessary to deter Russia in the low-intensity conflict in Donbas. At the same time, the biggest qualitative breakthrough in the provision of military assistance occurred during D. Trump's term in office, when in 2017 the United States decided to supply Ukraine with a batch of Javelin ATGMs, thereby lifting the political taboo on supplying Kyiv with lethal weapons.*

Demonstrating continuity in the policy of military assistance to Ukraine, at the same time, to the administrations of B. Obama, D. Trump and J. Biden. Biden had different priorities. In 2014-2016 US military aid was limited to non-lethal means, with the aim of reducing the losses of the Ukrainian army in the conflict in the Donbass and not exacerbating escalation. The administration of D. Trump, along with the provision of lethal weapons, paid special attention to reforming the Ukrainian security sector. Instead, the Biden administration has identified strengthening Ukraine's naval capabilities as a priority in providing military assistance.

Key words: *conflict in Donbas, US-Ukrainian relation, military aid, security sector reforms, lethal weapons, deterrence of Russian aggression.*

Анотація. *Стаття присвячена вивченню особливостей військово-технічного співробітництва України та США у 2014-2021 рр. Зокрема, охарактеризовані обсяги, номенклатура та цілі американської військової допомоги Україні у цей період, основні напрями двостороннього оборонного співробітництва. Визначено, що незважаючи на певні відмінності у підходах та акцентах у наданні військової допомоги Україні, адміністрації Б. Обами, Д. Трампа та адміністрації Дж. Байдена продемонстрували наступність у логіці та цілях: Вашингтон надав обмежену оборонну військову допомогу, необхідну для стримування Росії у конфлікті низької інтенсивності на Донбасі. При цьому найбільший якісний прорив у наданні військової допомоги стався під час перебування Д. Трампа на посаді, коли у 2017 р. США поставили Україні партію ПТРК «Javelin», тим самим знявши політичне табу на постачання Києву летальної зброї.*

Демонструючи значний рівень наступності у політиці військової допомоги Україні, Б. Обама, Д. Трамп і Дж. Байден мали різні пріоритети у цьому питанні. При Б. Обамі військова допомога обмежувалася нелетальними засобами, маючи на меті зменшити втрати української армії у конфлікті на Донбасі та не посилювати ескалацію. Адміністрація Д. Трампа поряд з наданням летального озброєння особливу увагу приділяла реформуванню українського сектору безпеки. Натомість, адміністрація Дж. Байдена визначила пріоритетом у наданні військової допомоги посилення військово-морських спроможностей України.

Ключові слова: *конфлікт на Донбасі, американсько-українські відносини, військова допомога, реформи сектору безпеки, летальні озброєння, стримування російської агресії.*

Introduction. Following the tragic events of 2014, the annexation of Crimea and Russia's military conflict in the Donbass, the United States has become Ukraine's main security partner. Russia's aggression against Ukraine in 2014-2015 has forced the United States to face the fact of a sharp change in Moscow's policy in the post-Soviet space, forcing Washington to refocus its attention on Kyiv and rethink the quality of bilateral relations with it. On the one hand, US officials and experts considered the conflict in eastern Ukraine as a European problem that did not affect US strategic interests. At the same time, Russia's military actions threatened to undermine the European security order and destabilise NATO's eastern flank, which required an adequate response from Washington.

One component of the US response to these events was the expansion of Ukrainian-American defence cooperation. The military and technical assistance, training missions, and advisory support for security sector reforms provided by the United States in 2014-2021 made a significant contribution to strengthening Ukraine's defence capabilities and deterring Russian aggression.

In this context, it is relevant and useful to study the dynamics of defence cooperation between Ukraine and the United States. This will not only help to structure and summarise the experience of the new security cooperation between the two countries, but will also contribute to a better understanding of the logic and trends in the development of defence cooperation by the United States.

The purpose of the article is to analyze and characterize the main features, directions and achievements of Ukrainian-American security cooperation in the period 2014-2021.

Literature review. The issues of military-technical cooperation between Ukraine and the United States, despite their practical relevance after 2014, have not been fully covered and understood in the scientific literature. Most of the works of both domestic and foreign researchers either indirectly cover the defence cooperation of the countries within the framework of the consideration of Ukrainian-US relations, or focus on only one period, the cadence of B. Obama or D. Trump, and are descriptive in nature. Among the Ukrainian scientists who developed this topic, it should be noted M. Lymar, O. Ivasechko, P. Lopushanskyi, V. Tsyhaniuk, as well as experts V. Begma, V. Shemayev and D. Radov from The National Institute for Strategic Studies (NISS). In particular, M. Lymar (2017) looks at the dynamics of US military assistance to Ukraine and the internal US debate on the issue during the Obama administration. V. Tsyhaniuk (2021) highlighted the volumes and nomenclature of US military aid to Ukraine under B. Obama and D. Trump. Experts from NISS (2019) analysed the state and prospects of the U.S.-Ukraine bilateral security cooperation in such new areas as the purchase of American weapons, the reform of the defence industry and cybersecurity.

Recent work by American researchers Alexander Lanoszka and Jordan Becker analyses the policy of the United States and European NATO member states in providing military assistance to Ukraine in 2014-2021. They argue that throughout this period, the parameters of US military aid to Ukraine were determined by the desire to keep the military conflict between Ukraine and Russia within the Donbass (*Lanoszka & Becker, 2023*).

In this context, our contribution to the development of this topic will be an attempt to provide a broad aspect analysis of the development of US-Ukrainian defence cooperation during this period.

Main results of the research. Since the beginning of the Russian aggression and up to December 2021, the United States has provided Ukraine with more than \$2.5 billion in security assistance. The United States accounted for 92% of all military assistance Ukraine received from abroad during this period. At this, there was a tendency to a consistent increase in US military support. The bulk of it was directed through the US Department of Defense: 2014 – \$87 million, 2015 – \$103 million, 2016 – \$229 million, 2017 – \$152 million, 2018 – \$153 million, 2019 – \$253 million, 2020 – \$253 million, 2021 – \$338 million (Lymar & Tykhonenko). In addition, a quarter of the funds provided by other US government agencies were also used for security projects. 80% of US security assistance was directed to the needs of the Ukrainian Armed Forces, while the remainder was used to support the State Border Guard Service and the National Guard of Ukraine. American aid represented 5-6% of Ukraine's military budget at that time and did not fundamentally change the balance of power in Donbass, but it was important from a geopolitical and technical point of view.

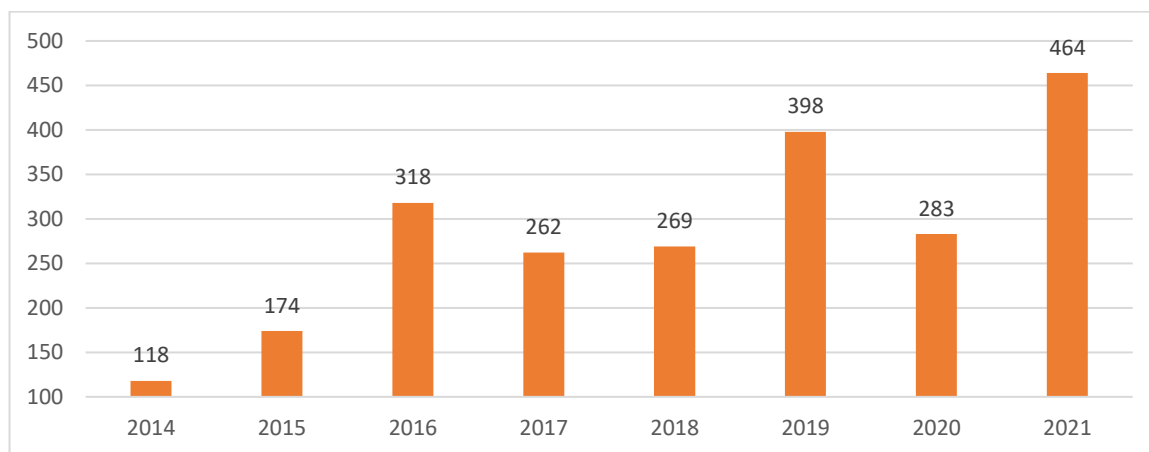


Figure 1. US the security assistance to Ukraine in 2014-2021, in \$ million
Source: Defense Express 2021

During this period, US military assistance was providing to Ukraine through 12 international programmes, but more than $\frac{3}{4}$ of the funds, equipment and machinery were provided through two programmes - \$1.35 billion under the Ukraine Security Assistance Initiative (USAI) and \$720 million under the Foreign Military Financing (FMF) programme.

The 2015 US National Security Strategy defined Russia as an aggressor that had grossly violated Ukraine's territorial integrity and international law, fuelled conflict in a neighbouring country, and therefore needed to be deterred. The document clearly emphasised the need to assist Ukraine, Georgia and Moldova in strengthening their defence capabilities and to increase the US military presence in Central and Eastern Europe to deter further Russian aggression (Tyutyunnik, 2022).

Despite the differences in approach to military assistance between B. Obama and D. Trump, the general philosophy of Washington's actions in this area remained constant. The United States provided Ukraine mainly with weapons and equipment that the Ukrainian government could not produce or purchase in the short term, but which were necessary to deter Russian aggression. In addition, the United States, along with Canada and the United Kingdom, provided training missions for NCOs and officers and expert advice on defence and security sector reform. In the long term, these measures, along with military supplies, were intended to strengthen the army's defensive capabilities to the point where Ukraine could effectively counter Russian aggression.

In 2014-2016, the US government allocated \$1.4 billion to Ukraine, of which security assistance amounted to about \$630 million. US military assistance during this period included a wide range of non-lethal military equipment – counter-battery radars, Harris secure communication systems (more than 300 Falcon-III radio communication stations), Humvee multi-purpose army off-road vehicles, mine-clearing equipment, RQ-11 Raven unmanned reconnaissance vehicles, military

ammunition (thermal imagers, night vision devices, equipment for divers), cartridges for certain types of small arms, as well as instructional missions and various rehabilitation projects for Ukrainian soldiers. Since 2015, 160 American instructors have begun conducting training missions for Ukrainian servicemen at the Yavoriv military training area. The training missions by the United States and other partners were designed to train Ukrainian soldiers and junior officers with combat experience in modern tactics and skills. In addition, projects have been implemented to create a simulation centre in Yavoriv (\$22 million) and to build a Ukrainian naval operations control centre in Ochakov (\$25 million).

Table 1. Main types of non-lethal US military assistance to Ukraine in 2014-2016

Year	Name	Quantity
2014	Body armour	2 000
	Armoured off-road vehicles	35
	Camouflage jackets	3 600
	Medical aid kits	1 500
	Anti-mortar radars	20
	Sleeping sets	1 000
	Dry rations	330 000
	Uniforms	3 200
2015	Covers and helmets	1 000
	Armoured off-road vehicles	147
	Military field hospital	1
2016	Boats	5
	Unmanned aerial vehicles	72
	Medical vehicles	40
	Armoured off-road vehicles	13
	Night vision devices	2 500
	Radar systems	14
Radio stations	more 300	

Source: (Tsyhaniuk, 2021)

The Ukrainian government has also involved American think tanks in the process of reforming the defence sector. In particular, in 2015-2016, experts from the Rand Corporation participated in the development of a national security policy document and a strategy for the reform of the Ukrainian Ministry of Defence and the Ukrainian Armed Forces based on Western models. In addition to supplying equipment and supplies, the United States facilitated the establishment of military-technical cooperation between Ukraine and a number of Eastern European NATO countries. The problem was that the Ukrainian military-industrial complex was historically dependent on cooperation with Russian companies and could produce no more than 8-10% of the products needed to equip the armed forces on its own. After the outbreak of the conflict in Donbass, military cooperation with Russia was drastically curtailed. International cooperation with Lithuania, Estonia, the Czech Republic, Slovakia, and Bulgaria (with US support) allowed Kyiv to obtain components, materials, and technologies for repairing and modernising Soviet- and post-Soviet-made military equipment.

Russia's aggression against Ukraine has also become a catalyst for a significant increase in cooperation on joint military exercises. Traditionally, the two key events in this area have been the

Rapid Trident land exercises at the Yavoriv training area and the Sea Breeze naval exercises. In the 2014-2021, their scope has steadily increased. In particular, in 2014, the Rapid Trident exercise brought together nearly 1,200 servicemen from 15 countries, including 600 officers from the Ukrainian Armed Forces and 200 US servicemen. In 2015, these exercises brought together more than 1,800 military personnel from 18 countries, and in 2016 - 1,832 military personnel from 13 countries (*Prohovnik, 2020*). These annual exercises have become an effective complement to the large-scale training missions conducted by the United States, the United Kingdom and Canada during this period.

The scale of the Sea Breeze naval exercises has also increased since 2014. For Ukraine, which lost up to 80 per cent of its navy as a result of the annexation of Crimea, they have become an important deterrent to Russia in the Black Sea. In 2014, almost 2,000 servicemen and 13 ships from 10 countries took part in Sea Breeze, in 2015 - 2,500 servicemen and 18 ships from 13 countries, and in 2016 - more than 3,100 servicemen and 26 ships from 16 countries. It is worth noting that all countries of the Black Sea region (except Russia) and leading Western countries participated in the meetings, demonstrating clear international support for Ukraine and concern about Russia's growing influence in the region.

Traditionally, Ukraine, as a co-organiser of the exercises, provided the territory and military infrastructure, while the United States covered the cost of the exercises. The cost of organising a Rapid Trident / Sea Breeze exercise was \$4-4.5 million.

The B. Obama administration's position on the supply of lethal weapons to Kyiv, with the exception of small batches of light small arms, remained generally negative. Although the government of A. Yatsenyuk had already asked Washington to provide weapons and ammunition in April 2014, at the beginning of the Russian aggression in Donbass. In the years that followed, the Ukrainian government made several requests to the United States for lethal weapons, but each time received a diplomatic response that 'this issue is open but not yet urgent'.

It is worth noting that many leading administration officials, including Vice President J. Biden, Secretary of State J. Kerry, his deputy for European and Eurasian affairs V. Nuland, Secretary of Defence E. Carter and Supreme Allied Commander Europe F. Breedlove, advocated providing Kyiv with lethal weapons. In their view, such a move would send a strong signal of support to Ukraine, raise the cost to Moscow of further escalating the conflict, and act as a deterrent (Lymar 2017). Instead, National Security Adviser S. Rice and B. Obama himself feared that such a decision would push Russia to escalate and reduce the chances of a political settlement.

At the legislative level, the US Congress expressed its position on Ukraine in December 2014 in the Ukraine Freedom Support Act. In addition to postulates supporting the territorial integrity and sovereignty of Ukraine, the document contained recommendations to increase sanctions pressure on Russia, expand non-military assistance and provide Kyiv with anti-tank weapons.

The coming to power of the Trump administration in the United States marked the beginning of a new phase in Ukrainian-American relations. Despite some reduction in security assistance to Ukraine and his controversial statements on Ukraine during his first two years in office, bilateral defence cooperation has grown significantly.

Washington continued to provide expert assistance in implementing security sector reforms. American officials began to place more emphasis on defence industry reform, considering it more important than equipment transfers. The Ukrainian Ministry of Defence had a group of US advisers consulting the military leadership on institutional reform of the MoD and the armed forces (strategic planning, military education and medicine, and management structure). The number of US advisers to the MoD doubled in 2017-2020 and at the beginning of 2021 stood at 16 (Orlyk 2021).

In January 2018, a US representative, E. Teter, was appointed to the Supervisory Board of Ukroboronprom under the quota of the Cabinet of Ministers of Ukraine to advise the company's management on corporatization and development strategy. He retained his position after President Zelenskyy came to power.

In February 2019, at the request of the Ukrainian leadership, the United States sent a group of experts from the Institute for Defence Analyses. The group was headed by the US Senior Advisor on the Reform of the Ukrainian Defence Industry, former Minister of the Navy D. Winter. His responsibilities included the reform of the military-industrial complex, including the transformation of Ukroboronprom, military assistance and Kyiv's purchases of US weapons. Also in 2017-2018, the Jamestown Foundation developed for the Ukrainian Navy the concept of building a "mosquito fleet" to deter Russian aggression in the Black and Azov Seas, and its representatives became regular guests at the Lviv and Kyiv security forums.

In addition, in September 2016, the Defence Reform Advisory Board (DRAB) was established under the Ministry of Defence of Ukraine as an advisory body. It includes the heads of the MoD, the Armed Forces and high-level strategic advisers from the US, Canada, the UK, Poland, Germany and Lithuania. The United States delegated General (retired) J. Abizaid to the Committee. He headed the group of strategic advisers to the MoD and served on the Committee until November 2018, when he was replaced by Lieutenant General (retired) K. Dayton.

However, the main difference between the Trump administration and its predecessors in this regard was the change in approach to military assistance. The Republicans rejected warnings that providing Ukraine with lethal weapons would provoke Russia to escalate military action in Donbass. 22 December 2017. The White House announced a decision to lift the embargo on the supply of lethal defensive weapons to Ukraine. In March 2018, the US supplied Ukraine with 37 FGM-148 Javelin ATGM launchers and 210 missiles for \$47 million. In total, in 2017-2020, the United States transferred two batches of Javelin ATGMs to the Ukrainian Armed Forces as military aid (\$47 million and \$39 million) and sold one batch under a contract with the Ministry of Defence of Ukraine (*Lymar & Tykhonenko, 2022*).

US military assistance in 2017-2020 increased significantly in terms of nomenclature. It included Javelin ATGMs, counter-battery radars, anti-mortar radars, Harris radios, automated troop management systems, Humvee army off-road vehicles, diving and demining equipment, cybersecurity equipment, spare parts for vehicles, ammunition (night vision devices, thermal imagers), and medical equipment.

In 2019, the United States handed over two Island patrol boats to Kyiv. In July 2020, the Trump administration decided to provide Ukraine with 16 Mark VI warships worth \$600 million. Six of them were to be given to Kyiv as military aid, while the Ukrainian government could purchase the rest at its own expense. Ukrainian authorities have also received permits from the US government to purchase batches of Barrett M82 and Barrett M107 sniper rifles and PSRL-1 grenade launchers from US manufacturers. All of this allowed D. Trump to say that 'I am the one who gave Ukraine offensive weapons and anti-tank systems. Obama did not. He sent pillows and blankets' (*Tolstov, 2019*).

During the Trump administration, Ukrainian-American cooperation in the field of joint military exercises developed at a consistently high level. In 2017, 2,500 military personnel from 15 countries took part in the Rapid Trident exercise at the International Peacekeeping and Security Centre at the Yavoriv training range, in 2018 - more than 2,200 military personnel from 14 countries, and in 2019, the exercise brought together about 3,700 military personnel from 14 countries. In 2020, more than 4,000 military personnel from 9 countries took part in the exercise.

In parallel, the Ukrainian-American Sea Breeze exercises were held annually. In particular, in 2017, more than 3,000 servicemen and 31 ships from 16 countries took part in the exercise, in 2018 - 2,700 servicemen and 29 ships from 19 countries, in 2019 - more than 3,000 servicemen and 32 ships from 19 countries. More than 2,000 personnel and 23 ships from 9 countries participated in Sea Breeze 2020, but due to the coronavirus pandemic, the exercise was limited to the maritime phase (*Prohovnik, 2020*).

The United States also increased funding for the training of command (sergeants and senior officers) and managerial personnel for Ukraine under the International Military Education and Training Program (IMET). Under this programme, about 400 Ukrainian military were educated at

US military training institutions in 2014-2021. The US government spent \$19.7 million for these purposes. By comparison, Ukraine received \$16 million under IMET in the period 1993-2013.

Cybersecurity has become a new direction of defence cooperation between countries. After 2014, both Ukraine and the United States were regularly subjected to cyber-attacks by the Russian Federation. Russian hackers carried out attacks on information systems of state authorities, critical infrastructure facilities and banking institutions. Therefore, the first US-Ukrainian interagency consultations on cyber security took place in Kyiv in September 2017. As a result, the United States began providing assistance to Ukraine to strengthen the cyber capabilities of government agencies (*Begma, Shemayev & Radov, 2019*). The second and third rounds of consultations were held in 2018 and 2020. In total, in 2017-2020, the US government allocated up to \$20 million to Ukraine for cybersecurity projects, including training of Ukrainian specialists, advisors, and equipment for the Cyber Threat Response Centre

The Biden administration began its term with a focus on defence cooperation. For 2021, the US Congress approved \$728 million in aid to Ukraine, of which \$250 million was traditionally military assistance under the Ukraine Security Assistance Initiative (USAI) program. Of these funds, \$75 million were intended for the supply of lethal weapons. After coming to power, the Biden administration increased the amount of military aid by another \$25 million.

It should be noted that within the planned \$250 million, significant emphasis has been placed on strengthening Ukraine's naval capabilities. 1 March 2021 The US Department of Defense announced \$125 million in military assistance to Ukraine, including two additional Mark IV patrol boats, 10 high-speed boats and more than 150 inflatable boats for the navy, 55 Humvee army off-road vehicles, counter-artillery radars, military medical and tactical equipment (*Ivasechko & Lopushanskyi, 2023*). The US Department of Defense has awarded SAFE Boats International three contracts worth approximately \$130 million for the construction of ten Mark VI combat patrol boats for the Ukrainian Navy. 11 June 2021 The Pentagon announced the provision of the second part of military aid to Ukraine in the amount of \$150 million. It included Javelin anti-tank systems, counter-artillery radars, communications equipment, small arms, counter-UAV systems, military training and consulting support for security reforms. Also under USAI, in November 2021 the United States transferred two Island patrol boats to Ukraine.

Another \$478 million in U.S. aid for 2021 were intended to support reforms and implementation of projects in the field of security, economic development, public administration, energy, medicine, education and humanitarian assistance. Of these funds, \$115 million was provided under the State Department's Foreign Military Financing program and included the supply of special equipment, vehicles, secure communications equipment to strengthen border protection, UAVs, ammunition, medical and tactical equipment. A \$12 million project was launched to build a Maritime Guard Rapid Response Centre in Odessa. In addition, \$10 million was provided under the non-proliferation and counter-terrorism program, and \$20 million for measures to improve nuclear safety in Ukraine.

The US Congress has taken a more active stance on the development of bilateral defense cooperation. In March 2021 a group of senators introduced a bill on partnership with Ukraine in the field of security (Ukraine Security Partnership Act), which determined the main parameters of long-term military and diplomatic support to Kyiv for the period 2022-2026. All six authors of the document, Republicans R. Portman, J. Barrasso, J. Risch and Democrats B. Menendez, C. Murphy, J. Shaheen was a member of the Senate Ukraine Caucus. The bill contained the following proposals:

- appoint a US Special Representative for Ukraine, whose tasks will be to participate in the Normandy format negotiations and promote dialogue between the countries of the Black Sea region;
- to provide Ukraine with military assistance, including lethal weapons, worth \$300 million annually until 2026;
- reporting by the US Secretary of State to Congress on support for Ukraine during the next five years;

- provide annually up to \$4 million for the training of the Ukrainian military under the International Program of Military Education and Training (IMET).

Ukraine Security Partnership Act did not offer fundamentally new approaches or projects. Rather, it was intended to consolidate at the official level the course formed in previous years to strengthen the defense cooperation of countries. At the same time, it was never considered by Congress.

On 31 August - 2 September, President of Ukraine V. Zelenskiy paid a working visit to the United States, where he met with President J. Biden, Secretary of Defense L. Austin, Secretary of Energy J. Grenholm, members of the Ukrainian Caucus in Congress. The visit took place against an extremely unfavorable backdrop - the shameful and hasty withdrawal of the US military from Afghanistan, where the Islamist Taliban movement had seized power. On the eve of the visit, the White House announced the allocation of additional security aid to Ukraine for \$60 million, which included 30 Javelin anti-tank systems and 180 missiles, small arms, communication equipment, military training.

As part of the visit on 31 August, the Ministers of Defence of Ukraine and the United States A. Taran and L. Austin signed a Framework agreement on the strategic foundations of defense partnership between the ministries. In it, the parties announced their intention to strengthen the partnership in such areas as reforms in the defence sector in accordance with NATO standards, training and exercises, security in the Black Sea region, cyber security and cooperation between intelligence agencies (Armyinform 2021).

Another signal of Kyiv's support became the multinational military exercises "Sea Breeze" and "Rapid Trident" in Ukraine, which took place in July and September 2021. They became the largest in the history of their conduct. The Sea Breeze-2021 exercises in the Black Sea involved 5000 troops and 32 ships from 32 countries. In turn, more than 6,000 soldiers from 15 countries practiced active defence and offensive tactics at the Yavoriv training area in the Lviv region as part of the Rapid Trident-2021 land exercises.

In general, the administration of J. The Biden administration at the end of its first year in office did not seek to increase defense cooperation with Ukraine, considering the level achieved sufficient. For 2022, Congress approved \$756 million in assistance to Ukraine, including \$459 million in security assistance (Report 2021). 300 million was earmarked for the USAI program (including \$75 million for lethal weapons) and \$115 million for Ukraine under the Foreign Military Financing program.

Conclusions

After 2014 the United States has become Ukraine's most important security partner. During 2014-2021 US-Ukrainian defence cooperation has gradually expanded. Had started with non-lethal weapons and equipment, it expanded after the Trump administration came to power, including cooperation in the field of cyber security, security reform and the provision of lethal defensive weapons (Javelin anti-tank systems, combat patrol boats). At this, the general philosophy of providing American military assistance throughout this period remained constant: the United States provided Ukraine with those weapons and equipment that were necessary to deter Russian aggression in the Donbas, but at the same time did not significantly affect the balance of forces in conflict.

US presidential administrations in 2014-2021 prioritized military assistance to Ukraine in different ways. Under B. Obama, only non-lethal military assistance was provided to minimize the losses of Ukrainian forces on the demarcation line in Donbas (anti-mortar and counter-battery radars, protective gear and equipment, communication facilities). Having provided lethal weapons and increased military aid, the Trump administration focused at the strategic level not on the transfer of equipment but on reforming the Ukrainian security sector, particularly the military-industrial complex. In Washington's view, this would enable Ukraine to produce more of its own weapons and strengthen defence capabilities. In turn, at the beginning of its work (2021), the Biden administration focused on strengthening Ukraine's naval capabilities in providing military assistance to Ukraine.

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A NEW DIMENSION IN SOMALI-TURKEY RELATIONS: WHY SOMALIA SEES TURKEY AS A SECURITY PARTNER?

НОВИЙ ВИМІР У СОМАЛІЙСЬКО-ТУРЕЦЬКИХ ВІДНОСИНАХ: ЧОМУ СОМАЛІ РОЗГЛЯДАЄ ТУРЕЧЧИНУ ЯК ПАРТНЕРА У СФЕРІ БЕЗПЕКИ?

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Abstract. *Sub-Saharan Africa is one of the regions characterized by civil wars, terrorism and instability. This situation has required countries in this geography to identify strategies and take various measures to protect themselves from risks and threats. Security and stability in the region are of great importance for the Somali state, which is located in the Horn of Africa and in today's conjuncture, both fighting against terrorist organizations such as Al-Shabaab, which continue to exist in the region, and trying to counter piracy activities on its coasts opening to the Red Sea and the Indian Ocean. In this context, Somalia has chosen Turkey, with which it has positively deepened its relations, as its strategic security partner among many dominant actors in the region against potential risks in the region and has given Turkey an effective mission for the security and stability of its coasts with the new 'Defense and Economic Cooperation Framework Agreement' signed in February 2024. At this point, this article will mainly focus on why Somalia, grappling with security challenges in the Horn of Africa, has embraced and favoured Turkey as a strategic partner and ally, and will also examine the putative relationship dynamics that led to the signing of a new agreement. By addressing these dynamics from a historical perspective and analyzing Somalia's security needs, this study will also examine the dynamics behind Turkey's important role in Somalia and try to analyze the dynamics behind Turkey's important role in Somalia's coastline in line with the question of why Somalia sees Turkey as a security partner.*

Keywords: *Somalia, Turkey, Security Partner, Defense and Economic Cooperation Framework Agreement*

Анотація. *Підсахарська Африка є одним із регіонів, який характеризується громадянськими війнами, тероризмом і нестабільністю. Ця ситуація змусила країни цього регіону розробити стратегії та вжити різноманітних заходів для захисту себе від ризиків і загроз. Безпека та стабільність у регіоні мають велике значення для Сомалі, яка розташована на Африканському Розі та в сучасному контексті веде боротьбу як проти*

терористичних організацій, таких як Аль-Шабааб, що продовжують існувати в регіоні, так і проти піратських дій на її узбережжях, що виходять до Червоного моря та Індійського океану. У цьому контексті Сомалі обрала Туреччину, з якою вона позитивно поглибила свої відносини, як свого стратегічного партнера з безпеки серед багатьох домінуючих акторів регіону для захисту від потенційних ризиків і надала Туреччині важливу роль у забезпеченні безпеки та стабільності її узбережжя в рамках нового 'Рамкової угоди про оборону та економічне співробітництво', підписаної у лютому 2024 року. У цьому дослідженні основну увагу буде приділено тому, чому Сомалі, яка бореться з викликами безпеки на Африканському Розі, вибрала та віддала перевагу Туреччині як стратегічному партнеру та союзнику, а також будуть розглянуті передумови, які призвели до підписання нової угоди. Вивчаючи ці динаміки з історичної точки зору та аналізуючи потреби Сомалі у сфері безпеки, дослідження також спробує проаналізувати важливу роль Туреччини у забезпеченні безпеки сомалійського узбережжя через питання, чому Сомалі вбачає в Туреччині партнера з безпеки.

Ключові слова: *Сомалі, Туреччина, Партнер з безпеки, Рамкова угода про оборону та економічне співробітництво.*

Introduction. Somalia, geographically positioned with the Indian Ocean to its east and south, the Gulf of Aden to its north, and its proximity to the Red Sea, is one of the most strategically important countries in the Horn of Africa. While this situation is perceived as an advantage for Somalia, it has also brought various and multidimensional challenges for both the Somali state and its people throughout history. At this juncture, Somalia's strategically significant position has attracted the attention of various international actors over the course of history, leading it to be seen as a country over which they seek to exert influence in various ways. Especially since the dawn and intensification of colonialism and imperialism worldwide, Somalia, targeted by powerful actors within the axis of imperialism, has been worn down and exploited in various ways due to its inherent values. Despite declaring its independence in 1960, Somalia has given the impression of a country trying to struggle with the problems from the past and the unstable and weak structure within the country and trying to make its own destiny and existence sustainable in the geography where it is located. This situation in Somalia has caused it to be seen in the international system as a country that often needs the support of foreign countries. In this context, Turkey stands out as an actor that has largely redirected its focus towards the African continent, particularly Somalia, through its 'Africa Opening' foreign policy doctrine established in 1998 with the aim of expansion and globalization in its foreign policy agenda, followed by various actions taken towards the continent. Especially since 2011, Turkey has approached Somalia as an actor seeking to develop its relations with Somalia and deepen its historical ties, emphasizing its support to the Somali government and people in humanitarian, economic, political, and military aspects, with the aim of fostering stability in Somalia in every sense. In this respect, Turkey's positive steps towards Somalia and the various supports it has provided to the region within the framework of a constructive approach have been welcomed by Somali rulers. This has resulted in Somalia's increased interest in and sympathy for Turkey as well as being seen as a partner. Similarly, the relationship dynamics between the two actors, which started in 2011 and gradually gained momentum, continued to diversify in the following years and created a new area of cooperation in terms of military and security, especially with the opening of a military base in Mogadishu in 2017. At this point, Turkey's military and security support to Somalia, both in the resolution of past instabilities and in response to the security problems in various fields that Somalia needs today, has further expanded and gained new dimension with the "Defense and Economic Cooperation Framework Agreement" signed in February 2024.

The Purpose of article is to examine and analyze the dynamics behind Somalia's perception of Turkey as a strategic partner in line with the main research question "Why does Somalia prefer Turkey as a security partner?". To answer this research question, the first section will examine various historical milestones that have been important in the development and deepening of

relations between Somalia and Turkey based on the existing literature review and analyze the relationship networks established between both actors from the past to the present. In the second part of the study, various security needs that pose risks and threats to Somalia in its efforts to build a stable state in the Horn of Africa will be analyzed. In this way, it will be analyzed what are the security needs that Somalia faces in its geography and how they affect Somalia. In the third and final part of the study, in connection with both the second part and the research question, it will be analyzed why the Somali State considers Turkey as a security partner and the dynamics behind the perception of Turkey as a partner will be evaluated and the causal motivations for the preference of Turkey by Somalia will be discussed.

Literature review. The interaction between Somalia and Turkey has been addressed especially with historical dimensions and there are various studies on Turkey's opening to Africa. In this regard, the interaction and relations between Turkey and Somalia were largely superficial before the 2000s, and relations were generally tried to be established through diplomatic contacts that took place in small amounts. However, even in this process, Turkey has been an actor following the developments and events in Somalia. Somalia, located in the middle of the Horn of Africa, was ruled by Mohamed Said Barre for 22 years, but in the last years under his rule, protests and demonstrations by opponents of the government grew and sparked a civil war. This led to many problems within the country, including famine, and the conflict and political crisis within the country made itself felt for a long time. (*Şen, 2019, p.219*). At this point, it has been observed that Turkey has tried to make direct or indirect contributions to various efforts both to find solutions to the problems in Somalia and to end the ongoing conflict in the country and to stabilize the country. At this point, Turkey's relations with the African continent and the countries in the region started to gain momentum with the Ak Party(AKP) government that came to power with the change of government in Turkey in the early 2000s. Turkey, which had turned its foreign policy towards the West in the previous period, has been in various initiatives towards the African continent since 2002 and has taken various steps to develop and deepen its relations with the countries in Africa. In this context, the AK Party, which came to power after 2002, made a significant move by declaring the year 2005 as the 'Year of Africa,' thereby accelerating the implementation of the 'Africa Opening Action Plan' adopted in 1998 to expand Turkey's influence both regionally and internationally. (*Firat, 2009, p.4*). In this regard, the concrete and practical implementation of the foreign policy adopted by the AK Party in power during this period can be exemplified by Turkey's relations with Somalia, which can be seen as a strategically important country in Sub-Saharan Africa (*Sıradağ, 2017, p.700*).

At this point, the official visit to Somalia in 2011 holds significant importance in the relations between the two actors. In this context, then Prime Minister Erdogan, accompanied by important figures such as his wife Emine Erdogan, the Minister of Foreign Affairs, the Minister of Family and Social Policies, and the Minister of Agriculture and Livestock, conducted an official visit to Somalia in 2011. (*Şen, 2019, p.221*). Another significance of this visit is the fact that since the beginning of the civil war and turmoil in Somalia, no other state, except Turkey, has paid a visit to Somalia with the status of prime minister. (*Şen, 2019, p.222*). Moreover, the fact that Turkey was the first country to open its diplomatic mission in Somalia in this period was seen as an important development in terms of developing mutual dynamics as an indicator of the importance it attaches to Somalia. (*Sıradağ, 2017, p. 700*). At this point, it is possible to say that this visit, conducted in that year, played a crucial role in the development of Turkey's relations with Somalia and the construction of bilateral dialogues.

Similarly, another significant event that contributed to the strengthening of interaction and communication between Turkey and Somalia was evident during the famine crisis that greatly affected Somalia in the summer months of 2011. In response to the outbreak of famine in Somalia, Turkey has made efforts to help the heavily affected Somalia and has tried to alleviate the burden of the famine on the Somali people, both by providing financial support and by sending personnel to help resolve the humanitarian crisis. (*Şahin, 2021, p.111*). Additionally, Turkey, in its efforts to strengthen ties with Somalia, has strived for the sustainability of its activities in the region during

this period, emphasizing that the endeavors were not only aimed at combating the famine in Somalia but also at addressing the longstanding imbalance in the political structure of the region and the resulting instability. Turkey's efforts and aid initiatives during this period have been positively received by the Somali people, leading to their embrace of Turkey, and showing interest in it. (Bingöl, 2013, p. 82). In the subsequent years after 2011, Turkey continued to extend a helping hand to Somalia and diversified its support efforts. In this context, particularly from this year onwards, Turkey, under the leadership of the Turkish Red Crescent (Kızılay), continued to provide health and hospital services to Somalis and sustained its support to them. Subsequently, the interaction between Turkey and Somalia took on a new dimension, with military relations increasingly becoming one of the most important areas of cooperation between the two actors. This situation has also resulted in Turkey being perceived as a 'Strategic Partner' by Somali rulers and decision makers in various fields of the country and has been seen as an important factor in deepening the relations of both actors and strengthening ties. (Şahin, 2021, p.119-120). At this point, it is possible to see that the turning points that can be seen as important in Turkey's relations with Somalia paved the way for Somalia to see Turkey as an ally and partner in many respects today.

Main results of the research. The relationship between Turkey and Somalia has gained momentum and diversification over time within Turkey's strategy of outreach to the African continent. In this regard, it is observed that Turkey's policies and actions initiated towards the African continent have taken a step further, particularly in the case of Somalia. (Mehmetçik & Belder, 2017, p. 457). Turkey, in the post-2011 period, has continued to enhance the effectiveness of its bilateral ties with Somalia by increasing its support to Somalia not only in terms of humanitarian aid and financial assistance but also in addressing both the governance-related instability and combating the Al-Shabaab terrorist organization, which has been a source of trouble for Somalia. This situation is seen to form the basis for Somali decision-makers and officials viewing Turkey as a partner not only in other areas but also in ensuring national security and fostering stability in Somalia.

In this context, when examining the reasons why Turkey is perceived as a reliable partner for Somalia, the reasons why Somalia feels the need for security, especially in the context of recurrent crises, also plays a key role. At this point, it is possible to mention four different points that have contributed to Somalia's security needs.

The first reason for the emergence of security needs in Somalia, from past to present, is prominently attributed to the colonial activities experienced by Somalia and their ramifications to the present day. Like many other African countries, Somalia fell under the influence of both French and British administrations in the late 19th century, leading to colonization. This situation has subjected Somalia to both political and humanitarian crises for a long period. As a result of the repercussions of the colonial process, the unstable environment in Somalia has hindered the use of democratic solutions, such as holding democratic elections to choose leaders in Somali politics, and this situation has been replaced by the dominance of militarily strong and authoritative figures in Somalia. (Pirinççi & Demirtaş, 2020, p.784). Additionally, until Somalia gained independence status, it endeavored to struggle against or resist major international powers that exploited or showed tendencies of exploitation towards the country; however, this situation led to disagreements and divisions among local tribes in Somalia. (Tepebaş, 2013, p. 233). This situation is still seen as the primary factor contributing to political instability in the Somali state today, as a legacy of the colonial era.

The second point that can be seen as causing Somalia's security needs in today's international context is the security concerns arising from the political crises resulting from the problems in bilateral relations with its neighbors in the Horn of Africa. In this context, especially Ethiopia and Kenya stand out as actors that exert influence both on the Somali state and on Somalis through their policies and strategies developed specifically for Somalia. Currently, both Kenya and Ethiopia's dominance over parts of the historic Somali territory and the fact that these regions are mostly inhabited by Somali communities contribute significantly to the crisis becoming an effective

component. (Çelenk, 2021, p. 70). However, when Somalia's security concerns are taken into account, Ethiopia is one step ahead. At this point, Somalia's dynamics with Ethiopia since the 1960s, when Somalia got rid of Italian colonialism and gained independence status, have been characterized by insecurity and conflict concerns, and both actors have not been able to gain a healthy dimension in their relations since this process. (Jimale, 2019, p. 21). This situation causes Ethiopia, which can be seen as a regional power compared to other state actors in its geography, to see Somalia as a potential rival, especially politically and economically. The tense environment created by these bilateral dynamics from the past is seen to create insecurity for Somalia in the current conjuncture. Ethiopia's agreement with Somaliland signed on January 1, 2024, to ensure its access to the Red Sea and for its own economic and political interests was seen as a major threat to Somalia's territorial sovereignty. (AA, 2024). In the face of this situation, Somali decision-makers and the leadership saw Ethiopia's move as an aggression on their behalf and stated that they would oppose this agreement. (Independent, 2024). Therefore, the actions taken by Somalia's neighbors in the region and the alliances they attempt to establish pose a risk to Somalia's security and highlight the security needs.

On the other hand, problems such as piracy and maritime banditry, which Somalia frequently encounters in its geopolitical position, are seen as the third reason for Somalia's security needs. Somalia plays a key role in the Horn of Africa with its strategic location due to its coasts and its strategic position as a transit point between the Red Sea and the Indian Ocean. Although this situation seems to be an advantage for Somalia, it is seen that piracy groups carry out actions both off the coast of Somalia and around the Gulf of Aden, causing great damage to both global trade and Somalia, and this situation shows itself as one of the most important topics on the agenda of global mariners today. (Beyoğlu, 2013, p.2). Piracy activities conducted in the region involve pirates attacking passing merchant vessels, looting them, and demanding ransom, thereby compromising the security of Somali coastlines. Additionally, the high trade potential of Somalia's location opens the door to piracy activities and maritime piracy in the region, providing pirate groups with a significant advantage, especially in ransom negotiations. (Şahin, 2020, p. 886). On the other hand, piracy activities and maritime banditry in the region, which reveal Somalia's security needs, cause great damage to the Somali state and the local population and are seen as one of the most important factors of the country's lack of stability in terms of both economic and political structure. Groups carrying out piracy activities largely provide economic support to terrorist organizations such as al-Shabaab and various tribes that cause instability and aim to receive support from these organizations and tribes to carry out their actions (Çalık, 2017, 415). In this context, in today's conjuncture, these pirate groups, which continue their activities on the Somali coast, are seen as one of the main reasons for Somalia's security needs by causing great economic and political damage to Somalis.

The last reason, which can be seen as the most important among other reasons for Somalia's security needs today, is the Al-Shabaab terrorist organization, which has a strong influence in the African continent and harms the countries of the region with its actions and attacks. The failure to address the internal conflict and the absence of a central political authority resulting from the division, particularly evident in Somalia as a reflection of the colonial era, have laid the groundwork for the emergence of terrorism problems in Somalia and the adverse effects it has created. (Tepebaş, 2013, p. 241). Although the al-Shabaab terrorist organization explains its ideology as the fight against Islamophobia and the creation of a Somali caliphate, it is seen that its main goal is to create an environment where Western influence is eliminated. (Yalçın, 2016, p.20). However, with its various actions in Somalia, the organization draws a different axis from the goals it has adopted and causes the death of Somali people with its actions. Moreover, the organization defines itself as the hegemonic power in Somalia and includes individuals and armed groups from various tribes of Somalia. At this point, especially the high density of young population in Somalia and the unemployment caused by this situation increases the participation in terrorist groups and structures such as al-Shabaab and paves the way for recruitment. (Bingöl, 2013, p.89). The

consequences of this situation cause great hardship to the Somali people and pose a risk to stability and confidence in Somalia.

Accordingly, when the reasons why Somalia sees Turkey as a security partner in line with its security needs are analyzed,

Turkey's increasing military and political influence in the international arena, especially in recent years, and its strong diplomatic relations in various geographies have paved the way for Turkey to be seen as an important and powerful actor by many countries. In this context, Turkey, especially in recent years, has given the impression of a country that has gradually increased its presence and influence in strategic locations such as the Middle East and Africa, and has evolved into a country that is frequently mentioned in the international system with its actions in solving or resolving various crises and problems. Similarly, in recent years, Turkey has taken steps to increase its military capacity and military technology as a result of reducing foreign dependence and the importance it attaches to the domestic defense industry. This situation has been seen as a significant development for the establishment of a stable state in Somalia, a strategically important country in the Horn of Africa that requires various forms of assistance from allies, especially in terms of security. (*Mukhtar & Ahmed, 2021, p.45*)

In this regard, it is possible to evaluate the dynamics that contribute to Turkey being perceived differently by Somalia and being seen as a security partner compared to other actors in Sub-Saharan Africa in four different sub-points.

The historical ties that both actors have established in the past play a critical role as the first and foremost reason why Somalia sees Turkey as a security partner and prefers Turkey. In this context, it has been observed that Turkey's historical ties with the East African region extend back to the 16th century and that it has had political, economic, and especially security relations since this period. (*Siradağ, 2017, p. 699*). It is understood that the Ottoman Empire, which was dominant in the Horn of Africa during this period, was directly or indirectly interested in both Somalia and the region in various ways. (*Küçükaltan & Bozkurt & Kesikbaş, 2022, p.113*). On the other hand, it has been observed that during both the 16th and 17th centuries, the Ajura Empire and the Adal Sultanate, which ruled the region, established commercial, cultural, and military relations with the Ottoman Empire and especially the Ottoman Turks. During this period, records indicate that the Ottoman Empire provided direct military support to the Adal Sultanate in the conflicts that arose between Somalia's Adal Sultanate and Abyssinia. (*Merga & Dashu, 2021, p.11*). Considering the historical process, it is understood that this situation played a key role in terms of Turkey's first support to Somalia.

In addition, when look at the end of the 19th century and the beginning of the 20th century, it is seen that even when the Ottoman Empire was in a difficult period economically, politically and militarily, it supported and helped Somalia through its provinces such as Hejaz and Yemen, especially against the colonialism initiated by European states in the region. (*Kavas, 2017, p.11*). At this point, it is seen that the long historical ties between the two actors have played an important role in shaping the Somali government's view of Turkey in the current conjuncture and its positive interest and tendency towards Turkey.

On the other hand, the second dynamic that influences Somalia's perception of Turkey as a strategic and security partner is the convergence of both countries around a common religious belief. In this regard, the fact that both Somalia and Turkey share the same Islamic faith, and particularly the significance of this religion in both societies socially and culturally, is seen as a common ground for both actors. In this context, especially Turkey has supported Somalia in various ways religiously throughout history and has made its presence felt among Somalis and the Somali government through solidarity around the common religious belief. At this point, it has been observed that during the late 19th and early 20th centuries, Turkey supported the "Somali Dervish Movement," which can be seen as a religious and social movement in Somalia emphasizing the power of Islam and played a significant advisory role during this action. (*Merga & Dashu, 2021, p.12*). Moreover, the impact of this common religious phenomenon from the past has also manifested itself in the recent past and has been effective in Somalia's perception of Turkey as a

partner. For instance, Turkey organizing a fundraising conference for Somalia, a member of the Organization of Islamic Cooperation, in 2011, and coordinating with other Muslim countries to increase the scope of aid, can be seen as a concrete example of this influence (*Merga & Dashu, 2021, p.16*).

Similarly, Turkey continues to provide financial support to Islamic-based schools, mosques, and various Islamic initiatives in Somalia through NGOs that can be considered as part of its soft power elements. Another example is the active involvement of the Presidency of Religious Affairs (Diyanet İşleri Başkanlığı) in Turkey, especially in 2011, sending imams and teachers to Somalia with the aim of distributing Qurans and providing education, which is understood as a tangible indication of Turkey's religious support and commitment to Somalia (*Crises Group, 2012, p.2*). At this point, it is seen that Turkey's actions based on common religious values in Somalia, from the Ottoman Empire to modern Turkey, have been effective in Somalia's sympathy for Turkey and its preference for Turkey for various cooperation, especially security and military cooperation.

The third focal point of Somalia's perception of Turkey as a security and strategic partner is associated with Turkey's increasingly influential image and globalized identity both in its region and in the international system. Factors such as the ability to shape public opinion and geopolitical significance, which are considered decisive in establishing a country's reputable and powerful image in various international platforms, play a key role in the international activities of actors. (*Gültekin, 2013, p.129*). At this point, thanks to its power to create public opinion on certain important issues in the international system, especially in recent years, Turkey has been trying to draw international attention to issues that it sees as problematic in the international system and has found itself in the position of an actor trying to play a direct or indirect role in the solution of these problems. To give an example, Turkey gives the impression of being an important actor globally, especially in the Middle East, thanks to its increased international visibility, such as its mediation efforts in the Russia-Ukraine war, which has had an impact on the international system in recent years, and its ability to meet with the parties of both countries, and the Turkish image identity that it tries to globalize with its humanitarian and political support to Gaza, especially in the Israeli-Palestinian war, where civil unrest and wars still continue in today's conjuncture. Moreover, the steps Turkey has been trying to take on certain issues have also manifested themselves in Somalia and this has reinforced the deepening of bilateral relations. In Somalia, where the lack of political authority has been felt for a long time due to various internal problems such as Somaliland and Puntland, ensuring security has been seen as the top priority. (*Küçükaltan & Bozkurt & Kesikbaş, 2022, p.129*). At this point, Turkey has assumed a mediation role in the resolution of internal problems, especially in Somaliland and Puntland, in order to eliminate the internal turmoil and frayed political balances in Somalia and to restore peace in the country. In this context, Turkey has organized Somali conferences involving actors from both sides to rebuild peace in Somalia and has made efforts to draw the attention of the international press and public opinion on this issue in international meetings at the United Nations. (*Şahin, 2021, p.121*). Moreover, especially during the period when Turkey continued its mediation efforts, in its statements on Somalia, Turkey both showed the importance it attaches to the territorial integrity of the Somali state and focused on the peaceful resolution of the existing problems in the continent in order to ensure peace and stability in Africa. (*Tepeciklioğlu 2019, p.39 & Özkan, 2014, p. 87*). At this point, Turkey's efforts for Somalia in both regional and international platforms have been seen as one of the effective dynamics in Somalia's perception of Turkey as a strategic partner and as an important milestone that reinforces Somalia's trust in Turkey.

The final dynamic in Turkey's perception of Somalia as a security partner is that Turkey's approach to Somalia is "pragmatic" rather than colonialist approach. In the past, the colonial activities carried out by European states all over the African geography made itself felt to a great extent in Somalia. This is seen as one of the main reasons for the political problems and general instability in the country today, and the legacy of colonization is seen as creating a security need for Somalia. (*Pirinççi & Demirtaş, 2020, p.786*). At this point, it is seen that Turkey's approach towards Somalia is not based on the exploitation and purely interest-based approach of other Western states

in the past, but rather on a sustainable and long-term approach to meet the basic needs of Somalis, such as economic and political development, as well as their current security needs. For example, Turkey's actions and initiatives in response to the humanitarian crisis in Somalia in 2011 not only increased Turkey's presence in Somalia and deepened bilateral ties but also went beyond the conventional aid provided by Western states and Turkey's engagement in Somalia was seen as an important step towards state-building in Somalia (*Donelli, 2018, p.57*). In this context, especially when Turkey's approach to Somalia is evaluated, the humanitarian aid provided for Somalia, the support for health facilities such as hospitals within the scope of the reforms promoted in the field of health, and the efforts made to ensure peace in Somalia, especially within the scope of security, can be shown as evidence of Turkey's helpful attitude and humanitarian approach towards Somalia. (*Merga & Dashu, 2021, p.18*).

On the other hand, Turkey's pragmatic approach based on mutual cooperation is also evident in the military sphere where Somalia's security needs are felt. In this context, it is seen that Turkey has established cooperation with Somalia in the military and security field with the aim of training and modernizing Somalia's relatively weak and inadequate military personnel and revitalizing the Somali National Army with its largest military base opened in Mogadishu in 2017 within the scope of the "Turkey-Somalia Defense Industry Cooperation Agreement" signed in 2016. (*Dhaysane, 2021*). Accordingly, Turkey's cooperation with Somalia aims both to increase Somalia's capacity to cope with major security threats such as terrorism and piracy, and to build a backbone that will form the basic structure and strength of the Somali army in the future by increasing the training capacity of Somali soldiers (*Sönmez & Batu & Arslan, 2023, p.197*).

The military base, which was opened in 2017 and is still active and effective today, can be considered as the biggest proof of Turkey's support and cooperative approach to Somalia, especially in the military and security field, where Turkey has significant security needs. The effects of this pragmatic approach, which was initiated at the time and continued, have been welcomed by the Somali state, and this approach is largely reflected in today's conjuncture. As the strongest evidence of this, the '*Defense and Economic Cooperation Framework Agreement*' signed between Turkey and Somalia on February 8, 2024, which deepens and advances the military and security cooperation between the two countries, can be cited as an example. (*BBC, 2024*). In this context, Somalia has taken an important step by signing a defense agreement with a powerful actor like Turkey against the agreement signed between Ethiopia, which poses a security problem for Somalia, and Somaliland, which separated from Somalia but whose independence is not recognized, and which laid the foundations for Ethiopia's access to the sea. (*Diriliş Postası, 2024*). Also, with this agreement, Somalia has authorized Turkey to protect Somali territorial waters and marine resources off the Somali coast for a period of 10 years. (*BBC, 2024*). To go deeper, under the agreement signed between both actors, Turkey commits to provide support to Somalia in some important areas such as bringing maritime resources to the Somali economy, protecting maritime resources, and providing military support in the form of air, naval and land operations in case of defense needs and creating common security areas. (*Diriliş Postası, 2024*). This is seen as a key development in terms of showing that Turkey will provide effective security support in areas where Somalia needs security such as terrorism and piracy activities. Moreover, it is seen that Turkey is trying to provide a more secure and stable environment to Somalia through its military and security support and is approaching Somalia with a cooperative pragmatic approach. This situation can be considered as one of the most effective dynamics and elements in the consolidation of Somalia's closeness to Turkey and Somalia's perception of Turkey as a partner.

Conclusion. In line with the research question, this paper has first analyzed the major events that are seen as historical turning points in the dynamics of bilateral relations between Somalia and Turkey, based on specific periods and events. In this way, it has uncovered the foundations of Somalia's affinity for Turkey and the subsequent evolution of this affinity into a partnership dimension. In this context, Turkey's engagement with Somalia, especially since 2011, has manifested itself in economic, military, humanitarian, and developmental ways, which have fostered a sense of trust and partnership between the two actors.

Secondly, the article analyzed Somalia's challenges, both in terms of its geographical location and various internal and external security concerns and shed light on the areas where Somalia needs security measures and the role and consequences of these needs within Somalia's particularly unstable political and economic framework. Specifically, Somalia's security needs have been addressed under four different sub-headings, and the sub-headings that emphasize each security need have examined the issues that Somalia has struggled with in the past and is still struggling with in the current conjuncture.

Thirdly, the study analyzed the factors that make Somalia see Turkey as a strategic and security partner in the context of its struggle with its security needs, different from other actors, and analyzed the dynamics affecting Somalia's preference for Turkey as a partner under four different headings, while revealing the motivations behind Somalia's preference for Turkey by analyzing each of these different dynamics in depth.

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FORMATION OF THE PROJECTION OF GLOBAL INTERESTS ON LATIN AMERICA

СТАНОВЛЕННЯ ПРОЕКЦІЇ ГЛОБАЛЬНИХ ІНТЕРЕСІВ НА ЛАТИНСЬКУ АМЕРИКУ

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***Abstract.** The article examines the historical relations between Latin America and foreign countries, focusing on the "conquest", colonial and post-colonial periods, analyzes the long-term influence of colonialism on the development of Latin America. It highlights how external forces shaped the region's political and economic systems, leaving a legacy of social stratification and economic dependence. The first part of the article is devoted to the analysis of the complex and ambiguous process of conquest and its impact on the formation of Latin America as a region, demonstrating the fundamentality, duality and legacy of the aforementioned process. The second part of the article analyzes in detail the economic-political system and social structure of colonial Latin America, formed under the influence of the metropolises, and demonstrates what consequences it had for the future independent states. The third part of the article analyzes the process of gaining independence by the countries of Latin America, emphasizing that although internal contradictions in colonial societies were an important factor, it was the weakening of the metropolises and the external intervention of other states that played a decisive role in the successful conclusion of the wars of independence. And at the very end, an analysis of the economic dependence of Latin American countries on external players in the period after gaining independence, which was a consequence of its colonial legacy. Describes the emergence of new interested players in the arena: Great Britain and the United States, emphasizes that the debt problem led to defaults and deepening economic addiction. In general, the article argues that the historical experience of foreign intervention in the internal affairs of Latin America has had a lasting impact on the development of the region. The legacy of colonialism, the debt cycle, and*

foreign interventions continue to shape the political, economic, and social realities of Latin American countries.

Key words: *Latin America, LATIN AMERICA AND CARIBBEAN, conquest, economic exploitation, demographic changes, colonial economy, economic dependence, economic reform, social hierarchy, government crisis, wars of independence, foreign intervention, political instability, foreign capital, economic instability, debt crisis.*

Анотація. *Стаття досліджує історичні взаємини між Латинською Америкою та іноземними державами, зосереджуючись на “конкістському”, колоніальному та пост-колоніальному періодах, аналізує тривалий вплив колоніалізму на розвиток Латинської Америки. Вона підкреслює, як зовнішні сили формували політичні та економічні системи регіону, залишаючи спадщину соціальної стратифікації та економічної залежності. Перша частина статті присвячена аналізу складного та неоднозначного процесу конкісти та її впливу на формування Латинської Америки як регіону, демонструючи фундаментальність, двоїтність та спадщину вищезгаданого процесу. Друга частина статті детально аналізує економіко-політичну систему та соціальну структуру колоніальної Латинської Америки, сформовану під впливом метрополій та демонструє, які наслідки це мало для майбутніх незалежних держав. Третя частина статті аналізує процес здобуття незалежності країнами Латинської Америки, підкреслюючи, що хоча внутрішні суперечності в колоніальних суспільствах були важливим чинником, саме ослаблення метрополій та зовнішнє втручання інших держав відіграли вирішальну роль в успішному завершенні воєн за незалежність. І на сам кінець аналіз економічної залежності латиноамериканських країн від зовнішніх гравців у період після здобуття незалежності, що стало наслідком її колоніальної спадщини. Описує появу на арені нових зацікавлених гравців: Великої Британії та США, підкреслює, що проблема заборгованості призводила до дефолтів та поглиблення економічної аддикції. Загалом, стаття стверджує, що історичний досвід зовнішнього втручання у внутрішні справи Латинської Америки мав тривалий вплив на розвиток регіону. Спадщина колоніалізму, цикл боргів та іноземні інтервенції продовжують формувати політичні, економічні та соціальні реалії латиноамериканських країн.*

Ключові слова: *Латинська Америка, ЛАКБ, конкіста, економічна експлуатація, демографічні зміни, колоніальна економіка, економічна залежність, економічна реформа, соціальна ієрархія, урядова криза, війни за незалежність, зовнішня інтервенція, політична нестабільність, іноземний капітал, економічна нестабільність, торгова криза.*

Problem Statement and Relevance

Latin American countries have traditionally been within the sphere of foreign influence. Their historical destiny was largely determined by foreign states, and at different points in history, their territories have become arenas for competing interests of various larger geopolitical players.

During the conquest and subsequent colonial period, the lives of people in Latin America were shaped from Madrid, Lisbon, and other European capitals. After these countries gained independence, the United States began to lay claim to "patronage" over them, advancing the Monroe Doctrine. During the Cold War, leading world blocs -the West, led by the United - States, and the "socialist camp," led by the Soviet Union competed for influence in Latin America. At this stage, the centers of power that assert their political and economic interests in the region, none of which are native to Latin America, include the United States, the European Union, Russia, China, and Spain. Thus, it can be stated that the constant (and still unchanged) factor characterizing the entire history of Latin American countries is foreign presence, exerted in one form or another, and the influence of one or another external center of power relative to the Latin American region.

At the same time, analyzing international relations in the region reveals that Latin American countries have never completely resigned themselves to this state of affairs. The history of Latin

America is also the history of a struggle for real sovereignty, for the ability to determine their own fate independently, for minimizing external influence, for reducing the negative effects of global interests on the region, and for building more equal relations with external players.

Therefore, it can be stated that the Latin American countries have acquired some experience both in resisting projections of external forces and in using them for their own interests.

Methodology

In order to investigate this problem, an analysis and study of academic books and articles on the history of Latin America, colonialism, and economic development were conducted, along with historical maps, economic data, and political documents. The following research methods were employed: historical analysis, comparative analysis (comparing the experiences of various Latin American countries to identify similarities and differences), and qualitative analysis.

The Purpose of the research

The purpose of this article is to study the specifics of how global interests impact regional states, as well as to analyze these countries' experiences in counteracting external intervention and using asymmetric strategies to protect their own interests in dialogues with global centers of power. Reflecting on this experience is important for protecting the interests of our own country. Ukraine, in many respects, exists in a geopolitical environment similar to that of Latin American countries. Like Latin American countries, Ukraine is a state that, due to its geographical location, is under constant pressure from competing global powers. And like the countries of Latin America, Ukraine has a dramatic history of existing under external influences and resisting the projections of leading foreign players.

The Conquest as a Foundation of Global Interest Projections in Latin America and Caribbean

It can be stated that throughout their history, Latin American countries have been the target of influence from foreign centers of power. This reality becomes evident when analyzing the origins and course of their independent statehood.

First, it should be noted that the space of Latin America - demographic, linguistic, cultural, civilizational, socio-economic, administrative - was formed in the process known as *conquista*, or "conquest." The term comes from the Spanish word *conquistar* - "to conquer" - and denotes the process of military-political, demographic, and civilizational-religious penetration of the Western Hemisphere by the Iberian states - Spain and Portugal. This process ultimately led to the subjugation of most of the Americas to the Spanish and Portuguese crowns.

Modern researchers emphasize the contradictory nature of the conquest. On one hand, it brought destruction to the culture of traditional societies in the region, disrupting established social structures and economic systems, as well as demographic losses and impoverishment for the indigenous inhabitants of Latin America. Disease, the collapse of traditional economic organization, and exploitation by the colonists led to the extinction of a significant percentage of the native population. Although exact figures are not available, some scholars argue that from half to 90% of all "Indians" (indigenous peoples of the region) perished. With the arrival of the Iberian conquistadors, the local population lost its statehood and the form of civilization that existed in the pre-Columbian era. From this point of view, the conquest was a brutal act of conquest with a destructive character.

On the other hand, the conquest introduced a new civilization to the region, bringing technological, scientific, and organizational advancements that were sometimes superior to those in pre-Columbian America. In particular, the demographic losses of the indigenous population were later compensated by new agricultural techniques from Europe, which led to population growth. The colonization aspect of the conquest should also not be ignored: the official mission of expeditions to the New World was, in Spanish, *conquistar y poblar* - literally, "to conquer and settle." If *conquistar* meant taking possession of space, then *poblar* meant "domesticating" it, making it similar to Europe. This approach implied not only establishing royal authority in new

places but also involving local inhabitants in the new society as its members. The crown viewed the Indians as potential subjects, and the Catholic Church as a future congregation. The conquest cannot be called merely an act of conquest, as it was also a geographical discovery and had a significant research component. Thus, the conquest also carried a constructive seed - the creation of new ethnocultural communities in Latin America with a Christian and European identity.

In terms of timeframes, the conquest lasted from 1493, when Columbus' first large-scale colonial expedition to the New World took place, until the middle of the 16th century. A royal decree in 1556 marked the official end of the conquest, stating, "For significant reasons, the term 'conquest' must be removed from all official documents, to be replaced by 'pacification' and 'settlement'..." This decree codified the conquest as a past event.

Administratively, the conquest was completed by the establishment of a series of viceroalties (New Spain, Peru, New Granada, Rio de la Plata) and smaller autonomous units (captaincies general), which later formed the basis for independent Latin American states.

Therefore, the conquest had exceptional significance for Latin America. It resulted in the complete political, demographic, cultural, religious, and linguistic "reformatting" of this region. This reformatting created a relatively homogeneous Spanish- and Portuguese-speaking community, united by Catholicism, within which the present-day independent Latin American countries eventually emerged. The existence of Latin America as we know it owes itself to the projection of global interests on the region.

External projections in the colonial period

The colonial period became equally significant in shaping the future of Latin American countries. During this period, the primary parameters of the socio-economic and state-administrative systems of Latin American countries were established, as well as the outlines of their future borders.

One of the main vectors of influence by the metropolis on Latin America was the organization of the local economic system, and the very model of economic management.

The economic development of Latin America was fully conditioned by the interests of the metropolis, which primarily viewed their overseas colonies as sources of precious metals and plantation products such as coffee, sugar, tobacco, and cotton. Industrial development was extremely slow. Even at the end of the 18th century and the beginning of the 19th century, the Latin American region had a minimal number of manufacturing establishments. This situation arose from administrative restrictions dictated by the interests of the governments of Spain and Portugal. Colonial authorities deliberately hindered the development of local industries in Latin America to preserve the metropolis' monopoly on exporting finished products to the colonies. The colonial policies also shaped the state of the agricultural sector in these colonies' economies. To avoid competition, the authorities banned the cultivation of several agricultural products. Specifically, growing grapes, olives, flax, and raising silkworms was prohibited. Following these restrictive policies, a large portion of vineyards was destroyed, olive orchards were cut down, and mulberry groves were uprooted. Only crops that were not grown in the metropolis were allowed.

As a result, the purchasing power of the majority of the population under these conditions was limited, and internal trade within the colonies developed slowly. The government imposed additional restrictions. State monopolies on the sale of salt, alcoholic beverages, tobacco, stamped paper, gunpowder, and other goods hampered the growth of trade and the internal market. Additionally, foreign trade was under strict royal monopoly, and trade relations with foreign countries were prohibited. Furthermore, even trade between different Spanish colonies within the same region was illegal for an extended period - all commercial operations had to pass through Madrid. Thus, for most of the colonial period, Latin America's economic relations were restricted to trade with the metropolis, with all imports and exports heavily taxed.

Additionally, trade logistics were under state control. For example, until the last quarter of the 18th century, goods from Spain to America and back could only be transported by royal fleets.

These fleets periodically departed under heavy military escort, initially from Seville and, from 1717, from Cádiz. One fleet sailed to Cartagena (a port in New Granada), and the other operated between Spain and the Mexican port of Veracruz.

This system not only contradicted the logic of economic development but also caused significant discontent in colonial society, which in turn harbored the seeds of future political problems. At a certain point, both Madrid and Lisbon realized that deliberately sustaining the colonies' underdeveloped agrarian economies was ultimately detrimental to the metropolis, as it reduced their tax base. However, this realization came only in the second half of the 18th century, shortly before European monarchies' colonial dominance in Latin America ended.

As part of the reforms initiated by King Charles III of Spain in the 1760s–1780s, there was a partial relaxation of the trade regime: Spanish colonies in America were permitted to trade with one another, and their ports were opened to trade with the metropolis. The government of Charles III abandoned the fleet system, abolished or reduced several customs duties, and stimulated mining industries by reducing the share of precious metals owed to the royal treasury and implementing a series of administrative changes.

Meanwhile, in the third quarter of the 18th century, Brazil underwent similar reforms under the Portuguese minister Marquis of Pombal. Particularly important for Brazil were reforms such as the abolition of Indian slavery, the establishment of manufacturing, and the creation of trading companies with monopoly rights.

Under different circumstances, these reforms could have partially corrected the economic imbalances in Latin America and altered the trajectory of its political and economic development. However, the significant constructive potential of these reforms was largely nullified by events on the European continent. Both key reformers left the political stage - Pombal was removed from power in 1777, and Charles III died in 1788. In the last quarter of the 18th century, the entire European political system faced a powerful blow: the French Revolution occurred. Conservatives, who took power in Spain and Portugal, hastily repealed most of these reforms to prevent the emergence of an alternative power center in the colonies and to avoid any shift towards economic or political autonomy in the colonies. Thus, despite some progress, the restrictive economic policy of the metropolis in Latin America essentially remained unchanged.

Overall, this very rigid regime did not foster the full economic development of Latin American territories. The reforms of the late 18th and early 19th centuries were too partial, incomplete, and too late to fundamentally change the situation.

As a result, the metropolis' policies left Latin American countries with weak economies upon achieving independence. These economies had weaknesses such as low consumer purchasing power, limited domestic markets, and insufficient free capital to meet investment needs. The economic structure of the new states in the region was inherently vulnerable. The local economy was dominated by the agricultural sector, and the industrial base consisted of low-value manufacturing with relatively low profitability - mainly raw material extraction and low-tech manufacturing. There was effectively no unified colonial market: each future Latin American country existed largely "on its own," with its economic ties primarily to the metropolis as the main intermediary and logistics center. This was the economic "baggage" with which Latin American countries approached independence.

In terms of administration and political organization, several key characteristics of Latin American countries were also shaped by the metropolis.

By concluding the Treaty of Tordesillas in 1494 and the Treaty of Madrid in 1750, Spain and Portugal delineated their possessions, in principle defining the borders between Brazil and the neighboring Latin American countries. The administrative division within Spanish colonies also influenced their future development. This division emerged under various factors, including the direction of colonial expeditions, administrative appointments, and courtly political struggles in Madrid among different factions. Therefore, this division was at times random, subjective, and only

partially dependent on objective factors - geography and the local economy. As a result, it not only delineated future borders between Spanish-speaking Latin American countries but also sowed the seeds of post-independence conflicts and tensions between them.

This thesis can be illustrated with several examples. The Upper Peru region was a source of disputes between two equal administrative units of the Spanish crown - the Viceroyalty of Peru and the Viceroyalty of the Río de la Plata. Meanwhile, residents of the territory of Chile, which was part of the Viceroyalty of Peru and had its own coastal access, were forced to trade their goods through Peru, separated from Chile by the Río de la Plata Viceroyalty. Meanwhile, the Intendancy of Paraguay and the Banda Oriental (modern Uruguay) suffered economic losses because their river trade was dependent on administration in Buenos Aires.

From the Perspective of Social and Political Structure the colonial society of Latin America exhibited distinct local characteristics. Its defining features were caste divisions, vertical social stratification, clan-based horizontal structures, and racial differentiation. To illustrate, Latin American society can be visualized as a pyramid. At its base were the lowest and most discriminated classes - slaves or peons (individuals in debt bondage). Slightly higher in the social hierarchy were the impoverished descendants of white colonists, mestizos, indigenous people, and free people of African descent. Above them was the "middle class," comprising merchants, small and medium-ranking officials, clergy, military personnel, and the native elite. At the top of the pyramid was the colonial leadership, high-ranking clergy, large landowners, merchants, industrialists, and military commanders.

In this "pyramidal" system, upward mobility was extremely difficult, if not impossible. It should be noted that, starting from the middle class, the vast majority were of European descent or their Creole descendants, while the lower classes consisted of subjugated indigenous people or enslaved Africans. The de facto alignment of race with social status created additional barriers to upward mobility within Latin American society. This closed, rigid social structure lacked "social elevators," reducing the competitiveness, flexibility, and dynamism of Latin American society and contributing to its structural weaknesses. The adverse consequences of these colonial-era realities continue to resonate to this day.

Meanwhile, Latin American society was also divided horizontally into clans - powerful families and, more broadly, alliances bound by kinship, friendship, and business ties. As long as the royal authority governed the colonies "from above," this did not pose a serious political problem, especially since political life in the colonies, as we understand it today, was essentially nonexistent. However, when royal authority in Latin America weakened and was eventually abolished, and a vibrant political life began in the new states, this clan-based structure became a major structural flaw. Naturally, political factions formed around the leading clans, which were already centers of wealth and influence. The struggle to preserve and elevate clan status, as well as inter-clan tensions, became the cause of numerous internal political conflicts, crises, and ultimately, civil wars. Acute political crises and internal instability, which became the "trademarks" of Latin America for decades and centuries, can be traced, in part, to this phenomenon.

Thus, projections of global interests were crucial for the fate of the Latin American region during the colonial era, and they defined the key characteristics of local societies that emerged with independence.

Global Interest Projections Amidst the Struggle for Independence

It is also relevant to note that Latin America's attainment of sovereignty was largely influenced by external, non-regional factors.

In the "traditional" concept of Latin American history (particularly the version formulated during the Soviet period and still influential in the post-Soviet space), the primary role in the region's independence is attributed to internal factors. Briefly stated, it is believed that a critical mass of political and socio-economic contradictions accumulated in the region, which led to a revolution in which Latin Americans overthrew the metropolis' rule. However, this view is

incomplete. Indeed, the interests of the local "establishment," which sought greater influence and power and was dissatisfied with the metropolis' monopoly on authority, played a role. Yet, differences in interests between the metropolis and the colonies had always existed but had not previously led to such large-scale consequences. It is also indisputable that the Spanish were expelled through uprisings that spread throughout the region. However, uprisings in colonial Latin America - whether indigenous, Black, Creole; military coups, revolts, or high-ranking official conspiracies - were a chronic occurrence but never resulted in the dissolution of the entire colonial empire.

In fact, the systematic and large-scale independence movements and their successes were possible only due to the situation in Spain, Europe, and the world at large.

The Latin American War of Independence (or rather, a series of wars from 1810 to 1826) was driven not only by internal but also by numerous external factors, rooted in projections of global interests.

The first and most significant of these factors was the weakening of the metropolis (Spain and Portugal) as a result of European events.

In 1808, Spain was occupied by Napoleonic France, and Napoleon replaced the deposed Spanish Bourbons by placing his brother Joseph on the throne. This led to a series of consequences. First, it caused a crisis of legitimacy in the Spanish government. Both in Spain and in the colonies, the majority of subjects did not recognize the new king. Against this backdrop, an anti-French uprising broke out in Spain, and alternative centers of power began to emerge. This, in turn, paralyzed administrative control over the colonies. For the first time in their history, these vast territories in another hemisphere found themselves without a single, legitimate, universally accepted authority. Secondly, for an extended period, Spain's focus was almost entirely on internal issues. As a result, control over the Spanish colonies weakened, and territories that had always been tightly supervised from Madrid suddenly faced the need to determine their own fate. They not only had to practice self-government but also fend off foreign encroachments (notably, British invasions, as discussed below). And when stability returned to Spain and the Bonapartes were expelled from the Iberian Peninsula, the colonies had already gained *de facto* experience of independence and no longer saw a need to restore the "old order."

A similar situation unfolded in the Portuguese part of the region: in 1807, Napoleonic forces invaded Portugal, and the royal court fled to Brazil. During the royal family's stay in Brazil, this territory's status increased - essentially transforming it into a metropolis. Since the Portuguese royal authority no longer ruled from Portugal, the restrictions that had previously enforced Brazil's dependence on the metropolis lost their rationale. In the first months of the monarchy's presence in Brazil, the king lifted all restrictions on foreign trade and industrial development. Brazil, once a remote province, began to develop rapidly. While the court was in Rio de Janeiro, a government press was established, newspapers and journals began to circulate, and books were imported. Additionally, institutions like a theater, national library, national museum, botanical garden, military and naval academies, an academy of arts, a chemical laboratory, medical schools, and hospitals were founded in Brazil. Like in the Spanish colonies, Brazil laid the foundation for future political and economic independence. When Portugal returned under the control of the royal family, Brazil's elite and population no longer wanted to revert to the one-sided dependence on Lisbon or the status of a powerless province. Thus, in 1822, Brazil declared its independence.

A second external factor in the successful attainment of independence by Latin American countries was the role of other major regional and global players.

Spain's weakened position naturally attracted the interest of power centers present in the Western Hemisphere, particularly Great Britain. After losing its North American colonies, Britain turned its attention to Spanish holdings. Initial attempts to seize the future territories of Uruguay and Argentina in 1806 and 1807 failed, prompting Britain to adopt an indirect strategy. The basis of this new British policy was to expand influence in Latin America through diplomacy, trade, and investment.

In this context, London played both sides, engaging in negotiations and securing advantages from each side in exchange for support and assistance. Simón Bolívar, for example, was transported to Latin America on a British warship, and one of his most capable units was the British Legion, trained by British experts. Meanwhile, for most of the war (from 1814 to 1823), London formally supported Spain in Latin America, benefiting from trade privileges as a result. However, starting in 1823, three years before Spain's ultimate defeat in the colonial independence wars, Britain openly sided with the Latin Americans. It became the first European country to recognize Mexico, sent diplomatic representatives to the new states, and British merchants took over much of Latin America's domestic and foreign trade. Britain employed a similar approach in Brazil. Initially, during the years the royal family resided in Rio de Janeiro, it secured a series of preferential trade agreements in exchange for military protection guarantees. British goods were subject to a low tariff of 15%, which was not only lower than the tariff on goods from other countries (24%) but also lower than that on Portuguese products (16%). Later, when tensions between the metropolis and Brazil escalated, Britain provided military assistance to Brazil in exchange for trade and legal privileges. British naval officers, led by Admiral Lord Cochrane, organized the Brazilian fleet, which played a crucial role in forcing the surrender of Portuguese garrisons in the country. With a special status in both Brazil and Portugal, Britain facilitated a peaceful resolution of Brazil's independence by providing a diplomatic platform for negotiations and acting as a mediator, effectively dictating terms to both parties.

The United States also significantly influenced the course of the anti-Spanish uprising. Expressing verbal support for the Latin American struggle for independence, the U.S. seized the opportunity for territorial expansion at Spain's expense. First, it provoked anti-Spanish uprisings in West Florida, and subsequently sent in troops to "protect" the local population. Under this pretext, the United States controlled the area from 1810 to 1813. In 1817, as the struggle in Spanish colonies intensified, the U.S. seized Amelia Island and eventually the entire territory of West Florida. By threatening Spain with continued support for independence movements, in 1819, the U.S. secured Spain's recognition of the annexation of Florida in exchange for a promise of neutrality. However, just three years later, in 1822, the U.S. Congress passed a resolution recognizing the independence of Latin American states.

These efforts by two major regional players objectively weakened Spain's position and benefited the colonies' struggle for independence. Thus, external intervention and the projection of global interests also played an undeniably important role in Latin America's independence.

Projections of Global Interests and the New Independent States of Latin America and Caribbean

Previously, we discussed the systemic problems Latin American countries faced upon achieving independence - namely, economic underdevelopment, social stratification, and unresolved administrative-territorial issues. The next period in the history of Latin American countries, marked by independent existence, became a time of struggle to overcome these structural deficiencies. One of the long-term goals for the region's countries was to modernize their societies' social, political, and economic structures to attain true independence. However, to this day, they have not achieved a clear victory in this struggle. Paradoxically, modernization efforts often led either to a deepening of existing dependencies on external players or to the replacement of old forms of dependence with new ones. Latin America found itself in a state of "permanent catch-up" - a state from which it has yet to emerge. External influences have played a significant role in this ongoing situation.

A critical field for the projection of global interests in the region during the postcolonial era was the economy.

At the time of independence, the region's economy was in a semi-crisis state. Traditional issues were compounded by new problems. The de facto customs union of Latin American countries, which had existed within the colonial empire, disintegrated. The tax and customs collection systems collapsed, and new national replacements were only beginning to be built. The war destroyed established connections and consumed a large share of national wealth. As a result,

economic life stagnated, and countries and their populations became impoverished. The average income of Latin Americans fell to such an extent that it only returned to colonial levels in the mid-19th century - decades after the start of the wars for independence.

The regional economy faced several urgent needs. First, the new countries required markets for their products - precious metals, raw materials, and colonial goods (tobacco, sugar, cotton, coffee, etc.). Second, they needed industrial goods, which the local primitive economy, with its artisanal or semi-artisanal production, could not yet produce independently. Third, local economic players needed reliable banking institutions to store their funds and facilitate transactions with foreign partners, especially in Europe. Fourth, there was a pressing need for investments to modernize the local economy, increase its technological capacity, expand the industrial base, and reduce dependence on imported industrial goods. Finally, the new states needed market infrastructure and logistics, which they could not organize on their own due to a lack of funds, expertise, and experience.

It was only natural that these needs could only be met externally. The local economy was too weak, and its financial potential was clearly insufficient to make this kind of "breakthrough." Who could act as a strategic trading partner, intermediary, and investor? At that time, only European states could fulfill this role; later, in the latter half of the 19th and early 20th centuries, the United States joined their ranks.

The European country best suited to meet all these criteria from the outset was Great Britain. It had ample investment capital, a developed banking system, a powerful merchant fleet, extensive commercial experience, and military and diplomatic power, which the British government used to advance its economic interests in Latin America. In addition to Great Britain, other European countries such as France, the Netherlands, and, later, Germany sought to become trade partners and investors on a smaller scale. It is worth examining the projection of external economic interests in more detail.

In the field of foreign trade, Great Britain assumed a prominent role in the region. Gradually penetrating Latin America, it initially engaged in smuggling, and later, after recognizing the independence of the new states, developed legal trade. During the independence wars, up to 40% of all British exports were directed to the Latin American region, which helped Britain mitigate the devastating effects of Napoleon's continental blockade. More competitive British goods quickly replaced the products of the former metropolis, which lacked protective tariffs. Overall, British diplomacy ensured that Latin American countries did not grant trade preferences to any other state, which became its main priority in the region. However, Britain did occasionally secure preferential treatment, as in its relations with Brazil, where British goods were subject to a lower tariff (15%) than those from other countries (24%). Both objective realities and London's efforts in economic diplomacy led to Britain becoming the primary supplier of goods to Latin America and, generally, one of its leading trade partners by the mid-19th century. From the 1850s to the 1870s, Great Britain controlled about one-third of both imports into and exports from Latin America. In its relations with certain economically significant countries, these percentages were even higher. By the mid-19th century, more than 50% of Brazil's imports came from Britain.

Although Great Britain held an almost undisputed leadership in Latin American trade for many years, other European countries also entered the regional market, gradually pushing out British goods. Britain began to lose its exclusive position in the latter half of the 19th century. Following the end of the Napoleonic Wars and the recovery of its economy, France actively increased its presence in the region. Later, during the last quarter of the 19th century and the early 20th century, "old" players in the Latin American market were challenged by Germany, which was undergoing an industrial boom. Moreover, from the latter half of the 19th century onward, Europeans gradually yielded to the United States. Using both forceful methods and economic diplomacy, the U.S. eventually emerged as a key player in the Latin American market.

A critical need for investment funds to modernize the economy, industrialize, and later, develop modern infrastructure following the spread of railways, compelled the new Latin American

countries to seek foreign funding. Their initial experience in issuing bonds on the London and Amsterdam stock exchanges was unsuccessful. Between 1822 and 1825, the governments of regions like Colombia, Chile, Peru, Buenos Aires, Brazil, Mexico, Guadalajara, and Central America issued obligations totaling 21 million pounds. However, due to a lack of established investment infrastructure, relevant experience, and the economic and political conditions needed to ensure returns, these bonds defaulted by 1827. Only Brazil managed to repay its debts by 1829 and return to the borrowing market, while the rest of Latin America was effectively unable to borrow again until the mid-19th century.

In the 1850s–1870s, the region's countries renewed their efforts to attract foreign investment and credit. At that time, their collective debt portfolio reached more than 180 million pounds, about 70% of which was under government obligations and 30% under private obligations. The majority of loans were sourced from Britain, with some from French financial institutions. Nevertheless, lending in Latin America remained risky. By the end of 1880, almost 60% of all Latin American sovereign debt was in default. To address these defaults and finance industrial growth, Latin American countries continued to borrow actively. A decade later, in 1890, this again led to default and a major crisis in two of the region's key economies - Argentina and Brazil. This trend persisted: with growing indebtedness, Brazil subsequently declared default in 1898–1900 and again in 1902–1909. Meanwhile, the combined sovereign and private debt continued to grow, with close to two billion pounds invested in Latin America by the start of World War I.

Defaults had two main negative consequences. First, to resume borrowing, Latin American countries had to accept worsened borrowing conditions: they had to increase yields and discounts on bond face values. Second, over time, defaults deepened economic dependence on European creditors. Apart from purely economic problems, unpaid debts posed serious political and security risks for Latin American countries, which will be discussed later. Overall, the first postcolonial decades established a characteristic feature of Latin American economies: the heavy burden of debt and dependence on foreign creditors and asset owners. Chronic debt issues cemented Latin American countries' dependent status relative to foreign economic partners, such as the United States, Great Britain, France, and Germany.

Latin America's "inherent trait" - political instability - led to not merely weakness but often a state of defenselessness in the face of more powerful nations. Both European powers and the United States frequently exploited this situation to impose their will and advance their interests through force. The "leaders" in the use of force against Latin American countries were undoubtedly the United States. European countries behaved more "restrainedly" overall, though they, too, conducted several military actions against countries in the region. The following section on the United States' interests will discuss how it used this instrument in more detail; for now, let us briefly examine European military interventions.

A particularly telling example of this dynamic occurred in Mexico. As noted above, in an effort to attract funds, the Mexican government actively borrowed abroad starting in 1822. Its main creditors were Great Britain, France, and Spain. However, due to internal political and economic difficulties, as well as constant pressure from the United States, these funds were not utilized to yield corresponding economic returns. In 1861, President Juárez's administration declared a two-year moratorium on debt repayment. Under the pretext of debt collection, creditor countries - France, Great Britain, and Spain - formed a coalition, resulting in the deployment of French troops in Mexico and the establishment of an "empire" that temporarily subordinated Mexico to Napoleon III. Similar situations occurred later. In 1902–1903, Great Britain, Germany, and Italy jointly blockaded Venezuela's coast when it declared its inability to pay its debt. Ultimately, Venezuela was forced to accept the Hague arbitration decision, which granted creditor nations a most-favored-nation status.

The lack of a strong culture of political dialogue and the absence of regional mechanisms for dispute resolution among independent Latin American countries often allowed European nations to position themselves as self-appointed arbiters in their international relations and as mediators in

conflicts. In this context, the establishment of Uruguay is a particularly illustrative example. In 1816, forces from Brazil, then still under Portuguese rule, seized the Banda Oriental territory, part of the United Provinces of the Río de la Plata (now Argentina). In 1825, after Brazil gained independence, Río de la Plata began a war to expel the Brazilians from the province. The war, which lasted about a year and a half, ended with British diplomatic mediation. The British pressured both sides to end hostilities, resulting in the Treaty of Montevideo in 1828, which established the Banda Oriental as a new independent country - Uruguay. One of Britain's motivations was to create a small, and therefore potentially dependent, state at a strategic point essential for trade with inland territories; Uruguay is located at the mouth of Latin America's longest river system. The goal was also to ensure that this small country, with a population of less than 75,000, would remain reliant on Britain for protection and diplomatic support. This calculation proved successful: for a long time, Uruguay looked to Great Britain as its primary political and economic partner. In the 1840s, Great Britain, acting alone or in concert with France, conducted a series of interventions, formally intended to preserve Uruguay's independence, this time protecting it from Argentinian encroachments. Specifically, British and French fleets blockaded Buenos Aires and defended Montevideo, the capital, while British diplomacy exerted pressure on the conflicting parties.

Conclusions. A number of Latin American dependencies were determined by the "genetic" features of the countries of the region, which were formed during the days of colonial rule. Among these, the following stand out: internal political instability, social challenges, hierarchical and clannish societies, structural flaws of new national economies, etc.

The acquisition of independence by the states of the Latin America occurred not only under the influence of internal factors, but also as a result of changes in the projections of global interests. On the one hand, Spain and Portugal weakened as a result of Napoleonic aggression. On the other hand, major regional players, Great Britain and the United States, took advantage of this to advance their interests. As a result, it enabled Latin American countries to become sovereign states.

After gaining sovereignty, the new Latin America and Caribbean states were objectively weakened. They were not stable in the internal political dimension and did not have a powerful military potential. Their elites did not have sufficient administrative and political experience, and the economy was in a state of crisis. This led to the fact that both the European states and the neighboring USA were able to speak with them from the position of the strong. The need to attract funds for economic development formed the region's dependence on foreign capital, primarily American and European. The economies of Latin American countries were increasingly burdened with debt, which increased the region's vulnerability to the projections of global interests.

As a result, a situation has developed in Latin America where external forces and their interests have acquired an important and sometimes decisive role in the life of the region. This situation, in general, persists to the present moment.

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THE HISTORY OF DEVELOPMENT OF UKRAINE'S RELATIONS WITH AUSTRALIA

ІСТОРИЯ РОЗВИТКУ ВІДНОСИН УКРАЇНИ З АВСТРАЛІЄЮ

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Abstract. *The article discusses the main milestones in the development of Ukrainian-Australian relations since the early 1990s up to the present day. Australia recognized Ukraine as a sovereign and independent state on December 26, 1991, and on January 10, 1992, diplomatic relations were established between the two states. However, the Embassy of Ukraine in Australia was opened only on April 14, 2003. The official visit of the Australian parliamentary delegation to Ukraine in June-July 2004 became the important evidence of support for the statehood democratic course of Ukraine. The first visit of the President of Ukraine to Australia took place in December 2014.*

The investigation of the MH17 plane crash gave the impetus for the intensification of relations between Ukraine and Australia. During the terrorist attack, 38 Australian citizens were killed. This event strengthened Australia's empathy for Ukraine, which is waging a fierce existential war against the aggressor country Russia. Ukraine and Australia signed the "Agreement between Ukraine and Australia on the Deployment of Australian Personnel to Ukraine in Connection with the Crash of Malaysia Airlines Flight MH17" (2014).

Russia's full-scale invasion of the territory of Ukraine on February 24, 2022, was another milestone in the history of relations between Ukraine and Australia. Ukraine was the first state visited by Australian Prime Minister Anthony Albanese (July 3, 2022). Australia supports Ukraine at the diplomatic and political level. Financial, material, military, and humanitarian assistance to our country from Australia, one of the G20 countries and Ukraine's largest donor in Oceania, does not stop. In 2024, Australia provided the largest aid package in its history to Ukraine.

Keywords: *MH17 plane crash, Australia, security situation, support for Ukraine, Russian-Ukrainian war, Ukraine.*

Анотація. *У статті розглянуто основні віхи розвитку українсько-австралійських взаємовідносин від початку 1990-х рр. й по сьогодні. Австралія визнала Україну як суверенну*

і незалежну державу 26 грудня 1991 р. Вже 10 січня 1992 р. між державами були встановлені дипломатичні відносини. Але Посольство України в Австралії було відкрито 14 квітня 2003 р. Посольство Австралії в Україні першопочатково було акредитоване за сумісництвом у Польщі. У Києві посольство Австралії відкрили у лютому 2015 р. Міжпарламентська співпраця між державами була започаткована з листопада 1992 р. Важливим свідченням підтримки державницького демократичного курсу України став офіційний візит австралійської парламентської делегації у червні-липні 2004 р. перший за всю історію українсько-австралійських взаємин візит Президента України до Австралії відбувся у грудні 2014 р.

Розслідування авіакатастрофи МН17 стало поштовхом до активізації взаємин між Україною та Австралією. Під час теракту загинуло 38 громадян Австралії. Дана подія посилила емпатію Австралії до України, яке веде запеклу екзистенційну війну проти країни-агресорки Росії. Між Україною і Австралією укладено «Угоду між Україною та Австралією про направлення Австралійського персоналу до України у зв'язку з падінням літака «Malaysia Airlines» рейсу МН17» (2014 р.).

Повномасштабне вторгнення Росії в Україну 24 лютого 2022 р. стало черговою віхою в історіє взаємин між Україною та Австралією. Вперше Україну відвідав прем'єр-міністр Австралії Ентоні Албенізі (3 липня 2022 р.). Австралія підтримує Україну на дипломатичному, політичному рівні. Не припиняється фінансова, матеріальна, військова, гуманітарна допомога нашій країні з боку Австралії, однієї із держав G20 та найбільшого донору України в Океанії. У 2024 році Австралія надала найбільший у своїй історії пакет допомоги Україні.

Ключові слова: авіакатастрофа МН17, Австралія, безпекова ситуація, підтримка України, російсько-українська війна, Україна.

Introduction.

Australia is gaining more and more significance in the international political, economic, security, and humanitarian domains, despite the fact that it did not hold a major position on the geopolitical map of the world for a considerable amount of time. Its geographical location and specific history of development leave an imprint on Australia's relations with European countries, including Ukraine. Being a former colony of the British Empire, Australia is culturally related to the Western world. At the same time, Australia's economic focus is mainly oriented toward trade with Asian countries, especially China. Australia, with its political system and soft power, has a significant impact on trade and economic cooperation and security policy in the Pacific region. In the global dimension, Australia was forced to balance for a long time between the collective West and China, openly siding with the former (*Matskovych, 2021*). Following the fall of the USSR in 1991, as well as the emergence of new states on the political map of the world and the restructuring of international politics, Australia's foreign policy remained focused on its "military-political partnership with the United States, competition for leadership in the region, an active position in international organizations, special relations with New Zealand" (*Historical and Social-Cultural..., 2023: 434*). In the words of A. Martynov, "Australia is the link that connects the Euro-Atlantic region with the Indo-Pacific one" (*Martynov, 2021:184*).

Literature Review.

Various aspects of the political, diplomatic, historical, cultural, and environmental history of Australia are covered in the scientific publications of Zernetska O., Korol M., Lapa I., Martynov A., Myronchuk O., Oliinyk P., Perha T. (*Zernetska, Myronchuk, 2023; Korol, Lapa, 2020; Martynov, 2021; Oliinyk, 2012; Perha, 2019*). There are a number of works devoted to the Ukrainian diaspora in Australia (*Boiko, 2001; Yekelchuk, 1994; Tymochko, 2008; Usatenko, H., Usatenko, T., 2021*).

Kulinich M. has accumulated his practical diplomatic experience as Ambassador of Ukraine to Australia in a number of scientific publications saturated with analytical and factual material (*Kulinich, 2020; Kulinich, 2022*). Solomenna T. studied the vectors of Australian policy in the XXI century, with an emphasis on strategic relations with the United States and the tendency to form an

autonomous format of its defense in the context of globalization. According to the researcher, this is explained by the growing influence of China, Russia's aggressive policy in the post-Soviet space and in Syria, Russia's occupation and attempted annexation of Crimea, and Russia's war in the east of Ukraine (Solomenna, 2021). The reasons and the history of development of Ukrainian-Australian relations and their impact on geopolitics were also considered by Siekunova Yu. and Maslianyk S. (Siekunova, Maslianyk, 2022).

Emphasizing the previously unresolved parts of the general problem to which the scientific article is devoted. A holistic coverage of the main aspects of the history of relations between Ukraine and Australia requires further research and systematization. Taking into consideration Australia's role in geopolitical processes and in strengthening its presence in international relations, in particular, in relations with China, it is extremely important for Ukraine to have such a country among its allies and partners.

The purpose (the aim) of the scientific article is to highlight crucial aspects of the history of development of Ukrainian-Australian relations

Presentation of the material.

In order to gain a better understanding of Australia's role in modern geopolitical processes, it is necessary to dwell in more detail on its "soft power" and its policy among the states of the Asia-Pacific region (APR). The countries of the Asia-Pacific region are the states that are geographically located along the perimeter of the Pacific Ocean and the island states directly in it. The most economically influential and demographically saturated cities in the region are as follows: Vancouver, Hong Kong, Kuala Lumpur, Los Angeles, Melbourne, San Francisco, Seoul, Sydney, Seattle, Singapore, Tokyo and Shanghai. The developed countries, especially in the field of high technology, include Japan, South Korea, Hong Kong, Taiwan, Singapore, and the Western United States. The natural resources of Australia, Canada, the Philippines, the demographic potential of China and Indonesia, agriculture of Chile, New Zealand, the United States, and the Philippines are also important factors of development and influence in the geopolitical plane. Australia's importance in this geographic, political, and economic area is still expanding. This is facilitated by the factors as follows: firstly, reliance on the country's historical and cultural traditions; secondly, an effective system of assistance to developing countries; thirdly, political and legal traditions and values; fourthly, cultural diplomacy; fifthly, a policy of working with diasporas both at home and with its diasporas abroad; and sixthly, positioning the country in the international arena as a peace-loving state. In addition, Australia is actively working in the direction of solving global issues of a planetary scale, in particular, climate change and human rights protection, international terrorism, drug trafficking (*Historical and Social-Cultural...2023: 573-576*). When it comes to the European vector of Australia's foreign policy, the EU and Australia signed a partnership agreement as early as in 2008. There is an Australian Mission to the EU in Brussels; and there is the EU Delegation to Australia in Canberra, respectively. Trade relations between the continental country and the EU are gaining momentum. Australia has also been actively involved in military operations in Afghanistan, Iraq, and Syria, which were conducted under the auspices of the United States and NATO (*Martynov, 2021: 185*).

Australia declared its recognition of Ukraine on December 26, 1991. Diplomatic relations between the two countries were established on January 10, 1992. Ukraine has had its own Embassy in Australia since April 2003 (by reorganizing the Consulate General of Ukraine in Sydney, which had been operating since May 2000). The Honorary Consulate of Ukraine has been operating in Melbourne since 1993, and the Honorary Consulate has been operating in Sydney since 2017 (as of 2024, the positions of Honorary Consuls in Sydney and Melbourne are vacant). The Honorary Consulate of Australia in Ukraine had been operating in Kyiv from September 1992 to January 2015. The Embassy of Australia was accredited on a part-time basis in Poland. The Embassy of Australia in Ukraine has been established in Kyiv since February 2015 (since February 2022, the Australian Ambassador to Ukraine is physically located in Warsaw). A legislative delegation led by the Chairman of the Ukrainian Verkhovna Rada visited Australia in November 1992, marking the official beginning of inter-parliamentary cooperation. In June-July 2004, an Australian

parliamentary delegation paid an official visit to Ukraine. This visit was the important evidence of Australia's support for the democratic course chosen by Ukraine as a way of its state development (*Political Relations..., 2020*).

Several important high-level meetings have taken place over the years of diplomatic relations, confirming the significance of dialogue and cooperation between the two countries, namely:

- the meetings of the Ministers of Foreign Affairs of Ukraine and Australia

during the sessions of the UN General Assembly; September 1992, October 1997, September 1999, September 2003, September 2022;

- the meetings at the ministerial level during international security

conferences: London Conference on Afghanistan (January 2010), Munich Security Policy Conference (February 2011, February 2022);

- the meetings during the session of the OSCE Ministerial Council in Vilnius

(December 2011), the NPT Summit in New York (February 2011) (*Political relations..., 2020*).

It is necessary to emphasize the intensification of relations between Ukraine and Australia in connection with the investigation of the MH17 disaster that occurred on July 17, 2014. The civilized world was shocked by the news of the terrorist attack committed by the Russian occupiers; however, the judicial investigation lasted for years to establish the details of the catastrophe. There were 38 Australian citizens among the victims. As part of the UN's work, the Joint Working Group was established to investigate the MH17 accident. In the summer of 2014, Air Marshal A. Houston, a special envoy of the Australian Prime Minister, visited Ukraine to investigate the MH17 crash and discuss cooperation between the Australian and Ukrainian sides. That was the time when the "Agreement between Ukraine and Australia on the Deployment of Australian Personnel to Ukraine in Connection with the Crash of Malaysia Airlines Flight MH17" was signed (*Agreement between..., 2014*).

The President of Ukraine Petro Poroshenko paid a state visit to Australia in December 2014. It was the first visit of the President of Ukraine to Australia since 1991. In 2009, the visit of the President Yushchenko V. to Australia was scheduled, however, it had to be canceled due to the financial crisis (*Petro Poroshenko was the first to..., 2014*). It was extremely important for Ukraine that the Australian political leadership condemned the occupation of Crimea and Russia's aggression against our country and reaffirmed its support for Ukraine's sovereignty and territorial integrity. The possibility of supplying uranium and coal from Australia to Ukraine was also discussed at the highest level. The Australian Prime Minister T. Abbott expressed his support for Ukraine in words: "We stand on the side of freedom, democracy and self-determination", and called the crash of the passenger plane flight MH17 "a large-scale mass murder" (*Poroshenko and Abbott..., 2014*).

Another manifestation of the unity of values between Ukraine and Australia was the "Invictus Games" held in Sydney in October 2018. 15 athletes from Ukraine represented Ukraine in the competition. The head of the Ukrainian delegation, Iryna Klympush-Tsintsadze, emphasized: "<...> The participation of our team in these competitions is extremely important. Here you can feel the true power of the unity of Western civilization and the inviolability of its value foundation" (*The Australian competition started..., 2018*).

The development of relations with Australia is becoming increasingly significant for Ukraine in its foreign policy activities, especially since 2022. Australia is geographically located extremely far from our country, but it is also part of the culture of the Western world. Moreover, in the context of globalization and digitalization of many areas of life, geographical distance is no longer a key factor that hinders fruitful and mutually beneficial cooperation. Australia is a crucial Indo-Pacific and Southeast Asian partner for Ukraine, particularly, in light of the Russian-Ukrainian War, ongoing post-conflict rehabilitation efforts, and the creation of international cooperation initiatives (*Shaipova, 2024*).

Australia is a member of the G20, an association of the world's largest economies, "The Asia-Pacific Economic Cooperation" or APEC, the Intergovernmental Forum of Pacific Rim Economies, the Asian Development Bank and other important global and regional economic organizations.

Australia's economy had been growing for 28 years before the outbreak of the COVID-19 pandemic. It has the leading position among the world's economies, in particular, in iron ore mining, exports of meat products, sugar, wines, and grains. Australia's share of global trade is steadily increasing (*Kulinich, 2022: 211*). Australia is a leader among Ukraine's trading partners in Oceania. It should be noted that Australia's bilateral trade with Ukraine has grown significantly in recent years prior to Russia's full-scale aggression of the Ukrainian territory. In 2021, the volume of trade between the two countries amounted to USD 215, 2 million. Exports of goods from Ukraine to Australia increased by 43%, compared to 2020, and amounted to USD 60, 9 million. Imports of Australian goods tripled to USD 154, 3 million.

After the commencement of Russia's full-scale aggression, bilateral trade declined significantly (USD 97, 2 million in 2023); however, there is significant potential for renewal. Ukraine exports to Australia metallurgical and machine-building products (sea/river vessels), plastic products, fats and oils of vegetable and animal origin, etc. Along with this, Ukraine receives mineral fuels, machine-building and pharmaceutical products, optical devices, wool, precious stones, cardboard, paper, etc. from Australia. In December 2021 - February 2022, Ukraine purchased Australian coal for the first time. The exchange of services in the transportation, tourism, and telecommunications sectors is developing in bilateral trade.

Australia has invested in Ukraine in wholesale and retail trade, telecommunications and information technology as well as the mining sphere. In 2021, the Australian company "Volt Resources" acquired 70% of the "Zavallivsky Graphite" group, which, in turn, has a permit for mining in the Zavallivsky graphite deposit, the largest in Ukraine and one of the world's largest graphite ore deposits, located near the village of Zavallia, Kirovohrad region (*Australians are taking over..., 2021*). The Ukrainian-Australian company resumed operations in 2023.

Australia has lifted tariffs on imports of Ukrainian products for 1 year as part of its assistance packages to Ukraine in connection with the full-scale Russian war, starting in July 2022 (excise taxes on fuel, alcohol and tobacco products remain in place). In 2023, the Australian side extended this tariff-free regime for 1 year, and in April 2024 – for another 2 years (until July 2026). This favorable trade regime, in particular, facilitated the shipment of metallurgical products of PJSC "Arcelor Mittal Kryvyi Rih" and products of the pharmaceutical company "Darnytsia" to Australia in 2023.

It is crucial to institutionalize the commercial and economic ties between Australia and Ukraine and to sign bilateral and multilateral agreements that will provide the groundwork for future productive collaboration. In this context, it is important to start negotiations on the conclusion of the Convention between Ukraine and Australia on the Elimination of Double Taxation. Negotiations on this agreement were initiated in 2023.

With the commencement of Russia's full-scale invasion of Ukraine, ties between Australia and Ukraine underwent a significant uptick. The President of Ukraine V. Zelenskyi and the Prime Minister of Australia S. Morrison (holding the position at that time) had a telephone conversation on March 5, 2022, during which they agreed to start Australia's assistance to Ukraine amid Russian aggression.

In March 2022, a new Ambassador of Ukraine to Australia, Vasyl Myroshnychenko, was appointed, which also contributed to the increase in contacts between the two states. Three conversations were held between the leaderships of the Ukrainian and Australian Foreign Ministries during the spring of 2022. Furthermore, it should be mentioned that on March 31, 2022, the Australian Parliament received an extraordinary video speech from the President of Ukraine Volodymyr Zelenskyi (foreign leaders rarely address the Australian legislature).

On July 3, 2022, the first-ever visit of the Prime Minister of Australia to our country took place. On this day, the new Prime Minister of Australia, Anthony Albanese, arrived in Kyiv. The dialogue between the leaders of the two states was continued on October 11, 2022 (telephone conversation), and on November 12, 2022, the Minister for Foreign Affairs of Ukraine Dmytro Kuleba met with E. Albanese on the sidelines of the ASEAN Summit (Phnom Penh, Cambodia).

Meanwhile, Australia's active support for Ukraine and the intensification of bilateral cooperation continued in 2023. Meetings and phone calls were held at the level of the leadership of the Ministry of Foreign Affairs, the Ministry of Defense, the Ministry of Finance, etc. Interparliamentary relations were actively developing. On March 10, 2023, the First Deputy Chairman of the Verkhovna Rada of Ukraine O. Korniienko met with the Speaker of the House of Representatives of the Parliament of Australia M. Dick on the sidelines of the 146th Assembly of the Inter-Parliamentary Union (Manama, the Kingdom of Bahrain), and on March 20-25, 2023, the delegation (leadership and members of the Parliamentary Group of the Verkhovna Rada of Ukraine on Interparliamentary Cooperation with Australia) paid an official visit to Australia. Along with this, on May 9, 2023, the Chairman of the Verkhovna Rada of Ukraine R. Stefanchuk and M. Dick had a telephone conversation.

On May 21 and July 12, 2023, the President of Ukraine V. Zelenskyi and the Prime Minister of Australia E. Albanzi met again, and this time it was on the sidelines of the G7 Summit (Hiroshima) and the NATO Summit (Vilnius). 2023 featured almost twenty high-level contacts between Australia and Ukraine, the highest level of communication in the history of the two countries' bilateral ties.

This tendency is still maintained in 2024. In particular, on April 27, 2024, the Deputy Prime Minister and the Minister of Defense of Australia R. Marles visited Ukraine, during which he met with the Prime Minister of Ukraine D. Shmyhal (Lviv). On May 29, 2024, the President of Ukraine V. Zelenskyi had a scheduled phone conversation with the Prime Minister of Australia E. Albanzi.

It should also be noted that the intensification of Ukraine's relations with Australia indirectly leads to an increase in Ukraine's attention to the entire Pacific region. For instance, on July 8, 2022, for the first time in history, the Minister for Foreign Affairs of Ukraine Dmytro Kuleba spoke at the meeting of the Foreign Ministers of the Pacific Islands Forum (PIF), an influential regional organization of which Australia is a member (in the online mode). This speech is a significant step toward recognizing Australia's (and Ukraine's) place in the region's foreign policy agenda as well as the security situation in the Pacific Ocean (*Myroshnychenko V., 2022*).

As of August 2024, Australia's total assistance to Ukraine amounted to more than AUD 1 billion (USD 682 million), of which AUD 880 million (USD 583 million) was military aid. Australia is providing Ukraine with ammunition, armored vehicles, special purpose vehicles, defense equipment, drones, dry rations, etc. Australia is also cooperating with other countries in the field of assistance to Ukraine: production of artillery shells with France; cooperation with Germany and the UK on humanitarian and military aid. Thus, Australia is one of the largest contributors of military assistance to Ukraine beyond NATO. Australia's support for Ukraine also continues in financial terms.

In addition, Australia has imposed large-scale sectoral and personal sanctions against Russia in connection with the commencement of a full-scale military aggression against Ukraine. As of August 2024, Australia has imposed sanctions on more than 1,400 individuals and legal entities supporting Russia's war against Ukraine.

Conclusions.

Starting from the 1990s to the present day, the development of relations between Ukraine and Australia has had a stable vector towards strengthening cooperation and searching for important points of contact. Relations have developed both at the political and diplomatic level, as well as in the areas of trade, economic and humanitarian cooperation.

The events of 2014 – Russia's annexation and occupation of Crimea and the start of hostilities in eastern Ukraine – provided the motivation for the two nations to step up their collaboration. Australia has unequivocally condemned Russia's aggressive actions and supported Ukraine in its efforts to defend its territorial integrity and sovereignty. A painful reason for strengthening cooperation was the terrorist attack by the Russian occupiers resulting in the deaths of 38 Australian citizens - the downing of the MH17 passenger plane in 2014. The outbreak of full-scale Russian aggression and the solidarity of the Australian people with our country, as well as the active work of the Ukrainian side, contributed to the maximum increase in bilateral dialogue and Australia's

assistance to Ukraine. 2022-2024 were the most active years in the context of relations between the two countries.

Australia continues to support Ukraine politically and diplomatically while also strengthening sanctions against Russia and offering financial, military, and humanitarian aid.

Trade and economic ties between Ukraine and Australia had been steadily expanding until Russia's full-scale aggression against Ukraine began. Trade has declined between the two nations as a result of the disruption of trade routes, a significant rise in logistics costs, insurance expenses, etc. brought on by Russia's invasion of Ukraine. At the same time, Ukraine and Australia have the potential to increase bilateral trade in goods and services. Australia is a leading partner in Oceania for our state. Further intensification of Ukraine's relations with Australia will also contribute to strengthening Ukraine's position in the Pacific region. Australia is a very promising partner for Ukraine in the fields of trade, investment, security, and military and technical cooperation. Australia is rapidly developing into one of the Asia-Pacific region's leading nations.

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УДК 327

THE AEGEAN PROBLEM IN RELATIONS BETWEEN TÜRKIYE AND GREECE

ЕГЕЙСЬКА ПРОБЛЕМА У ВІДНОСИНАХ МІЖ ТУРЕЧЧИНОЮ ТА ГРЕЦІЄЮ

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***Abstract.** Throughout history, Greece and Türkiye have had a complex relationship characterized by both friendly relations and periods of conflict and confrontation. In the 20th century, there were several instances of war and conflict between the two nations. However, beginning in 1999, the two countries entered a new phase in their relations, characterized by increased cooperation and dialogue. This period was marked by the improvement of official relations between the governments of Greece and Türkiye, facilitated by the Greek government's support for Türkiye's efforts to join the European Union. Nevertheless, certain issues remain unresolved.*

One of these disputes relates to the delineation of the territorial sea in the Aegean Sea. The issue in the Aegean arises from disagreements over the continental shelf and territorial waters. It should be noted that resolving this dispute is a matter of keen interest not only for Greece and Türkiye, but also for European countries, Russia, and Israel. The discovery of new oil and gas reserves in the Eastern Mediterranean has further complicated the issue. If the dispute is settled in favor of Türkiye, then these areas will belong to Southern Cyprus' territorial waters if it is settled in favor of both Türkiye and Greece. This factor directly affects Europe's dependence on Russian energy. Therefore, in proposing a resolution to the dispute, it is necessary to conduct legal and political analyses.

In general, there has been progress between Türkiye and Greece in terms of diplomatic, political, trade, economic, transportation, tourism, cultural, and educational relations. In order to resolve existing issues between the two countries, various mechanisms have been put in place through dialogue, including political discussions, meetings, and the High-Level Cooperation Council. Recently, the number of official high-level visits has increased. The High-Level Cooperation Council meetings take place alternately in Türkiye and Greece, coordinated by the heads of government and foreign ministers from both countries.

It can be concluded that the most appropriate course of action would be to grant these islands 3 nautical miles of territorial waters, in accordance with the provisions of the Lausanne Treaty of 1923 and the Paris Treaty of 1947. Considering the unchanged positions of both parties, it is advisable to resolve the matter of the delineation of territorial waters in the Aegean Sea in accordance with these principles and methods, in order to avoid this situation escalating into a global crisis.

Key words: Türkiye, Greece, Aegean Sea, territorial waters, delimitation.

Анотація. *Історично відносинам між Грецією та Туреччиною характерна ворожнеча, протистояння, конфлікти, суперечки одночасно з дружніми відносинами.*

У 20 столітті між двома країнами було кілька воєн і конфліктів. Проте з 1999 року турецько-грецькі відносини вступили в нову еру, засновану на співпраці та діалозі в різних сферах. У той же час офіційні відносини між Грецією та Туреччиною покращилися в результаті підтримки грецького уряду зусиль Туреччини щодо членства в ЄС, але деякі проблеми не були вирішені.

Одна з таких суперечок пов'язана з делімітацією територіального моря в Егейському морі. Проблема в Егейському морі виникає через суперечки щодо континентального шельфу та територіальних вод. Слід зазначити, що вирішення цієї суперечки викликає неабиякий інтерес не лише до Греції та Туреччини, а й до європейських країн, Росії та Ізраїлю. Відкриття нових родовищ нафти і газу в Східному Середземномор'ї ще більше ускладнює проблему. Якщо суперечку буде вирішено на користь Туреччини, то ці родовища будуть належати територіальним водам Південного Кіпру. Це фактор, який безпосередньо впливає на енергетичну залежність Європи від Росії. Тому, пропонуючи вирішення проблеми, необхідно здійснити як правовий, так і політичний аналіз.

Метою дослідження є вивчення періоду між Туреччиною та Грецією з кінця 20 століття до початку 21 століття, розвитку двосторонніх та багатосторонніх політичних відносин, торгівлі, економіки, транспорту, туризму, культури та освіти, а також детальний розгляд проблем, що існують між двома країнами. Одним із важливих чинників, що зумовлюють актуальність дослідження, є всебічний розвиток відносин між двома країнами та вивчення існуючих проблем між ними.

Загалом між Туреччиною та Грецією є прогрес у дипломатичних, політичних, торгово-економічних, транспортних, туристичних, культурних та освітніх відносинах. Для вирішення існуючих проблем між двома країнами шляхом діалогу створені різні механізми, такі як політичні дискусії, зустрічі та Рада співробітництва високого рівня, а останнім часом збільшилася кількість офіційних візитів високого рівня. Засідання Ради співробітництва високого рівня організовуються по черзі в Туреччині та Греції під координацією глав урядів та міністрів закордонних справ обох країн.

Можна зробити висновок, що найбільш вигідним варіантом є надання цим островам 3 морських миль територіальних вод, як це передбачено Лозаннським договором 1923 р. та Паризьким договором 1947 р. З огляду на незмінну позицію обох країн, це рекомендував вирішити питання делімітації територіальних вод в Егейському морі в рамках вищезазначених принципів і методів з метою запобігання цьому криза не стала глобальною.

Ключові слова: *Туреччина, Греція, Егейське море, територіальні води, делімітація.*

Introduction. Greece and Türkiye, two coastal states, have legitimate interests and rights in the Aegean Sea, as recognized by international law, including security and economic considerations. There are two main issues regarding the Aegean between these two countries: one relates to territorial waters and the other to the continental shelf.

The disagreements between Greece and Türkiye regarding the Aegean are based on the status quo established in the Treaty of Lausanne, signed in 1923, which aimed to establish a political balance between the two countries. Both sides welcomed the provisions of this treaty, but Greece has recently proposed increasing its territorial waters in the Aegean from 6 nautical miles to 12 nautical miles.

It is important to note that both countries have a legitimate interest in securing their territorial waters and ensuring their security in the region. Therefore, it is essential to find a solution that respects the rights and interests of both parties and maintains the stability of the Aegean region.. Greece has repeatedly emphasized its rights to territorial waters and the continental shelf in the

Aegean Sea, in contradiction to Article 300 of the United Nations Convention on the Law of the Sea, one of the fundamental principles of international law.

The purpose of the research is to study the period between Türkiye and Greece from the end of the 20th century to the beginning of the 21st century, the development of bilateral and multilateral political relations, trade, economic, transport, tourism, cultural and educational relations, as well as a detailed examination of the problems existing between the two countries.

Literature review. One of the important factors determining the topicality of the study is the comprehensive development of relations between the two countries and the study of existing problems between them. Many studies have been conducted on this issue. In our articles, we primarily referred to the works of Turkish and Greek scholars. Works such as those by Mustafa Aydın, Kostas Ifantis, Sule Kut, Conostas Dimitri, as well as media reports, can be noted. Throughout history, Greece and Türkiye have experienced a complex relationship characterized by both hostility, confrontation, and conflict, as well as periods of cooperation and friendly relations. In the twentieth century, several military conflicts and tensions occurred between the two nations. However, in recent years, a new phase in Turkish-Greek relations has begun, based on the principles of cooperation and dialogue.

Since 1999, there has been an improvement in official relations between the two countries, particularly in light of the Greek government's support for Türkiye's application to join the European Union. Despite this progress, some issues remain unresolved, such as the dispute over the delimitation of territorial waters in the Aegean Sea, which is linked to disagreements over the continental shelves and exclusive economic zones.

The resolution of this issue is of significant importance not only for Greece and Türkiye but also for other European countries, as well as Russia and Israel. The resolution could have implications for regional stability and the future of regional cooperation in the region.. The discovery of new oil and gas reserves in the Eastern Mediterranean has further complicated the situation. Should the dispute be resolved in favor of Türkiye, these reserves would be transferred to the territorial waters of southern Cyprus. Alternatively, should the dispute be settled in favor of both Türkiye and Greece, this would have a direct impact on Europe's dependence on Russian energy. Therefore, in order to offer a solution to this issue, it is essential to conduct a comprehensive analysis of both legal and political aspects.

This article draws upon various monographs, books, and internet resources on the subject. One such work is the study by Turkish researcher Faruk Senmezoglu, "The Aegean Problem in Turkish Foreign Policy", which provides an in-depth analysis of Türkiye's foreign policy and the issues surrounding it. Additionally, Conostas Dimitri's book "Greece and Türkiye", published in New York in 1991, is a fundamental work on the issue.

The main results of the study. The Aegean problem is in fact not one problem, but a series of problems: they concern restrictions on territorial waters, sovereign rights over the continental shelf and airspace, the management of military and civilian air traffic control zones, and the militarization of the Greek islands.

Thus, the Greek side argues that the only subject of dispute between the parties is the delimitation of territorial waters. However, the Turkish side divides disputes related to the Aegean Sea into 5 different categories (*Ministry of Foreign Affairs of the Republic of Türkiye, Major Aegean Sea Problems*):

- 1) Jurisdiction at sea – territorial waters, continental shelf and their delimitation;
- 2) the demilitarized status of the eastern Aegean islands on the basis of relevant international documents, including the Treaty of Lausanne of 1923 and the Treaty of Paris of 1947;
- 3) the legal status of certain geographical features in the Aegean Sea;
- 4) 10 nautical mile claims to Greek national airspace;
- 5) Search and rescue missions.

The most important of these issues for Türkiye is the issue of territorial sea. Under the 1982 Maritime Convention, which Türkiye is not a signatory, Greece has the right to extend its territorial sea to 12 miles, although Greece has so far refrained from exercising this right. Greece expanding its territorial waters from 6 miles to 12 miles could make it difficult for Türkiye to enter major ports such as Istanbul and Izmir. Türkiye has repeatedly stated that any attempt by Greece to expand its territorial waters to 12 miles would lead to a state of war. The threat of force if Greece exercises its right to expand its territorial waters has become a major source of tension between the two countries. Official circles in Greece are firmly convinced that there will be no rapprochement between Greece and Türkiye, especially as long as Greece threatens to use force to resolve its political activities in accordance with international law (*Constas 1991: p. 130*).

Türkiye and Greece also clash in Aegean airspace. Türkiye does not recognize the 12 miles of airspace claimed by Greece, asserting Greek sovereignty over just 6 miles. To emphasize this point, Türkiye regularly sends its aircraft within 6 miles of the Greek coast. Greece responded by sending a plane to intercept the Turkish plane, regarding this as a violation of airspace. Official fighting and airspace issues are a constant source of concern for Türkiye's NATO allies, who are concerned that an incident or miscalculation could lead to a major conflict between the two countries, as happened during the Imia/Kardak crisis in January and February 1996.

The Republic of Türkiye has repeatedly proposed to initiate a bilateral dialogue with Greece to resolve these issues. However, Greece rejected broad bilateral dialogue, arguing that only one issue should be resolved – the continental shelf. Greece argues that the case should be referred to the International Court of Justice in The Hague. Be that as it may, Türkiye preferred to resolve the issue through bilateral negotiations and refused to submit this issue to the International Court of Justice (*Aydin, Ifantis 2004: p.137*).

Another issue straining bilateral relations is Greece's militarization of the eastern Aegean and Dodecanese islands, which Türkiye claims is contrary to the terms of the 1947 Paris Agreement. On the contrary, Greece argues that the militarization of the islands was a defensive response to Türkiye's creation of a 100,000-strong "Fourth Aegean Army" shortly after the Turkish invasion of Cyprus in 1974, headquartered in Izmir, a few miles from the Greek islands. Until recently, Türkiye refused to release its Aegean army. But in the spring of 2000, Admiral Güven Erkaya, former commander of the Turkish Navy and adviser to Prime Minister Acavit, proposed in a secret memorandum (later leaked to the Turkish press) to release Türkiye's Aegean Army in exchange for a promise not to expand Greece's territorial waters to 12 miles. Although his proposal was initially rejected by the Turkish military, who stated that Greece should agree not to extend its territorial waters beyond 12 miles, it is seen in some Turkish circles as a favor that, combined with Greek reciprocity, could lead to an escalation of the Aegean dispute (*Aydin, Ifantis 2004: p.139*).

Since mid-1999, Türkiye's relations with Greece have softened considerably. But the Aegean dispute continues to cloud relations and may even derail current muted tensions. For example, in October 2000, disagreements over access to the islands of Lemnos and Ikaria led Greece to withdraw from NATO exercises in the Aegean Sea to bring Greece and Türkiye closer together. Although both sides tried to declare their commitment to easing relations, this incident made it clear that disagreements over the Aegean Sea continue to burden relations (*Turkish-Greek Relations, Aegean Problems 2000: p. 90*).

In addition, the EU appears to have resolved Türkiye's differences with Greece by demanding Türkiye's accession to the EU. In December 1999, the official message of the EU summit in Helsinki called on candidate states to try to resolve border disputes and other related issues or, failing that, to refer the dispute to the International Court of Justice within a reasonable time. The Council stated that it would review the situation regarding the accession process by the end of 2004. Thus, with no resolution to the dispute, Türkiye's application for EU membership continued to be extended until today.

In January 2002, Greece agreed to begin a bilateral dialogue with Türkiye on the Aegean Sea. Greek diplomats wanted the dialogue to be limited to the continental shelf. At the same time, other

issues needed to be discussed during the dialogue, such as airspace control and disagreements regarding the Ecumenical Patriarch (the spiritual leader of the world's Orthodox Christians, who lives in Istanbul).

At first glance, the complex Aegean conflict seems zero-sum and difficult to resolve as it involves sensitive “national issues” such as sovereignty, sovereign rights, oil reserves, freedom of the high seas and air, access to ports, security and influence. However, unlike the Cyprus problem, the motto “no solution can be solved” does not apply to the Aegean conflict. As can be seen from the two settlement attempts (1975-1981 and 2002-2003), both sides came to a strong agreement on the basic principles and parameters of a proper and fair settlement, as well as the latest negotiations, which seem promising since May 2010 (*Turkish-Greek Relations, Aegean Problems 2000: p. 73*).

At the Aegean level, it must be clearly demonstrated that Greece does not want to “strangle Türkiye” by turning the Aegean into a “Greek sea”; Türkiye, for its part, is not thinking about “occupying the Greek islands”. Resolving the Aegean conflict still requires more time than dialogue carried out in the spirit of *détente* – the easing of tensions in the Aegean Sea for more than a decade.

Critics of this approach note that attempts in 1975-1981 and 2002-2003 did not produce any results, and negotiations continued in 2004-2009 also led to failure: one or both sides failed to take important steps for various reasons. As for the more recent renewed negotiations (from 2010), Recep Tayyip Erdogan seemed ready to make a deal, but Greece, under the leadership of George Papandreou, who initially seemed more positive in this direction, agreed to extend the deal for a longer period due to concerns about internal costs. Moreover, given that Türkiye’s prospects in the EU are diminishing, EU membership is becoming less popular even within Türkiye. Due to Türkiye’s growing influence vis-à-vis the EU and the perception of Türkiye as a constructive and friendly state in the region, there is little incentive to consider resolving the Aegean conflict as a priority.

But over time, the Greek side seems hopeless in solving the problem due to the country’s economic problems. (Greece has been constantly on the verge of bankruptcy since 2009). Such a grim situation is unlikely to be conducive to a bold reconciliation at the Aegean level since, given Greece's current weakness and international influence, it will almost certainly be structured as a bribery of the opposition and the public.

The economic problems provoked another negative reaction from Greek nationalists and like-minded “experts”: Greece should acquire the entire Aegean Sea (the traditional Andreas Papandreou line of the 1970s and 1980s) and possibly the eastern Mediterranean (around the small island of Kastellorizo), which would likely provide oil and other mineral resources and thus save Greece from bankruptcy. In this context, in addition to the other “six concepts” in the Aegean Sea, another promising dispute arises – about the exclusive economic zone (*Kut 2004: p. 124*).

Despite the centuries-long conflict between Greece and Türkiye, the Aegean Sea dispute is still a fairly new conflict that requires resolution for many reasons. Despite the possibility of an armed conflict, now is the time to begin a serious process of its resolution. The earthquakes that occurred in 1999 brought not only the population closer together, but also politicians and the media. However, in the 2000s, relations between Greece and Türkiye repeatedly reached the point of armed conflict.

For example, President Erdogan’s visit to Athens in 2017 took place in a very tense format. Both sides have laid a long list of historical claims against each other stemming from the collapse of the Ottoman Empire more than a century ago. Finally, Erdogan mentioned the Treaty of Lausanne of 1923, which formalized the end of the *de facto* war between the two countries and the final fall of the Ottoman Empire. This agreement largely determines the relationship between both countries. Erdogan said that many years after the agreement was signed between the countries, “new problems have arisen”. As an example, he cited the situation of the Muslim minority in Greece. The countries have long disagreed on a variety of issues, including where their continental shelf begins and ends, energy resources, how to fly over the Aegean Sea and more.

Cold relations between Athens and Ankara have begun to soften amid the devastating earthquake that Türkiye faced in February 2023. After this, Greece immediately sent aid to the neighboring country. Two rescue teams arrived in Türkiye to search for people under the rubble. Greek Foreign Minister Nikos Dendias has instructed the country's permanent mission to the UN in Geneva to take measures to provide urgent humanitarian assistance to Türkiye and Syria through the UN Office for the Coordination of Humanitarian Affairs. Deputy head of the department Andreas Katsaniotis, in turn, took on the responsibility of coordinating the activities of organizations and individuals wishing to help collect humanitarian aid for the affected regions of Türkiye and Syria.

After the earthquake, Mitsotakis called Erdogan and promised to help in eliminating the consequences of the earthquake. It was the first phone call in months. Relations with Greece really warmed up after providing assistance to Türkiye after the earthquake. However, it should be noted that a number of factors influence the warming of relations. This is due to changes in the internal economic and internal political situation in Greece and Türkiye, changes in the foreign policy situation around Türkiye, relations between Türkiye and the EU, a fundamental change in the situation in the Middle East and the situation in the Eastern Mediterranean.

Elections took place in Greece, which strengthened the position of the ruling majority and leader and gave it room to maneuver. In addition, Greece now feels more confident. He signed military agreements with France and the United States. At the same time, it is extremely important to take into account the results of the Turkish elections in Greek foreign policy. Of course, although the economic relations between Ankara and Athens are not so good, they are important for Greece. The possibility of doubling trade turnover has a positive effect on Greek foreign policy.

The benefits of establishing relations with its neighbor for Türkiye are obvious and they are quite multifaceted. Erdogan, who has consistently demonstrated an independent foreign policy, demonstrates through his actions his commitment to the obligations of the NATO alliance. Türkiye has its own position in everything and balances its actions in other areas through dialogue with Greece. A clear proof of the warming relations between the two countries was the visit of Turkish President Recep Tayyip Erdogan to the Greek capital in early December 2023.

During the visit, 16 documents were signed between Athens and Ankara: declarations, agreements and memorandums, including the "Declaration of Friendship and Friendly Good Neighborhood Relations". The signed documents cover various areas of interaction between the two countries, including education, economics, social services, sports, tourism, research and innovation.

Greek Prime Minister Kyriakos Mitsotakis announced in a joint press statement with Erdogan that Athens will issue visas to Turkish citizens for year-round weekly visits to 10 Greek islands in the Aegean Sea. Mitsotakis noted that this initiative "carries a strong message, but also expresses the great truth that the Greek islands are a bridge of communication and friendship between the two countries". According to him, the next step in restoring bilateral dialogue could be an approach to delimiting the continental shelf and exclusive economic zones in the Aegean and East Mediterranean seas.

The President of Türkiye specially emphasized: "We want to turn the Aegean Sea into a sea of peace. We want to be an example for the whole world with the joint steps of Türkiye and Greece". According to him, there are "no insoluble problems" between the countries (*President Erdoğan spoke at the joint press conference with Greek Prime Minister Mitsotakis 2023*). On the eve of his meeting with the Greek Prime Minister, Erdogan gave an interview to the Kathimerini newspaper, called him a "friend" and called for a "new page" to be opened in relations between the two countries after many years of tension. "I think Mr. Mitsotakis understands and sees that we want to overcome the problems between Greece and Türkiye and further develop our relations. I feel a similar position in him and it makes me happy...".

He said that Türkiye has never viewed neighboring Greece as an enemy or an enemy and that it has no problems with its neighbors that it cannot overcome. "We have the same geography, the same sea. We breathe the same air. We are connected by our past. There are many problems

between us that we have not yet been able to solve and which we are aware of as two countries. Let's build trust between our countries. Let's expand our cooperation in the areas of economy, trade, transport, energy, healthcare, technology, education and youth policy. Let us mutually protect the historical and cultural heritage of our peoples" (*Message from President Erdoğan to Greece: We want friends, not enemies*).

Conclusion. Thus, on the basis of international agreements, the legal position of both states and the approach of the International Court of Justice in similar cases, as well as consideration of the methods and principles applied, it can be concluded that the Aegean Sea should be divided between Türkiye and Greece based on the center line principle applied by the International Court of Justice.

It is clear that this decision – the resolution will decide what activities each country allows and where, minimizing the possibility of military action between Greece and Türkiye in the Aegean Sea. Moreover, the resolution will bring greater political, military and social stability and security to the region and ultimately to NATO and the EU. Both countries will gain more political respect and influence than they currently have and will increase their national prestige. Both Greece and Türkiye will benefit from increased economic opportunities, from resources on the continental shelf to increased tourist numbers and business partnerships. The resolution will ensure uncontested passage for ships of all countries from the Aegean Sea to the Black Sea and back.

NATO can improve the efficiency and effectiveness of crisis management planning and related measures and begin to view the Aegean as a strong point in the overall security and stability architecture, rather than as weak spots in Greece or Türkiye that each country must defend. Both countries, on the other hand, could reduce the excessive amount of money they currently spend on national defense compared to other European countries due to the "threat". The resolution will give greater legitimacy to UN Declaration III and enable it to be accepted worldwide as the only true maritime regime. Finally, the Greeks and Turks (and America, which actually places great strategic importance on the region and spends a lot of time and money trying to prevent violence and resolve disputes) will be able to live easier knowing that the threat of war has been eliminated once and for all.

Undoubtedly, Türkiye's EU membership proposal could help the settlement process. Moreover, Türkiye has wanted to become a member of the European Union for decades. Following his re-election in May amid an economic crisis, Erdogan said he intended to improve the country's relations with Western partners and allies.

It should be noted that Türkiye has a long way to go before it is accepted as a full member of the EU, but this path of acceptance will have a cyclical connection with the Aegean dispute. The more Greece and Türkiye try to resolve their disputes, the more likely it is that Türkiye will fully comply with membership requirements and therefore be accepted into the EU. Likewise, if Türkiye becomes a member of the EU, the European Union will help resolve the Aegean Sea dispute.

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EVOLUTION OF MILITARY-POLITICAL COOPERATION IN THE RAMSTEIN FORMAT (2022-2024)

ЕВОЛЮЦІЯ ВІЙСЬКОВО-ПОЛІТИЧНОГО СПІВРОБІТНИЦТВА В ФОРМАТІ «РАМШТАЙН» (2022-2024 РР.)

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Abstract. *The Ramstein format, initiated in 2022, has emerged as a groundbreaking mechanism for military-political cooperation in response to the escalating security crisis caused by Russia's invasion of Ukraine. This article explores the evolution of this international coalition from its formation to 2024, focusing on its role in uniting over 50 countries to provide coordinated military and logistical support to Ukraine.*

The study examines the main stages of the coalition's development, highlighting its strategic goals, such as strengthening Ukraine's defense capabilities, supplying advanced military equipment, and fostering interoperability among allied nations. Particular attention is given to the challenges faced by the coalition, including maintaining member-state cohesion, overcoming logistical hurdles, and addressing resource limitations in the face of prolonged conflict.

The findings reveal that the Ramstein format represents a new model of collective action in global security, demonstrating the effectiveness of flexible, multi-nation partnerships in addressing large-scale aggression. The article also underscores the format's impact on redefining military-political cooperation, setting a precedent for future alliances in mitigating similar threats to international peace and stability.

This research contributes to the understanding of how innovative frameworks for collaboration can adapt to rapidly changing geopolitical realities, offering insights into the long-term implications for global defense strategies.

Key Words: *Ramstein format, military-political cooperation, international security, Ukraine, defense aid, geopolitical crisis, collective action, military alliances, global stability, interoperability, advanced weaponry, coalition dynamics.*

Анотація. *У науковій роботі досліджується еволюція військово-політичного співробітництва у форматі «Рамштайн» протягом 2022–2024 років. Формат «Рамштайн» став новою моделлю міжнародної координації та взаємодії у забезпеченні безпеки України в умовах повномасштабної російської агресії. Аналізуються ключові етапи формування та розвитку цього формату, зокрема його роль у зміцненні міжнародної коаліції, організації постачання озброєння, координації дій союзників та розробці спільної стратегії протистояння загрозам глобальній безпеці.*

Особлива увага приділяється впливу формату «Рамштайн» на трансформацію євроатлантичної системи безпеки, його інституціоналізації та розширенню функціоналу в межах міжнародної взаємодії. Дослідження висвітлює внесок ключових держав-учасниць, їхню дипломатичну активність та роль у формуванні спільних військових і політичних рішень.

Результати роботи дають змогу оцінити ефективність «Рамштайну» як унікального інструменту кризового реагування, підвищення обороноздатності України та забезпечення міжнародної безпеки. Зроблено висновки щодо перспектив розвитку формату в контексті довгострокових викликів та збереження стабільності на глобальному рівні.

Ключові слова: Рамштайн, військово-політичне співробітництво, міжнародна коаліція, безпека, Україна, обороноздатність, координація дій, військова допомога, геополітика, колективна безпека, міжнародна взаємодія, кризове реагування.

Introduction. It is generally accepted that after this war, the world was divided. Today, given this division, several groups (blocks) of international actors have formed based on how one or another international actor perceives the war. Therefore, Ukraine should maintain and strengthen the dialogue with the collective West to increase the pace of military and economic assistance to end the war on favorable terms for Ukraine (Rafalskyi, 2023).

In this review, the authors highlight key challenges in the most economically developed countries sided with Ukraine. One of the key events in international cooperation in support of the Ukrainian state was the establishment of the Ukraine Defence Contact Group, also known as the Ramstein format.

This exploratory study tries to interpret the results of its establishment in April 2022. This group has undergone significant internal and external changes, going through a complex transformation process from periodic working meetings to a de facto international coalition to support Ukraine, which influences global processes and may become a component of the new international security architecture. The interaction between the members of the Ramstein format has resulted not only in mutually beneficial cooperation but also in complex interdependence, which should be transformed into a stable political alliance for Ukraine, as stated in the philosophy of the Ukrainian Peace Formula: ‘The risk of escalation in and around Ukraine will remain until its security is guaranteed by legally binding instruments of international law, backed by reliable domestic defense capabilities, and integrated into a new international security architecture.

This study aims to trace the evolution of cooperation between the participants of the Ramstein format during their interaction in providing international assistance to Ukraine.

Literature review. The theoretical, international, and historical aspects of Ukraine's behavior in the international arena in the context of repelling Russian aggression have been studied by such scholars as O. Rafalskyi, V. Horbulin, A. Maiboroda, H. Perepelytsia, S. Troyan, S. Shergin, A. Kudriachenko, P. Hai-Nyzhnyk, S. Vidnianskyi, M. Kapitonenko, B. Bernadskyi, R. Vovk, M. Malskyi, M. Trebin, A. Lytvynenko, A. Bohomolov (Maiboroda, Khamitov, Holovakha, Dembitskyi, Smolii, Skrypniuk, Stoetskyi, 2022).

Main results of the research. The findings revealed that many recent studies have focused on the diversity and multiplicity of mutually beneficial aspects of cooperation, ties, and contacts that have taken place between Ukraine and its allies in the Ramstein format in recent years. It is highly likely that this format has created a solid foundation for unilateral international support for Ukraine in repelling Russian aggression and significantly influenced the foreign policy strategies and behavior of Ukraine's allies in international politics. Ukraine has proven itself to be a strong international actor capable of acting as an outpost of defense of Western civilization against external threats to the Euro-Atlantic community for an extended time. Strengthening the defense of states that cannot ensure their security or protect their geopolitical interests on their own. At the same time, military assistance, as one of the foundations of Ukraine's resilience, is a component of the international support provided by Ukraine's allies in the military, socioeconomic, financial,

diplomatic, and other spheres, including humanitarian, where the most important place is occupied by assistance to internally displaced persons from Ukraine to the EU (*Buzarov, 2023*).

The discussion points out that since February 2022, the United Kingdom, the United States, and Poland have taken the lead in coordinating international military assistance to Ukraine. One trend is essential to note. From the outset, there was a clear institutional distinction between NATO's assistance as an actor in international relations and that provided as part of an initiative by a single country (group of countries), such as the UK. This institutional approach was further confirmed at the NATO summit in Washington in July 2024, when the Alliance took on a more active coordinating role in providing military assistance and training to Ukraine. The US stated that NATO's new role would go hand-in-hand with the work of the Contact Group on Ukraine's Defence (Ramstein). In other terms, despite close cooperation between NATO and the Ramstein, an institutional separation of cooperation with Ukraine was developed at the level of NATO and the Ramstein.

In April 2022, the United Kingdom and its partner countries established the International Donor Coordination Centre (IDCC) in Germany to make the international community's military assistance to Ukraine more coordinated and effective. Subsequently, the IDCC, which consisted of more than a hundred military personnel from 30 countries, was to respond to Ukraine's requests for weapons, coordinate allied responses, and ensure the delivery of equipment to Ukraine over the next two years (*Rafalskyi, 2023*).

It is commonly suggested that the first meeting in this format occurred on 26 April 2022 at the Ramstein Air Force Base near the German city of Ramstein-Miesenbach. 'Representatives of 43 countries, including 13 non-NATO countries, took part in the Summit on Ukraine's Long-Term Security at Ramstein Air Force Base. Most of them were represented by defense ministers or senior defense policy officials. NATO Secretary General Jens Stoltenberg also took part in the discussion. Among the non-NATO countries invited were the United States' key Pacific partners: Japan, South Korea, Australia, and New Zealand. Representatives of the Middle East - Israel, Qatar, and Jordan, a quartet from Africa - Kenya, Liberia, Morocco, and Tunisia, as well as Finland and Sweden (at that time, these countries were not yet full members of NATO) and, of course, Ukraine itself. The Pentagon also had to create a new kind of coalition, convening more than 50 countries worldwide to coordinate the supply of materiel to Ukraine through the Ukraine Defence Contact Group - the most complex and rapid effort ever undertaken to rebuild a single country's armed forces (*Perepelytsia, 2017*).

Broadly speaking, experts, journalists, and politicians used various terms and phrases to describe a new, historic, international format of support for Ukraine: from the emergence of the Anti-Putin Coalition to the new NATO format for engagement with Ukraine. However, the Ukraine Defense Kontakt Group was the official name used in international documents of NATO countries and the US Department of Defence. According to the definition of the Ministry of Defence of Ukraine's website ArmyInform: 'Ramstein meetings are a series of diplomatic meetings of defense ministers from several dozen countries. The primary purpose of the Ramstein is to discuss, synchronize, and accelerate the provision of military assistance, weapons, and equipment to Ukraine. In other words, defense ministers from around the world discuss what weapons will be provided to Ukraine to accelerate the end of the war (*Troian, 2014*).

The launch of the Ramstein format had the practical result of formalizing the political and legal aspects of specific packages of military and technical assistance to Ukraine and accelerating relevant political decision-making at the level of the governments of the allied countries. For example, on 9 May 2022, the United States passed the Ukraine Democracy Assistance Act of 2022, which laid the legal groundwork for in-depth military cooperation between the United States and Ukraine for the following year (*Pirozhkov, 2022*).

The study is a preliminary attempt to analyze that by April 2023, the assistance to Ukraine from the Ramstein Group countries had increased tenfold in a year. As of April 2023, the total security assistance from the member countries of the Contact Group on Defence of Ukraine was \$55 billion. This is a tenfold increase since the first meeting in the Ramstein format (the largest

share of this assistance was provided by the United States (USD 35 billion). The number of members of the Defence Contact Group, the donor countries that assist Ukraine, increased to 54 countries over the year.

This paper reports on the study's results, exploring that during the first year of the Ramstein meetings, the Allies gradually improved Ukraine's defense capabilities and increased the Armed Forces' combat capability. The following chronological classification of specific Ramstein meetings can be made in the context of the main topics discussed at a particular meeting: 'Ramstein 1'. Inaugural meeting and assessment of prospects; 'Ramstein 2'. Artillery and Missiles; Ramstein 3. Announcements about HIMARS; 'Ramstein 4'. Repair of damaged equipment, ammunition, and HIMARS again; 'Ramstein-5'. Gepard anti-aircraft guns, HARM, and Hellfire missiles; 'Ramstein-6'. Air defense against Russian missiles; 'Ramstein-7'. More air defense and artillery; 'Ramstein-8'. The West decides to transfer its tanks; 'Ramstein-9'. Formation of the tank coalition; 'Ramstein-10'. Shells for the counter-offensive.

According to some Ukrainian websites, during the first year of the Ramstein format, Ukraine received: 'At least 400 155-mm shells; at least a hundred 105-mm artillery pieces; about fifty Western MLRS (MLRS, HIMARS, Mars II, LRU); more than a thousand armored vehicles; anti-radar and anti-ship missiles; Western tanks (*Kapitonenko, 2009*).

The most impressive progress has been made in air and missile defense. At the end of January 2022, Ukraine could not buy banal stringers—it was impossible. Subsequently, within a year, the defense forces were able to secure Hundreds of man-portable air defense systems of various types: Crolate (France), Aspide, and Gepard (Germany); IRIS-T SLM (Germany) and NASAMS (Norway—USA) systems; and finally, Patriot (USA) systems capable of shooting down ballistic targets.

Thus, during the first year of the Ramstein format, the combat capability of the Ukrainian Armed Forces gradually improved, and the Ukrainian army was technically re-equipped according to Western standards.

Security assistance to Ukraine will increase to \$95 billion by 2024. US Secretary of Defence Lloyd J. Austin III officially announced this at a press conference after the 21st meeting of the Ukraine Defence Contact Group. Austin also noted that he is very proud of America's leadership and contribution and welcomed US President Joe Biden's law signing on additional assistance to Ukraine. He also welcomed increased funding for Israel, Taiwan, and the US defense industrial base (*Kudriachenko, 2006*).

It is commonly suggested that during the second year of the Ramstein format and its last meetings in 2024, the following thematic meetings were held: 'Ramstein 11'. Still no Western aircraft; 'Ramstein 12'. The Fighter Coalition; 'Ramstein 13'. Assistance against the backdrop of a counter-offensive; 'Ramstein 14'. Pilot training and clarity on the F-16; 'Ramstein 15'. Capability Coalition Initiative and launch of the IT Coalition. Ramstein 16. F-16s, air defense systems, tanks, and winterization. Ramstein 17. A coalition to strengthen Ukraine's air defense has been formed. Ramstein 18. Commitments on long-range weapons are announced. Ramstein 19. The Drone Coalition is officially launched. Ramstein 20. Ammunition, air defense, F-16s, and drones. 'Ramstein 21': Additional air defense funds are provided to Ukraine. 'Ramstein 22': more munitions, Leopard tanks, and air defense. 'Ramstein-23': improving air defense. Ramstein 24. Critical weapons and equipment, M2 Bradley fighting vehicles and missiles for HIMARS (*Malskyi, 2011*).

However, the 25th meeting of the Ramstein Group did not occur in September. It cannot be ruled out that one of the reasons for the postponement was the problematic domestic political situation in the United States on the eve of the presidential election. For an extended period, Trump's team made contradictory statements about how they saw further support for Ukraine and the end of the war in general. At the same time, there were media reports that the administration of the current US President, Joe Biden, wanted to urgently send the remaining \$6 billion in military aid to Ukraine. At the same time, Defence Minister Rustem Umerov hopes that the format of the

Contact Group on Ukraine's Defence, known as the 'Ramstein,' will continue under the future Donald Trump administration.

It should also be added that as of November 2024, the Pentagon has clarified the remaining amount intended to provide military assistance to Ukraine, which is waging a defensive war against Russia: 'It totaled \$9.3 billion (about €8.8 billion). This was stated by US Department of Defence spokesman Major General Pat Ryder during a press briefing on 12 November 2024. The Pentagon spokesman stressed that the United States wants to use all available funds to help Ukraine before the new US president's team takes over. Thus, more than \$7 billion remained under the Presidential Drawdown Authority program (\$4.3 approved by Congress in April and \$2.8 that became available after recalculations), and about \$2.2 billion is available under the USAI (Ukraine Security Assistance Initiative) program, Voice of America correspondent Ostap Yarysh wrote on social media platform X (*Khoma, 2015*).

In addition, according to Western analysts, 'since the beginning of the war, the US Congress has passed five bills providing Ukraine with permanent assistance, the last one in April 2024. The total budget allocated under these bills (and this is the amount that often appears in the headlines) is \$175 billion. It is important to note that out of the total \$175 billion, only \$106 billion goes directly to the Ukrainian government. Most of the remaining funds are used to finance various US activities related to the war in Ukraine, and a small portion is used to support other affected countries in the region.

Taken together, the results suggest that between the beginning of Russian aggression against Ukraine in February 2014 and the start of Russia's full-scale invasion in February 2022, the United States provided financial and humanitarian assistance many times less. In 2017, the US aid to Ukraine aimed to provide Ukraine with essential humanitarian and non-lethal assistance. Under President Obama, the United States was an active supporter and catalyst for reforms in Ukraine. Ukraine received other assistance to improve its defense capabilities and conducted many military exercises. From 2014 to 2017, the United States provided Ukraine \$1.6 billion in security assistance. Between 2014 and 2021, the United States provided Ukraine with \$2.5 billion in military aid. 'The ruling party of the United States still argued that the supply of Western weapons would accelerate the war's end, and a victorious war at that.' Eventually, the law supporting Ukraine was passed in April 2024, but the delay in its adoption led to significant changes at the front, not in favor of the Ukrainian side.

Indeed, the Ramstein format has dramatically contributed to the rapprochement between the Alliance's and Ukraine's structures. All 32 NATO member states are also members of the Ramstein Group. On 30 September 2022, President of Ukraine Volodymyr Zelenskyy signed Ukraine's application for NATO membership on an accelerated basis against the backdrop of Russia's annexation of the occupied territories of Ukraine. Since February 2022, NATO has implemented support projects in various fields under the Ukraine Airspace Trust Fund. At the Vilnius Summit in 2023, member states agreed to further develop the Partnership for Ukraine into a multi-year assistance program based on sustainable and predictable funding. Long-term assistance is provided in three main areas: reconstruction, institutional transformation, and transition to interoperability with NATO. At the Madrid Summit in 2022, NATO leaders agreed to step up training and capacity building as part of the NATO 2030 agenda. At the Washington Summit in 2024, Allied leaders pledged long-term security assistance to Ukraine to provide military equipment, assistance, and training to support Ukraine in building a force capable of defeating Russian aggression today and deterring it in the future.

Conclusions. The above multilateral analysis (mainly based on the theory of international relations and the historical and descriptive method) of the Ramstein phenomenon in world politics allows us to draw some conclusions about the trends in its functioning as the main center of international military and technical assistance to Ukraine in countering Russian aggression.

These results indicate that Ramstein has become a phenomenon in world politics. Partner assistance to Ukraine is essential to its defense capability and resilience in resisting Russian aggression. The term 'Ramstein' itself has become universal. Its analogs can be found in journalistic

and academic literature and the media: ‘Ramstein 2.0’, ‘Cultural Ramstein,’ ‘Financial Ramstein,’ ‘Economic Ramstein,’ etc. These phrases are associated with planning and the desire to modernize a particular area.

Taken as a whole, the Ramstein Group has created opportunities for the strategic rearmament of the Ukrainian Armed Forces and convergence with NATO standards. Within the framework of this format, specific types of weapons were supplied and purchased with financial assistance (over \$100 billion) from Ramstein member countries. Ukraine improved its defense capabilities, ensuring successful counterattacks and strategic defensive actions.

Specifically, during the entire period of intensive work of Ramstein, not only did the strategic rearmament of the Armed Forces of Ukraine take place, but also the technological improvement of the Ukrainian military-industrial complex. This, in turn, may increase interest in Ukraine's integration into the Euro-Atlantic community. In this regard, the chronicle and peculiarities of relations over the two-and-a-half years of intensive work of the Ramstein format to counter Russian aggression make it possible to state that Ramstein has also become a catalyst for Ukraine's multi-level accelerated integration into the Euro-Atlantic community.

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POWERHOUSES OF SERVICE INDUSTRY IN EUROPE: THE CASE OF SPAIN

РУШІЙНІ СИЛИ СЕКТОРУ ПОСЛУГ В ЄВРОПІ: ПРИКЛАД ІСПАНІЇ

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Abstract. *Along with France, Spain is considered the European leader in the field of service economy because of record-breaking numbers of foreign tourists, logistic infrastructure of world class and developed net of sea ports that serve as vital intermediaries in the trade between Europe and Africa. The article deals with the statistics that justifies the tourist success of the country and tries to explain how it became so prosperous, while using its rather limited economic potential.*

The authors analyze the peculiarities of Spain whose territory consists of the mainland, the Balearic Islands and the Canary Islands, and also belongs to the list of world leaders by the number of UNESCO World heritage sites and the beaches under the 'Blue Flag'. Since the country's culture has absorbed the heritage of several eras and different peoples who lived in the Iberian Peninsula, it is interesting both for lovers of antiquity and historical architectural heritage and for admirers of modern cultural trends.

The article underlines an exceptional contribution of aviation industry in the development of tourism, while simultaneously underscoring the importance of the developed net of bullet trains that belongs to the list of the largest in Europe, as well as the cooperation of this state with the European countries that are recognized as leaders in the field of aviation services.

Such topics as the Spanish language educational establishments and famous festivals that allow a certain category of holidaymakers arranging their own leisure time are also highlighted.

The authors believe that transit importance of Spain being at the crossroads between Morocco with its imperial towns, Andorra with its large duty-free zone and Portugal that is famous for its historic towns, windsurfing facilities and developed wine industry contributes even more to its resounding tourist success.

In the final count, one should claim that sophisticated service industry plays an important role in the Spanish economy by reducing, at least in seasonal terms, the high level of unemployment that is the second-worst in the EU only after Greece. Its contribution in monetary terms is also among the largest in the world.

Keywords: *Spain, UNESCO, Canary Islands, Balearic Islands, ports, airlines, tourism.*

Анатоція. *Разом із Францією, Іспанія є одним із європейських лідерів у сфері послуг завдяки значній кількості туристів, транспортній інфраструктурі світового рівня і портам, які слугують посередниками у торгівлі між Європою і Африкою. У статті наводяться статистичні дані, що свідчать про туристичний успіх країни, і робиться спроба пояснити, як їй вдалося досягнути таких переконливих результатів, використовуючи свій доволі обмежений в економічному сенсі потенціал.*

Автори аналізують специфічні туристичні особливості Іспанії, територія якої поєднує у собі материкову частину, Балеарські та Канарські острови, а також належить до переліку світових лідерів за кількістю місць, що знаходяться під захистом ЮНЕСКО, та пляжів, котрі за рейтингом перебувають під «блакитним прапором». Оскільки культура країни увібрала спадщину кількох епох та різних народів, які проживали на території Піренейського півострова, вона є цікавою як для любителів старовини й історичної архітектурної спадщини, так і для шанувальників сучасних культурних трендів.

У дослідженні наголошується на винятковому значенні авіатранспорту для розвитку туристичної галузі. Особлива увага також приділена розвинутій мережі швидкісних залізничних перевезень Іспанії, яка є однією з найбільших в Європі, а також кооперації цієї країни з провідними європейськими державами, що є визнаними лідерами в сфері надання авіаційних послуг.

У статті йдеться про навчання іспанській мові у країні та про знамениті фестивалі, які дають змогу зацікавити певну категорію туристів, метою яких є облаштування власного дозвілля й розваги.

Автори вважають, що транзитне значення Іспанії, котра знаходиться на роздоріжжі між Марокко з імперськими містами, Андоррою з великою зоною безмитної торгівлі та Португалією з її історичними містами, курортами для віндсерфінгу і розвинутим виноробством, ще більше посилює перспективність цієї країни.

У підсумку автори роблять висновок про те, що сфера послуг є важливим чинником розвитку іспанської економіки і дає можливість хоча б у сезонному відношенні зменшити рівень безробіття, за показниками якого країна поступається в ЄС тільки Греції. Фінансовий внесок галузі у народне господарство Іспанії вважається одним із найбільших у світі.

Ключові слова: *Іспанія, ЮНЕСКО, Канарські острови, Балеарські острови, порти, авіалінії, туризм.*

Problem statement. It is well-known that the Southern Europe lags in economic development behind northern regions of the continent. In this respect, it is interesting to analyze the example of such a regional logistic hub as Spain and to find out why the national service economy is so sophisticated.

Research assumption. The paradox of Spanish case is that the country enjoys perfect conditions for the successful growth of tourism and the relevant infrastructure to back it up but, at the same time, remains the state actor having relatively large level of unemployment, especially among the young people.

The aim of the article is to analyze the factors that contribute to resounding economic success of the national service industry and the impact they have on the general state of the Spanish economy.

Analysis of the latest publications. *David Cesar Heymann* underscores that Spain attracts visitors with high income and remains rather safe destination that has a favourable currency exchange rate for the residents of several countries like Great Britain [Heymann, 2024]. *Callum Tennant* says that Spain completely liberalized the market of travel with high-speed trains in 2021 that led to the arrival of Italian and French companies with cheap tickets and forced national operator ‘Renfe’ to react in timely fashion by introducing ‘Avlo’ low cost trains. As a result, this type of transportation became truly affordable for everyone [Tennant, 2023]. *William Chislett* claims that the tourist success of Spain has a few drawbacks like temporary overpopulation, the lack of flats for the citizens who want to pay a rent or to buy their own flats but this field of economic activity contributed 13 per cent to the national GDP in 2023 [Chislett, 2024]. *Jonas Martiny* also agrees that tourist success comes with strings attached. Very high temperatures and limited rains bring catastrophic draughts to Spain but national residents are forced to compete for water with foreign tourists. However, local authorities introduce only half-measures to protect them, since this Iberian country is the second most popular destination in the world after France and tourists bring in valuable funds [Martiny, 2024].

Presentation of the main research outcomes. Spain boasts the second largest land area in the Western Europe only after France. The national territory is equal to about 505 thousand square kilometers and occupies 11.9 per cent of the European Union’s land area. It is characterized by unique weather conditions, since the northern and southern regions are facing respectively cold North Atlantic Ocean with strong winds and hot Mediterranean Sea, and the difference in the land temperature between both regions is considerable. The country is located within the Iberian Peninsula and has common land borders with Portugal, Andorra and France, as well as maritime and land frontiers with Morocco. The Spanish share in the EU’s economy represents 8.4 per cent of the collective GDP [Spain in the EU].

In 2023, the population of Spain constituted some 48.6 million residents, including 6.49 million foreigners who were represented by workers and some retirees from the members of the European Union and Great Britain [Immigration increases Spain’s..., 2024]. Like in Italy, a sunny weather, a healthy Mediterranean cuisine, and relatively inexpensive food, as well as the local habit to socialize stimulate the Spaniards to live longer and happier lives. As a result, 20 per cent of the national population is 65 years old or even older, while the life expectancy in the country is among the best ones in the world [Keeley, 2022].

Spain is the tourist powerhouse of Europe, and this defines its economic development in other fields of economic activity, such as logistics, industry, and agriculture. Back in 2023, more than 85.1 million foreigners arrived to the Spanish national territory and spent about EUR 108.6 billion, with tourists from Britain, France and Germany being the most frequent visitors [Spain sets historical record..., 2024]. This statistics claims that the tourism is the mainstay of the national economy. Why is Spain so popular? The country with numerous sites of ancient cave art also boasts magnificent ruins of the Roman monumental buildings like the Aqueduct in Segovia, the Tower of Hercules in La Coruna or famous Roman walls of Lugo. Moreover, southern Spanish lands were under heavy Moorish cultural influence in the medieval period that led to the construction of oriental palaces and mosques in such famous towns as Cordoba, Seville, and Granada. In our opinion, all former colonial powers also accumulated considerable cultural reaches, and Spain that ruled over the largest areas of Latin America with the deposits of golden and silver ores in New Spain (Mexico) and Upper Peru (Bolivia) colonies was not an exception. Finally, the country succeeded in staying away from the battles of the Second World War that left its urbanized centres mostly intact.

The geography plays an important role in the economic success of tourism, since Spain that boasts its own Atlantic coast is located relatively not too faraway from Great Britain and Ireland where the weather is foggy and rainy. The British pound enjoys a bit greater exchange rate than euro, and the tourists from those islands find prices to be quite affordable here. The same is true with respect to expensive Germany where all parts of the country except the Deep South hardly

experience many sunny days but the size of population is the largest in Europe. Sweden, Norway and Finland follow the suit with bad weather and large salaries of national residents. Moreover, Spain is also attractive for tourists from the Middle East and the Maghreb because of the geographic proximity to the North Africa, the existence of towns-enclaves Seuta and Melilla on the north-western tip of this continent, and rich Moorish heritage in Andalucía. Furthermore, the constant terrorist threat in Egypt, Tunisia and Turkey turns this Iberian tourist player into an alternative and safe travel destination for European tourists.

As a rule, Spanish cities are picturesque enough, having dominant cathedral, elaborate building of a city hall (*ayuntamiento*), renovated medieval houses of central market square, and imposing covered markets known as '*mercados municipales*'. They are usually occupying historic structures made out of the steel and stone in Gustave Eiffel's style and famous for huge assortment of agricultural goods and fish. For example, the largest in Spain Central market of Valencia is distinguished for sophisticated stained glass, decorative iron elements of its interior, and more than 1,000 stalls [10 best markets in Spain]. The principal train stations of the country are not less impressive as well. Some of them stand out for a perfect symmetry, while others were constructed in Southern Spain in the 100 per cent Moorish style with the use of rich tile decorations. But Madrid's Atocha station of the end of the 19th century stands out among them all because of enormous tropical garden with 7,000 trees and plants inside of the main hall [Von Wartenburg, 2020].

The palm trees and other representatives of tropical flora are rare in Europe in general but not in Spain. Botanical gardens, central streets and even some areas of waterfront are duly decorated with flowers, and pavements sometimes covered with precious marble. Moreover, such historic southern urbanized centres like Seville, Malaga, Elche and Alicante are distinguished by palm groves of considerable size. More precisely, the Palmelar of Elche is the most interesting in this respect being the largest man-made palm forest in Europe with some 200,000 exotic trees [Elche palm grove]. As a result, the combination of sunny weather, striking architecture, authentic food and tropical greenery in the South makes Spain extremely attractive for wealthy foreigners from the countries with cold climate.

Unlike many European counterparts, Spain controls an extensive chain of islands with considerable tourist value. For example, the rough and volcanic Canary Islands next to the North-Western Africa represent the opportunity to escape cold winter weather in Europe because of high annual temperature of the air. Tenerife, Gran Canaria, and Lanzarote are the top three most popular destinations within this archipelago. Among them, namely Tenerife stands out for the combination of rich architectural heritage in the towns of San Cristobal Laguna and La Orotava with carved wooden balconies, the religious appeal of sacred Basilica of Candelaria, and for its natural beauty. This Island also hosts Volcano Teide being the highest point in Spain. The UNESCO-protected National Park boasts this Mountain with the summit that reaches about 3,718 metres but in fact more than half of its length that constitutes 7,500 metres is hidden under the oceanic water [What are the top..., 2024; Teide National Park]. Since 1945, the Canary Islands have been considered the movie capital of Spain, and many corporations are producing their advertisements or motion pictures with striking and diverse local landscapes in the background. They are also attracted by considerable tax discounts, the ability to invite the actors both from Europe and Africa, mountains, sand dunes, craggy coast, volcanoes, and the sunny weather with average annual temperature that constitutes 22 degrees Celsius [Audiovisual industry]. This fact allows the global TV audience to learn more about Spain.

On the other hand, the Balearic Islands – Menorca, Mallorca and Ibiza – are combining interesting historic towns like Palma with the Seu Cathedral and the 'capital of parties' Ibiza with outstanding beaches known as '*cala*'. Some of them belong to the list of the most beautiful in Europe. The proximity to Spanish mainland turns the islands into cruise hubs and defines the abundance of cheap flights of budget airlines. As a result, they hosted 14.4 million foreign visitors

who spend here roughly EUR 17.2 billion in 2023 that was slightly less than their counterparts did in more popular Catalonia [Ensor, 2024].

Talking about recreational zones for sun worshippers, one must say that Spain is famous for the cleanest water in Europe. Back in 2023, 729 beaches, marinas and other maritime areas in the country were registered under the Blue Flag by the Foundation for environmental education in Copenhagen. The regions that are truly distinguished for the immaculate coast are located mainly in Valencia, Andalucía, and Galicia. As a result of such multitude of ecologically-perfect areas, 15 per cent of the best global beaches are located in Spain, and it occupies the first spot in the world by their number [Spain continues..., 2023]. This distinction is not only making the country an attractive destination for foreigners, but also encourages both national residents and tourists to take care of the coastal areas in order to preserve such status.

In 2024, Spain counts on 50 UNESCO World Heritage sites, among them four are cultural ones. While staying in the country, one should visit the historic caves with primitive drawings, Roman ruins of Galicia, Moorish heritage in Andalucía and Aragon, medieval monasteries, and, finally, the most recent masterpieces of Antonio Gaudi in Barcelona. It also serves as important European religious destination due to the existence in its north-western corner of Santiago de Compostela as the final resting place of Apostle Saint James [Spain. Properties inscribed...]. One should say that only a handful of countries in the world boast so many UNESCO World Heritage sites.

Quite a few hotels in Spain are very authentic. From the personal experience, one may claim that many of them were opened in historic houses with tiled floors where spacious rooms were divided into 'singles' or 'doubles' and bathrooms were shared by all guests. But the country also boasts a more interesting phenomenon known as 'paradors' that came into existence in 1928. Those inns were opened in the premises of monasteries, convents, palaces, castles or other historic buildings, and the needs of their guests are catered today by 4,300 employees nationwide. Roughly 100 hotels of such historical type are functioning in Spain but they remain extremely expensive for foreign tourists. However, not all paradors are so old because some of them have recently been constructed in the areas with great panoramic views [Arribas, 2023]. Some hotels of this type are truly impressive. For example, Hostal dos Reis Catolicos near the tomb of Apostle Saint James in the central square of Santiago de Compostela is one of the oldest in Europe, since it opened the doors for the pilgrims in 1499 [Hotels in Spain...].

Spain is also famous as the land of festivals. La Tomatina takes place in Buñol, the region to the west of Valencia, and is usually conducted on the last Wednesday of August. The participants of this event are throwing at each other some 120 tonnes of ripe tomatoes, and the red rivers are flowing via the streets of a small town [La Tomatina Festival 2022...]. Moreover, all visitors of the country are also welcome to try their stamina at 'The running of the bulls' competition that is organized during San Fermin festival in Pamplona. The 'marathon' takes place every morning during 7-14 July in restricted area. Many tourists are evaluating the performance of brave ones in red-and-white clothes who are running away from a small herd of angry bulls via 875-metre-long stretch of street from their balconies [Quick Guide...]. Finally, the seaside city of Valencia attracts numerous foreigners with 'Fallas' festival that lasts during 1-19 March. This event consists of massive fireworks and the grand parade of giant comic statues made out of papier-mâché. The conclusion of festivities is devoted to the burning down of those artisanal masterpieces on 19 March as the sign of the final farewell to winter [Questions about the Fallas...].

The Spanish people are very friendly and open, they like sitting in bars and communicating till the late evening that creates a festive atmosphere in every town. In order to prove this point, one must say that in 2023 the country boasted a huge number of bars – at least 168,065 and spending money in them was considered very important feature of national pastime. But this relatively current statistics is not as impressive as it used to be just several years ago in pre-COVID-19 period, since many bar owners were forced to close down their establishments [Trelinski, 2024].

Inexpensive Spain with sunny weather and easily assessable beaches from any region is known as the hub of education and some 500,000 foreigners are studying in the country and developing their language skills. It is considered the European leader by the indicator of student mobility but it almost does not attract foreign lecturers because they face too stringent requirements and have to learn how to communicate in Spanish properly. The oldest national University of Salamanca was established in 1218, while the University of Valladolid was opened in 1241, and the Complutense University of Madrid was unveiled in 1293 [Bruque, Guadamillas, Rubio, 2023; The oldest universities in Spain].

Spain is an important transit territory for those tourists that are travelling to third destinations – Morocco, Portugal or Andorra. Many visitors are just driving via Spanish highways to Portuguese resorts or combine Spain and Portugal in one trip, since Western Spain is ‘shielded’ from the Atlantic Ocean by the land area of Portugal. This country with the famous Valley of Douro and Madeira Island is the motherland of popular fortified wines like ‘Port’ and ‘Madeira’ but, at the same time, it boasts such a unique drink as green wine (‘Vino Verde’) [What to drink in Portugal?..., 2024]. Moreover, both Porto and Lisbon are absolutely outstanding hilly cities with numerous cathedrals, decorated in the shape of ocean wave pavements of Central Squares, and the facades of historic buildings that are adorned with blue-and-white azulejos tiles.

Moreover, North-Eastern Spain, especially Barcelona, is located relatively close to the Catalan-speaking Principality of Andorra. This relatively small state is famous as the hub of duty-free purchases with wines, perfumes, watches, fashion items being the most popular goods and the vendors routinely displaying three prices in local shops – the one in Andorra, the second in Bordeaux, and the third in Barcelona, – with Andorran proposals being, of course, the cheapest ones. Numerous mountain peaks are also conducive for different kinds of winter sport activities and the capital Andorra de la Vella boasts ‘La Caldea’, a huge covered spa with natural hot water that is sourced from the ground [Sawyer, 2017]. On the contrary, the South-West corner of Spain also hosts British Gibraltar that is better known as the ‘Rock’.

Spain is also connected by ferry links to exotic Morocco being one of the most popular African countries among international tourists, with its famous ‘imperial cities’ of Rabat, Fez, Meknes, and Marrakesh. The distance between both constitutes only 14.5 kilometres, and the two Spanish enclaves of Seuta and Melilla are surrounded by Moroccan lands from three sides. For example, large cities of Tarifa, Seville and Malaga are connected by ferries to the top African port of Tangier [O’Malley, 2023]. As a result, the visitors to this region of Spain can easily travel to Morocco with day trips and business people from Southern Spanish regions are getting to this hub of African trade without any difficulty. In 2023, it became known that in 2030 Spain, Portugal, and Morocco would host the FIFA World Cup that may increase the connectivity between three countries to the level never seen before. However, the first three games will be organized in South America in order to pay the respect to the first World Cup in Uruguay in 1930 [Morocco – Spain – Portugal..., 2023].

The country also serves as an important transit point for the Spanish-speaking citizens of the Latin American states during their visits to the European Union, since the Spanish consulates are very active in issuing Schengen visas in the region.

The national food is rather unique, as it includes such famous products as Jamon Iberico from back legs of black-legged pigs and Jamon Serrano from the same body part of ordinary pigs, paprika-based Chorizo pork sausage, thin fuet sausage, Sobrasada pork meat spread with paprika for bread and, finally, fat salchichon. Moreover, the country is one of the giants in the field of winemaking because its different regions have their own specialties. For example, Catalonia is famous for Cava sparkling wines, hot Andalusia – for fortified wines that can be dry or very sweet and, finally, La Rioja – for elite dry red or white wines [Charcuteria...; The nearly ultimate guide..., 2023].

In 2024, the minimum wage in Spain constitutes EUR 1,134 that makes the national workforce rather cheap and readily attracts principal investors in hospitality industry, while just

several years ago this amount was considerably smaller [The Government of Spain..., 2024]. Moreover, Spanish hotel chains 'Barcelo', 'Melia' and 'Riu Hotels & Resorts' belong to the list of 50 largest global corporations in the field of hotel industry. For example, Melia owned 347 and Barcelo had 277 hotels in 2022 [Melia, Barcelo and Riu..., 2023].

Spain is one of the best connected countries on the continent because of the strategic location at the crossroads between the North Africa and the West Africa, the Southern Europe and the cold Atlantic region. It also boasts relatively large internal market for flights. But namely the tourism is the main driving force at the heart of cooperation with Ireland and Great Britain in the field of air transportation. Moreover, as the Atlantic Ocean in the North of Spain remains cold during the summer months, many residents of the Northern Spain are travelling to the South in order to enjoy swimming in more pleasant water of the Mediterranean Sea, to rest in the shadow of palm trees, and to listen to the noise that is emitted by wild parrots. As a result, domestic traffic between the North and the South is well-developed in spring – summer season, and all travelers to Spain immediately notice this thing.

Europe's largest low-cost airline 'Ryanair' considers the country as its principal market and sells probably the cheapest tickets to reach it. From the personal experience, one should say that the one-way fare between Barcelona and Mallorca can cost as low as EUR 10-20. The company is one of the largest private employers in Spain and caters 700 destinations in 29 countries from its Spanish bases [Ryanair announces..., 2024]. In many ways, the success of this airline has to do with the connection between the sizable British tourist market and sun-lit Spanish resorts, as well as with the well-developed links between the largest Spanish cities and recreational islands that also belong to this country. Moreover, in 2019 Ryanair introduced the maintenance factory in Seville with useful area of 20,000 square metres that was good enough to repair five jets at the same time [New Ryanair maintenance...].

A powerful airline 'International Consolidated Airlines Group' was created in 2011, when British Airways took over Iberia, and later in 2013 this new joint venture secured the ownership of Barcelona-based Vueling being the largest low-cost carrier in Spain. In 2015, the Irish Aer Lingus also joined the alliance, thus cementing the connectivity between the North-West and the South of Europe. The idea behind such mergers was to establish the links between the British and Irish markets of travelers with the Spanish resorts and to develop the net of new destinations, since British Airways and Iberia served different routes and could not be considered competitors [Karuwa, 2023]. Today, this unusual British – Irish – Spanish airline boasts the fleet that consists of 582 aircrafts and has the workforce that exceeds 71,794 people. In 2023, the International Consolidated Airlines Group catered the needs of 115.6 million passengers that was truly impressive [IAG Annual Report and Accounts 2023...].

On the other hand, Binter Canarias to be another quite successful player is flying to all eight principal airports of the Canary Islands and nearby countries of the Western Africa, since this island chain is considered the gateway to the aforementioned African region. It is one of the most important carriers that serves the destinations in Morocco, Senegal, Cabo Verde, and in the Atlantic islands of Portugal, with the fleet of 27 advanced turboprop planes 'ATR-72-600' and five 'Embraer E195-E2s' [95% of Binter Canarias' flights..., 2023].

Local airports are also distinguished by considerable size, since they are serving many millions of foreign tourists annually. The hubs in Madrid, Barcelona, Palma de Mallorca and Malaga are among the largest ones being the departure points of travels to prestigious Costa del Sol (Sunny Coast) region and finally Alicante that is located near Benidorm with its signature skyscrapers that is popular among British tourists. In this respect, the Madrid – Barajas Airport in Central Spain stands out for its size and the number of runways because it is the second largest airport in the Western Europe only after its principal counterpart in Paris with four terminals and four runways [Finlay, 2023]. In 2023, all the Spanish airports altogether handled 282.3 million travelers, while the share of Madrid constituted 60 million clients [Passenger traffic..., 2023]. So, unlike in many other European countries, numerous Spanish hubs are creating employment

opportunities nationwide, not only in the capital. The same is true in the case of national cruise ports.

The railroads and stations in Spain are up to the task of serving more than 48 million national passengers and even more numerous foreign tourists. Since 1992, the country has been using bullet trains 'AVE' ('Alta Velocidad Española') and today its rolling stock is utilizing the Europe's largest fast network that constitutes some 3,567 kilometres of tracks. All principal cities of Spain, except northern ones located on the Atlantic coast, are interconnected by this net. In 2020, the inexpensive AVLO train was introduced on the route between Madrid and Barcelona, as it covered 621 kilometres in less than three hours [Spain's high speed..., 2021]. The price of a ticket was minimal that would allow luring the passengers of airlines, since only the time for road travel to the airport and subsequent pre-flight formalities may take two hours or more.

The coastal infrastructure of Spain is highly developed with two ports of the European importance – Valencia and Algeciras. The country has more than 5,755 kilometres of coastal areas and is located at the collision point between the North Africa and the Southern Europe that is conducive for the development of maritime trade and cruises [Geography of Spain]. The Port of Valencia at the crossroads between Madrid, Zaragoza and Barcelona is the largest port in the country by container traffic. In 2023, it handled 4.79 million standard containers, 77 million tonnes of cargo, and some 643,000 cars [Valenciaport closes 2023..., 2024]. In fact, the Port of Valencia can be considered as the southern gate to Madrid and the central region of Spain that explains its extraordinary importance.

The general purpose of the Port of Algeciras that is located in the South-West of the country is to cater all kinds of cargo. It operates in the Andalusian Province of Cadiz near the Bay of Gibraltar and not too far from the famous Strait of Gibraltar. The main purpose of this strategic object is to trade with the North African, West African and European countries which belong to the region of the Atlantic Ocean. It boasts spacious passenger terminal, car terminal, the facilities for operations with oil and bulk cargoes, and repair berths for ships [Algeciras Port].

The extensive chain of the Canary Islands is located next to the coast of North-West Africa, at the crossroads between this continent and Europe. Local legislation envisages the regime with some of the lowest taxes in Europe that is attractive for investors. The fossil fuel-rich Western Africa serves as the top supplier of crude oil and is connected to Spain with the links of maritime trade and the routes of cruise ships, and, as a result, those islands serve as the hubs of refueling and the ship repair for vessels that are sailing between both regions or the rigs that are extracting the 'black gold' near this coast of Africa [Marine maritime offshore services]. Moreover, Spanish trawlers may also use their facilities.

Tourists are visiting this country in order to come back and look for the place to relocate. In fact, Spain is a popular destination where retirees from the Northern countries are buying residential property, as the people in older age are accumulating considerable funds and are unwilling to live in rainy and foggy climate with limited number of sunny days and high prices of groceries. Back in 2013, the country introduced the Program 'Golden Visa'. It allows any foreign citizen, who puts EUR 1 million into Spanish banking account, invests considerable money in the shares of national enterprises or buys the house for EUR 500,000 to become a permanent resident [Spain Golden Visa Requirements...]. In 2023, foreigners purchased more than 87,000 objects of property that constituted 15 per cent of all property deals in the country [Home purchases and sales..., 2024]. As a matter of fact, during the normal years house sales in Spain are usually booming.

At the same time, Spain suffers the largest level of unemployment in the EU that constituted 11.6 per cent in 2023 and was even higher than in crisis-prone Greece. Many economists believe that this situation has to do with the overreliance of the country on unstable tourism industry and the sales of residential property, while one can add that the Spanish economy is very often dealing with insufficient harvests in agriculture, thus creating the threat to seasonal jobs. Some experts are pointing out the practice of shadow employment that distorts official statistics even more [Hidalgo, 2023].

Conclusions. Nevertheless, Spain can be considered the powerhouse of service industry of the Southern Europe. The country with 50 UNESCO World Heritage sites and global leadership by the number of the cleanest beaches and marine zones is attractive enough in its own right but its strategic whereabouts between the South-West Europe and North Africa provide it with additional bonus. Among other impressive achievements, one should name some of Europe's busiest airports and ports, as well as highly developed net of railroads for bullet trains. The airlines in the country are also highly developed and ensure great connectivity. The opportunities to buy one's own house lure numerous wealthy foreigners to Spain. On the other hand, the overreliance on this industry brings the scarcity of national resources, omnipresent trash problem, and substantial increase in prices for property. In the final count, the vital industry that brings more than EUR 108 billion per year and creates so many seasonal jobs will remain the leader of the Spanish economy in the nearest future.

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СУЧАСНА СИСТЕМА МІЖНАРОДНОГО ПРАВА

УДК 341.96

LEGAL REGULATION OF VIRTUAL ASSETS IN THE PRINCIPALITY OF LIECHTENSTEIN

ПРАВОВЕ РЕГУЛЮВАННЯ ВІРТУАЛЬНИХ АКТИВІВ У КНЯЗІВСТВІ ЛІХТЕНШТЕЙН

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***Abstract.** The article is devoted to the study of the current legal regulation of virtual assets in the Principality of Liechtenstein. The authors analyse the advantages and disadvantages of the relevant legal framework, as well as the possibility and feasibility of implementing the most effective provisions of the legislative acts into Ukrainian legislation. Due to the absence of studies that would analyse the main regulatory norms and definitions, as well as the experience of harmonising the current legislation with the European Union regulations, it became necessary to examine the current legal system of the Principality of Liechtenstein, which is known for one of the most progressive virtual asset regulations in the world. To study the current state of legal regulation of virtual assets in the Principality of Liechtenstein, the authors used comparative, analytical, inductive, hypothetical and systemic methods. As a result of the study, specific features of tokens are identified and a possible classification of virtual assets is presented in accordance with the established approach in other jurisdictions. Features of the right to dispose of a virtual asset in comparison with other objects of private law relations are analysed. Further, the particularities of the legislation on Anti-money laundering in this area are outlined. Changes to be made to the existing legislation to harmonise it with the new EU MiCA regulation are considered, including changes to the rules for issuing and trading in virtual assets. It is concluded that the Principality of Liechtenstein has managed to create an adaptive system of legal regulation of virtual assets. The creation of separate legislation on virtual assets, which at the same time refers to the regulation of other objects of private law relations, made it possible to implement it quickly, although harmonisation with the EU MiCA Regulation also requires compliance with the established classification of virtual assets. Although this Regulation eliminates some of the advantages that a particular jurisdiction may have, it simplifies access to the EU market for participants in the*

circulation of virtual assets. Based on this experience, the Ukrainian legislator needs to create a regulatory system that can be harmonised with the EU regulations for this industry, but at the same time introduce certain preferences that will attract investment in the Ukrainian economy and will not contradict EU regulations.

Keywords: *virtual assets, tokens, MiCA, Principality of Liechtenstein, European Union, harmonisation of legislation.*

Анотація. *Стаття присвячена дослідженню сучасного правового регулювання віртуальних активів у Князівстві Ліхтенштейн. Автори аналізують переваги та недоліки відповідної нормативно-правової бази, а також можливість та доцільність імплементації найбільш результативних положень законодавчих актів до українського законодавства. У зв'язку з відсутністю досліджень, які би проаналізували основні регуляторні норми та дефініції, а також детально розібрали досвід гармонізації діючого законодавства із регламентами Європейського союзу, виникла необхідність розглянути сучасну правову систему Князівства Ліхтенштейн, яке відоме одним з найпрогресивніших регулювань віртуальних активів у світі. Для дослідження сучасного стану правового регулювання віртуальних активів у Князівстві Ліхтенштейн, були використані порівняльний, аналітичний, індуктивний, гіпотетичний, та системний методи. В результаті дослідження визначено особливість токенів та наведено можливу класифікацію віртуальних активів відповідно до усталеного підходу в інших юрисдикціях. Було проаналізовано особливості права розпорядження віртуальним активом у порівнянні з іншими об'єктами приватноправових відносин. Приведено особливості законодавства щодо легалізації доходів, одержаних злочинним шляхом у цій сфері. Розглянуто зміни, які планується впровадити до існуючого законодавства, щоб гармонізувати його із новим регламентом ЄС MiCA, в тому числі плануються зміни до правил випуску та торгівлі віртуальними активами. Робиться висновок, що Князівству Ліхтенштейн вдалося створити адаптивну систему правового регулювання віртуальних активів. Створення окремого законодавства щодо віртуальних активів, яке в той же час відсилає до регулювання інших об'єктів приватноправових відносин, надало можливість швидко впровадити його, хоча гармонізація із регламентом ЄС MiCA вимагає також і відповідність прийнятій класифікації віртуальних активів. Хоча цей Регламент нівелює частину переваг, які може мати певна юрисдикція, але він спрощує для учасників обігу віртуальних активів доступ до ринку ЄС. Українському законодавцю необхідно, спираючись на цей досвід, створити таку систему регулювання, яку буде можливо гармонізувати із регламентами ЄС для цієї галузі, але в той же час і запровадити певні преференції, які залучать інвестиції до української економіки і не будуть суперечити регламентам ЄС.*

Ключові слова: *віртуальні активи, токени, MiCA, Князівство Ліхтенштейн, Європейський союз, гармонізація законодавства.*

Introduction. In recent years, it has become evident that virtual assets have become one of the fastest growing segments of the economy. However, uncertainty in legal regulation makes it difficult to protect the rights of investors in such assets, which has led to some jurisdictions with clear regulation becoming much more popular than others.

One of the leaders in introducing such regulation is Liechtenstein, whose legislation in this area has become a model for other jurisdictions.

The European Union has also already developed a new regulation aimed at establishing common minimum standards and requirements, which allows to significantly simplify the process of licensing activities in the area of virtual assets in the EU member states. Liechtenstein has decided to harmonise its legislation with this regulation, so this experience will be useful for Ukrainian legislators to implement this regulation into Ukrainian legislation. This article will explore which legal norms have proved to be the most effective.

The purpose of the article is to analyse the legislation of the Principality of Liechtenstein in order to identify the most appropriate norms and definitions that can be further implemented in Ukrainian legislation, and to outline examples of harmonisation of the existing regulation of virtual assets with the new EU regulation.

Literature review. Analyses of the legal regulation of virtual assets in Liechtenstein have not been previously addressed in the Ukrainian scientific literature, and it is possible to find abroad only some advice from practicing lawyers on Internet portals in Switzerland and Germany, but there are no specialised researches on this topic in the scientific literature.

Thus far, the legislation directly, government commentaries and reports are the most complete and reliable source of information on the regulation of virtual assets.

Main results of the research. The Principality of Liechtenstein's desire to integrate blockchain technology into its financial and legal system has led to significant regulatory changes and legislative amendments. Liechtenstein has become one of the most convenient jurisdictions and safe harbor for investors in virtual assets with the adoption of the Token and Trusted Technology Service Providers Act of 03 October 2019 (hereinafter referred to as the “**TVTG**” or the “**Act**”) (*Token and TT Service Provider Act, 2019*), which entered into force on 1 January 2020. The main purpose of this legislation is to provide legal certainty to the token economy, including creating a safe environment for virtual assets market participants where their assets are protected and oversight of service providers is established to discourage fraud and money laundering. This Act, according to Article 1, establishes the legal framework for all transaction systems based on Trustworthy Technology and in particular governs the basis in terms of civil law with regard to tokens and the representation of rights through tokens and their transfer, and the supervision and rights and obligations of Trustworthy Technology service providers.

The Government Report on the application of the Act (*The Report and Application of the Government to the Parliament of the Principality of Liechtenstein, 2019*) states that various options for classifying virtual assets were considered, but it was decided that it was necessary to introduce a new object of civil rights.

At the same time, the provisions of the Act in the context of blockchain technologies are somewhat abstract. For instance, instead of explicitly referring to blockchain technology, the term “Trustworthy Technology” (hereinafter referred to as the “**TT**”) is used to preserve the applicability of the Act for subsequent technologies – technologies through which the integrity of tokens, the clear assignment of tokens to TT Identifiers and the disposal over tokens is ensured. It also introduced the term “TT Systems” referring to the transaction systems which allow for the secure transfer and storage of tokens and the rendering the services based on these systems by means of trustworthy technology. And only then the token is itself defined as “a piece of information on a TT System which: (a) can represent claims or rights of memberships against a person, rights to property or other absolute or relative rights; and (b) is assigned to one or more TT Identifiers that allows for the clear assignment of tokens”.

For simplicity of understanding, the Government Report uses already standardized terms to categorize virtual assets (*Garrido, 2023, pp. 22-26*), namely:

1. Utility tokens that provide access to a specific service or product and are not considered as financial instruments;
2. Payment tokens that function as a medium of exchange and are similar to digital currencies;
3. Security tokens that represent financial instruments such as stocks, bonds or other forms of instruments, which entails additional regulatory oversight under the Financial Markets Act.

But in fact, this classification was not incorporated into the Act. It is pointed out that this would be too much of a restriction for the application of tokens. Therefore, the concept of token itself is fairly abstract and does not require technical realization as a specific programme on a technological platform.

A remarkable innovation of this Act is the introduction of the concept of “token container model”, which distinguishes traditional assets and rights from the digital representation of these rights.

Although the conflict of laws issues in general fall outside the ambit of this Act, it nevertheless seeks to establish clear localization criteria for tokens. It is a general understanding and common perception of virtual assets as a legal phenomenon that they are so delocalized that it is difficult or even impossible to localize them in space. This Act tries to solve this problem by introducing precise criteria for localization of tokens and applicability of Liechtenstein law to such virtual assets. From the legal standpoint, it shifts an emphasis from any physical characteristic features that are conventionally used for localization of moveable tangible assets as *res corporales* to persons involved in the issuance of tokens or persons using them in their legal transactions (Marinotti, 2021, pp. 696-702).

Further to Articles 3 and 4 of this Act, the token shall be deemed to be an asset located in Liechtenstein, and the TVTG shall correspondingly apply, if:

(a) tokens are put into circulation or issued by a TT Service Provider with headquarters or place of residence in Liechtenstein;

(b) parties declare its provisions to expressly apply in a legal transaction over Tokens; or

(c) tokens are used in legal transactions by a natural or legal person with place of residence or headquarters in Liechtenstein.

As we can imply from this legislative provision, location of the relevant persons shall indicate the presumable location of the relevant tokens. Alternatively, such persons may agree upon the applicability of the Act, in particular, in their contractual documentation. Therefore, it can be concluded that the Liechtenstein's legislator introduced the concept of fictional *situs* for virtual assets covered by the TVTG without seeking to extrapolate or accommodate traditional localization criteria conventionally used for physical objects to virtual assets being completely different in terms of their essence and legal nature. Such an approach can provide a further roadmap for solving conflict of laws puzzle with respect of virtual assets.

Within this Act a particular emphasis is placed on the fact that the creation of tokens does not create new rights, but only transfers or confirms existing rights. Although it is recognized that tokens have similarities with property, the current definition of property in The General Civil Law Code of Liechtenstein (in German: Allgemeines Bürgerliches Gesetzbuch) (*Allgemeines bürgerliches Gesetzbuch, 1811*) is limited to physical objects, whereas tokens consist of lines of software code in a particular system and are not physical in nature.

This model makes it possible to flexibly apply the Act to different types of assets that can in principle be tokenized, including payment claims (documentary or non-documentary), commodities, real estate, financial instruments or intellectual property. For securities, the legal concept of a book-entry system has even been adopted. "Empty containers" are also allowed referring to the tokens without granting any rights, including traditional cryptocurrencies that acquire intrinsic value through the rules of the system in order to function as a means of payment.

This Act should be seen as an addition to the special legislation that already exists, for instance, if banking or securities services are offered in the TT system, the provisions of the Law on Bank and Investment Firms (*Law on Banks and Investment Firms [Banking Act], 1992*) or the Asset Management Act (hereinafter referred to as the "VVG") (*Law on Asset Management [Asset Management Act; VVG], 2005*) shall apply.

In this situation it was determined that it is necessary to distinguish between power and right of disposal, because only in the first case a person has full freedom to dispose of the token, and in the second case it is a statement of physical possibility to dispose of the token knowing its TT Key (being a part of the TT identifier, also known in payment systems as the public key).

It is noteworthy that the TVTG resolves the issue of legitimacy of a token holder. According to Article 8(1) of the Act, the person possessing the right of disposal reported by the TT System is considered the lawful holder of the right represented in the token in respect of the obligor (i.e. the underlying asset represented by the relevant token). This means that the Liechtenstein's legislator adopted an approach for legitimization of a token holder similar to that used for legitimization of a securities holder as the owner of the securities and holder of the rights attested by the securities: it is

generally known that availability of such rights can be established exclusively by referring to the system where the rights to securities are duly recorded.

Separately, it is necessary to mention that the TVTG does not cover regulation of financial market related activities such as exchanges for payment tokens.

Liechtenstein's anti-money laundering system is crucial in the context of regulating virtual assets. The Due Diligence Act (*Due Diligence Act [SPG], 2008*) and the Due Diligence Ordinance (*Due Diligence Ordinance [SPV], 2009*) impose strict anti-money laundering obligations on financial institutions and virtual asset service providers, requiring them to implement comprehensive customer due diligence, transaction monitoring, and reporting mechanisms. Together with the TVTG, ensuring that all TT service providers comply with international standards, including those set by the Financial Action Task Force and European Union anti-money laundering Directives.

An important feature of the Act is the “travelling rule”, which requires transactions to be accompanied by information about the originator and beneficiary of virtual asset transfers, which applies to traditional financial transactions as well.

To keep pace with the rapidly changing regulatory environment among the surrounding EU member states, Liechtenstein is improving its legislative framework and aligning regulations with the Regulation (EU) 2023/1114 of 31 May 2023 on Markets in Crypto-Assets (the “Markets in Crypto-Assets Regulation” or “MiCA”) (*Regulation [EU] 2023/1114, 2023*). Provisions that will harmonize requirements for the issuance and trading of virtual assets are intended to be introduced, as well as strengthening consumer protection measures is suggested. This will be achieved via the special Act on the Implementation, which is currently in the legislative process and is due to enter into force on 1 February 2025 (*Financial Market Authority's notification on the EEA MiCAR Implementation Act, 2024*).

In order to obtain a license to operate in the virtual asset sector in Liechtenstein, companies must meet certain requirements set by the Financial Market Authority (hereinafter referred to as the “FMA”) under the TVTG.

Contemporaneously the interaction between the TT Service Providers and the FMA is regulated by another act, namely the Tokens and TT Service Provider Ordinance (TDTV) (*Tokens and TT Service Provider Ordinance [TDTV], 2019*). This Act lists the required documents for registration of the TT Service Provider, as well as the procedure for informing the FMA of its actions, including the issuance of tokens.

The Liechtenstein FMA is the main regulatory authority overseeing the implementation and enforcement of the TVTG and other regulations that govern this area. To facilitate dialogue between representatives of innovative companies and the FMA, the government established the regulatory laboratory, whose work has led to the preparation of legislative initiatives.

The process for obtaining a license to operate as a TT Service Provider in Liechtenstein is regulated by the TVTG and monitored by the FMA.

Capital requirements vary depending on the nature of the services provided. For instance, token issuers must maintain a minimum capital based on the volume of tokens issued, and TT exchange service providers must have a minimum capital based on the volume of transactions.

Conclusions. Liechtenstein's legal framework for virtual assets has unique features and a broad approach to asset categorisation without reference to a specific technology platform.

Together with the AML rules, it has created a regulatory environment that provides precise criteria for determining the place of virtual assets among other objects of private law relations. And unlike most other jurisdictions, there is no rigid classification of virtual assets, as tokens only confirm the rights to a certain object, the specifics of their regulation depend on the legislation that is used for the objects, the rights to which they confirm. In this case, other analogies are also used, a characteristic example is the legitimisation of a token holder by analogy with the legitimisation of a securities holder.

Liechtenstein's efforts to comply with EU regulations, in particular MiCA, suggest that the Principality will continue to play a leading role among the most favourable jurisdictions for

investors in virtual assets. This approach attracts investment and fosters innovation in financial markets.

However, Ukrainian legislators should first of all consider as a model terminology that is not tied to a clearly specified technology, for instance, blockchain, but at the same time it is desirable to use the classification specified in the EU regulation to avoid unnecessary legal collisions and harmonize the legislation in a short time.

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ARTIFICIAL INTELLIGENCE: MILITARY CHALLENGES TO INTERNATIONAL ORDER AND CONTOURS OF INTERNATIONAL LEGAL REGULATION

ШТУЧНИЙ ІНТЕЛЕКТ: ВІЙСЬКОВІ ВИКЛИКИ МІЖНАРОДНОМУ ПОРЯДКУ І КОНТУРИ МІЖНАРОДНО-ПРАВОВОГО РЕГУЛЮВАННЯ

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Abstract. *The purpose of this research is to determine the current state of international legal scientific developments in the field of the use of artificial intelligence in the military sphere. The article, considering the leading scientific works of the last decade, identifies the main directions of the development of international legal thought regarding the use of artificial intelligence in the military sphere. The authors emphasize that among numerous studies on the international legal issues of the global information society, the topic of artificial intelligence technologies holds a special place. At the same time, changes in relations between states, when it comes to the large-scale use of artificial intelligence technologies, organically influence the international order and, consequently, international legality and the international legal order. Since the potential use of artificial intelligence technologies transcends state borders and has a significant impact on interstate relations, a logical question arises regarding their international legal regulation.*

Keywords: *International legal regulation, artificial intelligence, "responsible artificial intelligence," military sphere, lethal autonomous weapon systems, international law, international order, international legal order, global information society.*

Анотація. *Метою дослідження є визначення сучасного стану міжнародно-правових наукових розробок у сфері використання штучного інтелекту у військовій сфері. У статті, враховуючи провідні наукові роботи останнього десятиліття, визначено основні напрямки розвитку міжнародно-правової думки з приводу використання штучного інтелекту у військовій сфері. Автори підкреслюють, що серед численних досліджень міжнародно-правової проблематики глобального інформаційного суспільства, тема використання технологій штучного інтелекту посідає особливе місце. При цьому, зміни у відносинах між*

державами, коли мова йде про масштабне використання технологій штучного інтелекту, органічно впливають на міжнародний порядок і, як наслідок, на міжнародну законність і міжнародний правовий порядок. Оскільки можливості використання технологій штучного інтелекту виходять за межі державних кордонів і значним чином здатні впливати на міждержавні відносини, виникає логічне питання щодо їх міжнародно-правового регулювання

Ключові слова: міжнародно-правове регулювання, штучний інтелект, «відповідальний штучний інтелект», військова сфера, летальні автономні системи озброєнь, міжнародне право, міжнародний порядок, міжнародний правовий порядок, глобальне інформаційне суспільство.

Introduction. In the current context of the rapid development of information and communication technologies, the issue of fusing artificial intelligence (AI) technologies for military purposes is attracting increasing attention. The fact that we have yet to fully understand AI technologies and are still in the philosophical comprehension stage further complicates this challenge. At the same time, their application in various fields highlights the diverse possibilities and implications of their usage. So, international legal science needs to deal with problems related to using AI in general and look at how well legal systems can protect people from the dangers of using these technologies and weapons for military purposes without proper control.

Regulation faces significant challenges due to the dual-use nature of AI technologies, which can apply the same innovations for both civilian and military objectives. While civilian applications aim to enhance productivity, safety, and quality of life, military applications often prioritize strategic advantage and operational efficiency, raising ethical and legal concerns. The potential for autonomous systems to act without human oversight further complicates these concerns, posing risks of unintended escalation, violations of international humanitarian law, and unforeseen consequences in warfare.

Moreover, the transboundary nature of AI technologies demands a unified international response, as unilateral regulation within a single state or region is insufficient to address global security concerns. Developing comprehensive international frameworks for the responsible use of AI in military contexts necessitates collaboration among nations, organizations, and industries. Such frameworks must balance the benefits of technological innovation with the imperative to safeguard humanity from the potential misuse of AI as a tool of the conflict.

The purpose of the research is to determine the current state of international legal studies in the field fusing AI technologies in the military domain.

Recent literature review. Currently, there is a wide range of works covering various aspects of the use of AI technologies in the military domain. A special place among these studies is occupied by questions concerning the role of international law in the prospective regulation of AI technologies. Taking into account the scientific works of the last decade, the main directions of international legal thought regarding the use of AI in the military domain can be identified. These currently include the following ethical topics:

- The ability of international law as an instrument to regulate the use of AI for military purposes;
- The potential of international legal regulation to define moral and ethical aspects (criteria) for evaluating the use of AI for military purposes;
- The possibilities of international legal regulation for the combined use of AI and robotic (cyber-physical) systems in military contexts, as well as their deployment in autonomous weapons systems;
- The capability of international law to mitigate threats to humanity from the uncontrolled use of technologies and weapons for military purposes.

Authors researching the potential of international law to regulate the use of AI in military contexts focus on analyzing the current situation, at least over the past decade. Their attention is

directed toward theoretical questions about the role, necessity, and capability of international law to govern the use of AI technologies.

For example, Burri T. focuses on the ability of contemporary international law to structure inter-state relations concerning the use of AI (*Burri, 2017*). Castel J.-G. and Castel M.E. provide their own assessments of the capability of international law to regulate the use of AI (*Castel and Castel, 2016*). Krishnan A., addressing the use of AI in potential modern wars, emphasizes the need for international legal regulation (*Krishnan, 2009*).

In addition to positive approaches, discussions include considerations regarding the status of AI itself (*Weaver, 2013*), as well as skeptical views on the inability of either law or ethics to ensure the orderly use of AI in autonomous weapons systems (*Anderson & Waxman, 2013*).

Several works focus on the real possibilities of the global community, from the perspective of international humanitarian law, to regulate the use of AI technologies in military contexts (*Schuller, 2017*), (*Brehmm, (2017)*), (*Davison, 2017*).

An interesting direction of research is dedicated to the potential international legal regulation:

(a) in cases of combined use of AI technologies with robotic (cyber-physical) systems for military purposes (*Balkin, 2015*), (*Chelioudakis, 2018*); and

(b) in the deployment of these technologies in autonomous weapons systems (*Beard, 2014*), (*Geiss, 2015*), (*Thurnher, 2013*).

It is worth noting that some scholarly works specifically address the threats to humanity posed by the uncontrolled use of technologies and weapons for military purposes.

Main research results. In the general context of researching international legal issues in the global information society, the topic of using AI technologies occupies a special place.

Changes in inter-state relations, particularly concerning the large-scale use of AI technologies, organically influence the international order and, consequently, international legality and the international legal framework.

Since the potential uses of AI technologies, both in civilian and military spheres, transcend national borders and significantly influence inter-state relations, a logical question arises about their international legal regulation.

Efforts to regulate the use of AI technologies have led to the adoption of a limited number of international soft law instruments, the creation of specific international institutions, and initiatives by individual researchers to propose certain model regulations. At the same time, a significant number of national legal acts have been adopted to regulate relationships involving AI technologies.

It should be noted that contemporary scientific and practical research confirms:(a) the growing potential for the continuous and large-scale development of AI technologies; and(b) the diversity of their areas of application.

In the general theme of AI technology use, particular attention is drawn to their military applications and the potential corresponding international legal regulation. This complicates the tasks facing international law in maintaining peace and international security.

At this initial stage of AI implementation and use in the military sphere, "arms market researchers highlight ten areas of AI application for military purposes, including:

- Autonomous Weapons Systems;
- Surveillance and Reconnaissance;
- Target Recognition and Classification;
- Threat Analysis and Prediction;
- Logistics and Supply Chain Management;
- Cyber security Defense;
- Electronic Warfare;
- Simulation and Training;
- Medical Diagnostics and Treatment;
- Decision Support Systems".

Such diversity in the current and prospective uses of AI in the military domain highlights the immediate need for science and practice in international law to address the associated issues of international legal studies and potential regulation.

In this context, the following should be noted:

1. Emergence of shared international legal foundations:

A process has begun to form joint conceptual international legal foundations for the use of military technologies containing AI elements. This is evidenced not only by the military concepts, doctrines, and programs of leading states (USA, China, UK, Japan, France, South Korea, etc.), which emphasize and account for the transboundary nature of their application, but also by a shared understanding of the power, scale, and danger posed by AI technologies when used without control. For example, the U.S. Department of Defense views its AI strategy as an important component of the government's broader efforts to maintain the country's technological leadership on the global stage and ensure the protection of the population. In France, cyber security aspects, including those related to the use of AI, are regulated by the provision of the Military Programming Law (*Derkach O.O. (2023)*).

2. Development of international legal regulations:

Similar to the processes of prohibiting and limiting the use of chemical, biological, and nuclear weapons, the establishment of international legal regulation (through declarations, joint statements, multilateral agreements) to address the dangers posed by AI technologies to international peace and security is likely to follow a similar path (*Zabara, 2024*). It is worth noting that this is occurring at a time when the global community is still seeking common approaches and defining the role and place of artificial intelligence in "every day use." The last decade has been marked by active efforts to find individual actors and entities to develop principles and foundations for international legal regulation, particularly through initiatives such as the Asilomar AI Principles (2017) and the OECD Council Recommendation on Artificial Intelligence (2019) (*Zabara, 2024*). In this context, the European Parliament adopted the AI Act, which establishes requirements for AI developers aimed at ensuring the safety, transparency, sustainability, and ethical use of artificial intelligence in Europe (*Derkach, 2023*).

3. REAIM 2023 Declaration:

The outcomes of the "Responsible AI in the Military Domain" Summit (REAIM 2023, The Hague, February 15-16) underscore the global, urgent, and relevant nature of the issue. The adoption of the "Political Declaration on Responsible Use of AI and Autonomy in Military Applications" by 54 leading nations demonstrates a commitment to responsible behavior and governance of AI technologies in the military domain (*Pascual, 2017*).

4. Unlike the general situation, characterized by "the lack of a unified international legal policy regarding the future development of AI technologies, the absence of consensus on the goals and objectives of international legal regulation of AI, as well as the lack of a unified legal terminology" (*Zabara, 2024*), the REAIM 2023 Summit established the foundations for a joint policy on the military use of AI technologies.

Specifically, this concerns the control over "the development, deployment, and use" (*Pascual, 2017*) of military-purpose technologies and weaponry incorporating AI elements. It should be emphasized that, given the complexity of the object of regulation, this stage involved only the identification of fundamental principles, which became the subject of political agreement.

We believe that regarding the technological aspects of the development and use of AI in the military sphere, at the initial stage, developers will adhere to the already established provisions under the frameworks of the International Organization for Standardization (ISO), the International Electrotechnical Commission (IEC), and the International Telecommunication Union (ITU).

Attention should also be paid to the activities of certain international non-governmental organizations that have developed and propose methodologies for assessing the impact of AI systems on human and societal well-being. For example, the methodology developed by the Institute of Electrical and Electronics Engineers (IEEE) is one such initiative.

Despite some skepticism, the ethical aspects of AI use in the military sphere are increasingly becoming a subject of academic research. Scholars such as Pascual D.A. and Moliner González J.A. offer diverse perspectives on the issue -ranging from outright rejection and claims of the impossibility of establishing rules, to entirely optimistic forecasts, the principles of which may, over time, form the basis of international agreements.

It is also important to note the initial steps toward the formation of specific elements of international legal regulation, undertaken by the Group of Governmental Experts on Lethal Autonomous Weapons Systems, operating under the framework of the Convention on Certain Conventional Weapons. To date, their efforts have focused on the potential application of international law to autonomous weapons systems and the role of human oversight in their control. This is evidenced by numerous conferences on the topic.

The International Committee of the Red Cross (ICRC) is actively studying issues related to the use of AI from the standpoint of international humanitarian law. The Committee has initiated the development of recommendations for states concerning the adoption of legal norms to regulate and limit the creation and use of autonomous weapons systems.

Conclusion. To summarize, it is worth noting the following:

In the field of international law, four main directions of research on the use of artificial intelligence in the military domain have been identified. They include general issues concerning the capacity of international law to regulate the use of AI for military purposes, the determination of moral and ethical aspects related to the evaluation of AI use in military contexts, the potential for international legal regulation of the combined use of AI and robotic systems, and the capability of international law to mitigate threats to humanity from the uncontrolled use of technologies and weapons for military purposes. Practical issues related to the international legal regulation of AI technologies deserve special attention within the broader discussion of their use.

Current cooperation among leading states is focused on establishing the foundations of a shared policy regarding the military use of AI technologies.

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ОСОБЛИВОСТІ РОЗВИТКУ СВІТОВОГО ГОСПОДАРСТВА ТА МЕНТ

УДК 339.1

FORMATION OF NEW CONSUMER BEHAVIOR MODELS UNDER THE INFLUENCE OF THE CURRENT GLOBAL COST OF LIVING CRISIS

ФОРМУВАННЯ НОВИХ МОДЕЛЕЙ СПОЖИВЧОЇ ПОВЕДІНКИ ПІД ВПЛИВОМ СУЧАСНОЇ СВІТОВОЇ КРИЗИ ВАРТОСТІ ЖИТТЯ

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Abstract. *The article examines one of the most influential contemporary global drivers of international business – the cost of living crisis – and its impact on modern consumer behavior models. It explores the trend of economic growth slowdown, the dynamics and forecast of inflationary fluctuations, and the consumer price index in the world and Ukraine. The author identifies three new consumer segments that have emerged over the past two years under the influence of the global cost of living crisis: Budget-conscious customers, Cost and value-savers, and Now-or-never customers. The article examines the behavior models and savings methods of these consumer groups, which have gained particular popularity worldwide over the past two years, specifically, the BNPL model, reorientation to cheaper retailers or substitute goods, transition to popular private labels and duplicate goods of well-known brands in the middle to lower price segment, the influence and rise of deinfluencers on social media, bundle-and-save models, monthly or annual subscribe-and-save plans, referral bonuses, loyalty programs, and more. Several examples of such international and Ukrainian companies, like Shein, Pinduoduo, Temu, and Aurora, are analyzed. By focusing on the peculiarities of consumer behavior influenced by the cost of living crisis, these companies successfully compete in the market with well-known brands and increase their customer base each month.*

Key words: *consumer behavior models, the global cost of living crisis, inflationary fluctuations, private labels, marketing strategies, budget-conscious customers, international business, international marketing*

Анотація. *У статті розглянуто один з найвпливовіших сучасних світових драйверів міжнародного бізнесу – кризу вартості життя – та його вплив на сучасні моделі споживчої поведінки. Розглянуто тенденцію сповільнення економічного росту, динаміку та прогноз інфляційних коливань та індексу споживчих цін у світі та в Україні. Автором визначені три нові сегменти споживачів, які з'явилися за останні два роки під впливом світової кризи вартості життя, а саме – Бюджетно-орієнтовані споживачі, Споживачі, орієнтовані на заощадження та збереження цінності, та споживачі «Зараз-або-ніколи». Розглянуто моделі поведінки та способи заощадження даних споживчих груп, які набрали особливої популярності в світі за останні два роки, а саме, модель BNPL, переорієнтація на дешевших ритейлерів або товари-субституту, перехід на популярні власні торгові марки та товари-*

дублювати відомих брендів середнього на нижчого цінового сегменту, вплив та набуття популярності деінфлюенсерів в соціальних мережах, моделі спільних покупок, місячних або річних підписок на продукти, реферальних бонусів, програм лояльності, тощо. Проаналізовано декілька прикладів таких міжнародних та українських компаній, як Shein, Pinduoduo, Тети, Аврора, які завдяки орієнтації на особливості споживчої поведінки, зумовленої кризою вартості життя, успішно конкурують на ринку з вже давно відомими брендами, та з кожним місяцем збільшують кількість своїх клієнтів.

Ключові слова: моделі споживчої поведінки, світова криза вартості життя, інфляційні коливання, власні торгові марки, маркетингові стратегії, бюджетно-орієнтовані споживачі, міжнародний бізнес, міжнародний маркетинг

Introduction. For the last ten years, the world has dramatically changed under diverse external factors in different spheres. These external factors also influence international and domestic businesses, companies, their products and brands, consumer behavior and marketing strategies, which should be tailored to new obstacles and consumers' needs and pains. Among such global drivers, which impact business trends and then companies, brands and products we may distinguish rising inflation and cost of living, the slowdown in global growth; geopolitical conflicts; climate crises, resource scarcity and global warming; development of new technologies; population growth and population ageing; society fragmentation; micro globalization and glocalization. All these drivers form different cross-trends in international business and influence various aspects of marketing and management strategies.

The purpose of the article is to identify and summarize the main trends in consumer behavior globally formed under the influence of global driver – cost-of-living crises, highlight new models and ways of consumer behavior worldwide, and examine the marketing adaptation strategies of international and national companies to slowdown in global growth, rising inflation and cost of living.

Literature review. Each year, international organizations, institutions, and consulting agencies define forces that influence cultural, social, economic, political, technological, and environmental spheres and transform society over the next decade. Among such prominent institutions and agencies, we may highlight The World Bank Group (current report – Global Economic Prospects 2024), VML Intelligence (current report The Future 100 2024), McKinsey & Company, Euromonitor International (current report Consumer Trends to Watch 2024), Trend Hunter (current Trend report 2024), The Future Laboratory. Among data gathering platforms, which also provide statistics and survey results about different issues concerning trends in international business, marketing and consumer behavior we may define Statista, Exploding Topics and Google Trends. Studying main global drivers and trends and understanding their transformative impact on consumer behavior becomes critical for business while elaborating long-term vision and general strategy.

Research findings. In this article, we will focus on the global driver of cost of living crises, rising inflation and the slowdown in global growth which, according to the consulting company VML Intelligence, and its report The Future 100 became the top most pressing issue facing society in 2023 and even moved to lower positions such long-lasting issues as climate change and sustainable development.

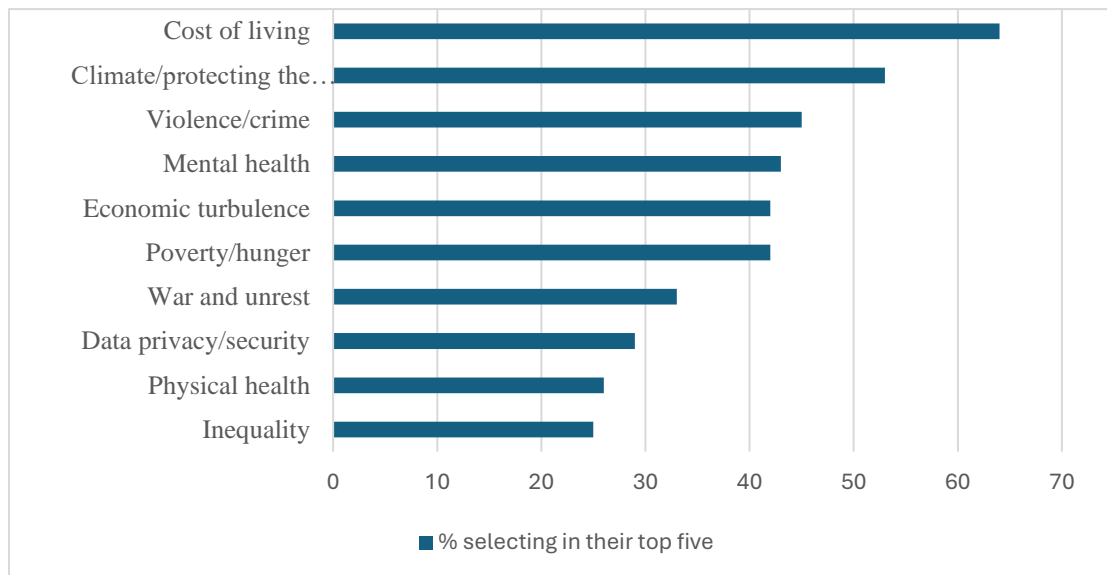


Figure 1. The 10 most pressing issues facing society, 2023 (Source: The Future 100 by VML Intelligence, 2024)

According to a World Bank Group report on global economic prospects, which was issued in June 2024, the slowdown in global growth is already occurring. Still, it is projected to stabilize at 2.6 per cent this year, holding steady for the first time in three years despite geopolitical tensions and high interest rates (*World Bank Group, 2024*). Figure 2 shows the projected GDP growth rates for 2024 and 2025 in the G20.

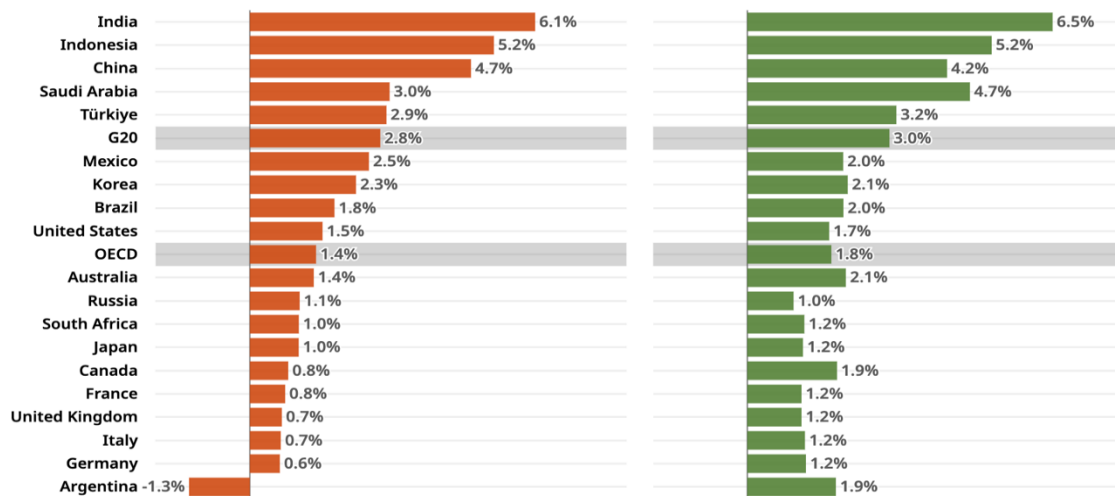


Figure 2. GDP growth projections for 2024 (left) and 2025 (right), %, year-on-year (Source: OECD, 2023)

Another factor is inflation, which is generally defined as the continued increase in the average prices of goods and services in a given region. As shown in Figure 3, the global inflation rate from 2000 to 2022 has been relatively stable (approximately 3-5%) excluding 2 sharp increases in 2008 due to the global financial crisis, and in 2022 following the COVID-19 pandemic and Russia's invasion of Ukraine in February 2022.

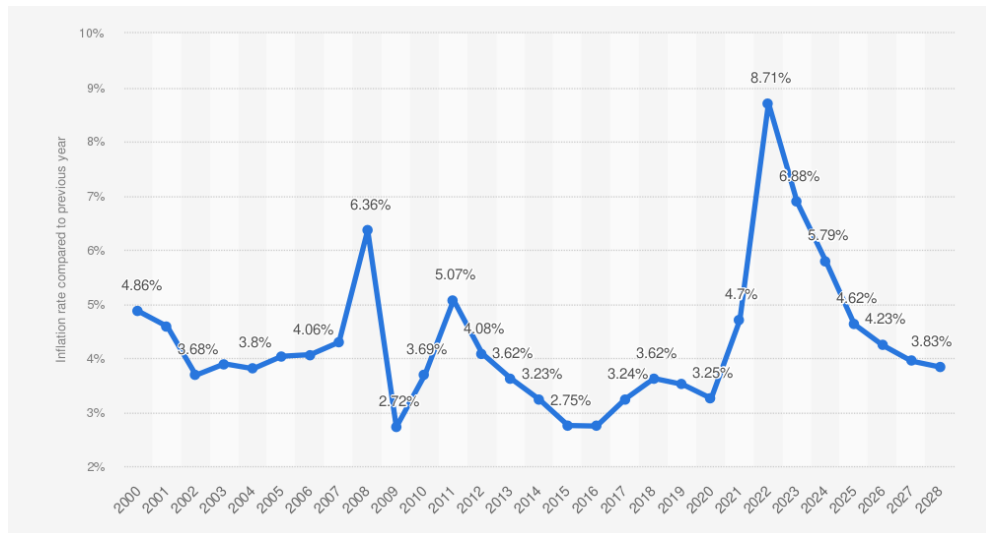


Figure 3. Global inflation rate from 2000 to 2022, with forecasts until 2028 (percent change from previous year) (Source: IMF, Statista, 2024)

Inflation and slowing economic growth are two major economic drivers, that significantly impact the economy these years. High rates of these factors as a result of geopolitical tensions, supply chain delays, and fiscal instability in the wake of the pandemic, led to rising energy and commodity prices, a reduction in production, employment, and investment and rising cost of living. World Bank states, that by the end of 2024, people in approximately one out of every four developing countries (including Ukraine) and about 40% of low-income countries will be poorer than they were before the coronavirus pandemic in 2019.

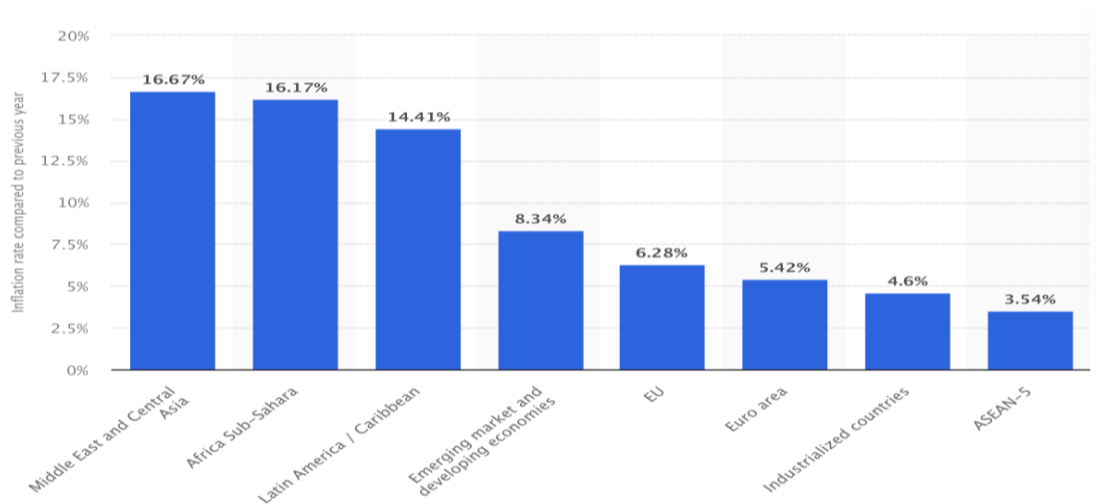


Figure 4. Inflation rate in selected global regions in 2023 (compared to previous year) (Source: Statista 2024)

While both developed and developing countries face significant challenges due to inflation, the impact is generally more severe in developing countries. This is due to their higher sensitivity to food and energy prices, less diversified economies, and more limited policy tools. Of course, consumers in developing countries are more sensitive to price increases, as a larger proportion of their income is spent on essential goods and services, while consumers in developed countries

generally have higher and more stable incomes, which can mitigate the impact of inflation on consumption patterns. But, even in the USA consumer prices for all items rose 3.4% in 2023 in comparison with 2022. Food prices increased by 2.7%, reflecting a 1.3% increase in prices for food at home and a 5.2% increase in food prices away from home (*U.S. Bureau of Labor Statistics, 2024*). The euro area’s annual inflation rate was 2.9% in 2023, and EU annual inflation was 3,4%. A year earlier the rates were 9,2% and 10.4% respectively (*Eurostat, 2024*). According to the FAO Food Price Index (a measure of the monthly change in international prices of a basket of food commodities) in January 2024 it averaged 118 points, the highest value for the index in the past 23 years was reached in March 2022 (Figure 5).

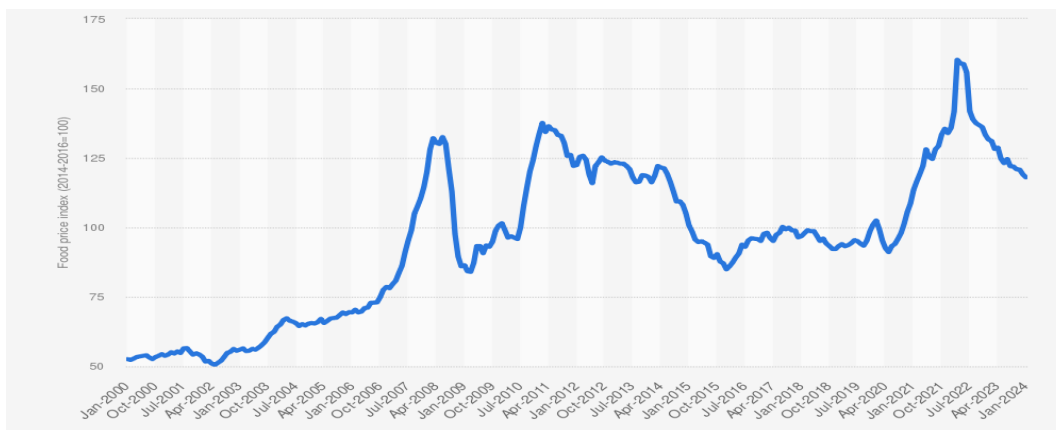


Figure 5. Monthly food price index worldwide from 2000 to 2024 (Source: FAO, Statista, 2024)

The consumer price index visually shows how average product and service prices go up over the years. It measures the overall change in consumer prices based on a representative basket of goods and services over time, compared to an earlier base year that is set to the value of 100. According to Statista, in February 2024, the global consumer price index, excluding the United States, stood at 194.1, compared to 159.3 for the U.S. (*Statista, 2024*).

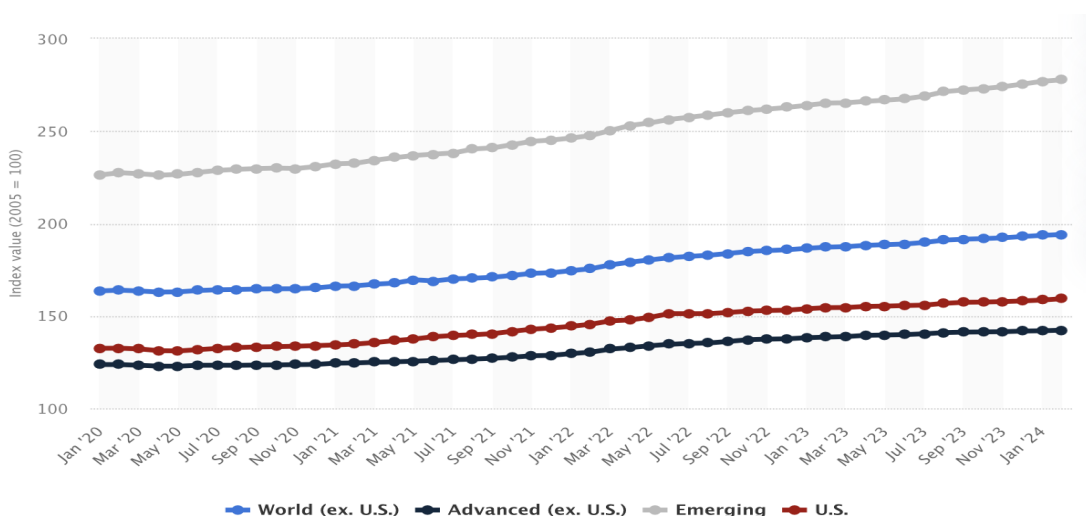


Figure 6. Headline consumer price index worldwide from January 2020 to February 2024, by region (Source: Statista 2024)

Speaking about Ukraine, inflation in 2023 slowed down five times compared to 2022 and amounted to 5.1% compared to 26.6%. The inflation is estimated to be 5% in 2029 (State Statistics Service of Ukraine, 2024).

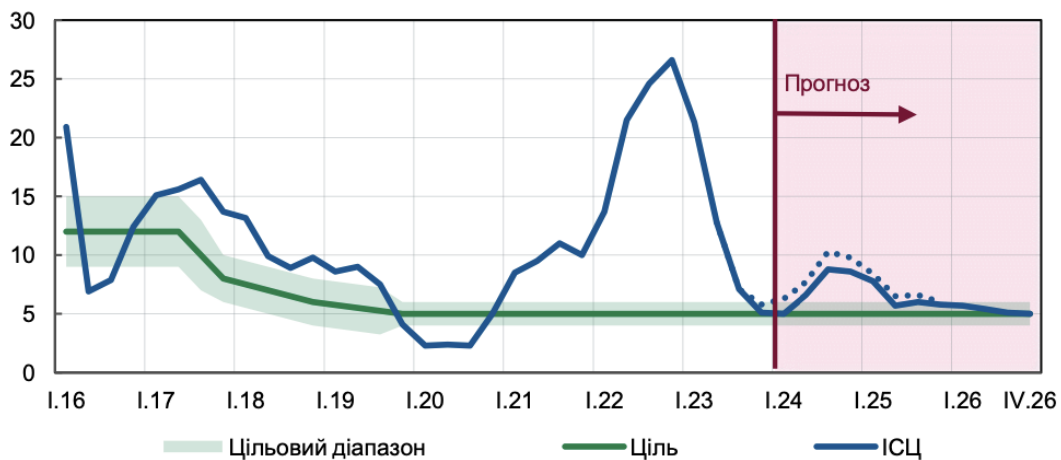


Figure 7. Change in the consumer price index (as of the end of the period, % y/y) and inflation targets (Source: State Statistics Service of Ukraine, National Bank of Ukraine, 2024)

According to these indicators, the global economy is currently in a better state than it was two years ago. However, rising geopolitical tensions could create new risks for the global economy. The World Bank expects global trade growth in 2024 to be only half of the average rate seen in the decade before the pandemic. Consequently, global economic growth is projected to slow for the third consecutive year — from 2.6% last year to 2.4% in 2024, which is the weakest start of the decade in the last 30 years.

Over the past four years of high inflation and restrained economic growth, especially in developing countries, new cohorts of consumers have emerged, influenced by the cost-of-living crisis. New consumption models have appeared, and certain factors that shape consumer behavior now and in the coming years have been highlighted. Following the survey, conducted by Euromonitor International in 2023 74% of consumers were concerned about the rising cost of everyday items and 44% planned to save more money in 2023 (Euromonitor International, 2024). According to the same survey, there are many ways, how consumers are trying to save money, for example, 52% cut back on non-essential spending, 53% are cooking at home more instead of eating out, 47% decreased energy use at home, 33% switched to buying private label products, 28% buy products in smaller quantities of packaging, 26% repair broken items instead of buying new products, 10% join online sharing groups and communities. According to McKinsey & Company survey, more and more customers all over the world are looking to new brands (become brand switchers, and are not loyal to earlier lovebrands) and retailers for better value. Thus, during 1st quarter of 2024 more than 30% of consumers in the US, Canada, Sweden, France, Germany, Italy, Spain, the UK, South Korea and Australia tried a different brand, and more than 40% of consumers in South Korea, Netherlands, Sweden, Canada, France, Germany, Italy, Spain and the UK changed retailers for lower price or discount (Adams C., Alldredge K., Kohli S., 2024). This trend is actually for different age groups, both older consumers and Gen Zers and millennials.

Certainly, consumers are trying to adapt to thriftier and more dynamic external factors and are changing their shopping habits. Nowadays we may distinguish several cohorts of consumers, who depend on the global driver of rising inflation and cost of living and the slowdown in global growth. They are Budget-conscious customers, Cost and value-savers and Now-or-never customers.

For the first, Budget-conscious customers, the main priority is to save money, for which the strategy of downgraded spending is used. Often, such consumers look for various ways to spare, frequently disregarding the additional value or quality that branded products may offer. Among popular ways, that Budget-conscious customers use to a cutback in expenditures are: looking for cheaper alternatives (lower-priced retailers or brands), skipping some purchases entirely or delaying them (focusing spending on essential items like groceries, utilities, and healthcare, while reducing spending on non-essentials), buy now, pay later model (BNPL), resale, rewards perks (for example, paying with points or exclusive discounts, coupons), looking for cheaper private label lines or just substituting products (choosing a less costly type of products like using public transportation instead of owning a car), buy products with special propositions (for example, a larger-size pack for a lower price).

The downgraded spending strategy was popular among customers all over the world in 2023, when consumers shifted from premium products to more affordable options, which affected their purchasing behavior and lifestyle. Many people reduced non-essential purchases, like entertainment, travel or dining out. For example, a study by Hunter, a marketing and PR firm, found that people in the USA are cooking 51% more often compared to pre-pandemic levels, as they are finding cooking more helps them save money (58% of consumers) and eat healthier (52% of consumers). Another good example of how international business adapts to new consumer models is the appearance of generic brands, which become popular instead of well-known branded items. The best example would be Chinese-owned e-commerce platforms Shein, Pinduoduo and Temu which are specializing in low-end women's fashion, the traditional agriculture industry and home decor and household items accordingly. These online retailers became strong competitors to e-commerce giant Amazon, while they steadily gained popularity among consumers thanks to the combination of social features, gamification and low-price marketing strategies. So, nowadays Amazon has shifted focus away from traditional rivals like Walmart and Target toward Shein and Temu.

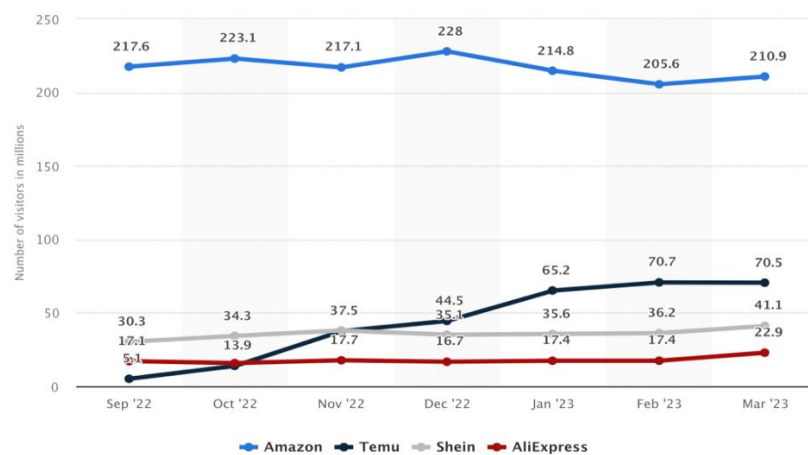


Figure 8. Number of unique visitors to Amazon, Temu, Shein, and AliExpress in the United States from September 2022 to March 2023, in millions (Source: Statista, 2024)

A study by Bain & Company and Kantar Worldpanel found that spending on FMCG products in China dropped by 0.9% year on year during Q3 2023. In the same quarter, Pinduoduo had a 314% jump in transaction revenue to nearly \$4 billion, representing a year-on-year increase of 90% (Ren D., 2023). According to estimates from Statista, Temu had 70,5 million US monthly active users in March 2023, Shein had 41,1 million, and Amazon had 210,9 million.

Pinduoduo entered the Chinese e-commerce market in 2015 and rapidly grew to become one of its largest players, thanks to the strategy of team purchase, where buyers form a group to receive discounts from suppliers. Also, they can use social platforms such as WeChat to encourage friends to be part of their team or wait for other buyers to join. The main segment of Pinduoduo is people with modest incomes who live away from major Chinese cities. Among the minuses of this retail customers note product quality issues, namely the prevalence of counterfeit and low-quality products on its platform. That’s why companies find it difficult to sell higher-quality items on the platform or make enough sales margin to earn a profit (*Sentance R., 2024*). In 2022 Pinduoduo’s parent company, PDD Holdings, launched a new business in the United States - an online marketplace Temu, which offers a vast variety of goods with the same strategy of low prices. Now Temu is present in 49 countries, most recently launching in South Africa in January 2024. Temu has a very clear message for its clients, which represents the main benefit for them – saving money and encouraging customers to buy products freely and impulsively. This message is coined in the slogan of the company - “shop like a billionaire”. Shein, a Chinese brand, was founded in 2012 and also is a very illustrative example of a generic brand for Inditex group, H&M, Next and Nike, in fast fashion, which specialises in trendy fashion products and uses a strategy of low prices. A study by ECDB provides information, that in 2023 Shein was ranked 3 of the biggest US online fashion retailers by net sales after Amazon (\$12,3b) and Walmart (\$8,9b) with \$8,1 billion. Fourth and fifth places are occupied by Macy’s (\$6,4b) and Nike (\$4,5B). In 2023, Temu and Shein have aggressively expanded internationally, successfully topping the global rankings for e-commerce application downloads and growth.

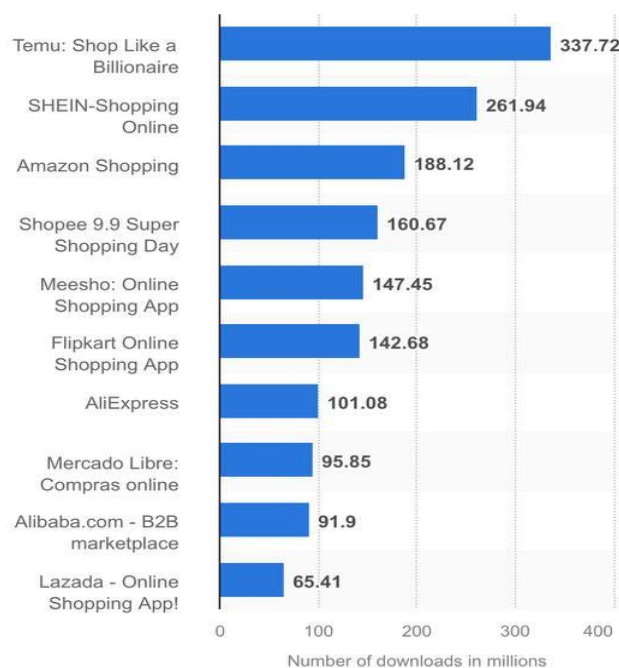


Figure 9. Leading shopping apps worldwide in 2023, by number of downloads, on millions (Source: Statista, 2024)

Also, according to the recent annual report on the most valuable and strongest Retail brands 2024 by Brand Finance, 8 of the world’s top ten retail brands experienced declines in brand value this year because of inflationary and cost-of-living pressures. Under such issues, brand values for discount and more affordable brands are improved. Among such brands, Brand Finance distinguishes American Dollar Tree – a multi-price-point chain of discount variety stores (brand value up 23%), Ross Dress for Less - a chain of discount department stores (brand value up 18%),

Family Dollar - variety store chain (brand value up 15%), and the UK's B&M – multinational variety store chain (brand value up 19%) (*Brand Finance, 2024*).

In Ukraine, the market for hard-discounter and dollar store formats is also rapidly developing. In recent years, chains like Territoriya minimal'nykh tsin, OnePrice, and Avrora have become very popular. International retailers such as Temu, AliExpress, and Joom also operate in the national market. For instance, according to Forbes Ukraine, AliExpress attracted the most Ukrainian traffic abroad with a 27% market share, Joom with 3%, and in May 2024, Temu nearly matched AliExpress in traffic – 9.96 million compared to 10.8 million (*Antonyk T., 2024*). Such international companies compete with discounters such as Territoriya minimal'nykh tsin, OnePrice, Avrora, and C2C sales through OLX and Instagram. According to Forbes' ranking "200 Leaders of the Ukrainian Economy," two-thirds of retailers have experienced a negative revenue trend over the past year. However, budget store chains like Avrora have more than doubled their revenue during the first war year, indicating a decline in the purchasing power of Ukrainians, a decrease in the number of consumers due to emigration, and increased demand for cheaper and lower-quality goods (*Forbes, 2023*). According to Auchan Ukraine, the number of items in the average consumer's basket has decreased by 20%, with a particular drop in demand for high-end products such as sausages, cheeses, and chocolate. Additionally, there has been an increase in the number of shoppers looking for discounted items or purchasing smaller quantities (*Antonyk T., 2024*). Avrora is the largest one-dollar store chain in Ukraine. In 2023, it opened 500 stores and plans to increase the total number of outlets in Ukraine to 2,000 by the end of 2024. The chain's revenue more than doubled, rising from 5.8 billion UAH to 13.9 billion UAH. Similarly, the OnePrice chain has 77 stores in Ukraine, selling non-food items, and plans to open its first OnePrice Club in the hard-discounter format, with a primary assortment of food and everyday products. CEOs of dollar store format companies highlight several factors that enable them to implement a low-price strategy – direct cooperation with manufacturers, strict cost control, selling unbranded products, not very expensive retail spaces with low rent, and using cross-docking (unloading products directly from one vehicle to another). Also, of course, the quality of products sold in discount chains is not very high.

It seems interesting to consider another behavioral model tool for Budget-conscious customers that is gaining momentum worldwide – buy now, pay later model (BNPL). It allows consumers to make a purchase and pay for it in interest-free instalments. Earlier this payment instrument was used for expensive items like furniture or gadgets, but now, it's available for a variety of products across different categories, no matter how cheap it is. In 2021, BNPL accounted for just 9% of e-commerce transactions. Still, by 2026, data shows that it will rise to 25% and in 2028 it will calculate \$687bn according to Juniper research (*Juniper Research, 2024*). Data from Insider Intelligence shows that this instrument is often used by young customers - more than 40% of BNPL consumers were Millennials in 2020. This generation is expected to continue to account for the largest share of users through 2025 and 44% of Zoomer buyers will use BNPL by the end of 2024. This model caters to the modern consumer's desire for immediate access to goods and services while managing their finances more effectively. Among the reasons why customers choose BNPL are avoiding credit card interest, immediate access to products, making purchases they couldn't otherwise make and avoiding a credit check.

One more strategy for Budget-conscious customers is Direct-to-Consumer (DTC) sales refers to the strategy where brands sell their products directly to customers without intermediaries like wholesalers or retailers. This approach has gained significant popularity because it helps save money for the customers and build better customer relationships for the companies. In 2021, nearly six in 10 consumers made a DTC purchase in different categories, with clothing, accessories and electronics dominating. According to a recent global survey by Statista, more than four out of ten respondents had purchased fashion directly from D2C sites in 2023.

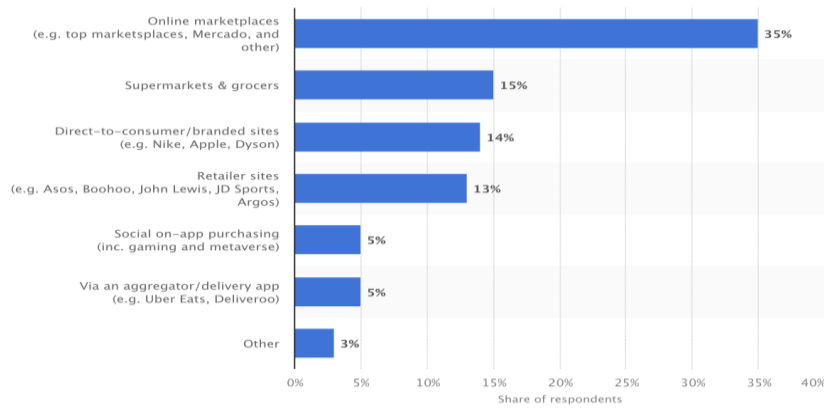


Figure 10. Distribution of online purchases worldwide, April 2023, by channel (Source: Statista, 2024)

The second group of consumers, which was formed under the global driver of the cost-of-living crisis is Cost and value-savers, who try to reduce spend without compromising quality. According to McKinsey, 80% of US consumers (and 88% of Zoomers and millennials) are seeking value by trading down to different products. This group of customers, unlike Budget-conscious customers, doesn't want to change their consumption habits and essential aspects of lifestyles, that is why, while saving money they don't want to buy products of low quality, they are looking for approximately the same value, as they used to buy from their loved brands. A study by McKinsey found, that in advanced markets, over a third of consumers have tried different brands, and approximately 40 percent have switched retailers in search of better prices and discounts. In Europe and the United States, Zoomers and millennials were looking for lower-priced brands and retailers (Adams C., Alldredge K., Kohli S., 2024). So, consumers are willing to find some alternatives ways of replacing through novel means of consumption.

One of the first trends for the Cost and value-savers consumption model is downtrading for private labels. According to McKinsey survey, 36% of consumers plan to purchase private label products more frequently, and 60% believe private brands offer equal or better quality (Adams C., Alldredge K., Kohli S., 2024). These products are generally positioned as lower-cost alternatives to name brands. They are found across various categories, from food and beverages to household goods and personal care items. However, if known and loyal retailers provide private labels, the quality and value of the product may be kept. According to Numerator, 57% of consumers think private label brands offer an above-average value for their price, 43% of consumers purchase private label items to save money and 29% of consumers think private label brands are just as good as name brands.

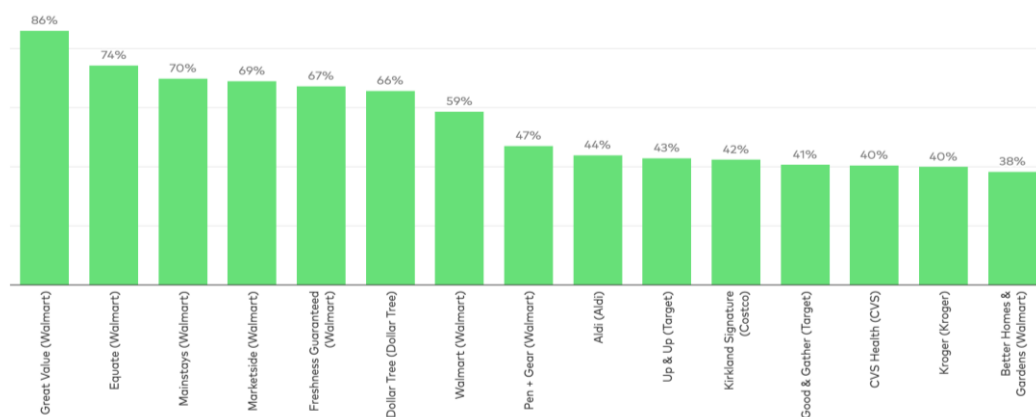


Figure11. Top largest US private label brands, % household penetration (Source: Numerator, 2024)

In Ukraine, private labels are also developing. Most grocery retailers operating in the Ukrainian market have several private labels in different price segments. The development of this segment was stimulated by the cost-of-living crisis, which began during the pandemic, as well as the full-scale invasion, when, in the absence of well-known brands, there was a demand for private label goods. For instance, recognizable brands are offered by Fozzy Group (Premiya, Povna Chasha), Novus (MARKA PROMO, NOVUS), and Kyshenya (Hit Product, № 1 - Honest Price). Among household appliances and electronics retailers, Foxtrot has its private label (Delfa), and in 2020, Rozetka launched its brand of household and semi-professional equipment (RZTK). Overall, the market share of private labels in Ukraine was 14% in the first quarter of 2023, which is not a high figure compared to some European countries. Private labels are present across a wide range of industries and are gaining more and more market penetration, according to Statista. In the first quarter of 2023, Switzerland emerged as the global frontrunner in terms of market share for private labels, commanding an impressive share of 52 percent. The United Kingdom and Spain followed suit, with private label market shares of 46 percent and 43 percent, respectively (Statista, 2024).

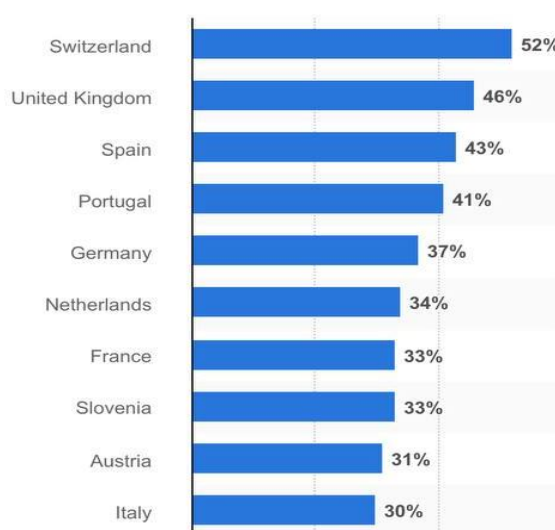


Figure 12. Top 10 countries by market share of private label brands worldwide in Q1 2023 (Source: Statista, 2024)

Another interesting way to save money, the quality/value of the product and customers' usual lifestyle, which is proposed by many brands nowadays is "dupes". Dupes have become one of the biggest buying trends of 2023-2024 years, especially among young shoppers who through social media and online shopping, where popular fashion bloggers research and share lists of dupes for brand-named items for everything from socks to perfumes, may buy the best variants. "Dupe" is short for "duplicate" and refers to items that are very similar to name brands and more expensive products, often mimicking their appearance, function, or quality, but available at a lower price. Consumers actively look for dupes as they can get a similar experience or aesthetic to the original product without paying a higher price. There are a lot of examples of well-known brands in the middle segment, which provide such a marketing strategy of mimicry - Zara frequently releases clothing, accessories and perfumes that resemble those from luxury brands like Balenciaga, Gucci, Chanel, Jo Malone and Tom Ford; Mango provides fashionable items similar to those found at brands like J.Crew and Madewell but at a lower price; **The Ordinary** offers simple, effective formulations like Drunk Elephant and Sunday Riley. An additional novel feature of social media, which helps in finding some balanced buying solutions is the appearance of deinfluencers who actively discourage their followers from purchasing certain products, or brands, or engaging in specific consumer behaviors. Their content often includes critiques of overhyped or overpriced

products, calls for less wasteful living, and recommendations for more ethical and responsible purchasing decisions.

Private labels and dupes are not the only way, how Cost and value-savers may maximise their budgets without sacrificing quality. For example, access to price-comparison tools, customer reviews, and online marketplaces enables them to make well-informed decisions swiftly, ensuring they get the best possible value for their money. Nowadays very often customers shop at stores with reward perks to rack up points for future purchases, pay with credit card or rewards points, and participate in free activities. There are a lot of financial or lifestyle tricks, which may help to save money. Bundle-and-save deals allow shoppers to purchase multiple products or services, which are sold together at a discounted price compared to purchasing each item individually. These deals are designed to encourage customers to buy more by providing them with savings. Subscribe-and-save plans also help to save money without changing customers' lifestyles. Subscription-based services allow customers to receive regular deliveries of products at a discounted price. These plans are popular for consumable goods and services that customers need regularly. They offer convenience and savings, making them attractive to consumers who prefer automatic replenishment without the hassle of reordering. **Walmart**, for example, provides subscription services for everyday essentials like baby products, pet supplies, and cleaning items. Another way is referral bonuses, which are offered to existing customers who refer new customers to a business. Both the referrer and the new customer typically receive a reward, which can be in the form of discounts, credits, cash, or other perks. For example, **Uber** provides free rides or ride credits to both parties when a new user signs up using a referral code. And of course, loyalty programs, which give the possibility for consumers to earn points for future purchases, have some discounts or even use for free such services like cleanings, repairs or warranties.

As the segment of Cost and value-savers grows in influence and such shopping behaviors will continue in 2024, it exerts pressure on businesses to innovate and adapt, emphasizing affordability and value creation in their offerings. This, in turn, fosters healthy competition and encourages market efficiency, benefiting consumers at large. The report by VML Intelligence *The Future 100 Trends & change to watch in 2024* gives several examples of such companies and their propositions. Canadian food delivery app SkipTheDishes tries to meet such consumer needs with its Inflation Cookbook grocery shopping tool. This tool forecasts the largest price drops for 400 popular ingredients from 100 grocery stores and uses this information to develop budget-friendly, "chef-inspired" recipes that users can shop for. In France, supermarket giant Carrefour is presenting itself as a consumer ally by opposing "shrinkflation"—where product size or quantity is reduced but the price remains the same. The store is using in-store signs to call out brands that use this tactic, pressuring them to reduce their prices. Petcare brand Wilder Harrier is going beyond just offering low prices to assist its customers. It is establishing a network of Community Pet Pantries, where families affected by the cost-of-living crisis can obtain donated food for their pets. Turkish Airlines provides free overnight accommodations for passengers with layovers exceeding 20 hours in Istanbul, allowing them to explore the city (VML, 2024).

The last four hard years for the whole world with COVID-19, wars and geopolitical conflicts, economic disruption, cost-and-living crisis, lockdowns and stay-at-home orders, social distancing and travel restrictions, mental health issues have generated a segment of Now-or-never customers. Many people have recently been limiting themselves to various things, products, and services, either due to general bans and restrictions or because of internal constraints on fun, non-essential items that bring joy and comfort. However, crises that follow one another and last for years prompt a reevaluation of values, behavior models, and the value of life at the moment. These external and internal factors have shaped a consumer segment that has begun to allow themselves the pleasure of living and purchasing emotionally valuable and worthwhile products from well-known brands. And even if their financial situation is not so stable, they are still ready to treat themselves, because they think they deserve it.

Conclusion. While longer-term economic outlooks are more optimistic, consumers in all global markets will continue to feel the pinch of the cost-of-living crisis in 2024. Consumers are compelled to rethink their spending patterns, scrutinizing every expense to ensure it aligns with their financial priorities. This proactive approach allows them to exert a degree of control over their financial well-being amidst broader economic uncertainties. By responding to the thrifter new consumer mindset, retailers can meet the growing demand for value-based offers, while positioning themselves as strong consumer allies. Today, companies must create new additional values for their products that consumers need so much today – providing positive impressions and emotions to switch from routine life; demonstrating support and convincing that the company can be trusted so that consumers feel confident in support and care, and can preserve and enhance the classic human values that are now most appreciated; sharing experiences and educating to inspire consumers for new achievements and future plans; demonstrating stability and sustainability through various social, inclusive, and environmental programs.

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IMPLEMENTATION OF AI SYSTEMS FOR ANALYSIS OF PRODUCTIVITY AND DEVELOPMENT OF TALENT IN GLOBAL TEAMS

ВПРОВАДЖЕННЯ СИСТЕМ ШІ ДЛЯ АНАЛІЗУ ПРОДУКТИВНОСТІ ТА РОЗВИТКУ ТАЛАНТІВ У ГЛОБАЛЬНИХ КОМАНДАХ

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Abstract. *In modern world, technological progress is changing not only the way individuals work, but also the goals of companies operating on a global scale. The globalization of the workforce and the rise of telecommuting have led to the need for effective performance management and talent development in multinational teams. Artificial intelligence (AI) is emerging as one of the most promising tools for solving these challenges, enabling process automation, big data analytics, personalization of learning and forecasting of talent needs. However, the implementation of AI is accompanied by numerous challenges, such as ethical issues, biases in algorithms, data privacy, and compliance with regulatory requirements in different countries. In addition, the use of AI requires significant investment in technical infrastructure and training of personnel, which can be a significant barrier for many organizations. It is also important to consider the potential impact of AI on corporate culture and employee interaction, as too much automation can lead to the loss of the human factor in work processes. The article examines the technological aspects of AI implementation, describes the main challenges and limitations, and offers strategies to overcome them. The research findings show that while AI has great potential to transform human resource management, its implementation requires a careful approach that includes consideration of ethical aspects and ensuring compliance with legal regulations. The study also highlights the importance of a balanced approach that combines the benefits of AI with traditional HR practices while ensuring that uniquely human qualities such as empathy, creativity and critical thinking are preserved.*

Keywords: *artificial intelligence, global teams, productivity, talent development, human resources management, ethics, data privacy, technological innovation, automation, personalization.*

Анотація. У сучасному світі технічний прогрес змінює не тільки спосіб роботи людей, але й цілі компаній, що працюють у глобальному масштабі. Глобалізація робочої сили та зростання дистанційної роботи призвели до необхідності ефективного управління продуктивністю та розвитку талантів у багатонаціональних командах. Штучний інтелект (ШІ) стає одним із найперспективніших інструментів для вирішення цих проблем, забезпечуючи автоматизацію процесів, аналітику великих даних, персоналізацію навчання та прогнозування потреб у талантах. Однак впровадження штучного інтелекту супроводжується численними проблемами, такими як етичні проблеми, упередження в алгоритмах, конфіденційність даних і дотримання нормативних вимог у різних країнах. Крім того, використання ШІ вимагає значних інвестицій у технічну інфраструктуру та навчання персоналу, що може стати суттєвою перешкодою для багатьох організацій. Також важливо враховувати потенційний вплив штучного інтелекту на корпоративну культуру та взаємодію співробітників, оскільки надмірна автоматизація може призвести до втрати людського фактора в робочих процесах. У статті розглядаються технологічні аспекти впровадження ШІ, описуються основні виклики та обмеження, а також пропонуються стратегії їх подолання. Результати дослідження показують, що хоча штучний інтелект має великий потенціал для трансформації управління людськими ресурсами, його впровадження вимагає ретельного підходу, який включає врахування етичних аспектів і забезпечення дотримання правових норм. Дослідження також підкреслює важливість збалансованого підходу, який поєднує переваги штучного інтелекту з традиційними методами управління персоналом, забезпечуючи при цьому збереження унікальних людських якостей, таких як емпатія, креативність і критичне мислення.

Ключові слова: штучний інтелект, глобальні команди, продуктивність, розвиток талантів, управління людськими ресурсами, етика, конфіденційність даних, технологічні інновації, автоматизація, персоналізація.

Introduction. Globalization and the development of technology are radically changing the way companies organize their work. Today's business world is very different from what it was just a few decades ago. Technological progress, in particular the development of the Internet and mobile communications, allows companies to work with employees and partners located in different corners of the world. With the advent of remote work opportunities and global teams, organizations are increasingly faced with the need to manage employees across countries, cultural contexts and time zones. This globalization of the workforce creates both new opportunities and challenges related to work coordination, performance evaluation, and talent development.

Modern organizations deal with a diversity of languages, cultural norms, and labour laws, which complicates management and decision-making processes. For example, managers must consider different work habits and time zones to effectively manage projects and ensure the productivity of their teams. In addition, distance and time differences can make communication and collaboration between team members difficult, making it necessary to adopt new technologies and HR approaches.

With its potential to analyse big data and automate routine tasks, artificial intelligence is becoming an important tool in the field of human resource management. The use of AI allows not only to increase the efficiency of processes, but also to provide a more personalized approach to training and development of employees. For example, AI systems can automatically process large volumes of information coming from various sources and based on this analysis, provide recommendations for training, professional development or career growth. This significantly improves the ability of companies to attract and retain talented specialists, increases their motivation and job satisfaction.

The purpose of the article. The purpose of this article is to explore in detail the implementation of artificial intelligence (AI) systems for performance analysis and talent development in global teams. The article is aimed at a deep understanding of how AI can be used to optimize HR processes in multinational organizations, what advantages and challenges arise when

applying these technologies, as well as what ethical, legal and social aspects need to be considered during implementation. The study also analyzes best practices and strategies that can help companies make the most of AI to improve the performance of their teams and promote long-term talent development in a globalized labor market.

Literature review. To date, there is a wide range of research devoted to the implementation of AI in human resource management. Here are a few scientists who have been engaged in research in the field of artificial intelligence (AI) and its application in human resource management: John McCarthy, Marvin Minsky, Jeffrey Hinton, Ian LeCun, Andrew Ing, Fei-Fei Li, Pedro Domingos, Sebastian Thrun, Jurgen Schmidhuber, Tom Mitchell.

These scientists and their research laid the foundation for the modern application of AI in human resource management. Their work covers a wide range of technologies - from basic machine learning algorithms to complex neural networks and deep learning systems. These technologies are increasingly used in HR practices, including recruitment, performance appraisal, turnover forecasting, personalization of employee training and development, and analytics for strategic HR decision-making.

It is important to note that although these scientists did not directly specialize in HR, their fundamental research in the field of AI created the basis for innovation in the field of human resource management. Modern specialists and researchers actively adapt and develop these technologies to solve specific tasks in the field of personnel management, creating new opportunities for increasing the efficiency and innovation of processes.

Main results of the research. Artificial intelligence is a term used to describe powerful technologies based on machine learning. It is the ability of a digital computer, or computer-controlled robot, to perform tasks normally associated with intelligent beings. This term is often used in the design of evolving systems that are endowed with human-like intellectual processes, such as the ability to reason, make sense, generalize, and learn from experience. The problem of a clear definition of the term AI is quite understandable, because the study of artificial intelligence is a young discipline, and the field of AI in science is still being formed.

The motivation behind the development of AI technologies is that tasks that depend on many variables require complex decisions that are difficult to algorithmic manually. The development of algorithms used for modelling and solving tasks related to large volumes of data takes a lot of time, so the main goal of improving AI technologies is to minimize human resources for solving highly intellectual tasks (*Slobodyanyuk, 2020*).

Artificial intelligence gives companies the opportunity to automate many routine processes related to evaluating employee performance. For example, AI systems can automatically collect and analyze data on task completion, project participation, team interaction, and other key performance indicators. This allows managers to receive quick and accurate analysis results, which helps them make informed decisions about improving the effectiveness of teams.

The study "AI-ecosystem of Ukraine: talents, companies, education", conducted by the Ministry of Digitization together with AI HOUSE and investment group Roosh, shows that Ukraine ranks second in the number of AI companies among the countries of Central and Eastern Europe, with more than 240 companies, that are actively working with AI technologies. This research enables companies to better understand their strengths and weaknesses, and the state to form an effective AI development policy, removing existing barriers (Ministry of Digital Transformation of Ukraine, 2024).

According to the study, over the past ten years, the number of AI/ML specialists in Ukraine has increased fivefold, reaching 5,200 professionals as of January 2024. Young people aged 21 to 25 make up 36% of all specialists in this field, which indicates a high interest and active participation of new generations in the development of technologies. The most common occupations among specialists are Data Scientists and ML Engineers, who together make up 63% of all industry professionals.

Ukrainian AI companies demonstrate high expertise in the fields of marketing, gaming and business software, which distinguishes Ukraine from other European countries. The study also

states that there are 44 active venture capital funds in Ukraine that invest in AI startups, which contributes to the development of innovations and the introduction of new technologies. In addition, 42 universities in the country have programs devoted in part or entirely to AI/ML, a significant increase compared to a decade ago.

The main centres of AI development in Ukraine are Kyiv, Lviv, Kharkiv, Odesa and Dnipro, where most AI companies and offices are located. However, despite significant progress, the industry faces several challenges, including the need to interact with other industries, competition on a global level, ethical issues, financial constraints and the loss of talent due to Russia's full-scale invasion of Ukraine. According to Oleksandr Borynyakov, Deputy Minister of Digital Transformation for IT Development, Ukraine has great potential for further development and strives to become a global AI hub where breakthrough technologies of the future are created (*Ministry of Digital Transformation of Ukraine, 2024*).

One of the most important aspects of implementing artificial intelligence (AI) in human resources management is the possibility of creating individual training and development plans for each employee. AI systems, using machine learning algorithms, can analyze large volumes of data, which allows them to deeply understand the current skills, achievements and potential growth areas of each employee. As a result of this analysis, AI can determine which specific skills need further development and recommend personalized training programs, courses or training. This significantly increases the effectiveness of the training process, as employees receive exactly the knowledge and skills that best meet their needs and roles in the company (*Boiko, 2020*).

In addition, personalization of training with the help of AI allows considering individual learning styles, pace of learning material and even personal interests of employees, which makes training not only more effective, but also more exciting and motivating. In turn, this has a positive impact on the productivity of the team, as employees who feel their development is supported and valued are more motivated and engaged.

1. AI is also a powerful tool for predicting future talent needs. Using data analytics and machine learning models, companies can predict what skills, and professional roles will be needed in the future. This allows you to plan the training and development of existing employees in advance, as well as to develop strategies for hiring new employees, focusing on promising areas of business development. For example, if the data analysis shows an increase in the demand for cyber security specialists, the company can invest in advance in training employees in this field or hire new specialists (*Kravchuk, 2023*).

2. An important aspect of using AI in the management of global teams is its application to optimize the processes of recruitment and adaptation of new employees. AI systems can analyze candidates' resumes, comparing them to the job requirements and the company's corporate culture. This allows you to quickly identify the most promising candidates, saving time for recruiters in the initial stages of selection. In addition, AI can help create personalized onboarding programs, considering the cultural background of the new employee and the specifics of his role in the global team.

The use of AI to analyze the emotional state and level of engagement of employees is becoming increasingly relevant, especially in the context of remote work. Algorithms can analyze the tone and content of electronic communications, activity in corporate systems, and even facial expressions during video conferences. This allows managers to detect signs of stress, burnout or decreased motivation in team members in time. Based on this data, AI can offer individual recommendations to support psychological health and increase employee engagement.

AI also plays an important role in ensuring the continuity of business processes in global teams. For example, AI-based forecasting systems can predict potential risks related to geopolitical events, natural disasters or economic crises that may affect the work of teams in different countries. This allows companies to proactively develop response strategies and ensure business resilience in the face of global uncertainty.

An innovative area of application of AI in the management of global teams is the creation of virtual assistants for team leaders. Such assistants can analyze data on performance, communication

and team dynamics, providing managers with personalized recommendations for improving management effectiveness. For example, a virtual assistant can suggest optimal times for meetings based on the time zones of all participants or suggest when to have a one-on-one conversation with a team member who is showing signs of declining productivity.

Finally, it is important to note the role of AI in creating an inclusive environment in global teams. Algorithms can analyze the language of corporate documents, communications, and even software code for bias or discriminatory language. It helps companies identify and address unconscious biases, contributing to a fairer and more inclusive work environment. In addition, AI can help develop inclusive hiring and promotion strategies, ensuring equal opportunities for all members of a global team regardless of their cultural background, gender or other characteristics.

The implementation of AI in the field of human resources management, despite all the advantages, is accompanied by numerous ethical challenges. One of the main risks is the possibility of biases in algorithms. This may lead to discrimination against certain groups of employees or job candidates. For example, if AI algorithms are trained on historical data that contain certain biases (for example, gender or racial), these biases can be automatically transferred to decision-making processes, reducing objectivity and fairness (Gorbachova, 2024).

Another important aspect is ensuring the confidentiality of employee data. The use of personal data for analysis and decision-making must comply with the requirements of privacy protection legislation in various countries. Failure to comply with these requirements can lead to legal consequences, loss of employee trust and damage to the company's reputation.

Successful implementation of technologies to manage global teams requires a comprehensive approach that covers several important aspects.

First, algorithms must be understandable and accessible for verification. This means that employees and managers must be able to understand how algorithmic decisions are made, what factors are taken into account, and how these factors affect the bottom line. Such transparency helps to avoid misunderstandings and contributes to the growth of trust in the technological solutions used in the organization.

Second, in order to increase the level of awareness of the use of new technologies, companies should invest in training their employees. This includes not only technical training, but also developing an understanding of the ethical, legal and practical aspects of working with new technologies. Employees must be well trained to use these tools in their daily activities.

Third, ethical issues should be central to the development and implementation of new technologies. Companies must adhere to the principles of fairness, impartiality and transparency in all their processes, as well as ensure compliance with legal regulations in the field of data protection and privacy. This is especially important because violating these principles can lead to a loss of trust from employees and customers.

Finally, continuous monitoring and evaluation of the use of new technologies helps to identify possible problems, evaluate the effectiveness of algorithms and processes, and make the necessary changes to improve them. This ensures the adaptability and development of technological systems in response to changes in business needs and market conditions. Thus, a comprehensive approach to technology implementation can help organizations achieve their goals and remain competitive in today's dynamic environment.

The use of artificial intelligence (AI) in HR technologies is gaining popularity, especially in the context of talent assessment and employee development. The initial stages of applying AI in assessment combine machine learning and digital technologies to automate processes and increase the accuracy of analysis. One of the key aspects is computer adaptive testing (CAT) online, which became possible thanks to the wide availability of computers and the Internet (Chinotti, 2021).

AI in evaluation refers to the automated analysis of responses without human intervention, using machine learning methods to determine attributes and predict results. This allows organizations to quickly and efficiently evaluate their employees, reducing costs and increasing the accuracy of results. AI-based programs have already proven their effectiveness in increasing productivity and revenue.

AI can be used in a variety of assessment methods, including asynchronous digital interviews, situational judgment testing, technical skills assessment, and text analysis. However, there is uncertainty regarding the compatibility of AI with traditional methods and the legal aspects of its application.

Six best practices are essential to successfully implementing AI in talent assessment: define data requirements, ensure transparency, design fair algorithms, perform due diligence, involve human oversight, and disclose intent for AI use. These steps will help to avoid prejudice, ensure confidentiality and compliance with legal requirements (*Chinotti, 2021*).

Conclusions. Thus, the implementation of artificial intelligence (AI) systems for performance analysis and talent development in global teams opens new opportunities for companies in the field of human resource management. By automating routine processes, analyzing large volumes of data more accurately, and enabling personalized learning, AI can significantly increase the effectiveness of teams, promote employee productivity, and ensure their sustainable development. Forecasting staffing needs also allows companies to plan and develop the necessary skills in their employees, which is a key factor in maintaining competitiveness in the market.

However, despite all the advantages, the implementation of AI is not without challenges. For the successful use of these technologies, it is important to consider ethical aspects, ensure the transparency of algorithms, avoid bias and discrimination, and ensure the protection of employee data in accordance with international standards and regulations. In addition, companies should invest in training their employees to ensure effective use of AI and increase their awareness of new technologies.

Only with a comprehensive approach to AI implementation, including technical training, ethical review, legal compliance and transparency, will companies be able to achieve the desired results and ensure the sustainable development of their teams in a global environment. This approach will help organizations not only optimize HR processes, but also create a culture of innovation aimed at long-term success and growth.

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DYNAMICS OF INTERNATIONAL TOURISM IN LEADING TOURIST COUNTRIES OF THE EU: IMPACT OF THE COVID-19 PANDEMIC AND THE RUSSIAN-UKRAINIAN WAR

ДИНАМІКА МІЖНАРОДНОГО ТУРИЗМУ У ПРОВІДНИХ ТУРИСТИЧНИХ КРАЇНАХ ЄС: ВПЛИВ ПАНДЕМІЇ COVID-19 ТА РОСІЙСЬКО-УКРАЇНСЬКОЇ ВІЙНИ

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***Abstract.** The article examines trends in the development of international tourism in the leading EU countries, selected through cluster analysis. The focus is on key factors that influence both the economic development of countries and their socio-economic development: tourist arrivals, tourism expenditures, and GDP per capita. Special attention is given to the impact of the Covid-19 pandemic and the Russia-Ukraine war on the tourism sector and the economies of these countries. The purpose of the research is to identify and analyze the factors contributing to the competitiveness of leading EU countries in the global tourism industry. The study employs quantitative analysis, using statistical data on tourism indicators from Eurostat and the World Tourism Organization. The analysis is carried out through time series analysis to explore patterns and relationships between variables like GDP per capita, number of international tourists, and tourism revenue. The findings indicate that the countries with well-developed tourism infrastructure, high levels of investment in promotion, and favorable economic conditions tend to dominate the international tourism industry. The analyzed countries have demonstrated significant recovery of tourism following major crises, such as the economic crisis, the Covid-19 pandemic and Russian-Ukrainian war. Despite the severe impact of these events, which led to substantial declines in tourist arrivals and revenue, leading EU nations have shown resilience in regaining their position in the global tourism market. The practical implications suggest that countries should continuously adapt their tourism strategies to maintain or improve their global rankings and address emerging trends and competition. The study concludes that sustainable tourism development, combined with the expansion of accommodation facilities and improvement of service quality, will be crucial for maintaining the competitiveness of EU countries in the global tourism*

industry which will contribute to economic development and socio-economic development of countries. The results of the analysis provide insights into future trends and offer recommendations on how to enhance the attractiveness of their countries for international visitors.

Keywords: *international tourism, tourism industry, tourism, socio-economic development, economic development, EU, Covid-19, economic crisis, GDP per capita, Russian-Ukrainian war*

Анотація. У статті досліджено тенденції розвитку міжнародного туризму в провідних країнах ЄС, які було обрано завдяки кластерному аналізу. Зосереджено увагу на таких ключових факторах, що впливають як на економічний розвиток країн, так і на соціально-економічний розвиток: туристичні прибуття, туристичні витрати та ВВП на душу населення. Окремо розглянуто вплив пандемії Covid-19 та російсько-української війни на туристичний сектор і економіку цих країн. Метою дослідження є виявлення та аналіз факторів, що сприяють конкурентоспроможності провідних країн ЄС у світовій індустрії туризму. У дослідженні використано кількісний аналіз із використанням статистичних даних про показники туризму від Євростату та Всесвітньої туристичної організації. Аналіз здійснюється за допомогою аналізу часових рядів, щоб дослідити закономірності та взаємозв'язки між такими змінними, як ВВП на душу населення, кількість міжнародних туристів і доходи від туризму. Результати показують, що країни з добре розвинутою туристичною інфраструктурою, високим рівнем інвестицій у просування та сприятливими економічними умовами, як правило, домінують у міжнародній індустрії туризму. Проаналізовані країни продемонстрували значне відновлення туризму після великих криз, таких як економічна криза, пандемія Covid-19 та російсько-українська війна. Незважаючи на серйозні наслідки цих подій, які призвели до значного зниження кількості туристів і доходів, провідні країни ЄС продемонстрували стійкість у відновленні своїх позицій на світовому ринку туризму. Практичні наслідки свідчать про те, що країни повинні постійно адаптувати свої туристичні стратегії, щоб підтримувати або покращувати свій глобальний рейтинг і реагувати на нові тенденції та конкуренцію. Дослідження робить висновок, що сталий розвиток туризму в поєднанні з розширенням об'єктів розміщення та покращенням якості послуг матиме вирішальне значення для підтримки конкурентоспроможності країн ЄС у світовій індустрії туризму, що сприятиме економічному розвитку та соціально-економічному розвитку країн. Результати аналізу дозволяють зрозуміти майбутні тенденції та пропонують рекомендації щодо підвищення привабливості своїх країн для іноземних відвідувачів.

Ключові слова: *міжнародний туризм, туризм, індустрія туризму, економічний розвиток, ЄС, Covid-19, економічна криза, розвиток, відновлення туризму, ВВП на душу населення, російсько-українська війна*

Introduction. The rapid development of international tourism in the European Union (EU) has been a significant driver of economic and socio-economic development, contributing to employment, infrastructure growth, and the overall well-being of the region. In recent decades, leading EU countries such as France, Spain, and Italy have consistently ranked among the top global destinations for international tourists. This growth, however, has been subject to fluctuations due to global economic crises and, more recently, the unprecedented impact of the Covid-19 pandemic. Additionally, the ongoing Russia-Ukraine war has created new challenges for the tourism industry, particularly in Eastern Europe, by disrupting travel routes, reducing tourist confidence, and causing shifts in regional economic stability. The tourism industry, highly sensitive to external shocks, experienced dramatic declines in arrivals and revenues during these crises, which not only affected economic performance but also hindered socio-economic development, including community livelihoods and social infrastructure. Given this backdrop, the study of trends in international tourism development, particularly in the context of post-crisis recovery, is both timely and relevant. The novelty of this research lies in its focus on examining the recovery patterns of the tourism industry in leading EU countries after economic crises. While much attention has been paid

to the general impact of economic crisis, the Covid-19 pandemic and Russian-Ukrainian war on development and recovery of tourism, less has been done to comprehensively assess the long-term recovery trends, as well as the factors that contribute to the resilience and competitiveness of these countries in the global tourism industry.

The primary objectives of this study are to: analyze the key factors influencing the development of international tourism in leading EU countries, assess the impact of economic crisis, the Covid-19 pandemic and the Russian-Ukrainian war on tourism performance, identify the factors contributing to the post-crisis recovery of the tourism industry, and provide recommendations for sustaining long-term competitiveness in the global tourism market.

The purpose of the research is to identify and thoroughly analyze the key factors that contribute to the competitiveness of leading EU countries in the global tourism industry. By understanding these drivers of success, the research aims to provide insights into how these countries maintain their leadership positions and how other regions might adopt similar strategies to boost their tourism competitiveness.

Analysis of recent research and publications. In recent years, there has been significant academic interest in international tourism, its economic impact, and resilience to global crises. Researchers have focused on analyzing the effects of economic and social shocks on the tourism industry in the EU.

Notably, scientists discuss the issue of effective management in the tourism and hospitality industry in a competitive environment (*L. Kevin, J. Mengjie & S. Wenming, 2017*). The authors emphasize that international tourism is a crucial driver of economic growth. Some of the works highlights that tourism significantly contributes to GDP and serves as a vital source of employment (*Wang, Y., & Tziamalis, A., 2023*). However, they also point out that a large proportion of tourist flows are concentrated in a few leading countries, which presents challenges related to the uneven development of the sector across the EU.

Farynyuk and Naumova had another important aspect is the statistical analysis of the tourism market conducted. Their study focuses on key indicators of tourism activity in Ukraine, providing valuable insights for comparison with EU countries. The research demonstrates how global economic crises and shifts in demand for international travel affect the overall structure of the tourism market (*Farynyuk, N. V., Naumova, M. A., 2018*).

The World Tourism Organization (UNWTO) has also made significant contributions to understanding the effects of the Covid-19 pandemic on the tourism industry. According to its reports (*UNWTO report, 2021*) global tourism suffered unprecedented losses in 2020, and recovery in leading EU countries only began towards the end of 2021. Furthermore, the European Union's Final Report on Regional Impacts of the Covid-19 Crisis on the Tourist Sector (2021) offers a detailed analysis of tourism recovery in different EU regions. This document highlights the need for sustainable development investments and emphasizes the importance of digitalization in fostering recovery.

Mashika, Grabar and Kashka emphasize the challenges faced by the tourism industry due to the shocks of the COVID-19 pandemic and the Russian-Ukrainian war. They argue that, in light of these crises, the EU tourism sector requires support in developing and implementing comprehensive risk management plans to be better prepared for future disruptions. The authors highlight that while tourism recovery is underway across much of Europe, the process is notably slower in Eastern Europe due to the ongoing Russian-Ukrainian war. This prolonged conflict has not only disrupted travel routes and diminished tourist confidence but also hampered economic stability, further complicating the region's recovery efforts (*Mashika H., Grabar M., & Kashka M., 2023*).

Additionally, Liasidou conducted a review of European countries' official tourism websites, examining their strategies to attract international tourists' post-crisis. The study shows that countries actively promoting sustainable and safe tourism through digital platforms demonstrated faster recovery rates (*Liasidou, 2022*).

Thus, recent research emphasizes the significance of tourism for the economic growth of EU countries and explores key factors contributing to its recovery after crises such as the Covid-19

pandemic and the Russia-Ukraine war. This research serves as a foundation for further development of the sector, particularly in terms of sustainable development, digitalization, and innovation, addressing the need for resilience in the face of global disruptions.

Presentation of the main research material. International tourism is a key factor in the global economy, contributing significantly to the development of many countries, including those in the European Union (EU), which attract millions of travelers annually. Analysis of trends in the development of international tourism in EU countries is an important task for understanding the dynamics of this sector and determining strategic directions for its further development.

It was decided to conduct a cluster analysis of all 27 EU countries which is based on various indicators of tourism activity (such as GDP per capita, number of international tourists, and tourist expenditures e.t.c). This analysis will help identify typical groups of countries with similar characteristics in their tourism markets, reveal development trends, and highlight the key factors influencing tourism activity in the region.

For the cluster analysis, we selected hierarchical clustering using the Complete Linkage method. The measure of dissimilarity between units was chosen as L2 dissimilarity, which assesses differences between objects, such as data points in a multidimensional space. Using Stata 16, we obtained average values for indicators and based on this data, a dendrogram was constructed, as shown below.

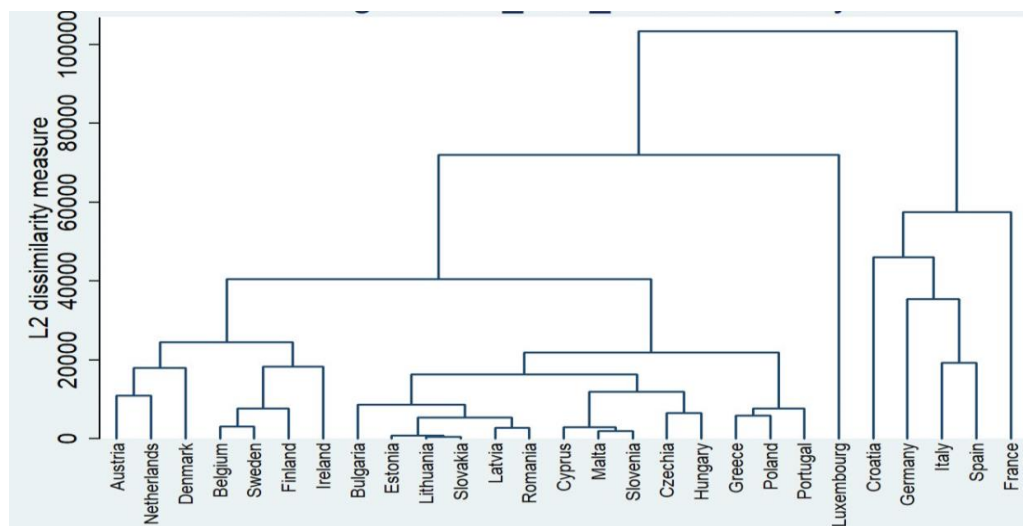


Figure 1. Dendrogram of cluster distribution according to the Complete Linkage method and L2 dissimilation measure. Source: author's calculations

The dendrogram shows that EU countries can be divided into several groups based on their economic and social indicators. Clusters reflect different levels of economic development and similarities between countries within the EU.

The first cluster consists of two subclusters: Austria, the Netherlands, Denmark, Belgium; and Sweden, Finland, Ireland. These countries have similar indicators for the chosen variables, with tourism developing well and GDP per capita gradually increasing.

The second cluster is divided into three subclusters: Bulgaria, Estonia, Lithuania, Slovakia, Latvia, Romania; Cyprus, Malta, Slovenia, the Czech Republic, Hungary; and Greece, Poland, and Portugal. These countries exhibit lower levels of tourism development and GDP per capita compared to those in the first cluster.

The third cluster contains only one country—Luxembourg. This is notable because Luxembourg has the highest GDP per capita among EU countries, yet its tourism sector is less developed, with relatively low tourist arrival figures.

Fourth Cluster: Germany, France, Italy, Spain, Croatia. These countries, characterized by high GDP per capita and exceptional tourism metrics, are major European tourist destinations with well-developed infrastructure and significant economic contributions from tourism.

In recent years, countries such as France, Spain, and Italy have consistently ranked among the top 10 most visited countries globally. Their attractiveness to tourists is driven by their rich cultural heritage, historical landmarks, diverse landscapes, and well-developed infrastructure, making them perennial favorites for international travelers. Therefore, we will focus on these countries for further calculations and analysis, as an example of the most successful EU economies and attractive countries for tourism development. Below, in the Table 1 we will look the leading EU country's place in the ranking of the most visited countries in the world in 2020-2024 (Q1 - Quarter 1).

Table 1. The leading EU country's place in the ranking of the most visited countries in the world (2020-2024)

Country name	The country's place in the top-10 ranking of the most visited countries in the world				
	2020	2021	2022	2023	2024 (Q1)
France	1	1	1	1	1
Italy	2	5	5	4	5
Spain	5	3	2	2	2

Source: compiled by the author based on data from UNWTO and Statista

France consistently holds the top position as the most visited country in the world from 2020 through Q1 2024. This sustained ranking reflects France's strong global appeal, likely driven by its rich cultural heritage, major attractions like Paris and the French Riviera, and well-established tourism infrastructure.

The fluctuations in Italy's and Spain's rankings highlight the dynamic nature of global tourism competition. While France maintains a dominant position, Italy and Spain's varying ranks suggest a more competitive environment where multiple factors influence tourist preferences and travel patterns. The early data for 2024 indicates that while France continues to lead, Italy and Spain are facing increased competition. The decline in Spain's ranking to eighth in Q1 2024 and Italy's drop to sixth may suggest emerging trends or changes in tourist behavior that could impact future rankings.

In summary, France's unwavering top position underscores its enduring global appeal. Italy and Spain's fluctuating rankings reflect the competitive nature of global tourism and highlight the need for these countries to adapt to evolving trends and market conditions.

In this study, the decision was made to analyze the trends in international tourism development in leading EU countries based on the following indicators: number of arrivals and tourism revenue, compared to GDP per capita, as these indicators are considered to be the most indicative.

The graphs below provide a comparative analysis of tourist flows and economic growth in chosen leading EU countries for the period 1995-2023.

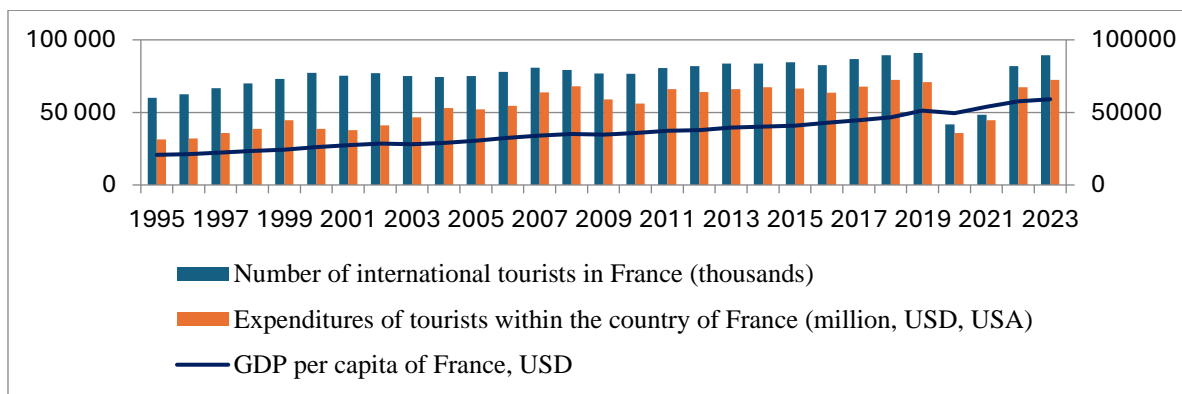


Figure 2. Comparative analysis of tourist flows and economic growth in France (1995-2023)
Source: compiled by the author based on data from UNWTO and Statista

The number of international tourists in France grew from 60.03 million in 1995 to 89.39 million in 2023, indicating a steady increase in France's popularity as a tourist destination. Tourist spending rose from \$31.30 billion in 1995 to \$72.41 billion in 2023, with a notable increase in recent years despite a dip in 2020 due to the pandemic. GDP per capita increased from \$20,763.10 in 1995 to \$59,069.39 in 2023, reflecting significant economic development.

As a result of the 2008 economic crisis, all these indicators declined slightly. However, by 2011, they began to recover gradually, with GDP per capita starting to rebound from 2010.

France shows positive trends in all main indicators. International tourist numbers and tourist spending are increasing, with some fluctuations during the pandemic. GDP per capita has also increased significantly, confirming the country's economic progress and socio-economic development. France remains one of the most popular tourist destinations in the world, and its economy continues to grow. Despite the serious blow caused by the Covid-19 pandemic, the country is showing a rapid recovery in the tourism industry, contributing not only to its economic growth but also to improved socio-economic conditions, including job creation and enhanced public services. the impact of the Russia-Ukraine war in 2022-2023, the data does not show a significant disruption similar to the effects of COVID-19. Both the number of tourists and tourist expenditures display growth in 2022 and 2023, with GDP per capita continuing its upward trend. This suggests that while the war has had profound geopolitical and economic consequences, its direct impact on France's tourism sector appears to be less pronounced, at least compared to the shock caused by the pandemic. However, it is possible that certain effects, such as changes in tourist composition or travel patterns, may not be immediately apparent in this aggregated data.

Economic indicators, such as GDP per capita, also indicate stable growth and a gradual return to pre-crisis levels.

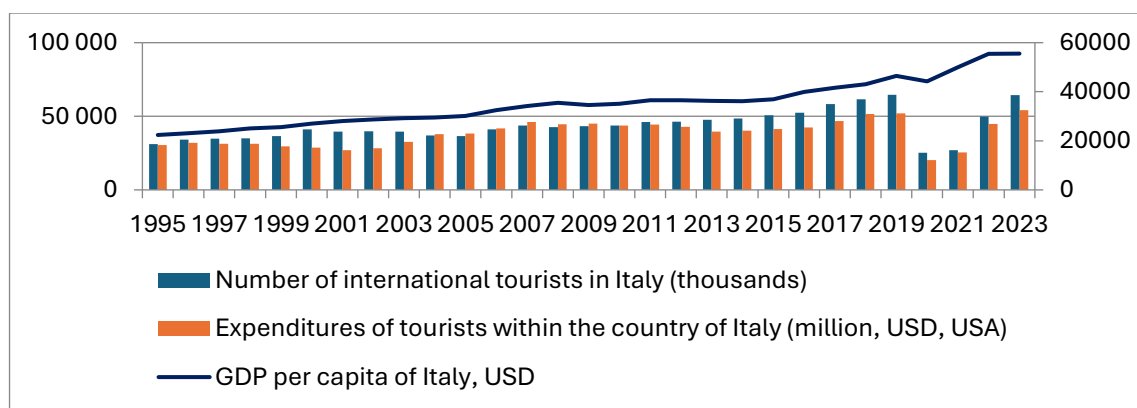


Figure 3. Comparative analysis of tourist flows and economic growth in Italy (1995-2023)
Source: compiled by the author based on data from UNWTO and Statista

In Italy the number of international tourists, tourist spendings and GDP per capita showed a steady increase during all the period.

The economic crisis of 2008 did not significantly impact the number of international tourists or their expenditures. However, there was a notable decrease in GDP per capita in 2009. Subsequently, from 2010 onwards, GDP per capita began to recover and showed a consistent upward trend.

The number of international tourists in Italy peaked at 64.51 million in 2019 but fell sharply to 25.19 million in 2020 due to Covid-19. By 2023, it had rebounded to 64.45 million. Tourist spending also showed a strong upward trend, reaching a record \$54.13 billion in 2023 after a drop to \$20.32 billion in 2020. GDP per capita steadily increased, peaking at \$55,540.77 in 2023, reflecting overall economic growth. Despite the pandemic's impact in 2020, Italy's tourism and economic indicators have recovered and reached new highs.

Despite the ongoing Russia-Ukraine war, the data does not indicate a major disruption to Italy's tourism sector during this period. Tourist numbers, expenditures, and GDP per capita continue to increase, suggesting that the war's direct impact on Italy's tourism industry is not as severe as the effects of the pandemic. However, potential changes in tourist demographics or travel behavior may still be present but are not immediately reflected in the aggregate figures.



Figure 4. Comparative analysis of tourist flows and economic growth in Spain (1995-2023)
Source: compiled by the author based on data from UNWTO and Statista

The graph for Spain shows a similar pattern to that of France and Italy, with a sharp decline in tourism indicators in 2020 due to the Covid-19 pandemic. However, the industry appears to rebound strongly in 2022 and 2023, with both international tourist numbers and expenditures rising significantly.

Throughout the studied period, there has been an overall growth in the number of international tourists, GDP per capita, and tourism expenditures in Spain, with some minor declines attributable to the economic crisis and the Covid-19 pandemic.

The economic crisis had a notable impact on all three indicators for Spain, resulting in a significant decline. However, from 2011 onward, a gradual recovery and increase in these indicators have been observed.

The number of international tourists in Spain steadily increased until 2019, peaking at 83.51 million. The Covid-19 pandemic caused a sharp decline to 18.93 million in 2020. However, by 2023, tourist numbers had risen again to 83.84 million.

Tourist spending followed a similar pattern, reaching a peak of \$79.57 billion in 2019 before dropping to \$18.38 billion in 2020. Spending rebounded to \$34.18 billion in 2021 and rose to \$84.35 billion in 2023.

GDP per capita in Spain has consistently increased, reaching \$48,685.50 in 2022, reflecting overall economic growth despite occasional dips.

Overall, Spain shows positive trends across all indicators: international tourist numbers, spending, and GDP per capita. Despite the significant impact of Covid-19 in 2020, the rapid recovery in subsequent years highlights the resilience of Spain's tourism industry and economy.

Regarding the impact of the Russia-Ukraine war in 2022-2023, the data does not suggest a noticeable disruption to Spain's tourism sector. Both tourist arrivals and expenditures show recovery and growth during this period, while GDP per capita continues to rise.

This indicates that, as in other Western European countries, the direct effects of the war on Spain's tourism industry are minimal compared to the shock from the pandemic. Nevertheless, certain indirect impacts, such as shifts in tourist origins or travel patterns, may not be immediately reflected in the aggregated data.

Conclusions. This study provides a comprehensive analysis of the development trends in international tourism in leading EU countries, focusing on France, Italy, and Spain, from 2020 to 2024. The analysis underscores several key findings related to both economic and socio-economic development:

1. France remains the world's top tourist destination, thanks to its cultural assets and strong tourism infrastructure. Steady growth in tourist numbers and spending shows resilience and recovery, contributing to job creation and regional development.

2. Italy's tourism ranking peaked in 2020 but dropped significantly due to the Covid-19 pandemic. However, by 2023, the country experienced a strong recovery, with both tourist numbers and spending rebounding. This recovery has also supported economic growth, as seen in the steady rise of GDP per capita, while fostering socio-economic improvements such as increased employment and enhanced local infrastructure.

3. Spain's tourism sector demonstrated a strong recovery after the pandemic-induced slump in 2020. The consistent rise in GDP per capita highlights the overall economic growth, while the recovery of the tourism industry reflects Spain's capacity to rebound and adapt to new market conditions. Moreover, this growth has positively influenced socio-economic development, with improved public services and increased living standards in key tourist regions.

4. The pandemic had a profound impact on international tourism across all analyzed countries, leading to significant declines in tourist numbers and spending in 2020. However, the rapid recovery in subsequent years underscores the resilience of these tourism sectors and their ability to adapt to changing circumstances, driving both economic and socio-economic development in the affected regions.

Leading EU countries have recovered well in tourist arrivals and spending post-pandemic. Adaptive strategies like infrastructure investment and marketing have helped maintain their global tourism competitiveness, supporting socio-economic growth through employment generation and community development.

Overall, the findings from this study provide valuable insights into the dynamics of international tourism in leading EU countries, offering recommendations to bolster economic and socio-economic resilience, and capitalize on growth opportunities in the post-pandemic era and post-war period.

The Russia-Ukraine war, which began in 2022, has added further complexity to the recovery of the European tourism industry. While its direct impact on France, Italy, and Spain may not be as pronounced as the pandemic, the war has created geopolitical uncertainty, altered travel patterns, and disrupted tourism flows, particularly from Eastern Europe.

Future research could delve into the long-term impacts of global disruptions on tourism resilience and sustainability, comparing recovery patterns with non-EU countries to highlight best practices. Investigating the role of technological advancements in shaping tourist behavior and spending, as well as assessing the economic and social implications of tourism recovery on local communities, will be crucial.

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SPECIFICS OF PRIVATE COMPANIES' ACTIVITIES IN THE FIELD OF MILITARY BUSINESS IN THE CONTEXT OF RISIS SHOCK: INTERNATIONAL EXPERIENCE

ОСОБЛИВОСТІ ДІЯЛЬНОСТІ ПРИВАТНИХ КОМПАНІЙ У СФЕРІ ВІЙСЬКОВОГО БІЗНЕСУ В УМОВАХ КРИЗОВИХ ПОТРЯСІНЬ: СВІТОВИЙ ДОСВІД

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***Abstract:** In the modern world, private military companies (PMCs) are gaining strategic importance. The purpose of the research is to analyze the peculiarities of modern private companies in the field of military business in the context of crisis shocks. The article reveals the essence and concept of the PMC phenomenon as a unique tool for privatization of security services, in particular in the context of international conflicts and humanitarian crises. Their role in the transformation of the global security landscape is highlighted, and the dynamics of changes in the range of services, including logistics support, protection of strategic facilities, consulting services, etc. is revealed. The authors applied the methods of system analysis, comparative research and content analysis, which allowed a comprehensive assessment of the transformation of the PMC sector in the context of global challenges. It is determined that globalization and the growth of regional conflicts stimulate the expansion of the range of PMC services, adapting the business strategies of leading companies in the industry. It is revealed how modern technologies transform the operational activities of PMCs, contributing to increased efficiency and reduced costs. The article outlines the advantages of using PMCs, in particular their efficiency, flexibility and ability to work in difficult conditions, and identifies their disadvantages, one of which is insufficient international regulation of their activities. It is proved that the effectiveness of PMCs in the global environment depends on their ability to integrate innovative approaches. The results of the research may be useful for analyzing global security trends, formulating policies for regulating the activities of PMCs and developing strategies for the development of the sector in the context of current threats and challenges.*

Key words: *private military companies, crisis, security, profits, changes, international business.*

Анотація. У сучасному світі приватні військові компанії (ПВК) набувають стратегічного значення. Метою дослідження є аналіз особливостей сучасних приватних компаній у сфері військового бізнесу в умовах кризових потрясінь. У статті розкрито сутність і поняття феномену ПВК як унікального інструменту приватизації безпекових послуг, зокрема в контексті міжнародних конфліктів та гуманітарних криз. Виокремлено їхню роль у трансформації глобального безпекового ландшафту, а також виявлено динаміку змін у спектрі послуг, включаючи логістичну підтримку, охорону стратегічних об'єктів, консультаційні послуги тощо. Авторами було застосовано методи системного аналізу, що дозволило комплексно оцінити трансформацію сектора ПВК у контексті глобальних викликів. Визначено, що глобалізація та зростання регіональних конфліктів стимулюють розширення спектра послуг ПВК, адаптуючи бізнес-стратегії провідних компаній галузі. Розкрито, як сучасні технології трансформують операційну діяльність ПВК, сприяючи підвищенню ефективності та зниженню витрат. Окреслено переваги використання ПВК, зокрема їхню оперативність, гнучкість та здатність працювати в складних умовах, а також виявлено недоліки, один з яких - недостатнє міжнародне регулювання діяльності. Доведено, що ефективність ПВК у глобальному середовищі залежить від їх здатності інтегрувати інноваційні підходи. Результати дослідження можуть бути корисними для аналізу глобальних безпекових тенденцій, формування політик регулювання діяльності ПВК та розробки стратегій розвитку сектора в умовах сучасних загроз та викликів.

Ключові слова: *приватні військові компанії, криза, безпека, прибуток, зміни, міжнародний бізнес.*

Introduction. Wars and terrorist attacks, economic and social crises, political instability at both the global and regional levels, fierce competition between countries and actors of international business are the real reasons for the popularization of private military companies' services in the world. They perform functions inherent in the national armed forces, provide external and internal security, engineering and technical protection, logistics, information security and consulting services, and are actively involved in the fight against terrorism, strategic and tactical planning, security advice, information gathering, psychological warfare and material and technical supply.

Every year, their number grows, their positioning changes, their activities are strengthened, and development trends predict success for decades to come. Those who have long been condemned are now openly acting as commercial enterprises whose activities extend to the territories of all countries of the world.

The purpose of the article is to explore the activities of private companies in the military business.

Literature review. Over the past few years, the relevance of research on the activities of private military companies has increased significantly. This is primarily due to their active presence in the information space, direct participation in combat zones and their growing role in modern military conflicts. I.Zhytnyk characterizes the phenomenon of PMCs as a corporate evolution of the age-old practice of mercenaries (Zhytnyk I., 2020), Y.Semenyuk calls them a convenient tool in the context of the concept of fourth generation wars (Semenyuk Y., 2020), and S.Kyrychenko modernizes the concept by defining PMCs as a commercial organization whose main goal is to make a profit (Kyrychenko S., 2021).

The opinions of domestic authors are confirmed by the estimates of experts from international consulting platforms, such as Vantage Market Research, where the global market for private military security services was estimated at 258.11 billion US dollars and is projected to reach 446.81 billion US dollars by 2030 (Vantage Market Research, 2022). In addition, according to the United Nations, only in the period from 2012 to 2017, the total amount officially paid by the organization to private contractors amounted to 166 million US dollars (Garcia M., 2023). This, in

turn, means an increase in demand for PMC services due to the inability of states and international organizations to perform protection functions and develop security innovations on their own.

Main results of the research. From the international business point of view, a PMC can be considered a business entity established and registered in the territory of any state, providing military or security services to other states, legal entities or individuals in accordance with the requirements of applicable law and international treaties. In the past, the employees of the above companies were called “mercenaries” or “combatants,” but now this statement is refuted and declared false. This is due to the fact that none of these categories covers the entire diversity of PMC activities and the complexity of the legal criteria provided for each of them.

The Montreux Document, prepared in 2008 by the International Committee of the Red Cross, proposes a system of regulation and determination of responsibility for the actions of private military contractors at the individual, company and state levels. V. Kravchuk writes that this document is not legally binding, as it is not reflected in national legal systems, which may differ from each other (*Kravchuk V., 2021*). However, of course, representatives of private military companies themselves claim that their activities, which are based on political ethics, contribute to the implementation of peaceful missions and are an important contribution to ending wars, conflicts and improving the humanitarian situation. Industry leaders have even united in the International Stability Operations Association.

Over time, there have also been some changes in the list of PMC services. The development of innovations, globalization processes, global progress and increasing demand for highly specialized services have improved the “product”, providing new opportunities for the growth of the military business in general. It would be fair to define the areas of their activity, which can be divided into 4 main categories: security, education, intelligence and supply.

Security services include protection of people, protection of domestic and international cargo transportation (development of actions to protect against theft, prevention of ship hijacking by pirates), protection against kidnapping (release and search for hostages, prisoners of war), fight against organized crime (money laundering human trafficking), protection of objects, facilities and institutions (protection of embassies, power plants, oil refineries) and information protection (ensuring confidentiality of personal and business communication, movement, actions, avoiding leakage of important and secret military information, localization of channels). Education and training is based on basic theoretical and practical training of civilians and military persons, advanced qualification of military staff, construction of training camps, training centers, shooting ranges, etc.

Intelligence services are considered in three areas: military intelligence, which includes the calculation of possible losses as a result of hostilities, the development of scenarios by analysts and the creation of risk models for strategic planning in accordance with the individual characteristics of the client. Also, business intelligence (collection of commercial information) and consulting (collection, analysis of data, forecasting (modeling) of situations, providing proposals to mitigate potential threats in various areas of life) should not be forgotten. Supply services are in demand in terms of supplying certain military groups with material and technical means, engineering, postal services, construction of military settlements, power plants.

In 2024, the global private military security services market will be characterized by the following players: Securitas AB (Sweden), Allied Universal (USA), GardaWorld (Canada), G4S (UK), Constellis (USA), Aegis Defense Services (UK), Northbridge Services Group (USA), and Academi (USA). All of them are companies with many years of experience in the security sector that have completely changed their business strategies in recent years to meet the new challenges of the modern business environment. They, like any other business, are affected by the dominance of global trends. They seek to generate international income using the concept of global business practices and taking into account the local conditions of countries and regions (*Vergun V., Pryiatelchuk O., Stupnytskyi O., 2020*) In addition, their evolution is associated with the demand for more comprehensive solutions in the military sector: the need to quickly adapt to changing

conditions on the battlefield, where technological innovation, cybersecurity and integrated management systems are becoming increasingly important.

In their new business strategies, PMCs are more often focusing on the development and implementation of technological solutions, such as the creation of unmanned aerial vehicles or intelligence systems with active use of AI. They also use marketing campaigns that emphasize their transformation from traditional closed structures into public, more transparent organizations. The analysis of their activities has shown that many PMCs are now creating their own media platforms, publishing analytical reports, and informing consumers about themselves through social networks. This to a certain extent creates a positive image and reduces public distrust, as well as facilitates lobbying for their interests at the state level, providing better access to contracts and government support.

A major impetus for the development of PMCs is provided by crises, wars and regional upheavals that require immediate intervention by professional soldiers. Today, states are not always ready to engage their own armed forces for a number of political, economic, or social reasons. Some of the conflicts in the Middle East have had a personal impact on the growing demand for PMC services. Governments and private corporations have sought to protect their assets and staff in high-risk environments by engaging American companies such as DynCorp International and Triple Canopy, which have been active in the region, providing security for strategic facilities and supporting US military operations. It is well known that PMCs are particularly fond of conflicts and crises related to the struggle for resources. We are talking about the African continent - Libya, the Central African Republic, the Democratic Republic of Congo, etc. Here, they are hired by both governments and corporations to ensure the security of extractive companies and help fight insurgent groups.

Naturally, like any business, PMCs try to keep silent about their shortcomings, emphasizing only their advantages (strengths). Recently, it is rare to hear the media, international organizations or governments condemning the activities of Western PMCs. More and more often, their positive aspects, greater controllability and ability to successfully perform various tasks are highlighted, especially in comparison with the Russian company Wagner. In addition, in view of recent events, ethical issues and controversies regarding the functioning of the Russian PMC model have become extremely acute.

After analyzing the international experience, it can be concluded that often the activities of PMCs are bound only by the provisions of the concluded contracts and legal norms of the respective professional sphere. Unlike state institutions, they do not have to adhere to any security concepts - neither national nor those arising from partnership obligations - and fulfill state orders provided for by law. They are subject exclusively to the rules of the market, i.e. the law of supply and demand. This freedom of action in the global marketplace gives them the ability to develop customer-focused products and solutions. They state: "If you have a problem, just write us a check and we'll do the rest - quickly, without red tape, and to your complete satisfaction." Or, as Doug Brooks, president of the ISOA, said: "Write a check and you will stop the war" (*Wessler R., 2007*). The quality of problem solving depends on the amount the client is willing to pay. Anyone who can afford it - a state, organization, concern, or individual - will receive a luxurious security package. Those who cannot will be forced to make do with a less reliable protection option.

Conclusions. Thus, it is now safe to say that the last decades have become crucial for PMCs in terms of changing the attitude of society and their consumers to their activities. The instability of the world order has increased the demand for the services of such companies, and the emergence of additional methods and tools for growth has provided additional opportunities for further prosperity and consolidation of their status in the international scene. Analyzing the current activities of industry leaders, the following advantages of using PMC services in the twenty-first century can be identified:

- qualified and trained personnel;
- reduction of official losses during local armed conflict;
- the possibility of rapid provision of additional personnel;

- protection of humanitarian organizations, improvement of the quality of UN actions;
- availability of the best advanced technologies;
- the state has the opportunity to outsource security tasks and thus use its own armed forces more flexibly;
- the use of PMCs does not cause the discontent in modern society that the use of regular armed forces can cause.

In addition to the positive aspects, it is also important to take into account certain disadvantages, such as

- refusal to fulfill an order due to its apparent complexity;
- lack of ideological motivation of the personnel;
- activities are regulated by business laws, but obligations are private;
- the main goal of the PMC is to make a profit;
- privatization of public functions;
- lack of proper regulation at both international and national levels.

To summarize, it is advisable to emphasize the need for additional research in this area by domestic authors and a systematic analysis of the activities of modern PMCs. Their analysis will help identify potential threats and challenges related to the functioning of PMCs in different regions of the world. It can also serve as a basis for the creation of a national regulatory framework that will ensure proper control and transparency of this business sector.

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SCENARIOS OF ECONOMIC RECOVERY OF UKRAINE: BUILD BACK BETTER VS BUSINESS-AS-USUAL

СЦЕНАРІЇ ВІДНОВЛЕННЯ ЕКОНОМІКИ УКРАЇНИ: BUILD BACK BETTER VS BUSINESS-AS-USUAL

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***Abstract.** Ukraine had ambitious plans for developing renewable generation, decarbonising the economy and combating climate change even before the start of a full-scale war. To implement the technological transition, economic development and European accession, the post-war recovery of Ukraine should be based on the concept of "building back better" and the principles of green recovery. Although the full-scale reconstruction of Ukraine can only start in the post-war period, fast recovery as a response to the emergency has been going on since nearly the first days of the full-scale invasion.*

The government is already planning the post-war recovery of Ukraine and taking measures to restore infrastructure such as energy objects or buildings quickly. Therefore, it is essential to understand the potential impact of recovery processes on the environment and climate. It goes without saying that defence is a number one priority during war. The work concludes that, sustainability, impacts on climate and environment are important considerations for long-term post-war reconstruction. The author argues that it is due to the following factors: European integration aspirations of Ukraine.

It is noted that Ukraine must implement European environmental and climate legislation to join the EU. It is advisable to take it into account during recovery and to ensure reconstruction processes are in line with it; the green component should be duly incorporated in state programs, reforms and projects. This will facilitate access to international financing, which is also relevant for business; incentives should be in place to develop green technologies and innovations to reduce the carbon intensity of existing production and attract investments in new industries. Those could be the production of equipment for RES or components of the electric vehicles. The author stated, that the green stimulus will help make Ukraine's post-war economy more modern, competitive, and integrated into EU value chains.

***Keywords:** concept of "building back better", European environmental and climate legislation, recovering of Ukraine, green recovery.*

***Анотація.** Україна мала амбітні плани щодо розвитку відновлюваної генерації, декарбонізації економіки та боротьби зі зміною клімату ще до початку повномасштабної війни. Для здійснення технологічного переходу, економічного розвитку та приєднання до Європи післявоєнне відновлення України має ґрунтуватися на концепції «відбудувати краще» та принципах зеленого відновлення. Хоча повномасштабна відбудова України може розпочатися лише у післявоєнний період, швидке відновлення як відповідь на надзвичайну ситуацію триває майже з перших днів повномасштабного вторгнення.*

Уряд вже планує післявоєнне відновлення України та вживає заходів для швидкого відновлення інфраструктури, наприклад енергетичних об'єктів чи будівель. Тому важливо розуміти потенційний вплив процесів відновлення на навколишнє середовище та клімат. В роботі зроблено висновок про те, що стійкість, вплив на клімат і навколишнє середовище є важливими міркуваннями для довгострокової післявоєнної реконструкції. Автором аргументовано, що це зумовлено такими чинниками: євроінтеграційними прагненнями України.

Зазначено, що Україна має імплементувати європейське екологічне та кліматичне законодавство, щоб вступити до ЄС. Його доцільно враховувати під час відновлення та забезпечити відповідність процесів реконструкції; зелена складова повинна бути належним чином включена в державні програми, реформи та проекти. Це полегшить доступ до міжнародного фінансування, що також актуально для бізнесу; мають існувати стимули для розвитку екологічно чистих технологій та інновацій, щоб зменшити викиди вуглецю в існуючому виробництві та залучити інвестиції в нові галузі. Це може бути виробництво обладнання для ВДЕ або компонентів електромобілів. Автором зазначено, що зелений стимул допоможе зробити післявоєнну економіку України більш сучасною, конкурентоспроможною та інтегрованою в ланцюжки створення вартості ЄС.

Ключові слова: концепція «відбудувати краще», європейське екологічне та кліматичне законодавство, відновлення України, зелене відновлення.

Introduction. Several months after the full-scale war had started, the government, businesses, the public, experts and international partners of Ukraine started discussing the future post-war recovery of the country. Although the full-scale reconstruction of Ukraine can only start in the post-war period, fast recovery as a response to the emergency has been going on since nearly the first days of the full-scale invasion. As the Ukrainian authorities are working on the recovery of Ukraine, we believe these processes should be considered in terms of their 'greenness', sustainability and impact on the climate and the environment. Due to Ukraine's EU accession ambitions, such implications must be regarded during the reconstruction. The future implementation of European environmental and climate legislation in due time necessitates alignment of the reconstruction process with them. Also, developing state programmes, reforms, and projects with an account of the green component will simplify access to international funding, which is also relevant for businesses.

European integration goals and the requirements of creditors and donors to projects are not the only motivations to implement sustainability principles. Potential social, economic, and environmental benefits for Ukrainians from policies and projects leading to a reduction in the impact on climate and environment are indeed an additional motivation for their implementation.

The purpose of the article - to conduct a comparative analysis of two scenarios for the recovery of Ukraine's economy - based on the principle of Build Back Better and based on the principle of Business-as-usual.

Literature review. The following foreign researchers studied the problems and practices of sustainable development: A.A. Leiserowicz, R.W. Kates, T.M. Parris, A. Hughes. Program documents of the Government of Ukraine, the EU, the UN, intergovernmental and non-governmental (public) organizations are devoted to the problems of scenarios for the recovery of the economy of Ukraine.

Main results of the research. As Ukraine has ambitious plans (for instance, according to the updated Nationally Determined Contribution to the Paris Agreement) [United Nations, 2015] not only for the development of green generation but also for decarbonisation of the economy and combat against climate change before the full-scale war, in our opinion, for the sake of technological transition, economic development and European integration, post-war recovery of Ukraine must be based on the build back better concept and principles of green recovery.

Different external and internal stakeholders use green recovery or the Build Back Better concept more and more often to characterise the recovery process of the national economy. Yet, neither Ukraine nor the world has a generally accepted definition of the concept or a uniform idea

of its components and principles. However, if the Government of Ukraine declares that recovery will be green, understanding of the recovery concept in the country should be approved for structured planning of the recovery process, setting of sectoral targets and tasks, development of recovery programs and the clear project assessment and selection methodology consistent with the concept. Firstly, this need is caused by the fact that sustainable recovery and reconstruction will make it easier to receive green funding from international financial partners. Secondly, it will prevent greenwashing practices when unsustainable projects are claimed to be green.

The authors of the study "Green recovery of Ukraine: guiding principles and tools for decision-makers", which included the author of this paper, key bottlenecks were defined, i.e. problems that stand in the way of green recovery of Ukraine, to propose relevant guidance and instruments for the stakeholders later. Among the bottlenecks of green recovery are the following:



Figure 1. Bottlenecks of the green recovery in Ukraine

Source: made by author

1. Low level of green mainstreaming in the recovery policy framework

There is a difference in understanding what a Build Back Better approach to planning and implementing the recovery looks like, both in general and regarding Ukraine's recovery during and after the war. This relates to international partners of Ukraine, its government, the non-profit and expert sectors, etc. Such divergence of views may result in difficulties for the Ukrainian government and businesses in properly designing and implementing the recovery and obtaining international finance.

Ukrainian stakeholders lack internal financial resources and instruments for recovery and high loan interest rates. This is exacerbated by the lack of a complete understanding of the requirements of international financial institutions and development financial institutions to clients regarding their impact on climate and the environment. At the same time, IFIs and DFIs have resources to finance recovery in Ukraine, usually provided at low-interest rates. The level of awareness of and preparedness for these requirements is insufficient both in the government and in the private sector. This bottleneck can be broken down into the following ones:

- the difference in approaches among governments, organisations, experts and NGOs;
- the difference in regulation and green KPIs among international stakeholders;
- lack of a complete understanding of the green requirements of IFIs/DFIs both in the government and the private sector.

2. Fast recovery actions vs post-war reconstruction priorities

While rebuilding fully in line with the Paris Agreement and best European/international standards may not be feasible before the end of the war, it is essential to consider these aspects now. Infrastructure being rebuilt will often be used for decades and may create carbon and environmentally damaging lock-ins. Regulatory and institutional architecture in Ukraine that could ensure green and sustainable recovery is weak. Existing legislation, regulation, and financial

incentives are insufficient to mandate a recovery process that will align with the trajectory needed to achieve net zero or prevent pollution levels from increasing compared to the pre-war levels. This bottleneck can be broken down into the following ones:

- The governmental communication doesn't provide a vision nor encourages stakeholders' actions;
- Green recovery governance and coordination challenges;
- Capacity to combine the short-term tactical needs and strategic EU integration priorities.

3. *Ukrainian business is in survival mode, not developing*

Ukrainian companies, primarily operating in survival mode, pay little attention to mitigating their environmental and climatic impact. This lack of motivation to adopt sustainable practices or innovate in technologies and processes is partly due to the absence of clear governmental directives and signals from the international community.

The implications of such corporate short-sightedness extend beyond immediate survival concerns: a projected decline in future competitiveness, a lack of preparedness for the more stringent regulatory environment anticipated with Ukraine's European integration, and significant detriments to environmental integrity and public health. These outcomes emphasise the need for a strategic developmental approach, incorporating regulatory frameworks and incentives to align business operations with environmental and climate imperatives. This bottleneck can be broken down into the following ones:

- Lack of resources for effective climate actions;
- Low awareness of the recovery plans and EU accession steps.

The government is already planning the post-war recovery of Ukraine and taking measures to restore infrastructure such as energy objects or buildings quickly. Therefore, it is essential to understand the potential impact of recovery processes on the environment and climate. It goes without saying that defence is a number one priority during war. However, sustainability, impacts on climate and environment are important considerations for long-term post-war reconstruction. This is due to the following factors:

- European integration aspirations of Ukraine. Ukraine must implement European environmental and climate legislation to join the EU. It is advisable to take it into account during recovery and to ensure reconstruction processes are in line with it;
- The green component should be duly incorporated in state programs, reforms and projects. This will facilitate access to international financing, which is also relevant for business;
- Incentives should be in place to develop green technologies and innovations to reduce the carbon intensity of existing production and attract investments in new industries. Those could be the production of equipment for RES or components of the electric vehicles. The green stimulus will help make Ukraine's post-war economy more modern, competitive, and integrated into EU value chains.

Terms Build Back Greener and Build Back Sustainably are components of the broader concept of Build Back Better and, therefore, can be considered its principles. Moreover, Build Back Greener is most often used to emphasise the importance of combating climate change by reducing or phasing out fossil fuels – coal, gas or oil. In its turn, Build Back Sustainably is used to consider biodiversity and reduce the use of natural resources and the amount of pollution.

At first, the Build Back Better concept was applied to reconstruction after natural disasters, e.g. in 2006, in relation to the recovery of states from the consequences of the tsunami in the Indian Ocean. Over time, the concept evolved to include a wide range of measures at the entire country's economy level, including support for sustainable infrastructure, energy, medicine, health care, housing, education, and immigration policies. Subsequently, the term began to be applied to the economic recovery after the consequences of the COVID-19 pandemic in the EU and the US. Nowadays, the "Build Back Better" concept is mainly used in the broad context of Ukraine's post-war development, where its green component is important.

Let's consider two scenarios for the recovery of Ukraine's economy.

The first concept is a baseline scenario of fast recovery. Under this scenario, destroyed facilities are reconstructed not with the best available low-carbon technologies but with technologies in a manner in which climate and environmental impact will not materially differ from the pre-destruction period. For instance, it can be a reconstruction of buildings or infrastructure without additional energy efficiency measures, efficient and low-carbon heating systems, and construction materials with a reduced carbon footprint. Modern construction materials or technical construction standards are obviously better than those used thirty or forty years ago. However, it does not guarantee consideration of all the existing trends for nearly zero-emission buildings.

Another example could be a reconstruction of industrial facilities without using the best modern techniques, resulting in low energy and resource efficiency and higher pollution levels than Best Available Techniques (BAT).

There might also be some type of temporary 'freezing' of climate change and environmental policy at the pre-war level, which excludes additional activities for the decarbonisation of the economy and adaptation to climate change. For instance, if the carbon price remains at the level of UAH 30 per tonne, the goal to reduce GHG emissions during the review of the Nationally Determined Contribution (NDC) in 2025 will not be set higher, and there will be no progress in bringing the legislation in line with the EU GD etc.

Moreover, compared to the pre-war scenario, the Business-as-Usual scenario can also include easing or not implementing climate policies during war and reconstruction. We can expect emissions to grow at the post-war large-scale reconstruction stage compared to the wartime level and reach the levels in 2021. However, if green recovery technologies are used, Ukraine can reach the set NDC goals by 2030. In this case, post-war emissions will grow but remain within -65% compared to 1990. In the Business-as-Usual scenario, there could be an increase in emissions in Ukraine, over the emission levels existing before the full-scale invasion.

Contrary to the Business-as-Usual scenario, we support the scenario of green recovery of Ukraine as the most reasonable one in terms of the use of resources and synchronisation with the EU accession policies. Instead, to describe the recovery to contribute to the containment of climate change, to influence the environment positively, and Contrary to the Business-as-Usual scenario, we support the scenario of green recovery of Ukraine as the most reasonable one in terms of use of resources and synchronisation with the EU accession policies. Instead, the concept of Building Back Better describes the recovery to contribute to the containment of climate change, to influence the environment positively, and to promote the adoption of more efficient tools to encourage a greener economy and its decarbonisation. Its principles include Build Back Greener and Build Back Sustainably.

Regarding the government strategy and programs of Ukrainian recovery, the general term Build Back Better and its principles of green, sustainable, climate-neutral, and environmentally friendly recovery are used. At this point, among think tanks, NGOs, intergovernmental organisations, foundations, international financial institutions, scientists and experts, there is neither a generally accepted vision of post-war reconstruction, including its green component, nor its metrics and indicators that should help to monitor the progress and provide accountability for the donors' money.

Green recovery refers to the process of overcoming the consequences of various emergencies and/or wars by improving the living conditions of both current and future generations in the affected area. It includes measures on climate change mitigation, combating the depletion of water resources, preserving biodiversity, ensuring clean air, water and soil, and general sustainable and inclusive development of the country. Green recovery will facilitate economic development and create new jobs and favourable living conditions.

Sectors to which green recovery principles can be applied include:

- electricity generation, heating, energy efficiency;
- electrification of industry, transport, and heating sector;
- carbon-intensive industry (metallurgy, fertilisers, cement), development of green technologies (production of RES equipment, CO₂ storage);

- electricity transmission networks, incl. smart grids, energy storage;
- agriculture and food systems;
- transport infrastructure;
- banking system;
- design of new buildings;
- use of natural solutions;
- development of competencies and human capital;
- waste management;
- research and innovation;
- digitisation etc.

In general, there is a common communication framework for recovery, a one-voice policy, in the Ukrainian government. Long-term recovery based on the Build Back Better principles is declared, while state officials report on short-term rapid recovery measures. The Prime Minister is the most active in the communication of recovery, constantly referring to it at meetings with Western government officials or representatives of financial organisations on attracting finance. Other government representatives deliver messages that match a specific profile of activity.

We can state that the ministries have slowed down but have not stopped work on "green" sectoral legislation. The development, adoption, and implementation of many strategies, bills, and resolutions had been planned before the start of full-scale hostilities, without reference to the reconstruction process. At the same time, despite the need for a comprehensive vision of the green component of recovery in government documents, green principles and goals are partially present in the National Recovery Plan presented in Lugano in 2022 and the presentation at the recovery conference in London in 2023.

The government is also taking steps to include environmental and climate impact criteria in recovery not only in plans and strategies but also in practice. In particular, the Methodological recommendations on prioritising projects to eliminate the consequences caused by the armed aggression of the Russian Federation against Ukraine provide for environmental and climate change considerations. However, the recommendations need to be refined in terms of a more apparent distinction between environment and climate, as well as the development of further methodologies for calculating consistency with the criteria, e.g. Paris Agreement alignment.

Including environmental and climate impacts in recovery planning should be cross-sectoral, mainstreamed in draft plans, considering the European Green Deal and gradual synchronisation with the EU *acquis*. At present, there is a lack of framework policies and guidelines for climate and environmental impacts consideration in Ukraine.

In post-war recovery, it is necessary to consider Ukraine's obligations under international agreements and treaties, as well as those that are not obligations yet but will inevitably become in time.

A basis of modern climate policy is the Paris Agreement, which aims to keep the global temperature increase within safe limits, namely 1.5-2°C by 2100. Ukraine is among those countries that have pledged to achieve climate neutrality by 2060. Integration with the European Union will necessitate the alignment of the NDC as well as the emissions standards with the EU. Integration with the European Union will require the alignment of the NDC in the future. The goals of the Paris Agreement, under which Ukraine submits the Nationally Determined Contribution, should be the basis of recovery planning for the government and businesses. Reconstruction and new projects need to inbuild new practices considering the adaptation to climate change requirements. This means considering how the project will help the society/economy adapt to the negative consequences and whether there are risks of negative physical impacts from climate change on the project itself. The other category is climate change mitigation, i.e. whether the project contributes to reducing GHG emissions. Hence, the recovery framework should incorporate the risks and best practices to accommodate the adaptation and mitigation goals for each sector's existing and new projects.

In recovery programs and projects, it is recommended to also take into account the UN Sustainable Development Goals, in particular, SDG7 "Affordable and Clean Energy", SDG11 "Sustainable Cities and Communities", SDG13 "Climate Action", SDG14 "Life Below Water", SDG15 "Life on Land", since Ukraine had targets and indicators for them even before the full-scale war.

Due to Ukraine's integration into the EU, the climate framework of European regulation, particularly the EU Green Deal, should be considered in the process of Ukrainian recovery at the same level as the Paris Agreement and the UN SDGs. The EU Green Deal is cross-sectoral since the EU views the development of all its economic sectors through its lens. This is also reflected in the financial sector in the directions of EU budget spending, policies of European financial institutions and their requirements for clients and projects seeking finance. Harmonisation of the recovery process with EU climate and environmental regulation, development of climate governance architecture and implementation of relevant green indicators should not be perceived as coercion from the EU but as necessary reforms and restructuring of the Ukrainian economy resulting from them.

The Paris Agreement and the Sustainable Development Goals impose certain obligations on the government, subsequently translated into climate policies. This leads to developing policies for transitioning gradually towards net-zero GHG emissions and strengthening climate resilience while using circular economy principles, leaving no one behind. Although there is still no generally accepted system of green indicators for the recovery process at the government level, the systems of such international organisations as the OECD and the IMF can serve as an example.

For the private sector, except for complying with national and international regulations, the development of ESG policies and participation in green and climate initiatives will be relevant. Although such policies are voluntary, meaning that the company is not obliged to do more than what is required by law, they are important to decrease potential reputational risks and to obtain financing from international financial organisations and banks. Quality ESG policies should prepare the company both for physical risks and for regulatory risks of climate change, which are almost inevitable due to the gradual strengthening of legislative requirements in the context of European integration. It is important for a company not just to adopt such policies and tools as a box-ticking exercise but also to implement and use them.

Most of the financial institutions that are the subject of this study finance not only green projects – among them, the European Investment Bank, the European Bank for Reconstruction and Development, the World Bank, Nefco, KfW Group, the British International Investment (BII), the Netherlands development bank FMO, the French development bank AFD. In general, IFIs and DFIs can finance not only green projects and activities. Nevertheless, all clients and projects must meet a certain set of environmental and climate criteria/indicators, which may become more stringent over time.

Already today, all of the analysed IFIs in their climate plans and policies determine that they will not allocate financing for coal, natural gas and oil, including for their extraction, processing, transportation, and combustion (CHPs). Funding of such projects is only possible if they lead to a reduction in GHG emissions, for example, a carbon capture and storage project or phasing out of the coal-fired plants. At the same time, the approaches of IFIs are nuanced: the EIB, for example, tries not to allocate money even for energy and resource efficiency measures that reduce emissions during the extraction or transportation of fossil fuels since this is still an area of extraction. Yet, EIB can make certain exceptions for using gas in a centralised heat supply or converting gas pipelines for the transportation of green gases (such as hydrogen).

Additionally, all IFIs have their own "black" (exclusion) lists, which list those activities that will not receive funding under any circumstances. It usually includes areas that may exacerbate climate change, cause particular harm to the environment, human health. Those could also be unacceptable due to ethical considerations – for example, the production or trade of hazardous chemicals (polychlorinated biphenyls, asbestos, mercury), production or trade in substances that deplete the ozone layer, production of fur or foie gras, unsustainable fishing, etc.

In their policies, IFIs determine which share of financing will go to green, sustainable projects and how it will gradually increase. Thus, by 2025, IFIs plan to spend from 50% (EIB, EBRD) and up to 100% (Nefco) of their budget on sustainable projects. The World Bank somewhat differs in terms of its ambition from European institutions – 35% in the period 2021-2025, while 50% of the funding of the International Bank for Reconstruction and Development and International Development Association (World Bank Group) will be directed to adaptation measures. However, it is important to note not only the share but also the volumes. In the case of EIB, 50% of financing will be about 32 billion euros per year (based on 2022 data, 62 billion euros), for the EBRD – 50%, about 6.5 billion euros (based on 2022 data, 13 billion euros), for Nefco – 100%, 128 million euros for Eastern Europe (based on 2022 data), for the World Bank – 35%, this is about 3.0 billion US dollars (based on 2022 data – 8.5 billion US dollars).

Having analysed the green financing criteria being used by IFIs and DFIs, key considerations are given to:

1. Compliance of the project with the Paris Agreement;
2. Compliance of the project with the UN SDGs;
3. Compliance of the project with European and national legislation;
4. Compliance with the EU Taxonomy and its principle "Do No Significant Harm";
5. Availability of ESG reporting;
6. Provision of related project documentation (e.g. ESMS).

Based on the analysed regulations and international agreements, as well as the requirements of international financial institutions and development agencies, we offer recommendations for the government. They contain a minimum set of green indicators feasible to implement at different recovery stages. At the stage of fast recovery, they should be used to lay the foundations of the Build Back Better concept, as well as to launch the initial processes of taking into account the cross-cutting nature of the fight against climate change and environmental protection. They should also be applied at the long-term recovery stage after the end of the war.

At the fast recovery stage, the government should lay the basis of the Build Back Better concept to launch the initial processes of considering the cross-sectoral character of climate change and environmental protection. Implementation of recommendations for the long-term will help draw grant funding, concessional loans, and investment during the broad-scale post-war recovery. It will also contribute to aligning Ukrainian legislation with European one, developing green technologies and integration into the European supply chains and improving reconstruction and EU accession planning and management.

Recommendations for overcoming identified "bottlenecks" of green restoration in Ukraine include the following:

Bottleneck 1. Low level of green mainstreaming in the recovery policy framework

1. Determine the regulatory minimum 'greenness' indicators of recovery projects, which will contain the set of specific indicators/metrics for each sector or project type to make them green.
2. Prepare criteria for green recovery and develop a system of green recovery indicators that will consider the requirements of the DFIs and IFIs, targets under the EU GD policies, and the OECD and IMF system of indicators.
3. Validate and integrate the Build Back Better concept and its principles of green recovery at the national, regional and municipal levels across sectors for all public plans/programs and for businesses.
4. Integrate green criteria into recovery planning: the green indicators and climate/environmental risk assessment tools as mandatory requirements in governmental recovery planning.
5. Develop a list of technologies and types of projects where no investment will be attracted, describing conditions for possible exceptions. The approval must consider the risks of stranded assets (the facilities to be reconstructed might lose their value faster than expected due to stricter climate policies in the future).

6. Mainstream climate issues, establish which minimum share of recovery spending will be green, i.e. will meet the green criteria, and set minimum sustainability criteria for the rest.

7. Adopt and enforce state regulations on standards for mandatory disclosure of non-finance information by companies in accordance with European and global best practices.

8. Develop projects on carbon offsets trading.

Bottleneck 2. Fast recovery actions vs post-war reconstruction priorities

1. Develop and adopt climate governance architecture by introducing climate policies that would gradually align with the European Green Deal while ensuring favourable conditions for green recovery and low-carbon development.

2. Adopt the framework climate law, which will establish long and short-term climate goals, the system for monitoring and controlling progress on them to set Ukraine's long-term intention to decarbonise and refocus its economy, to synchronise with the EU in terms of the climate policies, and to create the favourable environment for green sector development.

3. Integrate the sustainability component as an integral component into public procurement, i.e., consider the indicators of the impact of environmental and climate change as well as innovation.

4. Encourage local self-government representatives to lead the reconstruction process.

5. Avoid concessions in enforcing environmental regulations at any recovery stage since it can result in constructing facilities with negative environmental, climate and public health impacts for many decades after the end of the hostilities or the facilities that may become stranded assets.

6. Encourage social inclusiveness by ensuring the engagement of the public in recovery planning at the level of the Government and local authorities.

7. Advance professional qualifications in the field of climate and environment to raise public awareness to ensure the availability of necessary competencies and capacities to implement the European reforms and increase the public's environmental awareness.

8. Support the development of green innovation and research among Ukrainian businesses, academics, universities or other scientific institutions, including by encouraging cooperation with European companies and scientific institutions.

Business representatives should improve their corporate green culture and basic policies, that is, at the internal level, understand the need for and importance of both the green recovery of the state and the development of corporate climate and environmental governance. Prioritise recommendations arising out of green indicators, the implementation of which will contribute to the formation of corporate green culture and consciousness, as they are the first step on the way to changes in the company's activities. This will subsequently lead to advantages in the company's market positioning, as the company will better understand and be prepared for the requirements of its international investor partner.

Bottleneck 3. Ukrainian business is in survival mode, not developing

1. Integrate minimum green components into projects, including the ones that can be treated as recovery projects, and to bring their own business approach to the recovery process in line with the governmental Build Back Better concept.

2. Start preparation for long-term recovery, introducing the broader and more significant package of governmental laws and regulations, criteria of green recovery and transition to a more sustainable business model.

3. Monitor key trends in climate change and the applicable regulatory policy based on the Paris Agreement and the Sustainable Development Goals.

4. Monitor key European climate and environmental trends, corresponding ambitions and plans of the EU, including requirements for non-finance reporting by companies.

5. Assess own contribution to achieving the goals set by the principal national strategies in energy, climate and environment.

6. Prepare projects that can be funded by the state and international organisations in accordance with the requirements of the recovery plans approved by the government or published on the official state online recovery platforms.

7. Analyse green requirements of their international partners and investors, and to start implementation thereof now.

8. Induce the development of climate and environmental awareness in the company, in the first place, at the top management level, with an account of the risk-focused approach to such development and reconstruction.

9. Assess the sustainable business principles and practices of contractors and partners to analyse their ESG reporting and dynamics of carbon footprint reduction.

10. Publish information on the company's environmental sustainability and climate responsibility, together with the dynamics of achievement of its climate goals, at the company's website.

Currently, the priority task for the government should be the unification of the categories and principles of green recovery, the expansion of the vision of the components of such recovery due to the understanding of the foundations of international climate policy, the European Green Deal, as well as their impact on financial institutions.

The green component should be a basis at all stages of Ukraine's recovery, including the stage of fast recovery. A basic, minimal system of requirements and indicators is proposed in this study. An effective platform for applying these green indicators will be the national digital platform of the Ukrainian recovery projects DREAM.

Finally, the proposed system of green indicators and practical recommendations for the government and businesses will contribute to expanding the possibilities of attracting financial support as well as technical assistance for the country's recovery. This will help avoid the risk of rebuilding Ukraine according to the Business-as-usual scenario – that is, using outdated, resource-intensive, inefficient and carbon-intensive technologies.

The international partners, including governments, organisations and IFIs, mostly believe that the leader and coordinator of Ukraine's recovery process should be the Ukrainian government. While they should grant support at different recovery stages, such as technical, analytical, expert and financial.

In its analytical document “Designing Ukraine's Recovery in the Spirit of the Marshall Plan” [Ganster and others, 2022], the organisation presents its views on the architecture, principles, and coordination of international partners of Ukraine. In particular, the centre distinguishes the following investing phases subject to the recovery stages:

- Relief in time of war – means the investment phase, which includes the provision of humanitarian and macro financial aid and recovering the critical infrastructure.

- Reconstruction – rapid post-war response to encourage market recovery and finance reconstruction of the social infrastructure.

- Modernisation based on the Build Back Better principle is the investment phase, which includes structural changes in the economy focusing on digitalisation, environmental friendliness, and leapfrog. It should include structural economic changes focusing on digitalisation, environmental friendliness, and leapfrog.

- EU accession – EU accession means the investment phase that includes the final alignment of the national regulation with the European one as well as raising investment into climate neutrality of the country. This stage should include the final alignment of the regulation with the European one as well as investment into climate neutrality of the country.

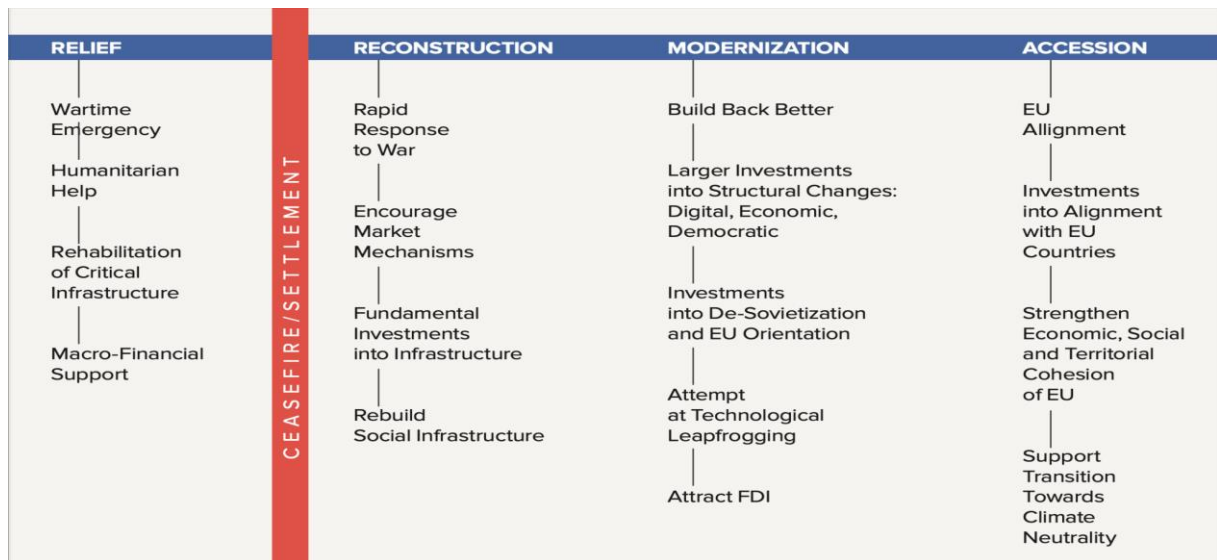


Figure 2. Investing phases of Ukraine's recovery from war effects

Source: *ibid*

Therefore, the Marshall Fund deems it expedient to start considering green components at later phases of the state's recovery, i.e. modernisation and EU accession although the ultimate goal is integration into the EU, whose climate policies Ukraine will have to implement.

Vision by the EU. With Ukraine's integration into the EU, the way the European Union sees Ukraine's recovery must be of priority for the government. In 2022, the European Commission approved the communication "Ukraine Relief and Reconstruction" [European Commission, 2022]. In its document, the EC lists four major pillars of reconstruction, one of which is "Support the recovery of Ukraine's economy and society by promoting sustainable and inclusive economic competitiveness, sustainable trade, and private sector development, while contributing to the green and digital transition of the country". However, the EC does not specify sectoral actions and reforms to be performed within such recovery.

Also, in June 2023, the EC proposed the [European Commission, 2023a] large-scale facility to aid Ukraine for EUR 50 million from 2024 to 2027. The Facility is organised around three pillars:

- 1) financial support to the state, which will be granted provided that there is a reconstruction plan with the list of EU accession reforms;
- 2) a specific Ukraine Investment Framework to mobilise additional resources;
- 3) technical assistance and other supporting measures.

The proposal for [European Commission, 2023b] a regulation "On establishing the Ukraine Facility" refers to the need to invest in the transition towards a green, digital and inclusive economy. The goals of the new financial instrument include a green transition of all the economic sectors. It is also mentioned among the main principles that funding within this EU instrument is supposed to contribute to fight climate change and be guided by the sustainable approach on which the EU GD is based. The EU believes that the green component is key and reiterates that the recovery should not only include reconstruction of what has been destroyed but also be sustainable and resilient, based on the 'do no harm' principle and 'leave no one behind' principle established at the UN level, consider the approaches of the EU Initiative New European Bauhaus [European Union, 2020], according to which living spaces must be sustainable in terms of climate, pollution, circularity, biodiversity as well as aesthetic, inclusive and accessible.

It is also stated in the proposal that the European investors shall not support projects which are incompatible with the National Energy and Climate Plan (if available), the Nationally Determined Contribution to the Paris Agreement [Rozporiadzhennia Kabinetu Ministriv Ukrainy № 868-r, 2021], or that promote investments in fossil fuels. The EU will also avoid investing in

stranded assets. Although the European Commission gives no detailed instructions on Ukraine's recovery, it establishes the principles to be considered. Moreover, financial support is expected to be granted following the internal assessment of the recovery plan by the European Commission. As of September 2023, the draft regulation is under consideration by the EU Parliament and Council. If the proposal is approved, support will be given in the form of grants and loans for four years upon the adoption date, provided that the recovery plan acceptable for the EU is developed and adopted by Ukraine.

Vision by the UN. The UN is Ukraine's international partner that grants targeted support to certain green recovery programmes and has a number of basic general requirements and criteria for support and funding of sectoral green recovery projects. It must be understood that even certain targeted programmes of the UN agencies have specific requirements and expectations for such projects. Thus, the representative of the UNIDO, the United Nations Industrial Development Organization, stated that the organisation would cooperate [UNIDO, 2023] with the Ukrainian government to develop strategic approaches towards green industrial reconstruction and development.

Specially for The Ukraine Recovery Conference 2023, which was held in London in June 2023, the United Nations Economic Commission for Europe (UNECE) drew up the report "Rebuilding Ukraine with a Resilient, Carbon-Neutral Energy System" (the key authors were from the Institute for Economics and Forecasting, National Academy of Sciences of Ukraine) [UNECE, 2023]. The report considers the scenario of post-war reconstruction of the carbon-neutral energy system. It gives recommendations and a road map for further recovery planning for the government.

During the COVID-19 pandemic, the UNDP Ukraine included the early recovery components into the existing programme "Inclusive Development, Recovery and Peacebuilding". The Building Forward Better approach was used for recovery in the eastern regions, where the war had started in 2014, and for recovery from the Covid crisis. The Building Forward Better approach by the UNDP for Ukraine includes the following [UNDP, 2020]:

- Making the recovery people-centred, namely reducing the wage gap between men and women, disparities in digital literacy and access to technologies between age groups, and equal access to quality health care.
- Digital transformation – expanding educational programmes to cover people living in rural areas, the elderly, and ethnic minorities.
- Investing in energy efficiency in public and private buildings, resilient and sustainable urban infrastructure, and more green spaces, including less pollution.
- Development of low-carbon energy solutions – ensuring decentralisation with energy independence while increasing energy security.
- Preparing for future crises – necessary changes in institutions and infrastructure.

At the same time, in the context of the COVID-19 crisis, the UNDP also uses Build Back Better, which means low carbon, resource efficient and socially inclusive recovery. Under this scenario, investment is made into the economic activity, infrastructure, and assets, which contribute to the reduction of GHG emissions and pollution, increase energy efficiency, and have a positive impact on biodiversity and ecosystem services. The purpose of this UNDP project ("Supporting green recovery in Ukraine") was to improve the legislation for green transition, conditions for the functioning of green financial markets, and better assessment and management of climate risks. Several publications were made within the project, including the Report on standards for ESG disclosure for financial institutions, except for banks, the Report on prospects of the green taxonomy in Ukraine, the Report on international voluntary and mandatory carbon markets, with description of Ukraine's opportunities.

After the full-scale war had started, the UNDP approved the UNDP Recovery Framework for Ukraine, and the overall purpose of the organisation is to bring the country back to a trajectory consistent with the Sustainable Development Goals. In general, the UNDP has set the following priorities for itself [UNDP, 2023]:

- Supporting the government in the development of capacities for crisis response; assessment of damages from destroyed infrastructure; support in development of the National Recovery Plan.
- Sustaining the provision of public services: mobile administrative service centres, digitalisation of public services, analysis of gaps in social service provision by local authorities.
- Facilitating the return of the Ukrainians and reconstruction: the UNDP helps supply power equipment, ensure access to water and heating as well as clearing of debris of the destroyed buildings and infrastructure.
- Assisting micro, small and medium-sized businesses, including in relocation.
- Supporting non-governmental organisations in promotion of democratic policies (human rights, gender equality, anti-corruption etc.).

UNDP also supports the implementation of energy efficiency measures through the energy service mechanism (ESCO contracts), which will allow attracting off-budget investments in energy efficiency not only in public buildings, but also in critical infrastructure facilities that provide heat, water, street lighting, etc. The expert report of the UNDP project "Removing ESCO Barriers" [UNDP, 2022] outlines the necessary indicators for a quantitative and qualitative leap in energy services to improve energy efficiency and energy security, in particular:

- annual coverage by ESCO projects of municipal and state-owned buildings and infrastructure of at least 1% of the total for 10 years (about 1-1.5 thousand buildings per year)
- an average "depth of energy efficiency of projects" of at least 40% (the level of reduction in energy consumption relative to the baseline);
- the share of ESCO contracts with introducing renewable energy sources and/or alternative fuels is at least 50% of the annual total number of energy service contracts concluded.

At the same time, UNDP has a separate program for the energy sector, which aims to support the resilience of the energy system. The strategic goals of the program are as follows:

- to take emergency actions to ensure resilience of the power system;
- to enhance the power system of Ukraine and its resilience;
- to ensure long-term reduction of GHG emissions and negative impact on the environment.

Vision by the World Bank. The World Bank's vision [World Bank, 2022] for Ukraine's green recovery and build back better process outlines three key phases: Relief, Recovery, and Resilient Reconstruction. During the Relief phase, the focus is on sustaining the economy and protecting the population, with priorities like maintaining macro-financial stability and restoring essential services. The Recovery phase aims for a quick rebound post-conflict, addressing macro-financial stability and restoring private sector functioning. Finally, the Resilient Reconstruction phase involves long-term rebuilding of infrastructure and institutions, fostering a sustainable, inclusive society, and integrating Ukraine more closely with the European Union. In this document, the World Bank does not focus on green recovery, only including some of the green measures, such as energy efficiency and climate considerations, but rather at the latest stage of recovery. Climate-smart agriculture practices are also included in the second and third phases. Moreover, at the Relief stage, it is recommended to accumulate coal reserves for TPPs. It should be noted that the vision was presented in April 2022.

In the second report "Ukraine Rapid Damage and Needs Assessment" of February 2023 [World Bank, 2023], the World Bank, together with KSE and UNDP, not only estimates the reconstruction and recovery needs as a result of the war as USD 411 billion but also makes a number of assumptions about Ukraine's recovery.

For instance, one of three main recovery principles is called building back better for a more sustainable future, including harmonisation of Ukraine's legislation and policies with European Union law. The Build Back Better approach is a basis for reconstruction and recovery, including the productive sector, irrigation and water resource management systems, the financial sector, and infrastructure.

Expenditures for adaptation to climate change are considered in agriculture. Energy efficiency must be a cross-cutting element of reconstruction. It is also noted that the post-war period will enable revising energy priorities, and the decisions taken will influence energy security and climate

goals in the long run. For the goals to be achieved and for economic recovery to be ensured, the World Bank recommends reducing reliance on fossil fuels and minimising energy consumption, rebuilding based on the Build Back Better concept, and transitioning to a decarbonised economy.

Therefore, the World Bank's assessment lays the green recovery principles when calculating the costs of reconstruction. The Build Back Better concept is broader as it also includes other areas in which it is used without connection with decarbonisation or reduced impact upon the environment. In other words, it can be stated that the World Bank uses green recovery principles as a part of the general Build Back Better approach.

Vision by civil society. The Ukrainian and foreign analytical centres and non-governmental organisations have also conducted their studies and drawn up notes and other position documents on Ukraine's recovery.

A consortium of Ukrainian non-governmental organisations coordinated by the think tank Dixi Group published an analytical note "Post-War Green Recovery of Ukraine: Vision and Models" in 2022 [NGO "Resource-Analytical Center "Society and Environment", 2022a]. The document describes an ambitious and pragmatic model of green recovery, which includes the fundamentals/principles, goals and green instruments and mechanisms, and also defines three stages of recovery:

- 1) wartime;
- 2) two to three years after the hostilities; and
- 3) medium-term, ten to fifteen years.



Figure 3. Architecture of the ambitious model of green recovery of Ukraine

Source: ibid

The Resource and Analysis Centre "Society and Environment" wrote the document "Post-War Green Recovery of Ukraine: Vision and Models" [ibid], and also published the document "Post-War Recovery of Ukrainian Cities: Green Reconstruction and Green Transformation" [NGO "Resource-Analytical Center "Society and Environment", 2022b].

The economists of the Center for Economic Policy Research developed the Ukraine Recovery Plan in 2022. The study proposes the following reconstruction stages: 1) instant response; 2) fast recovery of critical infrastructure; 3) laying the basis for future growth and modernization [Ukraine Recovery Conference, 2023]. The principles and approaches recommended for the first and second stages do not mention decarbonisation or sustainable development principles. Decarbonisation of the energy sector and reduced reliance upon fossil fuels are recommended for the third stage. At the same time, the proposed actions include construction of liquefied natural gas terminals and modernisation of oil terminals near the Black Sea, which is inconsistent with the previous recommendation on decarbonisation of the energy sector although gas investment can promote decarbonisation under certain conditions.

The third stage also proposes a reconstruction of the country based on the Build Back Better concept, namely the modernisation of the production capacities to use the latest technologies for low-carbon development. Therefore, the authors connect these two concepts. The study also gives

examples of the approaches to modernisation and decarbonisation of buildings, transport, technological and innovation development.

Finally, the German Marshall Fund (USA) developed the document “A Modern Marshall Plan for Ukraine” [Heather, 2022], which considers seven lessons to be considered in the recovery plan based on the history of the reconstruction of Europe after World War II. The Plan hardly mentions the environmental and climate recovery aspect. Although climate as an element of reconstruction cannot be a lesson from the post-World War II period, recommendations should consider the modern climate and environmental needs context and challenges.

Vision by academia. Some of the works written by Ukrainian and foreign scholars consider green recovery aspects in the energy, transport, and agricultural sectors by assessing necessary investments and recommending policies and reforms. They include:

- The Green Phoenix Framework: a climate-positive plan for economic recovery in Ukraine [Zagoruichyk and others, 2023]. In particular, the study proposes improving the policies announced in the Recovery Plan (Lugano, 2022). Thus, green alternatives to increasing gas production and modernisation of gas transmission and distribution networks are offered: RES, green industry development, energy efficiency, modernisation of the gas transmission and distribution networks for CO₂, green gases and biofuel production. The authors have also identified gaps in the Recovery Plan offered in Lugano as to green activities and approaches. Such recommended approaches can be treated as green recovery principles within the Build Back Better concept.

- Can Ukraine go ‘green’ on the post-war recovery path? [Chepeliev and others, 2023]. In this work, the authors consider possible ways to recover the energy system of Ukraine and demonstrate that the green energy transition will not be much more expensive than the reference scenario even if related benefits of such transition are disregarded.

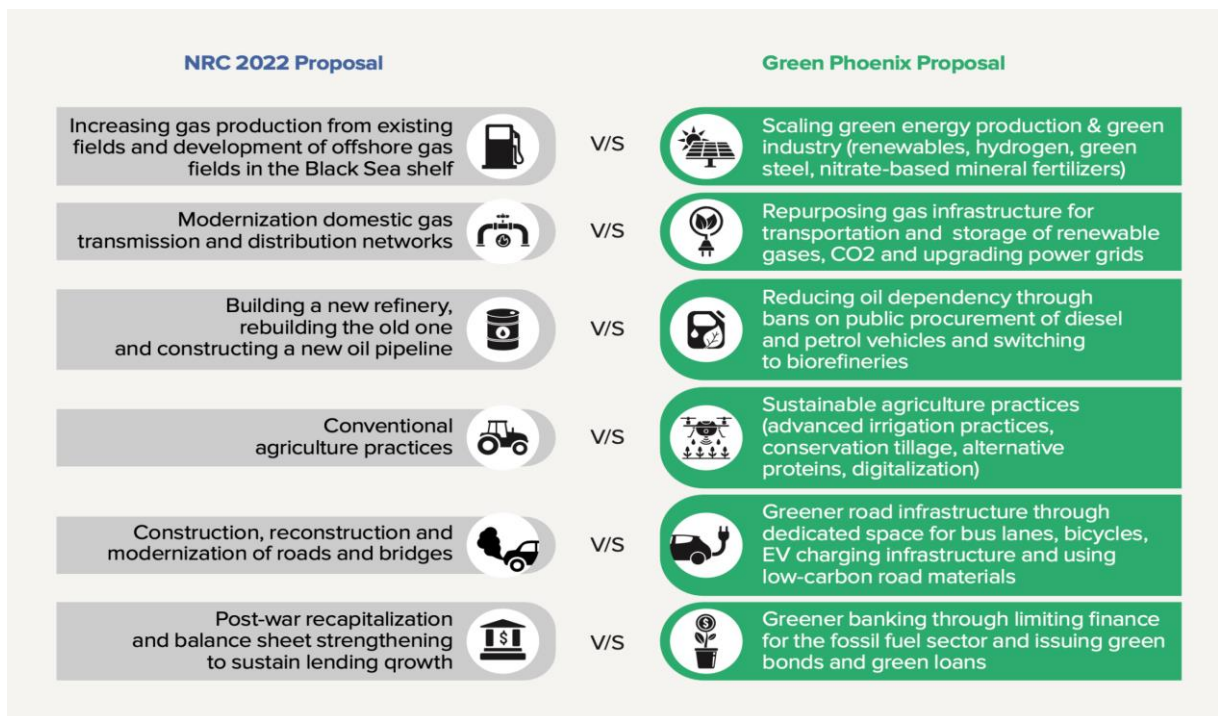


Figure 4. Proposals for amendments to the policies of the National Recovery Plan

Source: Ukraine Recovery Conference, 2023

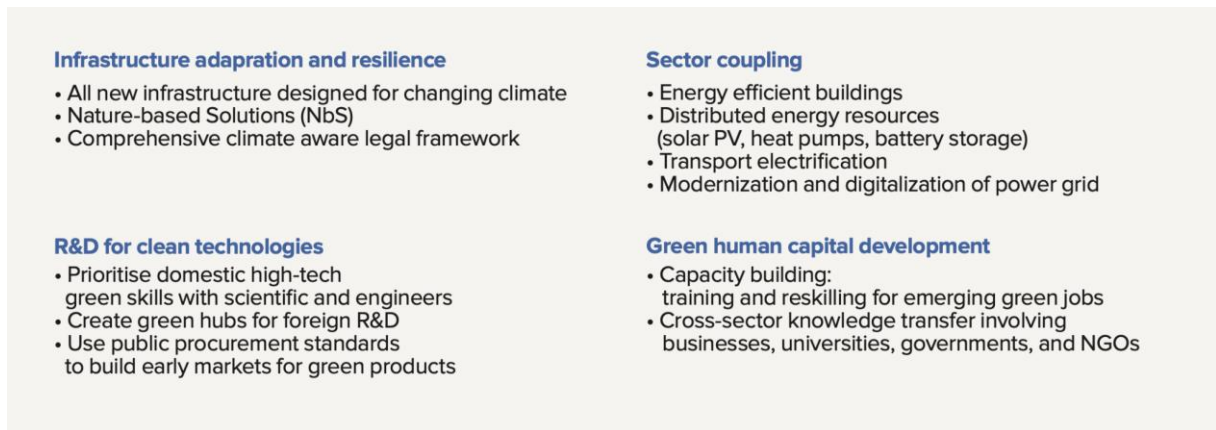


Figure 5. Structural gaps in the National Recovery Plan and potential solutions

Source: Zagoruichyk and others, 2023

Conclusions. At the same time, the analysis of the vision and approaches of the key international stakeholders demonstrates that green recovery principles should be a basis for recovery plans, programmes, projects and approaches, and should also be represented in indicators and metrics of the green goals. The non-governmental organisations and think tanks both in Ukraine and abroad advocate green recovery and continued EU accession, in particular within the European Green Deal actively. In particular, the following principles and approaches to green recovery are recommended:

- reconstruction and recovery in a manner consistent with the goal under the Paris Agreement to limit the temperature increase to 1.5°C;
- economic growth without increased GHG emissions (decoupling);
- reconstruction of critical infrastructure and enterprises with account of green technologies and potential phase-out of fossil fuels;
- reform of the environmental policy: establishment of long and medium-term goals to improve the environment;
- preservation and restoration of the natural capital affected by the war;
- resilience to climate change (natural disasters, changes in weather conditions);
- human rights-based, people-centred environmental and climate policies, and environmental justice.

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BUSINESS PROCESSES IN CONDITIONS OF SUSTAINABLE DEVELOPMENT: DIGITAL TRANSFORMATION OF MARKETING AND INNOVATION

БІЗНЕС-ПРОЦЕСИ В УМОВАХ СТАЛОГО РОЗВИТКУ: ЦИФРОВА ТРАНСФОРМАЦІЯ МАРКЕТИНГУ ТА ІННОВАЦІЙ

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***Abstract.** Business process digitization is integral to modern business, particularly in ensuring sustainable development. It profoundly impacts marketing, innovation, and overall company functions. To achieve successful digitalization, understanding your business needs and aligning digital technologies with your objectives are crucial. This study aims to uncover the key marketing and innovation factors driving the digitalization of business within sustainable development contexts.*

The research employs several methods: analysis, synthesis, forecasting, observation, factor analysis, modeling, and graphic representation. Key findings reveal the core components of the digitization process, encompassing automation, electronic document management, cloud technologies, the Internet of Things, database analytics, system integration, artificial intelligence, blockchain, and cybersecurity. These components collectively revamp traditional processes into more efficient ones, utilizing digital advancements to improve productivity, customer service, and cost-effectiveness.

Identified are two influential factor groups: marketing and innovation. The research presents a model facilitating flexible, efficient, and competitive business processes. Implementing this model enables companies to enhance product and service quality, lower expenses, and elevate profitability. Essentially, it empowers businesses to adapt and thrive in the digital landscape while aligning with sustainability goals.

In essence, this research delineates the crucial elements and factors pivotal in the digital transformation of businesses, offering a model that steers companies towards enhanced efficiency, competitiveness, and profitability within the sustainable development framework.

***Key words:** Digital economy, business model, digital transformation, innovation, innovative development*

Анотація. *Цифровізація бізнес-процесів є невід'ємною частиною сучасного бізнесу, зокрема для забезпечення сталого розвитку. Це глибоко впливає на маркетинг, інновації та загальні функції компанії. Для досягнення успішної цифровізації вирішальним є розуміння потреб вашого бізнесу та узгодження цифрових технологій із вашими цілями. Це дослідження має на меті виявити ключові фактори маркетингу та інновацій, що сприяють цифровізації бізнесу в контексті сталого розвитку.*

У дослідженні використовується декілька методів: аналіз, синтез, прогноз, спостереження, факторний аналіз, моделювання, графічне зображення. Ключові висновки розкривають ключові компоненти процесу оцифрування, що охоплює автоматизацію, електронний документообіг, хмарні технології, Інтернет речей, аналітику баз даних, системну інтеграцію, штучний інтелект, блокчейн і кібербезпеку. Ці компоненти спільно переробляють традиційні процеси на більш ефективні, використовуючи цифрові досягнення для підвищення продуктивності, обслуговування клієнтів і економічності.

Виявлено дві впливові групи факторів: маркетинг та інновації. Дослідження представляє модель, яка сприяє гнучким, ефективним і конкурентним бізнес-процесам. Впровадження цієї моделі дозволяє компаніям підвищити якість продукції та послуг, знизити витрати та підвищити прибутковість. По суті, це дає можливість підприємствам адаптуватися та процвітати в цифровому середовищі, дотримуючись цілей сталого розвитку.

По суті, це дослідження окреслює ключові елементи та фактори, що мають ключове значення для цифрової трансформації бізнесу, пропонуючи модель, яка спрямовує компанії на підвищення ефективності, конкурентоспроможності та прибутковості в рамках сталого розвитку.

Ключові слова: *Цифрова економіка, бізнес-модель, цифрова трансформація, інновації, інноваційний розвиток*

Introduction. Digitization is spreading across all facets of the world's life. It leads to the transformation of economic, global, and national spheres. Economic transformation in the context of digitization conditions contributes to achieving sustainable development goals by fostering the emergence of digital tools, competitive advantages, and competitiveness. The digital revolution fosters the use of new business models and processes that create favorable conditions for business development, attracting investments, and implementing innovations. The readiness to reshape business models, change production and value chains, as well as reconsider relationships with all stakeholders by incorporating new technologies into these processes and creating innovative products and tools for business optimization, promotes global business development.

Innovations and new business models created under the influence of digital transformation of the economy provide long-term growth and help address resource limitations.

Companies are digitizing their business processes to enhance efficiency and effectiveness by employing modern marketing technologies and innovative tools. Digitization of business processes involves changing internal and external processes, assets, products, and more through the application of digital technologies to enhance efficiency and increase the value of a product or service for consumers. To promote sustainable development goals and support globalization processes, there is a need for adaptation and implementation of changes in the business model. This is where business model digitization within the framework of digital business transformation comes into play.

At the current stage, the sectors that have achieved the highest level of digital maturity include banking services (fintech), retail, telecommunications, and media. The oil and gas sector, chemical industry, and energy are the most lagging industries primarily because they operate on a larger scale, lack flexibility, and require longer testing periods for new technologies before introducing them to the market.

Digitization has significantly influenced consumer behavior, leading businesses to adopt digital channels and thus altering the marketing structure. The initiators and catalysts of business

model digitization are the stakeholders of the company, but they only start the process and provide an understanding to the company's leadership, which needs changes for more effective interaction. One of the crucial stakeholders in this case is the government, as it has not only economic but also social goals. Customers, partners, and competitors also have a significant influence on business digitization.

The prospects and development trends of new business processes promote technological and innovative advancements. Companies are increasingly investing in digital growth. Creating proprietary marketing technologies with consideration for digitization conditions ensures business development. Companies are forming their own business ecosystems, already exerting influence on global economic sectors, setting the technological pace, and directing economic progress while displacing competitors from the market.

Neglecting the adoption of new technologies and resisting changes in business processes can result in consumers losing interest in products or services in the future, because they may not align with evolving consumer preferences and global technological trends. Timely responses to trends in the field of business process digitization and the application of progressive marketing and innovative technologies will be essential for optimizing business processes and maintaining relevance in the market. The outlined aspects substantiate the relevance of the research topic.

The purpose of the article. The research objective is to model business processes in the context of sustainable development, taking into account the digitization sector through the implementation of marketing and innovation components.

Literature review. Many scholars have delved into the exploration of digitization across various economic sectors, and assessing how its facets influence sustainable development has emerged as a timely and essential question for defining future directions in economic development.

In their research, Boichenko E., Martynovych N., and Shevchenko I. (*Boichenko E., 2021*) delve into the challenges of defining the conceptual foundations of sustainable development and the possibilities of shaping the main development vectors of the economy while considering the principles of sustainable development.

Ganushchak-Yefimenko L., Nifatova O., Fastovets N., Plysenko H., Lutay L., Tkachuk V., Shcherbak V., Ptashchenko O. (*Ganushchak-Yefimenko L., 2020*) in their research touch upon the issue of monitoring key indicators of sustainable development, which allows for optimizing a complex of management decisions in the future.

The work of Pawłowski A. (*Pawłowski A., 2021*) reveals the fundamental principles and mechanisms of supporting sustainable development in various economic sectors, with a focus on energy recovery systems.

Flaig A., Kindstrom D., Ottosson M. (*Flaig A., 2021*) in their work examine the specifics of marketing components to facilitate the development of entrepreneurial structures.

Huang Yu-Ch. (*Huang Yu-Ch., 2022*), Hausman A. (*Hausman A., 2021*), and Chi C. (*Chi C., 2021*) in their works define innovative marketing strategies that are shaping in the modern conditions of globalization and economic digitization. They also explore the integration of advanced marketing technologies into the contemporary business system.

Krchova H. and Švejnová Hoesová K. (*Krchova H., 2021*) present the combination of modern marketing tools in enterprise management with an innovative orientation.

Certain aspects of the formation of business models in the conditions of the digital economy and inclusiveness are considered in the works of Krysovaty A., Ptashchenko O., Kurtsev O., Arutyunyan O. (*Krysovaty A., 2024*).

Bilovodska O., Melnyk Y., Alenin Y., and Arkusha L. (*Bilovodska O., 2020*) dedicate their work to researching the implementation of modern marketing instruments to enhance innovation activity.

Desyatnyuk O., Muravskiy V., Shevchuk O., and Oleksiiv M. (*Desyatnyuk O., 2022*) investigate the process of business digitization from the perspective of control and accounting, which allows for optimizing management decisions regarding the activities of economic entities.

Main results of the research. Business digitization is the process of incorporating digital technologies and innovations into various aspects of a company's operations with the aim of improving efficiency, increasing profitability, enhancing competitiveness, and providing better customer service. Key aspects of business digitization include digital technologies, electronic communication, e-commerce, automation of business processes, database analysis, and cybersecurity. Business digitization can lead to increased efficiency, cost reduction, expansion of market reach, and enhanced competitiveness. It is important to note that digitization involves not only the adoption of new technologies but also a change in approaches to business processes and company culture. Business digitization requires a broader scope than just a shift in the business model itself (Figure 1).

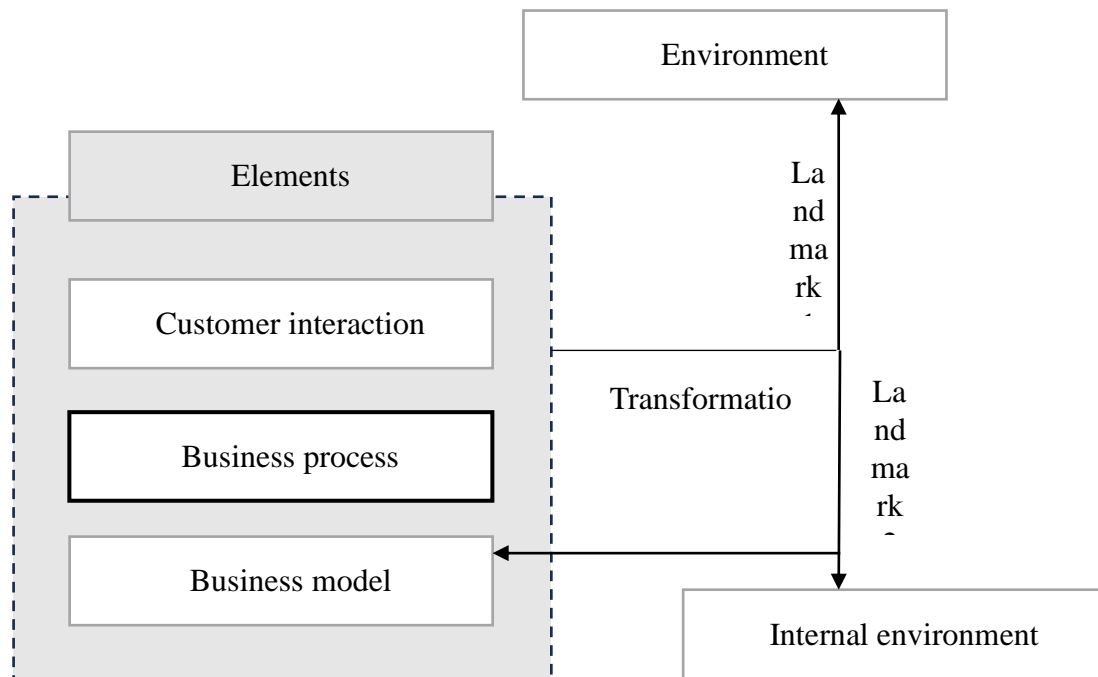


Figure 1. The place of business processes in business digitalization Source: constructed by the author

As evident from Figure 1, the transformation initially focuses on the external environment, then shifts to the internal environment, and finally deepens the transformation to change the business model.

The modeling of business processes involves finding an effective way to improve the efficiency and quality of a company's operations. This entails establishing logical connections between elements by defining relationships between related operations.

The construction and development of a business process model are the initial stages of business process digitization. This allows turning model diagrams into operational tools for the company, tracking and controlling the progress of each work stage in business management.

Modeling digitization of business processes involves optimizing a company's operations by assessing its efficiency during the model construction. Therefore, the authors of the research have identified key tasks in modeling the digitization of business processes:

1. Description of the business process model: Modeling allows for tracking the complete cycle of executing a chain of operations, from the beginning to the final stage. This enables an examination of work from different angles and, if necessary, optimization of labor costs.

2. Standardizing operations: Developing and creating models involves standardizing the execution of operations within a company according to predefined rules, compliance with which will lead to desired productivity.

3. Establishing relationships between processes: Modeling helps in establishing connections between different processes within the company.

These tasks are crucial for efficient digitization and optimization of business processes.

Modeling the digitization of business processes involves several stages:

1. Preparatory stage: At this stage, the company's processes are identified and described as they exist at the present moment. This step helps visually track how a particular action is executed in the company and identify its strengths and weaknesses. It includes analytical work, such as defining the components of operations, their initial and final stages.

2. Analytical stage: This stage serves as the basis for analysis and involves refining, reviewing, and fine-tuning the existing model. Redundant and duplicate actions in the model are identified, connections with other operations are established, and optimization for digitizing business processes takes place.

3. Construction stage: The focus of this stage is to build the model in a way that is most effective for the business. All necessary improvements required for the company's business process model are incorporated during this stage.

4. Testing stage (Verification and Validation): Testing can occur during the implementation of the model into the business. This stage involves correcting necessary aspects and making additions based on real business practices.

When constructing a digitization model for business processes, the authors of the research adhered to modeling principles, including decomposition, focus, documentation, consistency, completeness, and sufficiency. These principles help ensure that the model accurately represents the processes and their digitization.

The principles you mentioned are essential for building an effective model of business process digitization:

1. Decomposition Principle: This principle involves breaking down complex operations or processes into smaller, more manageable components. It helps in detailing the key operations within the company.

2. Focus Principle: This principle emphasizes concentrating on the core parameters and essential aspects while ignoring unnecessary details. It ensures that the model remains focused on its primary objectives.

3. Documentation Principle: This principle stresses the importance of formally documenting and recording all elements within the model. Proper documentation ensures clarity and traceability of the model's components.

4. Consistency Principle: This principle requires that all elements within the model have a clear and consistent interpretation. It ensures that there are no conflicting or ambiguous definitions.

5. Completeness and Sufficiency Principle: This principle involves evaluating all anticipated elements within the model based on their significance and impact. It ensures that the model is both comprehensive and adequate for its intended purpose.

The construction and use of the digital business process model allow companies to create processes that work efficiently. The model also enables the analysis of how the organization as a whole or a specific department operates, as well as how effectively it interacts with external companies, clients, and customers.

This allows modeling the organization's key operations that provide a competitive advantage, such as reducing the time it takes to process individual customer requests in the banking sector. Implementing the proposed digital business process model makes execution highly regulated and allows tracking the progress of work at each stage, resulting in a competitive advantage for the company by reducing costs, labor, and improving the quality and speed of work. The proposed digital business process model is shown in Figure 2.

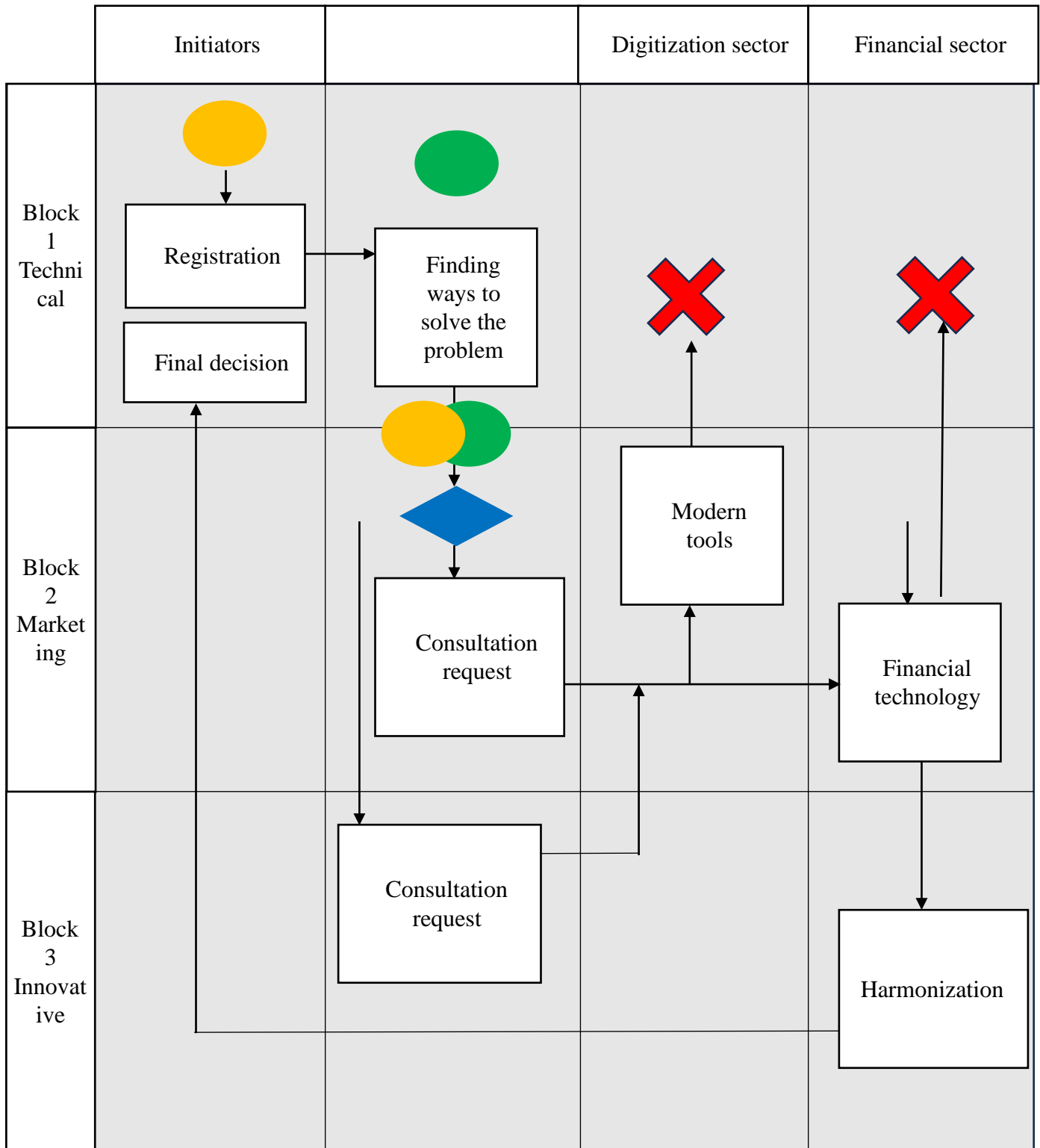


Figure 2. Model of business process digitalization

Source: Developed by the author

The constructed model is objective-imitation because it combines characteristics of interacting objects that transform during the execution of actions. It is aimed at testing business processes in both external and internal environments, followed by the evaluation of characteristics and resource optimization.

The primary goal of the proposed model for business process digitization is to create an organizational methodology that integrates marketing and innovation aspects, considering the

digitalization sector. This is achieved through a visual representation in a user-friendly format, suitable for conducting analytical research and optimizing operations in various departments.

Given that the proposed model is objective-imitation in nature, the authors of the research identified the most relevant method to emphasize necessary elements. Most of these methods are implemented in computer software, which includes graphical and text-based tools, as a result of digitalization.

That is why the model was constructed with consideration for the digitalization sector. The digitalization sector allows visualizing the organization's operations, describing its key elements, and establishing relationships in a clear manner.

Additionally, the model takes into account the financial sector, which aims to ensure the efficient use of financial resources and transparency in financial investments within the business model.

The model is built upon three blocks: technical, marketing, and innovation.

The technical block is responsible for programming the future of the business.

The marketing block focuses on creating and sustaining the value of the business, updating information through marketing channels to attract professionals for business promotion.

The innovation block contributes to the emergence of new technological solutions. However, innovation in business modeling is an equally important and powerful tool for business development and its revolutionary transformation.

Conclusions. Digitization of business processes in the context of sustainable development includes marketing and innovation aspects, which contribute to not only improving productivity and competitiveness but also ensure a balanced approach to addressing environmental, social, and economic issues.

During the current research, the following features of business process digitization were identified:

Digital Marketing and Sustainability: The use of digital channels to promote sustainable consumption and environmentally conscious decisions. Marketing can focus on the environmental attributes of products and services encourage customers to make environmentally responsible choices, and provide incentives for sustainable consumption.

Innovations in Products: Digitization enables the development and implementation of sustainable innovations in products that contribute to waste reduction and resource conservation. For example, smart products can monitor energy, water consumption, and optimize their usage.

Digital Analytics for Sustainable Development: Data collection and analysis help identify opportunities for resource consumption reduction, improvement of production processes, and reduction of negative environmental impacts.

Innovative Partnerships: Digital transformation fosters the creation of new innovative partnerships with environmentally focused startups and organizations working on sustainable energy development, the utilization of renewable energy sources, and more.

Consumer Engagement: Using digital platforms to engage consumers in the production and product development processes promotes the creation of more sustainable and responsible products.

Digital Public Engagement: Creating digital platforms to engage employees, customers, and the public in addressing sustainable development issues and making important decisions.

Efficient Resource Utilization: Using digital technologies to monitor and optimize the use of resources such as energy, water, raw materials, and others.

The overall result of these measures is that digital transformation becomes a step towards a more sustainable and responsible business, promoting efficient resource utilization, reducing negative environmental impacts, and increasing customer and employee satisfaction.

During the factor analysis, two groups of influencing factors on the digitalization of business processes were identified: marketing and innovation. The presented research confirms the necessity of considering marketing and innovation aspects in digitalization. It also underscores that the proposed model of digitalization of business processes, taking into account the technical, marketing,

and innovation blocks, allows modeling digitalization in a way that aligns with the results of the current research.

It should be noted that the success of enterprises in the context of the digitized market largely depends on their ability for innovative development and commitment to sustainable growth. The formation and selection of strategic directions for innovation activities are based on a comprehensive assessment of both the environment in which the enterprise operates and the identification of the internal innovation and marketing capabilities of the enterprise, characterized by the state and level of utilization of innovation potential. Moreover, the innovation opportunities of enterprises vary significantly depending on the specific characteristics of the enterprise, its industry affiliation, and its strategic orientation.

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УДК 339.9

TRENDS AND PROSPECTS IN INTERNATIONAL HYDROGEN TRADE IN THE FACE OF NEW BARRIERS AND CHALLENGES TO GLOBAL COOPERATION

ТРЕНДИ І ПЕРСПЕКТИВИ В МІЖНАРОДНІЙ ТОРГІВЛІ ВОДНЕМ В УМОВАХ НОВИХ БАР'ЄРІВ ТА ВИКЛИКІВ ГЛОБАЛЬНОМУ СПІВРОБІТНИЦТВУ

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***Abstract.** The article aims to identify key trends, prospects, and features of international hydrogen trade, focusing on new barriers and challenges to global cooperation. It is determined that the current growth of interest in hydrogen is associated with incentives in developed countries to reduce greenhouse gas emissions and combat global warming. It is argued that international hydrogen trade is becoming an important factor in countries' energy and economic transformation, and the hydrogen energy global market will be actively developed and supported. Still, it will have to overcome technical limitations to achieve significant success. Based on theoretical and empirical generalizations, the author concludes that hydrogen has significant explicit and latent potential for international trade and sustainable development of global energy and is a key factor in achieving global decarbonization goals. Still, the main challenges remain high production and transportation costs and the need to invest in innovative technologies. The study emphasizes that the oil refining and fertilizer industries mainly generate the demand for hydrogen. However, experts argue that in the future, sectors that are heavily dependent on fossil fuels, such as heavy industry, long-haul transportation, and air transport, may benefit most from hydrogen energy. Currently, the largest importers of hydrogen are Asian countries, driven by the region's demand for chemicals and the transportation, iron, and steel sectors in China and India. The main exporters of hydrogen in the future may be the countries of Oceania, North America, and the Middle East. The main barriers and challenges in international hydrogen trade are identified, which can be classified into economic, political, technical and infrastructural. It is emphasized that different regions of the world use unique strategies to develop the hydrogen market, and some cases are presented. The study concludes that the prospects for international hydrogen trade and the future introduction of*

hydrogen into the global economy will depend on the factors that affect a country's ability to produce and export hydrogen, which is multifaceted and interdisciplinary and covers many areas. For example, a country's hydrogen production may be limited by its oil resources, renewable energy potential, water resources, or land area, and difficulties in producing or exporting hydrogen due to its infrastructure, financial capacity, political climate, and government policies.

Keywords: hydrogen, hydrogen economy, decarbonization, sustainable development, green transition, circular economy, green investments, innovations in hydrogen production technologies, international trade, barriers and challenges, global cooperation, emissions trading system, regulation, strategic interests, economic interests, the strategy of using hydrogen for energy, country strategies.

Анотація. Метою статті є визначення ключових тенденцій, перспектив та особливостей міжнародної торгівлі воднем з акцентом на нові бар'єри та виклики глобальному співробітництву. Визначено, що нинішнє зростання інтересу до водню пов'язане зі стимулами в розвинених країнах до скорочення викидів парникових газів і боротьби з глобальним потеплінням. Стверджується, що міжнародна торгівля воднем стає важливим фактором енергетичної та економічної трансформації країн, а водневий енергетичний глобальний ринок активно розвиватиметься та підтримується, проте для досягнення значного успіху йому доведеться подолати технічні обмеження. Зроблено висновок на основі теоретичних і емпіричних узагальнень, що водень має значний явний і латентний потенціал для міжнародної торгівлі і сталого розвитку глобальної енергетики і є ключовим фактором для досягнення глобальних цілей декарбонізації, проте основними викликами лишаються: висока вартість виробництва, транспортування та необхідність інвестицій в інноваційні технології. В дослідженні підкреслено, що попит на водень в основному створюється нафтопереробною промисловістю та виробництвом добрив. Проте експерти стверджують, що у майбутньому галузі, які значною мірою залежать від викопного палива, такі як важка промисловість і далекомагістральні перевезення, авіаційний транспорт, можуть отримати найбільшу вигоду від водневої енергетики. Наразі, найбільшими імпортерами водню є країни Азії, що обумовлено попитом регіону на хімічні речовини, а також транспортними, залізничними і сталеливарними секторами в Китаї та Індії. Головними експортерами водню у перспективі можуть стати країни Океанії, Північної Америки та Близького Сходу. Ідентифіковано основні бар'єри і виклики у міжнародній торгівлі воднем, що можуть бути класифіковані на економічні, політичні, технічні та інфраструктурні. Акцентовано увагу, що різні регіони світу використовують унікальні стратегії для розвитку водневого ринку, наведені окремі кейси. В дослідженні зроблено висновок, що перспективи міжнародної торгівлі воднем і майбутнє впровадження водню в глобальну економіку залежатимуть від факторів, які впливають на здатність країни виробляти й експортувати водень, які є багатограничними та міждисциплінарними та охоплюють багато сфер. Наприклад, виробництво водню в країні може бути обмежене її нафтовими ресурсами, потенціалом відновлюваної енергії, водними ресурсами або площею землі, труднощами у виробництві або експорті водню через свою інфраструктуру, фінансову спроможність, політичний клімат і державну політику.

Ключові слова: водень, воднева економіка, декарбонізація, сталий розвиток, зелений перехід, циркулярна економіка, зелені інвестиції, інновації у технологіях виробництва водню, міжнародна торгівля, бар'єри і виклики, глобальне співробітництво, система торгівлі викидами, регулювання, стратегічні інтереси, економічні інтереси, стратегія використання водню для енергетики, стратегії країн.

Introduction. Fuel has always been a driving force behind human technological progress, from the wood fire that was first used for cooking to fossil fuels that fueled the Industrial Revolution and enabled the modernization of the global economy. (*What is hydrogen energy, 2024; Yatsenko O, Panchenko V., Ivashchenko O., 2024*). One of the problems that needs to be solved for

the future of humanity is related to energy, global warming, and the depletion of fossil fuels. Therefore, the use of fossil fuels has come under scrutiny for its role in climate change

The current growth of interest in green hydrogen is primarily due to the stimulating initiatives of developed countries to reduce greenhouse gas emissions and combat global warming. For example, the European Union actively supports the development of hydrogen energy by promoting the creation of infrastructure for producing «green» hydrogen using renewable energy sources. European countries are introducing decarbonization and clean air regulations, which indirectly increase the competitiveness of hydrogen as a fuel cell. Developed countries also help attract investment and create demand for this gas (*Low-emission hydrogen, 2024; Duginets & Panchenko et al., 2024; Yatsenko et al., 2024; Osaulenko O., Reznikova N. et al., 2020*).

International hydrogen trade is gradually becoming a key element of global energy markets. As the world moves towards decarbonizing its economies, hydrogen is a potential solution to meet energy needs while reducing carbon dioxide emissions. However, the formation of a global hydrogen market requires the transformation of both trade and environmental policies at the international level.

A study of the potential of hydrogen for sustainable global energy development points to the need to create infrastructure for hydrogen production, storage, and transportation, which contributes to the formation of new markets, especially in Europe, Asia, and North America. The main challenges include the high cost of production and the need for significant investment in innovative technologies. Nevertheless, with the development of technologies, such as electrolysis based on renewable energy (wind and solar), the cost is expected to decrease gradually, especially after production is scaled up (*Werner Antweiler, David Schlund, 2024*).

The purpose of the article is to identify key trends, prospects, and specifics of international hydrogen trade with a focus on new barriers and challenges to global cooperation.

Literature review. Hydrogen is today enjoying unprecedented momentum. The world should not miss this unique chance to make hydrogen an important part of our clean and secure energy future. Hydrogen and energy have a long-shared history – powering the first internal combustion engines over 200 years ago to becoming an integral part of the modern refining industry. It is light, storable, energy-dense, and produces no direct emissions of pollutants or greenhouse gases. But for hydrogen to contribute significantly to clean energy transitions, it needs to be adopted in sectors where it is almost completely absent, such as transport, buildings and power generation. The Future of Hydrogen provides an extensive and independent survey of hydrogen that lays out where things stand now, how hydrogen can help achieve a clean, secure, and affordable energy future, and how we can realize its potential (*Fatih Birol, 2019*).

Some scientists see hydrogen as the next step in energy production. Hydrogen energy can be a cleaner and more efficient way to power our world. After all, hydrogen and other energy sources can potentially replace natural gas in an environmentally friendly way. The analysis of the hydrogen economy is reflected in the studies of many domestic and foreign scholars. Over the past decades, the hydrogen economy has become one of the priority areas for reducing dependence on fossil energy sources and their environmental challenges (*Enabling the European Hydrogen Economy, 2021*).

The WTO Report (*WTO report, 2022*) emphasizes the importance of standardization in hydrogen trade. One of the key aspects is the creation of common international standards for the production and transportation of hydrogen, which will simplify trade barriers between countries. It also emphasizes integrating hydrogen markets with existing energy networks and ensuring technology compatibility.

The World Bank report (2023) emphasizes that the hydrogen economy can become a driving force for the economic development of many countries, in particular those with rich resources for renewable energy (*World Bank Report, 2023*). However, at the initial stages, government subsidies to support hydrogen production and transportation remain important. The hydrogen economy can have a significant impact on the labor market, creating new jobs in the areas of hydrogen

production, transportation, and storage. This is especially important for countries seeking to modernize their economies and move towards sustainable development.

The European Union is one of the leaders in shaping hydrogen policy. The Hydrogen Insights 2024 report (*Hydrogen-Insights-2024, 2024*) states that the EU plans to increase the production of green hydrogen and help reduce carbon emissions. This includes subsidies for hydrogen production from renewable sources and support for cross-border hydrogen trade. Importantly, hydrogen is seen as a strategic resource for the EU's energy security. Changes in environmental policy, in particular the adoption of the Paris Climate Agreement, are stimulating the development of the hydrogen economy. It is emphasized that in order to achieve the 2050 climate goals, it is necessary to significantly reduce the use of fossil energy sources and make hydrogen available to a wide range of industries, from industry to transportation (*Dawood Hjeij, Yusuf Bicer, Mohammed bin Saleh Al-Sada, Muammer Koç, 2023*).

At the request of the government of Japan under its G20 presidency, the International Energy Agency produced a landmark report to analyze the current state of play for hydrogen and to offer guidance on its future development (*IEA, 2019*). The report finds that clean hydrogen is enjoying unprecedented political and business momentum, with the number of policies and projects worldwide expanding rapidly. It concludes that now is the time to scale up technologies and reduce costs to allow hydrogen to become widely used. The pragmatic and actionable recommendations to governments and industry that are provided will make it possible to take full advantage of this increasing momentum. In contrast to renewable energy sources such as wind, solar, and biogas, the hydrogen economy has become popular and widely used due to its positive image in the media and social communications. However, the hydrogen economy is still less studied and not fully understood on a social level (*Hydrogen isn't the fuel of the future, 2019*). This is despite the importance of the hydrogen economy. The benefits include a clean environment and the possibility of ensuring the country's energy independence.

It should be noted that this problem has an economic and political dimension, as resource extraction is often used as an instrument of political pressure and blackmail, posing a threat to international security (*Oil Embargo, 1973–1974, n.d.*). A striking example is the Arab oil embargo of 1973-74, which led to major economic turmoil.

The Hydrogen Insights 2023 study indicates that hydrogen can be a key element for decarbonizing industries such as sustainable steel production, chemicals, and power generation. These sectors are the main consumers of fossil fuels and sources of significant CO₂ emissions. Hence, using hydrogen as a clean energy source is key to achieving greenhouse gas emission reduction targets. However, this requires a significant transformation of existing production processes and the introduction of innovative technologies, such as electrolysis, which helps reduce CO₂ emissions (*Hydrogen Insights 2023, 2023*).

Long-distance transportation of hydrogen remains a major trade challenge. The article by van Wijk et al. analyzes the prospects for creating an international infrastructure for hydrogen transportation by pipelines and in the form of liquefied hydrogen (Ad van Wijk, Frank Wouters, 2021). It is noted that hydrogen transportation prices are significantly higher than for natural gas, as hydrogen is a very low molecular weight gas that can penetrate the walls of conventional pipes, causing their degradation. Therefore, hydrogen transportation requires pipelines using more durable and specialized materials, which in turn limits its competitiveness in international markets.

Foreign research usually focuses on technological innovations, economic models, and successful cases of hydrogen technology implementation in different countries, which is useful for adaptation to the national conditions of other countries.

The scientific work of domestic researchers is aimed at studying the potential of hydrogen energy in Ukrainian conditions, including environmental and economic aspects. In their works, domestic scientists highlight two key elements of developing the hydrogen economy in Ukraine (*Reznikova N., Grod M., 2024; Shkvarylyuk, S., 2024; Repkin A., 2020; Onysiuk, S., 2024; Zelenko O. O., Gutsan T. G., Osmirko I. V., 2022; Dmitriiieva, O., 2024; Khalatur, S., 2024*). On the one hand, they note favorable climatic conditions that make hydrogen production using “green”

technologies possible and profitable. On the other hand, they emphasize that the potential for cooperation with European initiatives, such as integration into the ENTSO-E energy system, is highlighted, which opens up new opportunities for developing hydrogen energy. However, Ukrainian researchers also highlight some challenges facing the country's energy system. They emphasize the unpreparedness of the energy infrastructure for the large-scale introduction of hydrogen technologies and the overall complexity of the transition to renewable energy.

Ukraine's task is to create effective mechanisms to facilitate the integration of hydrogen technologies into the national energy system, which involves research and development and a national strategy that considers the economic interests of large energy companies and the state. It is also necessary to minimize social tensions related to the transition to new technologies in the country. It is important to create the conditions for integrating the hydrogen economy in Ukraine to be gradual, gentle, and without adversely affecting employment and economic stability.

Main results of the research. Hydrogen (H₂) is considered a promising future energy carrier due to its versatility, similar to fossil fuels. It can be transported in gaseous and liquefied form, similar to natural gas, and as ammonia (NH₃), which requires less cooling (-33 °C compared to -252 °C for liquefied water). Hydrogen can be mixed with natural gas, burned in gas turbines to generate electricity, and used in fuel cells to produce electricity (*Hydrogen chemical element, n.d.*). In addition, as an alternative to conventional batteries, hydrogen can store energy for long periods of time at minimal cost. These advantages have prompted many countries to actively pursue hydrogen production, use, storage, and transportation strategies.

With the development of hydrogen energy as an important energy carrier, international hydrogen trade is expected to increase significantly, and countries will begin to exploit their comparative advantages in hydrogen production. Since this new market will develop with multiple firms entering the market simultaneously in each period (with considerable heterogeneity and stochasticity), the resulting complexity defies closed-form analytical solutions. Long-term contracts are expected to dominate the first few decades of the hydrogen market (*Werner Antweiler, David Schlund, 2024; Dawood Hjej, Yusuf Bicer, Mohammed bin Saleh Al-Sada, Muammer Koç, 2023; Krzysztof Urbaniec, Anton Friedl, Donald Huisingh, Pieter Claassen, 2010*).

International trade makes hydrogen more available and cheaper than without trade, creating opportunities to capitalize on comparative advantage. Since hydrogen is a pathway to decarbonize emissions-intensive industries, international trade has a potentially positive environmental impact.

The current growth of interest in green hydrogen is primarily due to the stimulating initiatives of developed countries to reduce greenhouse gas emissions and combat global warming. For example, the European Union actively supports the development of hydrogen energy by promoting the creation of infrastructure for producing “green” hydrogen using renewable energy sources. European countries are introducing decarbonization and clean air regulations, which indirectly increase the competitiveness of hydrogen as a fuel cell. Developed countries also help attract investment and create demand for this gas (*Hydrogen, iea50, n.d.*). The Circular Economy Action Plan is one example. The circular economy involves a radical change in the organization of production and consumption – from a linear growth model (extract, produce, dispose) to one where waste becomes a sustainable alternative to resources (recover, reuse, recycle, share).

Hydrogen is the most abundant element in the universe, but it is practically not found on Earth in its pure form. Under normal conditions, hydrogen is a colorless, odorless, and tasteless gas with a density of 0.08987 g/l (c.v.), a boiling point of -252.76 °C, and a calorific value of 142.9 kJ/kg. In its liquefied state, hydrogen exists in a very narrow temperature range from -252.76 to -259.2 °C. At 253 °C, its density is about 70.8 g/l. In other words, this element has a high energy density per unit mass, which makes it an extremely efficient fuel. However, it is very inefficient in terms of storage and transportation. For example, natural gas has a calorific value of up to 16-34 kJ/kg and a density of 0.7 g/l (dry gaseous) or 400 g/l³ at 160 °C (liquid) (*Hydrogen chemical element, n.d.*). That is, according to a rough calculation, one imaginary 10-liter cylinder can hold $(0.0708 \cdot 10 \cdot 142.9 = 101.17)$ 101.17 kJ of energy if hydrogen in a liquefied state is collected there, and $(0.4 \cdot 10 \cdot 25 = 100)$ 100 kJ if it contains natural gas of average quality.

Therefore, the energy indicators are equal for the same volume. However, the costs associated with creating the conditions for international trade are different due to the possibility of long-distance hydrogen transportation. And herein lies the main disadvantage of hydrogen: its boiling point, or liquefaction, which reaches $-253\text{ }^{\circ}\text{C}$. This is a very low temperature, one of the lowest boiling points among all chemical elements, only $20\text{ }^{\circ}\text{C}$ warmer than absolute zero. This makes transporting hydrogen by pipeline or ship difficult over land or sea. When transported, it must either be liquid or converted to ammonia. Both processes are costly and require the creation of appropriate infrastructure, such as high-powered refrigeration units that would be capable of liquefying industrial volumes of hydrogen. For comparison, natural gas is liquefied at a temperature of 160°C . While a hydrogen refrigeration unit has to reduce the temperature to a much lower level. Of course, the difference should be offset by the price of hydrogen. The only question is whether, after transportation, it will become uncompetitive against other environmentally friendly fuel substitutes, such as biogas or biofuels.

This is why hydrogen's share in the global energy balance is currently quite modest. However, experts estimate its potential as enormous: hydrogen can become the basis for achieving carbon neutrality by 2050. Instead, the transportation problem is planned to be solved by building hydrogen pipelines. In his research, Michael A. Semeraro found that for distances of 1000 miles with 2030 technology, a hydrogen pipeline could be an economically competitive method of transmitting renewable energy (*Michael A. Semeraro III., 2021*). However, the same article emphasizes that the methods need further research.

The international hydrogen energy market will be actively developed and supported, but it must overcome technical limitations to achieve significant success.

Hydrogen demand is mainly generated by the oil refining and fertilizer industries. However, experts argue that in the future, industries that are heavily dependent on fossil fuels, such as heavy industry long-haul transportation and air transport, may benefit most from hydrogen energy (*What is hydrogen energy, 2024*). Hydrogen, as a clean fuel, can significantly reduce carbon emissions in these sectors, which is a key factor in achieving global decarbonization goals.

Supplying hydrogen to industrial users is now a major business around the world. Demand for hydrogen (figure 1), which has grown more than threefold since 1975, continues to rise – almost entirely supplied by fossil fuels, with 6% of global natural gas and 2% of global coal going to hydrogen production. As a consequence, the production of hydrogen is responsible for CO₂ emissions of around 830 million tons of carbon dioxide per year, equivalent to the CO₂ emissions of the United Kingdom and Indonesia combined.

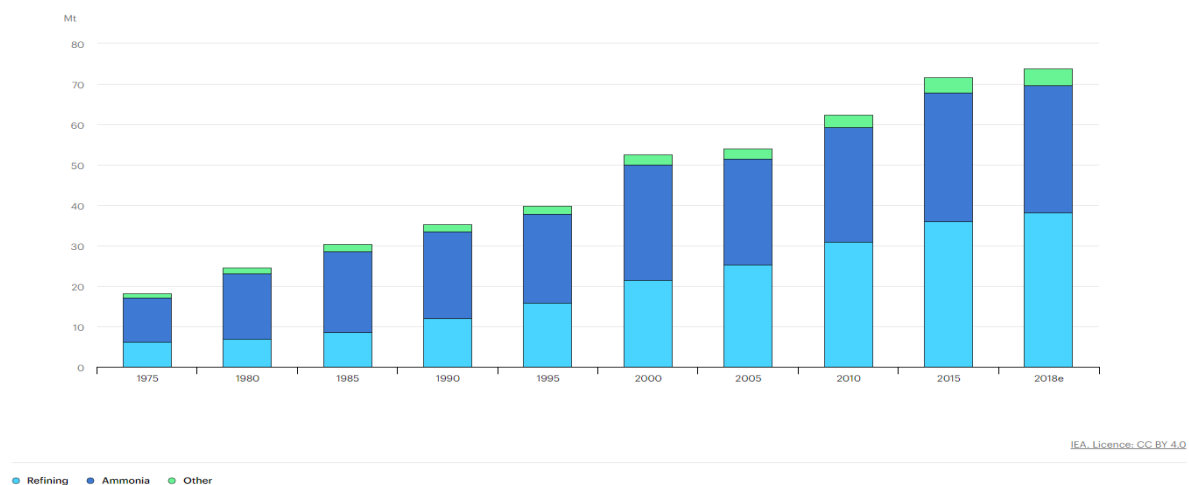


Figure 1. Global demand for pure hydrogen, 1975-2018 (IEA, 2019)

Today, the largest importers of hydrogen are Asian countries (Figure 2). This is primarily due to the region's demand for chemicals and the transportation, iron, and steel sectors in China and

India (What is Hydrogen Energy, 2024). This trend is expected to continue until 2050. However, in Japan and South Korea, a significant share of hydrogen demand is expected to come from electricity generation, as these countries are actively investing in hydrogen infrastructure to support their national energy strategies.

The main exporters of hydrogen in the future may be the countries of Oceania, North America, and the Middle East (What is hydrogen energy, 2024). Currently, Saudi Arabia and the United Arab Emirates are already developing plans to use solar energy to produce hydrogen for export. Australia also looks promising, as it could become a leader in the production of green hydrogen due to its vast renewable resources.

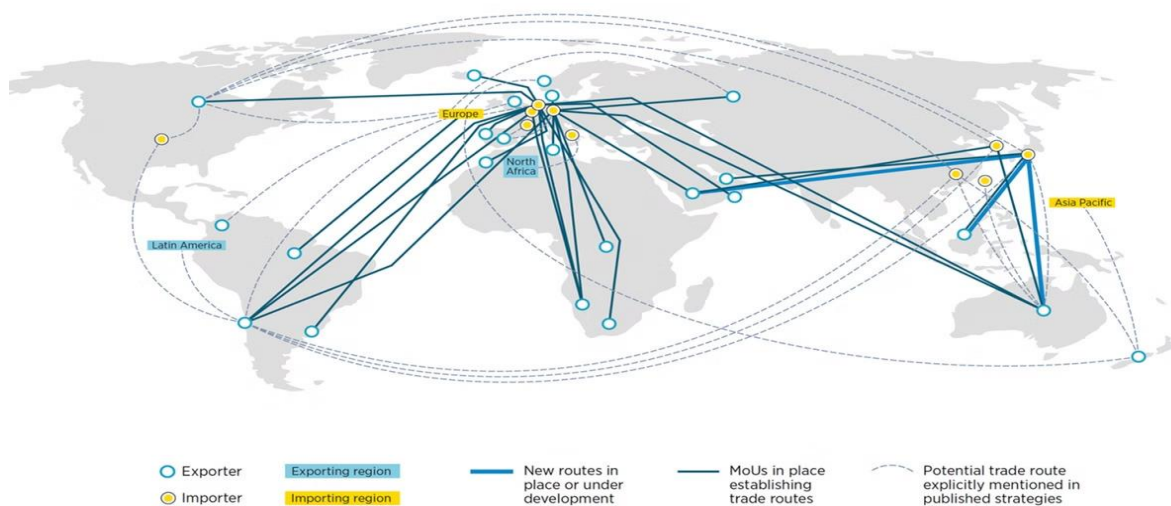
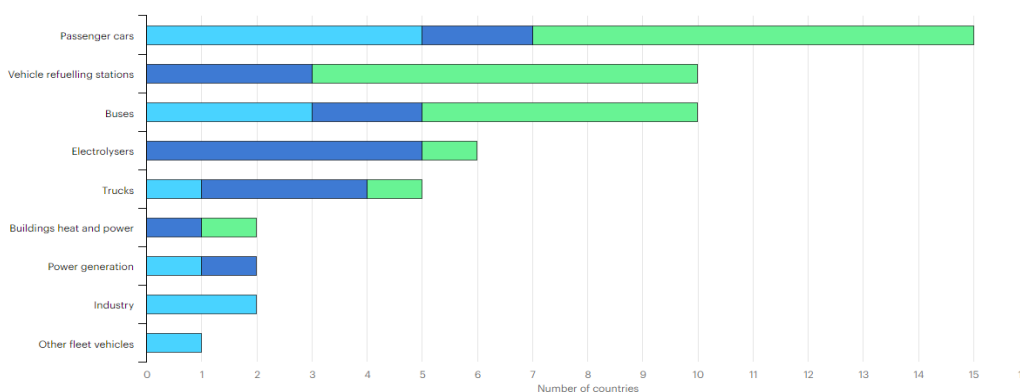


Figure 2. Key regions of global hydrogen trade (*Here's how global trade will be key, 2023*)

The number of countries with policies that directly support investment in hydrogen technologies is increasing, along with the number of sectors they target (figure 3). Around 50 targets, mandates, and policy incentives are in place today that directly support hydrogen, with the majority focused on transport. Over the past few years, global spending on hydrogen energy research, development, and demonstration by national governments has risen, although it remains lower than the peak in 2008.



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● Incentives without targets ● Targets without incentives ● Combined incentives with targets

Figure 3. Current policy support for hydrogen deployment, 2018 (*IEA, 2019*)

Current trends in international hydrogen trade demonstrate significant progress in the development of both infrastructure and policy support aimed at boosting the hydrogen economy. Hydrogen is turning into a commodity of strategic importance, and global energy chains are adapting to the new reality. One of the key trends is the development of partnerships between exporting countries rich in renewable energy sources and importing countries with a high level of demand for clean energy. For example, in 2021, Australia announced several international hydrogen export agreements with Japan and South Korea, which include both joint infrastructure investments and long-term supply agreements.

Another important trend is the emergence of new technologies in hydrogen production, storage, and transportation. A key factor is the reduction in the cost of water electrolysis, which allows for the production of green hydrogen from renewable energy sources at lower prices. According to a BloombergNEF report (*Kamala Schelling, 2023*), the cost of producing green hydrogen is expected to fall by 85% by 2030, making it competitive with hydrogen produced from natural gas. In addition, new storage technologies, such as using ammonia as a transportation carrier for hydrogen, can reduce transportation costs and increase the economic efficiency of international hydrogen trade.

Governments of different countries also actively support hydrogen infrastructure development at the international level. The European Union, for example, has launched a strategy for developing the hydrogen economy, which envisages the creation of a trans-European network for the transportation of hydrogen and its integration into the general energy market. In addition, the International Energy Agency (*IEA, 2019*) has set up special groups to develop recommendations to stimulate international hydrogen trade.

Another important trend is the growing role of the private sector in developing international hydrogen trade. Global corporations such as Shell, Siemens, and Toyota actively invest in hydrogen projects and create partnerships with governments to develop international supply chains. This shows that the hydrogen economy is becoming not only a political but also an economic priority.

It is important to note the issue of barriers and challenges to international hydrogen trade. Although international hydrogen trade has great potential, it faces several significant barriers and challenges that could delay its development. These challenges can be categorized into economic, political, technical, and infrastructural. Economic and political barriers are of primary importance. One of the main economic barriers is the high cost of hydrogen production, storage, and transportation. For example, the cost of producing green hydrogen remains high due to the cost of electrolyzers and renewable energy sources. Despite the decline in prices, they are projected to become competitive with traditional hydrogen production methods only by 2030. This may reduce investor interest in financing hydrogen projects (*IEA, 2021*).

Political barriers can also significantly impact the development of international hydrogen trade. The absence of harmonized international standards and regulations governing the production and transportation of hydrogen creates obstacles to trade relations between countries. Countries may have different approaches to safety, environmental standards, and licensing, making it difficult to do business internationally. As a result, companies may avoid investing in projects due to concerns about legal risks. In addition, political changes can lead to instability in the financing of hydrogen projects. For example, changes in governments or political regimes may lead to canceling government programs to support the hydrogen economy's development. These risks make investments unprofitable.

Technical and infrastructure challenges are also very significant. Technical challenges related to hydrogen production, storage, and transportation also play an important role in the development of international trade. One of the main problems is the reliability and efficiency of existing technologies. Hydrogen storage systems that operate at high pressure or in liquid form require significant investment in development and testing. Many of these technologies are not yet ready for mass deployment, making it difficult to access hydrogen on the market (*IEA, 2021*). In addition, the infrastructure needed to transport hydrogen is still underdeveloped. Many countries lack appropriate pipelines or terminals for hydrogen storage and transportation, which can be a serious obstacle to

international trade. For example, negotiations are underway in Europe and North America to create hydrogen corridors, but their implementation will take time and significant investment. Additionally, safety technologies for hydrogen transportation have not yet reached the required level, which is a concern among investors and government agencies. Genuine leaks or accidents could significantly damage the image of the hydrogen economy, reducing confidence in the industry.

Taken together, all these barriers and challenges can slow down the development of international hydrogen trade. However, given the global trend toward renewable energy sources and reduced greenhouse gas emissions, it is important that governments and companies work together to overcome these challenges. Cooperation between countries and investors can help create a stable legal and economic environment for the development of the hydrogen economy, which in turn will strengthen international hydrogen trade.

Different regions of the world have unique strategies for the development of the hydrogen market (IEA, 2019). For example, Australia is actively developing the production of “green” hydrogen, using its abundant renewable energy resources, in particular solar and wind energy. The country's main strategy is to export hydrogen to countries needing alternative energy sources, such as Japan and South Korea. These countries are limited in domestic renewable energy production due to geography and high population density, so they are looking to import hydrogen as part of their energy strategies to reduce emissions and improve energy security. Australia is already in talks with these countries and actively invests in infrastructure for hydrogen production, liquefaction, and transportation. While Saudi Arabia, in particular through its large-scale NEOM project, is also making great strides in developing the hydrogen economy. The country is focusing on using its natural resources to create giant solar and wind farms that will be used to produce green hydrogen. Saudi Arabia's strategy is to reduce its dependence on oil and develop clean energy, which will help diversify its economy. This project has already attracted significant foreign investment, and Saudi Arabia plans to become a key supplier of hydrogen to Europe and Asia.

France plans to become a global leader in the production of clean hydrogen by 2030, investing €7 billion. The government's strategy includes three main areas: development of hydrogen production through electrolysis, decarbonization of heavy transport (including hydrogen trucks and zero-emission aircraft by 2035), and support for innovation and research in the field of hydrogen energy. Total and Engie are jointly building France's largest green hydrogen plant, which will produce 5 tons of hydrogen daily using solar energy (*Green hydrogen: a new step in the energy, 2024*).

An interesting strategy for using hydrogen for energy is the strategy of mixing hydrogen with natural gas. This approach, for example, is planned to be used by New Zealand (*Hydrogen blending: A step, 2022*). The decision is based on the fact that the gradual introduction of hydrogen to the private sector and industry would reduce the number of harmful emissions from domestic and industrial consumption. Hydrogen blending starts small. The first step is to inject small amounts of hydrogen into the existing natural gas network. Subsequently, the amount of hydrogen can be increased to about 20% by using the existing gas infrastructure to supply homes and businesses. Natural gas currently provides over 20% of New Zealand's primary energy supply.

To summarize, we can conclude that the trends in international hydrogen trade are well-established:

1. Unique strategies of countries for the development of the hydrogen market.
2. Innovations in hydrogen production technologies. It is worth noting that one of the most promising areas is the use of artificial intelligence.
3. The hydrogen economy will become a driving force for the economic development of countries. The hydrogen economy can have a significant impact on the labor market, creating new jobs in the areas of hydrogen production, transportation, and storage.

Innovations in hydrogen production technologies are a key factor in developing the global hydrogen economy and its trade. According to an article by ACS Publications (2021), one of the most promising areas is the use of artificial intelligence (AI) to optimize electrolysis processes, a

technology that allows the production of green hydrogen from water using electricity generated from renewable energy sources such as solar or wind power. AI is able to analyze huge amounts of data in real-time, optimizing the operation of electrolyzers to maximize efficiency and reduce energy losses (Pedro J. Megía Arturo J. Vizcaino José A. Calles Alicia Carrero, 2021). This is achieved by precisely controlling various process parameters such as temperature, pressure, reagent concentration, and electric current intensity. This reduces energy consumption for hydrogen production, which significantly reduces its cost. The article also notes that machine learning methods are used to predict the optimal operating conditions of electrolyzers based on historical data and their subsequent correction in real-time. This makes it possible to dynamically adapt hydrogen production processes to changing conditions, such as changes in the power of renewable energy sources (for example, when solar insolation or wind fluctuates). This flexibility ensures stable and cost-effective hydrogen production.

In the context of environmental policy, it is important to integrate hydrogen into sustainable development strategies. Hydrogen can contribute to the achievement of several Sustainable Development Goals, including providing access to clean energy (Goal 7), promoting economic growth (Goal 8), and reducing greenhouse gas emissions (Goal 13). It is emphasized that hydrogen can significantly reduce the impact of climate change, but this requires support from governments and international organizations such as the UN to harmonize the regulatory framework. Governments should provide funding for research and innovation in hydrogen technology. Investments are needed to build infrastructure that supports the production and use of hydrogen, such as electrolyzers, pipelines, and refueling stations (Flavio Pinheiro Martins, Sofia De-León Almaraz, Amilton Barbosa Botelho Junior, Catherine Azzaro-Pantel, Priti Parikh, 2024). Governments of different countries should cooperate to share experiences and technologies. International agreements and partnerships can facilitate the development of joint projects in the hydrogen economy.

It is considered that hydrogen is a key element for decarbonization. In order to dynamize international trade, it is necessary, first of all, to ensure the transportation of hydrogen over long distances:

- Pipelines. Existing gas pipelines can be repurposed or new ones built to transport hydrogen.
- Delivery. Hydrogen can be transported in liquid form by sea, enabling global trade.
- Road transportation. Hydrogen can be transported by road in specialized trucks, particularly for regional distribution.

Changes in environmental policy also set a number of trends:

- Carbon pricing. Carbon taxes and emissions trading schemes encourage the adoption of cleaner technologies such as hydrogen.
- Renewable energy mandates. Renewable energy policies create a favorable environment for hydrogen production from renewable electricity.
- Support for hydrogen infrastructure. Government subsidies and incentives promote the development of hydrogen production, storage, and distribution networks.

The importance of standardization in hydrogen trading should also be noted:

- Quality control. Standardization ensures consistent hydrogen quality, which is crucial for compatibility with different programs and infrastructures in different countries.
- Interoperability. Common standards allow for seamless integration of hydrogen infrastructure across regions and countries.
- Market development. Standardization builds market confidence and facilitates investment by providing clear guidelines and considering specific conditions.

The prospects for international hydrogen trade and the future introduction of hydrogen into the global economy will depend on factors that affect a country's ability to produce and export hydrogen, which is multifaceted and interdisciplinary, covering many areas. A country's hydrogen production may be limited by its oil resources, renewable energy potential, water resources, or land area. These factors are physical constraints that can be assessed for each country. On the other hand,

a country may face challenges in producing or exporting hydrogen due to its infrastructure, financial capacity, political climate, and government policies.

Conclusions. Thus, the international hydrogen energy market will be actively developed and supported, but it must overcome technical limitations to achieve significant success. Theoretical and empirical studies show that hydrogen has significant potential for sustainable development of global energy, but the main challenges remain high production costs and the need to invest in innovative technologies.

International hydrogen trade is becoming an important factor in energy and economic transformation. The development of the hydrogen economy requires comprehensive changes in trade and environmental policies, including standardization, infrastructure projects, and support for innovation. In addition, environmental policy should be focused on reducing greenhouse gas emissions through the use of green hydrogen.

Hydrogen energy has significant potential for development, and international hydrogen trade will grow with it. Demand for hydrogen is growing as it plays a key role in reducing greenhouse gas emissions, especially in heavy industry, transportation, and energy systems. However, this market's development faces several technical challenges, including the high cost of producing green hydrogen, technical difficulties with the infrastructure for its transportation and storage due to its low density, and the need to create large-scale infrastructure.

Despite these obstacles, the initiatives of developed countries such as France, New Zealand, the UAE, Japan, and South Korea, and the growing number of investments in innovative technologies, indicate ambitious plans for developing this sector. Therefore, the hydrogen market will face a difficult path involving technical and economic issues. However, thanks to the support of governments and private investors, the sector has a great chance to become a key player in the future energy landscape, playing an important role in the decarbonization of the global economy.

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TRADING DIGITAL TWIN AS AN INNOVATIVE TECHNOLOGY FOR ENSURING DIGITAL TRADE IN SUSTAINABLE DEVELOPMENT CONDITIONS

ТРЕЙДИНГОВИЙ ЦИФРОВИЙ ДВОЙНИК ЯК ІННОВАЦІЙНА ТЕХНОЛОГІЯ ЗАБЕЗПЕЧЕННЯ ЦИФРОВОЇ ТОРГІВЛІ В УМОВАХ СТАЛОГО РОЗВИТКУ

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Abstract. *The scientific work attempts to refine the concept of a digital twin. It is noted that the term "digital twin" is a general scientific term, and the possibility and method of applying digital twins are widely discussed across various fields, including economics, the oil and gas industry, education, and medicine, among others. Therefore, it can be applied in any sector. Within this study, the author proposes a definition specific to digital trade in global markets (as there is currently no universally accepted scientific definition). The scientific novelty of the proposed definition lies in the creation of new approaches to stimulate the development of digital trade in global markets. The use of this category in science directly aims to enhance economic research related to the digital economy in general, as well as the activities of enterprises in global markets. Such a digital entity (digital twin) cannot be considered an independent subject since it serves only as a tool through which a real person interacts in the conditions of digital trade on global markets. The place of the trading digital twin in digital trade in global markets is presented in this study through configuration modeling. A cognitive approach to applying digital tools and technologies to ensure the development of digital trade in global markets is built. The scientific novelty of the proposed approach lies in the application of a conceptual framework for logical-linguistic modeling of intelligent solutions as a breakthrough cognitive technology for developing digital trade in global markets. The approach will allow for the development of a risk-protected strategy for digital trade development in global markets by considering the constantly changing environment, decision-makers, and conflicts of interest based on semantic structures and logical-linguistic modeling.*

Key words: *Digitalization, cross-cutting technologies, sustainable development, integration processes.*

Анотація. *Наукова робота спрямована на уточнення поняття «цифровий двійник». Відзначається, що термін «цифровий двійник» є загальнонауковим і можливості його застосування активно обговорюються у різних галузях, таких як економіка, нафтогазова промисловість, освіта, медицина тощо. Таким чином, він може бути застосований у будь-якому секторі. У межах цього дослідження автор пропонує визначення, специфічне для цифрової торгівлі на глобальних ринках (оскільки на даний момент немає загальноприйнятого наукового визначення). Наукова новизна запропонованого визначення*

полягає у створенні нових підходів для стимулювання розвитку цифрової торгівлі на глобальних ринках. Використання цієї категорії в науці безпосередньо спрямоване на поглиблення економічних досліджень, пов'язаних із цифровою економікою в цілому, а також із діяльністю підприємств на глобальних ринках. Така цифрова сутність (цифровий двійник) не може вважатися самостійним суб'єктом, оскільки вона виступає лише інструментом, через який реальна особа взаємодіє у цифровій торгівлі на глобальних ринках. У дослідженні представлено місце трейдингового цифрового двійника в цифровій торгівлі на глобальних ринках за допомогою конфігураційного моделювання. Побудовано когнітивний підхід до використання цифрових інструментів і технологій для забезпечення розвитку цифрової торгівлі на глобальних ринках. Наукова новизна запропонованого підходу полягає у застосуванні концептуальної бази для логіко-лінгвістичного моделювання інтелектуальних рішень як проривної когнітивної технології для розвитку цифрової торгівлі на глобальних ринках. Цей підхід дозволить розробити стратегію розвитку цифрової торгівлі на глобальних ринках, захищену від ризиків, з урахуванням постійно змінного середовища, осіб, які приймають рішення, та конфліктів інтересів, на основі семантичних структур і логіко-лінгвістичного моделювання.

Ключові слова: цифровізація, наскрізні технології, сталий розвиток, інтеграційні процеси.

Introduction. Modern trade transformation processes have led to the emergence of digital trade. As a result, traditional trade processes have undergone reform, initially driven by the impact of Covid-19 and later by military actions currently unfolding in various parts of the world. It is worth noting that the influence of such global issues has positively impacted the development of digital trade. Digital trade has supported international economic relations through integration processes in the economy. This has led to the formation of new economic cooperation agreements, the expansion of free trade areas through digitalization (from logistics processes to payment terms), and changes in the competitive landscape due to businesses entering global markets.

Sustainable development goals are supported by digitalization processes worldwide. Digitalization serves as a tool for promoting sustainable development by reducing environmental risks, fostering international integration, decreasing inequality, developing digital literacy, and enhancing financial inclusion. The development of digital trade is driven by cross-cutting technologies, digital literacy, and international integrations.

The purpose of the article. The aim of the research is to form a new paradigm of the trading digital twin by applying digital tools and technologies to ensure the development of digital trade in global markets under sustainable development conditions.

Literature review. This study has focused heavily on analyzing the literature related to the theoretical foundation of the term "digital twin." Specifically, it references M. Grieves (*Grieves, M., 2016*), D. Essex (*Essex, D., 2022*), K. Shaw, J. Fruhlinger (*Shaw, K., 2022*), R. Stark, T. Damerou (*Stark, R., 2022*), S. Sapon (*Sapon, S., 2022*), O. Pupena (*Pupena, O., 2022*), and Z. Wang (*Wang, Z., 2018*). M. Grieves' work is fundamental to this research since the concept of "digital twin" was first introduced by this scholar. The study also connects the conditions for sustainable development with the cross-cutting technology of a trading digital twin, which was explored in A. Pawłowski's (*Pawłowski, A., 2021*) work.

However, despite the abundance of literature on the topic of digital twins, no works have been specifically devoted to the trading digital twin in digital trade. The foundation for this work was the monograph by I.O. Shevchenko (*Shevchenko, I., 2023*), which focuses on the harmonization of digital trade in global markets through the lens of international experience.

Main results of the research. To achieve the research aim, the author employed both general scientific and specific research methods. The literature analysis allowed the author to propose, for the first time, their own definition of the term "trading digital twin" by highlighting its most essential characteristics. Using the comparative method, the study established a logical connection between sustainable development and the development of digital trade in global markets through

the use of cross-cutting technologies. The cognitive approach was built using the methods of generalization, systematization, analysis, and synthesis.

Today, in the context of digitalization and adherence to sustainable development conditions, the global community faces many problems requiring immediate solutions: rising poverty, overcoming unemployment, and humanitarian crises, among others. However, recent trends have shown that some of these issues can be addressed through innovative and cross-cutting technologies and digital tools.

According to the author, to ensure the development of digital trade, more attention should be given to important issues such as the creation of cross-cutting technologies, ensuring digital sovereignty, and creating value chains through vertical integration between countries. The application of vertical integration technology and the introduction of transfer pricing mechanisms allows for more flexible value creation, providing significant advantages in procedures for entering global markets.

The methodological tools for ensuring the development of digital trade in global markets are also supported by cross-cutting technology management tools for the digital transformation of entities. For the proper development of digital trade in global markets and the digital transformation of entities, cross-cutting technologies based on the digital twin should be implemented. These technologies are instrumental algorithms and intelligent tools aimed at solving strategic problems through cognitive analysis of linguistic (intellectual) activity, logical-linguistic modeling of solutions, and visualization of cognitive scenarios in the dynamics of modern knowledge bases and their contextual development. This includes frame-based representation of necessary and sufficient knowledge for anticipating and resolving problematic situations in the functioning of a managed object.

In science, a virtual model of a real physical object is called a digital twin. The concept of the digital twin was introduced in 2002 by M. Grieves, a doctor in computer engineering from the University of Michigan, though the term itself was coined by Grieves only in 2011.

Table 1

Modern Definitions of the Term "Digital Twin"

Source	Definition	Essential Characteristic
1	2	3
M. Grieves (<i>Grieves, M., 2016</i>)	"...a set of virtual informational constructs that fully describe a potential or real physical manufactured product"	Set (aggregate) of virtual constructs
D. Essex (<i>Essex, D., 2022</i>)	"...a virtual representation of a real-world entity or process (a physical person in the real space; a digital twin in the software representation; and the data linking the first two elements)"	Virtual (digital) representation
K. Shaw, J. Fruhlinger (<i>Shaw, K., 2022</i>)	"...a digital representation of a physical object or system. The technology behind digital twins has expanded to encompass buildings, factories, and even cities, with some claiming that even people and processes can have digital twins, extending the concept even further."	
R. Stark, T. Damerau (<i>Stark, R., 2022</i>)	"...a digital representation of an active unique product (a real device, object, machine, service, or intangible asset) or a unique product-service system (a system consisting of a product and related service) that contains selected characteristics, properties, conditions, and behaviors through models, information, and data at one or even several phases of the lifecycle."	
S. Sapon	"...a virtual representation of a physical object (system) that	

(Sapon, S., 2022)	consists of the physical object (system) itself, its digital model, and the two-way informational connections between the physical object and the digital model of the object and/or its components, used for modeling, analysis, and optimization of the state and behavior of the physical object (system) in real-time throughout the entire lifecycle of the product (system).”	
O. Pupena (Pupena, O., 2022)	“...a formal digital representation of an asset, process, or system that captures the attributes and behavior of this object, suitable for communication, storage, interpretation, or processing in a specific context.”	
Z. Wang (Wang, Z., 2018)	“...refers to the processes and methods for describing and modeling the characteristics of behavior, formation processes, and performance of physical objects through digital technologies, and can also be referred to as digital twin technology.”	Process and method
M. Derkach (Derkach, M., 2023)	“...a comprehensive digital model of an environment, product, or system that uses real data to create simulations and forecasts without affecting the real counterpart. It is also referred to as the technology of creating virtual clones. It allows testing multiple hypotheses or products at once.”	Digital model
M. Shacklett (Shacklett, M., 2023)	“...a digital model of a physical object or process. Its goal is to help organizations identify bottlenecks and/or problems in the process or physical object before they occur. Thus, proactive (and preventive) measures can be taken.”	
Ye. Sulema (Sulema, Ye., 2020)	“...a model of a physical object or process (physical twin) that fully reflects its characteristics in dynamics over a specific period.”	

Thus, based on the above morphological analysis, we can conclude that most researchers present a "digital twin" as a digital model or digital representation. Researchers such as K. Shaw, J. Fruhlinger (Shaw, K., 2022), R. Stark, T. Damerou (Stark, R., 2022), O. Pupena (Pupena, O., 2022), M. Derkach (Derkach, M., 2023), M. Shacklett (Shacklett, M., 2023), Ye. Sulema (Sulema, Ye., 2020), D. Essex (Essex, D., 2022) and S. Sapon (Sapon, S., 2022) belong to this category. Z. Wang (Wang, Z., 2018), however, offers a slightly different interpretation by revealing the concept through the attribute of process/method, which is entirely understandable considering the initial purpose of this concept and its application areas.

Despite the varying terminology, all the definitions converge on one point: they refer to what enables a real individual to interact with the virtual space and how they perceive themselves within it. Therefore, we find it appropriate to further define the concept of a digital twin as a modeled virtual representation of the physical characteristics of objects and/or processes in dynamics over a certain period.

It is worth noting that the term "digital twin" is a general scientific term, and the possibility and method of applying digital twins are widely discussed across various human activities — in economics, the oil and gas industry, education, medicine, and other fields — making it applicable to any industry.

In this study, the author proposes a definition that would be unique to digital trade in global markets (as a universally accepted scientific definition currently does not exist). To address the methodological tools for developing digital trade in global markets, the author introduces the concept of a "trading digital twin" and presents its definition for the first time:

Trading Digital Twin – a digital representation of objects and processes (person, store, company, business processes, etc.) in virtual space, allowing the creation and implementation of

personalized and unique goods and services on behalf of a physical and/or legal entity through interaction with other participants in the trade process in global markets.

The scientific novelty of the proposed definition lies in the creation of new approaches to stimulate the development of digital trade in global markets. The use of this category in science is directly aimed at advancing economic research related to both the digital economy as a whole and the activities of enterprises in global markets. At the same time, it is important to emphasize that such a digital entity (digital twin) cannot be regarded as an independent subject, as it merely acts as a tool through which a real individual interacts in the context of digital trade in global markets. The place of the trading digital twin in digital trade in global markets is depicted in Figure 1.

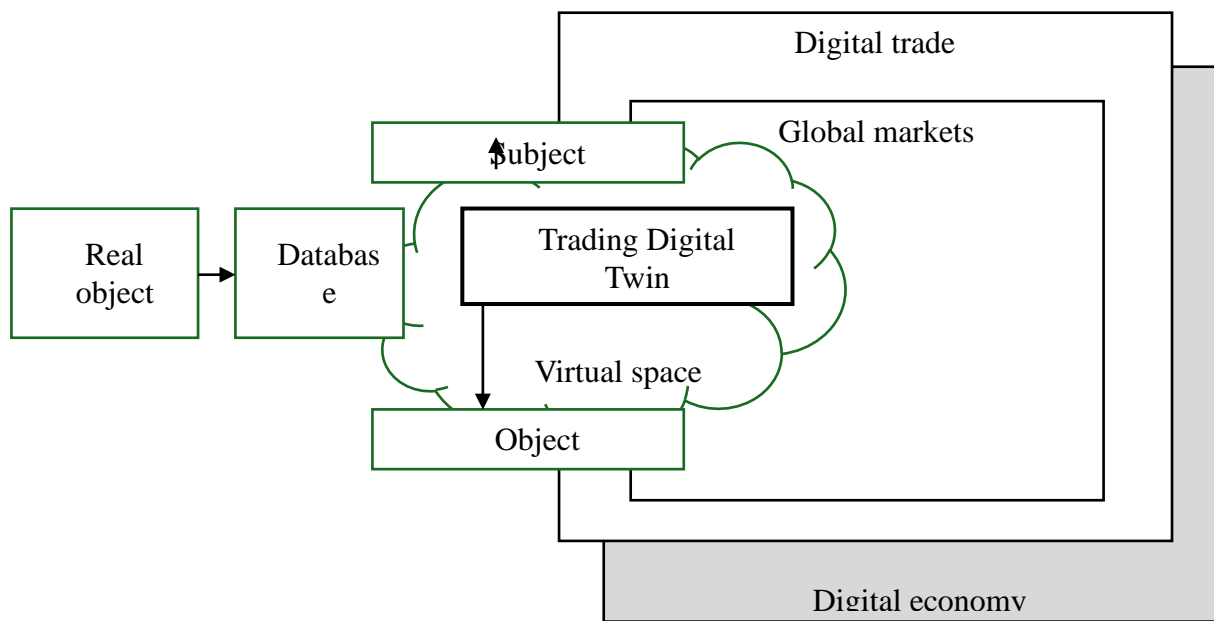


Figure 1. The Place of the Trading Digital Twin in Digital Trade in Global Markets.

Source: developed by the author

The figure represents the trading digital twin of a managed object as detailed modeling of the configurations of physical entities and dynamic modeling of changes in the product or service, process, and resources within the trading process. The digital twin of the managing subject represents individuals interacting in global markets to meet their needs by purchasing goods or services, following specific normative guidelines that have a digital prototype.

It is worth noting that not only the legal owner of the digital identity can use this digital tool, but also another person. This gives rise to numerous consequences that need to be considered both in theory and in practice when conducting further research.

Trading digital twins can ensure the process of digital trade in global markets and be used to improve the efficiency of trade processes. With this tool, it is possible to identify risks and threats of problematic situations within these processes, based on diagnostic and control procedures for their state. The use of trading digital twins in digital trade processes in global markets leads to decision-making that must meet cybersecurity requirements, ensuring confidentiality and anticipating threats inherent in the new technology.

Considering the role of digital twins and cross-cutting digital technologies in the context of the development of digital trade in global markets, the author suggests a visual representation (Figure 2).

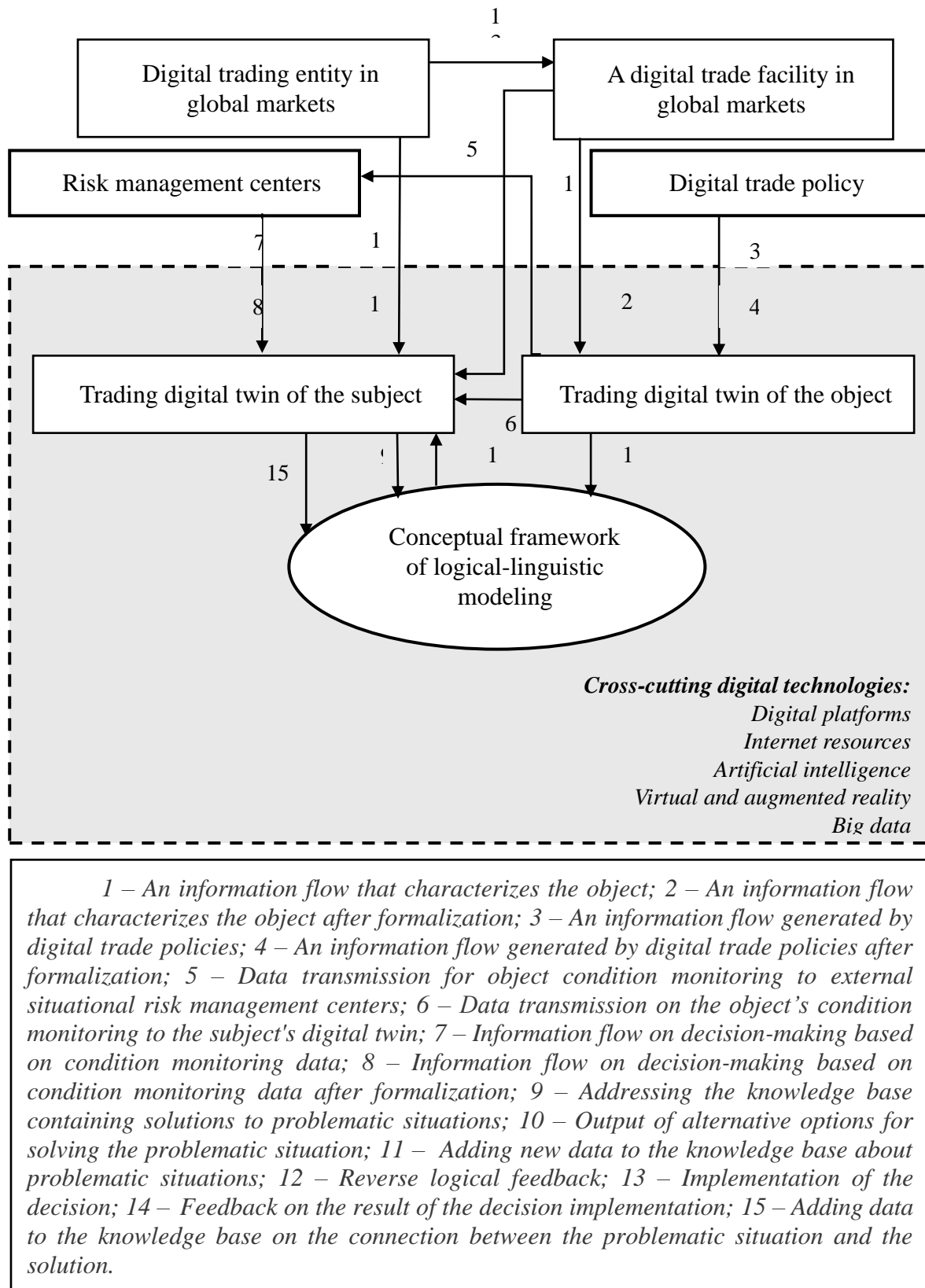


Figure 2. Cognitive Approach to the Application of Digital Tools and Technologies to Ensure the Development of Digital Trade in Global Markets

Source: constructed by the author

The scientific novelty of the proposed approach lies in the application of the conceptual framework of logical-linguistic modeling of intelligent solutions as a breakthrough cognitive

technology for the development of digital trade in global markets. This approach will allow for the construction of a risk-protected strategy for the development of digital trade in global markets, accounting for the ever-changing environment, decision-makers, and conflicts of interest based on semantic structures and logical-linguistic modeling.

When considering the key concepts characterizing the development of digital trade in global markets, it is crucial to define the strategy for developing digital trade in global markets as an integrated information-logical model of actions by the subject aimed at achieving development in the context of globalization. From a systems theory perspective, digital trade is a complex system consisting of functioning elements (resource complexes) and the relationships between them, integrated into an order management system, a risk management system based on situational centers, aimed at transforming the forms and properties of incoming resources, as well as selling goods and services.

Compared to traditional approaches that involve the creation of a physical prototype and real-life testing, the application of trading digital twins helps reduce the number of errors during design and can ensure the reduction of time, financial, and other resource costs. Trading digital twins also allow for the incorporation of characteristics of global competitiveness and high consumer demands into products and increase the level of customization.

To fully reveal the purpose of the research, the author proposes a visual representation of the relationship between digital trade and the trading digital twin in sustainable development conditions (Figure 3).

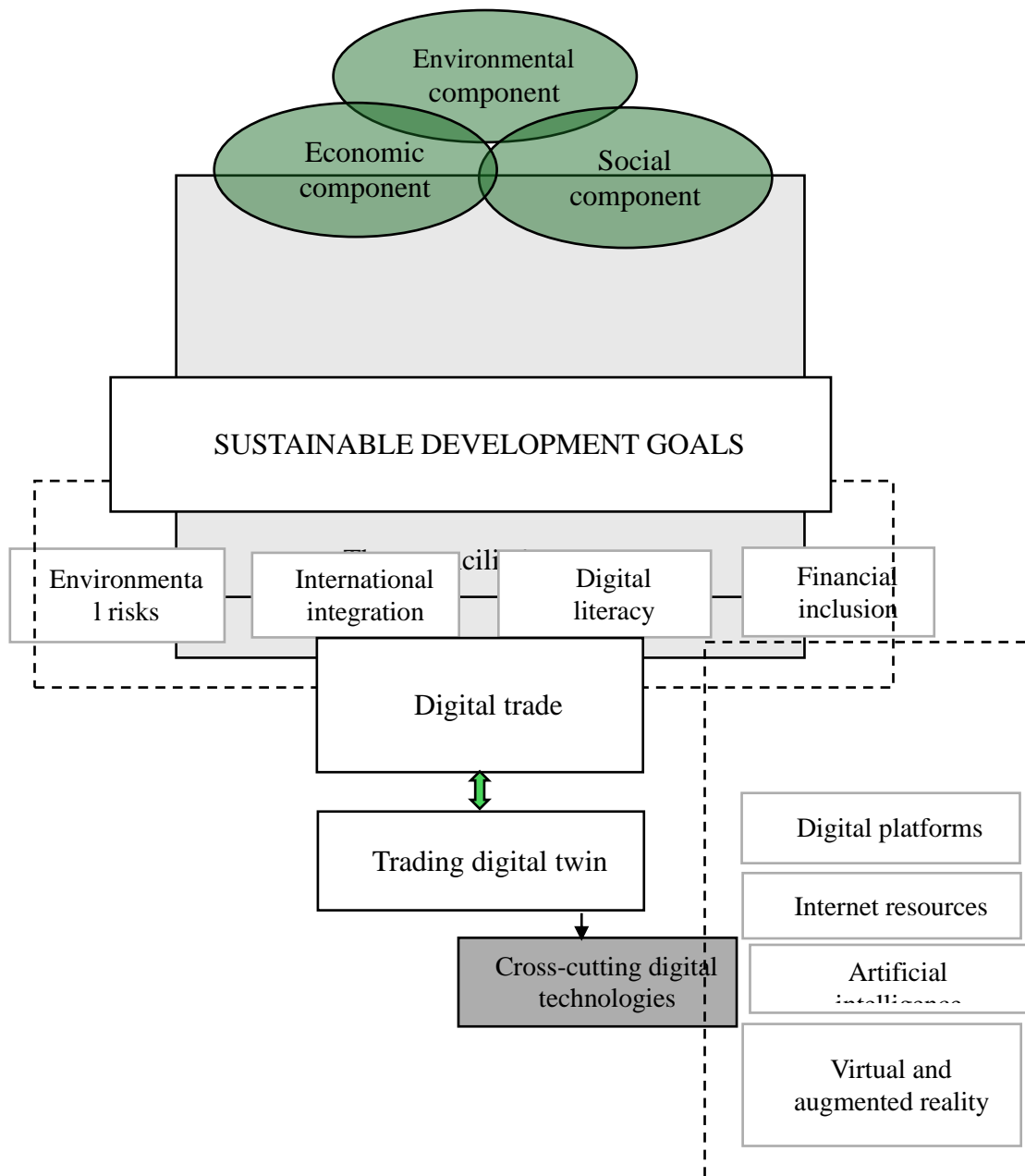


Figure 3. Relationship Between Digital Trade and the Trading Digital Twin in the Context of Sustainable Development. (Author’s Vision)

This figure emphasizes the connection between digital trade and sustainable development's three main pillars: the environmental component, the economic component, and the social component. Through international organizations and national governments, strategies for sustainable development and digital economy growth can be balanced. The development of the digital economy encourages the advancement of digital trade by reducing the digital divide between different regions. Investments in ICT development in remote areas and the legislative regulation of digital business activities prevent market monopolization and strengthen the protection of consumer rights and the interests of small and medium-sized enterprises.

Conclusions. This process is of particular importance when establishing the virtualization of specialized systems used in the modeling and testing of developing processes, as well as for real-time status monitoring; the development of standards for digital documentation; standards for digital trade; standards for the use of artificial intelligence; distributed data storage system standards

and blockchain technology; and standards for digital twins. The use of digital technologies ensures environmental protection and the reduction of digital waste. Innovative digital technologies aim to increase potential for environmental improvement and reduce industrial emissions.

The use of big data, cloud computing, digital twin technologies, and artificial intelligence transforms businesses considering sustainable development. This leads to independent environmental monitoring, evaluation, and analysis of ecosystems (environmental changes, pollution, etc.).

Therefore, the industrial business, in the context of digitalization, is transforming toward sustainable production. The development of digitalization must consider the consequences of climate change, not only from the perspective of diseases and human lives but also from the significant economic damage that can act as a destabilizing force affecting the economic growth of countries and hindering sustainable development.

Digital economy is a critical driver of economic development, and the transformation of traditional trade into digital trade has become a global consensus. However, according to the concept of sustainable development, digital trade has both positive and negative effects on the social and environmental components.

Future research directions should include the examination of "digital inequality" and the use of digital technologies for environmental protection, as well as the development of strategies for the sustainable development of the digital economy in general and digital trade in particular.

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