CORPORATE FINANCE, INVESTMENT INSTRUMENTS AND DIGITAL TRANSFORMATION AS DRIVERS OF ECONOMIC SECURITY AND POST-WAR RECOVERY

Monograph

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The research is aimed at substantiating new theoretical and methodological approaches to the analysis of corporate finance evolution, investment instruments, and digital transformation as systemic drivers of economic security and post-war recovery under conditions of armed conflict and structural economic transformation. The study examines the historical genesis of joint-stock entrepreneurship, the financial stability of the banking system under liquidity risk conditions, and the role of green finance, financial leasing, mortgage lending, foreign direct investment, and crowdfunding as components of a diversified ecosystem of investment financing mechanisms for Ukraine's post-war reconstruction. It is proved that the effective deployment of these instruments requires the simultaneous development of an appropriate regulatory and institutional framework and the integration of Ukrainian financial markets into the European financial space. The research further demonstrates that digital transformation — encompassing artificial intelligence, blockchain technology, and platform-based financial services — is fundamentally reshaping the architecture of corporate governance, investment decision-making, and financial intermediation. Empirical evidence confirms the statistically significant positive impact of AI adoption and automation on financial efficiency and enterprise competitiveness. The practical significance of the findings lies in their direct applicability to the formulation of financial policy, corporate governance reform, and investment strategy in the context of Ukraine's post-war economic reconstruction and European integration.

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INTRODUCTION

In the context of increasing geopolitical turbulence, accelerating technological change, and profound structural transformations of the global economy, the issues of economic security and innovation have acquired critical importance for national development strategies. Countries across the world are simultaneously navigating multiple interconnected challenges from fiscal instability and post-war recovery to the imperatives of digitalization, corporate governance reform, and the search for alternative sources of investment financing. In such conditions, the capacity of national economies, financial institutions, and business structures to adapt, stabilize, and innovate becomes a decisive determinant of their long-term sustainability and competitiveness.

This collective monograph explores the multidimensional relationship between economic security and innovation through the lens of structural transformation, with particular emphasis on the Ukrainian context - a country that has been confronted with the most severe test of its institutional resilience since independence. The full-scale military aggression launched by Russia in February 2022 has not only inflicted unprecedented physical and economic destruction but has also catalyzed profound transformations in the structure of Ukraine's financial system, corporate sector, investment environment, and civil society. It is precisely in this context that the theoretical and applied dimensions of the monograph's research agenda acquire their fullest significance.

The structure of the monograph is organized around four thematic sections, each addressing a distinct but interrelated domain of economic security and innovation research. The first section examines the evolution of corporate finance and business models in the digital economy, tracing the historical genesis of joint-stock entrepreneurship from its origins in sixteenth-century European trading companies through to the contemporary era of

digitalization, artificial intelligence, and platform-based business models. Drawing on empirical evidence from a survey of 135 small and medium-sized enterprises in Bulgaria, this section demonstrates the statistically significant positive impact of AI adoption and process automation on financial performance, managerial efficiency, and enterprise competitiveness. It further analyzes the theoretical foundations of the insurance business under conditions of global transformation and digitalization, situating Ukraine's underdeveloped insurance market within the broader context of international regulatory standards and post-war recovery imperatives.

The second section addresses the financial stability of the banking system under liquidity risk conditions, providing a comprehensive theoretical and practical analysis of liquidity management in commercial banks. Against the backdrop of Ukraine's ongoing martial law and macroeconomic instability, this section examines the classification of liquidity types, the instruments and mechanisms of liquidity regulation, and the international experience of central bank supervision, thereby contributing to a deeper understanding of the preconditions for banking sector resilience under crisis conditions.

The third section investigates investment and innovation security as factors of economic growth, with a particular focus on three strategically important financing instruments for Ukraine's post-war recovery. Green finance instruments are analyzed in the context of food security and European integration, with a proposed methodological framework for assessing the relationship between green finance intensity and food security resilience at the regional level. The development of financial leasing in Ukraine is examined through the lens of its structural transformation under martial law, including the institutional changes introduced by the National Bank of Ukraine and the gradual integration of ESG principles into non-

banking financial sector regulation. Mortgage lending is considered as a key instrument for enhancing investment attractiveness, with strategic directions for its development drawing on international best practices from the European Union, the United States, and Scandinavian countries.

The fourth section examines the role of digital instruments in supply chain competitiveness and banking sector development under martial law conditions. A regression-based conceptual framework is proposed for assessing the impact of latent motivating and constraining factors on strategic decision-making regarding blockchain technology adoption in corporate supply chains, with empirical evidence from Bulgarian enterprises. The dynamics of the mortgage lending market under martial law are analyzed in detail for the period 2020–2025, with particular attention to the transformative role of the state-supported "eOselia" program and the strategic development of JSC CB "PrivatBank's" mortgage portfolio.

The monograph also incorporates analysis of crowdfunding as an alternative instrument of investment financing and post-war economic recovery of Ukraine - a dimension of growing practical significance given the demonstrated capacity of platforms such as UNITED24, dobro.ua, and the Serhiy Prytula Foundation to mobilize hundreds of millions of hryvnias from domestic and international donors for military support, humanitarian assistance, and infrastructure reconstruction. The analysis encompasses the full typology of crowdfunding models, their specific application potential in the Ukrainian context, and both the macroeconomic and microeconomic advantages and risks associated with their deployment.

The relevance of this monograph lies in its interdisciplinary perspective and its direct application to the economic realities confronting Ukraine and comparable transitional economies. The authors aim not only to identify and

assess the existing challenges but also to propose theoretically grounded and practically applicable recommendations for strengthening economic resilience, fostering innovation, and enhancing institutional security at both macroeconomic and microeconomic levels. This volume is intended for researchers, policy analysts, economists, financial practitioners, and decision-makers engaged in post-crisis governance, economic reform, corporate transformation, and innovation policy. Its insights contribute to the advancement of academic discourse while simultaneously serving as a knowledge base for practical economic strategy in times of transformation.

SECTION 1.
HISTORICAL AND CONTEMPORARY DIMENSIONS OF CORPORATE FINANCE AND BUSINESS MODEL EVOLUTION IN THE DIGITAL ECONOMY

1.1. HISTORICAL DRIVERS OF CORPORATE FINANCE DEVELOPMENT

In the modern conditions of market economy development, corporate finance management is one of the key components of the corporate governance system and an important tool for ensuring the effective functioning of business entities. Its importance goes far beyond the purely financial activities of individual corporations, since the quality of management decisions in the field of formation, distribution and use of financial resources directly affects the level of capitalization of the economy, investment activity, competitiveness of enterprises, the dynamics of financial market development and the overall effectiveness of the state's economic system. At the same time, effective corporate finance management creates the prerequisites for the formation of high standards of corporate culture, increasing the transparency of economic activity, strengthening trust between participants in economic relations and ensuring an adequate level of protection of investors' interests.

In a broad scientific sense, the corporate finance management system is an important indicator of the level of maturity of market institutions and the corporate sector of the economy. It characterizes the quality of the economic environment, the degree of development of mechanisms for attracting investment capital, the effectiveness of the functioning of the stock market and the ability of business entities to

integrate into global financial processes[1]. That is why the level of development of corporate financial management is often considered as an indicator of the investment attractiveness of the country, the culture of economic relations and the effectiveness of institutional support for entrepreneurial activity[2].

The study of corporate finance acquires particular relevance in the context of analyzing the evolution of the joint-stock form of entrepreneurship, which is the organizational basis for the functioning of most modern corporations. In Ukraine, the active spread of joint-stock companies began in the early 1990s in the process of transforming the administrative-command economy and forming market principles of management. An important factor in this process was the corporatization of state-owned enterprises, which provided for the transformation of state ownership into share capital and the creation of new mechanisms for managing corporate assets. However, joint-stock entrepreneurship is not a fundamentally new phenomenon for the domestic economic system. Its historical roots date back to the second half of the 19th - early 20th centuries, when joint-stock companies in industry, transport, banking and trade actively developed on Ukrainian lands that were part of various state formations.[3]

The interruption of the evolutionary development of joint-stock relations was caused by the establishment of the Soviet model of management, which was based on the dominance of state ownership and centralized management of economic processes. Only with the acquisition of independence by Ukraine and the transition to a market economy was the

[1] Deeva N. E. Historical aspects of the theory and practice of corporate governance. Effective Economy. 2015. No. 9.

[2] Zymovets V. V., Tereshchenko O. O. Corporate Finance as a Dominant of Financial Science. Finance of Ukraine. 2015. No. 9. Pp. 78–95.

[3]Tarash L.I. Economic content and mechanism of realization of joint-stock ownership. Economic sciences. Ser.: Economic theory and economic history. 2008. Issue 5, part 2. URL http://www.nbuv.gov.ua/portal/soc_gum/en_etei/2008_5_2/zbirnuk_ETEI_08_2_217.pdf

restoration of the institute of joint-stock entrepreneurship as an important component of the national economic system. In this regard, the study of the historical prerequisites for the formation of joint-stock companies, the identification of socio-economic factors that contributed to their emergence and development, as well as the analysis of the specifics of the functioning of corporate structures at different stages of the economic evolution of Ukraine, acquires special importance.

Scientific understanding of the processes of the emergence and development of joint-stock entrepreneurship requires the use of a comprehensive methodological approach, in which the principle of the unity of the historical and logical plays an important role. The use of this principle allows not only to trace the sequence of the emergence and transformation of joint-stock forms of management in specific historical conditions, but also to identify the internal patterns of their development, cause-and-effect relationships and trends in further evolution[4].

Within the framework of this approach, historical analysis provides a reconstruction of the real process of the formation of corporate relations in the time dimension, while the logical method allows you to generalize the accumulated experience and recreate the essential characteristics of the phenomenon under study at the level of theoretical generalizations. The relationship between the historical and the logical is manifested through the ratio of the real and the abstract, the concrete-historical process and its theoretical interpretation, as well as through the unity of the formed economic institution and the process of its formation. It is this approach that creates methodological prerequisites for a deep understanding of the genesis of corporate finance, the features of the development of

[4] Corporate governance in joint-stock companies and limited liability companies: monograph. V. V. Vasilyeva, N. D. Vintonyak, O. I. Zozulyak and others. ; general editor. L. V. Sishchuk. Ivano-Frankivsk: National Academy of Sciences of Ukraine. 2025. 226 p.

joint-stock entrepreneurship and the patterns of the formation of the modern corporate governance system in Ukraine.

A joint-stock company is considered one of the most complex and effective organizational and legal forms of capital concentration, which ensures the unification of financial resources of a large number of investors into a single corporate capital. Its economic essence lies in the transformation of individual contributions of participants into a collective investment resource through the issuance and distribution of shares, which creates opportunities for large-scale capital attraction and implementation of large-scale business projects. It is the joint-stock form of business that has become an important institutional mechanism for the development of a market economy, contributing to the concentration of production, the expansion of investment activities and the formation of a modern corporate governance system.

The evolution of joint-stock companies is inextricably linked with the formation and development of the securities market, which is a key element in the mobilization and redistribution of financial resources between economic entities.[5] With the growth of the scale of joint-stock companies, the role of the stock market and exchange infrastructure has naturally increased as mechanisms for ensuring the liquidity of corporate capital and organizing the circulation of financial instruments. In scientific literature, the beginning of the functioning of the organized stock market is traditionally associated with the establishment of the Amsterdam Stock Exchange[6] in 1602, which became the first permanently operating exchange institution for trading in securities. However, the prerequisites for the emergence of the stock market were formed much earlier.

[5] Suprun N.A. (2009), "Features of formation of elements of corporate governance in the domestic business practices (20 years XX century)". Istoriia nar hosp-va ta ekon. dumky Ukrainy. No. 42, pp. 74-88.

[6] Petram, L. (2014). *The World's First Stock Exchange* (Translated by L. Waters). Columbia University Press.

Historical sources indicate that already in the 14th century, in the leading trade and financial centers of Europe — Venice, Florence and Genoa — transactions with state debt obligations, bank receipts and other financial documents were actively carried out, which served as prototypes of modern securities.[7] The development of international trade, banking and credit relations created the economic basis for the formation of specialized mechanisms for the circulation of financial assets, which later transformed into a full-fledged stock market.

The origins of joint-stock entrepreneurship also date back to the late Middle Ages. Already in the 15th century, the first forms of the so-called "capital companies" appeared in the economic practice of European states, which involved combining the financial resources of several individuals to carry out commercial activities. However, joint-stock companies closest to the modern understanding were formed only in the 16th–17th centuries under the influence of the intensification of international trade, great geographical discoveries and the need to finance large-scale trading expeditions[8].

Among the first known joint-stock companies, a special place is occupied by English trading corporations, in particular the Anglo-Hamburg Trading Company and the Moscow Company, founded in the middle of the 16th century. In the future, the process of development of joint-stock entrepreneurship was accompanied by the creation of new corporate entities, among which the Spanish Company, the Baltic Company and the Levantine Company, which specialized in organizing international trade, played an important role. The further development of the corporate sector is associated with the activities of the famous East India Companies of England

[7] Braudel, F. (1992). *Civilization and Capitalism, 15th-18th Century, Vol. III: The Perspective of the World*. University of California Press.

[8] MacDiarmid, C. (2018). *The Origins of Public Debt and Financial Markets in Medieval Italy: Venice, Florence, and Genoa*. Oxford University Press.

and the Netherlands, which became the first transnational corporations and had a significant impact on the formation of the world trade system. Similar processes took place in France, where during the 17th century large colonial trading companies were created, whose activities contributed to the expansion of international economic ties and the development of financial institutions.

The organizational prerequisite for the emergence of joint-stock companies was the evolution of traditional trading companies, which were formed as associations of individuals for joint business activities. The original meaning of the concept of "company" reflected the idea of collective participation in economic activity, based on the commonality of resources, labor, risks and results of management.[9] Such associations were in many ways reminiscent of medieval guilds and merchant unions, which ensured the coordination of commercial activities and the protection of the economic interests of their members. An important characteristic of early forms of companies was the unlimited property liability of participants for the results of joint activities. This model corresponded to the peculiarities of economic relations of that time and was based on a high level of personal trust between partners. In the process of further development of business structures, there was a gradual institutionalization of corporate relations, which was accompanied by the formation of the principle of legal separation of the company from its participants, the emergence of the category of corporate legal personality and the limitation of investors' liability to the amount of their contribution to the authorized capital.

Thus, the formation of joint-stock companies was the result of a long evolution of economic, legal and financial

[9] Berman, H. J. Law and Revolution: The Formation of the Western Legal Tradition. Cambridge : Harvard University Press, 1983. 557 p.

institutions associated with the development of trade, credit relations and capital markets. It was the joint-stock form of entrepreneurship that created the necessary prerequisites for the concentration of significant financial resources, the development of the stock market and the formation of a modern model of corporate governance, which remains the fundamental basis for the functioning of the global economy today.

The defining stage in the evolution of corporate forms of business was the emergence in the 16th–17th centuries of a special type of business associations, known in English economic practice as Joint Stock Companies[10]. They were the direct predecessors of modern joint-stock companies and initiated a new mechanism for accumulating financial resources by attracting a wide range of investors. Unlike previous forms of business associations, such companies provided the opportunity to form significant amounts of capital, necessary for financing large-scale commercial, industrial and colonial projects, the implementation of which was inaccessible to individual entrepreneurs.

The economic essence of this organizational form consisted in the division of the company's capital into separate shares belonging to different investors[11]. By acquiring a share in the company's capital, the investor received not only the right to participate in the distribution of profits, but also the status of a co-owner of the economic entity. Such a mechanism allowed to significantly expand the circle of potential participants in entrepreneurial activity and created conditions for the concentration of financial resources without the need for direct participation of each investor in the management of the enterprise.

[10] Scott, W. R. (2013). *The Constitution and Finance of English, Scottish and Irish Joint-Stock Companies to 1720* (Vol. 1-3). Cambridge University Press. (Original work published 1912).

[11] Economic theory: textbook / V.D. Lagutin, Yu.M. Umantsiv, T.A. Shcherbakova and others; ed. by V.D. Lagutin. Kyiv: Kyiv National University of Trade and Economics, 2017. 608 p.

An important factor in the spread of joint-stock companies was the gradual establishment of the principle of limited liability of investors. Limiting the risk to the size of the invested capital significantly increased the attractiveness of investment and contributed to the attraction of new participants to corporate projects. At the same time, the development of trade relations, banking and civil legal document flow created the prerequisites for the formation of mechanisms for the transfer of ownership rights to corporate shares. As a result, the share of participation in the company gradually transformed into an independent object of civil circulation[12].

The further development of these processes contributed to the emergence of the practice of buying and selling corporate shares between investors. The legal basis of such operations was the institution of cession, which ensured the transfer of property rights from one owner to another. Over time, such transactions became systematic and created the prerequisites for the formation of an organized market for corporate rights. In fact, it was at this stage that the foundations of the future stock market were laid, where the object of circulation was a new economic asset - a complex of property and corporate rights associated with the ownership of a share of the capital of the enterprise. Later, such rights received a standardized form and were embodied in a special financial instrument - shares[13].

At the same time, the evolution of corporate structures in Western Europe was uneven. During the 14th–18th centuries, the form of business partnerships, based on the principle of unlimited liability of participants, became dominant in England[14]. It gradually replaced earlier forms of partnership relations, which arose on the basis of the medieval command and

[12] Zlupko S.M. History of Economic Theory. Kyiv: Znannya, 2005. 719 p.

[13] Locke John. Two Treatises on Government. Trans. from English by Pavel Sodomor. Kyiv: Nash Format. 2020. 312 p.

[14] Scott, W. R. (2013). *The Constitution and Finance of English, Scottish and Irish Joint-Stock Companies to 1720* (Vol. 1). Cambridge University Press.

provided for the limitation of liability of individual investors. Similar trends were observed in the German lands, where most trade associations also operated on the basis of full liability of participants for the results of economic activity.

The prevalence of unlimited liability partnerships was explained by the specifics of the economic environment of that time. In conditions of insufficient development of legal institutions and a high level of uncertainty, the personal property liability of participants served as an important mechanism for ensuring trust between partners. Such forms of association made it possible to reduce the risks of unscrupulous behavior, limit manifestations of economic opportunism and increase the level of guarantees for the fulfillment of contractual obligations. Thus, the institution of unlimited liability served as a kind of mechanism for self-regulation of economic relations during the period of the formation of market institutions[15].

At the beginning of the 17th century, the development of international trade and corporate entrepreneurship contributed to the formation of the first elements of the modern stock market. A significant number of new instruments appeared in financial circulation, among which debt obligations of states and municipalities prevailed, as well as securities of large trading corporations. A special place among them was occupied by the shares of the Dutch East India Company, which became one of the first examples of large-scale corporate financing through capital market mechanisms[16].

The further development of joint-stock entrepreneurship was associated with the active participation of the state in the processes of mobilization of financial resources. A prime

[15] Braudel F. Material civilization, economy and capitalism, 15th–18th centuries: in 3 vols. / Fernand Braudel; trans. from French. Kyiv: Osnovy, 1997. Vol. 2: Games of exchange. pp. 412–440.

[16] Fundamentals of Economic Theory / Zakharchenko O., Baranovskaya M., Kozak Yu., Kurmyzhenko V., etc. Kyiv: Center for Educational Literature, 2019. 264 p.

example was the South Ocean Company[17], founded in 1711, which received exclusive trading privileges from the British government in exchange for financing a significant part of the state debt by placing its own shares among investors. This practice demonstrated the gradual convergence of the interests of the state and the corporate sector, which became an important feature of the development of financial systems of the early modern era.

At the same time, the initial stage of the formation of share capital was accompanied by numerous dysfunctions and crisis phenomena. The imperfection of legal regulation, the lack of proper control over the issue of securities and the insufficient level of transparency of corporate activities created favorable conditions for financial speculation. The mass establishment of companies, which often did not have sufficient economic basis for the implementation of the declared activities, caused the emergence of the so-called "stock bubbles" and large-scale bankruptcies[18]. These processes demonstrated the need to form a system of state supervision of the stock market, improve corporate legislation and introduce mechanisms for protecting investor rights, which later became integral components of the modern model of the functioning of the capital market[19].

The formation of the legal principles of the functioning of joint-stock companies on Ukrainian lands took place in the context of pan-European processes of the development of market institutions and corporate forms of management. The formation of the regulatory environment necessary for the operation of joint-stock companies began at the end of the 18th century and gradually became more systematic over the

[17] Dickson, P. G. M. (1993). *The Financial Revolution in England: A Study in the Development of Public Credit, 1688–1756*. Macmillan. (Original work published 1967).

[18] Mackay, C. (1841). *Memoirs of Extraordinary Popular Delusions and the Madness of Crowds*. Richard Bentley.

[19] Ferguson N. The Evolution of Money. A Financial History of the World. Kyiv: Nash Format, 2017. 382 p.

following decades. The growth of the scale of entrepreneurial activity, the complication of economic relations and the need to concentrate significant financial resources necessitated the legislative regulation of the activities of joint-stock companies as special business entities.

An important stage in the institutionalization of joint-stock entrepreneurship was the adoption in December 1836 of the first comprehensive regulatory act in Europe that regulated the activities of joint-stock companies, the "Regulations on Joint-Stock Companies", approved by Emperor Nicholas I. This document laid the foundations for the legal regulation of corporate relations, determined the procedure for creating joint-stock companies, the features of their capital formation, the management system and mechanisms for protecting shareholders' rights. The adoption of the aforementioned act became an important prerequisite for the further development of the joint-stock form of entrepreneurship and contributed to the spread of corporate mechanisms for attracting investment resources. At the same time, the practice of joint-stock companies demonstrated a certain imperfection of general legislative regulation. In the process of developing the corporate sector, the charters of individual companies actually acquired the meaning of local regulatory acts that detailed or even partially replaced the current legislative provisions. As a result, a peculiar system of combining general corporate legislation and individual statutory regulation was formed, which largely determined the specifics of the functioning of joint-stock companies throughout the 19th century.

According to legislative norms, a joint-stock company was considered as an association of individuals and legal entities that formed common capital by making certain monetary or property contributions. At the same time, the liability of participants was limited to the size of their shares, which was an important step in the development of the principle of limited liability and

increasing the investment attractiveness of the joint-stock form of entrepreneurship. This approach created favorable conditions for attracting a wide range of investors and contributed to the mobilization of significant financial resources for the implementation of large-scale economic projects.

The corporate governance system of joint-stock companies provided for the presence of several interconnected management and control bodies. The highest body was the general meeting of shareholders, which was responsible for making key decisions regarding the company's activities. Executive functions were entrusted to the board, while control over financial and economic activities was carried out by the audit committee. Such a management structure became one of the first examples of the distribution of management and control functions in the corporate sector.

Of particular importance was the consolidation of the legal status of the shareholder as a participant in corporate relations. Shareholders received the right to participate in general meetings, be elected to the company's governing bodies, familiarize themselves with financial documentation and control the reliability of accounting reports. At the same time, the exercise of the right to vote depended on the number of shares owned by the shareholder and the requirements specified in the charter for the minimum share package for participation in voting. This approach reflected the corporate governance model typical of that time, in which the degree of influence on the company's activities directly depended on the amount of invested capital.

An important achievement of corporate legislation was the consolidation of mechanisms for judicial protection of shareholders' rights. Company members were given the opportunity to apply to the courts with demands for the payment of due dividends, to appeal decisions of the general meeting, and to initiate the procedure for declaring the company insolvent.

The presence of such legal instruments contributed to an increase in the level of investor protection and the formation of trust in the joint-stock form of entrepreneurship.

The second half of the 19th century was a period of rapid expansion of joint-stock companies in most European countries. The growth in the number of corporate entities was directly related to the processes of industrialization, concentration of production and expansion of the scale of entrepreneurial activity. The joint-stock form of business gradually turned into the leading mechanism for mobilizing investment resources necessary for the development of large-scale industry, transport infrastructure, the banking system and other capital-intensive sectors of the economy.

In Ukrainian lands, the development of joint-stock entrepreneurship took place under the influence of large-scale structural changes associated with the completion of the industrial revolution in the 70s–80s of the 19th century. The mechanization of production, the expansion of the transport network, the development of the extractive industry and the growth of the domestic market created the necessary economic prerequisites for the active attraction of investment capital. It was during this period that the formation of modern sectors of the Ukrainian economy took place, which required significant financial resources for modernization and further development.

A favorable factor for the development of the joint-stock sector was also the accumulation of significant amounts of free capital in Western European countries at the end of the 19th century. Economic stagnation in certain industrial sectors of developed European countries stimulated the search for new investment directions. Ukrainian lands, which had significant natural resources, fertile soils, powerful raw material potential and relatively cheap labor, became one of the most attractive objects for foreign capital.

In these conditions, the joint-stock form of entrepreneurship became the main mechanism for attracting investment to the industrial sector of the economy. The first joint-stock companies in Ukraine appeared in the 1870s, but the process of corporatization gained real momentum during the 1890s. Further development of the corporate sector continued even in the conditions of the economic crisis of 1900–1903, and during the period of industrial boom of 1910–1913, joint-stock companies became the leading organizational form of functioning of big business. Thus, the development of legal regulation of joint-stock companies and the spread of joint-stock entrepreneurship in Ukraine in the late 19th and early 20th centuries became important factors in the formation of the national corporate sector. It was joint-stock companies that ensured the concentration of significant investment resources, contributed to the modernization of industrial production, the activation of the financial market and the integration of the Ukrainian economy into the international economic space, laying the foundation for the further development of corporate finance and the capital market.

The industrial revolution of the second half of the 19th century became one of the key factors in the transformation of the economic environment and significantly influenced the development of economic thought in Ukraine. Large-scale structural changes associated with the mechanization of production, the acceleration of industrialization processes and the formation of market institutions led to the expansion of the subject field of economic research. If earlier the attention of scientists was focused mainly on classical issues of political economy, then in the new conditions the problems of the formation of the national market, the development of corporate forms of management, the concentration of production and capital, the emergence of monopolistic associations, the formation of financial capital, as well as the international

movement of investment resources have acquired special importance.

During this period, joint-stock entrepreneurship gradually became one of the central objects of economic analysis. The development of large joint-stock companies, their influence on the structure of the national economy and their role in the processes of industrialization aroused considerable scientific interest among representatives of the Ukrainian economic school. Researchers sought not only to explain the economic nature of new corporate entities, but also to determine their place in the system of social production and to assess the long-term consequences of the spread of joint-stock ownership for economic development. A significant contribution to the study of these processes was made by the outstanding Ukrainian economist Mykhailo Tugan-Baranovsky, who considered the concentration of capital as one of the most characteristic trends in the development of industrial society at the end of the 19th century. The scientist emphasized that the economic progress of the leading capitalist states was accompanied by the rapid growth of various forms of business associations - from temporary agreements between individual entrepreneurs to coordinate economic activities to complex corporate structures that united numerous enterprises under a single management system. Such processes indicated qualitative changes in the organization of production, reflecting the tendency towards the centralization of capital and the formation of large economic complexes.

At the same time, Ukrainian economic thought was not limited only to the statement of the processes of concentration of production. Considerable attention was paid to the study of the contradictory nature of the joint-stock form of management. In contrast to the Marxist concept, which considered joint-stock companies mainly as an instrument of concentration of economic power in the hands of big capital, a number of

Ukrainian economists drew attention to another aspect of this phenomenon. They emphasized that the spread of share ownership simultaneously creates mechanisms for the decentralization of property rights by attracting a wide range of small and medium-sized investors to participate in corporate capital.

The practice of joint-stock companies has shown that the division of capital into shares allows to significantly expand the circle of owners of the enterprise, providing the opportunity to participate in the appropriation of income from economic activity for various social groups. In this context, the joint-stock form of entrepreneurship was considered not only as a tool for concentrating financial resources, but also as a mechanism for democratizing economic relations through the spread of corporate ownership among the population.

A significant place in scientific research of the second half of the 19th and early 20th centuries was occupied by the issues of the formation and development of domestic joint-stock companies. The subject of analysis was the economic and legal nature of joint-stock companies, the peculiarities of the functioning of joint-stock ownership, the patterns of development of the corporate sector, as well as its relationship with the processes of concentration of production, market monopolization and attraction of foreign capital. Researchers sought to identify key factors that determined the effectiveness of joint-stock forms of management and their role in the modernization of the economy.

A significant contribution to the development of the theoretical foundations of joint-stock entrepreneurship was made by Mykola Bunge and Mykhailo Tugan-Baranovsky. In their works, they generalized the main characteristics of entrepreneurial activity, determined the economic essence of joint-stock companies and outlined their advantages as forms of organizing large-scale production. Scientists considered a joint-

stock company as an institutional mechanism for the concentration of capital, capable of ensuring the implementation of large-scale investment projects and stimulating economic growth[20].

At the same time, assessments of the prospects for the development of large corporations in the scientific community were not unambiguous. Some researchers saw the strengthening of the corporate sector as an important prerequisite for increasing the efficiency of the economic system. In particular, it was emphasized that large joint-stock associations contribute to the rationalization of production processes, ensure the stability of economic activity and create conditions for long-term strategic planning. The monopolization of individual industries was considered a factor capable of reducing the destructive impact of excessive competition and increasing the predictability of economic development.

Among the most important advantages of the joint-stock form of entrepreneurship, the possibility of broad involvement of the population in participation in investment processes was especially highlighted. The spread of joint-stock ownership contributed to the formation of a new model of economic relations, in which citizens could act not only as employees, but also as co-owners of enterprises and recipients of part of corporate profits. It was this circumstance that became the basis for the emergence of the concept of "democratization of capital", whose supporters viewed corporatization as a mechanism for expanding the economic participation of the population and increasing the social efficiency of the market system.

One of the well-known representatives of this direction was Serhiy Farmakovsky, who substantiated the thesis about the ability of share ownership to provide wider access of different

[20] Gaidai T.V., Kudlak V.Ya. M.Kh. Bunge as a theorist and practitioner of market reform of the domestic financial system in the second half of the 19th century. Banking. 2006. No.3. P.13-26.

segments of the population to the results of economic development. Later, these ideas were developed in Western economic science within the framework of the concept of "popular capitalism", according to which mass ownership of shares is considered as a tool for combining market mechanisms of management with the principles of social participation and economic democracy[21].

Thus, the processes of industrialization and the spread of joint-stock entrepreneurship in the late 19th and early 20th centuries became an important catalyst for the development of Ukrainian economic thought. Research into the nature of corporate ownership, the patterns of capital concentration and the socio-economic consequences of corporatization laid the theoretical foundation for the further development of domestic science on corporate finance, corporate governance and the capital market[22].

A significant contribution to the study of the nature of joint-stock entrepreneurship and its role in the development of a market economy belongs to Mykhailo Tugan-Baranovsky, who considered joint-stock companies as an objective result of the evolution of the capitalist economic system and a natural form of organizing large-scale production. The scientist emphasized that the processes of capital concentration and the complication of production relations inevitably lead to the spread of corporate structures capable of accumulating significant financial resources and ensuring the implementation of large-scale economic projects. At the same time, he did not idealize the activities of joint-stock companies and drew attention to the

[21]Soskin O. I. Model of popular capitalism: stability and adaptability to any challenges (on the example of Austria). Current problems of economics. 2012. No.6. Pp. 16-29. URL: http://nbuv.gov.ua/UJRN/ape_2012_6_4.

[22] Zhavoronok A.V. Theoretical foundations of economic waves and cycles of economic development. Prychornomors′ki Economic Studies. 2018. Issue 32. P. 207- 2013.

presence of contradictions between corporate interests and social needs[23].

The scientist paid special attention to the social consequences of the functioning of large joint-stock associations. In his opinion, the desire of corporations to maximize profits often gave rise to phenomena that could negatively affect the well-being of the population, the competitive environment and the overall balance of economic interests. That is why he considered the problem of interaction between the state and the corporate sector as one of the key components of effective economic policy. At the same time, the scientist opposed administrative restrictions or artificial restraints on the development of joint-stock entrepreneurship, considering it a necessary element of a market economy. Instead, he defined the creation of regulatory mechanisms aimed at minimizing the negative socio-economic consequences of the activities of large corporations, protecting the interests of small investors and ensuring fair conditions for the functioning of the market as a priority task of the state. An important place in the development of the theoretical foundations of corporate relations is occupied by the scientific works of Lev Petrazhytsky, which investigated the psychological and legal aspects of the formation of share capital. The scientist was one of the first to draw attention to the fact that the functioning of joint-stock companies cannot be fully explained solely by economic factors. In his opinion, the behavior of investors, the mechanisms of corporate decision-making, the peculiarities of the distribution of property rights and managerial control depend to a large extent on the psychological motives of participants in economic relations[24].

[23]Tugan-Baranovsky M. I. Fundamentals of Political Economy - L.: Publishing Center of the Ivan Franko National University of Lviv, 2003. - 627p.

[24] Petrazhitsky L. I. The rights of a bona fide owner to income from the point of view of dogma and civil law policy [Text] / L. I. Petrazhitsky. K.: Statute, 2002. 425 p.

In the works of the researcher, a number of provisions were formulated regarding the nature of shareholder risk, the features of the exercise of shareholder rights, and the problems of delimiting ownership and corporate capital management. Many of his conclusions were ahead of their time and retain scientific value in modern studies of corporate governance, behavioral finance, and institutional economics. In particular, his considerations regarding the influence of psychological factors on investment decisions and the formation of corporate responsibility of participants in shareholder relations are of considerable interest. The further evolution of the corporate sector in Ukrainian lands underwent significant transformations during the Soviet period. An analysis of the development of corporate relations at this time indicates a profound change in their economic nature and functional purpose. The establishment of an administrative-command system of management was accompanied by the curtailment of market mechanisms for coordinating economic activity, the restriction of private initiative, and the strengthening of state control over production resources. In such conditions, corporate forms of management lost their inherent market characteristics and were integrated into the system of centralized economic management.

The consequences of these processes were particularly noticeable for joint-stock companies, which at the initial stage of the existence of the Soviet economic system remained one of the most active and widespread elements of the business environment. However, the gradual establishment of the principles of state ownership and centralized planning led to the actual liquidation of classical corporate mechanisms. As a result, not only the organizational structure of corporate entities was deformed, but also the very essence of corporate relations, which was based on a combination of private ownership, entrepreneurial initiative and economic responsibility.

At the same time, it was the Soviet stage of development that largely formed certain institutional features that continue to influence the functioning of the corporate sector of Ukraine in modern conditions[25]. First of all, this concerns the preservation of a significant role of the state as the owner of corporate rights and an active participant in corporate transformations. In addition, the problem of the gap between the formally enshrined rights of shareholders and the real possibilities of their practical implementation and protection has historically formed. An equally important characteristic was the spread of legal nihilism in the sphere of corporate relations, which is manifested in the insufficient activity of small shareholders, the low level of corporate culture, and the limited use of mechanisms for protecting property rights.

Along with the supporters of joint-stock entrepreneurship, a critical direction of research on corporate capital was also formed in economic science at the beginning of the 20th century. One of its most famous representatives was Mykola Nazarevsky, the author of the work "Essays on the History and Theory of Collective Capitalism. Syndicates and Trusts" (1912). The scientist considered the processes of concentration of production and the spread of corporate structures as a manifestation of a qualitatively new stage in the development of the capitalist economy[26].

In his opinion, the formation of large corporations, syndicates and trusts gradually transformed the traditional mechanisms of the functioning of a market economy. The concentration of financial and production resources within large corporate associations led to a change in the nature of

[25] Suprun N. A. Evolution of the domestic model of corporate governance: institutional aspect: monograph. State Institution "Institute of Economics and Forecasting of the National Academy of Sciences of Ukraine". Kyiv, 2009. 448 p.

[26] Nazarevsky, M. I. Essays on the history and theory of collective-capitalist economy: Syndicates, trusts and combined enterprises. Vol. 1, part 1: Essays on the history of the unification of American industry. K.: A. A. Levenson Society, 1912. — XIII, 365 p.

competition, the structure of ownership and the principles of organizing economic activity. In this regard, the researcher put forward the concept of the transition from the classical capitalist system to the so-called collective-capitalist form of management, within which large corporate entities begin to play a leading role, capable of determining the development of entire sectors of the economy[27].

The late science of this historical period Rudolf Hilferding (author of the work "Financial Capital", 1910)[28] to recap how the era of industrial and isolated manufacturers was lost in the past and markets great alliances have been divided among themselves, the spontaneity of markets is being replaced by the planned organization of trusts and syndicates.

Scientists like Hilferding R. and Nazarevsky M. emphasize in their work that the shareholder form does not maintain capital, the real power of the government is based on pure rent, and the actual production is managed by hired directors. The significance of the interpretation of the main postulates is presented in Table 1.1.

Thus, Ukrainian economic thought of the late 19th and early 20th centuries was in the trend of world research and formed a wide range of approaches to understanding the nature of joint-stock entrepreneurship and corporate capital[29]. The combination of supportive, moderately critical and critical concepts created a theoretical basis for the further development of research in the field of corporate finance, corporate governance and institutional economics.

[27] History of economic doctrines: textbook: 2 parts – Part 1 / Ed. by V.D. Bazilevich. – 3rd ed. – K: Znaniye, 2006. 582 p.

[28] Hilferding, R. (1910). *Das Finanzkapital: Eine Studie über die jüngste Entwicklung des Kapitalismus*. Wien: Wiener Volksbuchhandlung.

[29] History of economic thought of Ukraine: textbook. / [L. Ya. Korniychuk, N. O. Tatarenko, A. M. Poruchnik and others]; edited by prof. L. Ya. Korniychuk. Kyiv: KNEU, 2004. 564 p.

Table 1.1 - Discretion: the essence of "collectivism" against the ownership of banks[30]

Criterion for upgrading	M.I. Nazarevsky ("Essays...", 1912)	R. Gilferding ("Financial Capital", 1910)
Main destructive force	*Industrial unions.* The transformation is taking place in the middle of the production itself through the consolidation of enterprises in the syndicate.	*Banks.* It is expected that bank capital will be drained from industry. Banks order their industry and dictate their minds.
Interpretation of "collectivism"	Bachiv in monopolies "*collective-capitalist dominion*." Capital evolves into a collective form in the middle of the bourgeois mode.	Introducing the concept of *"organizational capitalism"*. Monopolization is just a change of mind for future expansion.
Kintsevy vysnovok i meta	*Reformist-analytical.* Nazarevsky shukav ways to balance and legal regulation of new corporate unions.	*Revolutionary-Marxist.* Gilferding, having taken into account that the accumulation of power over centralized banks would allow Mittevo to transition to socialism.

Most of the problems that were the subject of scientific discussions more than a century ago - the relationship between the state and corporations, the protection of shareholder rights, the concentration of economic power, the social responsibility of business and the effectiveness of corporate governance - remain relevant in modern conditions of the development of a market economy.

The long-term functioning of the administrative-command system of management, based on the principles of bureaucratic-distributive socialism, had a significant impact on the

[30] Source: compiled by the author based on 25-27

transformation of economic institutions and behavioral models of business entities. The dominance of state ownership, restrictions on private entrepreneurial initiative, and the absence of real mechanisms for exercising owner rights have led to the gradual degradation of the institution of private property as a fundamental element of a market economy. As a result, specific informal institutions and behavioral stereotypes have been formed that continue to influence the functioning of the corporate sector in the context of modern market transformations[31].

Among the most widespread socio-economic phenomena inherited from the previous economic system, free-riding, paternalism and absenteeism occupy a special place. From the standpoint of institutional economic theory, these phenomena can be considered as persistent informal restrictions that affect the effectiveness of the implementation of corporate rights, the level of economic responsibility of owners and the quality of corporate governance. Their preservation in the public consciousness significantly complicates the process of forming a modern model of corporate relations based on the active participation of shareholders in making management decisions and monitoring management activities[32].

One of the manifestations of these institutional deformations is the phenomenon of free-riding (free rider problem), which is characterized by the desire of individual economic agents to receive benefits from collective activities without proportional participation in costs or the performance of relevant duties. In the general economic sense, freeriding occurs when an entity benefits from the results of public goods or joint

[31] Chancellor, E. (2000). *Devil Take the Hindmost: A History of Financial Speculation*. Plume.

[32]Radieva M. (2008), «Corporate governance- balancing the interests of the institution concerned corporate groups», *Instytutsional'nyj vektor ekonomichnoho rozvytku*, No. 1(2).

efforts of other participants in economic relations, while avoiding its own contribution to their creation or maintenance.

In the field of corporate governance, the problem of freeriding becomes particularly relevant in the context of the interaction between shareholders and management. A significant part of small shareholders, not having sufficient incentives or resources to effectively monitor the activities of the company's management, tend to delegate the relevant functions to other participants in corporate relations. As a result, control over the activities of managers is concentrated in the hands of large shareholders or institutional investors, while a significant number of minority owners actually remain passive observers. Such a situation creates risks of increased agency conflicts, reduced transparency of management decisions and deterioration of the quality of corporate control.

An equally important institutional challenge for the development of the corporate sector is absenteeism, which is characterized by conscious or unconscious avoidance of subjects from participation in management and decision-making processes[33]. In the socio-political dimension, absenteeism is traditionally interpreted as a form of passive behavior of citizens, manifested in the reluctance to participate in electoral procedures, public activities or the exercise of their political rights. In a broader institutional context, this phenomenon reflects a low level of interest of a person in influencing processes, the results of which directly affect their interests.

In the corporate sphere, absenteeism is manifested through the passivity of shareholders in exercising their property rights. A significant part of investors does not participate in general meetings of shareholders, does not exercise control over the activities of the company's management bodies and does not use the mechanisms provided for by law to protect their corporate

[33] Veblen, T. (1923). Absentee Ownership and Business Enterprise in Recent Times: The Case of America. New York: McBride

rights. Such behavior weakens the system of corporate control and creates additional opportunities for the concentration of managerial power in the hands of a narrow circle of individuals[34].

The problem of absenteeism also has a deeper theoretical basis, related to the specifics of the joint-stock form of ownership. Back in the late 19th and early 20th centuries, a number of well-known economists drew attention to the fact that joint-stock ownership objectively generates a tendency to separate property rights from the function of direct management. In particular, Thorstein Veblen[35] and Joseph Schumpeter[36] emphasized that the development of large corporations is accompanied by the formation of the so-called "absentee ownership", when the owner of capital is actually removed from managing the enterprise and is limited to receiving income from the assets owned by him. In such conditions, the shareholder is increasingly turning into a financial investor, while real control over the corporation's activities passes to professional management. This creates the prerequisites for the emergence of a classic agency problem associated with the potential mismatch of interests between the owners of capital and hired managers. The lack of active participation of shareholders in corporate governance can lead to a decrease in the efficiency of resource use, a weakening of the responsibility of managers, and the emergence of conflicts of interest within the corporation.

Thus, freeriding[37], paternalism[38], and absenteeism[34] are not only socio-psychological phenomena, but also important

[34] Tereshchenko O. O., Stetsko M. V. Behavioral aspects of corporate financial management. Economy and State. 2019. No. 10. Pp. 11–16.

[35] Veblen, T. (1923). *Absentee Ownership and Business Enterprise in Recent Times: The Case of America*. New York: McGraw-Hill.

[36] Schumpeter, J. A. (1942). *Capitalism, Socialism and Democracy*. Harper & Brothers.

[37] Olson M. The Logic of Collective Action. Public Goods and Group Theory / Mansur Olson; trans. from English. A. Oliynyk. Kyiv: Lybid, 2004. 272 p.

[38] Tereshchenko O. O., Stetsko M. V. Behavioral aspects of corporate finance management. Economy and State. 2019. No. 10. P. 11–16.

institutional factors that determine the peculiarities of the functioning of the corporate sector in post-socialist economies. Overcoming them requires the development of corporate culture, increasing the level of financial literacy of the population, improving mechanisms for protecting shareholder rights, and forming an effective corporate governance system capable of ensuring the active participation of owners in the exercise of their property and management rights.

In modern economic science, corporate governance is increasingly viewed through the prism of an institutional approach, which focuses not only on the formal organizational structures of corporations, but also on the system of rules, norms and mechanisms of interaction between all participants in corporate relations[39]. In this context, corporate governance is a complex socio-economic institution that encompasses a set of formal legal norms, informal rules of conduct, corporate traditions and control mechanisms that determine the procedure for the distribution, implementation and protection of property rights in joint-stock companies and other corporate structures.

From the standpoint of institutional theory, the key purpose of corporate governance is to create an effective system for coordinating the interests of participants in corporate relations, ensuring proper control over the use of corporate resources and minimizing conflicts between owners of capital and persons who carry out operational management of the company. Given that a modern corporation functions as an open socio-economic system, integrated into the broader market, legal, and social environment, the effectiveness of its activities largely depends on the quality of corporate control mechanisms

[39] Suprun N. A. Evolution of the domestic model of corporate governance: institutional aspect: monograph. State Institution "Inst. of Economics and Forecasting of the NAS of Ukraine". Kyiv. 2009. 448 p.

and the ability to ensure a balance between the economic interests of different groups of participants[40].

One of the central tasks of corporate governance is the organization of a system for monitoring and monitoring the activities of management personnel. The need for such control is due to the objective and strengthened functions of power and management characteristic of current corporations. The implementation of the assigned task is carried out through the combined mechanisms of internal and external control. Prior to the internal mechanisms, there is the activity of external meetings of shareholders, supervisory councils, audit committees, internal audit and corporate compliance systems. External control is ensured through the functioning of the corporate control market, the activities of independent auditors, government regulators, stock exchanges, creditors, institutional investors and other external entities. middle

Regardless of the diversity of scientific approaches to the importance of corporate governance, most current researchers view this as an institution that balances the interests of stakeholders side In this case, reasonable corporate governance acts as a mechanism for coordinating the goals of rulers, managers, business owners, investors, creditors, governments and partners. Apparently, the effectiveness of corporate governance is determined not only by the financial results of the corporation's activities, but also by ensuring the stability of corporate shares, protecting the rights of participants and encouragement to trust the corporate sector.

The current development of the theory of corporate governance is characterized by the development of several conceptual lines that variously explain the nature of corporate regulations and the mechanisms of their regulation. Analysis of

[40] Shastitko A. Subject and methodological features of the new institutional economic theory. Questions of Economics. 2003. No. 1. P. 24-42.

scientific literature allows us to see three basic theoretical approaches: stakeholder theory, agency theory and comparative institutional analysis.

The theory of the importance of the parties comes from the fact that the corporation must focus not only on the interests of the government's capital, but also on the interests of all subjects, which directly and indirectly join in their activity or recognize the flow from their side. Such groups include workers, co-workers, postal workers, creditors, local communities, government institutions and other stakeholders. In this approach, corporate management is seen as a tool for achieving a balance between economic efficiency and social relevance of the business.

The agency theory, which is based on the analysis of relationships between the principal (author) and the agent (manager), has gained the greatest popularity in modern economic science. The main point is that government officials and managers have different economic interests, and that conflicts inevitably arise between them regarding the distribution of corporate resources and the division of results. activities. The main method of corporate governance in this type is the minimization of agency costs, ensuring the clarity of management decisions and the creation of incentives that would serve the interests of management with the interests of government officials capital

The theory of equal institutional analysis emphasizes the infusion of historical, legal, cultural and political characteristics of local countries into the formation of corporate governance models. It comes out of the fact that there is no universal system of corporate governance, but it is effective for all economies. However, the effectiveness of corporate mechanisms largely depends on the institutional framework, the development of the legal system, the power structure and the peculiarities of the national economic culture.

The formation of the meaning of theoretical approaches became a legacy of the development of neo-institutional economic theory, as a reaction to the limitations of traditional neo-classical analysis. Classical economic theory has always considered economic agents as purely rational subjects who operate in their minds with complete information and do not require special institutions coordination mechanisms. However, the practice of functioning of real economic systems has demonstrated that the effectiveness of government activity is largely determined by the number of institutions, among which there is economic efficiency. mutualism.

Vagomic contributions to the developments of the neo-institutional theory of the firm were made by such predecessors as Frank Knight[41], Ronald Coase[42], Armen Alchian[43], Harold Demsetz[43], Michael Jensen[44], William Meckling[44], Oliver Williamson[45], Sanford Grossman[46], Oliver Hart[46] and David Kreps[47]. Their scientific works have laid the foundation for the immediate development of the corporation as a system of contractual deposits, within which there is coordination of the interests of economic agents for the minds of the unknown. inaccurate information[48].

Of particular importance in neo-institutional theory is the concept of transaction costs, presumably to any functioning of

[41] Knight, F. H. (1921). *Risk, Uncertainty and Profit*. Houghton Mifflin.

[42] Coase, R. H. (1937). The Nature of the Firm. *Economica*, 4(16), 386–405.

[43] Alchian, A. A., & Demsetz, H. (1972). Production, Information Costs, and Economic Organization. *The American Economic Review*, 62(5), 777–795.

[44] Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.

[45] Williamson, O. E. (1985). *The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting*. New York: Free Press.

[46] Grossman, S. J., & Hart, O. D. (1986). The costs and benefits of ownership: A theory of vertical and lateral integration. *Journal of Political Economy*, 94(4), 691–719.

[47] Kreps, D. M. (1990). Corporate culture and economic theory. In J. E. Alt & K. A. Shepsle (Eds.), *Perspectives on Positive Political Economy* (pp. 90–143). Cambridge University Press.

[48] Shastitko A. Subject and methodological features of the new institutional economic theory. Questions of Economics. 2003. No. 1. P. 24-42.

any organization related to search costs. information, setting up contracts, monitoring their transactions and protecting power rights. The very need to minimize such expenses is significantly explained by the emergence and development of corporate structures as an effective form of organizing economic activity.

The neo-institutional approach also comes from an assumption about the balance between the rationality of economic agents and the possibility of displaying opportunistic behavior. This means that participants in economical transactions will not always be exposed to new information, will not fail to convey all possible results of their decisions, and may use correct information. advantages in the interests of power. For such minds, corporate management acts not only as a control mechanism, but also as a tool for coordinating actions to facilitate the resolution and regulation of conflicts between different groups of participants in corporate transactions[49].

Also, the current theory of corporate financial management views the corporation as a complex institutional system, the functioning of which is determined by the interaction of formal rules, informal norms and economic incentives. The effectiveness of corporate governance must be ensured by ensuring a balance of interests between participants in corporate transactions, minimizing transaction and agency costs, and also creating peace of mind for the long-term development of the corporate sector in the minds of the global economy[50].

Between the neo-institutional theory of the firm and corporate management, it is important to investigate the reasons behind the concentration of power and control in corporations. Representatives of which directly propose two interrelated hypotheses that explain the patterns of division of power rights,

[49] Brealey, R. A., Myers, S. C., & Allen, F. (2020). *Principles of Corporate Finance* (13th ed.). McGraw-Hill Education.

[50] Shvidanenko G. O., Oleksyuk I.V. Corporate finance: from theory to practice: monograph. Kiev: KNEU, 2014. 320 p.

management functions and risks between participants in corporate transactions. The first hypothesis is based on the assumption that if the combined function of management and control among the surrounding number of economic agents will ensure a high level of efficiency of the corporation, then The guilty agents themselves were entitled to too much rights and too much punishment. Another hypothesis comes from the fact that the strengthening of management functions, especially those that carry excessive risks, will inevitably create a need for institutional separation of management and control functions, so that becomes a necessary mental guarantee for the effectiveness of corporate activities[51].

The above theoretical provisions are considered through the analysis of two alternative models of the corporation's functioning, which differ in the level of information security of participants in corporate relations. The first model is based on the assumption of incomplete information, which is a characteristic feature of most real economic systems. Under such conditions, the most effective is the concentration of management and control functions in the hands of agents who have the most complete and relevant information about the company's activities. At the same time, the concentration of information advantages creates additional opportunities for the manifestation of opportunistic behavior by such individuals, which may lead to the use of corporate resources in their own interests.

To minimize these risks, neo-institutional theory offers a mechanism for combining management powers with responsibility for the results of the corporation's activities. That is why agents who carry out management and control also bear the residual risk associated with possible losses from ineffective decisions. This approach creates economic incentives for the

[51] Tkach A. A. Institutional Economics: Textbook. Kyiv: Center for Educational Literature, 2019. 296 p.

coordination of the interests of owners and managers and objectively contributes to the concentration of corporate ownership and control in the hands of a limited number of participants.

The second model assumes the functioning of the corporation in conditions of relatively complete information. In this case, the advantages of specialization of management activities become key. The development of complex corporate structures necessitates the involvement of professional managers who have special knowledge, competencies and skills of strategic management. As a result, management functions are separated from the functions of capital ownership, and the direct owners of corporate rights gradually transfer part of their powers to professional management[52].

Under such conditions, the problem of ensuring effective control over the activities of managers becomes of particular importance. Neo-institutional theory identifies two main mechanisms for solving this problem. The first is to delegate control powers to specialized corporate governance bodies, primarily the board of directors or the supervisory board, which act as representatives of the interests of shareholders and monitor the activities of executive management. The second mechanism involves the concentration of ownership in the hands of one or more large shareholders who have sufficient incentives and resources to exercise effective control over the activities of the corporation[53].

The problem of ownership concentration occupies a central place in modern corporate governance research, since the structure of share capital directly affects the quality of management decisions, investment activity and the overall

[52] Suprun N. A. Evolution of the domestic model of corporate governance: institutional aspect: monograph. State Institution "Institute of Economics and Forecasting of the National Academy of Sciences of Ukraine". Kyiv, 2009. 448 p.

[53] Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.

efficiency of the company's functioning. At the same time, the results of numerous empirical studies indicate the ambiguity of such an influence and the absence of a universal model of ownership structure that would ensure maximum efficiency under any conditions[54].

On the one hand, the concentration of equity in the hands of management and large private shareholders can have a positive impact on the performance of the corporation. This effect is explained primarily by the fact that owners of significant blocks of shares are focused on the long-term growth of the company's market value and are interested in increasing its competitiveness. The presence of a significant share of corporate capital in managers also contributes to the alignment of management interests with the interests of shareholders, since the company's financial results directly affect the well-being of the managers themselves.

In addition, large private owners, as a rule, have sufficient resources to effectively monitor management activities, which contributes to reducing agency costs and increasing the discipline of corporate governance. That is why in many cases, the concentration of ownership is associated with increased investment activity, strengthening the strategic orientation of the business and increasing the efficiency of using corporate resources.

At the same time, excessive concentration of corporate capital can also have negative consequences. The results of numerous empirical studies show that a high share of shares concentrated in the hands of the largest shareholder is often accompanied by a decrease in the company's performance. The main reason for this is the emergence of a conflict between controlling and minority shareholders, when the dominant owner gets the opportunity to use corporate resources to pursue

[54] Davydenko N. M., Buryak A. V. Corporate management: a textbook. Kyiv: Publishing house "Komprint", 2015. 346 p.

his own interests to the detriment of other participants in corporate relations.

In such conditions, the risks of the so-called expropriation of minority shareholders increase, the level of transparency of corporate governance decreases, access of other owners to the strategic decision-making process is limited, and the quality of corporate control deteriorates. In addition, excessive concentration of ownership can lead to a decrease in market discipline, weakening competition within the corporate structure, and a decrease in motivation to introduce innovations[55].

Thus, the modern theory of corporate governance considers the ownership structure as one of the key factors of the efficiency of the corporation. The impact of ownership concentration on the company's performance is complex and contradictory, as it combines potential advantages in the form of increased control and coordination of interests with the risks of excessive concentration of economic power. That is why an effective model of corporate governance should provide an optimal balance between the concentration of control, protection of the rights of all categories of shareholders and the creation of appropriate incentives for the long-term development of the corporation.

Modern institutional economic theory is based on the premise of the decisive role of social institutions in the formation and development of economic processes.[56] In contrast to the traditional neoclassical approach, which focuses mainly on the behavior of individual economic agents and market equilibrium mechanisms, institutionalism considers the economic system as a set of formal and informal rules that determine the nature of

[55] Buriak A., Lyeonov S. (2015). Comparative studies of risk, concentration and efficiency in transition economies. *Risk Governance and Control: Financial Markets & Institutions*, 5(4), 55–63.

[56] Hrytsenko A. A., (2023). Institutional architectonics and dynamics of economic changes in the conditions of digitalization. *Economic Theory*, (4), 5–23.

the interaction of economic entities. In this context, institutions are interpreted as "rules of the game" that regulate the behavior of participants in economic relations, while organizations act as instruments for implementing these rules and represent associations of individuals created to achieve certain economic, social, or managerial goals.

A special place among economic institutions is occupied by the institution of joint-stock ownership, which was formed as a result of the evolution of corporate forms of management and became one of the fundamental mechanisms for mobilizing investment capital in a market economy[57]. Its functioning is determined by the system of property rights, mechanisms of corporate control and the features of the distribution of corporate rights between participants in shareholder relations. The most important characteristics of the institution of joint-stock ownership are the total number of issued shares, the number of shareholders, the level of concentration of corporate capital and the ratio between large and small owners of corporate rights[58].

These parameters form the structure of shareholder ownership, which directly affects the mechanisms of corporate governance, the nature of the exercise of property rights and the efficiency of the joint-stock company. In modern economic literature, several basic models of the structure of shareholder capital are traditionally distinguished. First of all, we are talking about a concentrated ownership structure, in which control over the corporation belongs to one or several large shareholders; a dispersed structure, characterized by a significant number of owners of small blocks of shares; as well as mixed forms that combine elements of both models and form various options for the distribution of corporate control.

[57] *Jensen M. C.*, Meckling W. H. Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*. 1976. Vol. 3, No. 4. P. 305–360.

[58] Mendrul O. G. Management of the value of enterprises: monograph. Kyiv: KNEU. 2002. 272 p.

The corporate sector of Ukraine is characterized by the presence of several specific control models, formed under the influence of the peculiarities of the post-socialist transformation of the economy[59]. Researchers distinguish concentrated insider ownership, which corresponds to the model of a private company; concentrated ownership of managers, which resembles the model of a management cooperative; concentrated external ownership, in which control is concentrated in the hands of a strategic investor; as well as the dispersed external ownership model, which is characteristic of developed stock markets and involves a wide range of shareholders in the absence of a dominant owner.[60]

However, ownership relations cannot be fully explained only through the structure of share capital. They are also determined by the stage of the life cycle of a joint-stock company and the nature of the transformation of property rights in the process of its functioning. At the stage of creating a corporation, the initial specification of property rights occurs, that is, the legal consolidation of the rights of future shareholders to own, use and dispose of corporate capital. It is at this stage that the authorized capital of the company is formed, the nominal value of shares is established and the initial proportions of the distribution of corporate rights between the founders are determined.

The further development of a joint-stock company is accompanied by a constant transformation of the ownership structure under the influence of market mechanisms. Unlike the nominal value, which is determined during the issue of securities, the market price of shares is formed as a result of the

[59] Corporate governance in joint-stock companies and limited liability companies: monograph / V. V. Vasilyeva, N. D. Vintonyak, O. I. Zozulyak and others; ed. L. V. Sishchuk. Ivano-Frankivsk: Academician F. G. Burchak Research Institute of Private Law and Entrepreneurship of the National Academy of Sciences of Ukraine, 2025. 226 p.

[60] Zymovets V. V., Tereshchenko O. O. Corporate Finance as the Dominant of Financial Science. Finance of Ukraine. 2015. No. 9. Pp. 78–95.

interaction of supply and demand and reflects the assessment by investors of the current and future economic potential of the corporation. As a result, property rights acquire a high degree of mobility, and their redistribution between economic agents is carried out through the mechanism of the stock market[61].

At any given time, a shareholder is faced with the alternative of choosing whether to continue to own corporate rights. He can retain his shareholding, sell it to other shareholders or external investors, or increase his own share by purchasing additional shares. The rationality of such a choice is determined by the ratio of the expected benefits from the transaction and the costs associated with its implementation. In terms of neo-institutional economic theory, this refers to the assessment of transaction costs, which include the costs of searching for information, concluding agreements, monitoring their implementation, and protecting property rights.

The economic feasibility of transactions with corporate rights can be characterized by the profitability index of the exchange of property rights, which reflects the ratio between the benefits received and the transaction costs incurred. The higher this index, the more efficiently the mechanism for redistributing corporate control functions and the more perfect the corporate rights market is. At the final stage of the life cycle of a joint-stock company, in the event of its liquidation or cessation of activity, the value of shares is determined based on the liquidation value of the company's assets and the order of satisfaction of the claims of the owners of corporate rights.

A new stage in the development of the theory of corporate finance is associated with the formation of behavioral economics and behavioral finance, which at the end of the 20th and the beginning of the 21st centuries significantly changed traditional

[61] Innovative development of corporate finance: trends and prospects: monograph / [O. O. Tereshchenko, N. D. Babyak, A. I. Ivashchenko and others]; ed. by O. O. Tereshchenko. Kyiv: KNEU. 2017. 496 p.

ideas about the functioning of financial markets. Unlike classical models based on the assumption of complete rationality of investors, behavioral finance takes into account the influence of psychological factors, cognitive distortions and emotional reactions on the process of making investment decisions[62].

It was within the behavioral approach that large-scale corporate transformations that took place in the United States of America in the 1980s and were associated with the spread of Leveraged Buyout[63] (LBO)-type transactions received a new explanation. Such transactions involved the purchase of controlling stakes in companies using significant amounts of borrowed capital and were often accompanied by the transition of corporations from the status of public to the status of private companies. Behavioral finance made it possible to explain these processes not only by economic factors, but also by the peculiarities of risk perception by investors, the underestimation of assets by the stock market, and the influence of psychological expectations on the market value of companies.

In recent decades, an interdisciplinary area of research known as the psychology of mass behavior or crowd psychology has become widespread. Its representatives study the mechanisms of collective decision-making and the peculiarities of the formation of the behavior of large groups of economic agents in situations of uncertainty. The results of such research are increasingly being used to analyze the processes occurring in financial markets[64].

Of particular interest is the phenomenon of investor herd behavior, in which market participants tend to make decisions not based on their own analysis of information, but under the

[62] Tereshchenko O. O., Stetsko M. V. Behavioral aspects of corporate financial management. Economy and State. 2019. No. 10. Pp. 11–16.

[63] Burrough, B., & Helyar, J. (2020). *Barbarians at the Gate: The Fall of RJR Nabisco* (Harper Business Essentials ed.). HarperBusiness.

[64] Tereshchenko O. O., Stetsko M. V. Behavioral aspects of corporate financial management. Economy and State. 2019. No. 10. Pp. 11–16.

influence of the actions of the majority[65]. Such behavior can lead to significant deviations of market prices from the fundamental value of assets and create the prerequisites for the formation of financial bubbles. Mass imitation of investment strategies of other market participants can stimulate an unreasonable increase in prices for financial assets, which subsequently ends in a sharp market correction and large-scale financial losses[66].

Based on the above, modern research on corporate ownership and corporate governance increasingly integrates the provisions of institutional economics, property rights theory, transactional analysis and behavioral finance[67]. Such an interdisciplinary approach allows for a comprehensive explanation of the patterns of joint-stock companies, the features of the distribution of corporate control, the mechanisms of property rights transformation and behavioral aspects of decision-making in financial markets in the conditions of a modern globalized economy.

Thus, the conducted study of the genesis, evolution and institutional features of joint-stock entrepreneurship allows us to formulate a number of generalizing conclusions regarding the patterns of development of the joint-stock form of business and its role in the functioning of a modern market economy.

First, the formation of joint-stock companies is the result of a long evolution of market institutions associated with the development of the stock market and mechanisms for mobilizing investment capital. Historical analysis shows that the emergence of the joint-stock form of entrepreneurship was a logical consequence of the complication of economic relations, the

[65] Thaler R. New behavioral economics. Why people break the rules of traditional economics. Trans. from English. S. Krykunenko. Kyiv: Nash Format, 2018. 464 p.

[66] Kahneman D. Thinking Fast and Slow. Trans. from English. M. Yakovlev. Kyiv: Nash Format. 2017. 480 p.

[67] Davydenko N. M. Financial support for the development of corporate governance in the agricultural sector of the economy of Ukraine: monograph. NNC "Institute of Agricultural Economics" NAAS. Kyiv: Komprint. 2013. 429 p.

expansion of the scale of entrepreneurial activity and the growing need for the concentration of significant financial resources. The share gradually transformed into a specific financial instrument, the economic value of which is determined by the ability to generate future income for the owner. That is why it can be considered as a special form of capital goods, and the sphere of circulation of corporate securities - as an important segment of the capital market.

The process of formation of joint-stock capital, which began in Western European countries in the 16th-17th centuries, was characterized by complexity and contradictions. Its development took place under the influence of both state support aimed at stimulating investment activity and economic growth, and numerous restrictions caused by the risks of financial speculation, corporate abuse and insufficient level of legal regulation. Historical experience convincingly proves that the effective functioning of joint-stock companies requires a comprehensive regulatory framework that determines the procedure for creating corporations, requirements for the capital structure, types of shares, mechanisms for exercising shareholders' rights, the activities of management bodies and the information disclosure system.

In modern conditions, the harmonization of legislative norms, internal corporate regulations and generally recognized international standards of corporate governance is of particular importance. In this context, an important direction for improving the activities of Ukrainian joint-stock companies is the implementation of the principles of good corporate governance and the development of their own corporate codes, which will contribute to increasing business transparency, protecting investor rights and strengthening trust in the corporate sector.

Secondly, the development of joint-stock entrepreneurship on Ukrainian lands in the second half of the 19th and early 20th centuries took place in conditions of active integration of the

domestic economy into the European and global financial space. This process was characterized by high rates of capital attraction, a significant level of concentration of production and the formation of large corporate structures. Important features of the development at that time were the active participation of foreign capital, especially in strategically important industries, primarily the mining and metallurgical complexes, as well as the spread of various forms of corporate integration, in particular cartels, syndicates and trusts.

Historical experience shows that the processes of economic integration have an ambiguous and at the same time mutually dependent impact on the development of national and international financial systems. On the one hand, they contribute to the attraction of investment resources, modernization of production and activation of financial markets. On the other hand, they create new challenges associated with increased competition, concentration of economic power and dependence on external sources of capital. The restoration of market mechanisms of management and the formation of a national stock market in Ukraine in the early 1990s initiated a qualitatively new stage in the development of the corporate sector, which continues in modern conditions.

Thirdly, the formation of scientific ideas about the nature of share capital and corporate entrepreneurship in Ukraine took place under the influence of leading Western European economic concepts of the second half of the 19th and early 20th centuries, but at the same time was based on a deep understanding of the peculiarities of national economic development. Ukrainian economists made a significant contribution to the study of the essence of share ownership, mechanisms of capital concentration, the role of corporate structures in the development of industry, and the relationship between economic efficiency and public interests.

Analysis of the scientific heritage of domestic researchers shows that many of the provisions formulated by them remain relevant in modern conditions.

Their approaches are largely consistent with the provisions of modern institutional economic theory, according to which a joint-stock company is considered as a complex system of contractual relations and a mechanism for coordinating the interests of various groups of economic agents. Of particular importance is the need to take into account the external effects of the activities of corporations and the creation of effective institutions capable of ensuring a balance between private and public interests.

From the standpoint of neo-institutional analysis, a joint-stock company is one of the most effective organizational and legal forms of business, as it ensures the mobilization of significant financial resources, diversification of risks, concentration of investment capital and reduction of transaction costs. It is the ability to minimize the costs of coordination, control and exchange of property rights that creates competitive advantages of the corporate form of business organization compared to other models of entrepreneurial activity.

In the current conditions of the development of the world economy, the corporate sector is one of the key elements of national economic systems, ensuring the accumulation of financial resources, the transformation of savings into investments, the development of innovative activity and the formation of competitive advantages of the economy.

The study of the patterns of its functioning requires the use of an institutional approach, which allows analyzing not only the economic results of corporations, but also the set of formal and informal institutions that determine the behavior of subjects of corporate relations.

According to the provisions of the new institutional economic theory, the corporate sector is a complex system of

contractual interactions between owners of capital, management, employees, investors, creditors, the state and other interested parties. The effectiveness of its functioning largely depends on the quality of the institutional environment, the level of protection of property rights, the development of corporate governance mechanisms, the degree of information transparency and the level of transaction costs.

Institutional analysis of the corporate sector involves studying the relationship between economic institutions, ownership structure, corporate control models, and the performance of corporate entities. Of particular importance is the assessment of the ability of existing institutions to adapt to the challenges of globalization and digital transformation, which are significantly changing the nature of corporate relations[68].

Globalization processes have become one of the determining factors in the development of the corporate sector of Ukraine over the past decades. The integration of the national economy into the world financial space has contributed to the intensification of capital flows, the expansion of access to international sources of financing and the spread of modern corporate governance standards.

At the same time, globalization has led to increased competition between corporations for financial, investment and human resources.

The openness of the economy has contributed to the penetration of transnational capital into strategic sectors of the national economy, which, on the one hand, has ensured the modernization of the production base and increased labor productivity, and on the other hand, has raised the issue of economic security, concentration of corporate control and dependence on external investors.

[68] Davydenko N.M. Introduction of the corporate imperative in the process of developing corporate governance in agribusiness. Formation of market relations in Ukraine: scientific collection. Kyiv. 2012.

The competitiveness of the corporate sector is increasingly determined by the level of innovation potential, the quality of corporate governance, the efficiency of the use of intellectual capital and the ability to integrate into global value chains.

When assessing the dynamics of the development of the corporate sector of the Ukrainian economy, it is necessary to take into account both global turbulence and the terrible challenges associated with a full-scale war (Table 1.2).

Table 1.2 - Dynamics of development of the corporate sector of Ukraine (2020–2024)

Indicator	2020	2021	2022	2023	2024
Public joint-stock companies, units	1321	≈1200*	≈1100*	≈1000*	≈900*
Private joint-stock companies, units	5395	≈5400	≈5350	≈5300	≈5250
Ltd., thousand units	689,4	720,1	740,0	770,0	more 800
Financial reports submitted by enterprises, thousand	498	421	440	456	470+
Export of IT services, billion USD	5,0	6,8	7,3	6,7	6,45

*assessment based on trends of the National Securities and Markets Commission and the State Statistics Service

The most significant trend in recent years has been the gradual reduction in the number of public joint-stock companies. As of mid-2020, 1,321 public joint-stock companies were operating in Ukraine, which is 14.7% less than the previous year. At the same time, the number of private joint-stock companies remained relatively stable and amounted to over 5,300 units[69].

This trend is explained by:

[69] Vygovska V. V., Chkhaidze V. O. Current trends in the development of the corporate sector of Ukraine. Problems and prospects of economics and management. 2021. No. 1 (25). P. 182–189.

• concentration of corporate ownership;
• the transition of many companies from public to private;
• low liquidity of the Ukrainian stock market;
• high costs of compliance with publicity requirements;
• military risks after 2022.

The Ukrainian economy has been characterized by the transformation of the classic joint-stock model into a model of concentrated ownership, where control is concentrated in a small group of strategic investors.

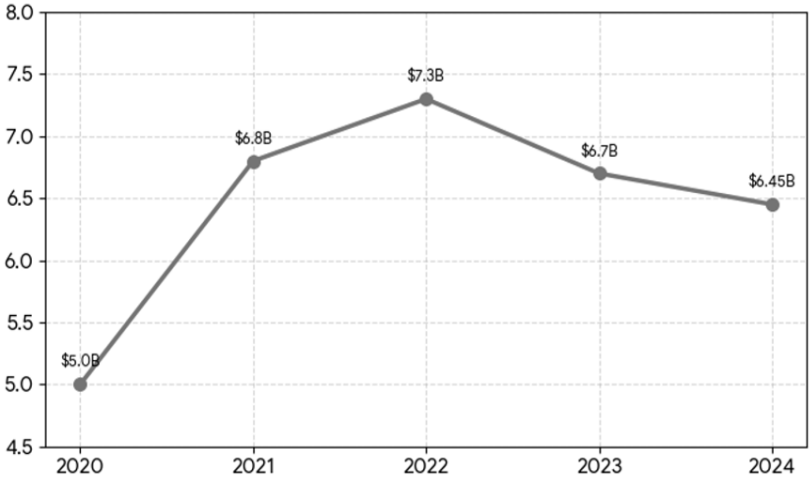


Fig. 1.1 - Dynamics of exports of IT services of Ukraine (billion dollars)

An important indicator of the modernization of the corporate sector is the dynamics of the digital economy. Despite the full-scale war, Ukraine's IT sector remained one of the largest exporters of services (Fig. 1.1)[70].

It was the digital sector that became the catalyst for changes in corporate governance:

[70] Dynamics of the Ukrainian IT market: analysis for 2020–2024. *International Science Journal of Education & Linguistics*. 2025. Т. 4, № 3. URL: https://archive.journal-grail.science/index.php/2710-3056/article/view/3079.

–introduction of electronic shareholder meetings;

–digitalization of registers of securities owners;

–automation of corporate reporting;

–use of Big Data and artificial intelligence in risk management;

–development of electronic document flow.

Change in the structure of corporate control During 2020–2024, the following institutional changes were observed:

1. Strengthening the concentration of ownership

Most Ukrainian corporations are characterized by an insider model of corporate control, in which a controlling stake belongs to a single owner or a financial and industrial group.

2. Growing role of the state

During the war period, the role of the state as a corporate owner and participant in corporate transformations significantly increased[71]. The process of corporatization of state-owned enterprises and their transformation into joint-stock companies is indicative.

3. Integration into the European corporate space

As part of European integration, Ukraine is implementing corporate governance standards focused on:

- protection of minority shareholders;
- independence of supervisory boards;
- transparency of financial reporting;
- ESG approaches;
- increasing management responsibility.

In general, in 2020–2024, the corporate sector of Ukraine underwent a stage of deep structural transformation. The number of public joint-stock companies continued to decline, which indicates further concentration of corporate ownership and

[71] Mendrul O. G. Transformation of the institution of state ownership and the specifics of corporate governance in the public sector of the economy. Scientific notes of the University "KROK". 2023. No. 2 (70). pp. 45–53.

reorientation of business towards closed forms of corporate control. At the same time, the digitalization of the economy contributed to the formation of new mechanisms for exercising shareholder rights, reducing transaction costs and increasing the transparency of corporate governance. Under the influence of globalization and European integration processes, there is a gradual transition from the post-Soviet insider model of corporate control to models based on international corporate governance standards, digital technologies and institutional protection of investor rights.

The digitalization of the economy is forming a new stage in the development of the corporate sector, associated with the transformation of business models, management mechanisms and financial relations. The spread of artificial intelligence, big data, machine learning, blockchain, cloud computing and the Internet of Things technologies is significantly changing the institutional environment of corporate functioning[72].

Digital technologies contribute to reducing transaction costs, increasing the speed of information processing and improving the corporate control system. At the same time, they create the prerequisites for the emergence of new risks related to cybersecurity, data protection, digital inequality and concentration of information power.

In the digital economy, information is becoming a strategic resource, and the ability to effectively manage data flows is becoming one of the key factors of corporate competitiveness. As a result, traditional management models are gradually transforming into models based on data analytics, algorithmic decision-making and digital corporate governance.

[72] Digital transformation of the corporate sector of the economy: institutional dimension: monograph. [T. M. Kolesnik, O. V. Shkvarchuk, R. V. Lavrov and others]; edited by Dr. of Economics T. M. Kolesnik. Kyiv: KNEU, 2023. 312 p.

Despite positive changes, the development of the corporate sector in Ukraine continues to be accompanied by a number of institutional restrictions.

Key problems include:

– insufficient protection of minority shareholders;

– high concentration of corporate ownership;

– imperfection of corporate control mechanisms;

– limited transparency of the activities of individual corporations;

– insufficient development of the stock market as an institution for mobilizing investment capital;

– significant influence of informal institutions on corporate decision-making;

– low level of digital maturity of a significant part of enterprises.

The problem of institutional trust plays a special role. The effective functioning of the corporate sector is impossible without investors' trust in financial reporting, the corporate governance system, judicial protection mechanisms and state regulation.

An important restraining factor also remains the asymmetry of information between various participants in corporate relations, which increases agency costs and complicates the process of attracting investments.

Digitalization necessitates a revision of traditional approaches to corporate governance. Modern corporations are increasingly actively implementing digital risk monitoring systems, automated management reporting platforms, electronic shareholder voting and digital tools for controlling management activities[73].

The use of Big Data technologies allows to improve the quality of financial analysis and forecasting, minimize

[73] Kravchenko M. V. Institutional environment of functioning of corporate structures in the context of development of Industry 4.0: monograph. Kharkiv: Pravo. 2022. 284 p.

information asymmetry and improve the process of strategic decision-making. At the same time, digital platforms contribute to increasing the transparency of corporate activities and expanding the opportunities for attracting investors.

A promising direction of development is the use of blockchain technology in the field of corporate governance. Its application can ensure increased reliability of accounting for corporate rights, transparency of corporate procedures and reduction of risks of information manipulation.

The current stage of development of the corporate sector is characterized by the transition from an industrial to a digital model of the economy, within which information, data, intellectual capital and digital technologies become the key factors of value creation. In such conditions, a significant transformation of the institution of shareholder ownership, which was traditionally based on the concentration of material assets and physical control over the means of production, is taking place.

From the standpoint of neo-institutional theory, digitalization contributes to reducing transaction costs, increasing the transparency of corporate activities and improving mechanisms for controlling management actions. At the same time, the development of digital technologies is changing the relationship between ownership and control, strengthening the role of information resources and digital platforms in the formation of corporate value.

In the modern economy, equity is increasingly associated not with the ownership of tangible assets, but with control over data flows, digital ecosystems, artificial intelligence algorithms and intellectual property. This leads to the emergence of new forms of corporate control and a rethinking of traditional mechanisms for protecting shareholder rights.

In recent years, Ukraine has demonstrated a fairly high pace of digital transformation of the business environment.

According to the results of the KPMG "Digitalization Champions 2024"[74] study conducted among Ukrainian companies, digitalization has become one of the key factors in ensuring business sustainability in conditions of martial law and structural restructuring of the economy.

The survey covered enterprises in the manufacturing and service sectors and showed that digital technologies are considered by companies as a strategic tool for increasing competitiveness and corporate governance efficiency.

One of the indicators of the development of the digital economy is the dynamics of the IT sector. According to the National Bank of Ukraine, the volume of exports of IT services in 2024 amounted to 6.45 billion USD.[75] Despite a certain reduction compared to the previous year, the IT industry continues to remain one of the largest sources of foreign exchange earnings and a key driver of the digitalization of the country's corporate sector.

The average monthly volume of exports of IT services in 2024 exceeded 537 million USD[75], which indicates the preservation of significant potential of the digital economy even in conditions of military risks. The main external markets for Ukrainian digital products and services remain the USA, Great Britain, Cyprus, Malta and Israel.

Digital technologies are significantly changing the mechanisms for exercising shareholder rights. While the traditional model of a joint-stock company involved the physical participation of owners in corporate procedures, modern digital solutions provide the ability to remotely manage corporate rights.

[74]KPMG "Champions of Digitalization 2024". URL: https://kpmg.com/ua/uk/insights/2025/01/chempiony-didzhytalizatsiyi-2024.html

[75] National Bank of Ukraine. *(2025). External sector statistics: Balance of payments data for computer services in 2024.* Official Website of the NBU. https://bank.gov.ua/.

Digital technologies are significantly changing the mechanisms for exercising shareholder rights. While the traditional model of a joint-stock company involved the physical participation of owners in corporate procedures, modern digital solutions provide the possibility of remote management of corporate rights.

The main areas of digital transformation of the institution of shareholder ownership are:

– electronic voting of shareholders;

– digital registers of securities owners;

– automation of corporate information disclosure;

– application of Big Data technologies to assess corporate value;

– use of artificial intelligence to analyze investment risks;

– implementation of blockchain technologies in corporate rights accounting systems.

As a result, agency costs are reduced, the efficiency of corporate decision-making increases, and the possibilities of monitoring management activities by investors are expanded.

The use of Big Data technologies is becoming particularly relevant. Modern investors increasingly make decisions based on the analysis of large amounts of financial and non-financial data, which significantly changes the mechanism for assessing the value of shares and corporate risks. Accordingly, the information asymmetry between management and shareholders is gradually decreasing[76].

The theoretical foundations of digital transformation in the corporate sector of the economy are based on a complex combination of technology, innovation, strategy and organizational culture. Using these foundations and participating in the continuous process of transformation,

[76]Hrytsenko A. A. Digital transformation of economic institutions: from traditional corporations to decentralized autonomous organizations (DAO). Economic theory. 2024. No. 1. pp. 5–21.

business can not only maintain its position, but also develop in the conditions of an ever-changing digital environment.

The development of financial technologies (FinTech) is forming new mechanisms of corporate financing and control. The traditional model of corporate governance, based on the concentration of controlling stakes, is gradually supplemented by digital tools for monitoring the activities of companies.[77]

Key financial innovations affecting the corporate sector of Ukraine include:

- digital payment systems;
- electronic trading platforms;
- blockchain technologies;
- digital assets and tokenization;
- artificial intelligence in the field of financial analysis;
- automated risk management systems.

The use of these technologies increases the transparency of corporate processes and creates additional opportunities for protecting the interests of minority shareholders. At the same time, the importance of independent directors, audit committees and digital tools for monitoring management activities is increasing.

The process of global integration of the corporate sector of Ukraine is a key tool for attracting foreign investment and modernizing the national economy. This process directly stimulates the evolution of domestic management structures, forcing them to move from post-Soviet insider practices to transparent international standards.

An important factor in the transformation of the corporate sector of Ukraine is integration into the European economic space. The Association Agreement with the European Union and the gradual harmonization of legislation contribute to the

[77] Kolesnik, T. M., & Shkvarchuk, O. V. (2023). *Digital transformation of the corporate sector of the economy: institutional dimension*. Kyiv: KNEU.

adaptation of Ukrainian corporations to international corporate governance standards.

Of particular importance are the principles of corporate governance formulated in the documents of the Organization for Economic Cooperation and Development (OECD)[78], which focus on the protection of shareholder rights, transparency of company activities, responsibility of the board of directors and accountability of management.

Under the influence of European integration processes and the requirements of the Association Agreement with the EU, Ukraine is legislatively implementing a two-tier management system (with a clear separation of the functions of the Management Board and the Supervisory Board), which is inherent in the German-French corporate tradition.

The main vector of evolution is the adaptation of the G20/OECD Principles of Corporate Governance. This is expressed in the creation of independent Supervisory Boards not only in private business, but also in the public sector (Naftogaz, Ukrzaliznytsia), which is critically important in the context of the growing role of the state as a corporate owner during martial law.

As a result of globalization, Ukraine is gradually transitioning from the insider model of corporate control, typical of post-Soviet economies, to models focused on balancing the interests of all stakeholder groups.

This is manifested in:

– strengthening the role of institutional investors; development of independent audit mechanisms;

– increasing requirements for corporate reporting;

– introduction of ESG standards;

– expanding the participation of international investors in the capital structure of Ukrainian companies.

[78] OECD. (2023). *G20/OECD Principles of Corporate Governance*. OECD Publishing. doi.org

The current stage of development of the corporate sector of Ukraine is characterized by a combination of deep institutional shocks caused by martial law and forced modernization under the influence of European integration and digitalization. Its main vectors are presented in Table 1.3.

The factors of global integration of the Ukrainian corporate sector of the economy to the standards of the international community are:

Table 1.3 - Transformation of Ukraine's Corporate Sector[79]

Transformation Direction	Nature of changes
Share Ownership	Transition to digital forms of property rights
Corporate Control	Strengthening the role of information and digital control mechanisms
Financial Market	Integration with international capital markets
Corporate Governance	Implementation of digital decision-making systems
Disclosure	Increasing transparency and availability of data
Investor Protection	Harmonization with European standards
Business Valuation	Growing role of intangible and digital assets

• Requirements of international financial institutions (IMF, World Bank, EBRD): Provision of financial assistance and loans for post-war reconstruction is directly related to the quality of corporate control, transparency of reporting and real protection of investors' rights.

• Spread of ESG criteria: Global capital no longer invests in companies without compliance with the principles of environmental and social responsibility (Environmental, Social, and Governance). Integration of Ukrainian companies into the European space requires the introduction of non-financial audit.

[79] Hrytsenko A. A. Directions of transformation of corporate structures under the influence of digitalization of the Ukrainian economy. Economic theory. 2024. No. 2. pp. 18–32.

• Digital modernization of institutions: Globalization requires Ukrainian corporations to reduce transaction costs through the implementation of AI, cloud computing and remote voting tools for shareholders (e-voting), which eliminates the problem of geographical dispersion of owners[80].

Thus, institutional analysis shows that digital technologies, financial innovations and processes of global integration are forming a qualitatively new stage of development of share ownership in Ukraine.

Transformation is taking place not only at the level of technological renewal of the corporate sector, but also at the level of fundamental institutions of ownership and control. There is a gradual transition from the model of concentrated control to a system of digital corporate governance, in which information, data, intellectual capital and digital competencies become key resources.

Further evolution of the corporate sector of Ukraine will depend on the speed of adaptation of national institutions to the standards of the global digital economy, the development of the stock market and the introduction of modern mechanisms for protecting the rights of investors.

Further development of the corporate sector of Ukraine will largely depend on the ability of the national economy to adapt to global technological changes and ensure the modernization of the institutional environment[81].

The priority areas of development are: improving the corporate governance system in accordance with international standards; developing the digital infrastructure of the financial

[80] Hrytsenko, A. A. (2024). Tsyfrova transformatsiia ekonomichnykh instytutiv: vid tradytsiinykh korporatsii do detsentralizovanykh avtonomnykh orhanizatsii (DAO) [Digital transformation of economic institutions: from traditional corporations to decentralized autonomous organizations (DAO)]. *Ekonomichna Teoriia*, (1), 5–21.

[81] Economy of Ukraine under the influence of military factors: challenges and directions of anti-crisis policy: monograph / edited by Dr. of Economics, Corresponding Member of the National Academy of Sciences of Ukraine L. V. Shynkaruk; State Institution "Institute of Economics and Forecasting of the National Academy of Sciences of Ukraine". Kyiv, 2024. 384p.

market; increasing the level of protection of investor rights; stimulating the digital transformation of enterprises; developing mechanisms for financing innovative activities; forming an effective cybersecurity system for the corporate sector; integrating ESG and sustainable development principles into corporate practice.

Thus, the institutional analysis shows that the corporate sector of Ukraine is at the stage of deep transformation, caused by the simultaneous impact of globalization processes, digitalization and structural changes in the economy. The effectiveness of these transformations will depend on the quality of institutional reforms, the ability of corporations to implement modern digital technologies and the level of adaptation of the national corporate governance model to new challenges in the global economic environment.

Corporate finance and digital transformation are interdependent components that together determine the path of an enterprise to scaling precisely through effective management. Digital transformation is a tool for implementing management decisions in the field of corporate finance and achieving both short-term and long-term goals by: making informed decisions on the use of investments in digital technologies of the enterprise; forming investment budgets for the implementation of the latest developments; effectively distributing enterprise resources; ensuring the implementation of investments in digital infrastructure; automating routine processes in the enterprise; increasing the efficiency of using fixed assets of the enterprise; using digital systems, online platforms and tools.

1.2. THE EVOLUTION OF BUSINESS MODELS: FINANCIAL, MANAGERIAL AND TECHNOLOGICAL ASPECTS

The evolution of business models in the contemporary economy is a key determinant of the competitiveness and sustainability of enterprises operating in a global environment. In the context of rapidly advancing digitalization, innovative technologies and evolving consumer expectations, business models are not only transforming but also acquiring new dimensions that directly influence the financial, managerial and technological aspects of organizations.

The relevance of this topic is driven by the increasing role of digitalization in the modern economy. With the rapid development of technologies such as artificial intelligence (AI), automation and platform-based business models, enterprises are faced with the imperative to adapt their structures and processes in order to remain competitive. Despite growing investment in AI and automation across various industries, there is still a lack of comprehensive empirical data regarding their actual impact on business outcomes.

The primary objective of this research is to examine the influence of new business models on financial, managerial, and technological processes within the economy and to determine how these models affect the financial and managerial efficiency and overall competitiveness of enterprises. To achieve this objective, the following research tasks have been defined:

– To evaluate the impact of new business models on financial performance;

– To analyze the relationship between the degree of automation and managerial efficiency;

– To assess the contribution of AI to enhancing organizational competitiveness;

– To examine the role of enterprise size in the effectiveness of innovation adoption;

– To propose practical recommendations for small and medium-sized enterprises (SMEs) regarding the optimization of business processes.

The object of the study comprises SMEs in Bulgaria that are implementing innovative business models and technologies such as dropshipping, platform-based models, and AI.

The subject of the study is the interrelationship between the use of AI, the degree of automation, and key organizational performance indicators, including financial efficiency (measured through Return on Investment ROI), managerial effectiveness, and competitiveness (evidenced by customer base expansion).

The core hypothesis of this academic study asserts that digital transformation, realized through the adoption of innovative technologies such as AI, automation and platform-based models, significantly enhances the financial and managerial efficiency and competitiveness of SMEs. Furthermore, the degree of automation is directly associated with customer base growth and the optimization of operational processes.

The scope of the study includes an analysis of survey data collected from 135 enterprises operating in various sectors of the economy. The timeframe of the research spans from the beginning of 2024 to the end of the first quarter of 2025, thus ensuring the inclusion of up-to-date empirical evidence on the implementation of innovative business models and technological solutions within the contemporary economic context.

The research model tests the following hypotheses:

– H1: The implementation of innovative business models has a positive effect on an enterprise's financial efficiency, as

measured by indicators such as ROI and net present value (NPV);

– H2: Resource and process management in the context of digital transformation is significantly more effective when technologies such as AI and platform-based models are utilized;

– H3: The integration of technological innovations leads to a substantial increase in enterprise competitiveness, as measured by customer base expansion, purchase frequency, and customer satisfaction;

– H4: The degree of business process automation is directly correlated with improvements in financial performance, managerial effectiveness, and competitiveness;

– H5: The size of the enterprise has a significant impact on the effectiveness of adopting innovative business models and technologies.

– The analysis of the data is conducted in three distinct stages:

– The first stage involves a documentary analysis, including a review of existing studies on the topic and the implementation of an original survey;

– The second stage focuses on assessing the reliability and validity of the study. The primary objective here is to ensure consistency within the measurement scales and to validate the applied research model;

– The third stage involves the application of statistical analytical techniques aimed at identifying the relationships between dependent and independent variables.

1. Theoretical Framework

The evolution of business models in the contemporary economy is intrinsically linked to technological innovation and

shifts in consumer behavior. Digital technologies are needed to increase the competitiveness of business organizations today[82].

In the age of digital economy, the topic of innovation of SMEs is especially relevant in order to simplify trade processes, with the main focus on the role of logistics and

improving suplly chain[83].

As Teece (2010) emphasizes, business models are not static rather, they reflect the dynamics of the economic environment by incorporating new technologies and organizational structures in order to remain competitive[84]. It is precisely for this reason that an increasing number of companies are leveraging technology in an effort to gain significant competitive advantages, thereby enhancing their position within global value chains[85]. This transition from traditional supply chains to platform-based models and other innovative forms illustrates how technologies such as AI and blockchain are reshaping the way value is created and distributed. According to Yoo, Henfridsson, and Lyytinen (2010), digital technologies not only transform existing business models but also enable the emergence of new forms that challenge conventional economic paradigms[86]. These developments signify a transition toward

[82] Гигов, Р., Димитров, И. (2021), „План на статистическо изследване, приложимо при изследване на възможността за повишаване на конкурентоспособността на веригите за доставки на българските предприятия чрез блокчейн технологията“, Management & Education / Upravlenie i Obrazovanie, Vol 17, Issue 1, p.35, ISSN1312-6121.

[83] Koprinkova–Noncheva, N., Dimitrov, I. (2021), "Increasing the Innovative and Technological Representation of Bulgarian Small and Medium Sized Enterprises Through the Application of Key Characteristics with the Drop-Shipping Model," IV International Conference on High Technology for Sustainable Development (HiTech), pp. 01-04.

[84] Teece, J. (2010), “Business Models, Business Strategy and Innovation. Long Range Planning”, 43(2–3), pp. 172–194.

[85] Dimitrov, I., Gigov, R. (2021), "Factors Influencing the Degree of Penetration of Blockchain Technology in the Bulgarian Entrepreneurial Ecosystem," IV International Conference on High Technology for Sustainable Development (HiTech), pp. 01-04.

[86] Yoo, Y., Henfridsson, O. and Lyytinen, K. (2021), “ The New Organizing Logic of Digital Innovation: An Agenda for Information Systems Research. Information Systems Research”, pp. 724–735.

evolutionary forms of business models that are more flexible, scalable and oriented toward network effects.

The role of innovation in the transformation of business models is an integral part of this process, with dropshipping serving as a representative example of an evolutionary variant of the traditional supply chain. Increasingly, it is emerging as an innovative alternative to the conventional distribution model or as a method within the framework of e-commerce. Drop-shipping has gained increasing popularity over the years[87]. Due to its structure, drop-shipping is a simplified business model that shortens the path of goods and services to the consumer and delivers significant business benefits by reducing the usual cost of doing business[88]. This reduces transport costs, storage costs, and administrative expenses for SMEs that adopt the model. In summary, the model is characterized by the fact that retailers neither maintain nor manage inventory; instead, they focus solely on sales, while suppliers (manufacturers or national distributors) are responsible for stock management and product distribution on behalf of the retailers[89]. The application of the dropshipping model contributes to the enhancement of service quality among SMEs. An automated delivery system ensures faster, more accurate, and more reliable order fulfillment, which in turn leads to increased customer satisfaction.

- By adopting the dropshipping model, SMEs are able to compete more effectively with larger market players. They can

[87] Dimitrov, I., Koprinkova-Noncheva, N. and Dimitrova, A. (2023), "Key factors and conditions for implementing the drop-shipping method as an alternative to traditional supply chain", Entrepreneurship and Sustainability Issues, VsI Entrepreneurship and Sustainability Center, vol. 11(2), pp. 498-515.

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[89] Koprinkova–Noncheva, N., Dimitrov, I. (2021), "Increasing the Innovative and Technological Representation of Bulgarian Small and Medium Sized Enterprises Through the Application of Key Characteristics with the Drop-Shipping Model," IV International Conference on High Technology for Sustainable Development (HiTech), pp. 01-04.

offer product delivery services in the same manner as large corporations, thereby improving their market competitiveness.

- The automated delivery system can be integrated with inventory management systems, enabling more efficient stock tracking and minimizing losses due to overstocking, excessive warehouse space, or product shortages.
- The use of the dropshipping model by SMEs significantly enhances end-user satisfaction.

The next stage in the evolution of contemporary business models involves the integration of AI as a tool for managing business processes in SMEs. On the one hand, the implementation of AI in business operations, and on the other, the rapid growth and increasing prevalence of e-commerce, create the need for enterprises to improve their workflows and effectively integrate digital communication channels.

AI is a complex field within computer science and technology that aims to simulate human intelligence in machine systems. It encompasses a wide range of methodologies, algorithms, and applications that enable machines to perform tasks requiring cognitive capabilities such as learning, reasoning, data analysis, decision-making, and adaptation to new conditions. Some scholars define AI as "a technology designed to create agents that act rationally within a given environment by using methods of automated learning and problem-solving[90]. This definition underscores that AI not only imitates human behavior but also equips systems with the ability to make decisions based on logic and data. One of the core domains within AI is machine learning (ML), which enables systems to learn from data without being explicitly programmed. ML is the foundation of modern AI, as it allows systems to identify patterns within large volumes of data and to make predictions or decisions based on those patterns[91]. This

[90] Russell, S., Norvig, P. (2020), "Artificial Intelligence: A Modern Approach (4th ed.)".

[91] Goodfellow, I., Bengio, Y. and Courville, A. (2016), "Deep Learning".

makes ML particularly suitable for applications in finance, resource management, and technological innovation — all of which are key aspects in the evolution of business models.

In the context of the modern economy, AI is emerging as a primary driver of financial, managerial, and technological transformation, as AI is not only a tool for automation, but also a powerful mechanism for generating added value in business by optimizing processes, enhancing customer experience, and creating new revenue models[92]. A compelling example can be found in platform-based models such as Uber and Airbnb, which utilize AI for service personalization, demand forecasting, and pricing optimization.

The integration of AI into business models must be balanced with the principles of transparency, fairness, and accountability, as it affects society, employment, and human interactions[93]. AI enables enterprises to forecast financial indicators such as ROI and NPV with high accuracy by employing ML techniques to analyze historical data. Moreover, resource and process management becomes significantly more efficient due to AI's ability to automate decision-making and optimize operational functions. Now a day's companies are using data intelligence to flourish their business along with artificial intelligence. Data intelligence (DI) is a dynamic part of any establishment's energies to recover the amenities and revolutionary state-of-the-art policies they pay[94]. DI is frewuently applied to analyze and predict customer preferences, enabling organizations to tailor their strategies more

[92] Davenport, T. H. and Ronanki, R. (2018), "Artificial Intelligence for the Real World", Harvard Business Review , 96(1), pp. 108–116.

[93] Floridi, L., Cowls, J., Beltrametti, M., Chatila, R., Chazerand, P., Dignum, V., ... and Vayena, E. (2018), "AI4People—An Ethical Framework for a Good AI Society: Opportunities, Risks, Principles and Recommendations. Minds and Machines", 28(4), pp. 689–707.

[94] Charif, B. and Awad, A. I. (2014), "Business and government organizations' adoption of cloud computing", In International Conference on Intelligent Data Engineering and Automated Learning, pp. 492–501.

effectively[95]. By applying data mining techniques to gather statistics on consumer habits, shopping preferences, purchaising behavior, pricing sensitivity, solor and style choises, online trends and other individualized data, enterprises can better tailor their services and gain deeper insights into patterns within their target demographics[96].

Platform business models represent an innovative approach to organizing economic activity by creating a digital or physical environment that connects two or more parties (e.g., suppliers and consumers) for the purpose of value exchange. These models are characterized by scalability, low operational costs, and the capacity to generate new forms of interaction among participants. Some scholars argue that platform business models are systems that enable multiple participants to interact, thereby creating network effects that enhance value for all stakeholders[97]. This indicates that the success of platforms depends on their ability to attract and retain active users and providers. One of the most significant characteristics of platforms is the network effect, wherein the value of the service increases as the number of participants grows. Platforms are successful when they create positive network effects that facilitate interaction between the participating parties[98]. Platforms often leverage technologies such as AI, data analytics, and blockchain to automate processes and deliver personalized services. According to Kenney and Zysman (2016), digital platforms are changing the way value is created and distributed,

[95] Muthuveloo, R. and Ping, A. (2013), "Achieving business sustainability via I-TOP model. American Journal of Economics and Business Administration", 5(1), p.15.

[96] Mishra, S., Tripathi, R. (2021), "AI business model: an integrative business approach. J Innov Entrep" pp. 10-18.

[97] Parker, G., Van Alstyne, M., and Choudary, P. (2016), "Platform Revolution: How Networked Markets Are Transforming the Economy and How to Make Them Work for You . W.W. Norton and Company".

[98] Eisenmann, T., Parker, G. and Van Alstyne, M. (2011), "Platform Envelopment. Harvard Business Review" , Vol.89(10), pp.124–132.

replacing traditional supply chains with direct links between producers and consumers[99].

Platforms do not operate in isolation but are integrated into broader ecosystems that include partners, suppliers, and other stakeholders. As Jacobides, Cennamo, and Gawer (2018) emphasize, platforms are central to the creation of ecosystems that facilitate co-creation of value and innovation[100].

The financial aspects of business model evolution in the context of the modern economy are reflected in the emergence of new mechanisms for enhancing the financial resilience of enterprises, such as generating revenue through transaction fees and subscription-based models[101]. For example, platforms enable enterprises to reduce expenses related to physical infrastructure by utilizing online channels to reach customers. The managerial aspects of new business models are associated with the requirement for effective management of resources, processes, and stakeholder relationships. As Teece (2010) highlights, leadership and organizational culture are critical to the success of digital transformation[102].

As Chesbrough (2010) notes, the integration of technologies such as AI, blockchain, and cloud solutions transforms business models by enabling increased efficiency and transparency[103]. These aspects are precisely what constitute the technological infrastructure.

2. Research Methodology

[99] Kenney, M. and Zysman, J. (2016), "The rise of the platform economy. Issues in Science and Technology", Vol.32 (3), pp. 61–69.

[100] Jacobides, M. G., Cennamo, C. and Gawer, A. (2018), "Towards a theory of ecosystems. Strategic Management Journal", Vol.39(8), pp. 2255–2276.

[101] Kenney, M. and Zysman, J. (2016), "The rise of the platform economy. Issues in Science and Technology", Vol.32 (3), pp. 61–69.

[102] Teece, D. J. (2010), "Business models, business strategy and innovation. Long Range Planning" , Vol.43(2–3), pp. 172–194.

[103] Chesbrough, H. (2010), "Business model innovation: Opportunities and barriers. Long Range Planning", Vol. 43(2–3), pp. 354–363.

To gather the necessary information, a variety of methods were employed:

Sociological Method – A direct and online survey was conducted among 135 SMEs in Bulgaria. The enterprises were classified based on size, sector, and location.

Statistical Methods – A wide range of descriptive and analytical statistical techniques were used, including:

- Correlation analysis: to examine the relationships between independent and dependent variables;
- Regression analysis: to assess the strength and direction of the influence of independent variables on dependent ones;
- Chi-square test (χ^2): to test the significance of differences between categorical variables.

The results were processed using the SPSS 19 statistical software package and visually presented through Microsoft Office tools.

3. Validity and Reliability of the Research

The validity of the study was confirmed through the use of well-defined variables directly aligned with the objectives and hypotheses, as well as through high values in the correlation analysis (e.g., $r = 0.72$ for the relationship between AI and ROI). Reliability was ensured by high Cronbach's Alpha values ($\alpha > 0.85$), indicating strong internal consistency of the survey items, and by the statistical significance of the results ($p < 0.01$ for all tested hypotheses). Additionally, the combination of qualitative and quantitative methods ensured a balanced and scientifically grounded approach.

4. Results and Analysis

In the sample of 135 SMEs that have implemented new business models and technologies, the majority are enterprises with fewer than 50 employees (46.7%), followed by those with 50–200 employees (32.6%). Larger enterprises, with more than 200 employees, are less represented, with only 3.7% having over 500 employees.

In terms of core business activity, service-oriented enterprises predominate (30.4%), followed by the manufacturing sector (28.9%) and commerce (online/offline) with 25.9%. Financial services account for a smaller share (14.8%).

Geographically, 43.7% of the enterprises are located in the capital city, Sofia, while 33.3% are based in other cities. Rural areas are underrepresented (6.7%), and 16.3% of the enterprises operate internationally.

Regarding industry experience, a significant portion of the surveyed enterprises (58.5%) have been operating for over 10 years, indicating market stability and maturity. Enterprises with 6 to 10 years of experience make up 20.7%, while newer participants (less than 5 years in operation) account for 17.0%.

Following the description of the sample characteristics, the next step in the analysis involved conducting a correlation analysis to determine the strength and direction of relationships between the independent variables (use of AI and level of automation) and the dependent variables (financial efficiency, managerial efficiency, and competitiveness). This method is essential for testing the hypotheses, as it provides a clear view of the existence or absence of statistically significant relationships.

The results of the correlation analysis reveal strong positive correlations among the studied variables. The correlation coefficient for the relationship between AI usage and financial efficiency (ROI) was 0.72 ($p < 0.01$), supporting hypothesis H1 regarding the positive impact of innovative technologies on financial indicators. The level of automation also showed a strong correlation with managerial efficiency ($r = 0.75$, $p < 0.01$), confirming hypothesis H2. A significant correlation was observed between the use of AI and customer base expansion ($r = 0.65$, $p < 0.01$), which supports hypothesis

H3 concerning the contribution of technological innovation to competitiveness.

These results are presented in the table 1 below, which displays the correlation coefficients and significance levels for each variable pair:

Table 1.4 - Correlation Coefficients and Significance Levels Between Technological Variables and Key Business Performance Indicators

Variables	Correlation Coefficient (r)	p - Value	Interpretion
AI Usage vs. ROI	0.72	$p < 0.01$	Strong positive correlation
Automation Level vs. Management Efficiency	0.75	$p < 0.01$	Very strong positive correlation
AI Usage vs. Customer Base Growth	0.65	$p < 0.01$	Moderate to strong positive correlation

The correlation analysis confirms that the implementation of new technologies such as AI and automation has a significantly positive impact on the key business performance indicators of the enterprise. These results serve as a foundation for the more in-depth regression analysis, which further reveals the causal relationships between the examined variables.

The regression analysis was conducted to measure the strength and direction of the impact of independent variables (e.g., level of automation, use of AI) on dependent variables (financial efficiency, managerial efficiency, competitiveness). The SPSS results below demonstrate statistically significant models that support the formulated hypotheses.

Table 1.5 - Regression Analysis Results: Impact of AI and Automation on Business Performance Indicators

Model	β - Coeffi-cient	R^2	F - Statistic	p - Value	Interpretion
ROI vs. AI Usage	0.032	0.52	48.76	$p < 0.01$	A 1% increase AI usage leads to a 0.032-unit in crease in ROI.
Managerial Efficiency vs. Automation Level	0.028	0.56	49.80	$p < 0.01$	A 1% increase AI usage leads to a 0.028-unit increase in managerial efficiency.
Customer Base Growth vs. AI Usage	0.035	0.42	38.45	$p < 0.01$	A 1% increase AI usage leads to a 0.035-unit increase in crease in customer base growth.

The regression analysis confirms that the implementation of AI and automation has a significant positive impact on financial performance, managerial efficiency, and competitiveness. The obtained coefficients (β) and significance levels ($p < 0.01$) demonstrate the reliability of the models and support all formulated hypotheses.

Pearson's chi-square (χ^2) test was applied to examine the dependence between categorical variables. In this particular case, the method was used to determine whether the use of AI is associated with customer base expansion or improvements in overall competitiveness.

The chi-square test confirms that the use of AI significantly enhances competitiveness ($\chi^2 = 25.24$, $p < 0.01$),

with the strength of the association (Cramer's V = 0.50) underscoring the importance of technological innovation for enterprise success. Additionally, the data indicate that automation has a statistically significant contribution to improving competitiveness ($\chi^2 = 18.76$, $p < 0.01$). These findings complement the regression analysis and provide further empirical evidence supporting the formulated hypotheses.

Table 1.6 - Results of Pearson's Chi-Square (χ^2) Test: Association Between Technological Innovation and Competitiveness

Variables	χ^2 Value	Cramer's V	p - Value	Interpretion
AI Usage vs. Customer Base Growth	25.25	0.50	p < 0.01	Strong association between the use of Al and an sncrease in the customer base.
Automation Level vs. Competitiveness	18.76	0.45	p < 0.01	Significant relationship betweenthe level of automation and competitiveness/

Conclusion. This monograph presents a systematic and scientifically grounded analysis of the evolution of business models in the contemporary economy, emphasizing the financial, managerial, and technological dimensions of this transformation.

The study makes a substantial contribution to understanding the interrelationship between technological innovation and business performance, which is of critical importance to both the academic community and business practice. The central hypothesis, along with the accompanying sub-hypotheses, is confirmed through a quantitative study based on data from 135 SMEs in Bulgaria. The results demonstrate a strong positive correlation between AI implementation and

financial performance ($r = 0.72$, $p < 0.01$), with AI-using enterprises reporting an average ROI increase of 28%, compared to 12.6% for those not utilizing AI. The analysis also highlights the significant impact of automation on managerial efficiency ($\beta = 0.65$, $p < 0.01$) and its role in expanding the customer base ($\chi^2 = 12.45$, $p < 0.01$). These findings support the thesis that technological innovation is a key driver of enterprise competitiveness and success in the context of digital transformation.

Despite certain limitations — such as the regional focus of the study and the relatively small sample size — the methodological approach ensures the reliability and validity of the results. The use of a combination of qualitative and quantitative methods, including correlation, regression, and chi-square analyses, reinforces the scientific rigor of the study. High Cronbach's Alpha values ($\alpha > 0.85$) further confirm the internal consistency of the survey instrument.

The limitations stemming from the rapid pace of technological advancement and the specific characteristics of the sampled enterprises do not diminish the significance of the findings. On the contrary, they highlight the need for future research that could expand the scope of analysis by incorporating larger samples, international comparisons, and deeper sector-specific or technology-specific insights.

This monograph offers important practical recommendations for SMEs. The adoption of innovative technologies not only optimizes operational processes but also reveals strategic advantages, such as customer base expansion, improved customer satisfaction and reduced operational costs. Platform-based business models, grounded in the principles of open innovation, prove to be particularly well-suited to the digital transformation era, as they integrate financing, management, and technology within a unified framework.

The study underscores the importance of adaptive leadership and strategic thinking in ensuring successful digital transformation. The findings may serve as a foundation for informed strategic decision-making and contribute to the advancement of both theory and practice in the fields of innovative technologies and business model development.

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15. Muthuveloo, R. and Ping, A. (2013), "Achieving business sustainability via I-TOP model. American Journal of Economics and Business Administration", 5(1), p.15.

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19. Teece, J. (2010), "Business Models, Business Strategy and Innovation. Long Range Planning", 43(2–3), pp. 172–194.

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1.3. THEORETICAL FOUNDATIONS OF THE FUNCTIONING OF THE INSURANCE BUSINESS IN THE CONDITIONS OF GLOBAL TRANSFORMATIONS AND DIGITALIZATION OF THE ECONOMY

The modern global economy is undergoing profound structural changes driven by globalization, technological progress, and digital transformation, which significantly influence the functioning of financial systems, including the insurance sector. The insurance business plays a crucial role in ensuring financial stability, managing risks, and supporting economic development by redistributing uncertainty across individuals, enterprises, and entire economies. In the context of rapid global changes, the theoretical foundations of insurance activity require rethinking, as traditional approaches are being transformed under the influence of new economic realities, technological innovations, and emerging risks[104,105,106,107].

From a theoretical perspective, the insurance business is based on fundamental principles such as risk pooling, risk transfer, and risk diversification. These principles allow insurance companies to collect premiums from a large number of participants and use accumulated funds to compensate losses when insured events occur. The classical insurance theory is closely linked to probability theory and actuarial science, which provide tools for assessing risk and calculating insurance premiums. A key element of this theory is the law of large

[104] The analysis conducted by S&P confirms that in 2021 merger and acquisition (M&A) activity in insurance companies will become a turning point.. Available at https://forinsurer.com/news/21/04/09/39567 (accessed 26.08.2025).

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numbers, which ensures that the larger the number of insured entities, the more predictable the overall level of losses becomes, thereby contributing to financial stability and reliability of insurance operations.

In addition to its risk management function, modern insurance theory emphasizes the financial intermediary role of insurance companies. Insurers act not only as risk absorbers but also as significant institutional investors, accumulating substantial financial resources and channeling them into capital markets. This contributes to investment activity, economic growth, and the stability of financial systems. Thus, insurance institutions perform a dual role: they provide protection against risks and simultaneously support economic development through capital allocation[108,109,110].

Global transformations have significantly expanded the scope and complexity of insurance activities. In a globalized environment, insurance companies operate across international markets, facing interconnected risks such as financial crises, pandemics, climate change, cyber threats, and geopolitical instability. These risks are often systemic in nature, meaning they affect entire markets or economies and cannot be fully diversified through traditional methods. As a result, insurance theory increasingly incorporates the concept of systemic risk, which requires new approaches to risk assessment, management, and international cooperation, including reinsurance mechanisms and global risk-sharing strategies.

Another important aspect of globalization is the intensification of competition in the insurance market.

[108] White Paper "Future Regulation of the Insurance Market in Ukraine" National Bank of Ukraine. Kyiv, April 2020. 28 p. URL https://bank.gov.ua/admin_uploads/article/White_paper_insurance_2020.pdf?v=4 (accessed 26.08.2025).

[109] Zaviiska O. I. Insurance services: textbook. Lviv Kompakt LV, 2005. 656 p.

[110] Kryvenko Yu. Development of the insurance market of Ukraine under war conditions. Ekonomika ta suspilstvo. 2024. No. 65. DOI https://doi.org/10.32782/2524-0072/2024-65-142 (accessed 26.08.2025).

Companies must adapt to diverse regulatory frameworks, varying consumer expectations, and different levels of economic development across countries. This has led to the integration of international financial theories into insurance models, as well as the harmonization of regulatory standards at the global level. Consequently, modern insurance theory extends beyond national boundaries and increasingly reflects global economic interdependence[111, 112].

A key factor transforming the insurance industry is digitalization, which introduces advanced technologies such as artificial intelligence, big data analytics, blockchain, and the Internet of Things into insurance operations. These technologies fundamentally change traditional insurance models by improving risk assessment, enhancing operational efficiency, and enabling personalized insurance services. Big data allows insurers to process large volumes of information and improve predictive modeling, resulting in more accurate underwriting and pricing decisions. Artificial intelligence automates many processes, including claims handling and customer service, thereby reducing costs and increasing efficiency.

Blockchain technology introduces a new level of transparency and security in insurance transactions by creating decentralized and tamper-resistant data systems. This reduces fraud risks and strengthens trust between insurers and policyholders. Additionally, the emergence of InsurTech represents a new stage in the evolution of the insurance industry, combining technological innovation with financial services. InsurTech solutions promote the development of customer-

[111] Bohrynivtseva L., Kliuchka O., Zaichko I. Development and implementation of innovative approaches to financial management of insurance companies under martial law conditions. Ekonomika ta suspilstvo. 2024. No. 60.

[112] Vovk V., Zhezherun Yu., Kostohryz V. The insurance market of Ukraine during martial law: financial and marketing aspects. Problemy i perspektyvy ekonomiky ta upravlinnia. 2023. No. 3(35). P. 119 131.

oriented insurance products, real-time risk monitoring, and flexible policy structures tailored to individual needs[113].

Digital transformation also changes the nature of risk in the economy. Alongside traditional risks such as property damage or health-related losses, new categories of risks have emerged, including cyber risks, data breaches, and technological failures. These risks are more complex, dynamic, and difficult to predict, which challenges classical actuarial models. In response, insurance theory expands its conceptual framework to include cyber insurance and other innovative forms of coverage. Moreover, the speed of risk occurrence in the digital economy requires real-time monitoring systems and adaptive pricing models that can respond quickly to changing conditions[114].

In conclusion, the theoretical foundations of the insurance business are undergoing significant transformation under the influence of global economic changes and digitalization. While traditional insurance theory remains based on principles of risk pooling, probability, and diversification, modern developments introduce new dimensions such as systemic risk, digital risk, and data-driven decision-making. Globalization increases the complexity and interdependence of insurance markets, while digital technologies reshape operational processes and enhance efficiency. As a result, the insurance business is evolving into a highly adaptive and technologically advanced system that integrates classical financial principles with innovative digital solutions, ensuring its relevance and stability in the modern global economy[115].

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[113] Havadzyn N. O., Zapukhlyi R. I., Hryhorska N. M., Hrebeniuk N. V. Digitalization of insurance. Scientific Bulletin of Uzhhorod National University. 2023. Issue 48. P. 14 17.

[114] White Paper "Future Regulation of the Insurance Market in Ukraine" National Bank of Ukraine. Kyiv, April 2020. 28 p. URL https://bank.gov.ua/admin_uploads/article/White_paper_insurance_2020.pdf?v=4 (accessed 26.08.2025).

[115] The analysis conducted by S&P confirms that in 2021 merger and acquisition (M&A) activity in insurance companies will become a turning point... Available at https://forinsurer.com/news/21/04/09/39567 (accessed 26.08.2025).

The insurance business is an essential component of the financial system of any state, as it provides a mechanism for risk protection and contributes to the stability of economic relations. Its fundamental essence lies in the redistribution of financial resources among participants in insurance relations in order to compensate for losses in the event of an insured occurrence. In this process, the insurer accumulates contributions from policyholders, forms insurance reserves, and ensures their effective investment. Through this mechanism, the insurance sector generates additional financial resources that contribute to broader economic development and capital market stability[116].

From an economic perspective, insurance can be defined as a system of relations that emerges in the process of creating and using centralized and decentralized monetary funds intended to compensate for losses caused by adverse events. In this sense, the insurance business operates at the intersection of the financial and social sectors, combining the characteristics of entrepreneurial activity with those of a socially necessary service. It simultaneously functions as a profit-oriented economic activity and a public welfare mechanism aimed at reducing uncertainty and ensuring financial security for individuals, enterprises, and the state as a whole[117].

One of the fundamental characteristics of the insurance business is its universality. It encompasses both compulsory and voluntary types of insurance, including life insurance, health insurance, property insurance, liability insurance, and financial risk insurance, among others. Such a broad spectrum of coverage allows the insurance sector to support the stability of various segments of the economy and social life. Moreover, it creates preconditions for the diversification of the financial system by distributing risks across different sectors and participants,

[116] Bazylevych V. D., Bazylevych K. Insurance business. Kyiv Znannia, 2002. 203 p.

[117] Vovchak O. D., Zaviiska O. I. Insurance services: textbook. Lviv Kompakt LV, 2005. 656p.

thereby reducing systemic vulnerability and enhancing overall economic resilience[118].

Within the financial system of a state, insurance performs several key functions that determine its economic and social significance. The first is the risk function, which ensures protection against financial losses resulting from the occurrence of insured events. By transferring risks from individuals and enterprises to insurance companies, this function reduces uncertainty and enhances economic predictability. The second is the redistributive function, which involves the redistribution of financial resources among economic agents and the population through the accumulation of insurance premiums into centralized funds. This mechanism ensures the fair distribution of financial burdens associated with unforeseen events.

The third is the investment function, which is expressed in the mobilization of insurance reserves for participation in financial markets. Insurance companies, as institutional investors, channel accumulated funds into long-term investments, thereby contributing to capital formation, infrastructure development, and overall economic growth. The fourth is the stimulating function, which is related to the reduction of risk levels through the implementation of preventive measures. Insurance companies often encourage policyholders to adopt safer behavior and risk-reducing practices, which in turn supports more sustainable economic development. The fifth is the social function, which manifests itself in ensuring social stability through the compensation of losses suffered by households and business entities. By providing financial protection in times of crisis, insurance

[118] Zaviiska O. I. Insurance services: textbook. Lviv Kompakt LV, 2005. 656 p.

contributes to maintaining social cohesion and reducing the negative consequences of economic shocks[119].

Thus, the economic essence of the insurance business extends significantly beyond the simple compensation of losses arising from insured events, as it represents a complex and multifunctional system that contributes to the overall stability and resilience of the economic environment. In addition to its traditional protective role, insurance actively participates in the formation of conditions for sustainable socio-economic development by reducing uncertainty and mitigating the negative effects of various types of risks in both microeconomic and macroeconomic contexts.

Through the accumulation and redistribution of financial resources, the insurance sector enhances the efficiency of capital allocation and supports the continuous functioning of economic processes even under conditions of instability and external shocks.

Furthermore, insurance plays an important role in strengthening confidence among economic agents by providing mechanisms of financial security that encourage investment activity, entrepreneurial initiative, and long-term planning. By transforming uncertain and potentially destructive risks into manageable financial obligations, insurance contributes to the predictability of economic relations and improves the overall investment climate. In this sense, it acts not only as a compensatory mechanism but also as a preventive and stabilizing force within the economy.

[119] Zhytar M. O., Bohrynivtseva L. M., Chamor H. S. Financial stability of insurance companies: risk management. Collection of scientific papers of the University of the State Fiscal Service of Ukraine. 2019. No.1. P. 7-19.

Table 1.7 - Functions of the Insurance Business in the Economic System

Function	Characteristics	Economic Implications
Risk function	Provides protection against losses in the event of insured occurrences	Ensures financial security for enterprises and individuals, reducing economic uncertainty
Redistributive function	Accumulation of financial resources and their redistribution among participants in insurance relations	Creates a stable cash flow and supports the circulation of financial resources in the economy
Investment function	Formation of insurance reserves and their placement in financial and real sectors of the economy	Supports the development of capital markets, banking sector, and long-term investment activity
Incentive (stimulating) function	Implementation of preventive measures aimed at risk reduction	Decreases the level of risks in production and everyday activities, improving economic efficiency
Social function	Compensation of losses to households and economic agents	Enhances social protection and contributes to social stability

Source: compiled by the author[120]

In developed countries, the insurance business occupies a leading position among institutional investors. For instance, according to Swiss Re, in 2020 the total assets of insurance companies worldwide exceeded 33 trillion US dollars, accounting for approximately 8% of global financial resources[121]. In Ukraine, this indicator is significantly lower; however, a steady upward trend is observed, particularly in the life insurance and health insurance segments[122].

[120] Swiss Re Institute. World insurance riding out the 2020 pandemic storm. Sigma. 2020. No.4.

[121] Swiss Re Institute. World insurance riding out the 2020 pandemic storm. Sigma. 2020. No.4.

[122] Insurance market of Ukraine. URL: https: //www.statista.com/outlook/fmo/insurances/ukraine#gross-written-premium (accessed 26.08.2025).

The importance of the insurance business in the context of Ukraine's transformational economy is especially emphasized under wartime conditions. As Vovk, Zhezherun, and Kostohryz note, the insurance market during martial law performs a dual role: on the one hand, it provides compensation for risks, and on the other hand, it generates additional financial resources to support the economy[123].

It should be emphasized that the economic essence of insurance is being transformed alongside the development of digital technologies. Modern instruments such as Insurtech, cyber insurance, telematics, and blockchain are shaping a new architecture of the insurance market, where speed, transparency, and customer orientation become key determinants of competitiveness and efficiency[124, 125].

The historical development of the insurance business confirms its organic integration into the financial system of society. The origins of insurance date back to ancient times, while its early forms can be traced to medieval trade practices. In particular, in Genoa and Venice in the 15th century, contracts were concluded that guaranteed merchants compensation for losses in case of cargo damage or loss during maritime transport. This mechanism aimed to minimize risks in international trade and stimulated the expansion of commercial relations[126]. Later, insurance developed into fire, marine, and life insurance types, and by the 18th–19th centuries it became an integral component of the financial systems of leading European countries.

[123] Vovk V., Zhezherun Yu., Kostohryz V. The insurance market of Ukraine during martial law: financial and marketing aspects. Problemy i perspektyvy ekonomiky ta upravlinnia. 2023. No. 3(35). P. 119 131.

[124] Komisaroa A. S. InsurTech market as an innovative driver in insurance. Molodyi vchenyi. 2020. No. 23 (313). P. 396 397. URL https://moluch.ru/archive/313/71341 (accessed 26.08.2025).

[125] Cyber insurance: characteristics and features. URL https://www.lawfirm-pryadko.com/articles/kiberstrahovanie_harakteristika_i_osobennosti (accessed 26.08.2025).

[126] Bazylevych V. D., Bazylevych K. Insurance business. Kyiv Znannia, 2002. 203 p.

In Ukraine, insurance traditions are closely linked to the development of the cooperative movement. In the second half of the 19th century, mutual insurance societies emerged to protect peasant households from losses related to crop failure or livestock damage. This reflected the social nature of the insurance business, as its primary purpose was to support community members in difficult life circumstances[127]. During the Soviet period, insurance was monopolized by the state, and the development of a competitive insurance market in Ukraine began only after independence was declared in 1991.

In modern conditions, the economic essence of the insurance business is manifested through its interconnection with other segments of the financial system. First, the insurance market is an important partner of the banking sector, as insurance companies invest in banking instruments, while banks offer insurance products to clients in the form of bancassurance services[128]. Second, insurance companies actively participate in the stock market by placing their reserves in securities. This creates additional demand for government bonds and corporate securities, thereby stimulating the development of the investment market. Third, insurance serves as a foundation for the development of pension and social funds, since part of long-term insurance savings can be used to finance pension programs.

An important characteristic of the economic essence of insurance is its countercyclical nature. During periods of economic crises, demand for insurance services may decline due to reduced household incomes; however, the role of the insurance market as a stabilizing institution increases. Insurance companies act as institutions capable of maintaining financial discipline and accumulating funds even under macroeconomic

[127] Vovchak O. D., Zaviiska O. I. Insurance services: textbook. Lviv Kompakt LV, 2005. 656p.

[128] Hudz O. Ye. Insurance development: new tools and risk management methods in the digital economy. Ekonomika. Menedzhment. Biznes. 2019. No. 3. P. 4 12. DOI https://doi.org/10.31673/2415-8089.2019.030412 (accessed 26.08.2025).

instability[129]. A clear example is the crisis caused by the COVID-19 pandemic, when global demand for health and life insurance sharply increased, while other segments experienced a decline. This demonstrates the flexibility of the insurance business and its ability to adapt to new challenges[130].

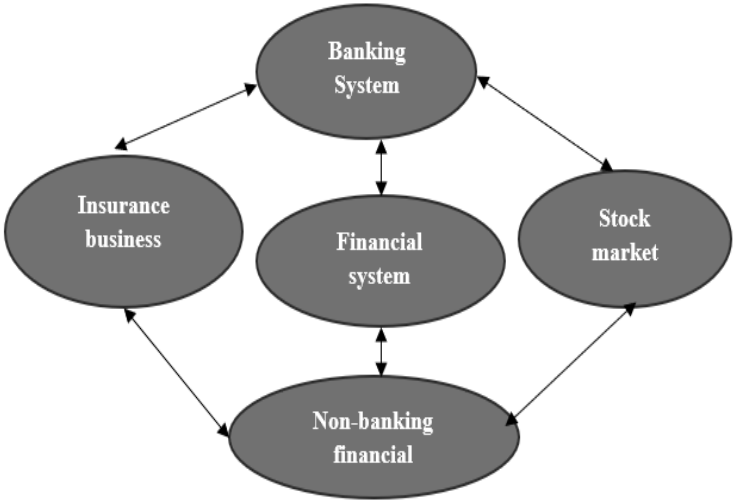


Fig. 1.2 - The Role of the Insurance Business in the Financial System of the State

Source: compiled by the authors[28]

Special attention should also be given to the social dimension of insurance. For households, insurance services function as a financial safety net that ensures compensation for losses in the event of unforeseen circumstances. This contributes to strengthening public trust in the financial system as a whole and stimulates economic activity. Research shows that in

[129] Zhytar M. O. Assessment of the functioning of the insurance market of Ukraine under globalization conditions. Infrastruktura rynku. 2020. No. 41. P. 261 266.

[130] Mamonova H. V., Pozdniakova L. O. Impact of the coronavirus crisis on the development of the insurance business in the world. Naukovyi pohliad: ekonomika ta upravlinnia. 2021. No. 3 (73). P. 74-81.

countries with a high insurance penetration rate, the population is more inclined to engage in entrepreneurial activity, as the perception of risk is significantly reduced. For Ukraine, increasing the level of insurance culture among the population remains one of the key priorities at the current stage of development[131].

As shown in Figure 1.2, the insurance business acts as an integral element of the financial system of the state, ensuring close interaction between the banking sector, the stock market, and other components of financial infrastructure. Through this role, it performs a mediating function in the redistribution of financial resources by accumulating monetary flows in the form of insurance premiums and directing them to various sectors of the economy. Thus, the insurance business not only provides financial protection for market participants but also contributes to improving the efficiency of the entire financial system through capital mobilization and redistribution.

An important aspect of the economic essence of insurance is its investment role. Insurance reserves formed from policyholder contributions represent a significant volume of long-term capital that can be used for investment in different sectors of the economy. In developed countries, insurance companies are among the largest institutional investors, acting as major holders of government bonds, corporate securities, infrastructure projects, and real estate assets. This ensures stable financing of strategically important areas such as healthcare, education, transport infrastructure, and innovative economic development.

In Ukraine, the investment function of insurance companies is still not fully realized, which is due to the underdevelopment of the stock market, a limited range of

[131] Panchenko O., Kholyavko N., Kolotok M. Insurance literacy of the population as a key condition for insurance market development. Problemy i perspektyvy ekonomiky ta upravlinnia. 2021. No. 4(28). P. 194- 202.

financial instruments, and low capitalization levels of insurers. At the same time, there is significant potential for the development of this function, especially under conditions of financial reform, integration into the European financial space, and expansion of opportunities for investing insurance reserves[132].

In addition, insurance companies play an important role in implementing state economic policy. Through mandatory insurance mechanisms, such as motor third-party liability insurance, occupational accident insurance, and other socially significant types of insurance, the state partially delegates its social functions to the private sector. This reduces the burden on the state budget, increases the efficiency of risk management, and ensures citizens receive more prompt and financially guaranteed protection.

Overall, the role of the insurance business in the financial system of Ukraine can be considered in three interrelated dimensions: economic, social, and fiscal. The economic dimension involves the formation of long-term investment resources and the development of financial markets. The social dimension is reflected in improving the welfare of the population, ensuring protection against risks, and stabilizing the socio-economic environment. The fiscal dimension is manifested in generating tax revenues for the budget and reducing government expenditures by transferring part of social obligations to insurance companies.

In this context, the economic essence of insurance is defined as a complex combination of protective, investment, and socio-economic functions that ensure the stability of the state's

[132] Zhytar M. Trends in the development of the insurance market of Ukraine under martial law conditions. Ekonomika ta suspilstvo. 2024. No. 61.

financial system and contribute to the development of market relations[133, 134].

Studying international experience in the functioning of the insurance business allows for a deeper understanding of its economic nature and helps identify promising directions for improving the national insurance system. In developed countries, insurance companies are not only financial intermediaries but also key institutional investors in the national economy. For example, in France, the assets of insurance companies exceed 200% of GDP, indicating a very high level of insurance market development. In comparison, in Ukraine this indicator remains significantly lower, and the share of insurance premiums and insurer assets in the financial system is still limited[135].

In the United States, the United Kingdom, and Germany, insurance companies play a leading role in the stock market, actively investing in government and corporate bonds, real estate, infrastructure projects, and innovative ventures. Such activities not only ensure profitability for insurers but also promote overall economic growth and financial system development[136].

A special place in global practice is occupied by life insurance, which combines both risk protection and long-term capital accumulation functions. In Japan, the share of life insurance in GDP exceeds 8%, whereas in Ukraine it does not

[133] Vovk V., Zhezherun Yu., Kostohryz V. The insurance market of Ukraine during martial law: financial and marketing aspects. Problemy i perspektyvy ekonomiky ta upravlinnia. 2023. No. 3(35). P. 119 - 131.

[134] Zhytar M. O., Bohrynivtseva L. M., Chamor H. S. Financial stability of insurance companies: risk management. Collection of scientific papers of the University of the State Fiscal Service of Ukraine. 2019. No. 1. P. 7-19.

[135] First results 2019 of the French insurance market. URL https://www.asquarepartners.com/premiers-resultats-2019-de-lassurance-francaise/ (accessed 26.08.2025).

[136] Motashko T. P. Development of the global insurance market in conditions of digitalization. Bulletin of Taras Shevchenko National University of Kyiv. Economics. 2016. Issue 5. P. 18 24.

exceed 0.5%. This significant gap is explained by a low level of insurance culture among the population, insufficient trust in financial institutions, and limited purchasing power of citizens[137].

In the European Union, the insurance business operates under a strict regulatory framework based on the Solvency II Directive. It establishes high requirements for capitalization, risk management systems, and transparency of insurers' activities, ensuring the stability of the insurance market even during financial crises[138]. For Ukraine, adapting these standards is a strategic task, as they form the basis of the European financial space.

Modern global trends significantly influence the transformation of the economic essence of the insurance business. One of the most important is digitalization, which changes distribution channels of insurance products, risk assessment methods, and claims settlement mechanisms. The use of Big Data, artificial intelligence, and blockchain technologies enables insurance companies to significantly improve efficiency, reduce operational costs, and offer more personalized services to clients[138].

These changes transform the very nature of insurance relations, shifting them from a traditional post-event compensation model to preventive real-time risk management[139].

[137] Insurance market of Ukraine. URL https://www.statista.com/outlook/fmo/insurances/ukraine#gross-written-premium (accessed 26.08.2025).

[138] Panchenko O., Sadchykova I. The impact of digital technologies on the development of the insurance business. Problemy i perspektyvy ekonomiky ta upravlinnia. 2023. No. 4 (36). P. 291-301.

[139] Parubets O., Podoliak O. Transformation of the mechanism of functioning and development of the insurance market under digitalization of the economy. Problemy i perspektyvy ekonomiky ta upravlinnia. 2024. No. 2 (38). P. 165 176. DOI https://doi.org/10.25140/2411-5215-2024-2(38)-165-176.

In the global context, insurance also serves as an important instrument of financial stability in managing catastrophic risks. Examples include international insurance pools established to cover losses from natural disasters, pandemics, or terrorist attacks[140]. In many cases, the state acts as a guarantor of such mechanisms, highlighting the strategic importance of the insurance business for economic stability.

In Ukraine, the development of the insurance business has several specific features. First, it largely depends on the level of economic development and political stability. Second, the structure of insurance premiums is dominated by motor insurance, while life and health insurance remain underdeveloped[141]. Third, Ukrainian insurance companies are characterized by low capitalization, which limits their ability to generate long-term investment resources[142].

Special attention should be given to the functioning of the insurance business under wartime conditions. On the one hand, there is a growing need for protection against risks related to property damage, threats to life and health, and liability obligations. On the other hand, reduced purchasing power of households and businesses leads to lower demand for insurance services, resulting in market contraction and consolidation of assets among the largest players[143].

Nevertheless, even under martial law, the insurance business maintains its role in the financial system, acting as an

[140] Markova. Creation of an insurance pool the best solution during COVID-19. URL https://vuzf.bg/novini/sazdavane-na-zastrahovatelen-pul-e-nay-dobroto-reshenie-pri-covid-19 (accessed 26.08.2025).

[141] Insurance market statistics of Ukraine. URL https://forinsurer.com/stat (accessed 26.08.2025).

[142] Zhytar M. Trends in the development of the insurance market of Ukraine under martial law conditions. Ekonomika ta suspilstvo. 2024. No. 61.

[143] Maryna A., Petsenko M. The insurance market of Ukraine under war conditions. Tsyfrova ekonomika ta ekonomichna bezpeka. 2023. No. 5 (05). P. 44 51. DOI https://doi.org/10.32782/dees.5-7 (accessed 26.08.2025).

important mechanism for resource redistribution and supporting economic stability[144].

Table 1.8 - Comparative Characteristics of the Insurance Business in Ukraine and EU Countries

Criterion	Ukraine	EU Countries
Share of insurance premiums in GDP	1.0–1.2%	6–8%
Leading segments	Motor insurance, property insurance	Life insurance, health insurance
Level of regulation	Transitional, based on the Law "On Insurance"	Solvency II (high regulatory standards)
Investment function	Limited due to low capitalization	Strong, long-term investment orientation
Digitalization	At the implementation stage	Developed InsurTech ecosystem

Source: compiled by the author[145,146,147]

The data presented in Table 1.8 indicate a significant lag of the Ukrainian insurance market behind European indicators, which necessitates structural reforms in the sector. One of the key factors is the need to increase public trust in insurance companies. A low level of insurance culture, combined with cases of fraud in the market, reduces demand for insurance services and creates a vicious circle: lack of demand leads to

[144] Kryvenko Yu. Development of the insurance market of Ukraine under war conditions. Ekonomika ta suspilstvo. 2024. No. 65. DOI https://doi.org/10.32782/2524-0072/2024-65-142 (accessed 26.08.2025).

[145] Havadzyn N. O., Zapukhlyi R. I., Hryhorska N. M., Hrebeniuk N. V. Digitalization of insurance. Scientific Bulletin of Uzhhorod National University. 2023. Issue 48. P. 14- 17.

[146] Kryvenko Yu. Development of the insurance market of Ukraine under war conditions. Ekonomika ta suspilstvo. 2024. No. 65. DOI https://doi.org/10.32782/2524-0072/2024-65-142 (accessed 26.08.2025).

[147] On Insurance Law of Ukraine dated 07.03.1996 No. 85/96 VR. Bulletin of the Verkhovna Rada of Ukraine. URL https://zakon.rada.gov.ua/laws/show/85/96-vr#Text (accessed 26.08.2025).

insufficient capital accumulation, which in turn limits investment opportunities. Overcoming this problem is possible only through comprehensive measures, including stronger state regulation, increased transparency of insurers' activities, and the development of financial literacy among the population[148].

In general, the economic essence of the insurance business in Ukraine is manifested through a combination of two interrelated aspects. On the one hand, it includes classical functions of protection, redistribution, and investment, which are inherent to insurance markets worldwide. On the other hand, it reflects specific features caused by low levels of trust, economic instability, and wartime risks. Therefore, the adaptation of international best practices and gradual implementation of European insurance standards remain critically important for Ukraine[149,150].

Another important aspect of the economic essence of insurance is its integration into the system of national economic security. Financial security is a key component of national security, and insurance acts as one of the mechanisms for ensuring it. Insurance companies accumulate financial resources that can be used to compensate for losses caused by natural disasters, technological accidents, or military actions, thereby reducing the burden on the state budget. Research shows that in countries with highly developed insurance markets, public expenditures on disaster recovery are significantly lower, as the private insurance sector bears a substantial share of the financial burden[151]. For Ukraine, which is currently experiencing the

[148] Panchenko O., Kholyavko N., Kolotok M. Insurance literacy of the population as a key condition for insurance market development. Problemy i perspektyvy ekonomiky ta upravlinnia. 2021. No. 4(28). P. 194 202.

[149] Zhytar M. Trends in the development of the insurance market of Ukraine under martial law conditions. Ekonomika ta suspilstvo. 2024. No. 61.

[150] Shirinian A., Tatarina T. Economic characteristics of the insurance market in Ukraine at the current stage of development. Ekonomika ta suspilstvo. 2024. No. 68.

[151] Innovation in financial markets monograph / ed. by S. V. Onyshko. Irpin University of the State Fiscal Service of Ukraine, 2018. 466 p.

devastating effects of war, the development of insurance mechanisms for rebuilding infrastructure, housing, and businesses is particularly relevant.

In this context, international initiatives related to war-risk insurance are of great importance. Some countries, such as Poland and Lithuania, are already proposing models for insuring investments against military risks in cooperation with the European Bank for Reconstruction and Development and the World Bank. The implementation of similar mechanisms in Ukraine would facilitate the attraction of foreign investment into post-war reconstruction processes, as major investors are generally unwilling to operate in high-risk environments without adequate insurance protection[152]. Thus, the insurance business functions not only as a financial instrument but also as a geopolitical tool capable of ensuring long-term economic stability.

Special attention should be paid to the interaction between the insurance business and public finances. On the one hand, insurance companies are taxpayers contributing to budget revenues. On the other hand, the state uses insurance mechanisms to implement social policy, including compulsory health insurance and occupational accident insurance. This interaction creates a synergistic effect, as it combines private and public resources to ensure social stability[153].

It is important to emphasize that the role of the insurance business in the financial system of a state changes depending on the stage of economic development. In advanced economies, insurance primarily performs an investment function, whereas in transitional economies, including Ukraine, the main priority

[152] Maryna A., Petsenko M. The insurance market of Ukraine under war conditions. Tsyfrova ekonomika ta ekonomichna bezpeka. 2023. No. 5 (05). P. 44 51. DOI https://doi.org/10.32782/dees.5-7 (accessed 26.08.2025).

[153] Pozdniakova L. O. Problems of development of the insurance market of Ukraine and ways to solve them in modern conditions. Aktualni problemy ekonomiky. 2017. No. 6 (108). P. 250 254.

remains its protective function. However, the gradual introduction of digital technologies and integration into the European financial space are creating conditions for transforming Ukrainian insurance companies into powerful institutional investors[154].

The prospects for the development of the insurance business in Ukraine are closely linked to the European integration process. The Association Agreement with the European Union provides for the gradual approximation of national legislation to EU standards, particularly in the insurance sector. This includes the implementation of the Solvency II framework, increased capitalization requirements, enhanced transparency of insurers, and strengthened regulatory supervision. As a result, the Ukrainian insurance market will be able to integrate into the unified European financial space, which will contribute to its growth and strengthening[155].

Equally important is the development of financial literacy among the population. A low level of trust in insurance companies and insufficient awareness of the benefits of insurance protection remain key barriers to market development. Therefore, improving insurance culture through educational programs, government initiatives, and the activities of insurance companies themselves should become a priority in the coming years[156].

In the post-war period, the role of the insurance business is expected to become even more significant. First, insurance companies may serve as an important instrument for economic

[154] Havadzyn N. O., Zapukhlyi R. I., Hryhorska N. M., Hrebeniuk N. V. Digitalization of insurance. Scientific Bulletin of Uzhhorod National University. 2023. Issue 48. P. 14 17.

[155] White Paper "Future Regulation of the Insurance Market in Ukraine" National Bank of Ukraine. Kyiv, April 2020. 28 p. URLhttps://bank.gov.ua/admin_uploads/article/White_paper_insurance_2020.pdf?v=4 (accessed 26.08.2025).

[156] Panchenko O., Kholyavko N., Kolotok M. Insurance literacy of the population as a key condition for insurance market development. Problemy i perspektyvy ekonomiky ta upravlinnia. 2021. No. 4(28). P. 194-202.

recovery by attracting both international resources and domestic investment. Second, they are capable of providing risk coverage in key sectors such as construction, transport, and energy, which are essential for infrastructure reconstruction. Third, the insurance business will contribute to the formation of long-term financial resources for the development of small and medium-sized enterprises, which are expected to become a driving force of post-war economic recovery[157].

In modern conditions, the economic essence of the insurance business is characterized by its multidimensional nature. It combines protective, investment, social, and innovative functions, ensuring not only compensation for losses but also the creation of conditions for sustainable economic growth. Within the financial system of the state, insurance acts simultaneously as a stabilizer, investor, and social partner, without which the development of market relations would be impossible.

Considering the above, the strategic priorities for the development of the insurance business in Ukraine can be defined as a set of interrelated directions. First, it is necessary to increase the capitalization of insurance companies, which will ensure their financial stability and strengthen their ability to perform investment functions. Second, a key task is the adaptation of the national insurance regulatory system to European standards, which will facilitate integration into the EU financial space. Another important direction is the development of digital technologies, which will enhance the efficiency, transparency, and customer orientation of insurance services. Special attention should also be given to the creation of mechanisms for insuring war and catastrophic risks, which may become a foundation for economic recovery and investment attraction.

[157] Kryvenko Yu. Development of the insurance market of Ukraine under war conditions. Ekonomika ta suspilstvo. 2024. No. 65. DOI https://doi.org/10.32782/2524-0072/2024-65-142 (accessed 26.08.2025).

Risks in Insurance Activity and Their Impact on Market Functioning

Risk is a fundamental economic category that determines the essence and mechanism of insurance functioning. It is precisely the existence of risk that creates the demand for insurance services, as no sphere of human activity can be fully protected from accidental losses or unforeseen events. Therefore, the insurance business not only responds to existing risks but also transforms them into the basis of its own development. In economic literature, insurance risks are defined as probable events whose occurrence leads to material, financial, or social losses for the insured party, and which are compensated by the insurer in accordance with contractual terms[158].

It is important to note that risk in insurance activity has a dual nature. On the one hand, it is the object of insurance protection, as clients seek insurance coverage to protect themselves from potential losses. On the other hand, risk is a key factor in the functioning of insurance companies themselves, since improper risk assessment may lead to financial instability or even bankruptcy. Therefore, risk management is a central element of the strategy of every insurance company[159].

The classification of risks in insurance activity is multidimensional. Depending on their origin and nature of impact, they are divided into:

Natural risks – associated with natural disasters such as floods, earthquakes, hurricanes, droughts, and landslides. These risks are catastrophic in nature and cause significant losses within a short period of time.

Technogenic risks – arising from industrial accidents, transport disasters, and fires at enterprises. They are closely

[158] Bazylevych V. D., Bazylevych K. Insurance business. Kyiv Znannia, 2002. 203 p.

[159] Zhytar M. O., Bohrynivtseva L. M., Chamor H. S. Financial stability of insurance companies: risk management. Collection of scientific papers of the University of the State Fiscal Service of Ukraine. 2019. No. 1. P. 7-19.

linked to the level of technological development and infrastructure condition.

Social risks – related to human health, life, and working capacity. These include risks of accidents, illnesses, disability, and death.

Economic risks – caused by financial instability, currency fluctuations, inflation, and capital market crises.

Political risks – associated with military actions, social tensions, legislative changes, and regulatory policy shifts.

Specific insurance business risks – including risks of inadequate tariff policies, errors in reserve formation, fraudulent schemes, or imperfections in actuarial calculations[160].

Each of these risk groups affects the functioning of the insurance market in different ways. While natural and technogenic risks stimulate demand for insurance services, economic and political risks may paralyze insurers' operations by reducing clients' purchasing power or increasing payout obligations.

Particular attention should be paid to the problem of systemic risks, which simultaneously affect large groups of policyholders and lead to massive losses. These risks may include natural disasters, wars, or global economic crises. A clear example of a systemic risk was the COVID-19 pandemic, during which the insurance industry in many countries faced a sharp increase in claims in the areas of health and life insurance, while simultaneously experiencing a decline in demand for travel and transport insurance policies[161]. In Ukraine, an

[160] Pozdniakova L. O. Problems of development of the insurance market of Ukraine and ways to solve them in modern conditions. Aktualni problemy ekonomiky. 2017. No. 6 (108). P. 250 - 254.

[161] Mamonova H. V., Pozdniakova L. O. Impact of the coronavirus crisis on the development of the insurance business in the world. Naukovyi pohliad: ekonomika ta upravlinnia. 2021. No. 3 (73). P. 74 81.

additional systemic factor is the ongoing war, which creates an unprecedented level of uncertainty for all market participants[162].

An important tool for risk management in insurance activity is actuarial calculations. Actuarial science allows insurers to estimate the probability of insured events, determine appropriate insurance premium levels, and form an optimal structure of insurance reserves. The financial stability of an insurer largely depends on the accuracy of actuarial models: excessively high premiums reduce the company's competitiveness, while insufficiently calculated premiums may lead to financial losses[163]. In developed countries, there are strict requirements for the certification of actuaries, whereas in Ukraine this field is still in the process of development, which creates additional risks for the insurance market.

Another important mechanism for risk mitigation is reinsurance. It enables insurance companies to transfer part of their risks to other insurers or specialized reinsurance companies. This is particularly relevant in the case of catastrophic risks, when the scale of losses exceeds the financial capacity of a single insurer. For example, after major natural disasters such as hurricanes or earthquakes, reinsurance companies cover a significant portion of compensation payments, thereby preventing the insolvency of national insurers[164]. In Ukraine, the reinsurance market remains underdeveloped, and a large share of risks is transferred to foreign companies, which indicates the limited internal financial capacity of the domestic insurance sector.

[162] Kryvenko Yu. Development of the insurance market of Ukraine under war conditions. Ekonomika ta suspilstvo. 2024. No. 65. DOI https://doi.org/10.32782/2524-0072/2024-65-142 (accessed 26.08.2025).

[163] Zhytar M. O., Bohrynivtseva L. M., Chamor H. S. Financial stability of insurance companies: risk management. Collection of scientific papers of the University of the State Fiscal Service of Ukraine. 2019. No. 1. P. 7-19.

[164] Swiss Re Institute. World insurance riding out the 2020 pandemic storm. Sigma. 2020. No.4.

In addition, the effectiveness of insurers' activities is directly influenced by the quality of insurance reserve formation. According to the Law of Ukraine "On Insurance"[165], companies are required to form reserves to ensure future claim payments under insurance contracts. However, in practice, cases of underestimation or inefficient allocation of reserves are often observed, creating a risk of insolvency in the event of mass claims. The National Bank of Ukraine, in its "White Papers," has repeatedly emphasized the need to strengthen supervision over the quality of reserves and align them with European standards[166].

The presented table illustrates that the risk management system in insurance activity is complex and requires coordination between insurance companies and state regulatory authorities. A particularly important issue is the diversification of the insurance portfolio. If a company focuses exclusively on a single segment (for example, motor insurance), it becomes highly vulnerable to changes within that sector. In contrast, a balanced portfolio that includes life insurance, health insurance, property insurance, and financial risk insurance enables insurers to reduce the impact of market fluctuations and ensure stable income streams[167].

The impact of risks on the functioning of the Ukrainian insurance market can be observed in recent years. First, military actions have led to a sharp decline in demand for certain types of insurance, particularly travel insurance and property insurance in conflict-affected areas. Second, the demand for

[165] On Insurance Law of Ukraine dated 07.03.1996 No. 85/96 VR. Bulletin of the Verkhovna Rada of Ukraine. URL https://zakon.rada.gov.ua/laws/show/85/96-vr#Text (accessed 26.08.2025).

[166] White Paper "Future Regulation of the Insurance Market in Ukraine" National Bank of Ukraine. Kyiv, April 2020. 28 p. URLhttps://bank.gov.ua/admin_uploads/article/White_paper_insurance_2020.pdf?v=4 (accessed 26.02.2026).

[167] Zhytar M. Trends in the development of the insurance market of Ukraine under martial law conditions. Ekonomika ta suspilstvo. 2024. No. 61.

health, life, and liability insurance has increased; however, limited purchasing power among the population prevents full realization of this demand[168].

Table 1.9 - Risk Management Mechanisms in Insurance Activity

Mechanism	Essence	Expected Result
Actuarial calculations	Use of mathematical models to forecast the probability of insured events	Stable pricing (tariff) policy
Reinsurance	Transfer of part of the risk to other insurers or reinsurance companies	Reduction of catastrophic losses
Reserve formation	Accumulation of funds to cover future insurance claims	Financial stability of the insurer
Portfolio diversification	Distribution of risks across different insurance types and geographical regions	Reduction of risk concentration
Regulatory supervision	State control over insurance companies' activities	Protection of policyholders' rights

Source: compiled by the author[169]

Third, a significant number of insurers have faced solvency problems due to a rapid increase in claim payments and an inability to attract additional capital[170].

In international practice, state guarantees and insurance pools are widely used to mitigate systemic risks. For example,

[168] Kryvenko Yu. Development of the insurance market of Ukraine under war conditions. Ekonomika ta suspilstvo. 2024. No. 65. DOI https://doi.org/10.32782/2524-0072/2024-65-142 (accessed 26.08.2025).

[169] White Paper "Future Regulation of the Insurance Market in Ukraine" National Bank of Ukraine. Kyiv, April 2020. 28 p. URLhttps://bank.gov.ua/admin_uploads/article/White_paper_insurance_2020.pdf?v=4 (accessed 26.02.2026).

[170] Maryna A., Petsenko M. The insurance market of Ukraine under war conditions. Tsyfrova ekonomika ta ekonomichna bezpeka. 2023. No.5 (05). P.44-51. DOI https://doi.org/10.32782/dees.5-7 (accessed 26.02.2026).

in Germany there is a state program for natural disaster insurance that guarantees compensation to citizens even in cases of insurer insolvency. In France, a system of compulsory natural catastrophe insurance operates with state subsidies[171]. In Ukraine, such mechanisms are still at the discussion stage; however, their implementation is critically necessary in the post-war period.

Another highly relevant issue is fraud risk in insurance activity. It includes both fraud committed by clients (such as falsification of insurance claims or inflation of losses) and fraud by insurers (such as concealment of profits or unfair contractual conditions). According to expert estimates, in some countries up to 10% of all insurance payouts are associated with fraudulent schemes[172]. This not only undermines the financial stability of insurance companies but also reduces public trust in the insurance market.

Regulatory risks also have a significant impact on market functioning. Unpredictable changes in legislation or regulatory practice may impose additional burdens on insurers. For instance, in 2020 the National Bank of Ukraine introduced new capital adequacy requirements for insurance companies, which led to the exit of some small market players[173]. On the one hand, this reduced competition; on the other hand, it increased the overall stability of the sector.

Thus, risks in insurance activity should not be viewed solely as threats. They simultaneously act as drivers of market development, as they stimulate the emergence of new products, improvement of management mechanisms, and strengthening of the state regulatory system. This reflects their dual nature:

[171] Motashko T. P. Development of the global insurance market in conditions of digitalization. Bulletin of Taras Shevchenko National University of Kyiv. Economics. 2016. Issue 5. P. 18 24.
[172] Cyber insurance: characteristics and features. URL https://www.lawfirm-pryadko.com/articles/kiberstrahovanie_harakteristika_i_osobennosti (accessed 26.08.2025).
[173] Official website of the National Bank of Ukraine. URL https://bank.gov.ua (accessed 21.04.2024).

destructive in the short term but stimulating in the long term[174, 175].

A special role in risk mitigation is played by reinsurance as an instrument of international cooperation. When individual national companies are unable to bear catastrophic losses independently, reinsurance corporations such as Munich Re, Swiss Re, and Lloyd's ensure global risk redistribution. This model allows the insurance market to remain stable even after large-scale disasters. For example, after hurricanes in the United States in 2017, more than 60% of claims were covered by reinsurers, while local companies maintained solvency[176]. For Ukraine, integration into the international reinsurance market has a dual effect: on the one hand, it reduces the vulnerability of domestic insurers; on the other hand, it creates dependence on external players, which may become a risk in conditions of geopolitical isolation or sanctions.

In wartime conditions, risk issues become particularly urgent. Political and military risks are unique in their scale of impact, as they disrupt operations across multiple segments of the market simultaneously. In 2022–2023, for example, insurance volumes for property and transport significantly decreased in regions affected by hostilities. At the same time, demand for health and personal insurance increased; however, low income levels limited its expansion[177]. This demonstrates the dual nature of war-related risks: they reduce market capacity while simultaneously creating conditions for the development of new insurance segments.

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[174]Motor (transport) Insurance Bureau of Ukraine statistics. URL http://www.mtsbu.ua/ua/statistics/ (accessed 26.02.2026).

[175] Chunytska I. I., Bohrynivtseva L. M., Kliuchka O. V. Analysis of the impact of modern technologies on the development of the insurance business in Ukraine. Current Issues of Economic Sciences. 2025. No. 7.

[176] Swiss Re Institute. World insurance riding out the 2020 pandemic storm. Sigma. 2020. No.4.

[177] Kryvenko Yu. Development of the insurance market of Ukraine under war conditions. Ekonomika ta suspilstvo. 2024. No. 65. DOI https://doi.org/10.32782/2524-0072/2024-65-142 (accessed 14.03.2026).

Another category of risks that directly affects trust in the insurance market is reputational risk. Its essence lies in the potential loss of customer confidence due to delayed claim payments, non-transparent contract conditions, or financial misconduct. Reputational risks often have a cumulative effect: even a single high-profile case of insurer bankruptcy or refusal to pay claims can undermine trust in the entire market. Therefore, modern insurers invest significant resources in building a positive corporate image and ensuring high standards of customer service[178].

Scientific literature emphasizes that risks in insurance activity should be considered not only as threats but also as drivers of innovation. It is precisely due to new challenges that products such as cyber insurance, professional liability insurance, and telematics-based motor insurance have emerged. For instance, the growing cyber threats in the financial sector have led to the development of the cyber insurance segment, which is actively expanding in the United States and European Union countries[179]. For Ukraine, this direction is highly promising, as the digitalization of the economy increases cyber risks in both banking and insurance sectors.

Global Practice of Insurance Business Organization and Its Adaptation Potential

The global experience of insurance business organization is extremely diverse yet systematically structured, as in most countries it has evolved from local forms of mutual assistance into complex multi-level financial systems integrated into the global economy. In modern conditions, the insurance business serves not only as a provider of financial services but also as a

[178] Vovk V., Zhezherun Yu., Kostohryz V. The insurance market of Ukraine during martial law: financial and marketing aspects. Problemy i perspektyvy ekonomiky ta upravlinnia. 2023. No. 3(35). P. 119 - 131.

[179] Cyber insurance: characteristics and features. URL https://www.lawfirm-pryadko.com/articles/kiberstrahovanie_harakteristika_i_osobennosti (accessed 14.03.2026).

key factor in ensuring economic resilience of states, as it is capable of compensating losses caused by natural disasters, military risks, economic crises, and social shocks. Therefore, the study of international practice is a crucial task for countries with transitional economies, particularly Ukraine, which requires effective mechanisms for adapting global standards to national conditions.

The evolution of the insurance business worldwide demonstrates that in most developed countries its formation was influenced by three main factors: economic development, state policy, and societal demand for risk protection. The first insurance companies in England and the Netherlands in the seventeenth century emerged as a response to the expansion of maritime trade and associated risks. One of the most well-known examples is the establishment of Lloyd's in London, which evolved from a small coffee house into a global leader in reinsurance. Similar processes occurred across Europe, where the development of insurance was closely linked to the formation of banking systems and commercial corporations[180].

A distinctive feature of the European model is that insurance was initially perceived not only as a commercial activity but also as a socially significant institution. In nineteenth-century Germany, a system of social insurance was established under Chancellor Otto von Bismarck. It included accident, health, and pension insurance and became the prototype of modern social protection systems in many countries. This practice demonstrated that the state can act as an active participant in the insurance business, delegating certain functions to private companies while retaining control over key sectors[181].

In the United States, the insurance business developed under more liberal conditions. The primary focus was on

[180] Bazylevych V. D., Bazylevych K. Insurance business. Kyiv Znannia, 2002. 203 p.

[181] Vovchak O. D., Zaviiska O. I. Insurance services: textbook. Lviv Kompakt LV, 2005. 656p.

competition, private company development, and innovation. However, the federal system of governance led to insurance regulation being conducted at the level of individual states, creating additional challenges for standardization. The American practice is particularly notable in life insurance, where some of the world's largest companies were formed, holding assets worth hundreds of billions of dollars and acting as major institutional investors in the stock market[182]. This demonstrates the deep integration of insurance into the broader financial sector and its importance for the national economy.

A key feature of contemporary global practice is the combination of traditional insurance mechanisms with modern risk management tools. For example, in the European Union, the Solvency II Directive is widely applied, establishing unified standards for capital adequacy and risk assessment of insurers[183]. This system introduces a comprehensive approach to risk management, evaluating not only financial indicators but also organizational structure, corporate governance quality, and company strategy. As a result, the European insurance market is characterized by high transparency, strong customer trust, and resilience to crises. For Ukraine, adaptation of these standards represents a promising development direction, as it would enable harmonization with the European financial space and increase investment attractiveness[184].

The Japanese insurance model deserves separate attention due to its high level of integration into the structure of social

[182] First results 2019 of the French insurance market. URL https://www.asquarepartners.com/premiers-resultats-2019-de-lassurance-francaise/ (accessed 26.03.2026).

[183] White Paper "Future Regulation of the Insurance Market in Ukraine" National Bank of Ukraine. Kyiv, April 2020. 28 p. URL https://bank.gov.ua/admin_uploads/article/White_paper_insurance_2020.pdf?v=4 (accessed 26.08.2025).

[184] Parubets O., Podoliak O. Transformation of the mechanism of functioning and development of the insurance market under digitalization of the economy. Problemy i perspektyvy ekonomiky ta upravlinnia. 2024. No. 2 (38). P. 165 176. DOI https://doi.org/10.25140/2411-5215-2024-2(38)-165-176.

relations. In Japan, an insurance policy is not only a financial instrument but also a cultural tradition. More than 90% of households have life insurance, which ensures financial system stability and simultaneously serves as a source of long-term investment capital[185]. This indicates that the insurance business can develop effectively only under conditions of high insurance culture, formed through education, state programs, and public trust in financial institutions.

In developing countries, the insurance business often plays the role of a social stabilizer. For example, in Latin America, microinsurance products are widely used, targeting low-income populations. These products provide minimal protection against basic risks such as illness or accidents while also promoting financial inclusion. Such practice may be useful for Ukraine, where a significant portion of the population lacks access to traditional insurance products due to their high cost[186].

Globalization and digitalization are fundamentally transforming the architecture of the insurance business worldwide. A new driving force is InsurTech – the integration of insurance services and technology. The use of artificial intelligence, blockchain, telematics, and mobile applications enables insurance companies to optimize costs, reduce claim settlement time, and offer personalized services to clients[187]. In the United States, the United Kingdom, and China, InsurTech companies already form a separate market segment, attracting billions in investment and reshaping the competitive landscape for traditional insurers [188].

[185]Insurance market of Ukraine. URL: https ://www.statista.com/outlook/fmo/insurances/ukraine#gross-written-premium (accessed 17.03.2026).

[186] Klymash N. I. Problems of increasing the level of consumption of insurance services in Ukraine. Biznes Inform. 2020. No. 4. P. 357 363.

[187] Komisaroa A. S. InsurTech market as an innovative driver in insurance. Molodyi vchenyi. 2020. No. 23 (313). P. 396 397. URL https://moluch.ru/archive/313/71341 (accessed 26.03.2026).

[188] Quarterly InsurTech Briefing Q4 2019 Survey Report / Willis Towers Watson. January 2020.

An important factor in global practice is the development of specialized types of insurance. In particular, after the September 11, 2001 terrorist attacks in the United States, terrorism risk insurance significantly expanded, while after the 2008 financial crisis, insurance against bankruptcy and credit risks became more prominent. Today, cyber insurance is gaining particular importance, providing protection against hacking attacks, data breaches, and other threats to the digital economy[189]. This demonstrates that the insurance business continuously responds to emerging risks, transforming its products in line with changes in the global economy.

Overall, global practice confirms that the insurance business can function effectively only under conditions that combine strong state regulation, a high level of insurance culture among consumers, and innovative development. For Ukraine, the adaptation of these principles implies the need for comprehensive market reform, increased public trust, stimulation of investment activity, and the implementation of new technologies. The integration of best international practices can ensure the stability of the insurance sector and strengthen its key role in economic reconstruction.

Special attention in studying global experience should be given to the countries of Central and Eastern Europe, which, like Ukraine, underwent a transitional stage from planned to market economies. In Poland, the Czech Republic, and Hungary, the insurance business developed rapidly after the 1990s, when markets were opened to foreign investors. A common feature of these countries was the rapid entry of international insurance corporations, which ensured the inflow of capital, technologies, and modern management practices. For example, in Poland, insurance premiums as a percentage of GDP increased from

[189] Cyber insurance: characteristics and features. URL https://www.lawfirm-pryadko.com/articles/kiberstrahovanie_harakteristika_i_osobennosti (accessed 26.03.2026).

1.5% to more than 4.5% over two decades, while the market is dominated by subsidiaries of global players such as Allianz, Generali, and AXA[190]. This demonstrates that openness to foreign investment can act as a catalyst for development, although it may also create risks of displacement of domestic companies.

For Ukraine, the Polish experience is particularly valuable, as it demonstrates the effectiveness of combining state regulation with market liberalization. The implementation of European directives, the development of reinsurance systems, and the promotion of competition have enabled the creation of a stable market capable of withstanding economic and political challenges. A similar model could be implemented in Ukraine, where the key task is to combine internal stability with integration into international financial structures[191].

International organizations play an important role in global insurance practice by establishing standards for the functioning of the insurance business. Among them, the International Association of Insurance Supervisors (IAIS) should be highlighted, as it develops regulatory principles recognized in most countries worldwide. The Organisation for Economic Co-operation and Development (OECD) conducts analytical monitoring of insurance markets and provides recommendations for their development, particularly in the areas of digitalization and crisis resilience[192]. For Ukraine, participation in such organizations provides access to best practices and tools for legislative harmonization.

The experience of reinsurance as a key element of the global insurance system also deserves special attention. The largest reinsurance companies in the world-Munich Re, Swiss

[190] Radzyński J. H. The most important data on the insurance market for Q3 2020. URL https://piu.org.pl/30-mld-zl-odszkodowan-dla-poszkodowanych/ (accessed 26.03.2026).

[191] Zhytar M. Trends in the development of the insurance market of Ukraine under martial law conditions. Ekonomika ta suspilstvo. 2024. No. 61.

[192] Swiss Re Institute. World insurance riding out the 2020 pandemic storm. Sigma. 2020. No.4.

Re, Hannover Re, and Lloyd's of London-ensure international risk redistribution. This allows national insurers to effectively cope even with catastrophic events that would otherwise exceed their financial capacity. In most developed countries, reinsurance is integrated into the national supervisory system and serves as an important mechanism for ensuring insurer solvency[193]. For Ukraine, the development of a domestic reinsurance market is a strategic priority, as a significant share of risks is currently transferred abroad, limiting the accumulation of capital within the country.

In global practice, the insurance of catastrophic risks is becoming increasingly important. Climate change, the growing frequency of natural disasters, and global pandemics require insurers to develop new approaches. In many countries, state or mixed insurance pools are created to cover such risks. For example, in France, the Caisse Centrale de Réassurance (CCR) provides state-supported reinsurance against natural disasters. Similar structures operate in the United Kingdom (Pool Re for terrorism risk insurance) and the United States (National Flood Insurance Program)[194]. For Ukraine, the creation of specialized pools for war-risk insurance and infrastructure recovery is highly relevant. The development of insurance in Asian countries also provides valuable insights, as these markets have experienced rapid growth in recent decades. China has become one of the global leaders in insurance premium growth: the volume increased from 30 billion USD in 2000 to more than 600 billion USD in 2020. This was made possible through state support, active adoption of digital technologies, and large-scale

[193] Markova. Creation of an insurance pool the best solution during COVID-19. URL https://vuzf.bg/novini/sazdavane-na-zastrahovatelen-pul-e-nay-dobroto-reshenie-pri-covid-19 (accessed 26.03.2026).

[194] Motashko T. P. Development of the global insurance market in conditions of digitalization. Bulletin of Taras Shevchenko National University of Kyiv. Economics. 2016. Issue 5. P. 18 24.

investment in InsurTech development[195]. The Chinese experience demonstrates that the combination of state policy and innovation can ensure accelerated growth even in conditions of initially low insurance culture.

India also offers an interesting example, where insurance development has a strong social orientation. The state actively supports insurance programs for low-income populations and introduces compulsory health insurance schemes. This approach helps reduce social inequality while simultaneously forming stable demand for insurance services[196]. Ukraine may adopt this experience by creating special insurance programs for socially vulnerable groups in the post-war period.

Global practice also demonstrates a growing role of insurance in sustainable development systems. Many companies integrate ESG (Environmental, Social, Governance) principles into their operations, offering products that address environmental and social risks. For example, "green insurance" is becoming widespread in the EU, covering risks associated with renewable energy, carbon emission reduction, and energy efficiency[197]. For Ukraine, this direction is of strategic importance, as post-war reconstruction can serve as a platform for the development of energy-efficient and environmentally sustainable technologies.

Analyzing the presented examples (Table 4), it can be concluded that the adaptation of global practices for Ukraine should be carried out with consideration of two key factors: first, the need to protect against large-scale war-related risks, and

[195] Ukraine 2030E a country with a developed digital economy / Ukrainian Institute for the Future. URL https://strategy.uifuture.org/kraina-z-rozvinutoyu-cifrovoyu-ekonomikoyu.html (accessed 26.08.2025).

[196] World Telecommunication Statistics International Telecommunication Union. URL: https://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx (accessed 11.03.2026).

[197] Key technological trends of 2024 that will affect company efficiency. Problemy i perspektyvy ekonomiky ta upravlinnia. 2023. No. 4(36). P. 299. Available at https://forinsurer.com/news/23/11/24/43278 (accessed 26.03.2026).

second, integration into the global financial system through international reinsurance instruments.

Thus, international experience confirms that the successful organization of the insurance business is based on three pillars – effective state regulation, a high level of insurance consumption culture, and the use of innovative technologies. For Ukraine, it is important to combine the European regulatory model, the Asian emphasis on digitalization, and the American experience of developing private companies as institutional investors. Such a synthesis will make it possible to form a stable and competitive insurance market.

In the first chapter, the theoretical foundations of the functioning of the insurance business were studied, which made it possible to form a comprehensive understanding of its role in the financial system of the state, the specifics of risks, and the possibilities of adapting global experience to Ukrainian conditions.

The analysis of the economic essence of the insurance business showed that it is a multifunctional institution combining protective, redistributive, investment, stimulating, and social functions. In the financial system of the state, insurance acts simultaneously as a stabilizer of economic processes, a source of long-term investment resources, and a mechanism for implementing social policy.

It has been established that Ukraine is characterized by a significant lag in key indicators of insurance market development compared to European standards, in particular, the share of insurance premiums in GDP is only 1.0–1.2%, while in EU countries this indicator reaches 6–8%. This is due to the low level of insurance culture of the population, limited

capitalization of companies, and insufficient trust in financial institutions[198,199].

Table 1.10 - International Mechanisms for Insurance of Catastrophic and War Risks

Country/Region	Instrument	Characteristics
France	CCR	State-supported reinsurance for natural catastrophes
United Kingdom	Pool Re	Insurance against terrorism risks with government support
United States	NFIP	National Flood Insurance Program
Japan	JER	Earthquake reinsurance pool
Ukraine (prospective)	War-risk pool	Potential mechanism for compensation of war-related losses

Source: compiled by the author[196, 200]

The study of risks in insurance activity revealed their ambivalent nature. On the one hand, risks pose a threat to the financial stability of insurers, causing increased payouts, market contraction, and asset concentration in the largest companies. On the other hand, risks are a catalyst for innovation, stimulating the creation of new insurance products, the development of reinsurance, the introduction of digital technologies, and the improvement of regulatory standards. The problem of risk management becomes particularly acute in wartime conditions, when the need for insurance protection increases simultaneously with a decline in the solvency of the population and businesses. The key mechanisms for risk mitigation are actuarial

[198] Digital Agenda of Ukraine 2020 (draft) conceptual principles (version 1.0). Kyiv, 2016. URL https://ucci.org.ua/uploads/files/58e78ee3c3922.pdf (accessed 26.03.2026).

[199] Chvertko L. A., Vinnytska O. A., Kornienko T. O. State and problems of tourism insurance development in Ukraine. Actual Problems of Regional Economy Development. 2020. Issue 16, Vol. 1. P. 58 67

[200] World Telecommunication Statistics International Telecommunication Union. URL https://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx (accessed 26.08.2025).

calculations, reinsurance, formation of insurance reserves, portfolio diversification, and state regulatory supervision.

The study of global insurance business practices has demonstrated the diversity of models, each reflecting the specifics of national economic development and cultural traditions. The European model is characterized by strict regulation based on the Solvency II Directive, ensuring high market stability and transparency. The American model is based on competition and strong institutional investment. Asian countries demonstrate rapid growth due to state support and active implementation of InsurTech solutions. The experience of Central and Eastern European countries confirms the effectiveness of combining foreign investment inflows with the gradual adaptation of European regulatory standards[201,202].

For Ukraine, the adaptation of global experience implies the need for comprehensive reform of the insurance market in several directions. First, the implementation of Solvency II standards will ensure integration into the European financial space and increase investor confidence. Second, the development of reinsurance, in particular the creation of specialized pools for war risk insurance, will allow attracting international support for post-war reconstruction. Third, digitalization of the insurance business through the introduction of InsurTech technologies, artificial intelligence, blockchain, and telematics can become a competitive advantage of the Ukrainian market. Fourth, increasing the population's insurance literacy through educational programs and transparent company operations is a necessary prerequisite for market expansion.

[201] Chunytska I. I., Bohrynivtseva L. M., Kliuchka O. V. Analysis of the impact of modern technologies on the development of the insurance business in Ukraine. Current Issues of Economic Sciences. 2025. No. 7.

[202] Strategy for the development of the financial sector of Ukraine until 2025 National Bank of Ukraine. URL https://mof.gov.ua/storage/files/Strategija_financovogo_sektoru_ua.pdf (accessed 26.03.2026).

Thus, the theoretical analysis confirms that the insurance business in Ukraine has significant development potential; however, its realization is possible only under conditions of systemic changes in the regulatory environment, increased capitalization of companies, implementation of innovative technologies, and formation of public trust. In the post-war period, the insurance business can become a key instrument of economic reconstruction, investment attraction, and social stability, which confirms the strategic importance of its development for the national economy.

1.4. CORPORATE SECURITY AND HEALTH AT ENTERPRISES AND INSTITUTIONS

Corporate security is aimed at implementing a comprehensive set of coordinated measures designed to create safe conditions for the operation and sustainable development of a corporation, with clearly defined tasks for security stakeholders in the process of adapting to market-oriented economic relations. The organization of business security in commercial enterprises as well as public institutions plays a significant role in their successful functioning. Its organizational structure may vary depending on the financial capabilities of an enterprise, regardless of its form of ownership.

To better understand the essence of corporate security, it is necessary to identify its objects and subjects.

The objects of corporate security include:

- financial resources;
- personnel;
- the reputation of the owners, top management, and the company itself;
- tangible and intangible assets;
- technologies and business processes.

A central role in the corporate security system is assigned to its **s**ubjects, which include:

– the company's management or an internal security committee or security board;

– an external security service provider (security outsourcing);

– a mixed model combining internal and external security management [11].

An equally important aspect of corporate security strategy is the recognition that its effectiveness depends largely on the human factor. Research conducted by psychologists indicates that fatigued or ill employees are more likely to make mistakes due to diminished attention and slower reaction times. Such errors may result in information leakage, industrial accidents, or the emergence of other security threats.

A survey of security experts identified several categories of professionals who may serve as corporate security specialists. Depending on their area of responsibility, specific working conditions and selection criteria are established. Among the most important requirements are:

– an appropriate educational background;

– proficiency in handling firearms where required;

– good physical fitness;

– strong analytical skills;

– practical experience in law enforcement agencies or military organizations;

– high moral and psychological resilience, including the ability to withstand physical strain, psychological stress, and emergency situations;

– sufficient legal, financial, and managerial knowledge [5].

Issues of corporate security in Ukraine are primarily examined within the broader frameworks of enterprise economic security, risk management, state security, and information

security. Although there is not yet a separate academic school dedicated exclusively to corporate security, a number of Ukrainian scholars have made significant contributions to related fields. Consequently, Ukrainian enterprises employ an Economic Security System (ESS) as the principal mechanism for safeguarding corporate interests.

The ESS is fundamentally preventive in nature. Its primary objective is to anticipate, identify, and neutralize potential threats before they can negatively affect an enterprise. The reliability and effectiveness of such a system are evaluated according to the following criteria:

– ensuring the stable operation of an enterprise while preserving and increasing its financial and material assets;

– preventing crisis situations, including various emergency events associated with the activities of internal and/or external offenders [2].

Research conducted by T. B. Shyra emphasizes that comprehensive conceptual foundations for ensuring corporate security have already been developed in Ukraine. These foundations are based on identifying the distinctive characteristics of the national model of corporate governance in comparison with other international models while taking into account the actual challenges associated with the use of the corporate form of business within the national economy.

The proposed concept highlights the necessity of counteracting both specific internal and external threats. This comprehensive approach provides strategic guidelines for creating secure conditions for the sustainable development of Ukrainian enterprises.

According to the author, the improvement of an enterprise's corporate security system should be based on four key determinants:

– the specific characteristics of the enterprise's financial and economic activities;

– the level of aggressiveness and uncertainty of the external environment;

– effective interaction with external security stakeholders;

– the consolidation and cooperation of all participants involved in ensuring enterprise security.

Compliance with these determinants enables an enterprise to establish an optimal security system that provides an appropriate level of corporate protection while remaining consistent with its organizational structure and available resources.

Overall, T. B. Shyra proposes that the corporate security system should consist of the following interconnected components:

– economic security;
– financial security;
– personnel (human resource) security;
– technical and technological security;
– information security;
– physical (force) security.

Such an integrated structure allows enterprises to respond comprehensively to contemporary threats and to ensure sustainable operation, resilience, and long-term competitiveness in a dynamic business environment [8].

Ye. Davydenko emphasizes the critical role of cybersecurity in ensuring corporate security at Ukrainian enterprises under wartime conditions. The author considers cyberattacks to be one of the most significant external threats affecting not only the financial and economic stability of enterprises but also the national security of Ukraine as a whole.

According to the author, unauthorized cyberattacks are primarily aimed at stealing confidential information, misappropriating financial resources, disrupting business operations, and compromising the continuity of critical infrastructure. In the context of military conflict, such attacks

have become increasingly sophisticated and may target both private enterprises and public institutions.

To effectively counter cyber threats, enterprises should implement a comprehensive cybersecurity strategy that combines technical, organizational, and human-centered measures. This strategy should include regular software updates, the deployment of network and system protection mechanisms, continuous employee training in cybersecurity awareness, and well-developed incident response procedures.

The author identifies the following key elements of protection against cyberattacks:

– Antivirus software – installing and regularly updating antivirus applications to detect and eliminate malicious software.

– Firewalls – implementing firewall technologies to monitor network traffic and prevent unauthorized access.

– Regular software and operating system updates – ensuring that operating systems and applications are continuously updated to eliminate known vulnerabilities.

– Intrusion Detection and Prevention Systems (IDS/IPS) – deploying systems that monitor network activity and detect or prevent suspicious or unauthorized actions.

– Data encryption – using encryption technologies to protect confidential information during transmission and storage.

– Data backup – regularly creating secure backup copies of critical information and storing them in protected locations.

– Strong password policies – enforcing strict password requirements, including password complexity and regular password changes.

– Cooperation with external cybersecurity providers – engaging independent security specialists to conduct security audits and assess the organization's cybersecurity posture.

– Employee education and training – providing continuous cybersecurity awareness training to help staff recognize phishing attempts, social engineering attacks, and other cyber threats.

– Security monitoring and incident management – implementing continuous monitoring systems for the early detection of cyber incidents and developing comprehensive incident response plans.

– Physical security – protecting hardware, servers, communication equipment, and other critical infrastructure against unauthorized physical access.

– Business recovery planning – developing and implementing disaster recovery and business continuity plans to ensure the rapid restoration of enterprise operations following a cyberattack.

Overall, Ye. Davydenko argues that effective corporate cybersecurity requires an integrated approach combining advanced technological solutions, sound organizational policies, and a strong cybersecurity culture among employees. Such a comprehensive system significantly enhances an enterprise's resilience to cyber threats and contributes to maintaining operational continuity, financial stability, and corporate security during periods of military conflict and heightened geopolitical risk [3].

According to O. M. Lavrentiev, corporate security should not be viewed merely as a protective or guarding function but rather as a strategic management function that ensures an enterprise's long-term competitiveness, sustainability, and development. From this perspective, corporate security serves not only to safeguard organizational resources but also as a strategic management tool that enables enterprises to respond effectively to changes and challenges in the external environment [2].

Ensuring the physical safety of employees should be a top priority for every business. Regardless of the industry or geographical location, workplace violence remains a serious issue across the country that can endanger employees, customers, and visitors. At the same time, business owners bear responsibility for providing a safe working environment for all stakeholders. The good news is that many cases of workplace violence and other threats can be prevented. By implementing a number of key physical security measures, organizations can significantly improve employee protection and reduce risks. Such measures may include external fencing, digital surveillance cameras with motion detectors, license plate recognition systems, emergency call boxes, and professional security personnel. Even simple steps, such as the visible presence of guards, improved exterior lighting, or signage indicating that the area is under constant surveillance, can help deter dangerous individuals from entering the premises. Not every business requires all of these security measures, but it is undeniable that all companies should take appropriate steps to protect their perimeter.Modern physical security technologies further enhance organizational protection by ensuring that only authorized individuals gain access to company facilities. Advanced access control systems equipped with multi-factor authentication significantly strengthen corporate security.

Modern physical security technologies enable additional measures to ensure that only authorized individuals can access a facility, which significantly enhances employee safety within a company.

Reliable access control systems with dual authentication capabilities, such as facial recognition technology combined with employee contactless ID cards, are particularly important for restricting entry to critical infrastructure areas like computer rooms or power supply zones. Limiting access to these areas can

provide an additional layer of protection against insider threats and also significantly reduce the risk of theft or vandalism [10].

Despite all efforts, the constantly changing nature of the modern world means that security updates implemented today may become insufficient within just a few years. To avoid complacency, organizations should plan for an annual physical security assessment conducted by independent security specialists.

A security professional can identify changes in the environment, technologies, and threat methods that require adjustments to existing physical security measures.

Conducting a yearly site review helps determine areas for improvement and ensures that the organization remains aligned with current security trends and best practices [10].

This type of professional activity is classified as a high-risk occupation. The key requirements for this role include physical fitness, cognitive and creative abilities, as well as knowledge from various fields such as engineering, the chemical industry, and information technologies. The performance of functional duties of a corporate security specialist is associated with sustained attention, rapid and accurate perception of threats, analytical thinking in assessing emerging situations, and the ability to make decisions under strict time constraints [4, 7].

Studying international experience suggests that it is advisable to expand the scope of security practices. The globalization of the market economy has provided enterprises, regardless of ownership structure, with new opportunities for developing an integrated approach to security. In the works of various authors, [5] a framework for corporate security of enterprises and institutions has been developed, independent of their ownership form. Categories of employees who may be considered as corporate security specialists have been identified. Depending on the area of activity, specific working conditions

and selection criteria for security professionals are determined [5].

Analyzing literature sources, it is possible to examine security activities related to the implementation of business projects. In Ukraine, an Association in the field of corporate governance and corporate security has been established. The Association's activities are aimed at stabilizing the business environment and protecting the rights of its members both from unfair competitors and from state authorities.

The main areas of its activity include promoting the improvement of the effectiveness of the business security sector; implementing measures to organize the activities of permanent and temporary teams of specialists and experts for the purpose of researching corporate security issues; promoting the development of information security technologies and fraud prevention; as well as contributing to increasing the investment attractiveness of Ukrainian business through the improvement of corporate relations [12].

Analysis of foreign practices in the structural organization of enterprise security services has shown that such services most often consist of four main units: intelligence, counterintelligence, headquarters, and security (guard) units. Each of these units may have its own internal structure, with size and staffing levels determined by the specific tasks assigned to the enterprise security service.

In practice, the intelligence and counterintelligence units are sometimes merged into a single division; however, this is generally considered a forced measure due to limited financial and material resources. Headquarters units are typically present only in large enterprises where the security service has a sufficiently complex structure and where the head of the service is unable to monitor all operational directions independently. Thus, headquarters units are mainly characteristic of large organizations with numerous separate structural divisions.

Security (guard) units are an essential and mandatory component of enterprise security services. Their size primarily depends on the scale of the enterprise's resources and assets that require protection [13].

In Table 1.11, some criteria for organizing security are presented, comparing models of Ukrainian and international corporate security systems.

Nowadays, the protection of enterprise interests against unlawful activities of corrupt representatives of regulatory and law enforcement agencies is becoming increasingly relevant. In this regard, many heads of economic security services in commercial organizations distinguish this direction of work as a separate element of the Enterprise Economic Security System (EESS).

The main elements of an enterprise's economic security system include [1, 3]:

1. protection of trade secrets and confidential information;
2. computer, physical, technical, and fire safety;
3. security of buildings and structures;
4. security of contractual and business activities;
5. security of cargo and passenger transportation;
6. security of advertising, cultural, mass events, business meetings, and negotiations;
7. competitive intelligence;
8. information and analytical work, etc.

In the field of physical culture and sports, there is also a threat to economic security in the form of the disclosure of commercial secrets. In other words, it refers to the confidentiality of information that allows its owner, under existing or potential circumstances, to increase revenues, avoid unjustified expenses, maintain market position in goods and services, or obtain other commercial benefits.

Table 1.11 - Comparative Characteristics of Security Organization Models

№ п/п	Comparison of Security Models			
	Ukrainian		**International** [9]:	
	Positive Components	**Negative Components**	**Positive Components**	**Negative Components**
1	*2*	*3*	*4*	*5*
1.	Emphasis on comprehensiveness (economy, personnel, and continuous threat monitoring)	Less attention is paid to strategic management and non-financial risks	Risk-oriented approach integrated into corporate governance using KPIs, audits, etc.	The model is more formalized and standardized
2.	Adaptation of ISO 31000:2018 to the Ukrainian market; the document is applied as the official standard DSTU ISO 31000	Direct copying of international structures without proper adaptation to the Ukrainian context may lead to unsuccessful implementation; successful application requires adaptation to local regulatory requirements, sector specifics, and resource limitations	ISO 31000:2018 "Risk management — Guidelines" provides principles, framework, and processes for risk management; it can be used by any organization regardless of size, type, or sector. It helps improve the likelihood of achieving objectives, identify risks and opportunities more effectively, and allocate resources more efficiently during risk monitoring	ISO 31000 cannot be used for certification; it serves as guidance for internal or external audit programs. Organizations applying it can benchmark their risk management practices against internationally recognized principles of effective governance and management.

Note: * – implementation of international standards.
Source: compiled by the authors.

In the sphere of physical culture and sports, objects of commercial secrecy may include:

– accounting and financial reports of commercial sports organizations;

– the nature and terms of contracts concluded with athletes and other personnel of sports organizations;

– information about upcoming advertising campaigns of sports organizations;

– scientific and technical information (developed and applied training methods for athletes and the provision of sports services);

– data on equipment used by sports organizations in the training process;

– information on athletes' rehabilitation;

– banking operations of sports organizations;

– pricing mechanisms for sports services;

– salaries of employees in commercial sports organizations;

– information on business negotiations conducted within sports organizations;

– commercial correspondence of sports organizations.

The carriers of this information are employees of physical culture and sports organizations at different levels of the organizational structure. The disclosure of such information may lead to economic risks, including loss of market share or competitive advantage, failure to achieve planned profits, refusal of business relations by counterparties, and other negative consequences for the sports organization.

However, in this study, we focus specifically on the individual as the subject performing functional duties within a given position. Modern individuals increasingly tend toward self-realization and personal development. At the same time, cases of depression and poor well-being have become more

frequent. The main cause of this phenomenon is often workplace stress.

The causes of stressful situations can be identified as follows:

– excessive workload (as a result of work process optimization);

– role conflict (a conflict between a thought leader and the current manager, or due to a violation of the principle of unity of command);

– role ambiguity (when an employee does not fully understand their position within the company);

– lack of interest in work (monotony as a cause of psychological tension);

– information overload (a constant flow of information that may cause psychological "breakdowns");

– high level of responsibility (combined with limited ability to control the work process);

– unfavorable hygienic factors (lighting conditions, noise insulation, air conditioning levels, etc.).

From the perspective of physical culture, corporate security is considered as a system of measures aimed at preserving employees' health, working capacity, and psychological resilience, which directly influences the stability and security of a business. The introduction of physical culture and sports into the working environment has a significant impact on employees' performance efficiency and their engagement in work processes.

In other words, the focus is not on "physical protection forces," but rather on the human factor as the foundation of corporate security. From the standpoint of physical culture, enterprise security depends on:

– the physical condition of personnel, which can improve their endurance to professional workload and, in turn, enhance concentration and attentiveness;

– endurance and stress resistance, which contribute to greater determination and persistence in achieving organizational goals;

– prevention of occupational burnout;

– reduction of occupational injuries, as regular physical exercise helps strengthen health, decrease the likelihood of illnesses, and therefore reduce sick leave cases.

When engaging in sports and physical activity, all organs and systems of the human body are activated, including intellectual and psychological functions. Physical culture and sports help improve concentration and the ability to take responsibility, which is highly beneficial for business organization.

Loss of self-control due to fatigue and burnout can lead to poor decision-making and financial losses. Regular physical exercise supports better decision-making and contributes to improved work performance and overall results.

In Table 1.12, a scheme of organizing corporate security through means of physical culture is presented.

This set of measures contributes to reducing stress levels and increasing employee productivity, which in turn has a positive impact on company performance indicators, rankings, and overall organizational efficiency. The influence of corporate security enhanced by means of physical education is reflected in the reduction of occupational risks, a lower number of sick leaves, and other related outcomes.

To identify patterns regarding the necessity of engaging in physical activity, a study was conducted aimed at determining the intrinsic motivation of young people to participate in physical culture and sports activities. As part of the research, a survey was carried out at the State Tax University among students who will later be employed in enterprises of various forms of ownership. The total number of respondents was 50.

Participants were asked to answer a series of questions requiring the selection of one option.

Table 1.12 - A set of coordinated measures aimed at creating safe conditions for the functioning and development of a corporation through the means of physical culture

Recovery tools	**Regulation of employees' physical safety**	**Corporate obligations**
Corporate sports programs; competitions between companies and departments	1. Labor Code of Ukraine; 2. Law of Ukraine "On Occupational Safety"	1 Ensure safe working conditions; 2 Conduct instructions on engaging in physical exercises; 3 Minimize the risk of injuries; 4 Develop the enterprise's image through physical culture and sports.
Stress management training		
Occupational disease prevention programs		
Industrial gymnastics (workplace exercise breaks)		
Emergency response training		
Regular medical examinations		
Workplace fitness facilities (gyms, treadmills, table tennis)		
Discounted gym memberships		
Promotion of physical culture and sports in corporate environment		

Source: compiled by the authors

A survey of more than 50 young people was conducted. The questionnaire consisted of five questions designed to reveal students' perceptions of training in gyms and fitness centers, as well as the perceived positive impact of strength training exercises on physical development correction [6].

For the first question, "Do you attend any sports club or section in your free time?", the results are presented in Figure 1.3.

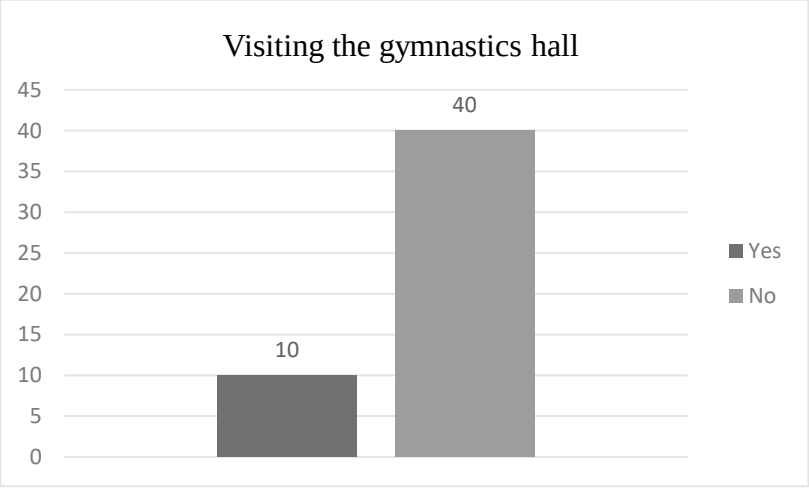


Fig. 1.3 - Attendance at the gym

Source: [6]

For the second question, "Have you engaged or are you currently engaging in physical exercises in a gym?", the results are presented in Figure 1.4.

Considering the integrated combination of fitness technologies that can be used by several people for the simultaneous performance of circuit or selective exercises, the majority of respondents expressed a preference not for a single type of training, but for the simultaneous use of several fitness programs, namely the combination of aerobics and fitness. Such an approach makes training more diverse and emotionally

engaging, contributing to the effective achievement of the goal of harmonious personal development, encompassing both physical and spiritual aspects of the individual [6].

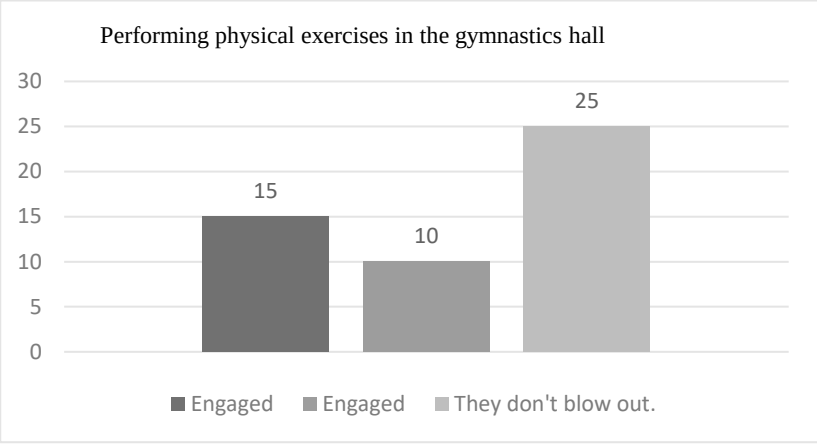


Fig. 1.4 - Attendance at the gym at the time of the survey
Source: [6]

As for the third question, which fitness technologies you are familiar with, the results are presented in Figure 1.5.

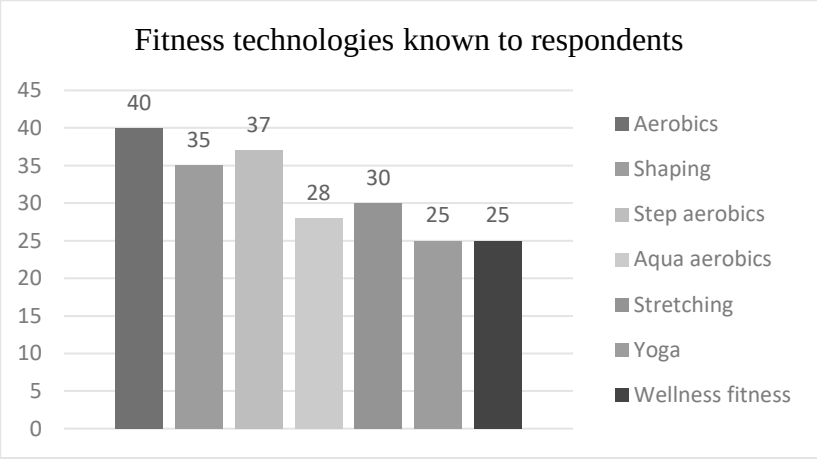


Fig. 1.5 - Fitness technologies familiar to respondents
Source: [6]

For the fourth question, “Which strength training fitness programs are you familiar with?”, the results are presented in (Fig. 1.6).

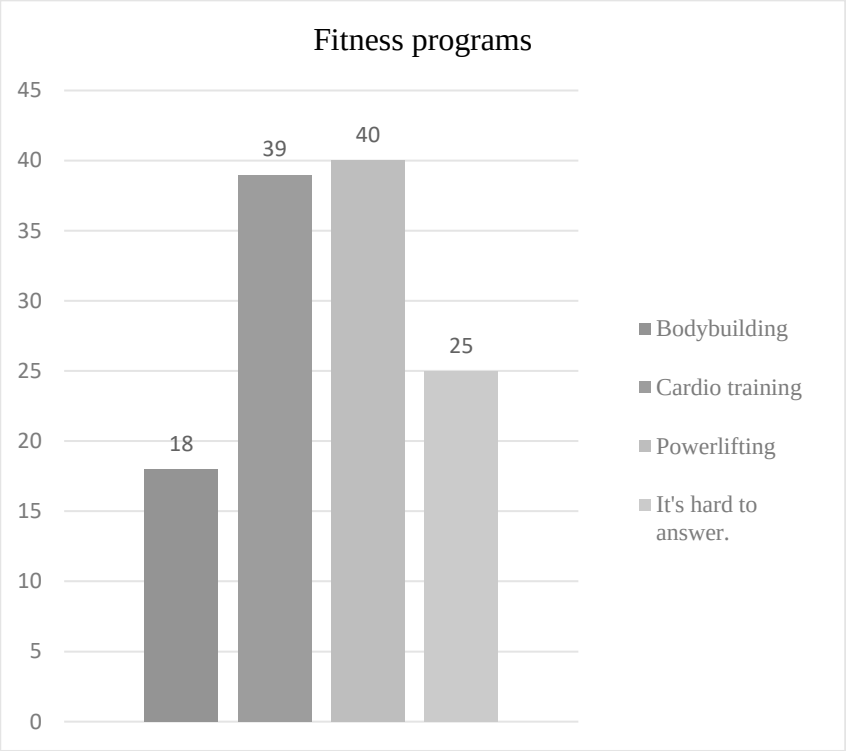


Fig. 1.6 - Strength training fitness programs

Source: [6]

For the fifth question, “How do you evaluate the effect of training in the gym compared to other fitness technologies?”, the result was not in favor of gym training. Respondents were distributed as shown in (Fig. 1.7).

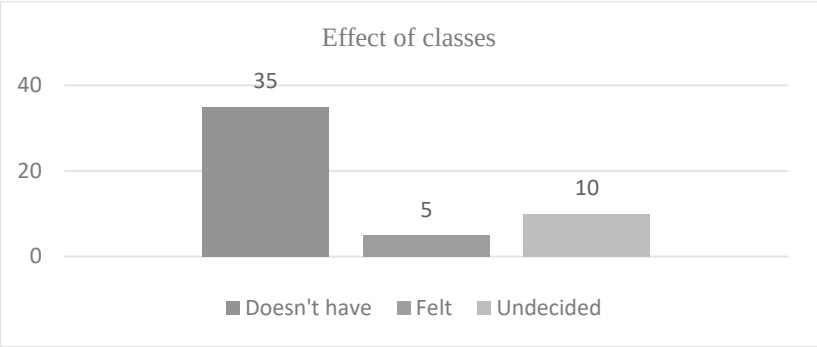


Fig. 1.7 - Difference between gym training and fitness technologies

Source: [6]

Considering international experience, researcher V. Bazenko in the organization of physical culture and sports notes that, under modern conditions, local authorities have begun to play a very important role in the development of physical culture and sports in leading countries of the world. This is typical for all territorial administrative units in different states, such as states, provinces, districts, regions, counties, voivodeships, municipalities, communes, and communities. Moreover, it applies to all areas of physical education, health-related physical activity, and sports, ranging from school physical education, sport for all, and elite sport to professional sport. However, there are also specific features of the participation of local authorities in the development of physical culture and sports in different countries.

Taking into account that the Ukrainian system of organization and management of the physical culture and sports movement has shifted toward the principles of decentralization of governmental functions and powers, European experience becomes particularly relevant. In this context, countries such as France and Germany are of special interest for studying such experience [1, 14].

The organization and management of physical culture and sports in France are based on the principles of vertical and horizontal subordination. The country is divided into 22 regions, 90 departments, and 36,000 communes.

In large cities, municipal sports associations operate; in the mid-1990s, their number was approximately 700. These are mainly Houses of Sport or municipal sports and recreation centers. The activities of these associations are coordinated by municipal sports departments.

The well-known French economist W. Andreff emphasizes that the role of local authorities and their activities in the field of physical education and sports are concentrated in three main areas: the construction and modernization of sports facilities taking into account the needs of the population; the organization of various types of physical activity and sport for all population groups; and funding [1, 14].

Municipal sports budgets vary significantly from one city to another and depend not only on sporting traditions, the presence of professional and other teams, and available sports facilities, but also on the attitude of municipal leadership toward sport. On average, in the provinces of France, 10.33 francs are spent per capita on sport.

In provincial budgets, the share of sports expenditure ranges from 1.65% to 6.93%, whereas the budget of the Ministry of Sport accounts for only 0.18% of the total state budget. Each year, local authorities allocate approximately 22–25 billion francs to the development of physical culture and sports in their regions, cities, and communes [1, 14].

In addition to direct financial subsidies, the state provides indirect support for the development of local sports organizations and sports facilities. This includes the provision of various loans, tax exemptions for hosting entertainment events, and the right to free placement of concession stands and advertising in stadiums.

Today, in French cities with a population exceeding 50,000 inhabitants, there are more than 400 municipal sports and recreation centers [1].

In Germany, there are 11 different sports support programs that vary according to historical, financial, and territorial characteristics. These programs address four main tasks at the level of federal states (Länder):

- promotion of sports facility construction;
- development of school and higher education sports;
- support for sports organizations, primarily sports clubs and teams;
- assistance to special population groups (persons with disabilities, prisoners, foreigners, etc.) [1, 15].

To support sports participation among special population groups, new programs have been introduced in the country, such as "Sport as Disease Prevention," "Sport for Prisoners," "Sport for the Unemployed," "Sport for Drug Addicts," "Sport for Foreigners," and others. It should be noted that the Conference of State Sports Ministers declared assistance to these special groups as one of the main objectives of public funding.

Municipal authorities in districts, cities, and communities consider themselves primary partners of sports clubs in their activities. Communities and cities provide municipal sports facilities to clubs free of charge, despite the significant maintenance costs and rental value associated with these facilities.

At the 1994 Congress of the German Gymnastics Association, it was demanded that the statutes of territorial communes include a clause on "Promotion of Sport," making the development of sport an official duty of local authorities [16].

Based on the conducted analysis of various measures, the following practical recommendations can be identified for the

implementation of physical culture and sports in organizations of different forms of ownership:

– Planning of physical culture and sports activities. It is necessary to organize a variety of extracurricular sports and physical education events for employees and their family members, which can help attract and retain qualified personnel. Therefore, it is important to develop a structured plan of both scheduled and unscheduled activities.

– Alignment with organizational goals in physical culture and sports. Physical activity initiatives implemented in organizations must correspond to their objectives, including meeting employees' needs, involving their family members, and promoting an active lifestyle.

– Diversity of physical culture and sports formats. It is recommended to include both offline and online formats of physical activity events.

– Variety of tools used. These should include different sports events, mobile platforms, webinars, training sessions, and other methods aimed at encouraging employee participation in sports activities.

– Accessible infrastructure and appropriate conditions for employees. It is necessary to ensure access to sports and recreation facilities, sports clubs, mobile fitness applications, equipment, as well as qualified specialists conducting physical education and sports activities. This creates conditions for regular employee participation in physical activity.

– Quality outcomes of external physical culture and sports activities should include increased awareness of a healthy lifestyle among employees, the formation of new behavioral patterns, and higher levels of physical activity.

– Quantitative outcomes should reflect an increase in the number of employees participating in physical culture and sports activities.

– Employee motivation. Incentivizing participation in sports activities through rewards and recognition can foster employees' interest in a healthy lifestyle and sport.

– Performance evaluation. It is important to monitor the outcomes of physical culture and sports activities to assess their impact on employees' productivity and health, and to adjust and improve programs based on feedback.

– Management support. The success of corporate physical culture initiatives depends on strong managerial support. Leaders should not only initiate activities but also participate in them, setting a personal example.

As evidenced by a number of foreign studies, corporate culture has a primary influence on the implementation of health promotion initiatives for employees [5]. Through the forms and mechanisms of corporate sport, it can affect people's thinking and behavior.

Sport, influencing various spheres of social life, changes lifestyle, shapes trends, strengthens relationships, and affects business life. Social norms act as external regulators of behavior, while values serve as internal ones. Individuals regulate their behavior according to accepted and internalized values and norms that are meaningful to them. Employer activities aimed at the perception, reproduction, creation, and dissemination of physical culture and sports values shape individuals' attitudes toward norms, people, the world, and themselves, thereby influencing employees' health.

Corporate sport, in contrast to occupational physical culture, involves training sessions conducted at the organization's sports facilities, including sectional classes organized according to a specific program and plan for a defined group of participants, as well as competitions in various sports. These competitive activities may take place both between different organizations and within the framework of professional sport, and are aimed at developing an individual's sports culture.

By competing for the company team, employees identify with their collective, develop teamwork skills, and demonstrate discipline and coordinated actions.

Thus, through corporate sport, organizational leaders address not only the goals of improving employees' health and increasing their level of physical activity, but also the formation of a unified team with shared goals and corporate values, thereby fostering a favorable business and socio-psychological climate within the organization.

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16. Jia Y., Fu H., Gao J., Dai J., Zheng P. (2018). The roles of health culture and physical environment in workplace health promotion: a two-year prospective intervention study in China. *BMC Public Health*, 18(1), 457. https://doi.org/10.1186/s12889-018-5361-5

1.5. THE ESSENCE AND CLASSIFICATION OF THE INTERESTS OF BUSINESS ENTITIES

Social development, business stability and state strength directly depend on the balance of diverse interests in society, although science still does not have a single interpretation of the concept of “interest”. As Hegel noted, interests move peoples. Interests are closely linked to needs, because need is the basis,

and interest is a conscious desire to satisfy needs. Quite often, the concept of interest is interpreted through a system of needs realized by a person[203]. With this approach, interest acts as a set of needs that determines the individual's attitude to the conditions of his life as a whole, while the needs themselves have a specific objective orientation.

In modern economic terminology, interest is considered as a category that reflects the key needs and priorities of subjects at different levels - from an individual to society as a whole[204]. In science, a need is defined as an ideal internal motive of a person, which encourages him to engage in economic activity in order to ensure his own well-being and the well-being of family members[205]. To satisfy his needs, a person makes certain decisions and takes appropriate actions. Therefore, it is the needs of the subject that are the initial motivation for activity. But people carry out their activities in different ways, based on their economic interests and opportunities to satisfy them. That is, economic interests act as internal drivers that determine the behavior and decisions of market participants.

In the process of studying needs and interests, we got acquainted with different opinions of scientists. Some scientists do not see the difference between needs and interests, identifying these concepts. Other scientists connect these two categories in such a way that interest is based on need[206], or that interest is derived from need[207]. For example, V. Mulyar indicates that needs as a motivating force for the activity of the

[203] Pidhomny O.M. Financial security of Ukraine: tools and strategies of formation: [monograph]. Lviv: Ivan Franko National University of Lviv. 2014. 320 p.

[204] Goncharov S. M., Kushnir N. B. Explanatory dictionary of an economist. Kyiv: Center for educational literature. 2009. 264 p.

[205] Economic encyclopedia: in 3 vols. Vol. 3. Kyiv: Academy. 2002. 952 p.

[206] Mulyar V.I. Self-realization of the individual as a social problem (philosophical and cultural analysis): [Monograph]. Zhytomyr: ZHITI. 1997. 214 p.

[207] Konovalenko N.V. Needs and interests of a citizen of Ukraine as a component of state-building processes of modern society. Dissertation candidate of philosophy. sciences: 09.00.03. Academy of Sciences of Ukraine, Institute of Higher Education. Kyiv 2007. 218 p.

individual affect it not directly, but indirectly, through the prism of interests[208]. At the same time, V.F. Sirenko believes that need and interest have one basis, but need acts as a vital necessary function of the subject, and interest includes this need not directly, but as a necessity to satisfy the subject's need[209].

In sociological science, interest (from the Latin interest – to have meaning) is interpreted as a conscious form of human needs. Researchers emphasize its objective-subjective nature and indicate that, together with needs, interest forms the value orientations of the individual and is an effective regulator of his behavior in society[210].

According to the approach of O.O. Amosov, the essence of the concept of "interest" is to obtain benefit, benefit or profit. In this context, the interests of the enterprise should be interpreted through the prism of its interaction with the external environment. Such interaction can be permanent or temporary, voluntary or forced, but its final result is always ensuring profitability[211].

In literary sources, interest is interpreted as "the subject of interest, desires and motivations of the activities of economic entities"[213], or as "a manifestation, on the one hand, of the economic relations of the enterprise, on the other hand, of the contradictions of the financial activities of the enterprise itself".

Among interests, economic interest is the most decisive for most people.

Economic interest is a form of expression of a need, a person's conscious desire to satisfy it, it is a benefit, an advantage that is achieved in the process of implementing

[208] Mulyar V.I. Self-realization of the individual as a social problem (philosophical and cultural analysis): [Monograph]. Zhytomyr: ZHITI. 1997. 214 p.

[209] Sirenko V.F. Interests and power: [Monograph]. Kyiv: Oriyany. 2006. 536 p.

[210] Sociology: dictionary of terms and concepts. Kyiv: Condor. 2006. 372 p.

[211] Amosov O.O. Financial security of the enterprise in modern economic conditions: theoretical aspect. *Problems of economy*. 2011. №. 4. P.76-80.

economic relations. Economic interests can be not only in a person, but also in other organized participants in the process of social production: households, enterprises, the state, society as a whole. For example, an enterprise has an economic interest in making a profit from its activities, the state has an economic interest in increasing the income of its population. The bearers or subjects of economic interests can be any participants in economic relations.

The interest of an entrepreneurial entity is the perceived need of a business to obtain certain material, financial, or social benefits, which serves as the main driver of its activities.

In literary sources, interest is interpreted as "the subject of interest, desires and motivations of economic entities"[212], or as "a manifestation, on the one hand, of the economic relations of the enterprise, and on the other, of the contradictions of the financial activities of the enterprise itself".

Among the interests, the most important for most people is economic interest.

Economic interest is a form of expression of a need, a person's conscious desire for its satisfaction, it is a benefit, an advantage that is achieved in the process of implementing economic relations. Economic interests may belong not only to individuals but also to other organized participants in the process of social production: households, enterprises, the state, and society as a whole. For instance, an enterprise has an economic interest in generating profit from its operations, while the state has an economic interest in the growth of its population's income. Any participant in economic relations can be a bearer or subject of economic interests.

The interest of an entrepreneurial entity is a perceived need of a business to obtain certain material, financial or social benefits, which is the main driver of its activity.

[212] Yermoshenko M. M. Financial security of the state: national interests, real threats, security strategy. Kyiv: Kyiv. National Trade and Economic University. 2001. 309 p.

Economic interest is a fundamental characteristic of the internal driving forces that determine the formation and development of business entities in the form of material, spiritual, monetary and property aspirations.

The study of the interests of business structures is becoming particularly relevant in the context of the protracted crisis provoked by the Covid-19 pandemic and the long-term hybrid war of the Russian Federation against Ukraine[213]. These crisis phenomena transform both the mutual expectations of market participants regarding the development of critical processes and the balance of economic interests between different groups of market actors.

By their nature, economic interests are objective, since they are determined by the place and role of market participants in the social division of labor and the system of production relations. At the same time, they are subjective in nature, because they are always embodied through specific carriers.

Within the framework of the study of domestic scientific discourse, existing approaches to the definition of the term "economic interests" were summarized, namely the following:

– economic interest is a conscious desire of economic entities to satisfy certain needs, that is, economic interests are conscious needs [214];

– economic interest is interpreted by researchers as a category that expresses objective material needs of a person[215];

– economic interest encourages economic entities to act to satisfy needs;

[213] Yastrubetska L.S. Financial security of business entities in Ukraine in the context of hybrid threats: monograph. Lviv: Ivan Franko National University of Economics. 2022. 370 p.

[214] Timofieva S. B. Lecture notes on the discipline "Economic Theory" (for students and part-time students in the direction of training 6.060101 "Construction". Kharkiv National University of Urban Economics named after O.M. Beketov. Kh.: KhNUMG. 2014. 148 p.

[215] Explanatory Dictionary of an Economist. K.: Center for Educational Literature. 2009. 264p.

– economic interest is a real motive and incentive for social actions to satisfy dynamic systems of individual needs, determined by property relations and the principle of economic benefit. Interest arises when the satisfaction of a need is perceived as a specific goal (profit maximization, appropriation of goods, use or possession of a certain product, etc.)[216];

– economic interests – a category that reflects objectively determined material needs of people, which are embodied in life through active activity, are its motivations, the driving force in achieving certain economic results, which correspond to the level of development of productive forces and are intended to satisfy material needs[217];

– economic interests – a conscious desire of economic entities to satisfy certain needs, which is an objective motivation of their economic activity[218];

– "economic interest is a manifestation, on the one hand, of the economic relations of the enterprise, and on the other, of the contradictions of the financial activities of the enterprise itself" [219].

Based on the word "economic interest", which is defined as benefit, advantage, profit, it is possible to consider the interests of an enterprise as its interaction with the subjects of the external environment, carried out constantly or over a certain period of time, forcibly or by choice of the enterprise, the results of which ensure profit[220].

[216] Pankova I. Economic interests in stimulating the development of regions of Ukraine: problems and mechanisms of regulation. *Collection of scientific works of Cherkasy State Technological University. Series: Economic Sciences*. 2019. Issue 55. P. 31-40.

[217] Goncharov S. M., Kushnir N. B. Explanatory dictionary of an economist. Kyiv: Center for educational literature. 2009. 264 p.

[218] Bazylevich V.D. Economic theory: political economy [Electronic resource]. URL: http//www.pidruchniki.ws.

[219] Yermoshenko, M. M. Financial security of the state: national interests, real threats, security strategy [Text] / M. M. Yermoshenko. Kyiv: KNTEU. 2001. 309 p.

[220] Amosov O.O. Financial security of the enterprise in modern economic conditions: theoretical aspect. *Problems of economy*. 2011. №. 4. P.76-80.

Based on the study of the essence of the concept of interest, it can be concluded that economic interests are the conscious needs of business entities that motivate them to purposeful activity in order to achieve the set goals. The formation and development of economic interest should be considered as a socio-economic process. Scientists[221], distinguish three degrees of interrelation of categories compatible with interest:

– economic interests are formed under the influence of the natural historical development of the institutional structure or economic system;

– to ensure economic interests, it is necessary to apply appropriate incentives and methods of encouragement to achieve goals;

– the realization of economic interests through the satisfaction of needs contributes to the emergence of new needs and new interests.

Therefore, economic interests can be characterized as the desire of economic entities (people, enterprises, the state) in conditions of limited resources to satisfy their ever-growing economic needs, to provide qualitative self-reproduction,achieving maximum utility of the good at minimal cost.

The functioning of enterprises in the market is based on the coordination of strategic goals of all counterparties through achieving a balance of their interests. The realization of individual aspirations and ensuring the stability of the production chain requires synergistic interaction from partners. Scientists distinguish the following areas of cooperation: commercial (purchase and sale), technical and economic, production and scientific and technical. In the market, the basic

[221] Sukhorov A.I. National economic security. Textbook. Zhytomyr. Ruta. 2010. 384 p.

and most common form of interaction is precisely commercial purchase and sale relations.

Based on the type of subjects involved, economic interests are categorized into personal (individual), collective (group), societal, and state interests. At the same time, the fundamental and actual bearer of any interest remains the specific individual-shaped by their internal values, social status, professional preferences, and the influence of the external environment.

This constitutes a system of values arising from existing needs within the sphere of economic activity, the satisfaction of which ensures the achievement of set goals at every stage of the enterprise's life cycle[222] .

In the works of O.V. Rudkovsky[223], it is stated that the task of the enterprise is to create an effective system of protecting interests. At the same time, in studies of economic security, the protection of interests is also considered as its goal.

A.E. Kalsyn notes that "economic interest"[224] : 1) a form of manifestation of economic relations, a form of manifestation of property relations (property relations can be leading, determining in relation to economic interest); 2) a motivating motive or incentive for economic activity or production development (a certain motivating motive, a driving force for the development of production).

An interesting idea is proposed by scientists O.I. Bohdan and S.O. Mykhaylyuk, regarding the formation of a system of enterprise interests, namely, limitedness, which will contribute to a more effective organization of the process of monitoring

[222] Sak T.V. Economic interests of small businesses as an object of protection. *Investments: practice and experience*. 2014. № 22. Pp. 67-71.

[223] O.V. Rudkovsky, Ph.D., Assoc. Prof. Issues of resource provision of the corporate security system. *Bulletin of ZhDTU*. 2014. №2 (68) P.154-158

[224] Mishchuk E.V. Economic interests of the enterprise and its stakeholders in the context of their economic security. *Economics and enterprise management. Problems of the system approach in economics*. Issue №2(70), 2019. URL: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/http://www.psaejrnl.nau.in.ua/journal/2_70_1_2019_ukr/20.pdf

their compliance and protection; taking into account the priority of interests; versatility in orientation and taking into account the stage of the life cycle of the enterprise or industry; absence of internal contradictions in the system of interests; the possibility of transforming interests into economic indicators [225].

From the point of view of the stakeholders of the enterprise, their economic interests should be considered as a form of expression of economic needs. They determine the process of goal-setting, act as a driving force for development in a given direction, and also determine the nature of economic relations, tactics and strategy of the subjects. At the same time, the satisfaction of current interests does not eliminate them, but stimulates the emergence of new ones. In view of this, the key task is to assess the synergistic effect that arises as a result of the simultaneous satisfaction of the entire set of economic interests.

The system of economic interests of the enterprise is built on the principle of hierarchy, where each level is subordinated to the main goal. At the top of this structure we place strategic interests - a guideline for the future development of the company. In turn, current economic interests form the base level. They are the foundation, because stable daily activities provide the enterprise with resources to achieve long-term goals.

When implementing the economic interests of the enterprise, it is necessary to ensure their security, while taking into account the security of the interests of its stakeholders. Therefore, it is necessary to simultaneously ensure the economic security of the economic interests of the enterprise and stakeholders. It is worth noting the work of T.V. Sak, which studies the economic security of the economic interests of small businesses, which is defined as the state of security of business resources (capital, personnel, information and technology) and

[225] Bohdan O.I., Mykhailiuk S.O. Research of the interests of the enterprise in relation to its economic security. *Prometey.* 2008. Issue 3 (27). P. 114-117.

entrepreneurial opportunities, which guarantees their most effective use, prevention of internal and external threats[226].

This interpretation is acceptable for small businesses, but it is narrow. In our opinion, the security of the economic interests of the enterprise is proposed to be understood as the synergistic triad "state-process-resource". It acts as a fundamental basis for maintaining high competitiveness and safe evolution of the enterprise in conditions of dynamic environmental transformations and under any influence of risk factors.

In the structure of economic interests of entrepreneurship, a special place belongs to financial interests. Financial interests determine the basis of the financial system and the directions of development of economic activities of enterprises. Financial interests are personal or business needs related to obtaining, preserving, and increasing money. They are the driving force behind all decisions about income, expenses, and investments.

I. Blank treats the financial interests of the enterprise as part of its economic needs, which is manifested in financial activities[227,228]. They reflect the internal demands of the business, coordinated with external partners, and help achieve strategic goals at each stage of development. In addition, the author emphasizes the connection of interests with the security of the enterprise. Financial interests serve as the foundation for building a security system and the main incentive for increasing efficiency. That is why key financial interests require priority protection from threats.

In the scientific discourse on financial security, attention is focused on the specific nature of this phenomenon: financial

[226] Sak T.V. Economic interests of small business as an object of protection. *Investments: practice and experience*. 2014. №22. P. 67-71.

[227] Melnyk K.M. Financial interests of the enterprise as a basis for ensuring its financial security. *Economics, finance, management: current issues of science and practice.* 2015. №2. P.38-45. URL:chrome-extension://efaidnbmnnnib pcajpcglclefindmkaj/https://lib .udau.edu.ua/server/api/core/bitstreams/881a53c7-1ff8-43bc-95a6-061e18454a24/content

[228] Blank I. O. Management of financial security of the enterprise. Kyiv: Nika-Center; Elga. 2004. 784 p.

interests are considered as a direct manifestation of the economic relationships of a business entity and the conflicts of its financial activities[229]. In our opinion, the most justified approach is that of scientists who link the interpretation of financial interests with the factor of ensuring security.

T. Zagorelska in her research takes into account the security factor, considering the financial interests of business as a guideline for development and an indicator of economic relations. They directly reflect the desire of business entities for safe and promising functioning in an unstable environment[230].

The needs of financial entities form a system of financial relations, and this system itself determines the success of the realization of their interests.

The concept of "financial interests" is complex and multifaceted, and the wide variety of its interpretations reflects its multidimensional nature. An analysis of existing approaches allows the identification of the following key characteristics of this category[231]:

- Financial interests establish a relationship between the object (what the interest is directed toward) and the subject (who possesses the interest).
- The subjects of financial interests are the holders of such interests who seek to obtain certain benefits, maximize revenues, or minimize costs. These include owners, managers, or other authorized representatives of business entities, households, the state, and financial institutions.

[229] Yermoshenko M. M. Financial security of the state: national interests, real threats, security strategy. Kyiv: Kyiv. National Trade and Economic University, 2001. 309 p.

[230] Zagorelska T. Yu. Management of financial risks at the enterprise level. *Bulletin of Khmelnytskyi University*. 2009. №3. Vol. 1. P. 168-173. URL: http://surl.li/iakuo

[231] Yastrubetska L.S. Financial security of business entities in Ukraine in the context of hybrid threats: monograph. Lviv: Ivan Franko National University of Economics. 2022. 370 p.

- Financial interests constitute a system of needs of business entities, the realization of which is a fundamental prerequisite for achieving the objectives of their production and financial activities.
- Financial interests arise from the need for financial resources to ensure the successful operation and development of an enterprise.
- The achievement of an enterprise's financial objectives results from the consolidation of the strategic views of its owners and management.
- Financial interests are realized through the use of specific financial instruments and technologies.
- The financial interests of business entities are dynamic and subject to modification depending on the stage of their life cycle.
- The financial interests of business entities may not coincide with the financial expectations of other counterparties, competitors, and employees; therefore, an objective conflict of interests arises between businesses and other market participants.

To better understand the concept of financial interests, it is advisable to classify them according to the following criteria [232]:

1. By the level of financial and economic activity:
   - financial interests of the enterprise as a whole;
   - financial interests of individual structural divisions;
   - financial interests of individual projects.
2. By the object of interest:
   - capital provision;
   - investment activity;

[232] Yastrubetska L.S. Financial security of business entities in Ukraine in the context of hybrid threats: monograph. Lviv: Ivan Franko National University of Economics. 2022. 370 p.

- profit maximization;
- optimization of budget payments;
- increase in the market value of shares.

3. By the subject of interest:
- financial interests of owners;
- financial interests of enterprise management;
- financial interests of employees.

4. By the sphere of financial and economic activity:
- investment activities;
- lending activities;
- equity issuance activities;
- innovation activities;
- other areas of financial activity.

5. By the level of significance:
- primary financial interest;
- priority financial interests;
- secondary financial interests.

6. By relation to the enterprise:
- internal financial interests;
- external financial interests.

7. By the scale of implementation:
- operational financial interests;
- tactical financial interests;
- strategic financial interests.

8. By duration:
- short-term financial interests;
- long-term financial interests.

9. By the degree of realization:
- unrealized financial interests;
- partially realized financial interests;
- fully realized financial interests.

Among all the above-mentioned classification criteria, the level of significance of financial interests is of particular importance. The protection of an enterprise's financial interests

begins with the accurate identification of its primary and strategic priorities.

According to the approach proposed by I. Blank[233], the fundamental financial interest of business entities is subordinated to their overall strategic objective, which in financial management is described using specialized models (Table 1.13).

Table 1.13 - Models for determining the main financial interest of business entities

Model	Characteristics	Disadvantages
1	*2*	*3*
Profit maximization model	This target model is based on the concepts of classical political economy, primarily A. Smith's thesis that the desire of individual enterprises to maximize their own profits automatically increases the general welfare of society. The authorship of the model itself belongs to the French economist A. Cournot, who first substantiated it in 1838.	The pursuit of profit maximization does not always drive the sustainable economic growth of a business entity. In the event of inefficient allocation, accumulated net income may be directed toward current consumption, thereby negating the entity's investment potential for development. At the same time, maximizing financial results is often achieved by intensifying financial risks and destabilizing key indicators of financial health, which collectively creates a threat of insolvency.

[233] Blank I. O. Management of financial security of the enterprise. Kyiv: Nika-Center; Elga. 2004. 784 p.

Continuation of the table 1.13

1	*2*	*3*
Transaction cost minimization model	This approach is based on the neo-institutional theory of R. Coase, where the subject of entrepreneurship is treated as a complex network of commercial contracts.	The criterion of minimizing transaction costs is indeed limited, as the focus on dry economy ignores strategic development, resource synergy, and the creation of added value for the enterprise.
Sales volume maximization model	The specified target criterion illustrates the effectiveness of the economic activities of enterprises. Its implementation ensures profit maximization, intensification of the marketing strategy and modernization of production processes.	The variability of the competitive environment determines the specifics of consumer choice, which can level the effectiveness of marketing activity of enterprises. A significant defect of the specified model is the one-sided orientation of the objective function to maximize the income of business structures in the absence of mechanisms for optimizing operating costs
Sales growth rate maximization model	The optimization criterion of the presented model is the growth rate of sales. At the same time, the modeling takes into account the growth rates of operating profit and the basic proportions of its distribution, which ensures a pronounced strategic nature of the model.	The viability of this model is limited by the requirement that demand and product costs remain constant. This contradicts the dynamic and uncertain nature of the market environment.

Continuation of the table 1.13

1	2	3
Competitive advantage model	Serves as an integral indicator that records the results of the activities of almost every basic unit of the business entity	The concept of competitive advantage reflects the relative positioning of strategic business units in a specific industry market. At the same time, the structure of modern large and medium-sized businesses tends to be multi-profile and diversified.
Value-added maximization model: the scope of application of its objective function	The structure of added value covers the totality of production and marketing costs of business entities and their net profit. The advantage of this approach lies in the synergistic effect, which ensures the optimization of the economic interests of employees, management and investors (owners).	The application of this model is limited and is limited to enterprises specializing in the production of unique (exclusive) products. The limitations are due to the potential conflict of interest between the manufacturer and the end consumer, who may be unwilling to incur additional financial costs for the purchase of a more expensive product.
Model of maximizing the market value of a business entity	The model has received priority development in the USA, Europe, Japan and other countries and assumes that all management decisions in any area of business units' activities should be aimed at ensuring the constant growth of their value in the market.	

The table 1.13 is grouped based on sources.[234, 235.]

The prevailing opinion in the modern scientific community is that the fundamental financial interest of business entities in market conditions is to maximize their market value. The feasibility of applying this concept is due to the following factors:

1. identification of the owners of the enterprise as key stakeholders.

2. Synchronization of tactical and strategic development guidelines through the consolidation of the tasks of all structural services.

3. Using value as a universal indicator of capital management efficiency.

4. Strengthening investor control over management activities due to the higher objectivity of value indicators compared to traditional financial metrics.

Along with determining the core financial interest of the enterprise, it is of fundamental importance to outline its priority target guidelines. The key ones include:

– ensuring a surplus of financial resources at each stage of the life cycle;

– supporting the financial stability of the business entity in terms of scaling;

– maximizing the profitability of operating and commercial activities;

– increasing investment activity and increasing the return on investment;

– innovative orientation of financial and economic processes;

[234] Yastrubetska L.S. Financial security of business entities in Ukraine in the context of hybrid threats: monograph. Lviv: Ivan Franko National University of Economics. 2022. 370 p.

[235] Blank I.O. Management of financial security of the enterprise. Kyiv: Nika-Center; Elga. 2004. 784 p.

– timely neutralization of internal and external financial threats;

– anti-crisis management aimed at preventing crises and promptly eliminating their consequences.

K. Goryacheva believes that the main financial interest of an enterprise is to make a profit[236]. Therefore, in her opinion, it is on the basis of this indicator that the entire system of ensuring the financial security of the enterprise can be built. B. Vyshnivskaya's position is similar, who considers the main goal of entrepreneurial activity to be obtaining maximum income with minimal capital losses in conditions of competition[237]. Therefore, owners who invest their capital in the enterprise, providing the financial basis for its creation and functioning, are interested in efficiency of the enterprise's functioning and this incentive consists in increasing their well-being, which is reflected in the growth of the enterprise's market value[238]. Analysis of literary sources shows that in most definitions of the financial security of an enterprise, the authors do not specify threats, but indicate the interests of the enterprise, in particular, "sustainable", "stable" or "effective" development of enterprises, that is, positive final results of activity are priority financial interests and development strategy.

Owners who invest their capital in the enterprise, providing the financial basis for its creation and operation, are interested in the efficiency of the enterprise's operation, and this incentive consists in increasing their well-being, which is reflected in the growth of the market value of the enterprise [240].

[236] Goryacheva K. S. Information and analytical support of financial security of the enterprise. *Current problems of economics.* 2003. № 9(27). P. 43-49.

[237] Vyshnivska B. Methods of minimizing financial risks. *Economist.* 2007. №6. P. 58-59.

[238] Melnyk K.M. Financial interests of the enterprise as a basis for ensuring its financial security. *Economics, finance, management: current issues of science and practice*. 2015. №2. P.38-45. URL: chrome-extension://efaidnbmnnnib pcajpcglclefindmkaj/https:/ /lib.udau.edu.ua/server/api/core/bitstreams/881a53c7-1ff8-43bc-95a6-061e18454a24/content

Most researchers focus on the financial interests of the enterprise. Namely, they are talking about “sustainable”, “stable” or “efficient” development. This indicates that achieving positive final results of activity is the main financial guideline and the basis of the enterprise strategy.

Table 1.14 - Main tasks for the realization of the financial interests of the enterprise

Financial interests	Tasks of enterprises
Optimize financial results	minimizing production and sales costs; ensuring sustainable growth in operating income (revenue) and net profit; scaling and modernization of production facilities; effective tax optimization of payments to the budget; balancing dividend payments to shareholders; timely repayment of loans; capitalizing part of the profit to finance the development of the enterprise.
Create market value for the enterprise	ensure stable growth in the market value of the company's shares; form and strengthen the image of the company; strengthen the business reputation among customers, partners and the state; have a trademark to protect the uniqueness of the business; increase investment attractiveness for investors.
Providing a business entity with capital	ensuring effective commercial activities; increasing profitability based on cost optimization; managing the pricing process; maximizing margins; entering new markets and expanding the customer base.
Develop human capital	introduce an effective system of labor incentives; link employee compensation to key performance indicators.

Source: compiled by the authors based on [239, 240]

In a market economy, the main financial interests of an enterprise include profit maximization, market value growth, balanced provision of fixed and working capital, and attracting investment. Since these aspirations are often mutually exclusive, the study of the financial security of an enterprise should be conducted through the prism of internal contradictions. Namely, the pursuit of immediate profit, which can deplete resources and reduce long-termthe value of the company, freezing money in working capital limits the financing of new investment projects, maximizing profits requires high risks, and this threatens financial security.

To realize the financial interests of the enterprise, it is necessary to formulate key tasks for their achievement (Table 1.14).

Thus, the financial interests of the enterprise, which serve as a strategic vector of development. They not only reflect the nature of the economic relationships of the enterprise, but also determine its need for safe, stable functioning in conditions of variability and uncertainty of the external environment.

Incomplete or untimely provision of the key financial interests of the enterprise not only destabilizes its current activities and partnership relations, but also threatens the destruction of the strategic goal of the business.

In modern in the realities burdened by the consequences of the COVID-19 pandemic, hybrid warfare, and full-scale aggression of the Russian Federation against Ukraine, the ability of management to not only clearly identify financial priorities but also flexibly adjust them in accordance with the

[239] Yastrubetska L.S. Financial security of business entities in Ukraine in the context of hybrid threats: monograph. Lviv: Ivan Franko National University of Economics. 2022. 370 p.

[240] Melnyk K.M. Financial interests of the enterprise as a basis for ensuring its financial security. Economics, finance, management: current issues of science and practice. 2015. №2. P.38-45. URL: chrome-extension://efaidnbmnnnib pcajpcglclefindmkaj/https://l ib.udau.edu.ua/server/api/core/bitstreams/881a53c7-1ff8-43bc-95a6-061e18454a24/content

requirements of the crisis environment is of critical importance. The success of adaptation of business entities depends on the speed of management response. Today, it is important not only to declare financial priorities, but also to dynamically review them to maintain economic security.

SECTION 2.
FINANCIAL STABILITY OF THE BANKING SYSTEM UNDER CONDITIONS OF LIQUIDITY RISK AND MARTIAL LAW: THEORY, PRACTICE AND REGULATORY MECHANISMS

2.1. FINANCIAL STABILITY OF THE BANKING SYSTEM UNDER LIQUIDITY RISK CONDITIONS: THEORY AND PRACTICE OF MANAGEMENT

In the modern conditions of the development of global and national financial systems, the issue of ensuring the financial stability of the banking sector is of particular importance. Banks play a key role in the functioning of the economy, as they ensure the redistribution of financial resources, support investment processes, contribute to the development of entrepreneurship, and maintain the stability of monetary circulation. At the same time, their activities are directly associated with a high level of risks, among which liquidity risk is one of the most significant. Therefore, the study of the financial stability of the banking system under liquidity risk conditions is highly relevant from both theoretical and practical perspectives[241].

The relevance of this topic is primarily driven by the fact that liquidity is a fundamental characteristic of the stable functioning of any bank. An insufficient level of liquidity may lead to insolvency, panic withdrawal of deposits, a decline in trust from clients and investors, and in some cases, the bankruptcy of a financial institution. Accordingly, effective liquidity management is a key element of a bank's risk

[241] Bielikova O. I. Organizational and Economic Foundations of Mortgage Lending under Economic Instability: Monograph. Kyiv: Taras Shevchenko National University of Kyiv, 2022. 300 p.

management system and an essential condition for maintaining the financial stability of both individual banks and the banking system as a whole[242].

The current stage of financial market development is characterized by high volatility, globalization processes, and increasing interdependence among national economies. As a result, local financial crises can quickly escalate into global ones. A clear example is the global financial crisis of 2008, which revealed the vulnerability of banking systems to liquidity problems and weaknesses in risk management mechanisms. The consequences of this crisis forced regulators and financial institutions to revise approaches to liquidity assessment and management, leading to the introduction of new international standards, particularly Basel III.

In the context of contemporary challenges such as economic instability, geopolitical risks, inflationary fluctuations, and the digital transformation of financial services, the issue of liquidity acquires new dimensions. On the one hand, banks gain access to more diversified funding sources, including digital platforms and fintech solutions. On the other hand, the speed of capital movement increases, as does the sensitivity of clients to any negative signals, which raises the risk of sudden outflows of liquid funds. This requires banks to improve cash flow forecasting tools and implement more flexible liquidity management models[243, 244].

This issue is especially relevant for countries with transition economies, including Ukraine, where the banking

[242] Bublik A. I. Instruments of state support for housing mortgage lending. Finance Journal. Lviv: Ivan Franko Lviv National University, 2022. No. 2. pp. 38–44.

[243] Vanin A. O. Trends in mortgage lending development in Ukraine. Business Inform. Kharkiv: KhNEU, 2020. No. 5. pp. 231–233.

[244] Bielikova O. I. Organizational and Economic Foundations of Mortgage Lending under Economic Instability: Monograph. Kyiv: Taras Shevchenko National University of Kyiv, 2022. 300 p.

sector is affected by macroeconomic instability, military conflicts, exchange rate fluctuations, and changes in regulatory policy. Under such conditions, ensuring an adequate level of bank liquidity is critically important for maintaining trust in the financial system and preventing crisis phenomena. The central bank plays an important role in regulating liquidity through monetary policy instruments; however, the effectiveness of these measures largely depends on the internal policies of banks themselves[245].

Another important aspect is that liquidity directly affects the profitability of banking operations. Excessive accumulation of liquid assets may reduce a bank's income, while insufficient liquidity increases the risk of insolvency. Thus, banks are constantly required to balance profitability and security, making liquidity management a complex and multidimensional task.

The theoretical significance of this study lies in deepening the understanding of the essence of liquidity, its structural components, and its interrelation with other financial risks. The practical significance lies in the possibility of using the research results to improve liquidity management systems in banks, enhance their operational efficiency, and strengthen the financial stability of the banking sector as a whole.

Thus, the study of the financial stability of the banking system under liquidity risk conditions is highly relevant, as it allows not only an assessment of the current state of the banking sector but also the identification of directions for its further development under increasing uncertainty and global economic challenges[246,247].

[245]Bazyluk V. I. Models of State Support for Mortgage Lending in EU Countries: Monograph. Kyiv: KNEU, 2021. 280 p.

[246] Hatsenko T. State housing credit policy: new challenges. Economy of Ukraine. 2023. No. 1. pp. 210–220.

[247] Heyets V. M. Investment Mechanisms of Economic Development. Kharkiv: Institute of Economics, 2022. pp. 25–30.

Ukraine is currently facing significant political, economic, and social challenges, which inevitably have a direct impact on the stability and functioning of its banking sector. In such conditions, the role of banks becomes even more critical, as they are responsible for maintaining financial stability, ensuring uninterrupted payment flows, and supporting economic activity. One of the key missions of the banking system is to ensure an adequate level of liquidity for commercial banks. Liquidity is a fundamental prerequisite for the efficient, stable, and sustainable functioning of any banking institution, and it plays a decisive role not only at the level of individual banks but also for the entire financial system of the country. Therefore, the continuous study, analysis, and improvement of liquidity management mechanisms remain highly relevant in modern financial conditions.

In economic and banking literature, the concept of liquidity is interpreted differently depending on the scientific approach, research objectives, and analytical perspective. According to Kosareva I. P. and Kramska D. O., bank liquidity is defined as the ability of a bank to timely fulfill all its obligations to depositors, creditors, and founders, as well as to mobilize available funds of individuals and legal entities, provide credit resources, and invest in the economic development of the country. This definition emphasizes both the obligation-fulfillment function and the broader economic role of banks.

Primostka L. O. considers liquidity as the bank's ability to quickly and fully meet its immediate liquidity needs, highlighting the operational and short-term nature of liquidity management. Similarly, Haidak K. M. and Lyuta O. V. define liquidity as the unconditional ability of a banking institution to timely, fully, and continuously fulfill its monetary obligations to

depositors and creditors while maintaining a sufficient level of both liquid and non-liquid assets to ensure stability and operational continuity.

From a more qualitative perspective, I. Lys interprets liquidity as a characteristic of the bank's condition and performance that reflects its reliability and ability to fulfill obligations in a timely manner, thus linking liquidity with overall financial soundness and trustworthiness. Krasnova I. V. expands the concept to the level of the entire banking system, defining liquidity as the total amount of liquid resources available for settlement and payment operations within the national economy, as well as for credit provision.

In general terms, liquidity reflects the bank's ability to meet its short-term obligations using available working capital that can be quickly converted into cash without significant loss of value. The banking encyclopedia also provides two key interpretations of liquidity: first, as the ability to sell, realize, or convert tangible and financial assets into cash; and second, as the capacity of a banking institution to fulfill its financial obligations in a timely manner by ensuring the transformation of assets into liquid funds necessary for debt repayment.

In scientific literature, researchers often distinguish between several related but not identical concepts, such as "bank liquidity," "asset liquidity," "liability liquidity," and "balance sheet liquidity." However, such separation is largely theoretical, as in practice these categories are closely interconnected. The liquidity of assets and liabilities forms the overall balance sheet liquidity, while balance sheet liquidity is an integral component of the broader concept of bank liquidity.

According to current banking legislation, liquidity is defined as the ability of a bank to meet its monetary obligations on time, ensured through the balanced relationship between the maturity structure and volumes of assets and liabilities, as well

as other available funding sources. This regulatory approach highlights the importance of time coordination between inflows and outflows of funds, which is essential for maintaining financial stability.

Depending on the perspective of analysis, liquidity can be classified into several types. Client-side liquidity refers to the ability of clients to receive banking services and products in a timely manner and to ensure smooth financial transactions through the banking system. Bank-side liquidity refers to the institution's ability to meet both balance sheet and off-balance sheet obligations in full and on time, while maintaining stable operations, conducting active banking activities, and introducing new financial products. Regulatory liquidity reflects the bank's capacity to comply with liquidity standards set by the central bank or financial regulator, ensuring the stability of the entire banking system through proper resource management[248].

The terms "liquidity" and "solvency" are often used interchangeably in practice, but they are not identical concepts, although they are closely related. Solvency refers to the bank's ability to meet its long-term obligations, which depends on its profitability and capacity to generate sufficient income to cover interest payments and financial liabilities over time. In other words, solvency reflects the long-term financial sustainability of a bank and its ability to manage resources effectively in the long run.

Liquidity, in a broader sense, characterizes the relationship between a bank's equity capital and its liabilities, as well as the suitability of funding conditions for fulfilling debt obligations. Liquidity problems do not necessarily indicate insolvency, since even profitable banks may experience

[248] Bublik A. I. Instruments of state support for housing mortgage lending. Finance Journal. Lviv: Ivan Franko Lviv National University, 2022. No. 2. pp. 38–44.

temporary cash flow shortages or sudden outflows of funds. Such situations usually lead to short-term liquidity pressures rather than long-term financial failure and can often be resolved through access to short-term borrowing in the interbank market or from central bank facilities. However, frequent and persistent liquidity problems may indicate deeper financial weaknesses and can eventually lead to solvency issues[249].

In conclusion, liquidity is a key indicator of banking stability and plays a central role in ensuring the smooth functioning of the financial system. Effective liquidity management is therefore essential for maintaining trust in banks, supporting economic stability, and preventing financial crises, especially in countries experiencing economic uncertainty and structural challenges such as Ukraine.

Additionally, a bank's ability to obtain interbank loans and ensure continuous inflows of funds during its operational activity is an important factor that significantly influences its liquidity position. In this context, commercial banks strive to maintain a liquidity buffer at a minimally acceptable level, which allows them to meet regulatory requirements while simultaneously maximizing profitability. By maintaining only the necessary level of liquid assets, banks are able to allocate a larger share of their resources into less liquid but more profitable financial instruments, thereby increasing overall return on assets. The approach to understanding bank liquidity as a flow enables continuous and dynamic analysis of liquidity levels, assessment of financial market conditions, monitoring of interest rate movements, evaluation of changes in the structure

[249] Hatsenko T. State housing credit policy: new challenges. Economy of Ukraine. 2023. No. 1. pp. 210–220.

of assets and liabilities, and forecasting of future liquidity positions under different economic scenarios[250].

The liquidity of a commercial bank is formed on the basis of maintaining an optimal balance between its three key components — equity capital, attracted (borrowed) resources, and their allocation into active operations. This balance is achieved through effective and timely management of the structural elements of the bank's balance sheet, ensuring that resources are used efficiently while maintaining financial stability and compliance with regulatory standards[111].

A bank's liabilities are generally divided into actual (on-balance sheet) and contingent (off-balance sheet) obligations. Actual liabilities are reflected directly in the bank's balance sheet and include demand deposits, term deposits, interbank borrowings, and funds of creditors. These obligations represent real financial commitments that must be fulfilled within defined timeframes. In contrast, potential or off-balance sheet liabilities arise from contingent events and include guarantees issued by the bank, open credit lines provided to clients, letters of credit, and other similar commitments that may transform into real obligations under certain conditions[251].

Actual liabilities are defined as "obligations recorded in relevant balance sheet accounts, including deposits, interbank loans, and issued securities such as bills of exchange, deposit certificates, and savings certificates"[252]. These instruments form the core of a bank's funding base and directly influence its liquidity structure and stability.

[250] Bashlai S. V. Formation and prospects of mortgage credit relations development. Regional Economy. Ivano-Frankivsk: IFNTUNG, 2016. No. 1. pp. 109–115.

[251] Berehulia O. Application of new mortgage instruments as a method of increasing competitiveness. Economist. Dnipro: DNU, 2018. No. 5. pp. 42–49.

[252] Bielikova O. I. Organizational and Economic Foundations of Mortgage Lending under Economic Instability: Monograph. Kyiv: Taras Shevchenko National University of Kyiv, 2022. 300 p.

Contingent liabilities, in turn, are defined as "bank obligations recorded in off-balance sheet accounts that may arise depending on specific conditions or events, such as guarantees, sureties, or other commitments issued by the bank"[253]. Although they do not immediately affect liquidity, they represent potential future cash outflows and therefore must be carefully managed within the overall risk framework.

In academic literature, the concept of bank liquidity is often analyzed in close interconnection with related categories such as asset liquidity, liability liquidity, balance sheet liquidity, and the liquidity of the banking system as a whole[254]. This interconnected approach allows for a more comprehensive understanding of how different components of the banking structure influence overall financial stability.

Asset liquidity refers to the ability of a bank to convert its assets into cash within a specified period without significant loss of value, particularly in situations involving loan repayment or settlement of obligations. The higher the liquidity of assets, the more flexible and resilient the bank is in responding to unexpected financial demands.

Liability liquidity describes the bank's ability to access stable and reliable funding sources regardless of fluctuations in interest rates or market conditions. It reflects the institution's capacity to ensure a continuous inflow of funds to support both short-term and long-term operational needs, thereby maintaining uninterrupted banking activities.

Balance sheet liquidity represents the combined effect of both asset and liability liquidity. It reflects a well-balanced structure of the bank's balance sheet, where the maturity and

[253] Bielikova O. I. Organizational and Economic Foundations of Mortgage Lending under Economic Instability: Monograph. Kyiv: Taras Shevchenko National University of Kyiv, 2022. 300 p.

[254] Blank I. O. Financial Resource Management. Kyiv: Nika-Center, 2020.

liquidity characteristics of assets are aligned with the timing and structure of liabilities. Such alignment ensures financial stability and creates a solid resource base for sustainable banking operations.

A key challenge for both individual banks and the banking system as a whole is liquidity imbalance. When the demand for liquid funds does not correspond to their supply in the financial market, banks may experience either a liquidity deficit or a liquidity surplus. A liquidity deficit increases the risk of liquidity shortages, non-compliance with National Bank of Ukraine (NBU) regulatory requirements, potential financial penalties, and even the loss of depositor confidence, which may destabilize the bank's resource base. On the other hand, a liquidity surplus indicates inefficient use of financial resources, as excess funds remain idle instead of being invested in income-generating assets, ultimately reducing the profitability and efficiency of banking operations[255].

Therefore, maintaining an optimal level of liquidity requires banks to continuously and effectively manage both their assets and liabilities, ensuring a dynamic balance between profitability, risk, and financial stability (Fig. 2.1).

A bank's assets represent its core income-generating resources and form the basis of its operational and investment activities. They include loans issued to individuals and corporate clients, investments in government and corporate securities, interbank placements, and other financial instruments that generate interest or capital gains. The structure of assets largely determines the profitability of a banking institution, as well as its risk profile and ability to expand lending operations in the economy. At the same time, the quality, maturity, and

[255] Bohdanov Yu. O. Development of mortgage lending under economic crisis conditions. Bulletin of Economic Science of Ukraine. Kyiv: Institute for Economics and Forecasting of NAS of Ukraine, 2020. No. 4. pp. 45–52.

liquidity of assets directly influence the bank's capacity to respond to unexpected financial demands. A well-diversified and properly managed asset portfolio is therefore a key condition for maintaining financial stability.

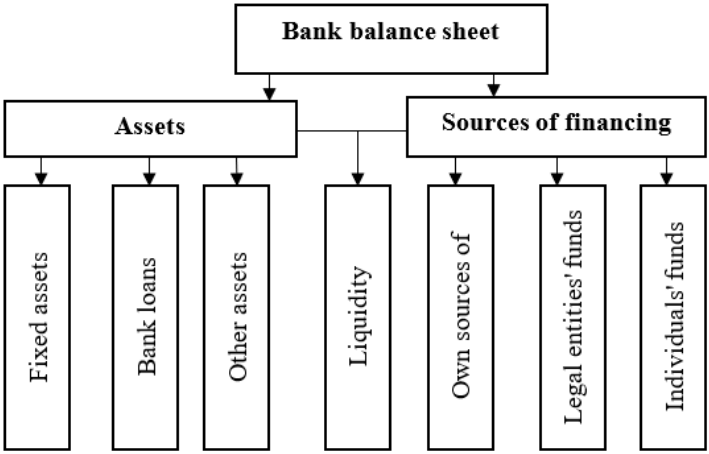


Fig. 2.1 - The place of liquidity among assets and financial resources

Source: compiled by the author based on[256]

A bank's liabilities, in turn, reflect the sources of its financial resources and define the structure of its funding base. They include customer deposits (both demand and term deposits), interbank borrowings, funds raised through the issuance of debt securities, and other obligations to creditors. Liabilities play a crucial role in determining the stability and cost of funding, as well as the bank's dependence on different financial markets. A diversified and stable liability structure reduces funding risk and enhances the bank's resilience to

[256] Borysenko S. V. The role of mortgage lending in socio-economic development. Economy of Ukraine. Kyiv: KNEU, 2021. No. 9. pp. 102–107.

external shocks. Thus, the interaction between assets and liabilities forms the foundation of the bank's overall financial position[257, 258].

The place of liquidity among a bank's assets and financial resources is of fundamental importance, as it ensures the bank's ability to maintain financial stability and meet its obligations in a timely manner. Liquidity acts as a bridging mechanism between the inflow and outflow of funds, enabling the bank to operate smoothly even under conditions of financial uncertainty. Regulatory authorities require banks to maintain specific liquidity ratios, particularly the proportion of highly liquid assets relative to total liabilities, in order to reduce systemic risk and ensure the stability of the financial system[259]. Highly liquid assets typically include cash, balances with the central bank, and short-term government securities, which can be quickly converted into cash with minimal loss of value.

However, maintaining liquidity involves an important trade-off between safety and profitability. While highly liquid assets ensure stability and reduce the risk of insolvency, they generally generate lower returns compared to less liquid but higher-yielding assets such as long-term loans, corporate investments, and structured financial products. As a result, banks face a continuous challenge in balancing liquidity and profitability. Excessive liquidity may lead to inefficient use of financial resources and reduced returns on equity, whereas insufficient liquidity increases the risk of financial distress. Therefore, an optimal liquidity strategy must take into account

[257] Vanin A. O. Trends in mortgage lending development in Ukraine. Business Inform. Kharkiv: KhNEU, 2020. No. 5. pp. 231–233.

[258] Hatsenko T. State housing credit policy: new challenges. Economy of Ukraine. 2023. No. 1. pp. 210–220.

[259] Bielikova O. I. Organizational and Economic Foundations of Mortgage Lending under Economic Instability: Monograph. Kyiv: Taras Shevchenko National University of Kyiv, 2022. 300 p.

the structure of liabilities, expected cash flows, interest rate environment, and overall market conditions[260].

Effective liquidity management also requires careful coordination of the maturity structure of both assets and liabilities. Banks must ensure that the timing of cash inflows from assets corresponds as closely as possible to the timing of cash outflows related to liabilities. This principle of maturity matching helps to reduce liquidity gaps and minimize the risk of cash shortages. In practice, however, perfect matching is rarely achievable, which is why banks rely on liquidity buffers, contingency funding plans, and access to interbank markets to manage short-term imbalances. Maturity mismatch remains one of the central sources of liquidity risk in banking and requires continuous monitoring and forecasting.

The concept of liquidity can also be analyzed at different levels, including microeconomic and macroeconomic perspectives. At the micro level, bank liquidity refers to the ability of an individual banking institution to generate sufficient financial resources to meet its obligations in full and on time, while also ensuring stable operations and supporting long-term development. At this level, liquidity management is closely linked to internal risk management systems, capital adequacy, and operational efficiency. At the macro level, liquidity refers to the overall liquidity of the banking system, meaning its collective ability to provide credit, support economic activity, and meet the financial needs of depositors and businesses without destabilizing the financial system[261]. System-wide

[260] Bublik A. I. Instruments of state support for housing mortgage lending. Finance Journal. Lviv: Ivan Franko Lviv National University, 2022. No. 2. pp. 38–44.

[261] Burmaka M. Securitization as a tool for regulating the loan capital market: international experience and prospects in Ukraine. Bulletin of the UABS. Sumy: UABS, 2018. No. 2. pp. 13–20.

liquidity is therefore a key determinant of macroeconomic and financial stability.

Bank liquidity performs several essential functions within the financial system, which can be classified as strategic, stabilization, managerial, competitive-status, and transformation functions (Fig. 2.2). The strategic function ensures the long-term sustainability and viability of the banking institution. The stabilization function helps the bank withstand financial shocks, market volatility, and periods of economic uncertainty. The managerial function is associated with the efficient allocation, monitoring, and control of financial resources. The competitive-status function reflects the bank's reputation, reliability, and position within the financial market, influencing customer trust and investor confidence. Finally, the transformation function represents one of the core roles of banks in the economy, namely the transformation of short-term liabilities into long-term assets, which supports credit creation and economic development.

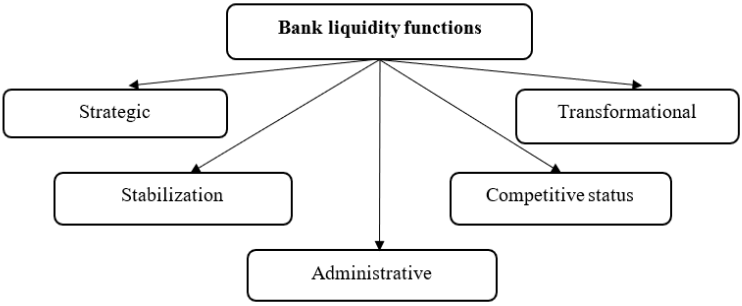


Fig. 2.2 - Functions of bank liquidity
Source: compiled by the author based on [262]

[262] Burmaka M. Securitization as a tool for regulating the loan capital market: international experience and prospects in Ukraine. Bulletin of the UABS. Sumy: UABS, 2018. No. 2. pp. 13–20.

Bank liquidity, depending on the time required to convert assets into cash, is commonly divided into three main levels, each of which reflects a different degree of asset liquidity and the bank's ability to meet its financial obligations under varying time horizons.Primary liquidity (first-level or current liquidity) represents the highest level of liquidity and reflects the bank's ability to meet its short-term obligations and ensure uninterrupted daily payments. This type of liquidity is essential for maintaining the operational stability of a banking institution, as it directly supports routine financial transactions such as customer withdrawals, interbank settlements, and payment processing. The main components of primary liquidity include cash held in the bank's vaults, cash equivalents, short-term bank deposits, and highly liquid securities that are actively traded in financial markets. These assets can be quickly and easily converted into cash with minimal risk of value loss, making them the most important buffer for covering immediate liquidity needs.

Secondary liquidity (second-level or intermediate liquidity) includes assets that can be converted into cash within the short- to medium-term horizon. These assets are less liquid than those included in primary liquidity but still play a crucial role in ensuring financial flexibility and stability. Secondary liquidity typically consists of short-term government deposits, loans provided to or obtained from other financial institutions, as well as medium-term securities that can be sold on the market when necessary. This level of liquidity allows banks to respond to temporary fluctuations in cash flow and maintain a stable financial position during periods of moderate stress or uncertainty[263].

[263] Heyets V. M. Investment Mechanisms of Economic Development. Kharkiv: Institute of Economics, 2022. pp. 25–30.

Tertiary liquidity (long-term liquidity) characterizes the bank's ability to mobilize financial resources over a longer time horizon. It reflects the structure of assets that are not immediately liquid but contribute significantly to the bank's long-term financial sustainability and profitability. This category includes mortgage loans, long-term credit agreements, investment projects, and other financial instruments with maturities exceeding one year[264]. Although these assets are less flexible in terms of immediate conversion into cash, they are essential for generating stable long-term income and supporting the strategic development of the banking institution.

In addition to classification by the time required for asset conversion, bank liquidity can also be divided according to the type of payment instruments into four main categories: non-cash liquidity, cash liquidity, foreign currency liquidity, and securities liquidity.

Each of these categories reflects a different form in which liquid resources are held and managed within the banking system. For example, cash liquidity ensures immediate settlement capabilities, while securities liquidity provides the opportunity to quickly access funds through the sale of financial instruments in capital markets. Foreign currency liquidity is particularly important in open economies, where exchange rate fluctuations and external financial flows significantly affect banking stability.

It should be emphasized that a bank's liquidity is not a static characteristic but rather a dynamic indicator that is gradually formed and continuously evolves throughout the institution's development. As a bank expands its asset and liability operations, the structure of its liquidity becomes more complex, requiring more advanced methods of analysis,

[264] Balayan O. V. Economic Mechanisms of Mortgage Lending: Study Guide. Lviv: Ivan Franko Lviv National University, 2022. 245 p.

forecasting, and management. The growth in transaction volume, diversification of financial products, and increased exposure to different types of risks all contribute to the need for a more sophisticated liquidity management system.

A bank's liquidity and its overall financial stability are influenced by a wide range of factors, which are generally divided into two broad categories: external (exogenous) and internal (endogenous) factors. External factors originate outside the bank's direct control but significantly affect its liquidity position and risk exposure.

Among the external (exogenous) factors, the most important include:

The economic and political situation in the country, which plays a decisive role in shaping the overall financial environment. Economic growth, inflation levels, unemployment rates, exchange rate stability, and political stability directly influence public confidence in the banking system. In periods of economic downturn or political uncertainty, deposit withdrawals may increase, access to funding may become more limited, and overall liquidity risk may rise significantly.

The effectiveness of state regulation and supervision, which includes the policies and actions of the central bank and financial regulatory authorities. Strong and well-structured regulatory frameworks contribute to the stability of the banking system by enforcing liquidity requirements, monitoring risk exposure, and ensuring compliance with prudential standards. Effective supervision helps prevent excessive risk-taking by banks and supports the maintenance of adequate liquidity buffers, whereas weak or inconsistent regulation may lead to increased systemic vulnerabilities and financial instability.

Commercial banks are directly dependent on monetary regulation measures, which influence their liquidity and solvency through several key mechanisms. One of the most

important is the restrictive policy of the central bank, which includes increasing the refinancing rate, changing mandatory reserve requirements, setting minimum capital adequacy levels, and introducing compulsory economic ratios that affect the structure and efficiency of both asset and liability operations of banks. Another important mechanism is the fiscal policy of the state, which indirectly influences liquidity through taxation, government spending, and overall macroeconomic stability. In addition, central bank operations in the open market with government securities and foreign currency also play a significant role. In order to support the liquidity of commercial banks and stimulate their lending activity, the central bank may act as a buyer in the open market[265].

Another important external factor is the condition of the money market and the securities market[266]. This factor significantly affects the redistribution of temporarily free funds among market participants, particularly banks. A well-developed financial market allows banks to quickly attract funds to maintain liquidity, while a stable and efficient securities market provides the opportunity to quickly sell financial instruments when necessary. Conversely, when financial markets are underdeveloped, banks are unable to fully utilize these opportunities and are forced to seek alternative funding sources. This aspect also includes the development and efficiency of the interbank lending market.

The possibility of state support is also an important external factor. This factor is manifested through the implementation of monetary policy by the government and the central bank, particularly through access to state-backed funding

[265] Vasylenko O. Yu. Institutional prerequisites for mortgage lending development in Ukraine. Investments: Practice and Experience. Kyiv: KNEU, 2020. No. 5. pp. 89–93.

[266] Balayan O. V. Economic Mechanisms of Mortgage Lending: Study Guide. Lviv: Ivan Franko Lviv National University, 2022. 245 p.

and refinancing programs. In Ukraine, this is primarily achieved through refinancing schemes and liquidity support mechanisms provided by the National Bank of Ukraine (NBU), which help stabilize commercial banks in times of financial stress[267].

The development and reliability of legislation is another key factor influencing liquidity. This includes not only legal mechanisms for debt recovery, which are particularly relevant for Ukrainian banks, but also regulatory requirements imposed on banks themselves. For example, according to NBU regulations, reserve capital must be held in a separate account at the National Bank of Ukraine, which allows for continuous monitoring of one of the key components of a bank's financial stability[268].

The reliability of a bank's clients and partners also plays an important role. Having financially stable and trustworthy clients enables the bank to attract long-term funding and ensures a more predictable cash flow structure. In addition, in emergency situations, reliable partners may provide access to interbank credit or other forms of financial support, which helps maintain liquidity stability.

The level of banking competition is another significant external factor. Depending on the intensity of competition in specific banking product markets, the potential profitability of new products, existing demand, and the number of available clients may change. This directly influences the bank's cash inflows and overall funding capacity. High competition may reduce profit margins but also encourages innovation and

[267] Bublik A. I. Instruments of state support for housing mortgage lending. Finance Journal. Lviv: Ivan Franko Lviv National University, 2022. No. 2. pp. 38–44.

[268] Balayan O. V. Economic Mechanisms of Mortgage Lending: Study Guide. Lviv: Ivan Franko Lviv National University, 2022. 245 p.

efficiency, while low competition may increase profitability but reduce market dynamism.

Internal factors influencing bank liquidity include several key elements. First, the quality of bank management is crucial. The professionalism, experience, and qualifications of bank managers and employees directly affect liquidity management decisions. Effective leadership ensures timely decision-making, proper risk assessment, and stable financial operations, all of which are essential for maintaining liquidity and financial stability.

Second, the adequacy of the bank's own capital significantly influences liquidity. A strong capital base acts as a financial buffer against unexpected events that may cause cash outflows and potentially lead to liquidity or solvency crises. The higher the level of capital adequacy, the greater the bank's ability to absorb financial shocks.

Third, the size of the bank and the quality and stability of its resource base are important determinants of liquidity. Depending on the stability of funding sources, banks can choose different strategies for allocating attracted funds. A stable resource base, along with customer confidence in the bank, allows for greater investment in long-term assets such as loans and financial instruments, thereby improving profitability and stability[269,270].

Another internal factor is the degree of dependence on external borrowing sources. The higher this dependence, the greater the risks associated with temporary insolvency or market disruptions, which may negatively affect liquidity.

[269] Herasymenko O. V., Kolomiiets L. S. Analysis of mortgage lending market development in Ukraine. Finance of Ukraine. Kyiv: KNEU, 2020. No. 5. pp. 22–29.

[270] Monetary and credit statistics of the NBU. National Bank of Ukraine: Website. URL: https://bank.gov.ua/files/3.3-Loans.xlsx (Accessed: 05.04.2026).

The balance between assets and liabilities in terms of both volume and maturity structure is also a key determinant of liquidity. It defines the bank's ability to meet its obligations on time. Liquidity in this context should not be viewed as a static balance sheet indicator but rather as a dynamic flow reflecting the timing differences between incoming and outgoing cash flows.

The level of risk associated with individual asset operations is another important factor. It determines the likelihood of losses when selling assets or the risk of non-repayment of invested funds. Asset risk depends on both internal and external factors, including the bank's investment strategy, loan portfolio structure and quality, investment activity in securities, quality of financial analysis, and the condition of the real sector of the economy and public finances. The higher the risk of asset operations, the greater the probability of losses during asset conversion into cash, which negatively affects liquidity. In Ukraine, the quality of risk assessment and control is supported by regulations introduced by the NBU, as well as new liquidity-related regulatory indicators[271].

Profitability of bank assets also plays an important role. The larger the share of productive assets in the balance sheet and the higher their efficiency, the more stable the financial position of the bank.

The structure and diversification of assets are equally important. In liquidity management, maintaining a sufficient proportion of highly liquid assets is necessary to ensure timely settlements and withdrawals. Diversification of assets across

[271] Vitiuk T. P., Kozlova L. I. Fundamentals of Mortgage Lending: Study Guide. Lviv: Ivan Franko Lviv National University, 2019. 298 p.

different sectors and instruments reduces overall risk and has a positive effect on liquidity stability[272].

The dynamics and structure of the client base also have a direct impact on liquidity. A stable and diversified client base ensures predictable inflows and outflows of funds and improves liquidity planning and forecasting.

Other internal factors include the experience and qualifications of bank management, the chosen liquidity management strategy, the bank's business reputation, and its specialization. Each of these elements contributes to the overall efficiency of liquidity management and the financial stability of the banking institution.

The analysis of scientific approaches to the concept of "liquidity" allows for a more precise and comprehensive definition to be formulated. Bank liquidity can be understood as the ability of a banking institution to quickly and efficiently convert its assets into cash or other highly liquid resources in order to meet its financial obligations to depositors, creditors, and other stakeholders. This characteristic is one of the most important indicators of a bank's financial stability, as it ensures the uninterrupted functioning of both individual banking institutions and the banking system as a whole. A sufficient level of liquidity helps to mitigate the risks associated with cash shortages, which, if unmanaged, may lead to financial instability, insolvency, and a loss of confidence among market participants[273].

Liquidity plays a central role in maintaining trust in the banking sector, as it directly reflects the bank's ability to fulfill its commitments on time and in full. In this context, liquidity is

[272] Vovk I. I. Mortgage lending in the context of financial market development. Scientific Bulletin of NULES of Ukraine. Kyiv: NULES, 2021. No. 9. pp. 37–45.

[273] Bohdanov Yu. O. Development of mortgage lending under economic crisis conditions. Bulletin of Economic Science of Ukraine. Kyiv: Institute for Economics and Forecasting of NAS of Ukraine, 2020. No. 4. pp. 45–52.

not only a technical financial indicator but also a key element of risk management and financial resilience. Its proper management helps reduce exposure to systemic shocks and ensures the stable functioning of financial markets even during periods of economic uncertainty or volatility.

Liquidity management is one of the core areas of banking management, as it determines the ability of a bank to meet its obligations to clients, investors, and regulatory authorities in a timely manner. Effective liquidity management ensures the financial stability of a banking institution and significantly reduces the risk of default or financial distress[274] . In the practice of commercial banks, a wide range of instruments and methods is used to manage liquidity, among which short-term and long-term liquidity planning plays a fundamental role.

One of the key components of liquidity management is budgeting and forecasting. This process involves the preparation of detailed plans regarding the inflow and outflow of funds within the bank, which allows management to assess the current liquidity position and anticipate potential cash flow gaps. Through systematic forecasting, banks can avoid unexpected liquidity shortages, improve financial planning accuracy, and prevent crisis situations that may arise due to sudden changes in market conditions or customer behavior.

Another important tool is the analysis of liquid assets, which involves evaluating and planning the structure of assets that can be quickly converted into cash. These include short-term financial obligations, government securities, and reserves held with the central bank[275]. Proper management of liquid

[274] Havryliuk M. S. Efficiency of state mortgage lending programs in Ukraine. Finance of Ukraine. Kyiv: KNEU, 2022. No. 6. pp. 28–35.

[275] Harazha O. P. Standardization of property valuation in the world. Scientific Bulletin of the International Humanitarian University. Economics and Management Series. Odesa: IHU, 2019. Issue 17. pp. 36-42.

assets ensures that the bank maintains an adequate liquidity buffer to meet immediate obligations without compromising its overall profitability.

In addition to planning and asset analysis, commercial banks utilize a number of operational instruments aimed at maintaining liquidity stability. These tools are part of a broader set of measures designed to ensure continuous solvency and prevent liquidity shortages. One of the most important instruments is the system of mandatory reserves. Banks are required to hold a certain percentage of their deposits in accounts with the central bank. These reserves act as a liquidity buffer that can be used in case of increased demand for funds.

Another important element is the holding of highly liquid assets. Banks invest in instruments that can be quickly converted into cash with minimal loss of value, such as government bonds, short-term treasury bills, and other reliable securities. These assets play a crucial role in ensuring the bank's ability to respond promptly to unexpected liquidity needs.

Interbank lending is also a significant source of short-term liquidity. Through the interbank market, banks can quickly obtain additional funds to cover temporary liquidity gaps. This mechanism enhances flexibility and helps maintain stability in the banking system, especially during periods of financial stress.

Operations conducted by the central bank represent another important source of liquidity support. Central banks provide refinancing instruments to commercial banks, including repurchase agreements, Lombard loans, and other credit facilities secured by collateral. These instruments allow banks to access liquidity quickly in exchange for eligible securities, thereby ensuring the stability of the financial system[276].

[276] Hatsenko T. State housing credit policy: new challenges. Economy of Ukraine. 2023. No. 1. pp. 210–220.

Effective liquidity management also requires careful coordination of the maturity structure of assets and liabilities. By aligning the timing of loan repayments with the maturity of obligations, banks can better synchronize cash inflows and outflows. This reduces the risk of liquidity mismatches and ensures more stable financial operations over time.

Additional instruments include factoring and securitization, which involve the sale of financial assets, such as loan portfolios, to other financial institutions or their transformation into marketable securities. These mechanisms allow banks to quickly generate liquidity and improve balance sheet efficiency.

Attracting long-term deposits is another important strategy, as competitive interest rates encourage clients to place their funds for longer periods. This strengthens the stability of the bank's resource base and reduces dependence on short-term funding sources.

Diversification of funding sources is also essential for maintaining liquidity stability. By using a combination of interbank loans, customer deposits, bond issuance, and other financial instruments, banks reduce their dependence on a single funding channel and increase their resilience to market fluctuations.

Finally, liquidity forecasting and planning based on analytical models allows banks to anticipate changes in liquidity demand. By analyzing historical data, seasonal patterns, and market trends, banks can adjust their liquidity reserves in a timely manner and maintain financial stability under changing economic conditions.

The use of these instruments enables banks to maintain an adequate level of liquidity, fulfill their obligations to clients and partners in a timely manner, and preserve financial stability even under conditions of market volatility and economic uncertainty.

In conclusion, liquidity management in commercial banks is a fundamental prerequisite for the stable and profitable functioning of both individual banking institutions and the banking system as a whole. It ensures financial stability, supports solvency, strengthens client and regulator confidence, and plays a key role in maintaining the overall resilience of the financial sector[277].

Reserve funds represent one of the key instruments of liquidity management in commercial banks. Banks are required to maintain a certain amount of funds in reserve accounts held with the central bank. These mandatory reserves serve as an important liquidity buffer, enabling financial institutions to meet unexpected funding needs and ensuring their ability to respond promptly to short-term obligations. In addition to regulatory compliance, reserve funds enhance the overall stability of the banking system by reducing the risk of sudden liquidity shortages.

Another important mechanism is the investment of resources in highly liquid assets. Banks typically allocate a portion of their financial resources into instruments that can be quickly converted into cash, such as government bonds and short-term securities. These assets are considered safe and liquid, as they can be easily sold on the financial market or used as collateral to obtain additional funding. Their role is essential in maintaining financial flexibility and ensuring the bank's ability to react to sudden liquidity demands.

Short-term interbank lending is also a crucial tool for liquidity management. In situations where a bank experiences a temporary liquidity shortage, it can obtain the necessary funds from the interbank market. This mechanism allows financial institutions to quickly cover short-term obligations and maintain

[277]Heyets V. M. Investment Mechanisms of Economic Development. Kharkiv: Institute of Economics, 2022. pp. 25–30.

uninterrupted financial operations. The interbank market therefore plays an important stabilizing role in the banking system by redistributing liquidity among banks.

In addition, central bank instruments represent an important source of liquidity support. Central banks provide commercial banks with refinancing opportunities or collateralized loans secured by financial assets. These operations are typically implemented through repurchase agreements (repos) or Lombard loans, which allow banks to obtain liquidity quickly in exchange for eligible securities[278]. Such instruments are especially important during periods of financial stress, as they ensure the stability of the banking system.

Credit risk limitation and credit portfolio management also play a significant role in liquidity management. Banking institutions introduce limits on lending volumes and establish internal risk controls to prevent excessive exposure to credit risk, which may negatively affect liquidity. Furthermore, banks regularly analyze and adjust the structure of their credit portfolios to optimize performance and minimize the risk of loan defaults[279]. Effective credit portfolio management ensures a more stable inflow of cash and reduces potential liquidity pressures.

Deposit policy is another key instrument of liquidity management. Through effective regulation of deposit conditions and interest rates, banks can influence cash inflows and outflows, making it a crucial tool for maintaining liquidity stability. Financial institutions often design specialized deposit programs aimed at attracting funds for fixed periods, thereby

[278]Herasymenko O. V., Kolomiiets L. S. Analysis of mortgage lending market development in Ukraine. Finance of Ukraine. Kyiv: KNEU, 2020. No. 5. pp. 22–29.

[279]The Global Economy – Mortgage Rates: Website. URL: https://www.theglobaleconomy.com/economies/ (Accessed: 15.03.2026).

strengthening the stability and predictability of their resource base.

Managing the volume and maturity structure of liabilities is also essential. By implementing maturity management strategies, banks can better forecast cash flows and ensure that incoming funds align with outgoing obligations. This helps maintain an adequate liquidity level over time and reduces the risk of liquidity gaps.

Forecasting and cash flow analysis are widely used analytical tools in liquidity management. By analyzing historical data, seasonal fluctuations, and current market trends, banks can estimate future liquidity needs more accurately. This enables them to respond promptly to changes in the financial environment and avoid potential liquidity shortages. Advanced forecasting models also improve decision-making and enhance overall financial planning efficiency.

Liquidity safeguarding mechanisms, such as limiting open positions, are also applied in practice. Some financial institutions impose restrictions on the use of certain funds to prevent excessive depletion of liquidity reserves. This approach helps control market risks and supports the overall financial stability of the bank.

Asset securitization is another important liquidity management technique. It involves converting a portion of bank assets, particularly loan portfolios, into tradable securities on financial markets. This process allows banks to quickly raise additional funds, improve balance sheet structure, and increase overall liquidity. Securitization also contributes to risk diversification and capital efficiency.

The widespread use of these instruments enables banks to maintain an optimal level of liquidity, balance the structure of assets and liabilities, and respond effectively to market

fluctuations, thereby ensuring the stability and continuity of their financial operations.

The strategic principles and approaches to liquidity management in commercial banks, presented in Figure 1.4, are aimed at ensuring solvency, financial stability, and protection against unpredictable market risks. Liquidity management is an integral part of the overall banking strategy and is based on a systemic approach that combines long-term planning with operational control and regulation[280].

Thus, liquidity management is a crucial component of a commercial bank's financial strategy and a decisive factor in ensuring the stability of its operations. Reliable and effective liquidity management enables a bank to fulfill its obligations to clients, investors, and regulatory authorities in a timely manner, avoid liquidity shortages, maintain overall financial stability, and strengthen trust within the entire banking sector. In this sense, liquidity management serves not only as an operational function but also as a strategic foundation for sustainable banking development and long-term financial resilience.

Modern banking practice employs a wide range of liquidity management instruments designed to ensure flexibility and stability in various market conditions. Among the most important tools are the establishment of mandatory reserve requirements, investment in highly liquid assets, interbank market operations, and cooperation with the central bank through refinancing mechanisms. In addition, banks actively use asset securitization and factoring as methods of quickly converting assets into cash, which significantly enhances liquidity availability.

[280]Hnatkivskyi B. M. Use of international experience in the development of housing mortgage in Ukraine. Actual Problems of Regional Economic Development. Ivano-Frankivsk: Vasyl Stefanyk Precarpathian National University, 2017. Vol. III(2). pp. 304–311.

Another essential element of liquidity management is the coordination of asset and liability maturities. Proper maturity matching allows banks to reduce liquidity gaps and ensure a stable flow of incoming and outgoing funds. Equally important is the use of cash flow forecasting techniques, which enable banks to anticipate future liquidity needs based on historical data, market trends, and seasonal fluctuations. This proactive approach improves decision-making and reduces exposure to unexpected financial shocks.

Diversification of funding sources also plays a key role in strengthening liquidity stability. By relying on a mix of deposits, interbank loans, and capital market instruments, banks reduce their dependence on a single source of funding and increase their resilience to market volatility. This diversification strategy enhances financial flexibility and reduces systemic risk exposure.

The combined use of these instruments allows banks to adapt effectively to changing market conditions, minimize liquidity and credit risks, and prevent potential liquidity crises. When applied consistently and in an integrated manner, these tools contribute to maintaining an optimal liquidity level, ensuring the uninterrupted functioning of banking operations, and supporting the overall stability of the financial system.

The regulation of bank liquidity in commercial banks is based on different approaches in international and domestic banking practice. Commercial banks play a central role in ensuring the financial stability not only of the banking system but also of the state and society as a whole. For this reason, the banking sector is one of the most heavily regulated areas of the economy, as effective regulation of liquidity is essential for maintaining the stability and reliability of financial institutions.

In most countries, banking regulation is carried out by central banks such as the National Bank of Ukraine and the

Federal Reserve System in the United States. International experience shows that in developed countries with stable and well-capitalized banking systems, liquidity regulation is often based on a limited number of indicators, usually one or two key ratios, rather than an extensive set of mandatory requirements. This reflects a more market-oriented approach to liquidity management, where banks are given greater responsibility for internal risk control.

For example, in the United Kingdom, commercial banks report to the central bank using a single liquidity ratio. This indicator is calculated as the ratio of cash holdings, nostro account balances, securities, and bills with a maturity of up to one year. The standard minimum value of this ratio is not less than 12.5%. In addition to this regulatory indicator, UK banks also calculate additional internal liquidity ratios for management purposes[281]. These supplementary indicators help banks monitor liquidity more precisely and adapt to changing market conditions.

In the United States, there are no strict standardized regulatory requirements for bank liquidity ratios. This is largely due to the highly developed and diversified banking system, where liquidity management is primarily the responsibility of bank management rather than regulatory authorities. American commercial banks typically use several internal indicators to assess liquidity risk and financial stability. One of the key indicators is the loan-to-deposit ratio, which shows the extent to which the loan portfolio is financed by deposits. Another important measure is the net reliance on non-core funding sources, which reflects the stability of market-based funding. Banks also use indicators such as the net short-term liability

[281]Monetary and credit statistics of the NBU. National Bank of Ukraine: Website. URL: https://bank.gov.ua/files/3.3-Loans.xlsx (Accessed: 05.03.2026).

ratio, cash liquidity ratio, and wholesale funding stability ratio to evaluate their liquidity position and funding structure.

In Germany, the banking system uses a more structured approach based on two main liquidity ratios[282]. The first is the short-term liquidity ratio, which measures the relationship between short- and medium-term investments (up to four years) and liabilities of similar maturity. The second is the long-term liquidity ratio, which compares long-term assets and liabilities with maturities exceeding four years. This dual-system approach allows for a balanced assessment of both short-term and structural liquidity risks.

Central banks and supervisory authorities regulate not only the liquidity of individual banks but also the liquidity of the entire banking system. Liquidity regulation is an integral part of monetary policy in every country, as its primary objective is to ensure the stability of the financial system. An optimal level of liquidity is essential for maintaining the solvency and stability of banks and is therefore a prerequisite for sustainable economic development. Both insufficient and excessive liquidity can have negative consequences for the financial system and the economy as a whole.

Insufficient liquidity in the banking system means that banks are unable to meet their financial obligations, which may lead to capital outflows from the banking sector and a reduction in lending activity. This, in turn, negatively affects economic growth and financial stability. On the other hand, excessive liquidity may lead to inflationary pressures and reduce the effectiveness of monetary policy, as surplus funds in the banking system may fuel speculative activities and distort financial markets.

[282]Huba M.O., Huba O.I. Current state of mortgage lending in Ukraine. Modern Economics. Kyiv: NAS of Ukraine, 2018. No. 8. pp. 55–62.

International experience shows that the largest open market operations are typically conducted in countries with active interest rate policies, where policy rates are set at or close to the central bank's discount rate. In such countries, open market operations are mainly carried out through credit and deposit operations. The central bank's key interest rate serves as a benchmark for refinancing costs in the market, and changes in this rate signal shifts in monetary policy. These changes influence inflation dynamics through various transmission channels within the economy.

In countries where central banks implement sterilization measures aimed at reducing excess liquidity, the policy interest rate is applied to deposit operations. In contrast, in countries without significant liquidity surplus problems, such as the European Union and the United Kingdom, the policy rate is mainly used for open market operations to regulate short-term liquidity conditions.

Another important instrument influencing banking system liquidity is the reserve requirement ratio. Mandatory reserves represent a portion of commercial banks' funds held in accounts with the central bank. By increasing reserve requirements, the central bank reduces the liquidity available to commercial banks, thereby limiting their lending capacity and tightening monetary conditions[283]. Conversely, a reduction in reserve requirements expands banks' resource base and increases system-wide liquidity.

In recent years, there has been a global trend toward reducing reserve requirements, and in some countries, this instrument has been completely abandoned. The reason for this shift is that reserve requirements are often viewed as a form of implicit taxation on banks, as they reduce available resources,

[283]Danylenko V. M. Financial policy in mortgage lending in Ukraine. Journal of Economic Research. 2019. No. 3. pp. 43–50.

increase the cost of banking products, and decrease the competitiveness of financial institutions. Countries that have reduced or eliminated reserve requirements include the United Kingdom, Australia, New Zealand, Switzerland, and Canada. In some jurisdictions where reserve requirements still exist, central banks apply interest payments on required reserves, partially compensating banks for holding funds in central bank accounts. For example, in Slovakia the interest rate is 1.5%, in Poland it is 0.9% of the policy rate, while in Hungary it is equal to the central bank's base rate[284].

Overall, the central bank effectively regulates banking system liquidity through the establishment of prudential standards and the use of monetary policy instruments. The primary objective of liquidity regulation measures is to maintain the stability of the banking system, ensure its resilience to financial shocks, and support the achievement of both tactical and strategic monetary policy goals, including price stability and sustainable economic growth.

Conclusion. Liquidity management is a key element of banking system stability and a necessary condition for its resilience during periods of economic uncertainty and financial turbulence. The theoretical analysis shows that bank liquidity is influenced by a complex system of interrelated factors, including the overall macroeconomic and financial condition of the country, the level of depositor confidence, internal bank policies, the structure of assets and liabilities, the quality of risk management, and regulatory requirements. In this context, the ability of a bank to fulfill its obligations in a timely manner remains the fundamental criterion of liquidity adequacy.

[284]Danylova L. I. Current trends in Ukraine's mortgage market development. Problems of Economy. 2021. No. 10. pp. 79–85.

This ability largely depends on the efficiency of maintaining sufficient reserves of highly liquid assets, the balanced structure of funding sources, and the effective coordination between active and passive operations. Regulatory standards, particularly liquidity ratios established by central banks, play a systemic role in ensuring minimum financial stability requirements. They not only protect individual banking institutions from excessive risk exposure but also encourage banks to optimize their asset structures and improve overall financial discipline. Short-term and long-term liquidity indicators are especially important, as they enhance the bank's capacity to withstand financial shocks and prevent liquidity shortages during crisis periods.

The effectiveness of liquidity management policy is significantly determined by how consistently a bank manages the maturity structure of its assets and liabilities, optimizes its investment portfolio, utilizes capital market instruments, and maintains adequate liquidity buffers. It is essential to recognize that liquidity is not a static indicator; rather, it is a dynamic characteristic that continuously changes under the influence of both internal managerial decisions and external economic conditions. Therefore, banks must develop flexible and adaptive strategies, incorporating modern forecasting methods and advanced tools for cash flow analysis in order to respond effectively to market volatility.

In addition, successful liquidity management requires a strategic balance between profitability and financial security. While excessive liquidity may reduce profitability by limiting investment in higher-yielding assets, insufficient liquidity significantly increases solvency risks and threatens the stability of the institution. This trade-off represents one of the central challenges in modern banking management and requires continuous monitoring and adjustment of liquidity positions.

Overall, liquidity represents a fundamental parameter of a bank's financial stability, and its effective management ensures not only the stability of individual institutions but also the resilience of the entire banking sector. In the context of modern economic challenges, banks must strengthen their internal control systems, improve risk prevention mechanisms, and ensure strict compliance with regulatory requirements. Such an approach forms the foundation for sustainable financial stability, enhances the efficiency of banking operations, and strengthens public trust in the banking system as a whole.

2.2. STRATEGIC DIRECTIONS FOR STIMULATING THE DEVELOPMENT OF MORTGAGE LENDING IN UKRAINE AS A KEY INSTRUMENT FOR ENHANCING INVESTMENT ATTRACTIVENESS

In the context of ongoing economic transformation and post-crisis recovery, the development of an efficient and accessible mortgage lending system in Ukraine is acquiring critical importance for strengthening the country's investment potential and ensuring sustainable economic growth. Mortgage lending performs a dual function in modern economies: it not only enhances housing affordability for households but also serves as a powerful mechanism for mobilizing long-term financial resources, stimulating the construction sector, and advancing the development of financial markets. In addition, the resilience of the mortgage lending system has become particularly relevant under conditions of heightened uncertainty and financial instability.

Effective regulatory frameworks and innovative risk management approaches are essential to maintain liquidity and ensure the stability of banking institutions[285,286].

In Ukraine, however, the mortgage market remains insufficiently developed in comparison with advanced economies. It is characterized by limited access to long-term credit, relatively high interest rates, an inadequate level of creditor rights protection, and overall macroeconomic instability. These constraints significantly limit the capacity of mortgage lending to operate as an effective driver of investment activity and economic expansion. At the same time, processes of European integration and the implementation of institutional reforms create new opportunities for revitalizing the mortgage sector.

The significance of this research lies in the urgent need to elaborate comprehensive and effective strategic approaches to the stimulation of mortgage lending that are aligned with current economic realities and capable of fostering the inflow of investments into the real sector of the economy. In the context of structural transformations, financial instability, and increasing integration into global and European markets, the role of mortgage lending as a catalyst for investment activity becomes particularly important[287].

The strengthening and modernization of the mortgage lending system can facilitate the mobilization of long-term financial resources, promote capital accumulation, and intensify investment processes within the housing and construction sectors. Moreover, a well-functioning mortgage market

[285]Bazyluk V. I. Models of State Support for Mortgage Lending in EU Countries: Monograph. Kyiv: KNEU, 2021. 280 p.

[286]Bublik A. I. Instruments of state support for housing mortgage lending. Finance Journal. Lviv: Ivan Franko Lviv National University, 2022. No. 2. pp. 38–44.

[287] Vanin A. O. Trends in mortgage lending development in Ukraine. Business Inform. Kharkiv: KhNEU, 2020. No. 5. pp. 231–233.

enhances the overall investment attractiveness of the national economy by creating favorable conditions for both domestic and foreign investors. In the long run, the development of mortgage lending contributes to financial market deepening, improves housing accessibility, and ensures macroeconomic stability and sustainable economic growth.

The purpose of this study is to substantiate strategic directions for stimulating the development of mortgage lending in Ukraine as a key instrument for enhancing investment attractiveness and ensuring sustainable economic growth. To achieve this objective, it is necessary to analyze the current state of the mortgage market, identify existing problems and barriers, and propose effective mechanisms and instruments for its activation and long-term development[288,289].

Thus, the study of strategic approaches to the development of mortgage lending in Ukraine possesses both theoretical significance and considerable practical value, as it contributes to the formation of a stable financial environment and supports the country's overall economic progress[290,291].

The pertinence of this study is determined by the growing necessity to design and implement coherent, evidence-based strategic approaches to the stimulation of mortgage lending that are consistent with contemporary macroeconomic conditions and institutional transformations. In an environment characterized by financial volatility, post-crisis recovery, and progressive integration into European and global financial

[288]Vasylenko O. Yu. Institutional prerequisites for mortgage lending development in Ukraine. Investments: Practice and Experience. Kyiv: KNEU, 2020. No. 5. pp. 89–93.

[289]Vovk I. I. Mortgage lending in the context of financial market development. Scientific Bulletin of NULES of Ukraine. Kyiv: NULES, 2021. No. 9. pp. 37–45.

[290] Bielikova O. I. Organizational and Economic Foundations of Mortgage Lending under Economic Instability: Monograph. Kyiv: Taras Shevchenko National University of Kyiv, 2022. 300 p.

[291]Borysenko S. V. The role of mortgage lending in socio-economic development. Economy of Ukraine. Kyiv: KNEU, 2021. No. 9. pp. 102–107.

systems, the development of a robust mortgage lending framework becomes a pivotal factor in facilitating the effective allocation of financial resources and channeling investments into the real sector of the economy[292,293].

Enhancing the institutional and financial architecture of mortgage lending can significantly contribute to the mobilization of long-term capital, deepen financial intermediation, and stimulate investment activity, particularly within the housing and construction sectors. Furthermore, a well-developed mortgage market increases the overall investment attractiveness of the national economy by reducing investment risks, improving market transparency, and creating stable conditions for both domestic and foreign investors.

In addition, the expansion of mortgage lending has broader socio-economic implications, including improved housing affordability, increased employment in related industries, and the strengthening of financial stability through the diversification of financial instruments. Consequently, the development of an efficient mortgage lending system serves not only as a driver of capital formation but also as an essential component of sustainable economic growth and long-term economic resilience[294,295].

The relevance of this study is the increasing need to formulate and implement comprehensive, scientifically grounded strategic approaches to the stimulation of mortgage lending that are fully aligned with current macroeconomic

[292] Koval M. I., Petrova V. S. Development of state mortgage lending programs in Ukraine. Economy and State. 2021. No. 9. pp. 38–45.

[293] Shapoval V. M. State mortgage support programs in Ukraine: problems and prospects. Current Problems of Economics. 2021. No. 12. pp. 95–101.

[294] Yurii S. I., Fedosov V. M. Financial System of Ukraine: Textbook. Kyiv: KNEU, 2019. 540 p.

[295] IMF. European Housing Markets at a Turning Point (WP/23/76). Washington, DC: IMF, 2023. URL: https://www.imf.org (Accessed: 21.04.2026).

dynamics and institutional reforms. Under conditions of economic restructuring, financial uncertainty, and the deepening of integration processes with European and global markets, mortgage lending is acquiring a crucial role as an effective instrument for reallocating financial resources and intensifying investment activity in the real sector of the economy[296].

The advancement and institutional strengthening of the mortgage lending system can ensure the accumulation and efficient distribution of long-term capital, promote the development of the housing and construction sectors, and enhance the overall efficiency of financial intermediation. At the same time, a transparent, stable, and well-regulated mortgage market significantly improves the investment climate, reduces systemic risks, and creates favorable conditions for both domestic and international investors[297].

Moreover, the expansion of mortgage lending generates significant socio-economic effects, including improved access to housing, increased employment in related industries, and the stimulation of domestic demand. It also contributes to the diversification of financial instruments and the strengthening of the resilience of the financial system. Therefore, the formation of an effective mortgage lending framework should be considered a strategic priority for ensuring sustainable economic growth, increasing national investment capacity, and enhancing long-term economic stability.

In foreign countries, there are also well-established and time-tested mechanisms of mortgage lending system development and regulation that may be beneficial for Ukraine

[296] Shevchenko I. V. Trends in Ukraine's housing mortgage market. Economy and State. 2020. No. 11. pp. 82–86.

[297] IMF. European Housing Markets at a Turning Point (WP/23/76). Washington, DC: IMF, 2023. URL: https://www.imf.org (Accessed: 21.04.2026).

in the context of its post-war economic recovery and financial market transformation starting from 2026.

Table 2.1 - Mechanisms of foreign experience in adapting the mortgage lending system in Ukraine for 2026

Types of programs	Mechanism of implementation
1	*2*
State support and subsidization	Countries such as the United States and European Union member states actively implement interest rate subsidy programs targeted at specific categories of citizens, including young families, military personnel, and low-income households. In addition, they provide partial credit guarantees, which significantly reduce lending risks for financial institutions. The Ukrainian "єОселя" program already represents a solid foundation in this direction; however, it requires further expansion. In particular, it may be enhanced through the differentiation of lending conditions across regions, taking into account the priorities of post-war reconstruction. Furthermore, the European Union's experience in co-financing housing reconstruction programs through development funds may serve as a valuable model for Ukraine.
Mortgage securities market	In the United States, Germany, and Denmark, the issuance of mortgage-backed bonds is highly developed. This mechanism enables banks to refinance their mortgage portfolios by attracting long-term investment from institutional investors such as pension funds and insurance companies. As a result, banks gain improved liquidity, while the overall cost of mortgage lending is reduced. In Ukraine, although an appropriate legal framework has already been established, the mortgage securities market remains underdeveloped. Therefore, its activation in 2025–2026 is essential and should be achieved through the creation of a transparent system for the circulation of mortgage assets, the introduction of tax incentives for investors, and the strengthening of confidence in the Ukrainian financial market.

Continuation of the table 2.1

1	*2*
Two-tier mortgage lending system	In countries such as Germany and Denmark, alongside traditional commercial banks, specialized mortgage institutions operate, including dedicated mortgage banks and building savings associations (Bausparkassen). These institutions provide long-term housing loans with fixed interest rates, financed through a system of prior savings accumulation by depositors. This model ensures financial stability and predictability for borrowers, as well as a balanced and sustainable funding base for mortgage lending institutions. The development of building savings associations in Ukraine could enable households to gradually accumulate funds for a down payment and subsequently obtain mortgage loans at fixed interest rates, thereby increasing the accessibility and reliability of housing finance.
Risk insurance systems	In international practice, comprehensive risk insurance systems are widely applied, covering mortgage-related risks such as borrower income loss, property damage or loss, and, in some cases, extraordinary risks including war-related risks. These instruments play a crucial role in reducing uncertainty for both lenders and borrowers, thereby enhancing the stability of mortgage lending markets.For Ukraine, this approach is particularly relevant given the current security and economic challenges. The development of effective mechanisms for insuring war-related risks, potentially with state support or participation, is of critical importance. The implementation of such instruments would enable banks to expand mortgage lending activities more actively, including in high-risk and frontline regions, while simultaneously improving the resilience of the housing finance system.

Source: compiled by the authors independently based on data from the National Bank of Ukraine (NBU)[298]

The application of such instruments is particularly relevant for improving housing affordability, expanding access to long-

[298] IMF. European Housing Markets at a Turning Point (WP/23/76). Washington, DC: IMF, 2023. URL: https://www.imf.org (Accessed: 21.04.2026

term credit resources, and strengthening the stability and liquidity of the banking sector. A structured overview of these approaches is presented in Table 2.1.

The adaptation of foreign mortgage lending mechanisms to Ukrainian realities will make it possible to build a comprehensive market model that combines state support, market-based financial instruments, and innovative technologies. The implementation of these measures will contribute to lower interest rates, broader access to housing, and Ukraine's deeper integration into the European financial space.

In 2026, the adaptation of international mortgage lending experience is not merely desirable but essential for Ukraine. The implementation of best practices will enable the creation of a stable and efficient mortgage lending system. This will not only ensure affordable housing for citizens but also become a powerful driver of post-war economic recovery and sustainable development[299].

An important factor is the harmonization of the national legal and regulatory framework with European standards, which will ensure transparency of financial operations and facilitate the attraction of foreign investment. Additionally, the application of state guarantees and interest rate compensation mechanisms will help support socially vulnerable groups, including young people and internally displaced persons. Thus, the implementation of foreign models can act as a catalyst for the development of the Ukrainian mortgage market, promote its integration into the European financial space, and ensure the formation of long-term sources of housing finance. In the long term, this will not only improve housing affordability but also

[299] The Global Economy – Mortgage Rates: Website. URL: https://www.theglobaleconomy.com/economies/ (Accessed: 02.04.2026).

strengthen the financial stability of the banking system and accelerate Ukraine's economic recovery[300].

Table 2.2 - Implementation strategies in Ukraine for 2026

Implementation methods	Measures for the implementation of the methods
1	*2*
Improvement of legislation and regulation	It is important to accelerate the implementation of the new Mortgage Lending Development Strategy, approved by the National Bank of Ukraine and the Financial Stability Council in July 2025. This strategy provides for a comprehensive reform of the entire mortgage infrastructure, including the introduction of war risk insurance mechanisms and updated real estate valuation standards. In addition, it is necessary to further harmonize Ukrainian legislation with European standards and simplify procedures for property rights registration, thereby improving transparency, efficiency, and accessibility of the mortgage market.
Stimulating the banking system	It is necessary to introduce additional incentives for banks that actively develop mortgage lending, particularly in the context of post-war reconstruction. Such measures may include a reduction in regulatory burdens for institutions with significant mortgage portfolios, as well as expanded access to long-term funding through the refinancing mechanisms of the National Bank of Ukraine (NBU).

[300] Monetary and credit statistics of the NBU. National Bank of Ukraine: Website. URL: https://bank.gov.ua/files/3.3-Loans.xlsx (Accessed: 02.04.2026).

Continuation of the table 2.2

1	*2*
	These steps would strengthen banks' liquidity position, encourage greater participation in housing finance, and support the expansion of affordable mortgage lending during the recovery period.
Development of the real estate market	The development of the real estate market should be oriented toward increasing transparency, improving valuation standards, and enhancing transaction efficiency. In the context of post-war recovery, it is essential to stimulate construction activity through public-private partnerships, simplify land allocation and building permit procedures, and ensure reliable digital registration of property rights. Strengthening market infrastructure and introducing modern digital tools will contribute to reducing transaction costs, minimizing risks of fraud, and increasing investor confidence. As a result, a more stable and competitive real estate market will support the expansion of mortgage lending and overall economic recovery.
Improving financial literacy	Improving financial literacy is a key precondition for the sustainable development of the mortgage market. It is necessary to implement nationwide educational programs aimed at increasing citizens' understanding of mortgage products, interest rate mechanisms, credit risks, and long-term financial planning. Special attention should be given to young households, internally displaced persons, and other socially vulnerable groups. The involvement of banks, educational institutions, and state agencies in awareness campaigns will help reduce the level of financial illiteracy,

Continuation of the table 2.2

1	*2*
	improve responsible borrowing behavior, and increase trust in the banking system. Ultimately, higher financial literacy will contribute to more stable demand for mortgage loans and better protection of borrowers' interests.
Use of modern technologies	The use of modern technologies is an important direction for the modernization of mortgage lending and for improving the efficiency of the financial market. It is advisable to implement digital platforms for submitting and processing mortgage applications, automated systems for assessing borrowers' creditworthiness, as well as the use of big data and artificial intelligence to reduce credit risks. In addition, the development of electronic document management and the integration of state registries will significantly reduce the time required to process mortgage transactions and increase the transparency of real estate operations. The adoption of fintech solutions will also improve the accessibility of mortgage products and reduce banks' operational costs, which in turn will positively influence the development of the housing finance market.

Source: compiled by the authors independently based on data from the National Bank of Ukraine (NBU)[301]

Implementation strategies in Ukraine in 2026 envisage that, for the successful adaptation and effective implementation of the above-mentioned foreign experience in mortgage lending, it is necessary to undertake a set of comprehensive measures aimed at harmonizing the legislative framework with European standards, developing mechanisms of state support and credit

[301] IMF. European Housing Markets at a Turning Point (WP/23/76). Washington, DC: IMF, 2023. URL: https://www.imf.org (Accessed: 21.04.2026).

guarantees, stimulating the development of secondary mortgage market financial instruments, introducing digital technologies into lending processes, and ensuring an adequate level of monitoring and control over their practical application. The implementation strategies in Ukraine in 2026 for successful adaptation and realization of this experience are presented in Table 2.

Thus, the adaptation of foreign mortgage lending mechanisms to Ukrainian conditions represents one of the key directions for the modernization of the mortgage market in 2026. The experience of the European Union, the United States, and Scandinavian countries demonstrates the effectiveness of the two-tier mortgage lending model, state subsidy programs, the introduction of "green" mortgages, and the digitalization of financial services.

The implementation of these instruments in Ukraine will not only reduce credit risks for banks but also create more accessible, transparent, and predictable conditions for borrowers. In the long term, such reforms will contribute to the stability of the financial system, the expansion of housing affordability, and the sustainable development of the mortgage market.

Necessary steps for the development of mortgage lending in Ukraine to the level of developed countries (forecast for 2026 and beyond). The development of the mortgage market is a key precondition for forming a sustainable financial environment and increasing housing affordability for the population. In order to bring Ukraine closer to the level of leading European countries and the United States, it is necessary to implement comprehensive legal, financial, economic, and institutional reforms that will ensure market stability, investment attractiveness, and public trust[302].

[302] Koval M. I., Petrova V. S. Development of state mortgage lending programs in Ukraine. Economy and State. 2021. No. 9. pp. 38–45.

1. Harmonization of legislation and regulatory framework. One of the main barriers to mortgage market development in Ukraine is insufficient legal clarity. In developed countries, clear and predictable mechanisms for protecting the rights of lenders and borrowers significantly reduce risks for financial institutions and attract investment.

For Ukraine, it is necessary to:

– introduce transparent and unified property valuation standards;

– improve insolvency legislation for individuals and simplify-procedures for the enforcement of non-performing assets;

– implement EU regulations on consumer protection in financial services and construction market regulation.

These measures will create predictable conditions for banks and investors, reducing legal risks that currently constrain mortgage market development[303].

2. Development of the secondary mortgage market and securitization. In countries such as the United States, Germany, and France, secondary mortgage market institutions play a crucial role by allowing banks to sell mortgage portfolios and refinance them through securities issuance.

For Ukraine, priorities include:

– establishing a fully functional securitization mechanism and issuing covered mortgage bonds;

– developing state or semi-state mortgage refinancing agencies modeled after Germany's KfW or the U.S. Fannie Mae;

– encouraging institutional investors (pension funds, insurance companies) to participate in mortgage financing.

[303] Yurii S. I., Fedosov V. M. Financial System of Ukraine: Textbook. Kyiv: KNEU, 2019. 540 p.

This would provide long-term liquidity for banks and contribute to lower interest rates for borrowers.

3. Introduction of state support programs and guarantees. The experience of Poland, the Czech Republic, and the Baltic states demonstrates that state-supported mortgage mechanisms are highly effective in transitional economies.

For Ukraine, it is recommended to:

– expand the "eOselia" program by introducing differentiated interest rates for specific population groups;

– create partial state guarantee mechanisms for young families and military personnel;

– introduce interest rate subsidies for socially vulnerable groups.

Such tools would increase effective housing demand and stimulate the construction sector.

4. Digitalization of the mortgage market. Countries such as the United Kingdom and Scandinavian states demonstrate the efficiency of digital mortgage platforms that ensure transparency and speed of lending processes.

For Ukraine, promising directions include:

– creation of a unified electronic mortgage registry;

– implementation of online platforms for loan applications and automated creditworthiness assessment;

– development of remote contract signing and digital document verification technologies.

These innovations will reduce administrative costs and accelerate lending processes.

5. Introduction of "green" mortgages. The European Union actively promotes environmentally oriented financial products, including green mortgages for energy-efficient housing[304].

For Ukraine, it is advisable to:

[304] Yatsenko H. A. Problems and prospects of housing mortgage development in Ukraine. Economy and Management. Dnipro: DNU, 2021. No. 3. pp. 98–104.

– introduce tax incentives for borrowers purchasing or renovating energy-efficient housing;

– encourage banks to offer lower interest rates for energy-efficient properties;

– attract international financial institutions (EBRD, EIB) to support such programs.

This will contribute both to mortgage market development and housing stock modernization.

6. Financial literacy and public trust. In EU countries, mortgage lending is widely used due to a high level of financial literacy.

Ukraine should:

– implement educational programs on mortgage and personal finance;

– increase transparency of banking products and standardize mortgage contracts;

– develop independent financial advisory institutions.

– Improving financial literacy will promote responsible borrowing behavior and reduce non-performing loans[305].

The development of mortgage lending in Ukraine to the level of developed countries is possible only through a comprehensive approach that includes legal reform, securitization mechanisms, strengthened state support, digital transformation, and adaptation of European financial instruments. In the long term, these measures will create a competitive mortgage market, ensure affordable housing for citizens, and support Ukraine's integration into the European financial ecosystem.

Thus, the adaptation of foreign mortgage lending mechanisms to Ukrainian conditions requires a systemic approach combining financial, legal, and technological tools.

[305]Sheludko V. M. Mortgage market and its impact on financial system development. Economics and Forecasting. 2021. No. 2. pp. 67–73.

The implementation of these measures will improve housing affordability, create a stable and competitive mortgage market, and ensure Ukraine's integration into the European financial space.

Perspectives of Mortgage Lending Development in Ukraine as a Factor of Socio-Economic Stabilization and Post-War Recovery: Challenges and Opportunities.

In Ukraine, mortgage lending became a mass financial product only before the 2007–2008 global financial crisis. Due to strong housing demand and the entry of foreign banks, the mortgage market experienced rapid expansion. Foreign financial institutions possessed significant experience in mortgage lending and had access to foreign currency funding.

However, due to regulatory weaknesses, banks underestimated risks: they issued foreign currency loans without proper assessment of borrowers' financial capacity, which contributed to overheating of the real estate market.

The accumulated imbalances led to a severe market collapse: real estate prices dropped to historically low levels, while borrowers massively defaulted on mortgage obligations, turning the majority of loans into non-performing assets.

To mitigate social pressure, a legal moratorium on the enforcement of collateral property was introduced. Significant financial losses discouraged both banks and households from engaging in mortgage lending. By the end of 2021, the mortgage-to-GDP ratio in Ukraine was only around 0.3%, indicating an extremely underdeveloped mortgage market. Since then, the real estate sector has been only marginally supported by mortgage financing and has mainly relied on developers' funds and buyers' own savings. However, the sector lacked proper regulation and investor protection mechanisms.

Chronic issues included violations of construction standards and frequent delays in commissioning residential properties. The market was also affected by several high-profile

developer bankruptcies, which further reduced banks' willingness to re-enter mortgage lending. State support programs proved to be unsustainable in the long term[306].

Only in the early 2020s did positive changes begin to emerge: the moratorium was lifted, and protections for creditors and consumers were strengthened. The reform of the State Architectural and Construction Inspection of Ukraine improved regulatory oversight. In addition, mechanisms such as mandatory construction guarantees and state registration of property rights during the construction phase were introduced. Combined with improving macroeconomic conditions and lower interest rates, these reforms made mortgage lending more accessible. In 2021, approximately 9 billion UAH in mortgage loans were issued[307].

However, the full-scale invasion interrupted this recovery trend. In the first months of the war, the real estate market nearly froze, and even later remained significantly weakened. By 2024, the number of housing transactions was nearly one-third lower compared to the pre-war period.

At the end of 2022, the government launched the "eOselia" program to support preferential mortgage lending. Initially, it targeted military personnel, teachers, and healthcare workers, but was later expanded to other population groups to improve housing conditions. The program has significantly contributed to mortgage lending growth for eligible categories. However, due to high risks and consequently high mortgage costs, the development of market-based mortgage products

[306] Koval M. I., Petrova V. S. Development of state mortgage lending programs in Ukraine. Economy and State. 2021. No. 9. pp. 38–45.

[307] Shapoval V. M. State mortgage support programs in Ukraine: problems and prospects. Current Problems of Economics. 2021. No. 12. pp. 95–101.

remains limited. As a result, state support accounts for over 96% of all new mortgage lending[308].

At the same time, the government's capacity to subsidize mortgages under the current model is limited. Without the development of market-based instruments, the program alone cannot fully meet housing demand during wartime and the post-war reconstruction period. A strong impetus for market development is expected from the Mortgage Lending Development Strategy, prepared and coordinated with international partners, including the National Bank of Ukraine.

The objective of the Strategy is to significantly improve housing affordability by calibrating state support to current market conditions and creating an efficient housing market. This includes promoting housing stock expansion, reforming institutional approaches, and stimulating the development of construction financing instruments and mortgage lending mechanisms[309].

The implementation of most measures under the Strategy will begin simultaneously; however, legislative reforms will require a longer implementation period. To ensure effective execution, a detailed Roadmap will be developed in the future.

Overall, the development of mortgage lending in Ukraine is closely linked to socio-economic stabilization and post-war recovery. Its transformation from a crisis-prone and underdeveloped segment into a stable financial mechanism depends on regulatory reforms, institutional strengthening, and the balanced interaction of state support and market-based instruments.

Strategic Objectives (updated English version):

[308] Koval M. I., Petrova V. S. Development of state mortgage lending programs in Ukraine. Economy and State. 2021. No. 9. pp. 38–45.

[309] Shevchenko I. V. Trends in Ukraine's housing mortgage market. Economy and State. 2020. No. 11. pp. 82–86.

1. Reduction of risk levels. The introduction of war-risk insurance will make mortgage lending more attractive for banks and more accessible for borrowers. Improving legislation related to the regulation of residential construction, with the aim of reducing the risk of unfinished projects and increasing transparency in real estate sales at all stages of construction, will enhance trust in developers and contribute to the scaling of the residential real estate market.

2. Accessible and transparent lending. An improved model of state support will provide access to mortgage products for a broader range of borrowers. Disclosure of loan-related information in accordance with European standards will simplify the understanding of mortgage products and strengthen the protection of borrowers' rights. Open access to real estate price information will support more accurate market assessments by all participants and improve overall market transparency.

3. Protection of creditors' rights. The modernization of procedures for resolving non-performing loans, including the implementation of European standards, will encourage banks to expand mortgage lending and properly assess associated risks, thereby increasing competition among lenders. In the future, this Strategy should become an integral part of a broader Housing Strategy.

The list of measures includes reforms in the financial sector and related areas necessary for the development of mortgage lending. A number of these measures are also components of the Financial Sector Development Strategy and the Credit Market Development Strategy.

Measures of the Mortgage Lending Development Strategy for 2026:

The 2026 Mortgage Lending Development Strategy includes a set of coordinated legal, institutional, and financial

measures aimed at building a stable, transparent, and EU-integrated housing finance system in Ukraine.

First, the Strategy provides for the development of a dedicated framework for the Ukrainian Financial Housing Company, ensuring that its operations fully comply with fiscal and public debt constraints while minimizing reliance on budgetary resources. This is intended to create a sustainable institutional mechanism for mortgage market support without excessive pressure on public finances.

A key priority is the introduction of war-risk insurance mechanisms for mortgage contracts, which would significantly reduce financial risks for both lenders and borrowers in the context of ongoing security challenges. This measure is expected to increase banks' willingness to expand mortgage lending.

The Strategy also includes the updating of valuation legislation, aimed at improving transparency, consistency, and reliability of real estate appraisals, which are essential for accurate risk assessment in mortgage lending.

Another important measure is the development of legislative proposals to ensure effective enforcement of creditors' claims secured by mortgage collateral, thereby strengthening legal protection for lenders and improving loan recovery procedures.

To increase market transparency, the Strategy foresees the establishment of a comprehensive real estate price database, including detailed metadata on primary and secondary market transactions, as well as the development of housing and commercial property price indices.

In parallel, the Strategy includes the adoption of a law on improving the regulation and functioning of credit bureaus,

which will enhance the quality of credit information used in mortgage lending decisions and reduce default risks[310,311].

A significant EU integration component involves legislative alignment with Directive 2014/17/EU on credit agreements for residential property, aimed at strengthening consumer protection standards and harmonizing mortgage lending practices with European regulations.

Further steps include the development and adoption of legislation on covered bonds and securitization in line with EU directives, which will facilitate the development of a secondary mortgage market and improve long-term funding opportunities for banks.

The Strategy also requires a review of mortgage enforcement moratoria, including an assessment of their continuation or gradual termination, followed by the preparation of relevant legislative amendments to restore full creditor rights.

In the construction sector, the Strategy focuses on improving transparency and control over construction financing, including standardization of financing conditions and ensuring that funds are used strictly for construction purposes in accordance with project progress.

Finally, the Strategy introduces a mechanism for replacing a defaulting developer, based on the creation of a separate legal entity for each construction project. This entity would act as the project owner, with its corporate rights placed under collateral, ensuring continuity of construction and protection of investors' interests.

Overall, these measures form a comprehensive reform package aimed at strengthening financial stability, improving investor confidence, protecting borrowers and creditors, and

[310] Borysenko S. V. The role of mortgage lending in socio-economic development. Economy of Ukraine. Kyiv: KNEU, 2021. No. 9. pp. 102–107.

[311] Shpylova N. S. Mortgage lending in Ukraine's economic recovery system. Investments: Practice and Experience. 2022. No. 14. pp. 47–52.

integrating Ukraine's mortgage market into the European financial framework.

Currently, the war remains the primary source of risks; however, international assistance this year is sufficient to maintain macroeconomic and financial stability. The continuation of the war restrains economic growth and private capital investment, yet rising corporate and household incomes still preserve room for expanding credit to the economy[312].

The banking system remains stable and highly liquid. It is actively increasing lending to both businesses and households and continues to support the financing of the budget deficit. Annual growth in business lending has accelerated to 29% and is observed across banks of all groups and business sizes, while consumer lending is growing at approximately 34% per year.

Favorable housing price conditions by historical standards have not translated into stronger demand in the real estate market, indicating the need for additional market stimuli[313].

The implementation of the Mortgage Lending Development Strategy, which is currently being finalized, is expected to enhance market transparency and stimulate the revival of market-based mortgage lending.

The quality of the loan portfolio remains satisfactory, as borrowers' debt burden is moderate. Losses from operational risk for banks last year were four times lower than in 2022. Despite rising funding costs, banks have maintained their interest margin, which supports operational efficiency and allows for capital accumulation, although profitability is gradually normalizing.

[312] Petrov O. P., Smolii I. P. Role of banks in mortgage lending development in Ukraine. Bulletin of Economic Science. 2018. No. 7. pp. 88–94.

[313] Shpylova N. S. Mortgage lending in Ukraine's economic recovery system. Investments: Practice and Experience. 2022. No. 14. pp. 47–52.

Bank capital remains sufficient to ensure system stability, support the implementation of new EU regulatory requirements, and sustain further credit expansion. The National Bank of Ukraine (NBU) is preparing for the introduction of capital buffers and for an assessment of regulatory equivalence with EU standards.

Strategic directions for expanding and optimizing the mortgage portfolio of JSC CB "PrivatBank" under conditions of macroeconomic instability, market fluctuations, and the implementation of state programs for the post-war economic recovery of Ukraine.

The strategic development of the mortgage portfolio of JSC CB "PrivatBank" in the current environment is determined by elevated macroeconomic uncertainty, structural changes in the real estate market, and the growing role of state-supported housing programs aimed at post-war reconstruction. In these conditions, the bank's mortgage policy should focus on balancing risk management, portfolio growth, and alignment with national recovery priorities.

A key strategic direction is the gradual expansion of mortgage lending through participation in government-backed housing initiatives, including preferential lending programs such as "eOselia". This allows the bank to maintain lending activity while mitigating credit and market risks through partial state support mechanisms.

Another important priority is the enhancement of risk management systems, particularly through improved borrower creditworthiness assessment, integration of advanced scoring models, and continuous monitoring of macroeconomic indicators. Special attention should be given to reducing

exposure to currency, interest rate, and construction-related risks[314].

The optimization of the mortgage portfolio also requires diversification of lending products, including fixed-rate mortgage instruments, energy-efficient ("green") mortgages, and flexible repayment schemes adapted to different income groups. Such diversification increases portfolio resilience under volatile market conditions.

Digital transformation represents a further strategic direction. The implementation of automated mortgage processing systems, digital client onboarding, and integration with state registries can significantly reduce transaction costs, improve processing speed, and enhance transparency.

In addition, strengthening cooperation with international financial institutions and development partners is essential for accessing long-term funding sources and adopting best international practices in mortgage lending.

Finally, the bank's strategy should align with national housing reconstruction priorities and the broader Mortgage Lending Development Strategy of Ukraine, ensuring coherence between commercial objectives and state economic recovery goals. Overall, the implementation of these strategic directions will allow JSC CB "PrivatBank" to sustainably expand its mortgage portfolio, improve asset quality, and strengthen its position as a key participant in Ukraine's post-war housing finance system.

The current state of mortgage lending in Ukraine is shaped by a complex set of economic, social, and institutional factors, among which the consequences of the full-scale war, high macroeconomic instability, and elevated risks for the banking system play a decisive role. The armed aggression has led to a

[314] Bielikova O. I. Organizational and Economic Foundations of Mortgage Lending under Economic Instability: Monograph. Kyiv: Taras Shevchenko National University of Kyiv, 2022. 300 p.

sharp decline in construction activity, a reduction in the commissioning of new housing, a deterioration in household financial capacity, and a reorientation of state economic priorities toward military and humanitarian expenditures.

Additional constraining factors include high inflation, rising construction material costs, limited investment resources, and persistently high lending rates in the commercial segment. These conditions significantly restrict the development of long-term mortgage lending and limit access to housing finance for the population.

At the same time, during the post-war economic and social recovery period, a gradual increase in housing demand is expected. This growth will be driven by the need to rebuild the destroyed housing stock, as well as by large-scale internal migration of the population. It is anticipated that the launch and expansion of state and public-private preferential mortgage programs (in particular the "eOselia" program) will contribute to market revitalization and improve housing affordability for a broader range of citizens.

In this context, leading banking institutions, including JSC CB "PrivatBank", have significant potential to expand their mortgage portfolios, relying on a large customer base, an extensive branch network, advanced digital infrastructure, and experience in implementing large-scale lending programs. The growth of mortgage lending in such banks can serve not only as an important tool for ensuring access to housing, but also as an effective driver of economic recovery, stimulating related industries such as construction, building materials production, furniture and woodworking industries, as well as interior design and renovation services[315].

[315] Official website of the NBU. Mortgage lending development strategy. URL: https://bank.gov.ua/admin_uploads/article/Strategy_Mortgage_2025.pdf?v=14

At the same time, in the post-war recovery phase, a gradual increase in housing demand is expected, creating preconditions for the expansion of mortgage portfolios of leading banks, in particular JSC CB "PrivatBank", namely:

1. Forecasting the dynamics of the mortgage portfolio. The forecasting of the mortgage portfolio development of JSC CB "PrivatBank" is carried out taking into account macroeconomic indicators, real estate market trends, state policy priorities, and the bank's internal strategic objectives. The overall outlook for 2026–2028 assumes that the implementation of preferential lending programs, in particular the "eOselia " initiative, as well as the introduction of securitization and refinancing mechanisms, will contribute to a gradual recovery of mortgage lending volumes.

Under a conservative scenario, the bank's mortgage portfolio is expected to grow annually by approximately 12–15%, provided that macroeconomic conditions stabilize and interest rates gradually decline. This scenario assumes moderate economic recovery and limited expansion of state support mechanisms[316].

An optimistic scenario foresees more dynamic growth of 18–20% per year, driven by faster recovery of the construction sector, expansion of state guarantees, increased availability of long-term funding sources, and stronger participation of international financial institutions in Ukraine's housing finance system.

The key factors influencing the forecast include:

– macroeconomic stability and the pace of economic recovery;

– the scale and effectiveness of state mortgage support programs;

[316] Official website of the NBU. Mortgage lending development strategy. URL: https://bank.gov.ua/admin_uploads/article/Strategy_Mortgage_2025.pdf?v=14

– recovery of the primary housing market and its price dynamics;

– the level of public trust in the banking system;

– international financial assistance and investment inflows to Ukraine.

2. Strategic pathways to improve the efficiency of mortgage portfolio implementation.

To ensure the stable development of mortgage lending, JSC CB "PrivatBank" should implement a set of strategic measures aimed at enhancing portfolio performance, expanding market presence, and strengthening long-term financial sustainability.

Product portfolio diversification. It is advisable to develop new mortgage products, including fixed-rate mortgage loans, targeted programs for young families, internally displaced persons, and participants in infrastructure reconstruction projects. This will allow the bank to better respond to diverse borrower needs and reduce portfolio concentration risks.

Development of partnership programs with developers and local authorities. Co-financing housing construction projects and introducing regional preferential mortgage schemes will strengthen cooperation between the banking sector, construction companies, and public authorities, while also supporting regional development and housing accessibility.

*Implementation of innovative financial mechanisms.*The use of securitization instruments and the issuance of mortgage-backed securities will enable the attraction of long-term financial resources, improve liquidity, and reduce the overall cost of mortgage lending.

Digitalization of lending processes. The development of online platforms for automated creditworthiness assessment, electronic contract signing, and remote customer servicing will

significantly increase operational efficiency, reduce transaction costs, and improve customer experience.

Strengthening risk management systems. The introduction of advanced credit risk monitoring and assessment tools based on artificial intelligence and predictive analytics models will enhance portfolio quality and reduce the level of non-performing loans[317].

Integration of green financial instruments. The development of "green mortgage" programs for energy-efficient housing, supported by international investment funds, will align the bank's activities with ESG principles and *European sustainability standards*.Cooperation with state and international financial institutions. Attracting resources from institutions such as the European Investment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD) will expand the long-term funding base of the mortgage market and support its structural development.

3. Expected results.

The implementation of the above measures will enable JSC CB "PrivatBank" to strengthen its position in the mortgage lending market, ensure stable portfolio growth, reduce credit risks, and create conditions for the formation of long-term funding sources. In the long term, these reforms will not only improve housing affordability for the population but also serve as an important driver of Ukraine's post-war economic recovery by stimulating construction activity, related industries, and overall economic growth.

The development strategy of JSC CB "PrivatBank" can be illustrated using the model of the fiscal multiplier effect.

Government Expenditure Multiplier. The government expenditure multiplier is a macroeconomic coefficient that

[317] Oliinyk N. I. Mortgage lending as a factor in construction sector stimulation. Financial Space. 2022. No. 1. pp. 39–45.

shows by how many units Gross Domestic Product (GDP) increases in response to a one-unit rise in government spending.

The concept is based on the ideas of John Maynard Keynes, according to which each monetary unit spent by the government generates a chain reaction of additional expenditures in the private sector, thereby increasing aggregate demand and overall welfare.

In the context of mortgage lending, government expenditure can produce a significant multiplier effect through the following channels:

Interest rate subsidies – reducing the cost of mortgage loans for households (for example, from 18% to 7% or even 3% within programs such as "eOselia"), which directly increases housing affordability and demand.

Loan guarantees – lowering credit risk for banks, which encourages more active mortgage lending and expands access to housing finance.

Investment in housing construction – increasing construction activity, which stimulates related industries such as steel, timber, cement, furniture, and household appliances, thereby generating additional economic growth.

Figure 1 illustrates the model of the government expenditure multiplier in the Ukrainian mortgage market. It shows two demand curves:

Curve D - represents the initial demand for housing without government support.

Curve D′ - represents the increased demand following the introduction of subsidized interest rates.

The horizontal axis reflects housing conditions of the population (i.e., the quantity and quality of housing purchased), while the vertical axis represents the volume of demand or construction activity.

The arrow labeled "Government intervention" illustrates the mechanism of demand shift resulting from state policy. The

rightward shift of the demand curve indicates an increase in effective demand for housing.

This shift not only stimulates economic activity in the construction sector but also generates long-term effects, including:

– increased employment,
– higher tax revenues,
– development of modernized housing infrastructure.

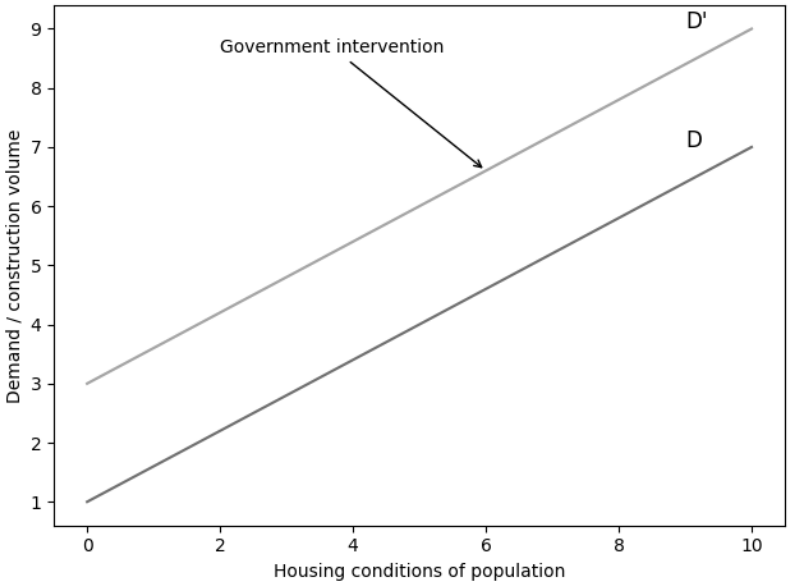


Fig. 2.3 - Model of the government expenditure multiplier in the mortgage market within the "eOselia" program

Source: compiled by the authors independently based on literature sources.

Therefore, the presented model demonstrates that state-subsidised mortgage programmes generate a multiplier effect that extends across multiple sectors of the economy.

Thus, PrivatBank can indirectly benefit from the operation of the government expenditure multiplier through several transmission channels:

1. Expansion of the client base: State mortgage programmes stimulate demand for credit among new categories of borrowers, including young families, internally displaced persons, and military personnel. This creates opportunities for the bank to expand its loan portfolio and retain clients over the long term through mortgage servicing, card products, insurance services, and related offerings.

2. "Ancillary products" effect: Mortgage borrowers frequently purchase additional banking services, such as current accounts, insurance products, internet banking, payment cards, and consumer loans for renovation or furnishing. This increases the overall profitability of PrivatBank.

3. Strengthening of financial stability: The increase in economic activity induced by the multiplier effect enhances clients' solvency and reduces the share of non-performing loans (NPLs) within the loan portfolio.

4. Expansion of investment opportunities: Provided that mortgage loan securitisation is implemented (i.e., the sale of loan portfolios to investors), PrivatBank may attract additional capital to issue new loans, thereby leveraging the multiplier effect to scale up its operations. If, within the post-war recovery framework, the state continues to finance subsidised mortgage lending at a level of 10–15 billion annually, and the sectoral multiplier is approximately 2.5, this would generate additional housing demand of 25–37.5 billion per year. Given a 20–25% market share in the mortgage segment, PrivatBank could increase its annual portfolio by 5–9 billion. These additional financial flows would also expand the volume of other banking products, including deposits, payment services, and insurance.

The illustrated model reflects the impact of state intervention in the form of subsidised mortgage interest rates (for example, under the "eOselia" programme) on the structure and dynamics of housing demand. In classical macroeconomic theory, such a policy is classified as an anti-crisis fiscal stimulus measure based on the government expenditure multiplier effect.

The multiplier model is grounded in the approach of J. M. Keynes, according to which government spending has a multiplied impact on aggregate national output. In the context of mortgage lending, this effect is transmitted through several interconnected mechanisms:

– lower interest rates on loans make mortgage credit more accessible to broader segments of the population;

– increased housing demand stimulates the construction sector and related industries (building materials production, furniture manufacturing, etc.);

– improved housing conditions enhance social stability and overall welfare.

The presented model illustrates the operation of the government expenditure multiplier in the form of state-driven stimulation of mortgage demand. The core idea is that interest rate subsidies (for instance, within the "eOselia" programme) shift the demand structure, expanding access to credit for households with medium and lower income levels.

In macroeconomic terms, a rightward shift of the demand curve (from D to D′) indicates that, at each level of "housing affordability conditions" (including income, down payment size, and creditworthiness), society is willing to invest more in housing due to state intervention. In this way, an economic growth model is realised through a multiplier effect operating across interconnected sectors.

Prospects for the application of the model in banking practice:

1. Demand and risk forecasting: Banks can use this model to forecast demand for mortgage products in the context

of state participation. In particular, the analysis of demand shifts enables the assessment of:

–required financing volumes;

–the expansion of the borrower base;

–potential risks (e.g., credit risk under subsidised interest rate conditions).

2. Strategic product planning: Based on the dynamics of the multiplier effect, banks can design new mortgage products taking into account changes in household purchasing power. This allows for:

– segmentation of clients by income level;

– development of flexible mortgage schemes with fixed or variable interest rates;

– adaptation of lending conditions to participation in state or regional programmes.

3. Expansion of cooperation with public institutions:

The model highlights the importance of partnerships between banks and state institutions such as the Ministry of Finance, the National Bank, the Entrepreneurship Development Fund, and others. Through such cooperation, banks may:

– receive compensation for reduced interest rates;

– mitigate risks through state guarantees;

– develop new socially oriented financial products.

The prospects for applying the model in the post-war recovery of Ukraine are particularly relevant, as the mortgage stimulus multiplier framework has significant practical value for the banking system. It enables:

– optimisation of mortgage portfolios;

– attraction of new borrowers;

– support for the housing sector;

– simultaneous contribution to macroeconomic stability.

Therefore, when properly implemented, this model becomes an instrument of systemic transformation of the

financial environment, aimed not only at banking profitability but also at broader socio-economic development.

In conclusion, the proposed model clearly demonstrates that fiscal stimulation through mortgage programmes represents an effective anti-crisis instrument that simultaneously addresses social, economic, and investment objectives. In the case of Ukraine, particularly in the context of post-war recovery, such a policy is of strategic importance for stabilising domestic demand and ensuring adequate housing provision for the population.

Conclusion. As a result of the conducted study, it has been established that mortgage lending, in contemporary conditions, is not only a tool for meeting the housing needs of the population but also an important macroeconomic mechanism influencing economic growth, financial stability, and the structural development of the national economy. Mortgage lending acquires particular significance under conditions of state-driven stimulation, where through interest rate subsidies, guarantee schemes, and other fiscal policy instruments, multiplier effects are generated that extend across both the financial sector and related industries.

The proposed mortgage stimulation multiplier model provides a comprehensive explanation of the mechanism through which government expenditure is transformed into an increase in aggregate housing demand. Within this framework, state intervention in the form of interest rate compensation or direct mortgage subsidies leads to a reduction in the cost of borrowing for households. This, in turn, expands the pool of potential borrowers, increases housing affordability, and stimulates activity in the real estate market.

A key outcome of the model's functioning is the emergence of a multiplier effect, expressed in the multiple expansion of economic activity relative to the initial volume of government expenditure. The increase in housing demand

stimulates the construction sector, building materials production, the furniture industry, financial and insurance services, as well as employment growth. Thus, mortgage lending acts as a catalyst for intersectoral economic linkages and contributes to long-term economic growth.

It should also be emphasised that the mortgage model plays an important role in the banking sector. Banks, particularly systemically important financial institutions, gain the opportunity not only to expand their loan portfolios but also to diversify income sources through related financial products such as insurance, payment services, and deposit programmes. Furthermore, participation in state mortgage programmes reduces credit risk through compensation mechanisms and guarantees, which positively affects asset quality and reduces the level of non-performing loans. The study also demonstrates that the mortgage model performs an important social function. It contributes to improving housing accessibility for the population, especially vulnerable groups such as young families, internally displaced persons, and military personnel. This, in turn, enhances social stability, reduces social tensions, and promotes long-term integration of citizens into the economic system of the state.

In the context of Ukraine's post-war recovery, the significance of the mortgage model increases substantially. It can become one of the key instruments for rebuilding the housing stock, stimulating domestic demand, and attracting investment into the construction sector. The implementation of subsidised mortgage programmes, such as state housing initiatives, allows not only the resolution of housing issues but also the stimulation of economic activity through the government expenditure multiplier mechanism.

An important theoretical foundation of the proposed model is the Keynesian concept of the multiplier, according to which initial government spending generates a chain reaction of

income and consumption growth in the economy. In the mortgage market, this effect is particularly pronounced due to the capital-intensive nature of construction and the large number of interconnected industries. Therefore, state stimulation of mortgage lending represents one of the most effective instruments of counter-cyclical economic policy.

In conclusion, the proposed mortgage multiplier model has both theoretical and significant practical relevance. It enables banks, state institutions, and regulators to more accurately assess the effects of fiscal incentives, forecast housing market development, and design effective financial strategies. In the long term, its implementation will contribute to improving the efficiency of the banking system, developing financial markets, and ensuring sustainable economic growth.

Thus, mortgage lending within the multiplier framework serves as a system-forming element of economic policy, integrating financial, social, and investment objectives of the state. Its further development, especially in the context of Ukraine's reconstruction, is a strategically important direction capable of ensuring synergy between state interests, the banking sector, and societal needs.

2.3. THE GLOBAL INVESTMENT LANDSCAPE AND CURRENT TRENDS IN STRUCTURAL SHIFTS IN THE FIELD OF FOREIGN DIRECT INVESTMENT

In today's globalized economy, investment plays a crucial role in ensuring economic stability, growth, and structural transformation. Foreign direct investment (FDI), as a key form of long-term capital investment, is taking on particular significance in the context of escalating geopolitical tensions, disruptions in global supply chains, the transformation of energy markets, the digitalization of the economy, and stricter

environmental requirements. In this regard, analyzing foreign direct investment and structural changes in international investment flows worldwide amid growing global instability takes on particular importance.

Numerous foreign and domestic scholars have studied foreign direct investment. Mukhtarov S. et al.[318] define foreign direct investment as an important factor in stimulating foreign economic activity and developing a country's export potential. Bostan I. et al.[319] explain the significance of internal and external factors of economic development for shaping investment activity in Central and Eastern European countries. Utouh & Kitole[320] define foreign direct investment as an important factor in industrialization and the structural transformation of the economy, emphasizing its role in the development of the manufacturing sector. Węgrzyn P.[321] examines the relationship between foreign direct investment and economic growth in EU countries and argues that the impact of FDI is ambiguous, depending on the structure of the economy and the level of development of individual countries.

Cookey & Eniekezimene[322] examine the factors influencing FDI inflows and identify the key impact of

[318] Mukhtarov, S., Alalawneh, M.M., Ibadov, E. and Huseynli, A. (2019), "The impact of foreign direct investment on exports in Jordan: An empirical analysis", Journal of International Studies, vol. 12, no. 3, pp. 38-47, available at: https://doi.org/10.14254/2071-8330.2019/12-3/4

[319] Bostan, I., Toma, C., Aevoae, G., Robu, I.-B., Mardiros, D.N. and Topliceanu, Ș.C. (2023), "Effects of Internal and External Factors on Economic Growth in Emerging Economies: Evidence from CEE Countries", Eastern European Economics, vol. 61, no. 1, pp. 66-85, available at: https://doi.org/10.1080/00128775.2022.2109489

[320] Utouh, H.M.L., and Kitole, F.A. (2025), "Forecasting effects of foreign direct investment on industrialization towards realization of the Tanzania development vision", Cogent Economics & Finance, available at: https://doi.org/10.1080/23322039.2024.2376947

[321] Węgrzyn, P. (2025), "The link between foreign direct investments and economic growth: empirical study from selected EU countries", Torun International Studies, vol. 1, no. 21, pp. 5-26, available at: https://doi.org/10.12775/TIS.2025.001

[322] Cookey, I.F. and Eniekezimene, F.A. (2020), "Studying Determinants of Foreign Direct Investment in Nigeria: An Empirical Investigation", Asian Journal of Economics, Business and Accounting, vol. 17, no. 2, pp. 73-84, available at: https://doi.org/10.9734/ajeba/2020/v17i230258

macroeconomic stability, the institutional environment, and the investment climate on international investment activity.

Chorny, R., and Chorna, N.[323] examine the role of foreign direct investment in driving economic growth in Poland, Ukraine, and Vietnam, focusing on the impact of FDI on the structural transformation of the economy, investment activity, and the integration of these countries into international economic processes. Nechaeva, I.[324] examines current trends in the recovery of foreign direct investment in the global economy and identifies key opportunities and constraints for boosting FDI in Ukraine amid growing global instability and post-war economic recovery. Stavitsky, A., Naumova, O., and Shevchuk, A.[325] conduct an empirical analysis of the relationship between foreign direct investment and economic growth in Ukraine, demonstrating the significant impact of FDI on macroeconomic development and investment activity in the national economy.

Foreign direct investment is an important factor in economic development in the context of globalization, as it ensures an inflow of capital, promotes the development of production, creates jobs, and facilitates the spread of new technologies. FDI plays a significant role in the structural

[323] Chornyi, R. and Chorna, N. (2026), "The role of foreign direct investment in promoting economic growth: the experience of Poland, Ukraine and Vietnam (2004-2024)", Research in Globalization, available at: https://doi.org/10.1016/j.resglo.2026.100337

[324] Nechaieva, I. (2024). "Vidnovlennia PII: hlobalni perspektyvy ta mozhlyvosti dlia Ukrainy", *Acta Academiae Beregsasiensis, Economics*, 5, 132-144, available at: https://www.researchgate.net/publication/383771105_Vidnovlenna_PII_globalni_perspektivi_ta_mozlivosti_dla_Ukraini

[325] Stavytskyi, A., Naumova, O. and Shevchuk, A. (2025), "Priami inozemni investytsii ta ekonomichne zrostannia v Ukraini: empirychnyi analiz", Ekonomika ta suspilstvo, vol. 75, available at: https://economyandsociety.in.ua/index.php/journal/article/view/6134

modernization of the economy and the integration of countries into international production and financial systems[326, 327].

In the current environment, international investment processes are undergoing significant transformation under the influence of global instability, heightened geopolitical risks, energy crises, inflationary pressures, and changes in the fiscal and monetary policies of leading nations (Table 2.3).

Table 2.3 - Factors Affecting FDI

Factor	Impact on FDI	Implications for International Investment Processes
The COVID-19 pandemic	Disruptions in global supply chains	Postponement of investment projects
Geopolitical conflicts	Rising investment risks	Decline in FDI in high-risk regions
The energy crisis	Rising production costs	Decline in investment activity
Inflationary pressures	Higher cost of capital	Decline in long-term investments
Tight monetary policy	Rising interest rates	Reduced access to financing
Geoeconomic fragmentation	Restructuring of production chains	Increase in nearshoring and reshoring
Technological transformation	Shifting investment priorities	Growth in FDI in AI, renewable energy, and semiconductors

Source: developed by the authors

Geopolitical risks are reshaping cooperation strategies in the global market, exacerbating geo-economic fragmentation.

[326] Mukhtarov, S., Alalawneh, M.M., Ibadov, E. and Huseynli, A. (2019), "The impact of foreign direct investment on exports in Jordan: An empirical analysis", Journal of International Studies, vol. 12, no. 3, pp. 38-47, available at: https://doi.org/10.14254/2071-8330.2019/12-3/4

[327] Bostan, I., Toma, C., Aevoae, G., Robu, I.-B., Mardiros, D.N. and Topliceanu, Ş.C. (2023), "Effects of Internal and External Factors on Economic Growth in Emerging Economies: Evidence from CEE Countries", Eastern European Economics, vol. 61, no. 1, pp. 66-85, available at: https://doi.org/10.1080/00128775.2022.2109489

As a result, trade, financial, and investment flows are becoming limited to politically aligned partners, accompanied by a sharp decline in traditional mergers and acquisitions (M&A) between competing blocs. Geoeconomic fragmentation is driving changes in supply chains, redirecting foreign direct investment (FDI) and greenfield projects toward the digital and energy infrastructure sectors of "friendly" jurisdictions[328].

Amid high uncertainty, investors are increasingly reallocating capital to more stable and strategically important sectors of the economy, reducing investments in high-risk regions and long-term projects with uncertain returns.

Table 2.4 - Foreign direct investment volumes in the world, Europe, and Ukraine, in billions of U.S. dollars

Years										
2014	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
World										
1472,7	2218,6	2043,6	1770,3	1294,2	1658,8	868,6	1676,5	1389,5	1455,0	1508,8
Europe										
436,7	921,0	780,3	646,8	241,7	591,1	45,9	223,4	- 61,2	221,5	198,1
Ukraine										
0,4	- 0,3	4,1	3,7	4,7	6,0	-0,036	7,3	0,5	4,5	3,3

Source: compiled based on[329]

An assessment of current trends in international investment processes, based on an analysis of foreign direct investment worldwide, in Europe, and in Ukraine during the period 2014-2024, makes it possible to identify trends in international capital flows, the level of investment activity, and

[328] Vyshnevska, O. M. (2026). **"**Frahmentatsiia svitovoi ekonomiky: prychyny, naslidky ta ochikuvannia"**,** Stalyi rozvytok ekonomiky, 1(58), 374-381, available at: https://economdevelopment.in.ua/index.php/journal/article/view/1734

[329] Ernst & Young (EY) (2025), "Europe's FDI attractiveness in 2025", available at: https://www.ey.com/content/dam/ey-unified-site/ey-com/en-gl/campaigns/foreign-direct-investment-surveys/documents/ey-gl-europe-attractiveness-survey-report-06-2025.pdf

the sensitivity of investment flows to global economic and geopolitical changes (Table 2.4).

The dynamics of foreign direct investment worldwide, in Europe, and in Ukraine during 2014-2024 were characterized by significant dependence on global economic crises, the COVID-19 pandemic, and geopolitical instability.

A common trend across all the economies studied was significant fluctuation in investment flows. At the same time, a comparison of foreign direct investment in the world and in Europe indicates significantly higher volatility in investment processes in the European region compared to global trends. For example, in 2015, FDI in Europe grew by 110.88%, while globally it grew by 50.65%, indicating a significantly higher intensity of foreign capital inflows into European countries.

During 2016-2017, the growth rate of FDI slowed globally and in Europe in particular compared to 2014, reflecting a decline in investment activity and linked to a reduction in the volume of cross-border mergers and acquisitions, a decline in investment activity by multinational corporations, and increased geopolitical uncertainty.

In 2018, the decline in FDI in Europe was significantly more pronounced. While global FDI fell by 12.12% in 2018 compared to 2014, the decline in Europe was 44.56%. Additional factors affecting Europe included the consequences of Brexit and rising intra-regional political risks. The sharpest decline in FDI was recorded in 2020 due to the COVID-19 pandemic the global figure fell by 41.02% compared to 2014, while in Europe it plummeted by as much as 89.5%.

After FDI fell to $868.6 billion in 2020, the volume of global investment nearly doubled in 2021 reaching $1.68 trillion demonstrating the global economy's high adaptability to crises. At the same time, FDI trends in Europe show significantly greater volatility compared to global trends in 2020, the volume of investment fell to $45.9 billion, and in 2022, FDI recorded a

negative value of $61.2 billion. The main causes were the energy crisis, inflation, and geopolitical instability in European. In 2023-2024, the global economy saw a moderate increase in FDI flows from 1,455.0 billion USD to 1,508.8 billion USD, indicating a gradual recovery in international investment activity. At the same time, in Europe during this period, FDI flows declined from $221.5 billion to $198.1 billion.

In 2024, foreign direct investment in Europe fell to its lowest level in the past nine years. In total, 5,383 projects were announced in Europe in 2024, which is 5% fewer than in 2023. The number of jobs created through foreign direct investment fell by 16% (Figure 2.4).

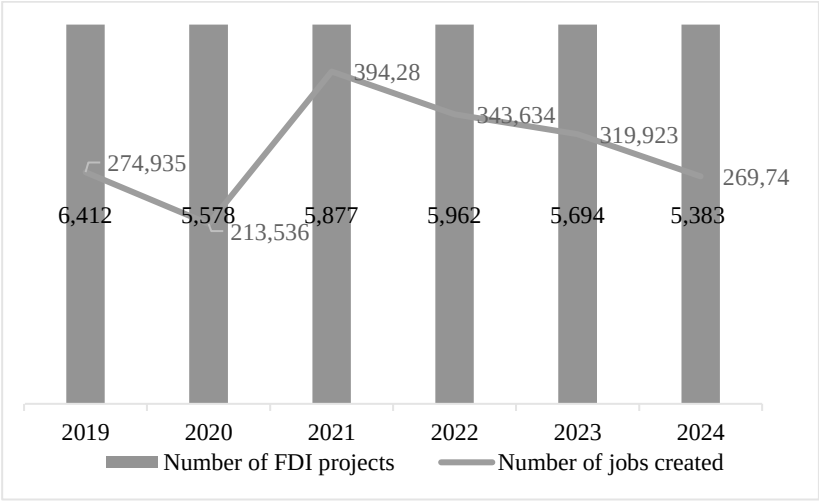


Fig. 2.4 - Number of FDI projects and jobs created in Europ

Source: compiled based on[330]

[330]EY European Investment Monitor (EIM) (2025), available at: https://www.ey.com/en_gl/foreign-direct-investment-surveys/ey-europe-attractiveness-survey

Data from the EY European Investment Monitor 2025 show that between 2019 and 2024, the number of foreign direct investment projects in Europe that meet EY's methodology remained relatively stable, although it showed a trend toward a gradual decline.

After reaching a peak in 2019 (6,412 projects), the number of projects fell to 5,578 in 2020 due to the effects of the COVID-19 pandemic. In 2021–2023, investment activity gradually recovered, resulting in an increase in the number of projects to 5,694. However, in 2024, the number fell to 5,383 projects.

The trend in new job creation shows a more pronounced decline. While investment projects created 394,300 jobs in 2021 the highest figure for the period under review this number subsequently declined steadily: to 343,600 in 2022, 319,900 in 2023, and 269,700 in 2024. Compared to 2023, the number of jobs created decreased by approximately 16%.In a global context, in 2024, the United States remained both the largest source and destination of foreign direct investment (FDI), underscoring its central role in the global economy (Figure 2.5).

During the period under review, investment flows into Ukraine exhibited the highest volatility among the economies in question. Following a negative FDI figure in 2015 (–0.3 billion USD), caused by Russia's military aggression against Ukraine, and a near-zero level in 2020 (-$0.036 billion), linked to the COVID-19 pandemic, there was a short-term recovery in 2021 (to $7.3 billion). However, the full-scale war in 2022 led to a sharp decline in FDI to $0.5 billion. Unlike the global economy, where the post-crisis recovery was relatively rapid, FDI trends in Ukraine remained volatile and largely dependent on military and political risks.

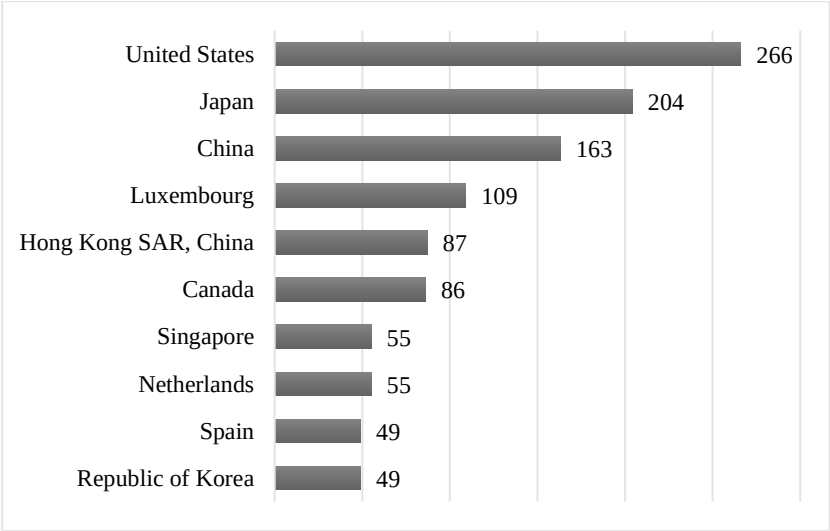


Fig. 2.5 - Top 10 Countries by Outflow of Foreign Direct Investment, in billions of U.S. dollars, 2024

Source: compiled based on[331]

An important characteristic of modern international investment processes is the relationship between the two main forms of foreign direct investment cross-border mergers and acquisitions (M&A) and greenfield projects (Figure 2.6).

An analysis of trends in global foreign direct investment from 2014 to 2024 reveals a significant transformation in the structure of the international investment market and a shift in the balance between cross-border M&A and greenfield investments.

[331]UN Trade and Development (UNCTAD) (2024), "Explore global investment data and changing trends", available at: https://unctad.org/news/explore-global-investment-data-and-changing-trends

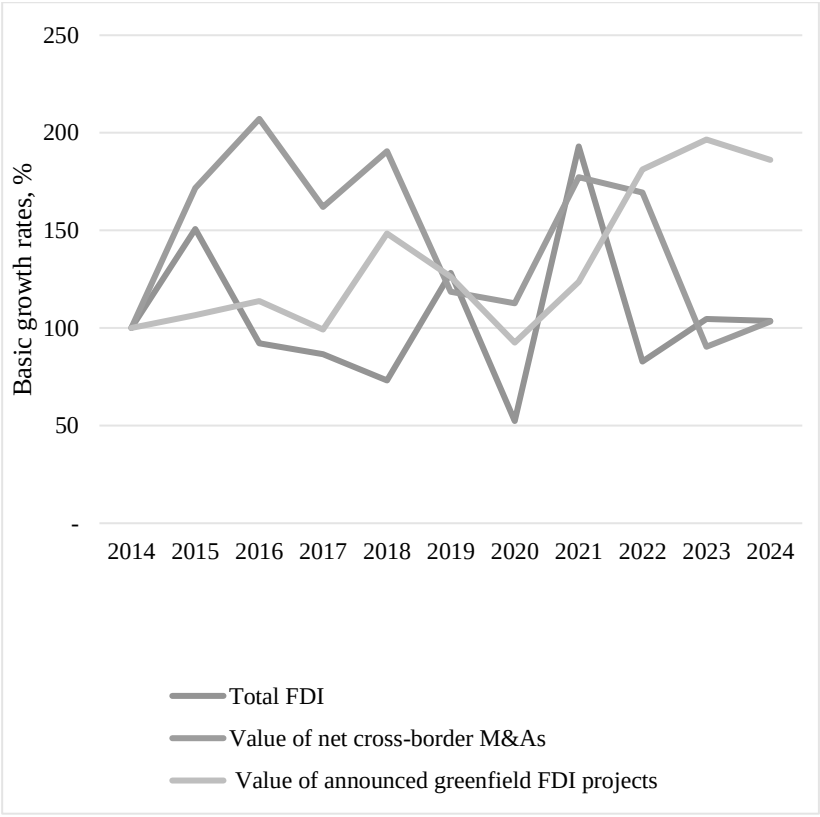


Fig. 2.6 - Comparative Trends in Total FDI, Cross-Border Mergers and Acquisitions and Greenfield Projects Worldwide

Source: developed by the authors based on[332]

From 2014 to 2019, the growth of cross-border mergers and acquisitions outpaced that of greenfield investments. In 2015-2016, the value of M&A transactions more than doubled compared to 2014, while the volume of greenfield projects showed more moderate growth. This indicated the dominance

[332]UNCTAD (2025), World Investment Report, available at: https://unctad.org/topic/investment/world-investment-report

of the financial-integration model of international investment, which focuses on the rapid expansion of multinational corporations' market presence through the acquisition of existing assets.

At the same time, after 2020, the balance between the forms of FDI under study began to change significantly. Despite an overall decline in global investment flows during the pandemic crisis, cross-border M&A proved to be less resilient in the long term. Following a short-term recovery in 2021, their volumes began to decline again. In contrast, greenfield investments, after the 2020 decline, demonstrated a steady upward trend and significantly exceeded the figures for cross-border M&A in 2022-2024.

It is particularly telling that in 2022-2023, the growth rate of greenfield investments rose to 181-197% of the 2014 level, while the corresponding figure for M&A in 2023 fell to 90%. This asymmetry indicates a structural transformation of the global investment market and a shift in the investment priorities of international capital.

Thus, the results of the analysis confirm the existence of a structural transformation in global FDI after 2020, manifested in a gradual shift of international investment capital from a model of financial integration through M&A to a model of regionalized production development based on greenfield investments.

To gain a more thorough understanding of the reasons behind changes in the dynamics of foreign direct investment, it is advisable not only to analyze FDI statistics but also to assess the key economic, geopolitical, and structural processes that have influenced international investment flows during various periods.

Table 2.5 - Key trends affecting FDI worldwide, in Europe, and in Ukraine from 2014 to 2024

Period	World	Europe	Ukraine
2014-2015	Intensification of global investment processes and recovery from previous crises	A revival in investment activity as a result of economic recovery	A sharp decline in FDI due to the military-political crisis and a deterioration in the investment climate
2016-2017	Slowdown in the growth of global FDI due to financial market instability	A decline in investment activity due to political and economic uncertainty	A partial recovery in FDI following the sharp decline of 2014-2015
2018-2019	Recovery of global investment activity and growth in greenfield projects	Growth in foreign direct investment in high-tech and infrastructure projects	Gradual growth in investment activity and stabilization of the economic situation
2020	Sharp decline in FDI as a result of the COVID-19 pandemic	Sharp decline in FDI as a result of the COVID-19 pandemic	Sharp decline in FDI as a result of the COVID-19 pandemic
2021	Active recovery of international investment flows following the pandemic	Recovery of FDI driven by stimulative economic policies and greenfield projects	Partial recovery of FDI and revitalization of certain investment projects
2022	Increased volatility in FDI due to geopolitical risks and inflationary pressures	Negative impact of the energy crisis and the war in Ukraine	A sharp decline in FDI due to full-scale war
2023-2024	Gradual recovery of global investment activity	Unstable recovery of FDI influenced by energy and geopolitical factors	Partial recovery of FDI amid the implementation of certain projects

Source: developed by the authors

This allows us to establish a connection between global instability and the transformation of international investment processes worldwide, in Europe, and in Ukraine.

In this regard, Table 2.5 summarizes the main processes that shaped changes in FDI dynamics from 2014 to 2024, as well as their impact on international investment activity in the economies under study. Since a significant portion of investment flows may be related to financial transactions, intra-corporate capital movements, or cross-border mergers and acquisitions, it is advisable to analyze greenfield projects, which represent long-term investments in the creation of new enterprises, production facilities, and infrastructure projects and better reflect the actual level of investment confidence and economic development.

A comparative analysis of the cost of announced greenfield projects worldwide, in Europe, and in Ukraine during 2014-2024 reveals a common trend toward growth in long-term investment, although the scale and stability of this growth varied significantly (Figure 2.7).

In the global economy, the value of announced greenfield projects in 2024 was nearly double (an 86% increase) that of 2014, reflecting an overall rise in long-term investment activity driven by the digitalization of the economy, the development of infrastructure projects, and the global energy transition. At the same time, in 2020, under the influence of the COVID-19 pandemic, there was a significant reduction in the value of new investment projects as part of an overall decline in FDI.

Europe has shown higher growth rates in the value of greenfield projects compared to global trends (growth in 2024 compared to 2014 was 119%). At the same time, 5,383 projects were announced in Europe in 2024, which is 5% fewer than in 2023[333].

[333] EY-Parthenon (2025), "How do CEOs chart a path to growth when the map keeps changing?", available at: https://www.ey.com/en_gl/ceo/ceo-outlook-global-report

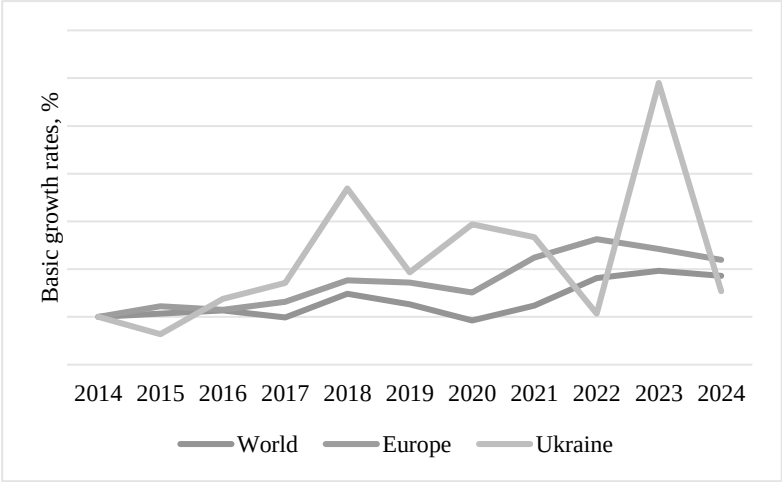


Fig. 2.7 - Trends in the Cost of Announced Greenfield FDI Projects

Source: compiled based on[334]

Despite this, Europe retains the potential to attract investment in promising high-tech and strategic sectors, particularly renewable energy, artificial intelligence, semiconductors, and electric vehicles, which are gradually becoming key drivers of the transformation of international investment flows. The sectoral breakdown of announced foreign direct investment in new projects in Europe in 2024 is shown in Figure 2.8.

An analysis of announced greenfield projects indicates a structural transformation of international investment flows in Europe. In 2024, the renewable energy sector remained the largest recipient of foreign direct investment (over $80 billion)[335], despite a slight decline in investment volumes

[334]UNCTAD (2025), World Investment Report, available at:https://unctad.org/topic/investment/world-investment-report

[335]FDi Markets (2025), "European Cities and Regions of the Future 2025: The standout investment destinations of the year", available at: https://ecrof25.fdiintelligence.com/

compared to 2022-2023. This confirms that investors continue to show strong interest in the energy sector and the decarbonization of the economy.

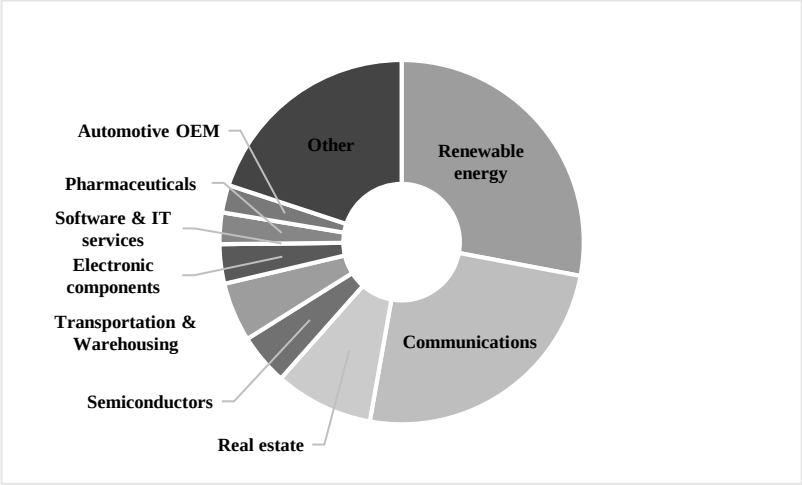


Fig. 2.8. – Sectoral Breakdown of Announced Greenfield Projects in Europe in 2024

Source: compiled based on[336]

At the same time, the role of high-tech sectors particularly artificial intelligence, digital technologies, and pharmaceuticals is growing significantly. The implementation of new investment projects by companies such as Microsoft (which announced plans to locate a significant portion of its artificial intelligence research and development in Ireland, creating 550 research and engineering jobs over the next four years and AstraZeneca (which announced a significant expansion of its presence in the field of scientific innovation in Spain across Europe)

[336] FDi Markets (2025), "European Cities and Regions of the Future 2025: The standout investment destinations of the year", available at: https://ecrof25.fdiintelligence.com/

demonstrates that the region remains attractive to investors in innovative and knowledge-intensive activities[337].

Thus, the current structure of greenfield projects in Europe is characterized by a gradual shift in investment priorities toward energy, digital, and high-tech projects, which form the basis for the long-term transformation of international investment processes.

The dynamics of greenfield projects in Ukraine during 2014-2024 were marked by high volatility and significant dependence on military, political, and economic factors. Following a 36% decline in investment activity in 2015 compared to 2014, a gradual recovery began in 2016. By 2021, the value of greenfield projects had increased by 167% compared to 2014, but in 2022, as a result of the full-scale war, the value of greenfield projects plummeted to $1.04 billion. At the same time, in 2023, there was a significant increase to $5.72 billion, which was due to a partial recovery in investment activity, the implementation of certain infrastructure and reconstruction projects, and businesses adapting to the conditions of martial law. However, in 2024, the volume of greenfield projects declined again to $1.49 billion.

Therefore, it is particularly important for Ukraine to create conditions for boosting foreign direct investment (FDI) through greenfield projects, as it is precisely these investments that ensure the development of new production capacities, the technological modernization of the economy, and job creation. In this context, priority areas should include strengthening investment security guarantees, developing mechanisms for insuring against war risks, improving government support for

[337] Ernst & Young (EY) (2025), “Europe’s FDI attractiveness in 2025”, available at: https://www.ey.com/content/dam/ey-unified-site/ey-com/en-gl/campaigns/foreign-direct-investment-surveys/documents/ey-gl-europe-attractiveness-survey-report-06-2025.pdf

investment projects, and stimulating post-war infrastructure reconstruction.

Transnational corporations are the primary entities making foreign direct investments in Ukraine, Europe, and the world at large. Transnational corporations contribute to the expansion of international investment activity and the flow of capital across borders. The top ten most profitable companies in the world in 2025 include Walmart, Amazon, State Grid Corporation of China, Saudi Aramco, China National Petroleum Corporation, Sinopec Group, UnitedHealth Group, Apple, CVS Health, and Berkshire Hathaway (Table 2.6).

Transnational corporations are increasingly focusing their investment activities on the development of industries that will shape the future architecture of the global economy. This strategic reorientation is driven by intensifying global competition, accelerating technological change, and the desire to secure long-term competitive advantages and consolidate leadership positions in key sectors.

At the same time, these trends are transforming the geography of international investment, contributing to the regionalization of production chains and the reorientation of investment flows closer to the home countries of transnational corporations, primarily those from developed economies.

In this context, mega-deals foreign direct investment projects valued at over $1 billion are becoming increasingly important. Their role is growing as global competition for leadership in strategic industries that shape the technological and economic future intensifies.

Each year, approximately 200 mega-deals are announced worldwide, accounting for only about 1% of the total number of announced greenfield projects, yet they account for nearly half of the total value of announced investments in new production capacity. It is these mega-deals that have accounted for virtually all of the growth in announced greenfield investments in future-

shaping industries, as well as about 75% of the increase in investment resources in these sectors. The value of announced Greenfield FDI projects for 2022-2025 was 1,407 billion U.S. dollars.

Table 2.6 - The World's Top 10 Companies by Revenue

№ п/п	Company Name	Business Sector	Revenue, in billions of dollars		
			2025	2024	2023
1	Walmart	Retail	680,99	648,1	611,3
2	Amazon	E-commerce, cloud technologies	637,96	574,8	469,8
3	State Grid Corporation of China	Energy (electricity supply)	548,41	545,9	460,6
4	Saudi Aramco	Oil and gas sector	480,19	494,9	400,4
5	China National Petroleum Corporation	Oil and gas sector	412,65	411,7	476
6	Sinopec Group	Oil, gas, and chemical industries	407,49	429,7	401,3
7	UnitedHealth Group	Healthcare products	400,28	404,2	371,6
8	Apple	Sales of iPhones and similar products	391,04	117,2	383,3
9	CVS Health	Healthcare, pharmaceuticals	372,81	357,8	292,1
10	Berkshire Hathaway	Diversified holding company	371,43	364,5	276,1

Source: compiled based on[338, 339]

According to research by the McKinsey Global Institute, mega-deals stimulated growth in the structure of foreign direct investment: their share increased to 47% in 2022-2025,

[338] Finance.ua. (2024), "Yaki kompanii zarobyly naibilshe u 2024", available at: https://finance.ua/ua/goodtoknow/yaki-kompanii-zarobyly-naibilshe-u-2024

[339] The FDI shake-up: How foreign direct investment today may shape industry and trade tomorrow (2025), available at: https://www.mckinsey.com/mgi/our-research/the-fdi-shake-up-how-foreign-direct-investment-today-may-shape-industry-and-trade-tomorrow

accompanied by a rise in the total value of greenfield FDI. The largest increase in investment was observed in capital-intensive sectors, particularly energy (+$166 billion), advanced manufacturing (+$142 billion), communications and software (+$73 billion), and the extractive industry (+$44 billion), while traditional sectors experienced a decline in investment activity (operational and professional services (–$76 billion), basic manufacturing (–$79 billion)340.

Mega-deals have grown in size and frequency, particularly in sectors that are shaping the future structure of the global economy, where the average deal size has doubled. Mega-deals account for about 60% of the total value of announced foreign direct investment in the resource sector and advanced manufacturing, as well as about 40% of investment in digital communications and software (Table 2.7).

The growth in the scale and number of such projects indicates an increasing concentration of international investment flows in strategically important sectors that drive the formation of new technological paradigms and long-term competitive advantages.

For 2022-2025, the highest share of mega-deals among Greenfield FDI is in the energy sector (62%) and the metallurgical and mineral sector (62%), indicating a concentration of investment in strategically important and capital-intensive industries. Overall, mega-deals account for 47% of all announced Greenfield FDI.

The Foreign Direct Investment (FDI) Confidence Index is published annually by Kearney. The index is compiled based on surveys of executives from the world's largest companies those

340 The FDI shake-up: How foreign direct investment today may shape industry and trade tomorrow (2025), available at: https://www.mckinsey.com/mgi/our-research/the-fdi-shake-up-how-foreign-direct-investment-today-may-shape-industry-and-trade-tomorrow

with revenues exceeding 500 million U.S. dollars regarding their intentions to invest in specific countries.

Table 2.7 - Share of mega-deals in the total number of announced Greenfield FDI projects (2022-May 2025)

Industry	Share of Mega-Deals, %	Total FDI, billion U.S. dollars
Advanced Manufacturing	58	335
Communications and Software	40	197
Metals and Minerals	62	92
Operational and Professional Services	21	204
Basic Manufacturing	15	145
All Industries	47	1 407

Source: compiled based on[341]

The index is calculated as a weighted average of responses that reflect the likelihood of direct investment over the next three years and specifically capture business sentiment and plans. This makes it possible to forecast investment flows for the coming years.

According to Kearney's latest global research, investors today weigh the following factors when forming their assessments and making decisions:

– the country's technological and innovative potential.

– domestic economic indicators and income.

– the effectiveness of legal and regulatory processes.

– regional geopolitical risks and the expansion of industrial policy.

Global uncertainty and volatility are on the rise. From the spread of tariffs to escalating geopolitical risks and shifts in

[341] The FDI shake-up: How foreign direct investment today may shape industry and trade tomorrow (2025), available at: https://www.mckinsey.com/mgi/our-research/the-fdi-shake-up-how-foreign-direct-investment-today-may-shape-industry-and-trade-tomorrow

domestic policy, global investors are finding it difficult to navigate this rapidly changing landscape.

Table 2.8 - Ranking of the Top 10 countries and factors affecting a country's attractiveness for foreign direct investment (FDI) according to the 2025 Kearney Foreign Direct Investment Confidence Index

Countries	Ranking	Factors that investors consider most important when choosing a country for foreign direct investment							
		Tech innovation	Ease of doing business	Transparent governance/ lack of corruption	Infrastructure quality	Talent/skill of labor pool	Economic performance	Natural resources	None
United States	1	45%	23%	14%	23%	21%	40%	16%	1%
Canada	2	28%	26%	24%	33%	22%	30%	17%	1%
United Kingdom	3	27%	26%	22%	30%	26%	32%	17%	2%
Japan	4	46%	21%	16%	30%	27%	31%	13%	1%
Germany	5	37%	21%	20%	29%	24%	35%	13%	1%
China	6	42%	20%	16%	23%	28%	34%	18%	1%
France	7	28%	25%	18%	31%	28%	31%	18%	1%
Italy	8	27%	27%	19%	26%	30%	31%	21%	1%
United Arab Emirates	9	31%	32%	17%	23%	19%	38%	23%	2%
Australia	10	25%	26%	20%	24%	26%	31%	22%	2%

Source: compiled based on[342]

To assess the investment attractiveness of countries, the table below presents a ranking of nations and the key factors determining their ability to attract foreign direct investment (FDI), based on data from the 2025 Kearney Foreign Direct Investment Confidence Index (Table 2.8).

[342]World at inflection.The 2025 FDI Confidence Index (2025), available at: https://www.kearney.com/service/global-business-policy-council/foreign-direct-investment-confidence-index/2025-full-report

The top ten also includes Canada, the United Kingdom, Japan, Germany, China, France, Italy, the United Arab Emirates, and Australia, while Spain ranks eleventh.

Canada has held onto its second-place ranking for the third consecutive year and remains one of the top five markets for the 13th consecutive year. Survey respondents cited the quality of infrastructure as the most attractive feature for investors.

The United Kingdom and Germany lead the way in Europe, ranking third and fifth, respectively. The UK's strong consumer market, robust financial services sector, high-quality infrastructure, and strong potential for innovation contributed to its rise to third place. Germany's leadership in technological innovation helped the market retain its 5th-place ranking.

This ranking reflects the dominance of developed economies, which are characterized by a high level of innovation, a favorable investment climate, and stable macroeconomic indicators.

An analysis of the factors determining a country's investment attractiveness shows that, among the investors surveyed, technological innovation (Tech innovation) and a country's economic performance (Economic performance) are the most important factors. In particular, the United States (45%), Japan (46%), and China (42%) received the highest ratings for their level of technological development, confirming the growing role of innovation potential as one of the key factors in a country's competitiveness in the race for international capital.

Another important factor is a country's economic performance, which was rated highest for the United States (40%), the United Arab Emirates (38%), Germany (35%), and China (34%). This indicates that investors are primarily guided by the stability of economic development, growth prospects, and the overall macroeconomic stability of countries.

Investment decisions are significantly influenced by the quality of infrastructure, the ease of doing business, and the qualifications of the workforce. Canada received the highest ratings for infrastructure quality (33%), while the United Arab Emirates leads in terms of the ease of doing business (32%). At the same time, a high level of professional skills among the workforce was noted in Italy (30%), France, and China (28% each), underscoring the importance of human capital in attracting investment.

Transparency in public administration and low levels of corruption have a comparatively smaller, but still significant, impact. Canada (24%), the United Kingdom (22%), and Germany (20%) received the highest scores on this criterion, confirming the importance of effective government institutions and a predictable regulatory environment for international investors.

Natural resources remain an additional competitive advantage for certain countries, though their importance is surpassed by innovation and economic stability. They are most significant for the United Arab Emirates (23%), Australia (22%), and Italy (21%). At the same time, the share of respondents who do not consider any of the proposed factors to be decisive is minimal (1-3%), which indicates the high importance of these criteria when selecting a country for foreign direct investment.

Thus, the findings of the Kearney Foreign Direct Investment Confidence Index 2025 confirm that, under current conditions, the key determinants of a country's investment attractiveness are its innovation potential, high rates of economic growth, the quality of its institutional environment, well-developed infrastructure, and the availability of a highly skilled workforce.

It is precisely the combination of these factors that shapes countries' competitive advantages in the global race to attract foreign direct investment.

Overall, investors believe that the most likely developments next year will be rising commodity prices, increased geopolitical tensions, and a stricter regulatory environment for businesses in developed countries (Table 2.9).

Table 2.9 - International investors' expectations regarding the most likely global economic and geopolitical events in 2023-2025 (according to the Kearney Foreign Direct Investment Confidence Index)

Key Economic and Geopolitical Risks	2023	2024	2025
Rise in commodity prices	38%	26%	38%
Increase in geopolitical tensions	36%	28%	36%
More restrictive business regulatory environment in a developed market	25%	31%	32%
More restrictive business regulatory environment in an emerging market	23%	28%	25%
Political instability in a developed market	22%	20%	26%
Economic crisis in a developed market	27%	20%	25%
Economic crisis in an emerging market	27%	21%	24%
Political instability in an emerging market	28%	22%	23%
Decrease in geopolitical tensions	19%	16%	19%
Drop in commodity prices	17%	12%	11%

Source: compiled based on [343]

Data from the Kearney Foreign Direct Investment Confidence Index 2025 show a shift in international investors' expectations regarding key global risks in the near term. The largest share of respondents (38%) forecasts rising commodity prices, which is the highest figure among all the options listed,

[343]World at inflection.The 2025 FDI Confidence Index (2025), available at: https://www.kearney.com/service/global-business-policy-council/foreign-direct-investment-confidence-index/2025-full-report

significantly exceeds the 2024 level (26%), and matches the 2023 estimates (38%).

The second most significant factor is an increase in geopolitical tensions, which 35% of investors cited as likely to occur in 2025. Third among the expected events is the tightening of regulatory restrictions on business in developed countries, which 32% of respondents foresee, indicating expectations of stricter government regulation of business activities in economically developed countries.

Table 2.10 - The most likely risks for the European Union over the next three years, as assessed by international investors (according to the Kearney Foreign Direct Investment Confidence Index, 2025)

Most likely risks	Percentage of respondents
Rise in commodity prices	30 %
Increase in geopolitical tensions	26 %
More restrictive business regulatory environment in a developed market	24 %
More restrictive business regulatory environment in an emerging market	23 %
Political instability in a developed market	21 %
Economic crisis in a developed market	20 %
Economic crisis in an emerging market	19 %
Political instability in an emerging market	17 %
Decrease in geopolitical tensions	4 %
Drop in commodity prices	0 %

Source: compiled based on [344]

Thus, the survey results confirm that international investors expect a high level of uncertainty in the global economy to persist in 2025.

[344]World at inflection.The 2025 FDI Confidence Index (2025), available at: https://www.kearney.com/service/global-business-policy-council/foreign-direct-investment-confidence-index/2025-full-report

Investors consider a reduction in geopolitical tensions (19%) and a decline in commodity prices (11%) to be the least likely scenarios. This indicates that pessimistic expectations regarding the development of the global economic and geopolitical environment prevail.

According to the Kearney Foreign Direct Investment Confidence Index 2025, investors continue to view the European Union as a safe region for foreign direct investment, while acknowledging certain key challenges (Table 2.10).

Thus, the modern global investment landscape is shaped by a complex interplay of economic, geopolitical, demographic, and institutional factors. Amid growing global uncertainty, countries' competitiveness in the race for foreign direct investment will increasingly be determined by their ability to ensure economic resilience, political stability, regulatory transparency, energy security, and favorable conditions for the development of innovation.

The analysis shows that, in the current context of global transformation in international investment, a country's competitiveness is determined not so much by its ability to attract any foreign direct investment as by its capacity to integrate into the new production and logistics chains of transnational corporations. In this regard, the priority of Ukraine's state investment policy should be to attract greenfield projects in the manufacturing and high-tech sectors of the economy, which ensure the creation of new production capacity, technology transfer, the generation of added value, and long-term economic growth.

Conclusions

1. This study examines current trends in the transformation of foreign direct investment amid global instability and growing economic uncertainty. It substantiates the importance of foreign direct investment as one of the key factors in economic development, structural modernization of the economy, technological upgrading of production, and the

integration of countries into international production and financial systems. It has been determined that, under current conditions, international investment processes are undergoing significant changes due to the influence of geopolitical conflicts, energy crises, inflationary pressures, changes in the monetary policies of leading nations, intensifying global competition, and increasing risks for international business.

2. A comparative analysis of trends in foreign direct investment worldwide, in Europe, and in Ukraine for 2014-2024 was conducted. It was found that the global economy was characterized by a relatively more stable recovery in investment activity following periods of crisis, whereas Europe was characterized by greater fluctuations in investment flows due to energy, economic, and geopolitical factors. It was determined that Ukraine is characterized by high instability in investment processes and a critical dependence of FDI dynamics on military-political risks and the level of economic uncertainty.

3. Particular attention is paid to the analysis of greenfield projects as an indicator of long-term investment activity and the structural transformation of international investment processes. It has been established that, amid global instability, investments in new production and infrastructure projects remain the most sensitive to external shocks, as their implementation requires a high level of investor confidence and a predictable economic environment. The paper justifies the need to develop an effective investment policy aimed at supporting long-term investment projects, enhancing investment security, stimulating greenfield projects, and ensuring the structural modernization of the economy amid global instability.

4. Transnational corporations are the primary agents of foreign direct investment in Ukraine, Europe, and the world; they play a leading role in the development of international capital flows, the expansion of investment cooperation between countries, and the integration of national economies into the

global economic space. Current trends indicate a strategic reorientation of TNCs' investment activities toward sectors that will shape the future structure of the global economy. This transformation is driven by intensifying global competition, accelerating technological development, and corporations' desire to strengthen their long-term competitive advantages in strategically important sectors.

5. The findings confirm that in 2025, a country's investment attractiveness will be determined not only by its level of innovation and economic development, but also by its ability to respond effectively to global challenges. Expected increases in commodity prices, heightened geopolitical tensions, and regulatory restrictions are creating a high level of uncertainty, which directly affects international capital flows and the investment strategies of multinational corporations.

2.4. FINANCIAL SECURITY OF ENTERPRISES UNDER CONDITIONS OF UNCERTAINTY

Without financial security, the economic stability of a country is impossible. Financial security not only protects the financial system from shocks but also lays the foundation for future economic development.

The military aggression of the Russian Federation against Ukraine has created critical challenges to national security in all spheres-from the economy to information securityand at every level of society. The business sector has suffered some of the greatest losses and structural distortions as a result of Russia's full-scale invasion. Military operations have caused a profound transformation of the business environment. The primary destructive factors include the destruction of assets and the disruption of distribution channels, leading to business relocation, changes in business activities, restructuring, or even

the liquidation of enterprises. The main causes have been the destruction of production capacities, broken supply chains, and the loss of customers. Furthermore, disruptions to standard business processes have resulted in financial losses or reduced revenues, thereby threatening the implementation of corporate security policies.

Ensuring the financial security of an enterprise directly depends on its ability to identify and neutralize threats to its economic interests in a timely manner. Under current conditions, numerous destructive factors can significantly undermine an enterprise's financial stability, solvency, and overall performance. The key components of financial security include continuous monitoring of internal and external threats, maintaining liquidity and solvency, ensuring the achievement of strategic financial objectives, and preventing negative factors from escalating into crises.

To stabilize the financial sector, stimulate economic development, and provide businesses with sufficient capital, a comprehensive modernization of the financial security system is required. This process encompasses all spheres of public life-including the economic, social, financial, political, scientific and technological, informational, and environmental domainsand extends simultaneously across the mega-, macro-, meso-, micro- and nano-economic levels.

Any economic system is exposed to systemic risks. Therefore, protecting the financial security of the state, its regions, and businesses is of critical importance. Without an adequate financial reserve, the state cannot fulfill its essential obligations to society, including providing social protection, financing cultural development, protecting the environment, and supporting the information sector.

An effective enterprise financial security system should be based on ensuring consistency between two key vectors:

Harmonization of interrelationships at all levels of governance: enterprise financial security → regional financial security → national financial security.

Balancing corporate security with investors' interests through the following sequence: stable financial condition → high level of financial security → increased investment attractiveness → maximization of owners' wealth.

Without state support for entrepreneurship, it is impossible to ensure financial stability. Government protection of entrepreneurs and their business activities enables them to adequately supply the domestic market with high-quality goods and services, promote employment, improve citizens' living standards, and contribute to the comprehensive development of the national economy[345, 346].

The constitutional foundation of Ukraine's financial security is established by the Constitution of Ukraine, while the key elements of its legal framework include the Budget Code of Ukraine, the Tax Code of Ukraine, the Law of Ukraine "On the State Budget," and other regulatory legal acts. Scholars analyzing the legal regulation of financial security, particularly the provisions of the Law of Ukraine "On National Security of Ukraine" of June 21, 2018, No. 2469-VIII, and the Economic Security Strategy of Ukraine until 2025, have concluded that the concept of financial security constitutes an integral component of national security[347, 348]. They also emphasize that the concept remains only partially defined in current legislation and that no

[345] Solomina G. V. Ensuring the financial and economic security of entrepreneurship: a manual. Dnipro: DDUVS, 2018. 234 p.

[346] N.I. Koval, K.V. Korniyuk. Ensuring the financial security of an enterprise in wartime: problems and features. AGROSVIT. №4, 2024. P.152-158. file:///C:/Users/admin/Downloads/A+4-2024_St20.pdf

[347] Law of Ukraine "On National Security of Ukraine" dated June 21, 2018 dated June 21, 2018 №2469-VIII. https://online.budstandart.com/ua/catalog/doc-page.html?id_doc=96166

[348] National Security and Defense Council of Ukraine “On the Strategy of Economic Security of Ukraine for the Period Until 2025” dated August 11, 2021 No. 347/2021. https://zakon.rada.gov.ua/laws/show/n0048525-21#Text

single public authority is fully responsible for formulating and implementing national financial security policy. Given the complexity and multidimensional nature of financial security, this position remains debatable, especially considering that the Bureau of Economic Security of Ukraine was established by Presidential Decree on November 24, 2021. Nevertheless, it should be recognized that economic security is an integrated concept comprising several components, including financial security[349, 350].

Economic security is defined as ensuring a state of enterprise operation that enables the achievement of positive economic outcomes through profit generation and the satisfaction of consumer needs[351].

The objective of an enterprise's economic security is to guarantee its efficient and sustainable functioning both in the present and in the future. This objective can be achieved through the implementation of its key functions, namely: analytical, regulatory and legal support, organizational and administrative, planning, accounting and control, and information functions[353, 352].

The first scientific publications on the economic security of business entities appeared worldwide in the mid-1970s, while the greatest scholarly interest in this issue emerged during the late 1980s and 1990s. In Ukraine, the first publications on this topic began to appear in the early 2000s. Issues related to the

[349] Bortnyk S. M. Legal Provision of Financial Security. Current Issues of Financial Security: Collection of Abstracts of the International Scientific and Practical Conference (Vinnytsia, March 27, 2023). Vinnytsia: KhNUVS, 2023. 216 p.

[350] Vasyliev A. A., Galenko V. M. Financial security of agricultural enterprises of Ukraine in the conditions of the legal regime of martial law. Economy and society. 2022. Issue 45. DOI: https://doi.org/10.32782/2524-0072/2022-45-63

[351] Pravdyuk N. L., Mulyk T. O., Mulyk Ya. I. Management of financial security of enterprises: accounting and analytical aspect: monograph. Kyiv: "Center for Educational Literature", 2019. 224 p.

[352] Kyrylenko V. I. Investment component of economic security: monograph. Kyiv: KNEU, 2005. 232 p.

formation of the financial security of business entities have become increasingly prominent in Ukrainian academic literature amid the prolonged financial crisis, the global pandemic, and Russia's full-scale war against Ukraine.

The concept of financial security of business entities has only recently begun to be widely used in academic research and has been examined at both the macroeconomic and microeconomic levels. As a structural component of economic security, the financial security of business entities determines the degree of protection of their business activities. It is directly associated with risk management and the mobilization of resources to ensure stable profit generation under market conditions.

The financial security of an enterprise is a dynamic characteristic of its financial condition that reflects the entity's resilience to the destructive effects of internal and external factors, as well as its capacity for long-term balanced development.

Under conditions of prolonged transformation and contemporary challenges, the Ukrainian economy requires comprehensive reforms aimed at optimizing the operating environment for enterprises across all sectors. Today, domestic businesses operate daily in conditions of high uncertainty and are exposed to numerous destabilizing factors. Under these circumstances, the focus of security management is shifting: it is no longer viewed solely as an instrument for the physical protection of assets but is transforming into a strategic process of creating a secure environment that ensures sustainable growth and the realization of the enterprise's economic interests.

The need to perceive security as the protection of the interests of individuals and society emerged alongside the formation of society and the state. The concept of security has evolved throughout different historical periods and political systems. From the perspective of ancient philosophy, Plato

interpreted security as "the prevention of harm to the state" and advocated the establishment of "a socially stable system of security in which the moral character of the actors played a central role, emphasizing that violations of the law would threaten the security of individuals, social classes, and the state." Aristotle regarded the state as the highest form of social organization, the purpose of which was to achieve the common good. He considered polity (moderate democracy) to be the most stable form of government, where the rule of law regulated citizens' activities, guaranteed their security, and ensured the self-preservation of society. Epicurus believed that the state and law originated from an agreement among people to ensure their mutual security [353].

In his writings, Marcus Tullius Cicero substantiated the natural human aspiration for security. He argued that every living being possesses an innate instinct for self-preservation that compels it to avoid harm and secure the resources necessary for survival [9]. At the same time, the philosopher emphasized the dichotomy of threats, noting that certain actions may be harmful to the individual, whereas others may have destructive consequences for the state as a whole.

Thus, an analysis of ancient philosophical thought demonstrates that maintaining the rule of law and ensuring a secure environment were regarded as the state's primary functions. The concept of security was understood as the absence of destructive factors and evil. Furthermore, its synergistic nature was emphasized: social cohesion was viewed as the only effective mechanism for neutralizing existential threats, including those of a mystical nature, which could not be overcome by individuals acting alone.

[353] Klymenko N. G. Evolution of the content of the concept of “security” in different historical eras and political systems. State administration: improvement and development. URL: http://www.dy.nayka.com.ua/pdf/8_2019/22.pdf

During the Middle Ages, the concepts of the state and security were perceived through the prism of religion and regarded as manifestations of divine will. This approach emerged during the flourishing of the feudal system, when the Catholic Church and the Holy Inquisition exercised control over virtually all spheres of social life.

A historical retrospective demonstrates that the substantive meaning of the category security has continuously evolved alongside the development of philosophical and sociological thought. Therefore, it is appropriate to agree with the opinion of scholars [354], who define security as an integral socio-political phenomenon. It encompasses historical experience, the specific conditions of existence, cultural codes, and the system of values of individuals, communities, public institutions, and civilization as a whole. At the linguistic level, however, according to the Explanatory Dictionary of the Ukrainian Language, the term retains its classical meaning as a state of being free from danger or protected against threats [355].

In contemporary academic discourse, security is interpreted as the minimization of the risks of distortion affecting the key parameters of an entity's functioning under the influence of internal and external threats, which constitutes a fundamental prerequisite for its sustainable development.

In contemporary academic discourse, security is interpreted as the minimization of the risks of distortion affecting the key parameters of an entity's functioning under the influence of internal and external threats, which constitutes a fundamental prerequisite for its sustainable development [356].

[354] National security of Ukraine methodological aspects, state and development trends: textbook / edited by N. R. Nyzhnyk, G. P. Sytnyk, V. T. Bilous. Irpin: Academy of State Police of Ukraine, 2000. 304 p.

[355] Dictionary of the Ukrainian language: in 11 vols. Vol. 1 / edited by I. K. Bilodid, Academy of Sciences of the Ukrainian SSR. Institute of Linguistics. Kyiv: Naukova Dumka, 1970.

[356] Hybrid threats to Ukraine and public security. Experience of the EU and the Eastern Partnership. Analytical document / edited by V. Martynyuk; Center for Global Studies “Strategy XXI”. Kyiv, 2018. 105 p.

The systemic transformation of society has led to the institutionalization of economic security and national security as independent fields of academic inquiry. The logic of this evolution is well illustrated by the concept proposed by O. Wæver. The scholar interprets security through the lens of societal resilienceits capacity to preserve its sociocultural identity, linguistic traditions, as well as state and religious practices under conditions of rapid social change [357]. In our view, this conceptual interpretation provides a fundamental basis for understanding the essence of national security.

Within the academic discourse, the category of economic security is examined through a variety of theoretical and methodological approaches. In particular, Z. Varnalii proposes a systemic interpretation of this phenomenon, defining it as a set of interrelated components operating within both vertical (from the mega- to the micro-level) and horizontal (financial, production, investment, social, etc.) structures[358]. This approach appears well-founded, as its undeniable advantage lies in integrating the interests of actors operating at different levels while emphasizing the interdependence of their structural elements.

In turn, M. Yermoshenko focuses on the macroeconomic dimension, defining economic security as a state of the national economic mechanism that ensures its resilience and stability against the destructive effects of both exogenous and endogenous threats [359]. According to this approach, the implementation of strategic national interests constitutes the foundation for the continuous and effective development of the country's economic and social systems.

[357] Wever O. Buzan B., Kelstrup M. Identity, Migration and the New Security Agenda in Europe. Macmillan, 1993. 221 p

[358] Varnalii Z. S. Economic and financial security of Ukraine in the context of globalization. Kyiv: Knowledge of Ukraine, 2020. 423 p.

[359] Yermoshenko M. M. Financial security of the state: national interests, real threats, security strategy. Kyiv: Kyiv. National Trade and Economic University, 2001. 309 p.

This interpretation is complemented by the approach of V. Muntiyan, who examines economic security through the concept of protection. The scholar emphasizes safeguarding the economic interests of the individual–society–state triad and developing an adequate defense capability. In his opinion, these factors constitute the foundation for sustainable economic development under conditions of expanded reproduction, improved public welfare, and the satisfaction of essential needs across key sectors, including the financial, technological, energy, and food sectors [360].

A particularly valuable aspect of this definition is its emphasis on strengthening national defense capabilities. In the context of Russia's ongoing military aggression against Ukraine, this aspect has become a key priority, as the full-scale invasion has clearly demonstrated that strong defense capacity is a fundamental prerequisite for overall national security and, in particular, for the country's economic security. At the same time, H. Pasternak-Taranushenko views the economic security of the state through the prism of its ability to create and maintain conditions conducive to public welfare while ensuring the sustainable development of the national economy over the long term [361].

Traditionally, the economic security of a state has been associated with creating conditions that ensure public welfare and the sustainable growth of the national economy. However, in the context of hybrid threats and external military interventions, its conceptual boundaries have expanded considerably, encompassing critically important aspects of the functioning of all spheres of national life.

[360] Muntiyan V. I. Economic security of Ukraine. Kyiv: KIITS, 1999. 547 p

[361] Pasternak-Taranushenko G. Economic security of the state. Statics of the security process: a textbook for civil servants, scientists, students and postgraduates of higher educational institutions of economic profile / edited by Professor Bohdan Kravchenko. Kyiv: “Kondor”, 2002. 302 p.

A fundamental prerequisite for the sustainable development of business entities is the maximization of their financial performance combined with an effective financial security system. Financial security is generally defined as a set of measures aimed at protecting the financial interests of an enterprise from the destructive impact of internal and external factors.

Financial security is a system of quantitative and qualitative indicators of an enterprise's financial condition that reflects the level of its financial protection [362].

According to O. Amosov [363], the financial security of an enterprise should be understood "as the degree of harmonization, in time and space, of the economic interests of an enterprise with the interests of the external stakeholders associated with it and operating beyond the boundaries of the enterprise. The principal distinction of this interpretation of enterprise financial security lies in recognizing the impossibility of completely protecting the enterprise's activities from the negative influence of the external environment, since the enterprise operates within that environment and cannot function outside it, while also acknowledging the positive influence of the external environment."

Financial security is a comprehensive state of the financial system that ensures its stability, protection, and effective functioning at all levels. According to O. Baranovskyi, financial security is [364]:

[362] Melnyk S. I. Management of financial security of enterprises: theory, methodology, practice: monograph. Lviv: Rastr-7, 2020. 384 p.

[363] Amosov O.O. Financial security of the enterprise in modern economic conditions: theoretical aspect. *Problems of economy.* 2011. №4. P.76-80.

[364] Baranovsky O. I. Financial security in Ukraine (assessment methodology and mechanisms of provision): [monograph]. Kyiv: Kyiv. National Trade and Economic University, 2004. 759p.

– a fundamental component of the state's economic security, based on an independent and competitive financial and credit system;

– the degree of protection of the financial interests of economic actors at every level of economic relations;

– the availability of financial resources sufficient to meet the needs and obligations of all economic actors, ranging from individual citizens to the global community;

– the condition of the monetary, banking, budgetary, tax, and other financial systems that ensures their balance, resilience to external threats, and capacity to support economic growth;

– the stable circulation of financial flows within the economy, governed by effective regulatory mechanisms;

– the quality of financial services that minimizes the risk of abuse and guarantees the return on clients' investments.

In the scholarly works of O. Ivashko, financial security is considered a complex and multidimensional phenomenon encompassing several key dimensions [365, 366]:

– ensuring reliable protection of the financial interests of economic actors at all stages and levels of the hierarchy of economic relations;

– maintaining an appropriate level of independence, balance, and stability of the state's financial system under the continuous influence of endogenous and exogenous factors;

– ensuring the effective functioning of an integrated system of financial instruments, services, and technologies capable of counteracting both internal and external threats;

[365] Ivashko O. Financial security of Ukraine in the conditions of crisis phenomena in the economy. *Economic magazine of the Lesya Ukrainka Eastern European National University*. 2015. №2. P.61-66.
Yermoshenko M.M. Financial security of the state: national interests, real threats, security strategy. Kyiv: Kyiv. National Trade and Economic University, 2001. 309 p.

[366] Yermoshenko M.M. Financial security of the state: national interests, real threats, security strategy. Kyiv: Kyiv. National Trade and Economic University, 2001. 309 p.

– the ability of the financial sector not only to safeguard national interests but also to accumulate and allocate financial resources sufficient to ensure sustainable business development and improve public welfare.

The academic literature offers a variety of approaches to defining the essence of the state's financial security. In particular, V. Heiets, M. Kyzym, and T. Klebanova [367] examine this category through the prism of the stability of the financial and credit sector. They define it as the condition of the monetary, fiscal, foreign exchange, and banking systems characterized by resilience to destructive factors and the ability to ensure the progressive development of the national economy. However, alternative perspectives also exist. For example, O. Pidkhomnyi proposes a behavioral approach, interpreting financial security as an integrated assessment of the potential consequences arising from conflicts of interest among participants in financial relations[368].While we partially agree with this approach, we believe that security is closely related to conflict theory, where conflicts of interest constitute the primary source of threats. At the same time, the definition of the state's financial security should encompass a broader range of characteristics. A review of the existing literature indicates that, for a long time, the microeconomic dimension was considered primarily through the lens of protecting interests at all levels of financial relations. However, the rapid development of contemporary scientific thought has shifted the focus toward the financial security of business entities themselves. It should be noted that there is still no unified consensus among scholars regarding the interpretation of financial security at the

[367] Modeling economic security: state, region, enterprise: monograph / V.M. Geyets, M.O. Kyzym, T.S. Klebanova and others; edited by Geyets V.M. Kharkiv: Publishing House "INZHEK", 2006. 240 p.

[368] Pidhomny O.M. Financial security of Ukraine: tools and strategies of formation: [monograph]. Lviv: Ivan Franko Lviv National University, 2014. 320 p.

microeconomic level, reflecting the same conceptual debate that exists at the macroeconomic level.

According to I. Blank, financial security is a qualitatively and quantitatively determined level of an enterprise's financial condition. It ensures the continuous protection of the enterprise's priority and balanced financial interests against actual and potential threats while creating the conditions necessary for sustainable long-term economic growth in accordance with the organization's financial philosophy [369].

According to A. Yepifanov, the financial security of business entities is a mechanism that, on the one hand, ensures the stability of the financial system through the application of protective financial instruments and, on the other hand, enhances its efficiency through the rational management and utilization of financial resources [370].

The stable operation and progressive development of modern enterprises directly depend on the effectiveness of their financial security management. This process requires the implementation of effective assessment tools, continuous monitoring of potential threats and risks, and the development of an appropriate strategic response mechanism.

According to I. Blank, financial security is characterized by the following features [371]:

– the level of financial security is assessed using both quantitative and qualitative indicators;

– the protection of the enterprise's financial interests is ensured, enabling the company to achieve financial equilibrium, strengthen financial stability, maintain liquidity and solvency,

[369] Blank I.O. Management of financial security of an enterprise. Kyiv: Nika-Center; Elga, 2004. 784 p.

[370] Financial security of enterprises and banking institutions: [monograph] / [A.O. Yepifanov, O.L. Plastun, V.S. Dombrovskyi and others]; ed. by A.O. Yepifanova. Sumy: State Higher Educational Institution of the National Bank of the Republic of Belarus, 2009. 295 p.

[371] Blank I.A. Financial Risk Management. K. Nika-Center. 2005. 600 p.

and ensure sustainable operations in both the short and long term;

– an adequate level of financial independence and flexibility in financial decision-making is maintained, while the enterprise's financial resource requirements for sustainable expanded reproduction are satisfied;

– the enterprise is capable of resisting existing and emerging risks through continuous monitoring and the implementation of appropriate operational and control measures.

While agreeing that the financial security of business entities primarily involves maintaining financial equilibrium and protecting against destructive threats, we propose a broader conceptual framework. In our view, the architecture of financial security should integrate not only purely economic factors but also managerial behavioral triggers and the destructive actions of malicious actors. Such factors are capable of generating a cumulative effect, producing a synergy of financial and reputational losses. In this regard, it is appropriate to refer to the reflecting its ability to meet its obligations and maintain viability under conditions of high uncertainty and business risk [372].

N. Krasnokutska and H. Koptieva define the financial security of an enterprise as a comprehensive characteristic of the degree to which its financial interests are protected and aligned with its existing potential and strategic objectives, thereby enabling it to withstand various adverse factors arising in the course of financial and business activities [373].

In their studies, N. Krasnokutska and H. Koptieva further characterize enterprise financial security as the comprehensive

[372] Vorobyova O.I. Financial Security at the Micro and Macro Levels [Text]. *Scientific Bulletin: Finance, Banks, Investments.* 2012. №2. P. 6-10.

[373] Krasnokutska N. S., Kopteva G. M. Definition of the Concept of "Financial Security of an Enterprise": Basic Approaches and Features. *Business Information*. 2019. №7. P. 14-19.

ability to withstand destabilizing factors during business operations. Such protection is based on harmonizing the company's financial interests with its actual capabilities and long-term strategic goals [375].

M. Pohosova considers a company's financial security to be a systemic characteristic of its overall functioning. According to the author, it is determined by the need to protect the enterprise's financial interests from the destructive effects of macro-, meso-, and internal threats, as well as by the ability to effectively realize these interests in relations with counterparties [374]. A common feature of many scholarly approaches is the understanding of financial security as a comprehensive state of the business entity. However, M. Pohosova's definition is particularly valuable because it emphasizes a crucial aspect – the enterprise's ability to defend its interests in the course of interaction with external partners.

According to I. Bahrovetska and L. Kozak, "the financial security of an enterprise is an important component of economic security, based on the independence, efficiency, and competitiveness of the business entity, reflected through a system of criteria and indicators of its financial condition, which characterize financial balance, adequate asset liquidity, and the availability of the necessary reserves" [375].

Based on the analysis of the above definitions, it can be concluded that enterprise financial security is a multifaceted concept that scholars generally interpret from two principal perspectives: as a state of the financial system (its stability and protection) and as a dynamic process involving the safeguarding of financial interests, the prevention of threats, and the promotion of sustainable development.

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[374] Pogosova M.Yu. Diagnostics of the Financial Security of an Industrial Enterprise: Abstract of the Dissertation ... Candidate of Economic Sciences: 08.00.08/ UBS NBU. Kyiv, 2010. 21 p.

[375] Kozak L. S., Bagrovetskaya I. V. Conceptual and methodological principles of forming a mechanism for ensuring the financial security of an enterprise [Text]. *Economics and Management.* 2008. №13. Pp. 97-101.

Summarizing the existing scholarly approaches, the following key components of financial security can be distinguished:

Protective function – the fundamental component aimed at minimizing financial losses, preventing bankruptcy (N. Y. Reverchuk; K. H. Serdiukov), and resisting internal and external threats (I. P. Moiseienko; I. V. Chibisova) [376, 377,378, 379].

Balance of interests – financial security is achieved not in isolation but through the harmonization of the financial interests of the enterprise with those of its stakeholders, including customers, business partners, and investors (Yu. V. Lavrov; I. P. Moiseienko)[380,381].

V. A. Arefiev defines a threat to enterprise security as a specific obstacle that impedes the effective...

Strategic orientation – financial security serves as the foundation for the enterprise's sustainable long-term development and the successful achievement of its strategic mission (I. P. Moiseienko; K. H. Serdiukov) [382,383].

Hierarchical nature – financial security constitutes an integral and one of the most significant components of the

[376] Reverchuk N.Y. Management of economic security of business structures: [monograph] / N.Y. Reverchuk. Lviv: LBI NBU, 2004. 195 p.

[377] Serdyukov K.G., Golovchenko Yu.V. Theoretical aspects of the financial security of an enterprise. Mukachevo State University. *Economy and Society*. Issue №9. 2017. P. 627-631.

[378] Moiseenko I.P. Management of financial and economic security of an enterprise. Lviv, 2011. 380 p.

[379] Chibisova I.V. Mechanism for ensuring the financial security of an enterprise. URL: http://www.nbuv.gov.ua/portal/soc_gum/ppei/2011_31/Chibis.pdf.

[380] Lavrova Y.V. Financial security of the enterprise: classification of threats. Economic analysis. 2011. №9. Part 2. P. 274-277. [Electronic resource]. Access mode: http://archive.nbuv.gov. ua/portal/Soc_Gum/Ecan/2011_9_2/pdf/lavrova.PDF.

[381] Moiseenko I.P. Management of financial and economic security of an enterprise. Lviv, 2011. 380 p.

[382] Serdyukov K.G., Golovchenko Yu.V. Theoretical aspects of the financial security of an enterprise. Mukachevo State University. *Economy and Society*. Issue №9. 2017. P. 627-631.

[383] Chibisova I.V. Mechanism for ensuring the financial security of an enterprise. URL: http://www.nbuv.gov.ua/portal/soc_gum/ppei/2011_31/Chibis.pdf.

overall economic security of a business entity (I. V. Chibisova; K. H. Serdiukov) [382,384].

V. A. Arefiev defines a threat to enterprise security as a specific obstacle that hinders efficient production and commercial activities and impedes the realization of the enterprise's economic interests [385].

O. Sudakova considers financial security to be a key component of a company's economic security. She argues that this state is based on the financial independence, efficiency, and competitiveness of the business entity. According to her definition, the level of financial security is reflected by a set of indicators demonstrating:

– financial stability, financial equilibrium, optimal liquidity, and adequate cash reserves;

– the availability of sufficient capital to meet current operational needs and fulfill financial obligations;

– the high quality of financial services and instruments that minimizes the risks of errors or abuse;

– the protection of the enterprise's financial interests across all areas of its economic relations [386].

In the works of S. Melnyk, it is noted that the financial security of an enterprise is a state in which, through the efficient use of all available resources and the adoption of appropriate managerial decisions in each specific situation, equilibrium is formed, stability is maintained, and the reliability of the system is ensured in order to achieve defined goals and objectives and to implement the development strategy. This is achieved through measures aimed at the timely identification of

[384] Sudakova O.I. Strategic management of the financial security of an enterprise. *Economic space.* 2008. № 9. P. 142.

[385] Aref'iev V. A. Methodological approaches to assessing the financial security of an enterprise. *Bulletin of NTU "KhPI*". 2010. P. 135-149.

[386] Sudakova O.I. Strategic management of the financial security of an enterprise. *Economic space.* 2008. № 9. P. 142.

challenges, risk avoidance/reduction, and counteraction/adaptation to the negative impact of threats [387].

In the studies of L. Yastremska, the financial security of business entities is predominantly characterized through the following key aspects: the level of financial resource provision; the stability of the financial condition; and the ability to resist threats [388].

N. Bondarchuk and M. Humenchuk interpret the financial security of enterprises as their financial and economic condition that ensures the protection of financial and economic interests from negative factors of the external and internal environment and creates the necessary financial and economic conditions for continuous successful activity and sustainable enterprise development [389]. However, this interpretation does not fully reflect the essence of the concept, as it emphasizes the conditions that facilitate protection against negative external and internal influences but does not take into account the ability to actively counter threats. The ability to resist internal and external threats is a defining characteristic of financial security. O. S. Zhuravka [390] notes that the financial security of an enterprise is the ability of a business entity to conduct its economic, particularly financial, activities effectively and sustainably through the use of a set of interrelated diagnostic, instrumental, and control financial measures aimed at optimizing the use of financial resources.

[387] Melnyk S.I. Management of the financial security of enterprises: theory, methodology, practice: monograph. Lviv: Rastr-7, 2020. 384 p.

[388] Yastrubetska L.S. Financial security of business entities in Ukraine in the face of hybrid threats: monograph. Lviv: Ivan Franko Lviv National University, 2022. 370 p.

[389] Bondarchuk N., Gumenchuk M. The essence of the financial and economic security of an enterprise and the need for its provision. *Effective Economy*. 2016. №11. URL: http://www.economy.nayka.com.ua/?op=1&z=5409

[390] Zhuravka O.S. Theoretical aspects of the formation of the financial security system of an enterprise. *Innovative Economy*. 2012. №4. P. 234-237.

Zh. V. Kudrytska [391] states that financial security is a balanced state of an enterprise's elements and subsystems as a separate economic system, which can be expressed through quantitative and qualitative indicators and is characterized by resilience to negative influences of the internal and external environment, as well as the ability to ensure effective functioning, stable development, and economic growth.

According to O. E. Ponomarenko [392], financial security of an enterprise is a qualitatively and quantitatively defined level of its financial condition, as well as activities aimed at achieving such a state, characterized by the balance and quality of financial instruments used within the economic system, ensuring the ability to fulfill its mission and maintain stable development while withstanding the negative influence of internal and external destabilizing factors.

Modern scholars consider the financial security of enterprises through several key approaches:

financial security is interpreted as the availability of sufficient resources to protect and support business processes, minimizing losses and ensuring expanded reproduction [393];

the concept is defined as a critical threshold of financial stability and resilience required for the successful implementation of strategic objectives and resistance to destructive factors [394];

[391] Kudrytska Zh.V. The system of financial security management of an enterprise. Effective Economy. 2012. No. 1.: http://www.economy.nayka.com.ua.

[392] Ponomarenko O.E. Theoretical aspects of financial security of enterprises. *Development Economics*. 2010. №1 (53). P. 77-80.

[393] Mishina S.V., Mishyn A.Yu. Express monitoring system for the financial security of an enterprise. *Current problems of economics.* 2015. №1(163). P. 162-172.

[394] Nekrasenko L.A., Rybalka Y.M. Components of managing the financial security of enterprises. Bulletin of the Poltava State Agrarian Academy. 2015. Issue 4 P. 162-167. URL: http://www.pdaa.edu.ua/sites/default/files/nppdaa/3.2/162.pdf

emphasis is placed on the quality, balance, and efficiency of financial instruments, technologies, and services that form the foundation of economic resilience [395];

security is viewed as reliable protection of a company's financial interests at all levels of interaction, ensuring its long-term self-preservation [396];

the term is described as continuous risk management activity and threat mitigation aimed at increasing equity capital [397];

financial security of an enterprise is defined as risk management and protection of enterprise interests from external and internal threats to ensure stable business development and growth of equity capital in both the current and strategic perspective [398].

The generalization of research indicates that financial security of business should be characterized through three key aspects: an adequate level of financial resource provision for stable operations; the ability to maintain equilibrium and long-term financial stability; and the capacity to effectively counter threats and minimize risks.

Financial security is a state of the most efficient use of corporate resources, reflected in optimal financial performance indicators of profitability and return on investment, the quality of management and utilization of fixed and working capital, the structure of its capital, dividend payout levels on securities, as

[395] Orlyk O. V. The mechanism of managing the financial and economic security of an enterprise and its main components. *Financial and credit activity: problems of theory and practice*. 2015. P. 222-23247. Nekrasenko L.A., Rybalka Y.M. Components of managing the financial security of enterprises. Bulletin of the Poltava State Agrarian Academy. 2015. Issue 4 P. 162-167. URL: http://www.pdaa.edu.ua/sites/default/files/nppdaa/3.2/162.pdf

[396] Mulyk Ya.I. The essence of the concept of "financial security of an enterprise": systematization of scientific views. *Collection of scientific works of Vinnytsia National Agrarian University*. 2013. №3(80). pp. 195-206.

[397] Kyrychenko O. A., Kudrya I. V. Improving the management of financial security of enterprises in times of crisis [Text]. Investments: practice and experience. 2009. №10. P. 22-26.

[398] Kutsyk V.I. Financial security of an enterprise is an independent object of management: problems of provision. Scientific Bulletin of NLTU of Ukraine. 2011. P. 250-255.

well as the market value of its securities as a synthetic indicator of current financial and economic performance of its current position and the prospects for its technological and financial development. According to the author, the main objective of enterprise financial security is to "ensure its stable and maximally efficient functioning today and a high development potential in the future"[399].

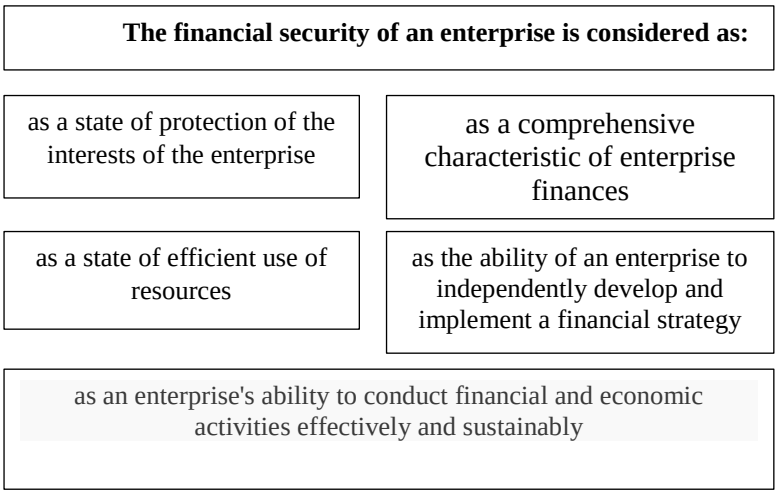


Fig. 2.9 - Approaches to determining the financial security of enterprises[400]

The financial security of an enterprise is a complex category formed under the combined influence of internal factors and the external (exogenous) environment. Its level is determined by the ability of a business entity to achieve dynamic equilibrium and balance between its own strategic financial interests and the objectives of its counterparties. Under these

[399] Arefieva, O.V. Economic foundations of the formation of the financial component of economic security. *Current problems of economics. 2009.* №1(91). P. 98-104.

[400] Yaremchuk, O. Scientific polemic on the theoretical conceptualization of the financial security of an enterprise. *World of Finance*. № 4(33). 2012. P. 100-111.

conditions, ensuring financial security is transformed into a process of harmonizing relationships with an ever-expanding range of external partners, which reflects the essential nature of this concept (Fig. 2.9).

N.N. Poyda-Nosyk [401] notes that "the main components of enterprise financial security are financial stability, liquidity, solvency, and profitability of operations. One of the factors of financial stability and a direct determinant of financial security is the effective management of capital value and capital structure."

A review of the literature shows that the assessment of enterprise financial security is based on specific indicators that make it possible to determine its actual financial condition. However, there are also alternative approaches that use the category of "financial security of entrepreneurship." These approaches focus on the primary objective of any commercial activity – profit maximization – which allows for a clearer classification of exogenous and endogenous threats.

Horiachieva defines the conceptual foundations of financial security of entrepreneurship as a financial condition characterized by: (1) the balance and quality of the set of financial instruments, technologies, and services used by the enterprise; (2) resilience to internal and external threats; and (3) the ability of the financial system of the business entity to ensure the realization of its financial resources and guarantee the effective and sustainable development of the enterprise's financial system [402].

[401] Poyda-Nosyk N.N. Assessment of efficiency and optimization of the capital structure in the system of financial security of an enterprise. *Finance of Ukraine*. 2010. №10. P. 100-112.

[402] Goryacheva K.S. Mechanism of management of the financial security of an enterprise: Author's abstract of the dissertation of the candidate of economic sciences: 08.06.01 "Economics, organization and management of enterprises" / Kyiv National University of Technologies and Design. K. 2006. P.5.

According to V.I. Voloshyn [403], the main shortcomings of the existing mechanism in the country aimed at ensuring an adequate level of financial security of entrepreneurship include: imperfect programmatic and regulatory-methodological support of state policy; insufficient effectiveness of public administration bodies at all levels (especially regional and local) in ensuring the economic security of entrepreneurship; and the underdevelopment of the domestic business security infrastructure (particularly at regional and local levels).

In order to protect an enterprise from external risks, management must have complete information about current and potential threats. Effective crisis prevention is impossible without a deep understanding of the nature of these threats and the availability of clear counteracting tools.

Among the most common approaches to defining the concept of "threat," the following are identified:

a threat is the most concrete and direct form of danger or a set of conditions and factors that create danger to the interests of various actors [404];

threats are potential or real conditions, factors, or actions of individuals and legal entities that disrupt the normal financial and economic state of business entities and may cause significant damage, up to and including the cessation of their activity [405];

a threat is the possibility of the accidental occurrence of undesirable financial consequences [406].

[403] Voloshin V.I. Problems and priorities of strengthening the financial security of small and medium-sized businesses in Ukraine. *Finance of Ukraine*. 2011. №11. P.76-83.

[404] Pekin A. Economic security of enterprises as an economic and legal category. *Economist*. 2007. №8. P. 23-25.

[405] Kamlyk M.I. Economic security of business activity. Economic and legal aspect. Kyiv: Atika, 2005. 432 p.

[406] Bilyak Yu.V. Main threats to the financial security of corporate finance. *Agrosvit.* 2017. №12. P. 20-30.

The reviewed definitions are consistent in that a threat is associated with potential harm to business; however, they differ in the level of detail regarding negative factors. In our view, a significant limitation of existing approaches is the lack of differentiation between internal and external destructive factors. Therefore, we propose the following authorial definition: a threat to entrepreneurial activity is any endogenous or exogenous factor of negative influence, or a trajectory of events arising from changes in the business environment, which creates a risk of disrupting the stable functioning of business entities, causing losses and destabilizing the security system.

Regarding the understanding of threats to the financial security of entrepreneurial activity, it should be noted that scientific views differ significantly. According to D. Zerkalov, the concept of "threats to the economic security of an enterprise" should be understood as the action of destabilizing natural and subjective factors associated with unfair competition and violations of laws and norms, which may cause potential or actual losses for the organization [407]. T. Vasyltsiv argues that the emergence of economic threats and dangers for business entities arises primarily due to conflicts of interest among participants in the business environment (as well as the means of achieving them) and the influence of external and internal environmental factors governing their functioning [408]. V. Kornieiev defines financial security of entrepreneurial activity as a set of destructive factors and phenomena, as well as potential or real actions of individuals and legal entities that violate the state of protection of business entities, cause material and reputational losses and can lead to the termination of activity (bankruptcy)

[407] Zerkalov D.V. Security of commercial activity: in 2 books. Book 2: Protection. Handbook. Kyiv: Osnova, 2006. 800 p.

[408] Vasyltsiv T.G. Economic security of Ukrainian enterprises: strategy and mechanisms of strengthening: [monograph]. Lviv: Aral, 2008. 384 p.

[409]. Sharing this position, we consider it appropriate to specify the content of this concept through the prism of ensuring the financial interests of business. Accordingly, we propose to understand threats to the financial security of business entities as both real or potential destructive actions of malicious actors, as well as a set of objective factors and conditions capable of causing material or moral damage, leading to negative financial consequences and making it impossible to protect the priority financial interests of the enterprise.

Threats, in turn, give rise to specific forms of danger that are destructive and disruptive in nature within the functioning of business entities. Thus, according to M. Yermoshenko [410], danger is an objectively existing possibility of negative influence on a certain phenomenon, system, mechanism, or social organism, as a result of which it may be harmed, decline, or fall into a crisis state, etc.

Researcher N. Mahas interprets danger as a set of destructive phenomena and processes capable of destabilizing the activities of business entities, causing crisis and blocking their development [411]. It is worth supporting the position of scholars that such threats with a high probability provoke systemic crisis phenomena in the functioning of business structures.

A group of authors led by T.H. Vasyltsiv defines a threat as a set of factors, processes, and conditions that hinder the

[409] Korneev V.V. Threats to the financial security of Ukrainian enterprises under martial law. Formation of market relations in Ukraine: collection of scientific works. 2022. №12 (259). P.71-6. URL: https://doi.org/10.5281/zenodo.7711759

[410] Yermoshenko M. M., Goryacheva K. S. Financial component of economic security: state and enterprise: scientific monograph. Kyiv: National Academy of Management, 2010. 232 p.

[411] Magas N. V. Theoretical foundations of the study of the financial security of business entities in the conditions of technoglobalism. Scientific Bulletin of the Lviv State University of Internal Affairs. (Economic Series). 2011. №2. P. 77-88.

achievement of the economic interests of business entities or create danger for them [412].

Currently, Ukrainian enterprises operate in a high-risk market environment. Their activities are negatively affected by imperfect legislation, the criminalization of society, as well as political and socio-economic instability, intensified by the consequences of the COVID-19 pandemic and the war. Under such conditions, strengthening the financial security of business requires the implementation of effective tools for identifying and recognizing critical threats. Continuous monitoring of these risks makes it possible to timely develop measures for their complete elimination, minimization, or neutralization of their destructive impact on the financial results of the enterprise.

T. Vasyltsiv, V. Voloshyn, O. Boikevych, and V. Karkavchuk [413] classify threats to the financial security of enterprises by: subjects, place of origin; attitude toward threats; severity of consequences; object of encroachment; possibility of realization; form of losses; duration and frequency of impact; level of predictability; and possibility of prevention. Scholar I. A. Blank [414] identifies the following classification features of threats to the financial security of business entities: object orientation; nature of manifestation; sources of origin; nature of emergence; time period; level of probability of realization; size of possible damage; and predictability.

H. Tsvaih and N. Halaiko propose grouping threats to the financial security of business entities by place of origin, sphere of origin, sources of origin, possibility of realization, duration

[412] Kuzenko T.B. Financial interests and threats to the financial security of business entities. Black Sea Economic Studies. Finance, banking and the stock market. 2025 P.172-178

[413] Financial and economic security of Ukrainian enterprises: strategy and mechanisms of support: monograph / T.G. Vasyltsiv, V.I. Voloshyn, O.R. Boykevych, V.V. Karkavchuk, [ed. by T. G. Vasyltsiv]. Lviv: Liga-Press, 2012. 388 p.

[414] Blank I. O. Management of financial security of enterprises. 2nd ed. Kyiv: Elga, 2009. 778p.

of impact, severity of consequences, and subjects of threats [415]. According to O. Pidkhomnyi, N. Mykytiuk, and I. Vozniuk [416], threats to the financial security of business entities should be classified by source of origin; level of severity of consequences; level of probability; stages of business activity; objects of encroachment; subjects of threats; and form of damage. O. Orlyk [417] proposed classifying threats to the financial and economic security of business entities by source of origin; object of encroachment; subjects of threats; possibility of realization; nature of impact; time period; causal relationship; nature of occurrence; duration of impact; level of probability of realization; size of probable losses; severity of consequences; level of danger; form of damage; predictability; possibility of prevention; stages of business activity; scale of possible impact; types of activity; spheres of manifestation; nature of threats, etc.

Systematization and generalization of scholars' views on the classification of threats to the financial security of business entities have enabled us to identify the following criteria for their grouping [418].

1. By the level of financial activity:

– threats to financial interests in general;
– threats to the financial interests of structural units;
– threats to the financial interests of individual projects.

[415] Zvaig Kh.I., Galayko N.V. Threats to the financial security of an enterprise and ways to eliminate them. Economic scientific and practical journal "Black Sea Economic Studies". 2016. P. 183.

[416] Pidkhomny O.M., Mykytyuk N.O., Voznyuk I.P. Typology of threats to the financial security of business entities. URL: http://vlp.com.ua/files/20_29.pdf , P. 121-122.

[417] Orlyk O.V. Classification and systematization of threats to the financial and economic security of enterprises. Bulletin of socio-economic research. 2017. №1. P. 106-115. URL: http://surl.li/iakxs

[418] Yastrubetska L.S. Financial security of business entities in Ukraine in the face of hybrid threats: monograph. Lviv: Ivan Franko Lviv National University, 2022. 370 p.

2. By sphere of occurrence:
– in the sphere of investment activity;
– in the sphere of credit activity;
– in the sphere of issuance activity;
– in the sphere of innovation activity;
– in other spheres of financial activity.
3. By object:
– threats to financial operations;
– threats to assets;
– threats to financial information;
– threats to financial technologies;
– threats to financial personnel.
4. By subject, threats that may be caused by the actions of:
– business partners;
– competitors;
– criminal groups;
– state institutions;
– owners and personnel.
5. By source of origin:
– threats generated by factors of the external environment (external threats);
– threats generated by factors and conditions of the internal environment (internal threats).
*6. By possibility of realization***:**
– real threats;
– potential threats.
7. By mode of occurrence:
– threats generated by objective factors and conditions;
– threats generated by subjective factors of financial relations.
8. By duration:
– short-term;
– long-term.
9. By level of probability of realization:
– *low probability;*

– medium probability;
– high probability;
– those whose probability cannot be determined.

10. By financial consequences:

– with an acceptable level of losses;
– with a critical level of losses;
– with a catastrophic level of losses.

11. By possibility of prediction:

– predictable;
– unpredictable.

12. By nature of manifestation and multiplicity of properties:

– simple threats;
– hybrid threats.

Among the above-mentioned criteria, the grouping of threats to the financial security of business entities by source of origin deserves special attention.

The classification of threats to the financial security of an enterprise studied by T.B. Kuzenko makes it possible to fully cover dangerous factors of both the internal and external environment [419].

The main threats to the financial security of the enterprise include the following:

External threats to the economic system are challenges caused by globalization processes in financial markets, a shortage of strategic resources, by the intensification of market competition, international economic conflicts, as well as the deep integration of national economies; macroeconomic environment threats include: economic recession or crisis phenomena, high inflation rates, declining purchasing power of the population, reduced market demand caused by demographic decline, imperfect and unstable

[419] Kuzenko T.B. Financial interests and threats to the financial security of business entities. *Finance, banking, insurance and the stock market*. Issue 93. 2025. P.172-178.

legislation, excessive tax burden, and exchange rate fluctuations, etc.

Threats formed in the microenvironment of an enterprise are destructive factors of the immediate environment that directly affect its activity [421]:

– the influence of suppliers;

– unfair behavior, namely the use of manipulative advertising, copying of brands or trademarks;

– poaching of qualified employees and customers by competitors;

– commercial espionage, raiding, hostile takeovers;

– corruption actions, artificial barriers and extortion by officials, unequal distribution of benefits in favor of competitors;

– unfair policies of commercial banks, as well as speculative or discriminatory actions of other participants in the financial market.

Internal threats of an enterprise arise due to errors in its management policy and manifest themselves in four key areas [420]:

– general management system: low efficiency of financial and economic strategy, incorrect prioritization in financial management, delayed response to critical changes;

– financial management: irrational management of assets and capital, risky financing strategy, shortage of financial resources, cash flow imbalance, misuse of profits, lack of reserve funds, low level of diversification of investment activity, excessive concentration of financial risks, reduced effectiveness of investment decisions;

[420] Kuzenko T.B. Financial interests and threats to the financial security of business entities. *Finance, banking, insurance and the stock market*. Issue 93. 2025. P.172-178.

– production sphere: technical and technological backwardness, worn-out equipment, production downtime, inefficient cost structure;

– marketing activity: a strategy that does not correspond to market conditions, neglect of market research, limited product range, unjustified pricing policy, low product competitiveness, weak communications, incorrect sales strategy, high distribution costs.

The long-term hybrid aggression of the Russian Federation against Ukraine has highlighted new challenges for the economy. In this regard, a new classification criterion for threats to the financial security of business entities has been proposed – by the nature of manifestation and multiplicity of properties. According to this criterion, two types of threats are distinguished:

– simple threats – classical, clearly identified destructive factors;

– hybrid threats – complex, multidimensional phenomena arising from the evolution and synergistic interaction of different elements, properties, and characteristics.

A lack of knowledge about the sources of hybrid threats distorts the perception of the security of key areas of enterprise activity. At the same time, the institutional weakness of processes for their identification, assessment, and mitigation significantly reduces the overall level of financial security of business. At the current stage, business entities rarely face isolated, single challenges. Usually, their financial condition is affected by a complex of interrelated factors, most of which are hybrid in nature.

Enterprise security includes protection both from direct threats and from potential risks. In the economic sphere, the category of "risk" is inextricably linked with situations of choice

and the need to make managerial decisions [421]. Modern science views economic risk as a synergy of objective and subjective factors that require overcoming uncertainty and internal contradictions.



Fig. 2.10 - Main types of financial risks[422, 423]

An essential element of this concept is the assessment of the probability of achieving goals under the influence of controllable and uncontrollable factors. Thus, the basic

[421] Kuzenko T.B. Financial interests and threats to the financial security of business entities. *Finance, banking, insurance and the stock market*. Issue 93. 2025. P.172-178.

[422] Kuzenko T.B. Financial interests and threats to the financial security of business entities. *Finance, banking, insurance and the stock market*. Issue 93. 2025. P.172-178.

[423] Radzikhovska L. M., Ivashchuk O. V. The essence of the concept of "economic risk": retrospective and modernity. *Economic Journal-XXI.* 2015. №7-8(1). Pp. 4

components of risk are the alternativeness of developments and the need to choose a specific decision [423, 424].

The main types of financial risks of an enterprise include the following (Fig. 2.10).

To reduce the negative impact of financial risks, enterprises use the following main risk management methods:

Risk avoidance – complete elimination of the possibility of a financial threat through changes in management policy.

Risk limitation – establishing internal restrictions and standards for financial operations associated with a critical level of threat.

Diversification – allocation of resources among different objects to reduce the impact of specific (unsystematic) risks.

Transfer (risk shifting) – transferring responsibility for risks to other entities (partners or insurance companies) through contractual agreements.

Self-insurance – formation of internal reserve funds by the enterprise to independently cover potential losses.

Among the key factors of effective risk mitigation is the timely and accurate identification of threats to the financial interests of the enterprise[425]. A systematic analysis of various threats to financial activity requires a comprehensive approach that includes several key stages:

– assessment of both internal and external threats;

– determination of the probable consequences of their impact on financial activity;

[424] Kozak L.S. Bagrovetska I.V. Conceptual and methodological principles of forming a mechanism for ensuring the financial security of an enterprise. *Economics and Management*. 2008. №13. P. 97-101.

[425] Kuzenko T.B. Financial interests and threats to the financial security of business entities. *Finance, banking, insurance and the stock market*. Issue 93. 2025. P.172-178.

– formation of a system of preventive managerial decisions that will facilitate the enterprise's rapid adaptation to changes in the environment [426].

Table 2.11 systematizes the key financial interests of the enterprise and measures aimed at neutralizing threats to its security.

Based on the identification of destructive factors that hinder the achievement of strategic goals, a set of actions has been developed to strengthen the financial stability of the business entity. Modern assessment tools provide broad opportunities for in-depth analysis of the enterprise's financial activity, timely identification of threats, and justification of managerial decisions.

In economic science, there is still no unified approach to determining its level. This is due to the large number of components of financial security and the varying specifics of enterprises themselves. As a rule, the analysis is carried out in stages for each individual component; therefore, forming a generalized conclusion is often quite difficult.

Nevertheless, in management practice, a clear set of effective diagnostic tools has been formed:

Expert assessment method – determines the integral level of company reliability and calculates entrepreneurial risks;

Scenario analysis – models possible developments depending on environmental changes, creating a basis for adaptive management;

Optimization methods – find extreme (best or least risky) values of indicators within given constraints;

[426] Antonenko V.M. Financial result as a factor of influence on the financial security of an enterprise. Municipal economy of cities. 2013. № 108. P. 350-359.

Table 2.11 - Countermeasures against threats to achieving the financial interests of the enterprise

Financial interest	Threat	Countermeasures against threats
1	*2*	*3*
1. Growth in the market value of the business entity	1. Reduction in market capacity; 2. Decrease in consumers' purchasing power for products	1. Increase in the market price of the enterprise's shares; 2. Improvement of the enterprise's image and brand; 3. Increase in investment in fixed assets; 4. Reduction in the cost of capital attraction; 5. Optimization of cash flows
2. Maximization of the enterprise's profit while ensuring profit quality	1. High cost of raising financial resources; 2. Shortage of qualified personnel	1. Minimization of budget contributions; 2. Optimization of dividend payments; 3. Timely and full repayment of loans; 4. Reduction of production and sales costs; 5. Rationalization of sources of financing for production development; 6. Innovation of the business entity; 7. Achievement of current and strategic competitiveness of the enterprise; 8. Satisfaction of the interests of owners and employees of the enterprise

Continuation of the table 2.11

1	*2*	*3*
3. Ensuring the enterprise with fixed and working capital, and maintaining an optimal ratio between equity and borrowed capital	1. Slowing of payment turnover; 2. Ineffective financing policy	1. Effective conduct of commercial activity; 2. Increase in profit; 3. Increase in liquidity; 4. Adjustment of the financial leverage ratio; 5. Identification of the most effective sources of funding; 6. Generation of additional profit; 7. Compliance with the "golden financing rule" through maximization of the coverage ratio
4. Providing the business entity with investments.	Ineffective innovation and investment policy	1) development of production (goods, works, services); 2) introduction of scientific and technical achievements into economic activity.
5. Optimization of deductions of a business entity to the budget.	Ineffective tax policy	1) reduction in accordance with current legislation of the amount of tax payments to the budget; 2) reduction of mandatory payments to special state funds

Source: [427]

Multivariate statistical analysis – predicts risks through correlation, regression, clustering, and time series analysis;

[427] Marchenko O.M. Current threats to the financial and economic security of business entities. *Scientific Bulletin.* 2011. №6. P. 171-184.

Artificial neural networks – analyze complex nonlinear relationships and effectively process large datasets with multiple variables;

Game-theoretic approaches – model decision-making under conditions of conflicting interests, where the actions of parties are interdependent.

In the scientific literature, three main approaches to assessing the financial security of an enterprise are distinguished, each of which has its own advantages and limitations [428]:

The indicator approach is based on comparing the actual financial indicators of an enterprise with their benchmark (threshold) values. The main problem of this approach is the lack of a universal methodology for forming indicators. Standard templates do not take into account the industry, capital structure, or ownership form; therefore, the criteria must be constantly revised manually.The resource-functional approach analyzes the efficiency of using all company resources through the lens of protecting its corporate interests. This approach provides comprehensive coverage and detailed monitoring of all internal processes. However, due to its excessive breadth, it blurs the boundaries of financial security itself. In addition, the analysis strongly depends on the subjective opinions of experts.

The profitability approach considers the presence of net profit as the main criterion of security, while losses are seen as a direct threat of bankruptcy. Profit clearly demonstrates a company's ability to develop, self-finance, and adapt to the market. However, profit alone is an absolute indicator. At the same time, it does not show the real efficiency of asset utilization and hides the level of financial risks.

[428]Kuzenko T.B. Financial interests and threats to the financial security of business entities. *Finance, banking, insurance and the stock market*. Issue 93. 2025. P.172-178.

For an objective assessment of the level of financial security of an economic entity, it is necessary to integrate different methodological tools, taking into account the sectoral and operational characteristics of its functioning. Such an approach improves the quality of management and ensures its long-term growth (Table 2.12).

To assess the efficiency of economic activity and the financial stability of an enterprise, profit is traditionally compared with costs and invested capital using profitability indicators. However, the results of such analysis only partially reflect the level of financial security. First, profitability focuses on internal factors (technological level, management quality, and employee productivity), while leaving aside the balance of interests with external stakeholders. Second, this analysis is retrospective in nature, as it is based on historical data and does not allow for a full assessment of the current market position of the business entity. Profitability of costs and capital does not provide a complete picture of the protection of an enterprise's financial interests. Benchmarking has similarly limited accuracy. Comparable enterprises often cannot be adequately compared due to differences in their scale, capital structure, industry affiliation, and internal financial priorities.

A separate methodological approach to assessing the financial security of an enterprise is based on comparing the volume of investments with the funds allocated to ensure it. Within this approach, financial security is viewed through the prism of expanded capital reproduction.

This serves as a fundamental condition for harmonizing the financial interests of the business entity with the external environment and makes it possible to identify its specific levels.

A generalization of existing methodological approaches has shown that an objective and comprehensive diagnosis of an enterprise's financial security requires the use of a system of indicators. This system should include indicators of:

- financial stability;
- solvency;
- profitability;
- business activity.

Table 2.12 - Approaches to determining the level of financial security of an enterprise

Methodological approach (author)	Advantages	Disadvantages
1	*2*	*3*
Indicator approach	Provides the ability to take into account a wide range of indicators and covers the main areas of the enterprise's activity.	However, it is limited by the lack of a clearly defined methodological framework for determining indicator values, which requires constant updating; as well as the absence of a generalized conclusion regarding the integral level of financial security.
Resource-functional approach	Provides comprehensive consideration of the main indicators of an enterprise's economic security and convenience in interpreting evaluation results.	However, it is affected by the subjective influence of expert judgment when determining weighting coefficients; the combination of indicators of different nature may distort the reliability of the assessment; and the use of a linear model does not always adequately reflect the actual level of security.
Program-targeted management approach for enterprise development	The use of multidimensional analysis contributes to improving the validity and accuracy of the assessment.	However, it is characterized by the complexity of analysis and the difficulty of evaluating the stability of the aggregated integral indicator within a specified range of its variation.

Continuation of the table 2.12

1	*2*	*3*
Investment approach	Allows drawing conclusions regarding the feasibility of individual measures to strengthen the economic security.	However, it insufficiently takes into account the security level of most (except investment) functional components of the enterprise's economic security
Risk assessment and management approach	Allows determining the level of risk as the probability of threats to the enterprise's activity.	However, insufficient attention is paid to assessing the economic efficiency of the enterprise's operations and the use of its resource provision as prerequisites for its economic security.
Presence of net profit approach	Simple to assess	However, it does not take into account many non-economic functional components of security (physical, information, institutional-legal, etc.) or risk forecasting.
Probability of enterprise bankruptcy approach	Allows assessing the probability of bankruptcy as a key indicator of security.	However, it does not take into account individual components of economic security, as well as the duration of the enterprise's pre-bankruptcy state.
Enterprise valuation using the income approach	Ensures continuous monitoring of the security status, taking into account solvency and business risk.	However, there is an indirect relationship between changes in the market value of the enterprise and its level of economic security.

Source: [429].

[429] Kuzenko T.B. Financial interests and threats to the financial security of business entities. *Finance, banking, insurance and the stock market*. Issue 93. 2025. P.172-178.

Thus, no single approach is capable of ensuring absolute accuracy of assessment. An effective analysis must be comprehensive and combine the study of internal parameters of enterprise activity with monitoring of external environmental factors.

In conditions of economic instability, financial interests are the main driver of enterprise development. Their protection directly depends on the speed of identifying and neutralizing threats. A classification of key threats to financial security has also been developed, and their negative impact on business processes has been assessed. To study the level of security, a comprehensive assessment must be carried out, taking into account both the external and internal environment. Ways of reducing risks and strengthening financial stability have also been examined, which can be implemented in company management to enhance their competitiveness.

Political and economic crises have deprived most Ukrainians of a sense of financial stability. The onset of full-scale war and the introduction of martial law have generated real risks and threats to business activity [430].

When examining the essence of the concept of "enterprise financial security," authors typically adapt the concept of state financial security to the micro level:

Financial security of enterprises is presented as a mechanism that, on the one hand, ensures the stability of an entity's financial system through the use of protective financial instruments, and on the other hand ensures its efficiency through

[430] Arefieva O.V., Kuzenko T.B. Planning the economic security of enterprises. Kyiv: Publishing House of the European University, 2014. 150 p.

the organization of rational use of financial resources [431, 432, 433]. The Resolution of the Cabinet of Ministers of Ukraine dated 05.08.2020 No. 695 "On Approval of the State Regional Development Strategy for 2021-2027" defines performance indicators and sets the goal of "Effective public administration in the field of regional development" [79]. Financial security of an enterprise is an integral component of economic security; it is a dynamic element that changes under the influence of factors and threats from both the internal and external environment. The formation of an enterprise's financial security ensures its stable operation and creates conditions for increasing its economic potential[434]. A significant number of researchers limit their studies to individual functional components of financial security, in particular its tasks, functions, and implementation tools. However, it is necessary to take a comprehensive approach to this issue, conceptually identifying all aspects and factors that may influence the level of an enterprise's financial security [435, 436].

[431] Vasyliev A.A., Galenko V.M. Financial security of agricultural enterprises of Ukraine under the legal regime of martial law. Economy and society. 2022. Issue 45. DOI: https://doi.org/10.32782/2524-0072/2022-45-63.

[432] Demchenko I.V. Strategic management of the financial security of a business entity. URL: http://www.napks.edu.ua/library/compilations_vak/nvfbi/2010 /2/p_43_46.pdf

[433] Koval N.I., Radchenko O.D. Financial analysis of the rating of agricultural development of regions of Ukraine. *Economics, Finance, Management: Current Issues of Science and Practice.* 2022. №2 (60). P. 67-79. DOI: 10.37128/2411-4413-2022-2-5.

[434] Golikov I.V. The Essence and Evolution of the Concept of Economic Security. *Problems of Economy.* 2014. №1. P. 309-314.

[435] Vasyliev A.A., Galenko V.M. Financial security of agricultural enterprises of Ukraine under the legal regime of martial law. Economy and society. 2022. Issue 45. DOI: https://doi.org/10.32782/2524-0072/2022-45-63.

[436] Demchenko I.V. Strategic management of the financial security of a business entity. URL: http://www.napks.edu.ua/library/compilations_vak/nvfbi/2010 /2/p_43_46.pdf

Table 2.13 - Principles of managing the financial security of an enterprise

Principles of Financial Security	
Program-target approach	Use of specific programs to achieve strategic security objectives
Priority of financial interests	Mandatory inclusion of the company's financial interests in its overall mission
System integration	Integration of financial security mechanisms into the overall financial management system
Balance of interests	Alignment of the objectives of the enterprise, its individual departments, and each employee
Continuous monitoring	Ongoing tracking of actual and potential threats in real time
Strategic alignment	All measures must correspond to the overall economic strategy and business mission
Coordination of actions	Clear organization and control over the implementation of financial protection plans
Feedback availability	Ability to adjust actions based on obtained results and new data
Economic efficiency	Minimization of costs for building the protection system without reducing its quality

Source: systematized by the author based on [437, 438, 439]

Economic security is a multifaceted category. It protects all company processes – from financial stability to the preservation of intellectual capital. Thus, V. I. Kyrylenko defines economic security as a process of achieving such a balanced state of the system in which there are no factors that pose a threat of its destruction [440]. This scholar focuses on the

[437] Vasyliev A.A., Galenko V.M. Financial security of agricultural enterprises of Ukraine under the legal regime of martial law. Economy and society. 2022. Issue 45. DOI: https://doi.org/10.32782/2524-0072/2022-45-63.

[438] Pravdyuk N.L., Mulyk T.O., Mulyk Ya.I. Management of financial security of enterprises: accounting and analytical aspect: monograph. Kyiv: Center for Literary Studies, 2019. 224 p.

[439] N.I. Koval, K.V. Korniyuk. Ensuring financial security of an enterprise in wartime: problems and features. A*GROSVIT*. №4, 2024. P. 152-158. file:///C:/Users/admin/Downloads/A+4-2024_St20.pdf

[440] Kyrylenko V.I. Investment component of economic security: monograph. Kyiv: KNEU, 2005. 232 p.

equilibrium state of the system; however, long-term existence in such a state is impossible. Constant influence of external and internal factors moves business entities out of equilibrium; therefore, focusing on it is not appropriate for the effective management of modern systems. The principles of managing the financial security of an enterprise are presented in Table 2.13.

According to I. Holikov, economic security is a dynamic component of the economy that adapts to the requirements of its time [441]. This viewpoint is worth agreeing with, since in conditions of uncertainty, enterprises must adapt to risks and protect assets from crisis phenomena, while maintaining solvency, increasing profits, ensuring flexibility of supply chains, and managing costs. I. Holikov also notes that the current stage of development of our state requires, for ensuring economic security, taking into account the specific characteristics of the object of study under conditions of emerging negative phenomena with features of uncertainty and risk, which causes deviations of the state of economic security from the planned one [442]. While sharing the author's view on the dynamic nature of the category "security," we also note that it should not be interpreted as a structural element of the economy or any other system. Security is not an element, but rather a dynamic state or the system's ability to withstand threats.

Contemporary economic and political challenges in Ukraine have significantly intensified this issue, leading to increased financial vulnerability and insecurity among the population. In particular, the onset of military actions and the introduction of martial law have generated real risks and threats

[441] Golikov I.V. The Essence and Evolution of the Concept of Economic Security. *Problems of Economy.* 2014. №1. P. 309-314.

[442] Golikov I.V. The Essence and Evolution of the Concept of Economic Security. *Problems of Economy.* 2014. №1. P. 309-314.

to business activity [443]. Most researchers, when forming the conceptual and categorical apparatus of enterprise financial security, use a deductive approach: they take the concept of state security as a basis and transfer its key characteristics to the microeconomic level, namely: "In general, financial security of enterprises is presented as a mechanism that, on the one hand, ensures the stability of an entity's financial system through the use of protective financial instruments, and on the other hand ensures its efficiency through the organization of rational use of financial resources" [444], [445].

When analyzing enterprise financial security, some scholars focus on financial interests and financial flows, concentrating on the study of corporate finance [446, 447].

In our opinion, the main components of the financial and economic mechanism for ensuring enterprise financial security should include the following elements, Table 2.14.

Based on the conducted research, it is appropriate to agree with the definition provided by H. V. Solomina. Taking into account the specifics of the components of the financial and economic security mechanism of a business entity, the researcher formulates this concept as follows:a system of methods, levers, instruments, and ways of functioning of a

[443] Chibisova I.V., Ivashina E.M. Mechanism for ensuring the financial security of an enterprise. *Problems of increasing the efficiency of infrastructure.* 2011. №31. URL: https:// jrnl.nau.edu.ua/index.php/PPEI/article/view/347

[444] Chibisova I.V., Ivashina E.M. Mechanism for ensuring the financial security of an enterprise. *Problems of increasing the efficiency of infrastructure.* 2011. №31. URL: https:// jrnl.nau.edu.ua/index.php/PPEI/article/view/347

[445] Potapyuk I. P. Theoretical and methodological foundations of the formation of the mechanism for ensuring the economic security of the enterprise. *Economic Forum. Lutsk: Research Institute of Lutsk National Technical University*, 2020. № 4. P. 125-130.

[446] Kyrylenko V.I. Investment component of economic security: monograph. Kyiv: KNEU, 2005. 232 p.

[447] Pravdyuk N.L., Mulyk T.O., Mulyk Ya.I. Management of financial security of enterprises: accounting and analytical aspect: monograph. Kyiv: Center for Literary Studies, 2019. 224 p

business entity under which its financial interests are sustainably ensured.

Table 2.14 - Components of the financial and economic mechanism

The financial and economic mechanism consists of three blocks:	
Forms the methodological foundation of management	It includes principles, methods, and tools, as well as a support system comprising legal, analytical, and technical resources necessary to maintain the enterprise's financial stability. Functional and analytical block
Functional and analytical block	The functional-analytical toolkit is aimed at a comprehensive assessment of the financial security status of a business entity. It not only enables the identification of current threats but also forms, on this basis, a strategic concept for risk mitigation. Special attention is paid to analytical justification and the integration of the selected strategy into the overall management framework of the enterprise.
Control and monitoring block	Ensures the tracking of the implementation of the financial security strategy and its operational adjustment. Evaluating the effectiveness of selected measures makes it possible to timely adapt the strategy to new conditions. The priority task is continuous monitoring of the implementation process of planned actions.

Source: systematized by the author based on [448, 449, 450]

In other words, the mechanism is understood as an objectively existing, inherent to the business entity, dynamic systemic formation that can be used to influence its

[448] Vasyliev A.A., Galenko V.M. Financial security of agricultural enterprises of Ukraine under the legal regime of martial law. Economy and society. 2022. Issue 45. DOI: https://doi.org/10.32782/2524-0072/2022-45-63.

[449] Pravdyuk N.L., Mulyk T.O., Mulyk Ya.I. Management of financial security of enterprises: accounting and analytical aspect: monograph. Kyiv: Center for Literary Studies, 2019. 224 p.

[450] N.I. Koval, K.V. Korniyuk. Ensuring financial security of an enterprise in wartime: problems and features. A*GROSVIT*. №4, 2024. P. 152-158. file:///C:/Users/admin/Downloads/A+4-2024_St20.pdf

development while ensuring the parameters of this development.

The conditions of existence of the business entity, as well as the presence of external and internal threats, are not predetermined; however, stability must be achieved even under conditions of danger and threats;

a system of financial methods, levers, instruments, and ways of achieving such a financial state of a business entity that is characterized by resilience to external and internal dangers and threats.

Thus, the financial and economic security mechanism is understood as a subjective-objective, static system of hierarchically subordinated financial methods and instruments that are used or may be used to influence its functioning and development [451].

Ensuring the financial stability of an enterprise is a critical factor for both its tactical and strategic development. The efficient and profitable activity of every business entity forms the foundation of the economic well-being of the entire country.

In our view, the features of ensuring the financial security of an enterprise under martial law conditions (Fig. 2.11) are as follows.

To develop an effective system of financial and economic security for enterprises during wartime, it is important to clearly define the essence of this concept, the key influencing factors, and the interrelationship between its individual elements

The multifaceted nature of financial security and the complexity of selecting optimal protection tools require the use of a comprehensive scientific approach. To achieve a high level of dynamic competitiveness of enterprises, it is necessary to improve their conceptual and methodological framework.

[451] Solomina G.V. Ensuring the financial and economic security of an enterprise: a textbook. Dnipro: DDUVS, 2018. 234 p.

Specifics of Ensuring an Enterprise's Financial Security During a Military Conflict
the financial security strategy is formulated taking into account not only the enterprise's internal factors but also the external vectors of state governance and military-economic policy
the emergence of an imminent threat of physical destruction or loss of a business entity’s assetsa situation of critical importance for enterprises in frontline regions and combat zones.
high volatility and instability of the national currency exchange rate, which significantly complicates financial planning and forecasting.
significant complication, blockage, or critical increase in the cost of processes for the export and import of goods and raw materials.

Fig. 2.11 - Mechanisms for maintaining the financial stability of business entities during a military conflict

Source: developed by the author based on [452, 453, 454]

H. V. Solomina proposes using both traditional and non-traditional approaches to assess the level of an enterprise’s financial security under martial law conditions, Fig. 2.12 [455].

This applies both to assessing the level of security and to increasing the effectiveness of measures aimed at strengthening

[452] Pravdyuk N.L., Mulyk T.O., Mulyk Ya.I. Management of financial security of enterprises: accounting and analytical aspect: monograph. Kyiv: Center for Literary Studies, 2019. 224 p.

[453] N.I. Koval, K.V. Korniyuk. Ensuring financial security of an enterprise in wartime: problems and features. A*GROSVIT*. №4, 2024. P. 152-158. file:///C:/Users/admin/Downloads/A+4-2024_St20.pdf

[454] Chervyakov I.M., Medesch M.M. Financial security as a component of the economic security of the state. *Bulletin of the Criminological Association of Ukraine.* 2004. №1(4). P. 125-130.

[455] Hybrid threats to Ukraine and public security. Experience of the EU and the Eastern Partnership. Analytical document / edited by V. Martynyuk; Center for Global Studies “Strategy XXI”. Kyiv, 2018. 105 p.

it. Special attention should be paid to strategic priorities within the organizational and economic mechanism for protecting entities engaged in financial and economic activity, taking into account current economic and legal realities.

Classical (traditional) methods for assessing the economic security of an enterprise	**Neoclassical (non-traditional) methods for assessing the economic security of an enterprise**
Assesses the company's overall operational efficiency and continuity. Analyzes business performance and asset preservation amidst active hostilities. Determines the enterprise's solvency, liquidity, and financial stability. Identifies early signs and symptoms of a deep organizational crisis. Applies mathematical and analytical models to assess the risk of liquidation.	Comparing investment costs with the volume of resources required to protect the enterprise; Calculating market value and the level of capital protection; Comprehensive monitoring and identification of systemic war-related risks.

Fig. 2.12 - Instruments for ensuring the financial stability of enterprises under martial law

Source: developed by the author based on [456] [457], [458]

[456] N.I. Koval, K.V. Korniyuk. Ensuring financial security of an enterprise in wartime: problems and features. A*GROSVIT*. №4, 2024. P. 152-158. file:///C:/Users/admin/Downloads/A+4-2024_St20.pdf

[457] Solomina G.V. Ensuring the financial and economic security of an enterprise: a textbook. Dnipro: DDUVS, 2018. 234 p.

[458] Bortnyk S.M. Legal provision of financial security. Current issues of financial security: collection of abstracts of the International Scientific and Practical Conference (Vinnytsia, March 27, 2023). Vinnytsia: KhNUVS, 2023. 216 p.

Financial and economic security of an enterprise is a dynamic and complex phenomenon. Its provision requires continuous monitoring of the financial condition in order to respond promptly to challenges caused by military factors, state reforms, fluctuations in the global market, globalization of financial flows, and the external political environment.

Under martial law conditions and subsequent recovery, business viability directly depends on the ability to operate in a secure environment. To achieve this, it is necessary to clearly identify threats and develop mechanisms for their prevention and mitigation, based on the specifics of legal regulation in the economic sphere.

At the enterprise level, ensuring financial and economic security during wartime has several key features:

Geopolitical dimension: business protection strategies now take into account not only internal factors but also global political processes. Physical risks: there is a real threat of destruction of assets and the enterprise itself, which is critical for frontline areas. Currency instability: constant exchange rate fluctuations significantly complicate financial planning. Logistical barriers: export and import operations are severely complicated due to the disruption of established supply chains.

Thus, the financial and economic security of an enterprise is a multi-level system. It combines various tools to optimize management and protect all available resources of the company.

SECTION 3.
GREEN FINANCE, FINANCIAL LEASING AS INSTRUMENTS OF INVESTMENT DEVELOPMENT AND POST-WAR ECONOMIC RECOVERY OF UKRAINE

3.1. GREEN FINANCE INSTRUMENTS FOR FOOD SECURITY: UKRAINE'S AGRARIAN SECTOR IN THE CONTEXT OF EU INTEGRATION

Introduction

The full-scale war waged against Ukraine has reframed the country's agrarian sector as a matter not merely of economic output but of national and international food security. Even under occupation of farmland, destruction of storage and logistics, and the blockade of Black Sea routes, Ukrainian agriculture retained its systemic role: agri-food products accounted for roughly 59% of national merchandise exports in 2024, with export value reaching about USD 24.5 billion and physical volume of 78.3 million tonnes.[459] Yet the share of agriculture, forestry and fisheries in gross domestic product declined from a pre-invasion level of 10.9% in 2021 to about 7.1% in 2024,[460] signalling that this relative resilience appears to have come at the cost of capital depletion, deferred investment and accumulating environmental liabilities.

This chapter advances a single proposition: that green finance instruments — instruments whose proceeds or pricing are explicitly tied to environmental and sustainability outcomes — are not a peripheral "ethical" add-on but a strategic mechanism for safeguarding the food security of Ukraine and,

[459] Ministry of Agrarian Policy and Food of Ukraine (2025), *Agri-food export statistics for* 2024.
[460] UkraineInvest (2025), *Agrifood*.

by extension, of the import-dependent markets it supplies. The proposition is examined through the lens of European integration, because the architecture into which Ukrainian agrarian finance is being drawn — the European Green Deal, the Common Agricultural Policy (CAP), the EU Taxonomy and the Ukraine Facility — simultaneously conditions access to capital and defines the sustainability criteria that capital must satisfy. The analysis deliberately does not reproduce the author's doctoral research on the mechanism of financial provision for sustainable agrarian development; rather, it isolates and tests one of its core hypotheses under the specific category of food security.

The conceptual nexus between green finance and food security

Food security is understood here in the canonical FAO formulation, as the condition in which all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food. Its four classical dimensions — availability, access, utilization and stability — have been complemented by the more recent dimensions of agency and sustainability.[461] Green finance, in turn, denotes the set of financial instruments and intermediation practices that direct capital towards activities with measurable environmental benefit: green and sustainability-linked bonds, green and ESG-linked bank lending, blended-finance vehicles, and conditional public transfers such as CAP-type eco-scheme payments.

The two concepts intersect through identifiable transmission channels rather than through rhetorical affinity. Lower-cost, longer-maturity green capital relaxes the financing constraint on climate-resilient inputs, irrigation, no-till technologies and modern storage; ESG-conditional finance pushes producers towards practices (soil conservation, reduced

[461] FAO (2009), *Declaration of the World Summit on Food Security*; HLPE (2020), *Food security and nutrition: Building a global narrative towards 2030*.

agrochemical intensity, traceability) that protect long-run productive capacity and unlock access to environmentally regulated EU markets. Each channel maps onto one or more food-security dimensions. Figure 3.1 formalises this mapping.

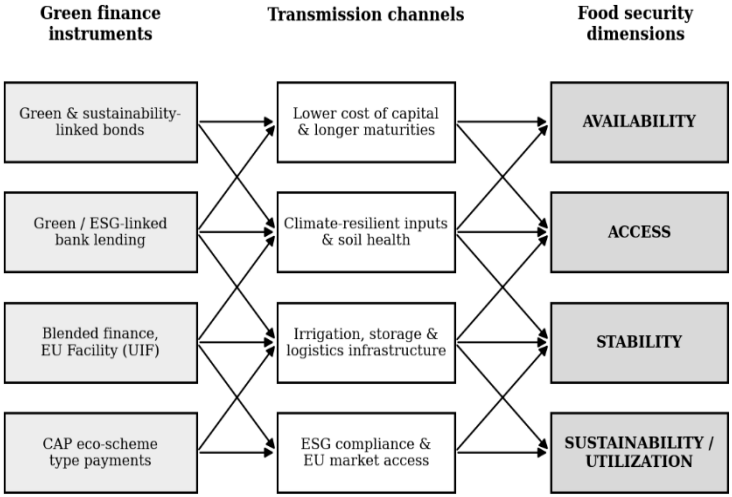


Fig. 3.1. Transmission channels from green finance instruments to the dimensions of food security

Source: compiled by the author.

Food security and Ukraine's agrarian sector under war

The wartime trajectory of the sector is one of contraction in relative weight alongside the preservation of absolute export capacity. Grain and oilseed exports reached 61.5 million tonnes in 2024, about 20% above the previous year, with roughly 79% of total exports moving through Black Sea ports despite continued attacks.[462] At the same time, the global share of Ukrainian maize fell from above 30% in 2018/2019 towards an estimated 24% in 2024/2025, and the wheat share from 16% to

[462] Centre for Economic Strategy (2025), *Ukrainian economy in 2024*.

about 15%,[463] while earlier in the war the EU "Solidarity Lanes" had carried much of Ukraine's agricultural exports, before this in turn triggered trade frictions with neighbouring member states[464]. Table 3.1 summarises selected indicators framing the food-security context.

Table 3.1 - Selected indicators of Ukraine's agri-food sector, 2021 and 2024

Indicator	2021	2024
Agri-food exports, USD bn	27.7	24.5
Agri-food exports, % of total exports	≈44.0	59.0
Physical export volume, mln t	≈60.0	78.3
Share of agriculture in GDP, %	10.9	7.1
Grain & oilseed exports, mln t	≈48.0	61.5
FDI stock in agriculture, USD bn	≈3.0	3.3

Source: compiled by the author from the Ministry of Agrarian Policy and Food of Ukraine (2025); UkraineInvest (2025); Centre for Economic Strategy (2025); and European Parliamentary Research Service (2024). "≈" denotes approximate / order-of-magnitude values.

The longer view (Figure 3.2) shows that the structural weight of agriculture had already become volatile before 2022; the war accelerated a decline that began after the 2015 peak. The implication is twofold: the sector remains a strategic guarantor of food availability, yet its capacity to finance its own modernisation from retained earnings is eroding. This is precisely the gap that external, sustainability-conditioned capital is positioned to fill.

[463] Farmdoc daily (2024), *1,000 days of the Ukraine–Russia war* (USDA WASDE, 2024/2025).
[464] European Parliamentary Research Service (2024), *Ukrainian agriculture*.

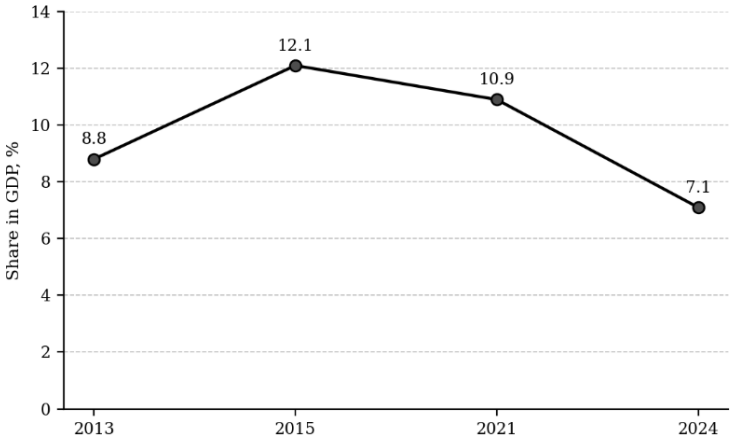


Fig. 3.2 - Share of agriculture, forestry and fisheries in Ukraine's GDP, selected years, %

Source: compiled by the author from World Bank, World Development Indicators — agriculture, forestry and fishing, value added (% of GDP), Ukraine (indicator NV.AGR.TOTL.ZS), for the indicated years.

Green finance instruments and their applicability to Ukrainian agriculture

Not every green instrument is equally deployable in a wartime, high-risk sovereign environment. The relevant filter is the combination of three properties: the instrument's tolerance of country and security risk, the maturity of the domestic institutional infrastructure required to issue or verify it, and the food-security dimension it most directly serves. Ukraine's public debt rose from 51% of GDP in 2021 to above 90% in 2024,[465] the average non-performing-loan ratio approached 35%, and the longest "on-the-run" domestic bond carried a maturity of only a few years,[466] which jointly constrain purely

[465] OECD (2025b), *OECD economic surveys: Ukraine 2025*.

[466] OECD (2025a), *Mapping Ukraine's financial markets and corporate governance framework for a sustainable recovery*.

market-based issuance and elevate the role of blended and guarantee-backed structures such as the Ukraine Investment Framework[467]. Table 3.2 maps the principal instruments against these criteria.

Table 3.2 - Green finance instruments mapped to food-security dimensions and applicability

Instrument	Primary mechanism	FS dimension	Readiness
Green / sustainability-linked bonds	Lower cost of long-term capital for irrigation, storage, processing	Availability, Stability	Low–medium
Green & ESG-linked bank loans	Conditional credit rewarding resource-efficient practices	Access, Sustainability	Medium
Blended finance / EU Facility (UIF)	Public guarantees crowd in private capital under high risk	Availability, Stability	Medium–high
CAP-type eco-scheme payments	Direct transfers tied to climate-friendly farming	Sustainability, Access	Low (pre-accession)

Source: compiled by the author. Readiness reflects the maturity of the institutional and market infrastructure required for deployment in Ukraine.

The pattern is instructive. Instruments that depend on deep domestic capital markets and reliable ESG verification — standalone green bonds above all — score lowest on readiness, notwithstanding their theoretical capacity to lower the cost of capital.[468] Instruments that import institutional capacity from abroad, by contrast — blended finance under the Ukraine Facility, donor green-recovery programmes channelled through municipalities and banks[469] — are deployable now and already

[467] European Commission (2024), *The Ukraine Facility*.

[468] Wang, Ding & Cui (2025), Green bond market stability and Russia–Ukraine conflict, *Research in International Business and Finance, 74*.

[469] Nefco (n.d.), *Green recovery programme for Ukraine*.

operate at scale. The policy inference is that the green-finance pathway to food security in the near term runs through guarantee-backed, internationally anchored structures, with autonomous bond issuance a medium-term objective contingent on capital-market reform.

The EU integration context

European integration is the decisive contextual variable because it operates on both sides of the green-finance–food-security relationship. On the supply-of-capital side, the Ukraine Facility (€50 billion for 2024–2027) and its Investment Framework blend grants, loans and guarantees explicitly to create "sustainable financing conditions" for recovery, with agriculture among the backed sectors.[470] On the conditionality side, the European Green Deal and its Farm to Fork strategy define the sustainability standards — reduced agrochemical use, expanded organic area, climate-tied payments — that Ukrainian producers must approach if they are to retain EU market access; 40% of the 2023–2027 CAP plans is allocated to climate action, within a 2021–2027 CAP envelope of €386.6 billion.[471] The EU Taxonomy Regulation provides the classification system that determines what may credibly be labelled "green," and thus what Ukrainian issuers must satisfy to access sustainability-linked capital.[472]

A methodologically honest analysis must register a counter-trend. In February 2025 the Commission set out a Vision for Agriculture and Food that, against the backdrop of farmer protests, softened several of the Green Deal's most ambitious agri-environmental targets and withdrew the pesticide-reduction regulation.[473] For Ukraine this is double-edged: a less prescriptive sustainability frontier lowers near-

[470] European Commission (2024), *The Ukraine Facility*.

[471] Council of the European Union (n.d.), *Greening agriculture*.

[472] Regulation (EU) 2020/852 (2020), *Official Journal of the European Union, L 198*.

[473] European Commission (2025), *A vision for agriculture and food* (COM(2025) 75).

term compliance costs, but it also weakens the external discipline that would otherwise pull Ukrainian agrarian finance towards genuinely green allocation. The food-security payoff of green finance therefore depends not only on capital volume but on the durability of the conditionality regime that governs it[474].

A methodological framework for measuring the linkage

To move beyond narrative, the chapter proposes — without claiming to estimate it on assembled data here — an analytical framework linking green-finance intensity to a composite measure of food-security resilience at the regional level. Let X_{ij} denote the value of food-security indicator j for region i. Each indicator is first normalised by the min–max method, distinguishing stimulators from destimulators:

$$I_{ij} = \frac{X_{ij} - X_j^{min}}{X_j^{max} - X_j^{min}} \quad (3.1)$$

for stimulators, with the numerator and the leading term of the denominator reversed for destimulators. The composite Food Security Resilience Index (*FSRI*) for region i is the weighted sum of normalised indicators, the weights w_j summing to unity:

$$FSRI_i = \sum_{j=1}^{n} w_j \cdot I_{ij}, \quad \sum w_j = 1 \quad (3.2)$$

Green-finance intensity is defined as the volume of green finance directed to agriculture relative to the sector's gross value added:

$$GFI_i = \frac{GF_i}{GVA_i^{agr}} \cdot 100\% \quad (3.3)$$

The central hypothesis is then expressed as a panel specification in which food-security resilience responds positively to green-finance intensity, to ESG integration (*ESG*) and to alignment with EU sustainability frameworks (*EUI*),

[474]European Commission (2020), *A farm to fork strategy* (COM(2020) 381); European Commission (2019), *The European Green Deal* (COM(2019) 640).

conditional on a vector of controls Z (war intensity, logistics access, public subsidy):

$$FSRI_{it} = \alpha + \beta_1 GFI_{it} + \beta_2 ESG_{it} + \beta_3 EUI_{it} + \gamma Z_{it} + \mu_i + \varepsilon_{it} \quad (3.4)$$

where μ_i captures region fixed effects and ε_{it} is the idiosyncratic error. The hypothesis predicts $\beta_1, \beta_2, \beta_3 > 0$. It is essential to state the evidentiary boundary plainly: this framework is a testable design, not an estimated result. Robust estimation requires a regionally disaggregated green-finance series that Ukraine does not yet systematically publish, and the war introduces structural breaks and measurement gaps that no specification can fully neutralise. Acknowledging that boundary is itself part of the methodological contribution — it identifies the data infrastructure whose construction is a precondition for evidence-based green-finance policy.

Institutional barriers and discussion

The framework above presumes a functioning channel from instrument to outcome; in Ukraine that channel is partially obstructed. The principal barriers are the absence of a domestic green-bond verification and taxonomy-alignment infrastructure, the elevated and non-diversifiable security risk that widens spreads on any sovereign-linked instrument, the shallowness and short maturity of the domestic debt market, and the institutional fragmentation between agrarian, financial and environmental authorities.[475] These are not arguments against green finance but a specification of the sequence in which it can work: international guarantee structures first, regulatory and verification capacity second, autonomous market issuance third. Trade-policy volatility — illustrated by the on-again, off-again restrictions on Ukrainian grain in neighbouring EU states[476] —

[475]Maslak, N. (2026). Innovatsiini finansovi instrumenty klimatychno-oriientovanoho ahrosektoru: Adaptatsiia dlia Ukrainy [Innovative financial instruments for the climate-oriented agricultural sector: Adaptation for Ukraine]. (in Ukrainian)

[476] VoxUkraine (2025), *Ukrainian agribusiness: Between the challenges of war and market opportunities*.

adds a further reminder that the access and stability dimensions of food security depend on institutional reliability as much as on capital.

The discussion converges on a position that is neither techno-optimist nor dismissive. Green finance can materially strengthen the availability and stability dimensions of food security by financing storage, irrigation and climate-resilient inputs, and can strengthen the sustainability dimension through ESG conditionality; its effect on the access dimension is more indirect, mediated by prices and by the trade regime. The magnitude of these effects in Ukraine is, at present, an open empirical question rather than an established fact.

Conclusions

Three conclusions follow. First, green finance is best understood, in the Ukrainian wartime and pre-accession setting, as an instrument of food security rather than a separate environmental agenda: its transmission channels map directly onto the availability, stability and sustainability dimensions of food security. Second, the binding constraint is institutional rather than conceptual — the near-term pathway runs through blended and guarantee-backed structures anchored in the Ukraine Facility, because the domestic conditions for autonomous green-bond issuance are not yet in place. Third, the European integration context is simultaneously the chief enabler and the chief source of uncertainty: it supplies both the capital and the sustainability conditionality, yet the 2025 softening of the Green Deal's agri-environmental ambition shows that this conditionality is politically contingent.

The policy implication is that Ukraine should treat the construction of green-finance infrastructure — a national taxonomy aligned with EU rules, an issuance and verification capacity, and a regionally disaggregated green-finance statistics base — as a food-security investment, not merely an environmental or capital-market reform. The analytical

framework proposed here offers a means of testing, once such data exist, whether the hypothesised positive linkage between green-finance intensity and food-security resilience in fact holds. Establishing that evidence base is the natural next step, and the one on which the credibility of green-finance policy for Ukraine's agrarian sector ultimately rests.

3.2. STATE AND PROSPECTS OF DEVELOPMENT OF FINANCIAL LEASING IN UKRAINE

In the context of the deep transformation of the modern economic environment, financial leasing acquires the status of one of the basic instruments for providing business entities with long-term investment resources. Its functional purpose goes beyond the simple mechanism of updating fixed assets and is transformed into a comprehensive system of financing capital investments, which allows enterprises to carry out modernization, technological re-equipment and expansion of production capacities without the need to attract significant one-time investment costs from their own or borrowed sources.

From the perspective of financial management, leasing operations provide a more flexible distribution of cash flows over time, which has a positive effect on the liquidity and solvency of enterprises. Thanks to this, business entities get the opportunity to optimize the capital structure, reduce the burden on working capital and increase the efficiency of using financial resources in the long term.

Financial leasing acquires particular relevance in conditions of martial law, high volatility of macroeconomic indicators and general instability of financial markets.[477] In such conditions, enterprises' access to classic sources of debt

[477] Grebenyuk N. V. Development of financial leasing in conditions of economic instability. Bulletin of the Economy of Transport and Industry. 2023. No. 81. pp. 45–52.

financing, primarily bank lending, is significantly limited due to increased credit risks, stricter requirements for borrowers, and an increase in the cost of capital raised.

In this context, the leasing mechanism performs a compensatory function, providing an alternative channel of investment financing, which is less dependent on the strict conditions of the credit market. This allows enterprises to maintain the continuity of operational activities even in times of crisis, preserve production potential and avoid a critical reduction in the volume of economic activity. In addition, the use of financial leasing contributes to strengthening the financial stability of business entities, as it allows distributing the financial burden over a long period and provides a more predictable cost structure.[478] In total, this increases the adaptability of enterprises to changes in the external environment and creates the prerequisites for their stable functioning in conditions of economic turbulence.

Currently, in financial and economic science, the issues of determining the economic nature of leasing and systematizing leasing operations remain the subject of active scientific discussions. The multifaceted nature of this instrument is due to the combination of features of investment, credit, property and entrepreneurial activity in it, which determines the existence of different conceptual approaches to interpreting its essence. Representatives of domestic and foreign scientific schools focus on individual functional characteristics of leasing, considering it as a specific form of financing capital investments, a type of long-term lending or a mechanism for exercising the right to use assets (Table 3.3).

[478] Butenko V. V., Tkachenko K. D. The role of leasing in ensuring the financial stability of an enterprise. Current problems of forming accounting and analytical support for the business process management system of economic entities. Odesa: I. I. Mechnikov ONU, 2025. pp. 37–39.

Table 3.3 - Economic nature and classification of leasing transactions

Author	Theoretical approach / definition
1	*2*
Bondarenko V.M.[479]	leasing as a special form of investment, which involves the transfer of the right to use an object of property with the subsequent right to buy it, which allows business entities to gain access to fixed assets without significant capital investments.
Kuznetsova A.Ya.[480]	classification of leasing transactions according to various criteria: by form of implementation, by sources of financing, by economic essence, which provides a comprehensive understanding of the types of leasing in the economic environment.
Levchenko O.A.[481]	leasing is considered as an alternative to traditional lending, which allows you to avoid direct borrowing, reducing the risk of loss of liquidity of the enterprise.
Petrashevska A. D.[482]	leasing has features of both rental and financing, which makes it a unique mixed investment instrument, capable of flexibly adapting to the conditions of entrepreneurial activity.
Potryvaeva N.V.[483]	historical formation of leasing as an economic category, which arose as a result of the need for long-term use of property without its purchase.

[479] Bondarenko V. M., Bondarenko, L. M. The economic content of leasing and its types. Collection of scientific works of the VNAU. 2012. No. 2 (64).

[480] Kuznetsova A. Ya. Theoretical foundations and classification of leasing operations. Finance of Ukraine. 2008. No. 4. pp. 45–52.

[481] Levchenko O. A. Theoretical approaches to defining the essence and functions of leasing. Business Inform. 2017. No. 3. pp. 33–40.

[482] Petrashevska A. D., Protsey A. S., Yatskevich I. V. Comparative characteristics of the economic essence of leasing and rental. Black Sea Economic Studies. 2019. Issue 40. P. 207–210

[483] Potryvaeva N. V., Ageenko I. V. Historical aspects of foreign experience in the development of leasing relations. Modern Economics. 2017. No. 2. pp. 55–59.

Continuation of the table 3.3

1	*2*
Lisovska N.V.[484]	leasing as a component of the financial strategy of the enterprise, which allows you to increase the efficiency of management of investment resources, especially in conditions of limited access to capital.
Kulinyak I.Ya.[485]	the role of leasing as a means of restoring the material and technical base of enterprises that do not have sufficient own funds for capital investments.
Lutsiv B.L.[486]	leasing as part of the logistics and financial strategy of the enterprise, focused on reducing costs when updating fixed assets and maintaining production potential.

In scientific literature and business practice, leasing is often identified with a type of rental relationship or considered as a mechanism for acquiring property with deferred payment[487].

However, such an interpretation is simplified and does not reflect the complex economic nature of this financial instrument. Leasing relations combine elements of investment activity, long-term lending, property leasing and financial intermediation, forming a specific complex of relationships between participants in the economic process.

[484] Lisovska N. V. Financial and economic essence of leasing activity. Bulletin of KNUTE. 2010. No. 1. pp. 92–101.

[485] Kulinyak I. Ya. Analysis of the dynamics of leasing development in Ukraine. Black Sea Economic Studies. 2015. Issue 12. P. 210–214.

[486] Lucsiv B. L. Leasing and factoring as an alternative source of credit: a textbook. Kyiv: ISDO, 2016. 72 p.

[487] Pavlova A. M. Historical justification of the emergence of leasing operations and their essence. Theoretical and practical aspects of economics and intellectual property. 2012. Issue 1. Pp. 312–317.

In domestic scientific thought and current regulatory and legal support, leasing is traditionally viewed through the prism of two interrelated components - economic and legal.[488]

The legal aspect focuses on contractual relations between the lessor, the lessee and the supplier of property, while the economic approach characterizes leasing as a special form of financing capital investments and the reproduction of fixed assets. At the same time, a significant number of existing definitions reflect only individual functional characteristics of this phenomenon, which complicates the formation of its universal scientific interpretation.

The generalization of modern theoretical approaches gives grounds to define leasing as a complex system of economic and legal relations, within which the lessor acquires ownership of a certain investment object for its own or borrowed financial resources and transfers it to the lessee for temporary paid use for a period specified in the contract with the possibility of further redemption or return of the asset.[489]

This mechanism provides enterprises with access to the necessary production resources without significant one-time capital expenditures, which is especially important in conditions of limited access to bank lending.

In a market economy, financial leasing performs an important investment and reproduction function, contributing to the renewal of the production potential of business entities, the modernization of fixed assets and the increase in the technological level of production.

The use of leasing mechanisms stimulates the investment activity of enterprises, accelerates the introduction of innovative technologies and minimizes the risks associated with moral and

[488] Law of Ukraine "On Financial Leasing" No. 1201-IX dated 04.02.2021. Verkhovna Rada of Ukraine. URL: https://zakon.rada.gov.ua/laws/show/1201-20

[489] Levchenko O. V. Theoretical foundations of leasing operations as an effective means of restoring the national economy. Financial Space. 2016. No. 2 (22). P. 103–109. URL:https://fp.lnu.edu.ua/index.php/fp/article/view/501

physical wear and tear of equipment. In addition, unlike traditional forms of bank lending, leasing provides a closer relationship between the financial and real sectors of the economy, since financial resources are directly transformed into productive assets[490].

An important advantage of leasing financing is its positive macroeconomic effect[491]. By directing funds to the acquisition of real production assets, leasing contributes to the expansion of investment demand, the activation of business activity and the creation of prerequisites for sustainable economic growth.

At the same time, it is characterized by a certain anti-inflationary potential, as it ensures the capitalization of financial resources in tangible assets, reducing speculative pressure on the money market and supporting the processes of structural modernization of the national economy.[492] The interpretation of leasing in the context of the investment and credit approach is presented in Table. 3.4.

Thus, within the framework of the investment and financial concept, leasing should be considered as a specific mechanism for capital mobilization that provides business entities with the opportunity to implement investment projects without the need to incur significant one-time costs for the acquisition of fixed assets.

For users of leasing services, this tool acts as an alternative source of financing, which, in conditions of a shortage of own financial resources and limited access to bank lending, creates the prerequisites for the effective use of movable and immovable property on terms of fixed-term and paid use[493].

[490] Kyrylenko V. I. Leasing as a tool for activating the investment activity of enterprises. Finance of Ukraine. 2019. No. 6. Pp. 87–96.

[491] Blank I. O. Financial Management: Training Course. Kyiv: Nika-Center, 2017. 528 p.

[492] Bilyk M. D., Pavlov V. I. Financial leasing in the system of investment support of the economy. Finance of Ukraine. 2018. No. 4. pp. 72–80.

[493] Gavrilyuk V. M. Analysis of methods for assessing the effectiveness of leasing operations. Effective Economy. 2015. No. 6.

Table 3.4 - Interpretation of leasing as an investment financing instrument in turbulent conditions

Author	Theoretical vision of the role of leasing in the investment process
Galetska T.I.[494]	Leasing is a tool that reduces the amount of initial investment in a project, increasing the investment attractiveness of enterprises.
Gridina G.[495]	In conditions of market instability, leasing allows you to reduce the risks associated with asset ownership and acts as an adaptive financial instrument.
Razumova G.V.[496]	Leasing mechanisms are effective for implementing innovative activities, as they allow you to modernize production without significant costs.
Onyshchuk Ya.V.[497]	Leasing is a component of the development financing strategy, which is especially relevant in a crisis period when bank lending is limited.
Burkovska A.V. Palamarchuk V. Yu.[498]	Leasing is a tool for increasing flexibility in the use of fixed assets and accelerating innovative renewal.
Duchenko M.M.[499]	Leasing is a necessary component of the investment infrastructure of an enterprise, capable of reducing dependence on the banking sector.

[494] Galetska T. I. Leasing in Ukraine: historical aspect of emergence and formation. Scientific notes of the National University "Ostroh Academy". Series "Economy". 2021. pp. 390–397.

[495] Gridina G. Financial leasing: problems and development prospects in Ukraine. Traektoria Nauki. 2017. No. 9. Pp. 3019–3025.

[496] Razumova G. V., Oskoma O. V., Voloshchuk V. V. Leasing activity: problems and development prospects. Business Inform. 2021. No. 7. P. 202–207.

[497] Onyshchuk Ya. V. Development of leasing in Ukraine. Finance of Ukraine. 2019. No. 7. P. 106.

[498] Burkovska A. V., Palamarchuk V. Yu. State and prospects of the Ukrainian leasing market in the conditions of technological progress. Scientific Bulletin of the Institute of Industrial Technology and Technology of Ukraine. 2020. No. 1. pp. 133–142.

[499] Duchenko M. M. State and prospects for the development of the leasing industry in Ukraine. Effective Economy. 2019. No. 1.

Gavrilyuk V.M.[500]	Leasing helps reduce barriers to investment, reduces pressure on cash flows of enterprises, and expands the range of available development tools.

At the same time, leasing ensures the combination of interests of all participants in the economic process, contributing to the intensification of investment activity and the renewal of the production potential of enterprises. In our opinion, the economic nature of leasing is characterized by a complex and multi-component content, which allows us to distinguish three interrelated aspects of its functioning. First of all, leasing is a special form of property relations, within which the lessor retains ownership of the asset, while the lessee acquires the right to its temporary use[501]. This approach indicates a close relationship between leasing transactions and the institution of rent, although their economic content is much broader and involves not only the transfer of property for use, but also the implementation of an investment function.

The second aspect is the investment nature of leasing relations. Financial leasing ensures the transformation of monetary resources into productive capital, creating conditions for the modernization of fixed assets and the introduction of modern technologies. This mechanism is especially important for capital-intensive sectors of the economy, in particular the agro-industrial complex, where the need for systematic updating of the material and technical base is combined with an insufficient level of own financial support. In this context, leasing serves as a long-term investment tool, which allows all participants in the leasing agreement to receive the appropriate economic effect in the form of income or profit. The third component reflects the credit nature of leasing relations. Despite

[500] Gavrilyuk V. M. Analysis of methods for assessing the effectiveness of leasing operations. Effective Economy. 2015. No. 6.

[501] Kuznetsova A. Ya. Leasing as a form of investment activity: theory, practice and regulation. Kyiv: KNEU, 2010. 388 p.

the specific implementation mechanism, financial leasing operates on the basis of the fundamental principles of lending - term, payment and reversibility. Leasing payments actually provide gradual reimbursement of the cost of the leasing object and remuneration to the lessor for the financial resources provided. That is why, in terms of their economic content, leasing transactions have many common features with long-term lending of investment projects, although they differ in the form of financing organization and the mechanism for distributing property rights and risks.

Therefore, modern financial leasing should be interpreted as an integrated system of property, investment and credit relations, which combines elements of leasing, investment and long-term financing[502]. It is this multifunctional nature that determines its importance as one of the most effective instruments for ensuring the investment development of enterprises and increasing their competitiveness in the conditions of transformation of the economic environment.

Financial leasing in the modern economy occupies an important place among investment financing instruments, as it ensures the transformation of temporarily free financial resources into real production assets.[503] Its economic purpose is to create a long-term investment mechanism, under which a specialized financial institution or leasing company purchases the necessary property and transfers it to the business entity for fixed-term paid use. This approach allows enterprises to implement modernization and technical re-equipment programs without a significant one-time burden on equity, which is especially relevant in conditions of limited access to traditional sources of credit resources.

[502] Melnyk O. P. Legal regulation of leasing relations in Ukraine: problems and prospects. Entrepreneurship, economy and law. 2020. No. 6. pp. 45–49.

[503] Bilyk M. D., Pavlov V. I. Financial leasing in the system of investment development of the economy. Finance of Ukraine. 2018. No. 4. pp. 72–80.

A feature of financial leasing is its high adaptability to dynamic changes in the market environment and the needs of business entities. Unlike classical forms of bank lending, the leasing mechanism organically combines instruments of investment activity, credit relations and property leasing. Its functioning involves the interaction of several participants - the equipment supplier, the lessor, the lessee and, often, a banking institution that provides financing for the transaction. Such integration creates the prerequisites for the effective distribution of financial risks and optimization of investment processes. At the same time, leasing relations are characterized by a complex system of legal support that regulates the procedure for selecting a leasing object, the conditions for its acquisition, transfer for use, distribution of property rights and responsibilities of the parties. That is why the effective functioning of the financial leasing market largely depends on the quality of regulatory and legal regulation and the degree of its consistency with the needs of the modern economy. The formation of a stable institutional environment is one of the key prerequisites for the activation of investment activity, the development of entrepreneurship and the increase in the competitiveness of national production.

The practice of market economies shows that excessive regulation of economic processes, the presence of legal conflicts or instability of legislation can significantly limit the development of financial leasing.

The inconsistency of individual regulatory provisions on accounting[504], taxation and legal registration of leasing transactions creates additional transaction costs for market participants, reducing its investment attractiveness (Table 3.5).

[504] Kafka S. M. Accounting for leasing (rental) operations: problems of harmonization of national and international standards. Scientific notes of the National University of Kyiv Medical Academy. Economic Sciences. 2017. Vol. 2, Issue 1. Pp. 60–68.

Table 3.5 - Regulatory and legal support for leasing activities in Ukraine

Author	Vector of view on the legal regulation of leasing
Ignatyuk Yu.O.[505]	Considers a leasing agreement as a mixed legal instrument containing elements of civil, commercial, and financial law.
Mendukh N.[506]	Emphasizes the historical stages of the formation of the regulatory framework for leasing in Ukraine, in particular the difficulties of the first legislative initiatives.
Dudchyk O.Yu. Antoshkina V. K.[507]	Points out the need for legislative provision of transparent conditions for concluding contracts, especially in the field of interstate leasing.
Kovalenko N. Chovnyuk Yu.[508]	Notes that the imperfection of the current regulatory framework is a factor that hinders the development of the domestic market for leasing services.
Cherevko G.V. Kalytka G. B.[509]	Considers it necessary to review licensing requirements for leasing companies in order to simplify the regulatory field.
Pogorelova N.P.[510]	Outlines the risks of legal uncertainty as a threat to lessees and lessors, especially in the context of changes in tax legislation.
Kupalova G.I. Grinchuk Y.S.[511]	Proposes a predictive and analytical model of the development of leasing legislation based on European practices.

[505] Ignatyuk Yu. O. The legal nature of the leasing agreement and its features. Scientific Bulletin of UzhNU. Law Series. 2021. Issue 64. Pp. 118–122.

[506] Mendukh N. The emergence, improvement and legal regulation of leasing relations in Ukraine. Legal Ukraine. 2015. No. 10. Pp. 51–54.

[507] Dudchyk O. Yu., Antoshkina V. K. Improving state regulation of leasing operations. Bulletin of the Dnipro Financial Academy. 2012. P. 113–119.

[508] Kovalenko N., Chovnyuk, Yu. Leasing Development Trends: World Experience and Realities. Banking. 2019. No. 6. Pp. 29–32.

[509] Cherevko G. V., Kalytka G. B. Leasing: realities, problems, prospects. Finance of Ukraine. 2019. No. 2. P. 19.

[510] Pogorelova N. P. Problems of leasing development in Ukraine. State and Regions. 2017. No. 3. P. 189–191.

[511] Kupalova G.I., Grinchuk Y.S. Leasing in Ukraine: statistical and economic analysis, forecast, development paths: monograph. Kyiv: Znannya, 2007. 237 p.

Despite the significant potential of using financial leasing as a source of fixed capital renewal and stimulating economic growth, its development in Ukraine is constrained by a number of systemic factors. The key ones include the imperfection of tax incentive mechanisms, the ambiguity of the interpretation of certain aspects of leasing transactions in the legislation, the insufficient level of harmonization of the national regulatory framework with international standards, as well as the limited access of leasing companies to long-term financial resources. The elimination of these institutional barriers will contribute to the expansion of the scale of leasing financing, the activation of investment processes and the acceleration of the structural modernization of the Ukrainian economy.

The system of institutional and legal support for financial leasing in Ukraine has undergone significant structural changes in recent years, reflecting the general trends in the reform of the national financial sector and its adaptation to European regulatory standards[512].

If at the previous stages of the leasing market development, regulatory support was mostly fragmented and based on the activities of several regulatory bodies, the modern model provides for the centralization of supervisory functions within the competence of the National Bank of Ukraine. This approach contributed to increasing the efficiency of state control, strengthening the requirements for the financial stability of market participants and the formation of a single regulatory environment for non-banking financial institutions[513].

An important stage of institutional transformation was the introduction of new requirements for the status of leasing

[512] Sholoyko, A., Klymenko, D. (2025). Development of financial leasing in Ukraine based on ESG principles. Economy and Society, No. 79. DOI: https://doi.org/10.32782/2524-0072/2025-79-19

[513] Ozadovsky, O. (2025). Financial leasing as a tool for supporting business in conditions of economic uncertainty in Ukraine. Scientific Bulletin of Polissya, No. 2(29). DOI: https://doi.org/10.25140/2410-9576-2024-2(29)-496-510

entities[514]. Starting from 2024, all legal entities carrying out financial leasing transactions have acquired the status of financial companies, which provides for their operation in accordance with unified standards of corporate governance, transparency of the ownership structure, capital adequacy and internal control system. As a result, state supervision mechanisms have been significantly strengthened and the level of protection of the rights of consumers of financial services has been increased.

At the present stage, the basic regulatory legal act that determines the organizational and economic principles of leasing transactions is the Law of Ukraine "On Financial Leasing" (2021)[515]. Its provisions regulate the procedure for concluding and performing financial leasing agreements, determine the rights and obligations of the parties, the features of the transfer of the leasing object, as well as mechanisms for protecting the legitimate interests of participants in the relevant legal relations. The adoption of this law was an important step in harmonizing national legislation with international practice in the functioning of the leasing services market.

Comprehensive regulation of the activities of leasing companies is also provided by the Law of Ukraine "On Financial Services and Financial Companies"[516], which establishes general requirements for the activities of non-bank financial institutions, defines the principles of state supervision, licensing and corporate governance. The interaction of these regulatory and legal acts forms a holistic institutional framework for the functioning of the financial leasing market and creates the

[514] Ageikin O. V. Financial leasing in Ukraine: advantages, disadvantages and ways of improvement. Tavria Scientific Bulletin. Series: Economy, 2025.

[515] Law of Ukraine "On Financial Leasing" No. 1201-IX. Official text: https://zakon.rada.gov.ua/go/1201-20 (access date: 04.06.2026).

[516] Law of Ukraine dated 14.12.2021 No. 1953-IX. Database "Legislation of Ukraine". Verkhovna Rada of Ukraine. URL: https://zakon.rada.gov.ua/laws/show/1953-20 (date of access: 04.06.2026).

prerequisites for increasing its investment attractiveness. At the same time, further development of the regulatory environment is associated with the introduction of a number of regulatory innovations of the National Bank of Ukraine. In particular, the latest changes provide for increased requirements for transparency of the ownership structure of financial companies, improved approaches to the formation of regulatory capital, increased standards of financial reporting and internal audit[517]. Such measures are aimed at minimizing systemic risks, strengthening the financial stability of the sector and increasing the level of confidence of investors and consumers in leasing services[518].

A separate direction of modernization of the institutional environment is the integration of the principles of sustainable financing into the activities of the non-banking financial sector.[519] As part of the implementation of strategic priorities, the National Bank of Ukraine is gradually implementing a comprehensive ESG (Environmental, Social and Governance) risk management system during 2025–2027, which involves taking into account environmental, social and governance factors in the process of assessing the financial stability of institutions. For the financial leasing market, this means the formation of new standards for financing investment projects focused on the principles of environmental safety, social responsibility and good corporate governance. Thus, the modern model of institutional and legal regulation of financial leasing in Ukraine is characterized by the transition to a more centralized, transparent and risk-oriented system of state supervision. Its

[517] Kuzhlev M. O., Kovalchuk K. F. Development of the financial leasing market in Ukraine in the context of institutional changes. Scientific Bulletin of Uzhhorod National University. Series "Economics and Law". 2023.

[518] Bilyanko L. V. (2024). The potential for the development of financial leasing in Ukraine. Scientia Fructuosa, No. 1(153), 127–142.

[519] Kuznetsova A., Levchenko O. (2017). *Development of methodological approaches to establishing an integrated risk management framework for leasing transactions in Ukraine.* Herald of Economics https://visnykj.wunu.edu.ua/index.php/htneu/article/view/954

further improvement creates the necessary prerequisites for expanding the scale of leasing financing, increasing the efficiency of investment processes and integrating the national financial services market into the European economic space[520].

Further development of regulatory policy in the financial services sector in Ukraine is associated with the implementation of international standards of sustainable financing and the integration of ESG principles (Environmental, Social, Governance) into the activities of financial institutions. Within the framework of the implementation of the relevant strategy, the National Bank of Ukraine envisages the phased formation of a comprehensive ESG risk management system, which will cover both the banking sector and non-banking financial institutions, including leasing companies.

One of the key areas of this process is the development of methodological recommendations for the formation of internal ESG risk management strategies and the improvement of corporate governance mechanisms. The introduction of such approaches should ensure the integration of environmental, social and governance factors into the process of making financial and investment decisions, which corresponds to modern trends in the development of global financial markets and contributes to increasing the resilience of financial institutions to long-term risks.

The next stage of the transformation of the regulatory environment will be the adoption in 2026 of specialized regulatory and legal acts that will determine the organizational and methodological principles of the functioning of the ESG risk management system. In particular, it is planned to establish uniform requirements for the structure of managing such risks, the procedure for their identification and assessment of materiality, as well as mechanisms for integrating ESG

[520] Sholoyko A. S., Klymenko D. O. (2025). Development of financial leasing in Ukraine based on ESG principles. Economy and Society, No. 79.

components into the general risk management system of financial institutions. This will allow harmonizing the activities of the Ukrainian financial sector with international regulatory practices and increasing its investment attractiveness[521].

During 2026–2027, the National Bank of Ukraine also plans to form a methodological framework for collecting, accumulating and verifying information on ESG risks, as well as develop recommendations for preparing non-financial reporting in accordance with the government's Strategy for the Introduction of Sustainable Development Reporting. An important element of this process will be the unification of approaches to surveying clients of financial institutions and standardizing procedures for obtaining information on the environmental and social aspects of their activities. It is expected that such measures will contribute to increasing the transparency of the financial sector and the quality of management decisions.[522]

Starting from 2027, assessing the effectiveness of the ESG risk management system will become a component of the supervisory assessment of the activities of financial institutions. In fact, this will mean the institutional integration of sustainable development principles into the mechanisms of state regulation and financial supervision, which corresponds to Ukraine's strategic course for implementing European standards for the functioning of the financial market.

At the same time, the transformation of the institutional environment is accompanied by significant structural changes in the financial leasing market. Analysis of statistical data shows that during 2020–2024, the number of financial companies that had the right to provide financial leasing services decreased

[521] Sholoyko A., and Klymenko D. (2025) “Development of financial leasing in Ukraine based on ESG principles”, Economy and Society, (79). doi: 10.32782/2524-0072/2025-79-19.

[522] Supervisory statistics of the National Bank of Ukraine: indicators of the activities of financial companies and lessors. Official website of the NBU. URL: https://bank.gov.ua/ua/statistic/supervision-statist (access date: 18.03.2026).

from 521 to 141 institutions.[523] This dynamics is due to a complex of both macroeconomic and regulatory factors.

First of all, the COVID-19 pandemic and full-scale military aggression against Ukraine had a significant negative impact on the functioning of the market, which caused a deterioration in the financial condition of business entities, a reduction in investment activity and a decrease in demand for leasing services. In addition, some financial companies lost assets or were forced to cease their activities due to security and economic risks.

An important factor in the structural consolidation of the market was also the strengthening of regulatory requirements by the National Bank of Ukraine. Improvements in licensing procedures, increased requirements for transparency of the ownership structure, capital adequacy and corporate governance led to the voluntary exit from the market of individual participants who did not meet the updated activity criteria or did not see the economic feasibility of further operation.

An additional stage of institutional reform was the acquisition of the status of financial companies by legal entities-lessors from January 1, 2024. The introduction of such an approach ensured the unification of regulatory requirements for all professional participants in the financial services market, increased the level of state supervision and created the prerequisites for the formation of a more transparent, sustainable and competitive financial leasing market in Ukraine.

Analysis of statistical indicators of the development of the financial leasing market in Ukraine during 2020–2024 indicates its high sensitivity to macroeconomic and geopolitical factors. The dynamics of concluding financial leasing agreements reflects both the processes of gradual recovery of economic

[523] Supervisory statistics of the National Bank of Ukraine: indicators of the activities of financial companies and lessors. Official website of the NBU. URL: https://bank.gov.ua/ua/statistic/supervision-statist (access date: 18.03.2026).

activity after the pandemic crisis and the significant negative impact of full-scale military aggression on the functioning of the country's investment environment.

In 2020, 13,498 financial leasing agreements were concluded on the market. The following year, this figure increased to 18,350 agreements, which was the highest result for the period under study[524]. Such positive dynamics were due to the gradual recovery of business activity after the COVID-19 pandemic, the revival of investment processes and the growing interest of business entities in using alternative mechanisms for financing the renewal of fixed assets. In conditions of limited access to bank lending, financial leasing has increasingly established itself as an effective tool for implementing investment projects.

However, in 2022, the market development was subjected to an unprecedented negative impact due to the outbreak of a full-scale war. The number of concluded contracts decreased to 5,860 units, which indicates a sharp decrease in the investment activity of enterprises, a deterioration in their financial condition and a significant increase in uncertainty in the field of long-term financing. The destruction of production and transport infrastructure, the temporary occupation of some territories, disruption of logistics chains and a decrease in demand for capital-intensive assets significantly limited the possibilities of using leasing mechanisms.

At the same time, already in 2023, the market demonstrated a gradual recovery. The adaptation of business to new business conditions, the intensification of enterprise relocation processes and the need to restore production capacities contributed to an increase in the number of concluded

[524] Supervisory statistics of the National Bank of Ukraine: indicators of the activities of financial companies and lessors. Official website of the NBU. URL: https://bank.gov.ua/ua/statistic/supervision-statist (access date: 18.03.2026).

contracts. In 2024, this indicator reached 10,517 transactions, which indicates the formation of a stable trend towards market recovery[525]. To a large extent, this dynamic was ensured by the completion of the structural transformation of the regulatory environment, increased transparency of financial companies' activities, and increased business confidence in leasing financing instruments.

Similar trends are also observed when analyzing the total value of concluded financial leasing agreements. In 2020, their total volume amounted to UAH 26,069 million, and in 2021 it increased to a record UAH 41,214 million, which confirms the intensification of investment processes in the post-pandemic period. However, in 2022, due to military risks and a sharp decline in economic activity, this indicator decreased to UAH 12,335 million. Subsequently, a positive trend towards gradual recovery was observed: in 2023, the total value of agreements reached UAH 20,914 million, and in 2024 - UAH 23,531 million. Despite the positive dynamics, these indicators still remain below the pre-war level, which indicates that the market recovery processes are incomplete.

The sectoral analysis of the functioning of the financial leasing market is particularly indicative. In 2022, its volumes decreased by almost 70%, which was a consequence of large-scale war destruction and a general deterioration in the investment climate. The segments related to the financing of buildings and structures, where the reduction was about 97%, as well as the railway transport sector, which lost more than 85% of the volume of leasing transactions, suffered the greatest negative impact. Such trends were directly related to the destruction of infrastructure facilities, the postponement of the

[525] Supervisory statistics of the National Bank of Ukraine: indicators of the activities of financial companies and lessors. Official website of the NBU. URL: https://bank.gov.ua/ua/statistic/supervision-statist (access date: 18.03.2026).

implementation of large-scale investment projects and a decrease in demand for long-term capital investments.

The segments of agricultural machinery and freight transport also suffered significant losses, where the reduction was about 73% and 44.5%, respectively. The main reasons were the disruption of logistics routes, the temporary occupation of certain regions, the shortage of financial resources and the general decrease in investment activity of enterprises of the agro-industrial complex and the transport industry[526].

At the same time, in 2023, the financial leasing market showed a significant revival: the total volume of transactions increased by approximately 72%. The highest recovery rates were characteristic of the passenger car segment, where the growth exceeded 146%, as well as for freight transport, which grew by almost 40%. This trend is explained by the need to quickly update the fleets of enterprises, ensure logistical mobility and adapt business processes to functioning under martial law[527].

Thus, the results of the analysis indicate that financial leasing remains one of the most effective mechanisms for supporting investment activity in Ukraine. Despite the significant losses caused by the war, the market demonstrates a gradual recovery and adaptation to new economic conditions, which confirms its strategic importance for the modernization of production potential and ensuring the long-term economic development of the state.

A study of the structure of financial leasing agreements by their terms of validity during 2020–2024 indicates a significant transformation of the behavioral models of market participants

[526] Supervisory statistics of the National Bank of Ukraine: indicators of the activities of financial companies and lessors. Official website of the NBU. URL: https://bank.gov.ua/ua/statistic/supervision-statist (access date: 18.03.2026).

[527] Supervisory statistics of the National Bank of Ukraine: indicators of the activities of financial companies and lessors. Official website of the NBU. URL: https://bank.gov.ua/ua/statistic/supervision-statist (access date: 18.03.2026).

and a change in approaches to financial risk management. Analysis of statistical data shows that before the start of the full-scale war, agreements with a medium-term financing horizon of three to five years remained the most common. If in 2020 their share was about 36.6%, then in 2023 it increased to 45.9%, which indicated the desire of business entities to implement investment projects related to the renewal and modernization of fixed assets on a long-term basis.[528] At the same time, there was a tendency to gradually reduce the proportion of contracts concluded for a period of one to three years. This can be explained by the growing demand for financing capital-intensive projects that require a longer investment payback period and appropriate mechanisms for distributing the financial burden between participants in leasing relations.

At the same time, 2024 witnessed a radical change in the market structure. The vast majority of new contracts — about 95.5% — were concluded for a period of up to one year. Such a transformation is a consequence of a significant increase in macroeconomic and military uncertainty, which forces both lessors and lessees to minimize long-term risks. In an unstable economic environment, short-term leasing agreements provide greater flexibility in making management decisions, allow for more rapid adaptation to changes in the market environment, and reduce the likelihood of financial losses in the event of a deterioration in the economic situation[529].

At the same time, the current state of the market indicates that financial leasing retains significant potential for further development, especially in the context of the post-war reconstruction of the Ukrainian economy. Its economic role is not only to ensure access to necessary production assets for

[528] Supervisory statistics of the National Bank of Ukraine: indicators of the activities of financial companies and lessors. Official website of the NBU. URL: https://bank.gov.ua/ua/statistic/supervision-statist (access date: 18.03.2026).

[529] Sholoyko A., and Klymenko D. (2025) "Development of financial leasing in Ukraine based on ESG principles", Economy and Society, (79). doi: 10.32782/2524-0072/2025-79-19.

enterprises, but also to stimulate investment activity and accelerate technological modernization processes. This tool is of particular importance for small and medium-sized businesses, which often have limited access to bank lending and do not have sufficient financial resources to purchase modern equipment.

The use of financial leasing mechanisms allows such enterprises to obtain the necessary fixed assets without significant initial capital investments and without a significant increase in the debt burden on their financial system. This ensures the renewal of production capacities, increases labor productivity, expands opportunities for the implementation of innovative technologies, and strengthens the competitiveness of domestic business.

At the same time, one of the significant restraining factors for the development of the financial leasing market in Ukraine remains the insufficient level of awareness of potential users regarding its economic advantages, mechanisms of operation and practical possibilities of application. For a significant part of small and medium-sized businesses, leasing continues to be perceived as a complex or little-known financial product, which limits the scope of its use as an alternative source of investment financing.

In this regard, the implementation of a comprehensive information and educational policy aimed at popularizing financial leasing among the business community is of great importance. Effective tools can be specialized information campaigns, the creation of digital consulting platforms, the organization of training webinars and educational programs with the participation of the National Bank of Ukraine, professional associations and business associations. In addition, it is advisable to expand cooperation between state institutions, financial companies and representatives of the business sector in order to form a modern culture of using leasing instruments.

Thus, the further development of the financial leasing market in Ukraine will depend not only on improving regulatory and legal support and stabilizing the macroeconomic environment, but also on increasing the level of financial literacy of business entities. Provided that the above measures are implemented, financial leasing can become one of the key mechanisms for financing the structural modernization of the economy and restoring the state's production potential in the post-war period.

The analysis of the development of the financial leasing market in Ukraine during 2020–2024 gives grounds to assert that this segment of the financial market is at the stage of deep structural transformation, caused by both internal economic processes and the influence of external crisis factors. Despite a significant reduction in the number of entities entitled to provide financial leasing services, current trends indicate a gradual restoration of market activity and adaptation of its participants to new operating conditions. One of the characteristic features of recent years has been a change in the structure of leasing operations towards an increase in the proportion of short-term contracts, which reflects the desire of market participants to minimize financial and operational risks in conditions of increased macroeconomic uncertainty[530].

Along with the positive trends of recovery, the financial leasing market continues to face a number of systemic restrictions that hinder its full development and reduce the potential for use as an investment financing instrument. One of the key barriers remains the insufficient level of awareness of small and medium-sized enterprises regarding the economic benefits and mechanisms for applying leasing products. In addition, the spread of financial leasing is complicated by the presence of complex administrative procedures, significant

[530] Sholoyko A., and Klymenko D. (2025) “Development of financial leasing in Ukraine based on ESG principles”, Economy and Society, (79). doi: 10.32782/2524-0072/2025-79-19.

requirements for document processing, insufficient level of digitalization of business processes and limited opportunities for state support for market participants[531].

An important direction for further development should be the implementation of a set of measures aimed at increasing the institutional efficiency of the market. Such measures include large-scale information and educational campaigns for business representatives, expanding the digital infrastructure for the provision of leasing services, improving electronic document management and introducing modern technologies for automating the processes of assessing and supporting leasing operations. The implementation of the principles of sustainable financing and the integration of ESG approaches into the activities of leasing companies, which corresponds to current trends in the development of international financial markets, is also of significant importance[532].

A promising direction for the modernization of the national financial leasing market is also the adaptation of successful practices of the European Union countries. The use of European experience in tax incentives for leasing operations, the development of state guarantee mechanisms and support for investment activity of small and medium-sized businesses can significantly increase the efficiency of the functioning of the domestic market. A special role in this process can be played by state programs to compensate for part of leasing payments, subsidize interest rates, and create specialized financial instruments for the implementation of post-war economic reconstruction projects[533].

[531] Gridina, G. (2017). Financial Leasing: Problems and Prospects of Development in Ukraine. Path of Science, 3(9), 3019–3025.

[532] Sholoyko A., and Klymenko D. (2025) “Development of financial leasing in Ukraine based on ESG principles”, Economy and Society, (79). doi: 10.32782/2524-0072/2025-79-19.

[533] Belianko, L. (2024). *Potential for the development of financial leasing in Ukraine.* Scientia Fructuosa, 153(1), 127–142.

In general, financial leasing has significant potential for further expansion of its use in Ukraine. Its investment attractiveness is due to the possibility of effectively combining the interests of all participants in the leasing process, ensuring access of enterprises to modern fixed assets and optimizing the structure of financing capital investments. The gradual stabilization of the economic situation, the restoration of entrepreneurial activity and the implementation of large-scale reconstruction programs of the country will form additional demand for alternative mechanisms of long-term financing, among which financial leasing will occupy one of the leading places. At the same time, the high dynamism of the market environment, the constant influence of external and internal economic factors, the transformation of regulatory policy and the formation of new global trends require systematic scientific support for the development of the leasing industry. Further research should be aimed at an in-depth analysis of the institutional mechanisms of the market, assessing the effectiveness of state regulation, studying the impact of digitalization and ESG transformation on the activities of leasing companies, as well as developing practical recommendations for strengthening the role of financial leasing as one of the key instruments of investment support for the post-war economic recovery of Ukraine.

Thus, the modern financial leasing market in Ukraine is gradually transforming into an important element of the national financial system, capable of acting as an effective alternative to traditional bank lending. Its further development, improvement of regulatory support and expansion of application practice will create the necessary prerequisites for activating investment processes, updating the production potential of enterprises and ensuring long-term economic growth of the state.

The further evolution of the financial leasing market in Ukraine is largely determined by the quality and consistency of

regulatory regulation, primarily in the field of taxation of leasing and related financial transactions. Current practice indicates the presence of a number of institutional imbalances that reduce the effectiveness of using the leasing mechanism as an investment financing tool. One of the key problems is the ambiguity of the interpretation of the essence of leasing in various tax legislation, where it can simultaneously be considered as a financial service or as a transaction economically close to the purchase and sale of an asset with deferred payment.[534]

Such regulatory discrepancies complicate the formation of a single tax logic for regulating leasing transactions and create additional fiscal burdens on market participants. In particular, in some cases, tax mechanisms lead to situations of double or multiple charging of value added tax for the lessor, which significantly reduces the economic attractiveness of leasing compared to alternative forms of financing capital investments.

In this context, the harmonization of tax legislation and the elimination of existing regulatory conflicts are of priority. In order to increase the investment attractiveness of leasing transactions, it is advisable to introduce clearer and unified rules for tax accounting of leasing payments, determine the procedure for forming tax liabilities, and improve approaches to depreciation of the leased asset. Special attention is required to establish transparent and predictable terms for depreciation of property and mechanisms for its tax accounting throughout the entire life cycle of the leasing agreement.

An important direction of reform is also the modernization of legislative regulation of foreign economic aspects of leasing activities, in particular operations related to the export of products and receipt of leasing payments from abroad. Insufficient adaptation of relevant norms to the conditions of the international financial market limits the potential for the

[534] Burkovska et al. (2020). *State and prospects of the Ukrainian leasing market.* https://doi.org/10.31471/2409-0948-2020-1(21)-133-142

development of cross-border leasing and reduces the competitiveness of Ukrainian manufacturers in global capital markets.[535]

Systematic synchronization of national legislation with international legal standards in the field of financial leasing will create the prerequisites for more active attraction of foreign capital, entry of international leasing companies into the Ukrainian market and expansion of the long-term investment financing tools. In the future, this will contribute to the intensification of structural transformations of the economy, an increase in the level of investment activity, acceleration of technological modernization of the production sector and an increase in the volume of production of competitive products with high added value. Thus, improving the tax and legal environment is one of the key factors in the formation of an effective financial leasing market in Ukraine and an important prerequisite for its integration into the global system of financial relations.

Leasing operations are accompanied by certain risks, the impact of which must be taken into account. The ability to correctly predict the probability of such risks, identify them, calculate the possibilities of future losses, and choose ways to minimize them determines the choice of the right management decisions to achieve the optimal ratio between profitability and risks, which, in turn, will contribute to increasing the efficiency of the functioning of the financial and credit mechanism for securing leasing operations.

Also, an effectively formed comprehensive system of risk management of leasing operations through the use of leasing technology and the activation of leasing operations will contribute to the minimization of other types of risks that arise

[535] Kuznetsova A., Levchenko O. (2017). *Development of methodological approaches to establishing an integrated risk management framework for leasing transactions in Ukraine.* Herald of Economics https://visnykj.wunu.edu.ua/index.php/htneu/article/view/954

in the process of activity not only of leasing companies, but also of related enterprises or institutions, namely: liquidity risk, risk of untimely financing, risk of losses when a participant leaves the project, risk of additional losses in case of project failure, risk of untimely repayment of budget obligations, credit risk, as well as the risk of reducing creditworthiness and investment attractiveness.

A comprehensive system of risk management of leasing operations will allow to ensure control over the risks of leasing activities by organically integrating them into the structure of business processes of leasing companies, and its implementation should ensure the effective functioning of the financial and credit mechanism for securing leasing operations in Ukraine.

3.3. FOREIGN DIRECT INVESTMENT AS A FACTOR OF NATIONAL ECONOMIC DEVELOPMENT AND POST-WAR RECOVERY OF UKRAINE UNDER MARTIAL LAW CONDITIONS

In the face of the latest economic challenges, the issue of attracting foreign investment and formulating effective, innovative strategies for the development of the national economy has become increasingly pressing. Systemic instability, caused by military risks, global crises and high volatility in financial markets, calls for new approaches. In the post-war period, a significant increase in foreign investors' interest in Ukraine's economy is expected. Attracting foreign investment will contribute to the accelerated reconstruction of our country, the adoption of leading technologies and methods of work and production, raising business in Ukraine to a qualitatively new level, and improving the well-being of the population .

Just as foreign aid is now of critical importance in the fight against the aggressor, so too will foreign capital have an extremely significant impact on the development of the national economy and its financial system in the near future.

Foreign investment is one of the key drivers of economic growth, particularly for countries undergoing transformation or recovering from the shocks of a crisis[536]. For Ukraine, which has faced unprecedented destruction as a result of a full-scale military invasion, attracting foreign capital is of strategic importance in several respects. Firstly, it is a source of financial resources for rebuilding destroyed infrastructure, housing stock, industrial capacity and critical infrastructure facilities. Secondly, foreign investment serves as a channel for the transfer of technology, managerial expertise and innovative solutions, which is a prerequisite for modernising the national economy and enhancing its competitiveness in international markets. Thirdly, the presence of foreign capital signals to the international community that confidence in Ukraine as an investment destination is being restored, creating a multiplier effect that attracts further new investors.

At the same time, it is important to recognise that a country's investment appeal is determined not only by the potential profitability of projects, but also by the quality of the institutional environment - the protection of property rights, the transparency of the judicial system, the effectiveness of public administration and the level of corruption. That is precisely why, alongside measures to directly attract foreign investment, Ukraine must consistently implement structural reforms that enhance the predictability and stability of doing business. Accordingly, the issue of foreign investment is inextricably linked to the broader context of institutional transformation,

[536] N. Davydenko, N. Wasilewska. Investment activity of the enterprise and sources of its financing. Ukraine, Bulgaria, EU: Economic and Social Development Trends: materials VI International Scientific and Practical Conference (Burgas, Bulgaria, 26 August 2022) Burgas: Avangard Prima, 2022, 235 p.

European integration commitments and the development of a modern model of state regulation of financial flows.

This issue takes on particular relevance in the context of Ukraine's accession process to the European Union. Meeting the membership criteria requires the implementation of standards for corporate governance, financial reporting, investor protection and the regulatory environment that comply with EU norms. This, in turn, creates more favourable conditions for attracting European and international capital, as it reduces regulatory and legal risks for foreign investors and enhances the transparency of the investment climate as a whole.

Thus, under current conditions, foreign investment is not only a tool for financing recovery but also a powerful driver of the structural transformation of Ukraine's economy, its technological modernisation and integration into global production and financial networks. Research into the role of foreign investment in the development of the national economy under martial law and in the context of post-war recovery is, therefore, highly relevant from both a theoretical and a practical perspective.

Despite the ongoing hostilities, Ukraine remains open to foreign capital and continues to actively develop its investment environment. The country's economic capacity is one of the key factors in both achieving success in confronting the aggressor and ensuring effective post-war reconstruction. Currently, through international platforms and investment forums, the state is promoting over 500 projects with high investment potential, open to participation by foreign partners, in the following priority areas:

Defence and industrial complex (US$43 billion in investment potential).

Metallurgy and metalworking (US$26 billion in investment potential). Ferrous metallurgy (the production of

steel, cast iron, rolled steel, etc.) is the most highly developed sector in Ukraine.

Energy sector (US$177 billion in investment potential). Ukraine has the potential to generate 'green' electricity and 'green' hydrogen.

Natural resources (US$5.6 billion in investment potential). Ukraine is one of the world's regions richest in mineral resources.

Agri-industrial complex ($34 billion in investment potential). Agriculture is the main component of Ukraine's agri-industrial complex.

Logistics and infrastructure ($123 billion in investment potential). Ukraine enjoys a favourable and strategically important geographical location for transit trade.

Industrial production (US$16 billion in investment potential). The largest share of Ukraine's industry is accounted for by the electricity sector, ferrous metallurgy, mechanical engineering, and the chemical and food industries.

Woodworking and furniture manufacturing (US$5 billion in investment potential). Our country has every opportunity to become the continent's furniture manufacturing hub.

Pharmaceuticals (US$19 billion in investment potential). This sector is one of the leaders in terms of investment and has great potential. Ukrainian pharmaceutical companies meet international standards.

Innovative technologies (US$11 billion in investment potential) [537].

Under martial law, it is impossible to overlook the importance of foreign investment for Ukraine's defence industry.

[537] Нечипорук О. В. Проблема залучення іноземних інвестицій в Україні під час війни. *Економіка та суспільство*. 2023. вип. 54. URL: https://doi.org/10.32782/2524-0072/2023-54-6

Foreign investment plays a multifaceted role in strengthening Ukraine's defence industry under martial law: it not only provides additional funding for production capacity but also accelerates technological modernisation and integration into international supply chains, whilst creating the conditions for joint investment projects and knowledge transfer. In academic and analytical discourse, such instruments are regarded as critically important for enhancing the state's defence capability and economic resilience in the face of protracted armed aggression[538]. It is worth noting that the defence industry has traditionally been regarded as off-limits to foreign capital for reasons of national security. However, Russia's full-scale invasion of Ukraine has radically altered this paradigm: today, attracting foreign investment into the defence-industrial complex has become not only permissible but also a strategically necessary element of the state's defence policy.

Foreign direct investment (FDI) and international partnerships help to scale up the production of armaments and military equipment by funding the construction of production facilities, the modernisation of enterprises and the creation of new production lines. This is particularly important for Ukraine, where demand for ammunition, unmanned systems and electronic warfare (EW) equipment has grown exponentially since 2022; according to analytical reviews, international partnerships and investment enable a rapid ramp-up in production and a reduction in dependence on emergency aid[539]. Crucially, foreign investment in this context serves not only a financial but also a structural function: it contributes to the

[538] Kuzmuk K., Scarazzato L. The transformation of Ukraine's arms industry amid war. *Stockholm International Peace Research Institute*. URL: https://www.sipri.org/commentary/topical-backgrounder/2025/transformation-ukraines-arms-industry-amid-war-russia

[539] Arabia C., Bowen A., Dimascio J. Defense Production for Ukraine: Background and Issues for Congress. *Congressional Research Service*. 2024. 16 Sep. P. 1–35. URL: https://www.congress.gov/crs-product/R48182

diversification of the defence industry's production base, reduces the risks associated with the concentration of defence capabilities within a limited number of enterprises, and enables production capacity to be distributed across more secure regions of the country. Furthermore, involving foreign partners in joint production significantly accelerates the process of standardising armaments in accordance with NATO requirements, which is a necessary prerequisite for Ukraine's full integration into the Euro-Atlantic security system.

Foreign investment provides access to technology and expertise - ranging from design and digital solutions to the organisation of high-quality production management. Commercial technology companies and defence manufacturers from Western countries supply not only equipment but also know-how, which accelerates the innovative transformation of the defence-industrial complex and improves the cost-effectiveness of defence spending. In this context, analytical reports highlight the role of public-private and cross-border production agreements in creating more resilient and modernised supply chains[540]. Particular emphasis should be placed on the importance of digital technologies and solutions in the fields of artificial intelligence, cyber security and unmanned systems, which are being actively introduced into Ukraine's defence industry precisely through cooperation with foreign technology companies. Such a transfer of knowledge and technology not only enhances combat effectiveness but also lays the foundations for the long-term development of Ukraine's own high-tech defence industry, which is of strategic importance for ensuring Ukraine's technological sovereignty.

Foreign investment and international contracts send a signal to other investors and help restore confidence in the

[540] Bondar K. How Ukraine Rebuilt Its Military Acquisition System Around Commercial Technology. *Center for Strategic & International Studies*. 2025. 13 Jan. P. 1–14. URL: https://www.csis.org/analysis/how-ukraine-rebuilt-its-military-acquisition-system-around-commercial-technology

sector: the presence of foreign partners reduces information asymmetry and political risk for potential investors, thereby increasing the likelihood of further capital investment in related sectors of the defence industry. This also amplifies the multiplier effect for the economy as a whole through job creation and the development of supply chains[541]. This multiplier effect is of particular significance given that the development of the defence-industrial complex through the attraction of foreign investment generates demand for products from related sectors - mechanical engineering, electronics, the chemical industry and logistics - thereby stimulating their development and creating new jobs in the regions where defence enterprises are located. Thus, foreign investment in the defence-industrial complex serves not only as a means of strengthening defence capabilities, but also as a key factor in Ukraine's economic recovery and regional development under martial law and in the context of post-war reconstruction.

At the same time, foreign investment in the defence industry during a period of martial law creates specific risks that require appropriate legal and political management. These include technology security risks (export controls and restrictions on the transfer of critical components), legal and reputational risks in the event of breaches of sanctions regimes, as well as risks associated with dependence on foreign supply chains. Analytical sources emphasise the need for a clear national policy on investment in critical sectors, export control systems, and mechanisms for state support and guarantees for investors.

The effective mobilisation of foreign capital in the defence sector requires a comprehensive approach: a combination of tailored legislation (regarding investment protection and

[541] Kuzmuk K., Scarazzato L. The transformation of Ukraine's arms industry amid war. *Stockholm International Peace Research Institute*. URL: https://www.sipri.org/commentary/topical-backgrounder/2025/transformation-ukraines-arms-industry-amid-war-russia

transparent procedures for admitting foreign partners), preferential regimes or state guarantees for strategic projects, as well as integration into international cooperation frameworks (NATO compatibility, production standards, certification). Policy must strike a balance between providing incentives for investors and ensuring national security and strategic autonomy. Analysis by the EU and international centres shows that large-scale defence investment initiatives require long-term planning and coordination at the level of states and alliances[542].

The practical results of attracting foreign capital are already showing positive momentum. In 2024, Ukraine attracted over US$1.5 billion for investment in its domestic defence industry from nine Western donor countries as part of the 'ZBROYARI: Manufacturing Freedom' programme. The total volume of defence production in 2024 reached US$10 billion, compared with US$1 billion in 2022 and US$3 billion in 2023, whilst the number of defence sector enterprises exceeded 800, employing over 300,000 specialists. At the same time, investment in defence technology companies rose from a modest US$1.1 million in 2023 to over US$105 million in 2024 - an increase of more than a hundredfold in two years. In early 2026, a deal worth over US$700 million was concluded, and the total value of investment deals in 2026 is expected to exceed US$1 billion[543].

A prime example of a successful model for attracting foreign investment is cooperation with leading European defence conglomerates. Rheinmetall pioneered this approach by announcing in March 2023 the opening of production facilities in Ukraine; in October 2024, the plant for the production of KF41 Lynx armoured vehicles was officially opened. In

[542] Давиденко Н.М. Залучення іноземних інвестицій в аграрний сектор економіки України. Науковий вісник Ужгородського університету. Серія «Економіка». Ужгород. 2015. Вип. 1(45). Т.1. С. 124 – 127.

[543] https://index.minfin.com.ua/ua/finance/budget/gov/income/

addition, the EU allocated US$440 million from the proceeds of frozen Russian assets to support the Ukrainian defence sector. At the same time, in May 2025, the European Union announced the allocation of €1 billion from surplus proceeds of frozen Russian assets to develop Ukraine's defence industry, and in May 2025, EU defence ministers approved a large-scale €150 billion armaments fund as part of the SAFE programme, in which Ukraine is also participating[544].

At the same time, systemic challenges remain that are holding back the full realisation of the country's investment potential. One of the key barriers for foreign investors has been the restrictions on the export of defence products, which have created uncertainty regarding market access. At the same time, the state is significantly increasing domestic procurement: in 2024, agreements were signed to purchase over one million domestically produced drones, compared with approximately three hundred thousand in the previous year. Institutional barriers include the absence in Ukraine of early-stage financing instruments standard for Western investors (SAFE agreements, convertible notes); new legislation to introduce these mechanisms is planned for 2025–2026.

Under martial law, foreign investment serves simultaneously as a source of capital, a channel for technology transfer and a factor in the reconstruction of the defence-industrial complex's production capacity. To ensure that this potential is realised with minimal risks to financial and national security, transparent institutional mechanisms for the selection and monitoring of investments, effective export control systems and long-term partnerships with international manufacturers and donor organisations are required. An important step in this direction is the corporatisation of 'Ukroboronprom' and the introduction of OECD corporate governance standards at state-owned defence enterprises, which increases transparency and

[544] https://index.minfin.com.ua/ua/finance/budget/gov/income/

reduces corruption risks – one of the most serious barriers for foreign investors

To attract foreign investment effectively, it is vital to tackle the problem of corruption in Ukraine, which remains one of the key barriers, causing uncertainty regarding the legal framework, increasing transaction costs, posing a risk to investors' reputations and complicating access to public contracts. In academic circles, corruption is regarded as one of the most significant factors influencing the investment climate, investment attractiveness and, in particular, the inflow of foreign direct investment.

The Corruption Perceptions Index (CPI) compiled by Transparency International provides a quantitative measure of the state of corruption in Ukraine; the organisation assesses 180 countries annually on a scale from 0 (maximum corruption) to 100 (complete absence of corruption). The trend in Ukraine's score indicates a gradual, albeit slow, improvement: in 2017, Ukraine scored 30 points; in 2021, 32 points; and in 2022, 33 points. The most significant jump occurred in 2023 – to 36 points – which enabled the country to climb 12 places at once and rank 104th out of 180 countries. However, in 2024, this progress was partially offset - Ukraine scored 35 points and dropped to 105th place. According to analysts at Transparency International Ukraine, the decline in the score in 2024 indicates that reforms are often implemented only in name or their implementation is deliberately delayed; therefore, simply fulfilling policy commitments is not enough - the quality of their implementation is the decisive factor. Despite the positive trend of recent years, Ukraine's score still lags significantly behind the average for EU countries (over 60 points) and EU candidate countries, which is a serious signal for foreign investors when assessing risks.

During a period of martial law, corruption risks may increase due to greater secrecy surrounding defence

procurement, a rise in public spending – which is carried out rapidly and sometimes with limited oversight – and the heightened vulnerability of the law enforcement system, where courts may be less accessible or effective in certain regions. These factors exacerbate uncertainty for foreign investors, which is a particularly serious barrier in a wartime context. At the same time, the massive increase in external funding (over US$100 billion cumulatively for 2022–2024) raises international partners' and donors' expectations regarding transparency in the use of funds and the accountability of state bodies, which effectively creates external institutional pressure for anti-corruption reforms.

Corruption in Ukraine is a major obstacle to attracting foreign investment. It reduces the volume of investment and undermines its quality, particularly for long-term projects, due to fears of legal risk, a loss of trust, unjustified delays and additional costs. The impact of corruption is particularly acute on investment decisions in strategic sectors - energy, infrastructure and the defence-industrial complex - where contract values are high and procurement procedures are especially vulnerable to abuse. According to researchers' estimates, corruption in public procurement can increase the cost of contracts by 20–30 per cent, which directly reduces the investment attractiveness of projects for foreign partners.

At the same time, it should be noted that Ukraine's anti-corruption efforts are gaining international recognition: Transparency International has stated that Ukraine's rise in the 2023 ranking is one of the best results in the world this year, and reforms linked to European integration commitments have persuaded European leaders to grant Ukraine EU candidate status and to begin formal accession negotiations. Key institutional achievements include the operation of the NABU (National Anti-Corruption Bureau of Ukraine), the SAP (Specialised Anti-Corruption Prosecutor's Office), the National

Agency for Corruption Prevention (NAZK), as well as the system for the electronic declaration of civil servants' assets and the ProZorro public procurement platform, which has gained international recognition as one of the most transparent public procurement mechanisms in the world. It is the ProZorro platform, launched in 2014 by a group of anti-corruption activists, that has become one of the symbols of systemic change in the field of public procurement.

To tackle the challenges posed by corruption and enhance investment attractiveness, a proactive anti-corruption policy is required across several interlinked areas. Firstly, ensuring the genuine, rather than merely formal, independence of anti-corruption bodies and the judiciary, which is a key prerequisite for restoring foreign investors' confidence in Ukraine's law enforcement system. Secondly, the consistent expansion of the use of digital transparency tools - registers, e-auctions and open data - to those sectors where the risks of corruption remain highest, particularly in defence procurement and the distribution of international aid. Thirdly, the introduction of effective mechanisms to protect investors from corruption-related pressure – specialised arbitration procedures, investment ombudsmen, and state guarantees against unlawful actions by public officials. Finally, aligning Ukraine's anti-corruption legislation with EU standards as part of fulfilling its obligations as a candidate for membership is not only a requirement for European integration but also a powerful signal to foreign investors regarding the systematic and irreversible nature of the reforms.

We will outline the state of foreign investment in Ukraine as a whole, highlight the objective and subjective measures of the effectiveness of attracting foreign investment, and determine the impact that improvements in legal regulation have on increasing foreign investment and developing the socio-economic international investment environment.

According to pre-war statistics, the volume of foreign direct investment in Ukraine has been increasing in recent years (with the exception of the COVID-19 pandemic period).

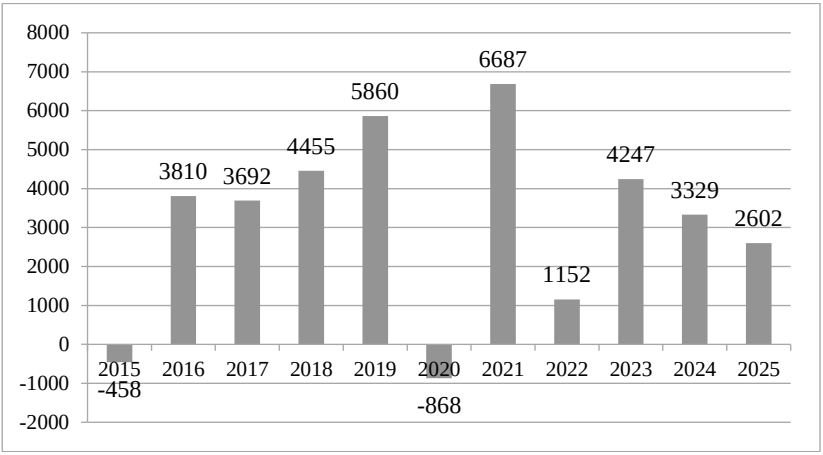


Fig. 3.3 - Trends in foreign direct investment in the Ukrainian economy, USD $ million

* *Compiled by the authors based on 545*

According to research by Gordienko V., Shevchenko N. and Sugakova D., foreign direct investment has a significant impact on GDP[546].

Based on the model developed by these researchers, it can be stated that 54 per cent of Ukraine's total GDP depends on foreign direct investment[547].

[545] Статистична інформація. *Офіційний сайт Державної служби статистики України*. URL: https://www.ukrstat.gov.ua

[546] Гордієнко В. О., Шевченко Н. І., Сугакова Д. О. Вплив іноземних інвестицій на розвиток інноваційної діяльності в Україні. *Державне управління: удосконалення та розвиток*. 2019. вип. 9. URL: https://doi.org/10.32702/2307-2156-2019.9.21/

[547] Гордієнко В. О., Шевченко Н. І., Сугакова Д. О. Вплив іноземних інвестицій на розвиток інноваційної діяльності в Україні. *Державне управління: удосконалення та розвиток*. 2019. вип. 9. URL: https://doi.org/10.32702/2307-2156-2019.9.21/

Table 3.6 - Dependence of GDP on foreign direct investment by economic sector and overall

Sectors	ECM	R^2	Fisher's test	Student's Criterion
1. Agriculture, forestry and fishing	Y = 134,7X +49311	0,55	Adequate	Significant
2. Industry	Y = 5,8X+63092	0,45	Adequate	Significant
3. Construction	Y = 55,91X+65236	0,49	Adequate	Significant
4. Wholesale and retail trade	Y=13,1X+668212	0,36	Adequate	Significant
5. Financial and insurance activities	Y=4,8X+85723	0,47	Adequate	Significant
6. Real estate operations	Y=17X+74476	0,36	Adequate	Significant
7. Education	Y=989X+102740	0,05	Not	Not significant
8. Health care and social assistance	Y=187,5X+138958	0,03	adequate	Not significant
9. Direct investments (in all sectors) in the economy of Ukraine	Y=242X+132109	0,54	Not adequate	Significant

** Source*[548]

Foreign direct investment has a significant impact on GDP. An empirical study of the impact of FDI on Ukraine's economic growth in 2001–2023, conducted using regression analysis, confirmed a statistically significant positive effect of FDI and investment in R&D on GDP growth.

This relationship is multi-channel: FDI affects GDP not only directly through the expansion of production capacity and

[548] Гордієнко В. О., Шевченко Н. І., Сугакова Д. О. Вплив іноземних інвестицій на розвиток інноваційної діяльності в Україні. *Державне управління: удосконалення та розвиток*. 2019. вип. 9. URL: https://doi.org/10.32702/2307-2156-2019.9.21/

employment, but also indirectly - through increased labour productivity, technology transfer, the development of human capital and the expansion of the country's export potential[549].

An analysis of the trends in FDI in Ukraine during the pre-war and war periods provides grounds for concluding that geopolitical instability has had a significant impact on the volume of foreign capital inflows. The cumulative stock of FDI stood at US$55.2 billion at the start of 2024 - 6.3 per cent higher than at the start of 2023, but 16.5 per cent lower than at the start of 2022. FDI inflows in 2023 reached US$4.2 billion, with the share of reinvested earnings exceeding 74% of total FDI, whilst the share of new direct investments in companies' capital accounted for only 15%. This indicates that, under martial law, the main source of foreign capital remains not the inflow of new foreign investors, but the reinvestment of profits by companies already present in Ukraine - that is, the retention rather than the expansion of the investment base[550].

According to official data from the National Bank of Ukraine, net FDI inflows into Ukraine in 2025 amounted to US$1.6 billion, which is a modest figure given the scale of the reconstruction required. By way of comparison: in 2022, Poland attracted US$35 billion in FDI, the Czech Republic US$10.5 billion, and France US$105.4 billion, which clearly demonstrates the extent to which Ukraine lags behind EU countries in this respect and underlines the need for systematic measures to enhance investment attractiveness[551].

Another significant factor in assessing the real impact of FDI on GDP is the phenomenon of 'round-tripping'- a term used to describe circular investments that originate in Ukraine but are

[549] Статистична інформація. *Офіційний сайт Державної служби статистики України*. URL: https://www.ukrstat.gov.ua

[550] Статистична інформація. *Офіційний сайт Державної служби статистики України*. URL: https://www.ukrstat.gov.ua

[551] Статистична інформація. *Офіційний сайт Державної служби статистики України*. URL: https://www.ukrstat.gov.ua

legally registered as foreign. According to NBU estimates, the total volume of round-tripping investments for 2023–2024 amounted to US$0.7 billion, or 38.7 per cent of total FDI inflows into Ukraine, with the largest volumes flowing into enterprises in the real sector. This means that the actual impact of foreign capital as an external resource on GDP is somewhat lower than the nominal figures for FDI inflows, and this should be taken into account separately when formulating investment policy[552].

Particular attention is drawn to a study by the German Consulting Group, according to which companies with a significant share of foreign direct investment (at least 10 per cent of the authorised capital) account for around 5 per cent of all companies registered in Ukraine. However, over 24 per cent of all capital in Ukraine is concentrated in these companies; such enterprises employ over 20 per cent of Ukrainian workers and generate around 35 per cent of added value[553]. Given the high likelihood of 'circular' investment (foreign investment of Ukrainian origin, though this is not explicitly stated in the documents), we assume that the actual impact of foreign direct investment may be somewhat smaller, but still sufficiently positive.

Kramarenko K. identifies the following positive and negative consequences of attracting foreign direct investment into the Ukrainian economy.

The analysis carried out therefore allows us to draw a comprehensive conclusion regarding the role of foreign investment as a factor in the development of Ukraine's national economy under martial law.

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552 Статистична інформація. *Офіційний сайт Державної служби статистики України*. URL: https://www.ukrstat.gov.ua

553 Saha D., Kravchuk V., Kirchner R. The economic impact of FDI on Ukraine. *German Advisory Group. Institute for Economic Research and Policy Consulting*. Berlin. Kyiv, 2018. P. 1–48. URL: http://www.ier.com.ua/files/publications/Policy_papers/German_advisory_group/2018/Full_PS_01_2018_en.pdf

Table 3.7 - Consequences of attracting foreign direct investment

Positive Negative	Positive Negative
Transfer of technology, know-how, advanced management and marketing methods	The outflow of investment income, which is sometimes
Possibility of promoting the emergence of new modern technologies	Greater than the investments themselves
Multiplicative effect for the entire economy through the involvement of local resources	Development of various profit hiding schemes due to imperfect
Tax revenues to the budget	Ignoring in some cases the environmental and labor legislation of the FDI recipient country, causing environmental damage to the environment
Increase in export revenues of the recipient country	Risk of crowding out national producers
Diversification of the national economy	From the market
Substitution of portfolio and debt capitals, which contributes to increasing the stability of the balance of payments and financial stability	High probability of FDI concentration in the export-commodity sector
No impact on the volume of external	High probability of switching cash flows to foreign financial intermediaries
	Exploitation of local raw materials

* *Source*[554]

Firstly, foreign investment currently fulfils a fundamentally different function than it did in the pre-war period.

Whilst up until 2022 it was viewed primarily as a tool for structural modernisation and enhancing the competitiveness of specific sectors, with the onset of the full-scale invasion its role has undergone significant changes - today, foreign investment

[554]Крамаренко К. М. Прямі іноземні інвестиції у системі міжнародних фінансів. *Ефективна економіка*. 2021. вип. 4. URL: https://doi.org/10.32702/2307-2105-2021.4.81.

simultaneously serves as a source of funding for critically important defence needs, a channel for technology transfer within the defence-industrial complex, a mechanism for maintaining macroeconomic stability through budgetary support, and a tool for preserving the country's economic potential for post-war recovery.

This multidimensional nature of the functional role of foreign capital in the context of armed conflict is a defining feature of the current stage of development in Ukraine's investment sector, distinguishing its experience from most previous examples of foreign direct investment in developing countries.

Secondly, the figures confirm that, despite the unprecedented challenges posed by martial law, Ukraine has maintained and even partially increased investment activity in strategic sectors. The cumulative stock of FDI stood at US$55.2 billion at the start of 2024, defence production rose from US$1 billion in 2022 to US$10 billion in 2024, and investment in defence technologies increased more than a hundredfold over two years. At the same time, these figures remain significantly below what is potentially possible and necessary to ensure a full recovery, indicating the presence of significant structural and institutional barriers that are holding back the inflow of foreign capital.

Thirdly, an analysis of the systemic factors determining Ukraine's investment attractiveness allows us to identify three interrelated groups of problems. The first is security uncertainty, which is an objective consequence of martial law and directly increases the risk premium for foreign investors. The second is institutional weakness, manifested in the lack of independence of the judicial system, corruption, weak protection of property rights and the absence of a number of legal instruments standard for international investors (SAFE agreements, convertible notes). The third is the structural asymmetry of investment

flows: the predominance of reinvestment of earnings by existing companies (74% in 2023) over the inflow of new foreign investors, as well as a significant share of round-tripping investments (38.7% of total FDI inflows in 2023–2024), which reduces the real positive impact of nominal FDI inflows on GDP.

Fourthly, despite the challenges mentioned, Ukraine is making steady progress in creating a favourable investment climate. The reform of anti-corruption institutions, the operation of the ProZorro system, the corporatisation of Ukroboronprom, the implementation of OECD standards in state-owned enterprises, and European integration commitments - all of these form the institutional foundation necessary for the full restoration of foreign investors' confidence in the post-war period. Ukraine's attainment of EU candidate status sends a powerful signal to the international investment community regarding the irreversibility of the reform course and enhances the predictability of the regulatory environment for long-term capital investments.

Fifthly, the prospects for attracting foreign investment in the post-war period are objectively substantial. The total investment potential across ten priority sectors exceeds US$559 billion, and the end of the active phase of hostilities will inevitably lead to a significant increase in international investors' interest in Ukraine's reconstruction. Even now, despite the ongoing state of martial law, the value of expected deals in the defence technology sector in 2026 is forecast to exceed US$1 billion, indicating the emergence of a new wave of investment interest in Ukraine.

Consequently, the effective attraction of foreign investment under martial law and in the context of post-war reconstruction requires the state to implement a comprehensive strategy combining three key components. The first is the creation of a reliable legal and institutional framework through

the protection of investors' rights, anti-corruption reforms and an independent judiciary. The second is active investment diplomacy and the development of bilateral investment protection mechanisms within the framework of the European integration process. The third is the formulation of sectoral priorities and targeted incentives to attract long-term strategic capital specifically to those sectors where foreign investment has the greatest multiplier effect on GDP, employment and the technological modernisation of the economy. Achieving these objectives is a prerequisite for transforming foreign investment from an ad hoc anti-crisis tool into a systemic factor in the sustainable development of Ukraine's national economy.

3.4. CROWDFUNDING AS AN ALTERNATIVE INSTRUMENT OF INVESTMENT FINANCING AND POST-WAR ECONOMIC RECOVERY OF UKRAINE

The modern global economy is undergoing profound transformations driven by technological progress, digitalization of financial markets, and the growing need for alternative sources of capital mobilization. In this context, crowdfunding has emerged as one of the most dynamic and innovative instruments of investment financing, fundamentally changing the traditional paradigm of capital attraction and redistribution. Unlike conventional banking lending or direct foreign investment, crowdfunding enables a wide range of participants - from individual citizens to international communities - to directly finance projects of strategic importance, bypassing traditional financial intermediaries.

For Ukraine, which is facing unprecedented economic challenges caused by Russia's full-scale military aggression, the relevance of crowdfunding as an alternative financing instrument acquires particular strategic significance. The

destruction of critical infrastructure, forced displacement of millions of citizens, sharp decline in business activity, and limited access to traditional credit resources have created an acute need for flexible, transparent, and accessible mechanisms for mobilizing financial resources. In such conditions, crowdfunding is not merely an alternative to bank lending - it is becoming a vital tool for ensuring the continuity of entrepreneurial activity, supporting socially important initiatives, and attracting both domestic and international capital for the reconstruction of the country.

The significance of crowdfunding for Ukraine's post-war recovery is further reinforced by its proven capacity to engage civil society, the Ukrainian diaspora, and international partners in financing reconstruction projects. The experience of the state platform UNITED24, which has attracted donors from more than 110 countries, as well as the rapid growth of charitable crowdfunding platforms such as Dobro.ua and Palianytsia.org, clearly demonstrates the high mobilization potential of this instrument under wartime conditions. At the same time, the Ukrainian crowdfunding market, despite its positive dynamics, remains significantly underdeveloped compared to global trends, which underscores the necessity of a comprehensive scientific analysis of its current state, development prospects, and regulatory framework.

The theoretical and practical importance of studying crowdfunding in the context of Ukraine's post-war economic recovery is determined by several interrelated factors. First, the growing global volume of crowdfunding transactions, projected to reach USD 1.2 billion by the end of 2024, confirms the increasing role of this instrument in the global financial system. Second, the diversification of crowdfunding models, from donation-based and reward-based to loan-based and equity crowdfunding - opens wide opportunities for financing projects of various scales and types, from military support initiatives to

innovative technological startups. Third, the integration of crowdfunding into state reconstruction programs and its combination with international financial assistance mechanisms can significantly increase the efficiency of resource mobilization for Ukraine's post-war recovery.

Thus, the study of crowdfunding as an alternative instrument of investment financing in the context of Ukraine's post-war economic recovery represents both a theoretically significant and practically important direction of scientific research, which determines the relevance and objectives of this section.

The phenomenon of crowdfunding is not a fundamentally new concept in the financial practice of humanity; rather, it represents a natural evolutionary development of collective financing mechanisms whose roots stretch back centuries. A vivid illustration of such a model of resource mobilization in the pre-reform, pre-digital era is the well-known example of the Statue of Liberty. Although the sculpture itself was an official diplomatic gesture on the part of France, the construction of the stone pedestal for its installation was the responsibility of the American side - specifically, the city of New York. However, the then-governor Grover Cleveland rejected the proposal to allocate municipal funding for this purpose, while the United States Congress was unable to pass the relevant budget act that would have provided funds for the construction of the pedestal. As a result, a genuine threat emerged that New York would lose its right to host the statue: several American cities - Baltimore, Boston, San Francisco, and Philadelphia - expressed their willingness to undertake the construction of the pedestal on the condition that the sculpture be relocated to their respective territories. In this critical situation, the prominent publisher Joseph Pulitzer used his influential print outlet the newspaper New York World, and appealed to his broad readership with a call to contribute to the funding of the pedestal. Donors were

offered various incentives based on the size of their contribution, including a decorative gold coin for those who made the largest donations. Thanks to this civic initiative, the remaining $100,000 was raised, the pedestal was constructed, and New York permanently secured its right to be regarded as the home of the Statue of Liberty[555].

As for the concept itself, the term "crowdfunding" entered scientific and public discourse through the efforts of American blogger Michael Sullivan, who first used the word in 2006 to describe the practice of raising financial resources from a wide circle of individuals united by a shared interest in a particular project. Sullivan's original intention was to use this instrument to self-finance his own video blog. Despite the fact that the project itself never achieved the anticipated success, it was precisely through this attempt that a new term entered the lexicon - one that would subsequently gain widespread currency throughout the world[556].

Crowdfunding as a phenomenon traces its origins to a broader concept, crowdsourcing, which was described in 2006 by journalist J. Howe of Wired magazine. At the core of this concept lies the idea of engaging an undefined group of people who are not narrow-domain specialists, yet are capable of generating solutions to specific problems, proposing unconventional ideas, or providing feedback regarding a particular product, service, or concept. According to the author, when the process is properly organized, a collective can demonstrate higher performance outcomes compared to the regular employees of an enterprise. The researcher further emphasizes that the driving force for crowdsourcing participants

[555] Statue of Libery. Joseph Pulitzer. *National Park Service*. February, 2015. URL: https://www.nps.gov/stli/learn/historyculture/joseph-pulitzer.htm

[556] Zhao Y., Harris P., Lam W. Crowdfunding industry - History, development, policies, and potential issues. *Journal of Public Affairs*. 2019. 19(1), e1921.

is not material reward, but rather the satisfaction derived from the process of collaborative activity itself [557].

As researchers note, "crowdfunding represents a method of raising funds for the implementation of projects, entrepreneurial initiatives, or lending, which involves obtaining relatively small amounts from a significant number of investors or donors who seek to support a particular type of initiative"[558]. This financing mechanism serves as an alternative to traditional bank lending and provides individual investors with the opportunity to contribute funds through specialized online platforms - crowdfunding platforms. The fundamental distinction between crowdfunding and classical forms of capital attraction lies in the democratization of access to financial resources: whereas traditional bank lending is based on an assessment of the borrower's creditworthiness and requires the existence of collateral, crowdfunding opens up financing opportunities for a wide range of initiators, including those who lack access to conventional banking products. It is precisely this characteristic that makes crowdfunding particularly sought-after under conditions of martial law, when traditional financial institutions significantly curtail their lending activities due to escalating risks.

The typical crowdfunding model identifies three key actors: the project initiator, who seeks financing and presents their concept to a broad audience; investors or donors, who are willing to contribute funds in support of the project; and the crowdfunding platform itself, as a specialized service provider that establishes the connection between the initiator and potential funders. In this context, the role of the platform is not limited to purely intermediary functions - it also performs the functions of project verification, ensuring transaction

[557] Howe J. The rise of crowdsourcing. *Wired Magazine*. 2006. 14(6), 1–4.

[558] Mollick E. The dynamics of crowdfunding: An exploratory study. *Journal of Business Venturing*. 2014. Volume 29, Issue 1.

transparency, protecting investor interests, and fostering trust among participants. The effectiveness of the entire crowdfunding process and the level of public confidence in it are directly contingent upon the quality with which these functions are performed. It is for this reason that developing the institutional capacity of crowdfunding platforms is no less important a task than expanding the circle of their users[559].

Academic literature presents a variety of approaches to the classification of crowdfunding: some researchers consolidate models based on donations, rewards, and pre-orders, grouping them as a distinct category alongside debt-based and equity-based crowdfunding, while other authors treat each of the aforementioned models as a separate and independent form[560]. The contentious nature of these classificatory approaches is explained, above all, by the dynamic development of the phenomenon itself and the emergence of hybrid models that simultaneously combine elements of several crowdfunding forms. In practical terms, the choice of a specific model is determined by the nature of the project, the expectations of the target investor audience, the regulatory environment, and the strategic objectives of the initiator. For Ukraine, which finds itself in the active phase of an armed conflict and simultaneously faces the challenges of military support, humanitarian assistance, and economic recovery, various crowdfunding models are relevant depending on the specific type of initiative.

Table 3.8 presents a systematization of crowdfunding types based on the financing model, encompassing their key characteristics and areas of application.

[559] Давиденко Н.М., Ключка О.В. Роль блокчейну в оптимізації бізнес – процесів цифрової економіки. Науковий вісник Міжнародного гуманітарного університету. Серія: «Економіка і менеджмент» 2025. № 63. С. 28 - 32

[560] Belleflamme P., Lambert T., Schwienbacher A. Individual crowdfunding practices. *Venture Capital*. 2013. 15(4). P. 313-333.

Table 3.8 - Classification of Crowdfunding Based on the Financing Model

Type of Crowdfunding	Description	Key Characteristics	Areas of Application
1	*2*	*3*	*4*
Donation-based crowdfunding	Raising funds without financial reward for the donor	Investors act as donors and receive non-financial benefits (acknowledgements)	Charitable fundraising, social projects, arts
Reward-based crowdfunding	Raising funds for projects with a reward for investors	Reward in the form of a product, access to it, or exclusive privileges	Product development, cultural projects
Pre-order-based crowdfunding	Raising funds with an obligation to deliver a product in the future	Investors become the first users of the product	Startups with innovative products
Debt-based crowdfunding (Lending)	Borrowing funds at a fixed interest rate	Borrowers repay loans with interest; the platform acts as an intermediary	Financing of businesses or personal projects
Equity crowdfunding	Raising capital in exchange for a share in the company	Investors receive shares in the company	Financing the strategic activities of companies
Royalty-based crowdfunding	Raising funds in exchange for a share of future revenues	Investors receive a percentage of the project's future income without acquiring ownership rights	Creative industries, music, film production
Real estate crowdfunding	Collective investment in	Investors receive income from rental	Residential and commercial

	real estate objects	payments or asset appreciation	real estate, post-war reconstruction
Civic / Municipal crowdfunding	Raising funds for public infrastructure and community initiatives	Often involves co-financing by local authorities; high level of civic engagement	Urban development, public spaces, local infrastructure recovery
State crowdfunding	Fundraising organized or supported by state institutions	State acts as guarantor or co-financer; high level of institutional trust	National defense, reconstruction, humanitarian aid (e.g., UNITED24)
Hybrid crowdfunding	Combining elements of two or more crowdfunding models	Flexible structure adapted to the specific needs of the project	Complex investment and social projects, post-war recovery initiatives

Source: compiled by the authors based on[561] *and supplemented by the authors*

Analysis of the presented models leads to the conclusion that each possesses its own specific application potential in the context of Ukraine's post-war recovery. Donation-based crowdfunding most organically corresponds to the needs of charitable and humanitarian initiatives, which are critically important under conditions of martial law. The experience of platforms such as UNITED24 and dobro.ua clearly demonstrates that this model is capable of mobilizing resources not only domestically but also from the international community and the Ukrainian diaspora, thereby transforming individual civic

[561] Cumming D. J., Leboeuf G., Schwienbacher A. Crowdfunding Models: Keep-It-All vs. All-Or-Nothing. *Forthcoming, Financial Management*. February 5, 2019.

impulses into a systemic financing mechanism for the state's defense and reconstruction needs.

Reward-based and pre-order crowdfunding open up prospects for financing innovative products and the development of small businesses, providing entrepreneurs with the opportunity to test market demand before full-scale production and to attract an initial customer base without recourse to traditional credit instruments. This is of particular importance for Ukrainian entrepreneurs who have lost assets or been forced to relocate their businesses as a result of the war, yet retain the intellectual and creative potential for launching new ventures.

Debt-based and equity crowdfunding hold the greatest potential for attracting investment into medium and large businesses, the implementation of infrastructure projects, and the development of new production capacities in the post-conflict period. These models are capable of channeling private capital - both domestic and international into strategically important sectors of the economy, complementing public financing and international grant support[562].

Royalty-based crowdfunding deserves special attention in the context of developing Ukraine's creative industries, which have demonstrated remarkable resilience and international recognition during the war period. This model enables artists, musicians, filmmakers, and other representatives of the cultural sector to attract financing without relinquishing ownership rights, while simultaneously offering investors a share in future revenues.

Real estate crowdfunding has exceptional potential for Ukraine's post-war reconstruction, particularly in the context of restoring the destroyed housing stock and rebuilding urban infrastructure. By allowing a large number of investors to

[562] Давиденко Н.М., Кушнір О.О., Давиденко М.А. Розвиток сучасних платіжних систем в Україні. Науково – виробничий журнал «Бізнес – навігатор». 2025. №3(80). С. 196 – 200. DOI: https://doi.org/10.32782/business-navigator.80-34

collectively finance real estate projects, this model can attract private capital into the reconstruction process, reducing the burden on the state budget and international aid programs.

Civic and municipal crowdfunding, in combination with co-financing mechanisms from local self-government bodies, can become an effective instrument for restoring community infrastructure, from educational institutions and medical facilities to public spaces and utility networks. This model simultaneously serves as a tool for civic engagement and a mechanism for increasing public trust in local authorities through transparency in the management of financial resources.

State crowdfunding, represented in Ukraine primarily by the UNITED24 platform, has already proven its effectiveness as an instrument for mobilizing international support for national defense and reconstruction priorities. The further development of this model, including its integration with European Union programs and bilateral donor agreements, can significantly expand the financing base for Ukraine's post-war recovery.

Finally, hybrid crowdfunding models that combine elements of several financing forms simultaneously are particularly promising for complex reconstruction projects requiring both grant support and commercial investment. Such hybrid structures are increasingly being applied in international post-war recovery practice and may become an important component of Ukraine's financial architecture in the post-conflict period.

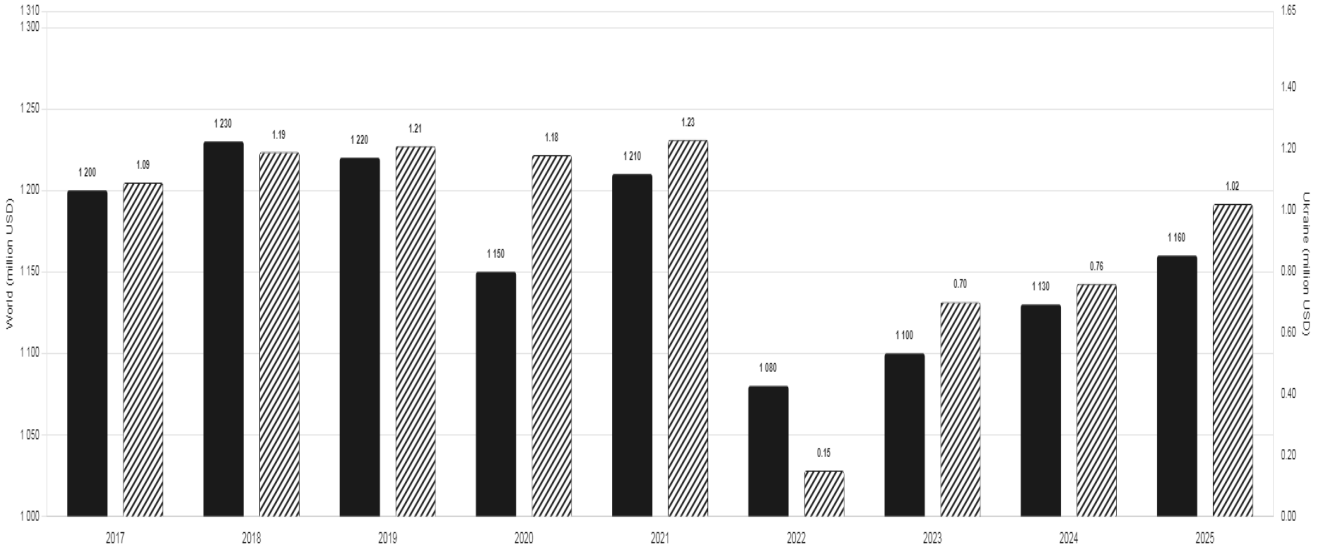
Thus, the comprehensive application of diverse crowdfunding models within a unified ecosystem of alternative financing can serve as a significant complement to traditional investment attraction mechanisms for Ukraine's recovery. The key condition for realizing this potential is the development of an appropriate regulatory and institutional framework, the enhancement of financial literacy among the population, and the

integration of Ukrainian crowdfunding platforms into the international network of alternative financing instruments.

Among the earliest collective financing platforms in the world, a special place is occupied by ArtistShare[563], founded in 2001, which subsequently became a reference point and institutional model for an entire generation of modern crowdfunding resources, including KickStarter, IndieGoGo, and PledgeMusic. On Ukrainian soil, the first such platforms appeared in the early 2010s: notably, Biggggidea, oriented towards financing social, cultural, and artistic initiatives, and Na-Starte, which specializes in supporting creative and entrepreneurial projects. The emergence and development of these platforms reflect the global trend towards the active adoption of crowdfunding as an effective mechanism for supporting entrepreneurship and socially significant initiatives.

A significant impetus for the development of crowdfunding culture was the transformation of the financial environment that occurred as a result of the global financial crisis of 2008. The introduction of stricter lending standards by banking institutions in the post-crisis period, and the objective difficulties encountered by small enterprises in their attempts to access credit resources, prompted market participants to seek non-traditional mechanisms for attracting capital outside the boundaries of the conventional banking system.

[563] *ArtistShare*.URL: https://www.artistshare.com/about



Dual-axis chart: World values (left axis) and Ukraine values (right axis)
World (million USD) - left axisUkraine (million USD) - right axis

Fig. 3.4 - Value of Crowdfunding Transactions in Ukraine and Worldwide, 2017–2025 (million USD)

Source: compiled by the author. Note: Ukraine and World values use separate Y-axes due to difference in scale.

The volume of funds raised through crowdfunding campaigns on a global scale demonstrates a steady upward trajectory year on year, with the projected value of this indicator by the end of 2024 estimated at USD 1.2 billion[564].

Figure 3.4 illustrates the dynamics of the global crowdfunding market and the corresponding Ukrainian market (in million USD), which, despite its relatively modest absolute figures compared to worldwide volumes, generally reflects the international development trends of the industry. It is anticipated that as early as 2025, the volume of the Ukrainian crowdfunding market will surpass the threshold of USD 1 billion.

Crowdfunding has the potential to play an important role in Ukraine's recovery by filling the financing gap experienced by numerous domestic entrepreneurs and initiators of innovative projects. This gap is particularly acute for business entities that require seed financing at the early stages of development but are unable to access traditional credit resources due to insufficient collateral or other assets. Crowdfunding opens up opportunities for Ukrainian entrepreneurs to attract financial resources from a wide range of individuals willing to support promising ideas and contribute to the economic revival of the country - both under conditions of prolonged war and in the prospect of post-war reconstruction.

Compelling evidence of the effectiveness of crowdfunding as an instrument for mobilizing charitable resources is provided by the experience of one of Ukraine's leading fundraising platforms - dobro.ua, founded in 2012 on the initiative of the Victor Pinchuk Foundation. The platform positions itself as the first and largest online philanthropy fundraising platform in Ukraine, an effective and modern instrument for raising funds for charitable and social projects of any nature. The fundamental distinction between dobro.ua and spontaneous forms of

[564]URL:https://www.statista.com/outlook/dmo/fintech/digitalcapitalraising/crowdfunding/worldwide

fundraising lies in the introduction of clear mechanisms for partner verification and control over the targeted use of raised resources, which is of particular importance under conditions of heightened fraud risk during wartime.

Analysis of the platform's reporting data covering the entire period of its operation, from 2012 to 2025, published on the official dobro.ua website - confirms a steady upward trajectory in fundraising receipts. Over 14 years of operation, the platform has raised more than UAH 829,000,000 for charitable purposes, supported nearly 9,000 projects, and won numerous national awards in the field of philanthropy[565]. Even more indicative are the consolidated figures as of mid-2025: the total volume of funds raised reached UAH 972,811,734, the number of completed projects and campaigns exceeded 9,869, and the number of charitable contributions amounted to more than 1,479,373[566]. Thus, in the two years alone - 2024–2025 - the platform raised an additional UAH 143 million compared to the previously reported figure of UAH 829 million, demonstrating the preservation of a powerful upward momentum even under conditions of prolonged armed aggression.

Equally indicative is the breadth of the platform's partner network: more than 200 companies have become partners of dobro.ua, including major business representatives such as Kyivstar, WOG, Socar, Winner, Monobank, PrivatBank, Danone, Vodafone, Bayer, Amway, Nova Poshta, and others567. This demonstrates that crowdfunding platforms are capable not only of accumulating retail donations from individuals, but also of serving as a venue for corporate social responsibility, attracting systemic partnerships with leading companies.

[565] URL: https://dobro.ua/about_us/

[566] URL: https://dobro.ua/about_us/

[567] URL: https://dobro.ua/about_us/

In 2024–2025, the platform continued to expand its capacity in the field of veteran rehabilitation: in April 2025, with the support of Kyivstar, a modern burn care unit for children was opened at the National Rehabilitation Centre UNBROKEN in Lviv, and in June 2025, Kyivstar allocated UAH 15 million for medical equipment for the UNBROKEN Centre as part of the Children's Hope project. These examples vividly illustrate the evolution of crowdfunding from one-time fundraising campaigns to systemic long-term recovery and rehabilitation initiatives.

The platform has also received broad institutional recognition: in 2025–2026, dobro.ua entered the TOP-100+ ranking of the largest charitable foundations in the country and was awarded second place in the National Competition "Charitable Ukraine-2025", which received 1,698 applications across 27 nominations[568]. This demonstrates that crowdfunding platforms in Ukraine have already established themselves as fully-fledged institutional actors within the charitable sector, rather than merely technical intermediaries in the collection of funds.

Thus, the experience of dobro.ua convincingly demonstrates that crowdfunding under conditions of martial law is transforming from an auxiliary financial instrument into a systemic mechanism for mobilizing public resources, ensuring transparency in charitable activities, and fostering a resilient donor culture in Ukraine. The growth dynamics of the platform's key indicators, from UAH 596 million (2023) to nearly UAH 973 million (2025), constitute a compelling argument in favor of further developing the crowdfunding ecosystem as an integral element of the financial architecture of Ukraine's post-war recovery.

The diversity of crowdfunding forms opens up broad opportunities for financing projects of various types and for

[568] URL: https://dobro.ua/about_us/

different categories of participants. In particular, donation-based crowdfunding is acquiring special significance for the implementation of Ukrainian charitable initiatives aimed at supporting the armed forces, restoring destroyed infrastructure, and providing social assistance to citizens who have suffered as a result of military operations. It is precisely such funds that currently hold leading positions in terms of the total volume of donations raised, as clearly demonstrated by Table 3.9.

Table 3.9 - Top 5 Largest Charitable Organizations of Ukraine

2024 Rank	NameRevenue	2023, million UAH	Revenue 2024, million UAH	Dynamics
1	1Ukrainian Red Cross Society	8 971,2	5 592,0	–37,7%
2	Charitable Organization (CO) ICF "Come Back Alive"	5 298,0	4 985,9	–5,9%
3	ICF "Caritas Ukraine"	3 249,7	2 617,0	–19,5%
4	All-Ukrainian Network of People Living with HIV/AIDS (CO "100% Life")	2 528,1	2 374,1	–6,1%
5	CO "Serhiy Prytula Foundation"	2 359,0	2 195,7	–6,9%

Source: compiled by the authors based on data from the All-Ukrainian Charitable Organization "Association of Charity of Ukraine" - Annual Review "TOP 100+ Public Transparent Charitable Organizations of Ukraine" based on the results of activities in 2024[569]

[569] ВБО «Асоціація благодійників України». ТОП 100+ публічних транспарентних доброчинних організацій України за результатами діяльності у 2024 році. URL: https://blagoukraine.org/wp-content/uploads/2025/07/TOP-100-NGO-in-2024-1.pdf

Analysis of the data from the "TOP 100+ Public Transparent Charitable Organizations of Ukraine" ranking for 2024, prepared by the All-Ukrainian Charitable Organization "Association of Charity of Ukraine", reveals an important structural trend - despite the same five organizations retaining their leadership positions, all of them demonstrated a decline in revenue volumes compared to 2023[570]. The most significant contraction was recorded by the Ukrainian Red Cross Society - from UAH 8,971.2 million in 2023 to UAH 5,592.0 million in 2024, representing a decrease of nearly 38%. At the same time, the overall ranking encompasses a considerably broader spectrum of growth-leading organizations: among those that substantially increased their fundraising volumes, the Charitable Foundation "Mission Hansen" (+738.88%), CO "Olena Zelenska Foundation" (+326%), CO "Superhumans" (+285.1%), and CO "Support the Third Assault Brigade" (+5,644%) stand out - indicating the active formation of new institutional centers of crowdfunding activity, particularly in the fields of rehabilitation and direct military support[571].

The diversity of crowdfunding forms opens up broad opportunities for financing projects of various types and for different categories of participants. In particular, donation-based crowdfunding is acquiring special significance for the implementation of Ukrainian charitable initiatives aimed at supporting the armed forces, restoring destroyed infrastructure, and providing social assistance to citizens who have suffered as a result of military operations.

Three large-scale projects - "We Can Do It Again!", "Detect and Destroy", and "We Will Reach the Enemy

[570] ВБО «Асоціація благодійників України». ТОП 100+ публічних транспарентних доброчинних організацій України за результатами діяльності у 2024 році. URL: https://blagoukraine.org/wp-content/uploads/2025/07/TOP-100-NGO-in-2024-1.pdf

[571] ВБО «Асоціація благодійників України». ТОП 100+ публічних транспарентних доброчинних організацій України за результатами діяльності у 2024 році. URL: https://blagoukraine.org/wp-content/uploads/2025/07/TOP-100-NGO-in-2024-1.pdf

Everywhere" - collectively accumulated 20% of the total volume of funds raised. This represents a considerably significant share, indicating a pronounced concentration of donor attention on specific, strategically priority directions that have a substantial impact on meeting the needs of the armed forces.

On the basis of the analysis of the financial activities of the Serhiy Prytula Foundation, the following key conclusions can be drawn. First, the overwhelming majority of the funds raised - 94% are directed exclusively towards supporting military personnel, while humanitarian projects receive only 6% of the total volume of receipts. Such a distribution structure confirms the unequivocal priority of military assistance under conditions of armed conflict, where the primary objective is to meet the needs of national defense. Second, 84% of financial receipts are generated domestically - from donors located within Ukraine, while contributions from abroad account for only 16%. This points to an exceptionally high level of internal solidarity and the active participation of Ukrainian society in fundraising to meet the critical needs of the state. At the same time, foreign contributions, despite their relatively smaller share, also play an important role in forming the resource base of the foundation. Third, the core of the donor audience consists of private individuals, who account for 85% of the total funds raised, while the business sector provides only 15%. Such a structure may indicate the deep personal engagement of ordinary citizens who independently make decisions to financially support important initiatives, while the entrepreneurial sector, despite its smaller proportional weight, also makes a meaningful contribution.

Thus, Ukrainian society demonstrates a high level of activity in financing military needs through the crowdfunding mechanism, with donations from private individuals located within Ukraine remaining the primary source of receipts. At the same time, humanitarian initiatives receive considerably less support, which reflects the objective priority of the army's needs

under conditions of active hostilities. The combination of mass participation by private individuals with contributions from business structures forms a powerful donor base for financing critically important initiatives.

Reward-based crowdfunding provides entrepreneurs with the opportunity to offer early or exclusive access to their goods and services, thereby stimulating the development of small entrepreneurship and creative industries. Debt-based and equity crowdfunding are also regarded as promising instruments for domestic businesses, as they enable the attraction of investment capital and ensure the development of companies in a challenging economic environment.

The success of a crowdfunding campaign in Ukraine is determined by a set of interrelated factors: the clarity and persuasiveness of the project's goal formulation, the effectiveness of the marketing strategy, and the ability of the initiator to gain and maintain the trust of potential investors. These aspects acquire particular significance under conditions of martial law, when both Ukrainian citizens and representatives of the diaspora demonstrate a heightened willingness to invest in projects aimed at rebuilding the country and strengthening its independence. Crowdfunding platforms provide entrepreneurs with a unique platform for presenting their initiatives, gaining public support, and searching for new clients and partners, thereby contributing to the strengthening of their competitive positions in the market. Beyond its purely financial function, crowdfunding enables Ukrainian entrepreneurs to test their business ideas and receive valuable feedback from potential consumers at the early stages of project implementation. This is of particular relevance for initiatives related to the restoration of infrastructure facilities or the introduction of innovative technological solutions oriented towards economic revival. Thus, crowdfunding creates unique conditions for the development of entrepreneurial activity, the attraction of new

investors, and the enhancement of brand recognition among a broad audience.

Thus, crowdfunding as a financing instrument has the potential to play an important systemic role in the process of Ukraine's recovery in the context of achieving economic stabilization and ensuring sustainable development in the post-conflict period. Its key advantages lie not only in the possibility of attracting financial resources, but also in the capacity to mobilize civil society and the international community in support of various projects related to the reconstruction of the state.

The advantages of using crowdfunding in the process of Ukraine's post-war recovery can be considered in two interrelated dimensions - macroeconomic and microeconomic. The macroeconomic-level advantages of crowdfunding in the context of Ukraine's post-war reconstruction are as follows.

First, ensuring access to capital for infrastructure recovery. In the post-conflict period, a significant number of projects aimed at the reconstruction of infrastructure facilities will require substantial financial support. Crowdfunding can become an effective mechanism through which both domestic citizens and the international community will be able to invest in the restoration of cities, educational institutions, medical facilities, and other strategically important objects. This will enable the prompt mobilization of the necessary resources for the implementation of recovery works that require urgent financing.

Second, ensuring transparency and minimizing corruption risks. By virtue of its decentralized nature, crowdfunding guarantees the openness and traceability of project financing. For Ukraine, where the problem of corruption remains one of the key systemic deficiencies, this characteristic is of particularly important significance. The ability to track every contribution, as well as the transparency in the use of raised funds, become

decisive factors in building trust between investors and project initiators.

Third, supporting socially significant initiatives. Crowdfunding can serve as an effective instrument for financing socially oriented projects, including assistance programs for internally displaced persons, the construction of new housing for individuals who have lost their homes as a result of military operations, and rehabilitation centers for veterans. Crowdfunding platforms enable direct participation in the implementation of specific initiatives that have a substantial impact on the restoration of the social structure of society.

Fourth, attracting international support and consolidating the efforts of the diaspora. Crowdfunding platforms open up broad opportunities for receiving support from the international community and Ukrainians residing abroad. This creates the preconditions for a significant increase in financial flows in favor of Ukraine's recovery, as donor participation is not constrained by any geographical boundaries.

Fifth, the opportunity to test innovative solutions. The post-conflict period will become a time of active innovation, and crowdfunding can serve as an effective instrument for financing new ideas, technological developments, and startup projects. In particular, initiatives in the field of improving energy efficiency, developing renewable energy, or introducing the latest technologies in the construction sector can attract the necessary funds through crowdfunding platforms, which will substantially accelerate their practical implementation.

Sixth, mobilizing civil society. Crowdfunding directly engages citizens in the process of rebuilding the country, providing each individual with the opportunity to make a personal contribution to the implementation of specific projects. This fosters a sense of responsibility and community, which is of particular importance for Ukraine during the period of social and economic recovery.

Seventh, supporting small and medium-sized entrepreneurship. Small and medium-sized business entities have suffered significant losses as a result of military operations, and crowdfunding can become an effective instrument for their revival. Crowdfunding platforms provide entrepreneurs with the opportunity to attract capital for relaunching existing or establishing new businesses, which is critically important for restoring economic activity in the country.

Thus, crowdfunding has the potential to become a powerful and effective instrument for financing projects related to Ukraine's reconstruction. Its defining advantages - transparency of operations, broad access to international support, the possibility of financing socially significant projects and innovative initiatives — make it an indispensable mechanism in the post-conflict period. At the same time, there is an urgent need to develop crowdfunding platforms in Ukraine and ensure their effective integration with state reconstruction programs, with the aim of maximizing the attraction of resources for the rapid and productive recovery of the country.

A compelling example of such interaction today is the UNITED24 platform, one of whose priority areas of activity is defined as "Rebuilding the Country". In particular, for the implementation of the project to restore 18 apartment buildings in the Kyiv region, thanks to donors from UNITED24 representing more than 110 countries of the world, as of January 2023, more than UAH 504 million out of the declared need of UAH 719 million had been raised[572].

The regulation of crowdfunding activity in Ukraine is at the formative stage; however, the objective necessity of establishing a clear and comprehensive legal framework that would ensure the transparency and reliability of this instrument's functioning is beyond question. A valuable point of reference in

[572] URL: https://www.kmu.gov.ua/news/united24-zapustyla-napriam-vidbudova-ukrainy-pershyi-proekt-18-bahatokvartyrnykh-budynkiv-u-kyivskii-oblasti

this context may be the experience of leading states, in particular the United States, where the normative regulation of equity crowdfunding was implemented within the framework of the JOBS Act (Jumpstart Our Business Startups Act)[573]. It is of fundamental importance that the future regulatory environment in Ukraine combines effective protection of investor rights with ensuring entrepreneurs real access to investment capital.

Despite the significant potential of crowdfunding as an innovative financial instrument, its use is associated with certain risks and challenges that must be taken into account by all participants in this process.

For project initiators, one of the most tangible risks is the possibility that a crowdfunding campaign may fail to reach its established financial goal, as a result of which the funds necessary for the implementation of the project may never be raised in full. Since the overwhelming majority of crowdfunding projects are carried out in the public domain, their initiators may encounter open criticism from investors or the general public in the event of an unsuccessful campaign outcome. The public nature of project presentation also creates the risk of intellectual piracy: competitors gain the opportunity to familiarize themselves with the key concept prior to its practical implementation and to make use of it for their own purposes. Furthermore, organizing and maintaining a crowdfunding campaign at an appropriate level requires considerable expenditure of time, organizational effort, and financial resources for promotion, which may constitute a significant additional burden for initiators. Competition for the attention of potential investors is also quite intense, given the large number of projects simultaneously presented on crowdfunding platforms and competing for a limited pool of donor resources.

573 URL: https://www.kmu.gov.ua/news/united24-zapustyla-napriam-vidbudova-ukrainy-pershyi-proekt-18-bahatokvartyrnykh-budynkiv-u-kyivskii-oblasti

To illustrate the scale of competition between projects, it is worth noting that on the "My City" platform alone, across three cities - Kharkiv, Odesa, and Dnipro - more than 195 socially oriented projects have been implemented since 2015. In the case of reward-based crowdfunding, initiators undertake obligations to provide the promised incentives to donors; however, in practice, difficulties may arise in meeting the established product delivery deadlines or ensuring that the outcome corresponds to participants' expectations. It should also be noted that maintaining regular communication with a large investor base may generate additional operational costs for the initiator. In the case of financing through equity crowdfunding, project initiators are compelled to account for the inevitable distribution or partial transfer of corporate control to new shareholders, as well as the dilution of share capital, which may subsequently reduce the company's attractiveness to potential strategic investors.

From the perspective of investors, participation in crowdfunding projects also carries a number of specific risks. First and foremost, it is necessary to note the risk of partial or complete loss of invested funds, since no deposit insurance or investor compensation mechanism analogous to the Deposit Guarantee System extends to crowdfunding, and no guarantees of project success exist. In certain crowdfunding models, particularly those based on rewards, in the event that the campaign fails to reach its financial goal, investors are deprived of the right to recover their invested funds. Where platforms conduct insufficient verification of project initiators, authors who fail to fulfill their undertaken obligations may mislead investors. The risk of outright fraud should not be underestimated either: although such cases are relatively infrequent, they do occur. In this regard, according to the findings of the study "Charity in Times of War", conducted in June 2022 by the Zagoriy Foundation in collaboration with

Sotsio-Inform, only 30.5% of investors carried out a verification of the project's integrity prior to making a contribution[574].

Investments in early-stage companies through crowdfunding are characterized by low liquidity, which may significantly complicate or render impossible an investor's exit from such a transaction through the sale of their stake. Early termination of an investment prior to the expiry of the agreed term may also prove practically impossible or may be associated with considerable complications. In reward-based crowdfunding models, investors effectively have no influence whatsoever over managerial decisions concerning the company or project and do not participate in determining the strategic priorities of its development, receiving instead exclusively a product or other stipulated incentives in exchange for their observations and suggestions.

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[574] URL:https://zagoriy.foundation/wp-content/uploads/2022/08/doslidzhennya-2022-1.pdf

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[575] URL: https://zagoriy.foundation/wp-content/uploads/2022/08/doslidzhennya-2022-1.pdf

SECTION 4.
BLOCKCHAIN SOLUTIONS AND MORTGAGE LENDING DYNAMICS AS FACTORS OF BANKING SECTOR DEVELOPMENT UNDER MARTIAL LAW CONDITIONS

4.1. ASSESSING THE IMPACT OF LATENT FACTORS ON STRATEGIC DECISION-MAKING FOR BLOCKCHAIN TECHNOLOGICAL ADOPTION IN CORPORATE SUPPLY CHAIN

Abstract. This monograph presents an advanced conceptual framework designed to support managerial decision-making in the implementation of blockchain technology within business entities operating in supply chain networks. The primary objective is to enhance competitiveness and brand recognition within the context of globalized and digitized value chains. The study identifies and analyzes the key factors influencing the successful integration of blockchain solutions, aiming to position corporations among the leading actors in the digital economy.

The applied research approaches, methods, procedures, and quantitative calculations are suitable for both practical business implementation and advancement in applied scientific research. The empirical findings serve as a relevant foundation for the development of strategies and policies at corporate, administrative, and national levels.

Introduction. The relevance of the topic stems from the observation that commercial companies often fail to recognize the true advantages of blockchain technology, which continues to be predominantly associated with cryptocurrencies – frequently marked by high volatility and fraudulent projects. In

this context, the business community demands empirical evidence regarding the benefits and specificities of blockchain implementation, which has the potential to significantly enhance the competitiveness of corporate supply chains (Cole, R., Stevenson, M. and Aitken, J., 2019)[576].

Based on this rationale, a national-level study was conducted in Bulgaria, aiming to explore the potential of blockchain technology (Nakamoto, S., 2008)[577] in reinforcing the visibility of digitally adaptive companies as desirable business partners. The findings serve as the foundation for a conceptual framework designed to guide strategic decision-making on the adoption of blockchain-based software applications with the goal of improving organizational competitiveness.

By utilizing this framework, corporate management teams can not only make informed decisions regarding the integration of blockchain technologies, but also anticipate and manage the implementation of future high-tech solutions, driven by waves of technological innovation and socio-cognitive motivations – ultimately focusing on achieving economic benefit.

The research thesis conceptualized in this study is based on the premise that blockchain technology can enhance the competitiveness of an enterprise, provided that the enterprise operates within supply chain systems. However, achieving the desired level of competitiveness requires that the business entity be integrated into a blockchain network, i.e., meet the so-called „onboarding" criterion. In other words, by establishing connections with a sufficient number of participants in the supply chain, companies can benefit from the alignment of

[576] Cole, R., Stevenson, M. and Aitken, J. (2019), "Blockchain technology: implications for operations and supply chain management", Supply Chain Management, Vol. 24 No. 4, pp. 469-483. https://doi.org/10.1108/SCM-09-2018-0309

[577] Nakamoto, S. (2008) „Bitcoin: A Peer-to-peer electronic Cash System." (accessed 29 October 2018) https://bitcoin.org/bitcoin.pdf

sectoral interests, which would otherwise remain limited. This network-based integration enables the enterprise to position itself within the so-called „elite of the digital economy".

The question of how to measure the advantages and specific features of blockchain implementation is addressed by operationalizing the identified driving and limiting factors – represented as the independent variables „latent motivators" and „latent barriers" These variables form the basis for achieving the research objective and for developing the theoretical and methodological framework of the study. While previous research (e.g., Dimitrov, I., Gigov, R., and Dimitrova, A., 2022)[578] has explored the individual effects of these variables, the present work focuses on the combined influence of latent impact factors – specifically, „latent motivators" and „latent barriers".

1. Literature Review on the Use of Blockchain Technology in Supply Chain Systems

The purpose of this theoretical review is to analyze and synthesize the key factors influencing the enhancement of competitiveness in firms operating within supply chains. Common research practices involve a taxonomic segmentation of the causes contributing to the overall increase in the status index of the studied company. The focus is often placed on internal organizational factors, as they can be measured through the perceptions and subjective assessments of the management team.

The managerial perspective is fundamental in the decision-making process regarding the implementation of information technologies that hold potential to strengthen the company's position within the supply chain ecosystem

[578] Dimitrov, I., Gigov, R., & Dimitrova, A. (2022). Leading factors for blockchain technology implementation in the business organisations in the Bulgarian context. Entrepreneurship and Sustainability Issues, 10(2), 255. DOI:10.9770/jesi.2022.10.2(16)

(Koprinkova-Noncheva, N., & Dimitrov, I., 2022, October)[579]. However, this process must first align with specific decision-making criteria, generally categorized into two main groups: driving forces (motivators) and limiting factors (barriers).

This literature review is structured around four key focal points:

– Synthesizing the criteria necessary for enhancing enterprise competitiveness within supply chains;

– A taxonomic overview of blockchain technology and its practical applications;

– An analysis of best practices associated with the implementation of blockchain solutions in supply chain systems;

– A critical examination of the literature focusing on the factors influencing the adoption of blockchain technology by business organizations on a global scale.

In a publication on the topic (Saberi et al., 2019)[580], the reasons motivating and limiting the adoption of blockchain technology (BCT) are discussed. On the other hand, other authors (Kouhizadeh et al., 2021)[581] conduct a more detailed examination of the inhibiting forces, analyzing the overall impact of BCT on the supply chain sector. This particular study delves into the specifics of the influencing factors, whereas the present research aims to outline a more general framework for

[579] Koprinkova-Noncheva, N., & Dimitrov, I. (2022, October). Increasing the Investment Attractiveness of SMEs by Applying the Drop-Shipping Supply Chain Model in Context of Environmental, Social and Corporate Governance. In 2022 V International Conference on High Technology for Sustainable Development (HiTech) (pp. 1-5). IEEE. https://doi.org/10.1109/HiTech56937.2022.10145526

[580] Sara Saberi, Mahtab Kouhizadeh, Joseph Sarkis & Lejia Shen (2018):Blockchain technology and its relationships to sustainable supply chain management, International Journal of Production Research, DOI: 10.1080/00207543.2018.153326

[581] Kouhizadeh, M., Saberi, S. & Sarkis, J. (2021). Blockchain technology and the sustainable supply chain: Theoretically exploring adoption barriers, International Journal of Production Economics, Volume 231, 107831, ISSN 0925-5273, https://doi.org/10.1016/j.ijpe.2020.107831.

the adoption of the technology. In their paper, the authors classify the limiting factors into external and internal categories, with internal factors being further divided into intra-organizational, inter-organizational, and system-related.

In support of the aforementioned, other analysts (Sahebi et al., 2020)[582] share a method for studying the influence of various limiting factors, while noting that further analyses are needed to confirm the applicability of blockchain technology in supply chains.

In the present case, it can be summarized that the need for the introduction of this technology arises from the necessity for Bulgarian enterprises to position themselves within global supply chains, which, in turn, will align them with corporations operating in highly developed economies. In light of the thesis that blockchain connectivity will select participants in global trade, it is logical to conclude that enterprises adopting this technology will enter the first segment and, as a result, become more competitive.

2. Conceptual Model of the Study

The aim of this study is to establish the potential for enhancing the competitiveness of Bulgarian enterprises' supply chains through the implementation of blockchain technology. Throughout the investigation, the following aspects are considered: the advantages and disadvantages of blockchain technology (BCT) and its potential for integration into companies operating at both national and transnational levels; the factors influencing organizations during the implementation of BCT; and the extent to which the corporation could enhance its competitiveness by positioning itself within global supply chains through the use of the technology. A systematic approach

[582] Sahebi, I.G., Masoomi, B. and Ghorbani, S. (2020), "Expert oriented approach for analyzing the blockchain adoption barriers in humanitarian supply chain", Technology in Society, Vol. 63, p. 101427.

is applied throughout the various stages of the research to assess the degree to which each factor influences the system of indicators.

The tasks are structured in a sequence that follows widely accepted academic practices, namely: conducting a literature review on the research topic; developing the research methodology; and discussing and summarizing the results of the empirical study. The specific tasks include:

- Analyzing and summarizing the factors that enhance the competitiveness of supply chains, both internal and external to the company;
- Reviewing existing methods for assessing the factors influencing blockchain implementation, with a focus on categorizing the so-called motivating and constraining factors;
- Developing the conceptual model of the study, i.e., outlining the research philosophy;
- Structuring the influencing factors into research constructs that serve as the foundation for the survey design;
- Formulating the research hypotheses;
- Justifying the selection of computational techniques used for data analysis;
- Collecting and calculating the empirical results;
- Testing the reliability of the constructs in accordance with established scientific standards;
- Conducting descriptive statistical analysis and regression analysis using relevant constructs for the computations;
- Performing a residual analysis.

Based on the collected data, a regression model is proposed to assess the impact of significant latent motivating and, respectively, latent constraining factors on the enhancement of supply chain competitiveness in Bulgarian

business organizations through the implementation of blockchain technology.

The object of the study in this dissertation comprises economic entities located in Bulgaria that operate within supply chains on both national and international levels. The research includes micro, small, medium-sized, and large enterprises, which represent 95% of the economic structure in the country and within the European Union (EU), with some of these being corporate structures.

The subject of the research focuses on analyzing the potential to increase enterprise competitiveness through blockchain technology, the adoption of which is influenced by various internal and external factors affecting the organization.

The methodology of the study aims to identify opportunities for improving the competitiveness of supply chains among economic actors in the country through blockchain technology. This involves analyzing the alignment of stakeholder interests within the organization's priority business processes. To achieve this, both primary and secondary statistical data processing is required.

The initial evaluation of the input data involves descriptive statistics, while the secondary analysis is more in-depth, aiming to identify specific dependencies. Based on the final indicator values, conclusions are drawn regarding the relevance of implementing blockchain technology (BCT) in the supply chains (SC) of Bulgarian enterprises.

The subsequent stage aims to examine the influence of independent variables on a single dependent variable. In this context, the dependent variable – „planning the use of blockchain technology to enhance the competitiveness of the business entity" – reflects the attitudes of economic agents toward adopting decentralized information technologies, in

view of meeting the requirement for integration into a blockchain network via the so-called „onboarding“ process.

The independent variables influencing the intention to adopt the technology are categorized into „latent motivators“, which stimulate the adoption of BCT, and „latent barriers“, which hinder the implementation of the innovation within the firm (see Figure 4.1).

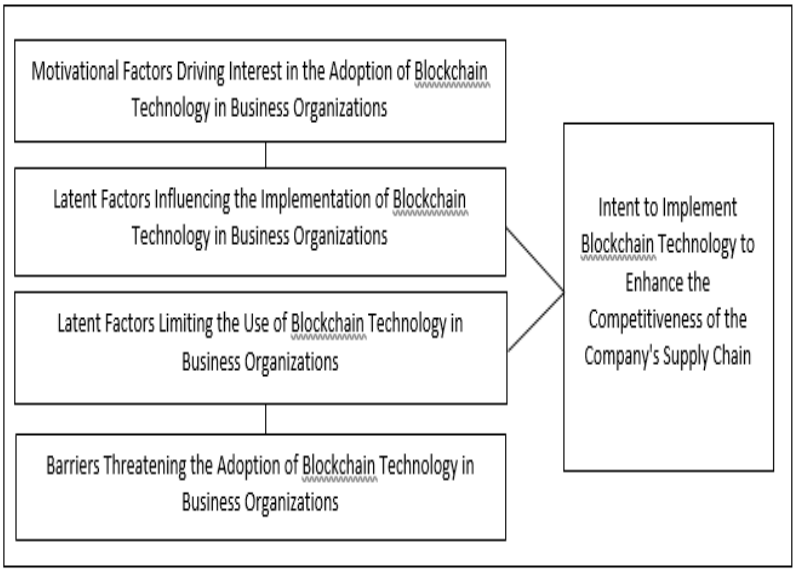


Fig. 4.1 - Conceptual Model of the Study

In the context of the main research question – concerning the intention to implement blockchain technology with the aim of increasing the competitiveness of the company's supply chain – two key hypotheses are formulated:

(H1) The „latent motivators“, which drive interest in the innovation, have a significant influence on the intention to

implement blockchain technology to enhance the company's competitiveness.

(H2) The „latent barriers", which threaten the adoption of the technology, have a significant influence on the intention to implement blockchain technology to enhance the company's competitiveness.

For the purposes of the analysis, primary statistics will be examined, a regression model will be developed using constructs derived from factor analysis, and residual effects will also be analyzed. The influence of other impacting factors has been previously discussed in earlier publications (Dimitrov and Gigov, 2021; 2022).

Data was collected using a questionnaire, which includes three main sections:

First section – introductory, aimed at outlining the respondent's profile and their level of awareness of blockchain technology. It includes questions that examine the demographic characteristics of participants.

Second section – focuses on the reasons behind the decision to implement the technology, or the so-called „motivators". This section reflects the benefits expected from joining a blockchain-based information infrastructure. The responses generate the independent variable „latent motivators".

Third section – groups the potential „barriers" to the integration of blockchain, forming the independent variable „latent barriers".

3. Analysis of Results

The data required for the task were collected through a survey, representing an exploratory data analysis (EDA) using the questionnaire method. In the pilot concept, direct interviews with respondents were planned, but the questionnaire was distributed via webinars organized by industry agencies

promoting the use of tools to enhance the competitiveness of businesses.

A key aspect in interpreting the raw data is considering the different influencing factors. For the objects analyzed in this study – Bulgarian enterprises – these factors are categorized as motivating and limiting, external and internal factors for the business organization.

Table 4.1- Descriptive statistics on "motivators"

Motivator	N	St. Error	St. Deviation	Variance	Skewness	Skewness Std. Error	Kurtosis	Kurtosis Std. Error
Transparency and traceability of information	104	0.141	1.434	2.057	-1.277	0.237	0.192	0.469
Digitization of supply chains	103	0.148	1.5	2.249	-0.891	0.237	-0.673	0.469
Decentralization of data storage	104	0.168	1.711	2.929	-0.516	0.237	-1.469	0.469
Reducing intermediaries in supply chains	104	0.148	1.507	2.27	-1.032	0.237	-0.461	0.469
Use of smart contracts	104	0.113	1.155	1.334	-2.161	0.237	3.633	0.469
Protection of intellectual property	104	0.188	1.916	3.671	0.103	0.237	-1.948	0.469
Improving delivery of goods and services	104	0.123	1.258	1.582	-0.981	0.237	-0.107	0.469
Preventing loss of trade contracts	104	0.099	1.005	1.01	-2.169	0.237	4.189	0.469
Reduction of storage costs	104	0.168	1.714	2.937	-0.311	0.237	-1.614	0.469
Ease of operating the technology	104	0.111	1.133	1.284	-0.93	0.237	0.331	0.469
Gaining competitive advantages	104	0.103	1.05	1.102	-2.026	0.237	3.549	0.469
Access to P2P services	104	0.168	1.711	2.926	-0.139	0.237	-1.664	0.469

On the other hand, there are also so-called „latent (hidden) factors“, which will form the core research constructs. The influencing factors are structured and segmented in a way that prevents the dominance of any given factor over the others, which could distort the final results.

A more detailed segmentation is applied through the investigation of the motivators and barriers affecting the implementation of blockchain technology (BCT). For this purpose, descriptive statistics are used to analyze the raw data for „motivators” (Table 4.1).

A similar operation is applied to the external motivating factors for the organization (Table 4.2).

Table 4.2 - Analysis of External Motivating Factors for the Company

External Factors	Frequency	Percentage (%)	Cumulative (%)
Pressure from customers	18	17.3	17.3
Pressure from suppliers	1	1	18.3
Need for collaboration in supply chains	13	12.5	30.8
Market requirements	27	26	56.7
Government requirements	11	10.6	67.3
Public attitudes	1	1	68.3
All listed factors	33	31.7	100
Total:	104	100	

Next, a descriptive statistical method is applied to the "correctors" of the driving forces, namely the so-called "barriers" (Table 4.3).

Table 4.3. Descriptive Statistics of Internal Barriers for the Company

Barriers and Limiting Factors	N	St. Error	St. Deviation	Variance	Skewness	Skewness Std. Error	Kurtosis	Kurtosis Std. Error
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
Financial constraints	104	0.123	1.259	1.585	-0.706	0.237	-0.273	0.469
Lack of corporate-organizational policies for BCT adoption	104	0.156	1.588	2.523	0.494	0.237	-1.311	0.469
Lack of expertise in the company regarding the technology	104	0.123	1.258	1.582	-0.905	0.237	0.006	0.469
Organizational culture would not accept such a project	104	0.131	1.34	1.796	0.994	0.237	-0.27	0.469
Organizational culture would not accept such a project	104	0.131	1.34	1.796	0.994	0.237	-0.27	0.469
Current information system does not allow interoperability	104	0.115	1.17	1.369	-0.032	0.237	-0.388	0.469
Lack of benchmark for rapid BCT integration in the company	104	0.113	1.153	1.329	-0.357	0.237	-0.209	0.469
Lack of customer knowledge regarding BCT	104	0.089	0.91	0.829	-0.79	0.237	0.751	0.469
Lack of cooperation and coordination among partners for BCT inclusion	104	0.108	1.097	1.202	-0.418	0.237	-0.001	0.469
Organizational culture would not accept such a project	104	0.131	1.34	1.796	0.994	0.237	-0.27	0.469

Continuation of table 4.3

1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
Current information system does not allow interoperability	104	0.115	1.17	1.369	-0.032	0.237	-0.388	0.469
Sensitivity regarding information sharing	104	0.13	1.33	1.768	-0.475	0.237	-0.69	0.469
Requirement for all participants to be part of the BCT network	104	0.102	1.036	1.074	-0.832	0.237	0.444	0.469
Negative opinions influenced by the 'dark side of cryptocurrencies'	104	0.117	1.194	1.426	-1.068	0.237	0.246	0.469
Insufficient development of BCT	104	0.098	0.998	0.996	-0.66	0.237	0.339	0.469

A similar analytical procedure is applied to the external limiting factors (Table 4.4).

It is important to note the concentration of opinions regarding market uncertainty in relation to blockchain technology (BCT). The underlying reason for such perceptions is the respondents' lack of awareness of the regulatory framework at the time of the survey – specifically the "Markets in Crypto-Assets" (MiCA) regulation (Gigov and Dimitrov, 2023). To address this, a follow-up study was conducted to explore the regulatory mechanisms at the national, EU, and global levels. The results suggest the opposite: global standards exist that support BCT, with an emphasis on data privacy and

anti-money laundering (AML) measures (FATF, 2019[583]; Gigov and Dimitrov, 2020[584]).

Table 4.4 - External Limiting Factors Affecting the Business Organization

External Limiting Factors			
	Frequency	**Percentage (%)**	**Cumulative (%)**
Government is reluctant to support BCT integration	10	9,6	9,6
Market competition regarding BCT use	6	5,8	15,4
Market uncertainty regarding BCT	36	34,6	50,0
Lack of commitment from relevant NGOs for BCT adoption	22	21,2	71,2
Lack of expert opinion from industry organizations about BCT benefits	30	28,8	100,0
Total:	104	100,0	

Other significant external factors include the shortage of blockchain technology experts (28.85%) and the limited engagement of non-governmental organizations (21.15%) in raising awareness of the benefits of implementing and using BCT within business environments – challenges that stem from the external environment of the firms.

Before proceeding to a more in-depth analysis of the survey data, it is necessary to apply a test to assess the normality

[583] FATF (2019), Guidance for a Risk-Based Approach to Virtual Assets and Virtual Asset Service Providers, FATF, http://www.fatf-gafi.org/publications/fatfrecommendations/documents/Guidance-RBA-virtual-assets.html

[584] Gigov and Dimitrov, (2020) REGULATIONS AFFECTING BLOCKCHAIN TECHNOLOGY ON A GLOBAL SCOPE,PROSPECTS FOR TECHNOLOGY DEVELOPMENT IN EUROPE AND IN BULGARIA

of data distribution. For this purpose, the Kolmogorov-Smirnov Test is used (Fasano G., A. Franceschini, 1987)[585] (Table 4.5).

Table 4.5 - Kolmogorov-Smirnov Test

Statistics							
Planning and using BCT	N	Skewness	Std. Error of Skewness	Kurtosis	Std. Error of Kurtosis	Zsk	Zku
	104	-,264	,237	-1,006	,469	1,64	1,94
Motivators	104	-,864	,238	,645	,472	3,63	1,36
Barriers	104	,121	,237	,625	,469	0,51	1,33

From the results obtained through the normality distribution analysis, a deviation is observed, though it is considered negligible.

3.1. Determination of Latent Factors

Factor analysis is essentially used to reduce the number of independent variables included in the initial stage of the survey (Child, 2006;[586] Yong and Pearce, 2013[587]). In this context, the identification of sub-variables (latent factors) is a primary objective of the analysis (Cureton and Mulaik, 1975)[588]. Once the necessary calculations are performed, the results are grouped into distinct constructs, which serve to measure the influence of the independent variables on the dependent variable – „enhancing the company's competitiveness through the implementation of blockchain technology".

Table 4.1. - Rotated Component Matrix on "motivators"

[585] Fasano G., A. Franceschini, A multidimensional version of the Kolmogorov–Smirnov test, Monthly Notices of the Royal Astronomical Society, Volume 225, Issue 1, March 1987, Pages 155–170, https://doi.org/10.1093/mnras/225.1.155

[586] Child, D. (2006). The essentials of factor analysis. (3rd ed.). New York, NY: Continuum International Publishing Group.

[587] Yong, A. G., & Pearce, S. (2013). A beginner's guide to factor analysis: Focusing on exploratory factor analysis. Tutorials in quantitative methods for psychology, 9(2), 79-94

[588] Cureton, E.E. & Mulaik, S.A. (1975). The weighted varimax rotation and the promax rotation. Psychometrika 40, 183–195. https://doi.org/10.1007/BF02291565

Rotated Component Matrix on "motivators"					
	Component				
	Factor 1. Leading to optimize the processes in Supply chain, **LOPSC**	Factor 2. Improving company reputation, **ICR**	Factor 3. Factors building trustiness, **FBT**	Factor 4. Web3 factors, **W3FSs**	Factor 5. Unmanageable risks, **UmR**
1	*2*	*3*	*4*	*5*	*6*
Increasing the transparency, traceability and immutability of information			,922		
Digitisation of supply chains	,659				
Reduction of intermediaries in trade processes				,851	
The ability to use smart contracts				,586	
Improving the processes of delivery of goods	,852				
Trade contracts risk prevention		,675			
Reduce the cost of maintaining inventories	,812				
low costs of implementing the technology		,875			
Obtaining competitive advantages		,665			
External factors					,958
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.					
a. Rotation converged in 6 iterations.					

Following the naming of the motivating factors identified through the analysis, a similar approach is applied to structure the groups of latent limiting factors (Table 4.7).

Once the new sets of influencing factors are formed, the respondents falling within the normal distribution range are identified. This serves as the basis for conducting the regression analysis.

The aim of the regression analysis is to assess the impact of the independent variables on the dependent variable – „planning the implementation of blockchain technology to enhance the competitiveness of supply chains in Bulgarian enterprises."

Table 4.2 - Rotated Component Matrix on "barriers"

Rotated Component Matrix on "barriers"				
	Component			
	Factor 1. Technological and subjective limitations, **TSL**	Factor 2. Constraints caused by organizational policies, **CCOP**	Factor 3. Communication and financial barriers, **CFB**	Factor 4. Lack of trust and connectivity **LTC**
1	*2*	*3*	*4*	*5*
Financial constraints	,806			
Lack of company and organisational strategies		,856		
Lack of expertise in the company	,756			
The organisational culture would not accept the introduction of such a project		,833		
Lack of interoperability with existing IT-Systems			,869	
lack of a BCT benchmark for rapid implementation of the technology			,646	

Continuation of table 4.7

1	*2*	*3*	*4*	*5*
Lack of knowledge among clients about BTC	,529			
Lack of cooperation and coordination between our partners for inclusion in Blockchain smart grid		,565		
Sensitivity to sharing information in permissioned grids				,824
Limited information infrastructure caused by the requirement for all participants to be "on-board	,503			
Insufficient development of the BCT			,549	
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.[a]				
a. Rotation converged in 6 iterations.				

The calculations reveal the strength of the predictive relationship between the predictors and the dependent variable, using both linear and nonlinear regression analysis algorithms.

Linear Regression Analysis Using Research Constructs Derived from Factor Analysis

The regression analysis using the identified constructs is carried out in accordance with the methodology described in the previous sections. In this case, a linear multiple regression model is applied, incorporating variables derived from the latent motivating and limiting factors.

Similarly to the factor analysis, the reliability of the utilized constructs is assessed (Table 4.8).

The data presented in the table shows that the coefficient of determination is 0.223 (22%), indicating a relatively low explanatory power of the model. This necessitates a more in-depth reliability check by performing a linear regression test (Table 4.9).

Table 4.8 - Analysis of Constructs – Latent Motivating and Limiting Factors

Model Summary[b]									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	,472[a]	,223	,207	,949	,223	14,352	2	100	,000
a. Predictors: (Constant), Latent barrier factors, Latent motivator factors									
b. Dependent Variable: Planning and using blockchain technology									

The output data confirm the adequacy of the research model in several aspects:

- **The direction of the regression equation is correct**:

$$\hat{y} = 2.782 + 0.054 \cdot \text{LMFs} - 0.034 \cdot \text{LBF}$$

indicating a positive effect from the latent motivating factors and a negative effect from the limiting factors;

- **The significance level (Sig = 0.000)** demonstrates a high level of statistical reliability of the variables included in the model;

- **The confidence interval for the latent motivating factors** does not include "0", which confirms the alternative hypothesis H1:*"Latent motivators triggering interest in innovation have a significant impact on the intention to implement blockchain technology to enhance enterprise competitiveness."*

- **The confidence interval for the latent limiting factors** also excludes "0", supporting hypothesis H2: *„Latent barriers that hinder the use of the technology significantly affect the intention to implement blockchain technology in the enterprise."*

- **The partial correlation value** is low for both independent variables, prompting a deeper investigation into

the sub-variables that form the constructs „latent motivators" and „latent barriers";

Table 4.9 - Independence Test of Constructs for Latent Influencing Factors

Coefficients[a]												
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Correlations	Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Partial	Tolerance	VIF
1	Constant	2,782	,679		4,101	,000	1,436	4,129			
	Latent motivator factors (**LMFs**)	,054	,012	,403	4,572	,000	,031	,078	,416	1,000	1,000
	Latent barrier factors (**LBFs**)	-,034	,013	-,239	-2,713	,008	-,059	-,009	-,262	1,000	1,000
a. Dependent Variable: Planning and using blockchain technology											

- **The Tolerance index**, which measures the independence of variables, is within the acceptable range (close to 1), and the **VIF is below 10**, confirming the absence of multi-collinearity and validating the model's appropriateness.

It should be noted that the calculations presented here reflect the overall impact of the constructs „latent motivators" and „latent barriers." Upon completion of the methodological calculations, the distribution of standardized residuals is illustrated graphically (Figure 4.2 and Figure 4.3).

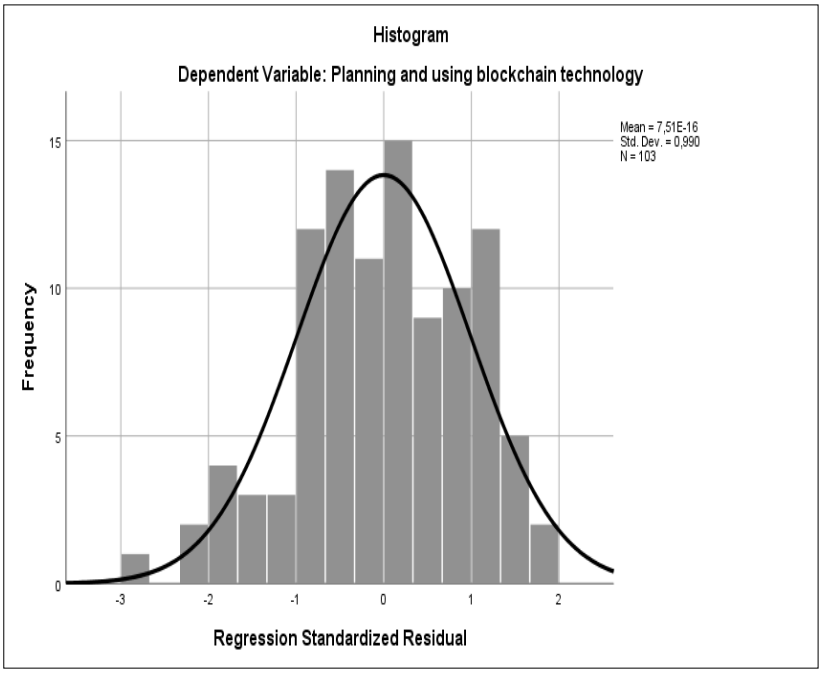


Fig. 4.2 - Histogram presenting the distribution of residuals

The histogram demonstrates that the distribution of residuals is approximately normal. This is evidenced by a mean value close to zero (Mean = –0.000000000000000751) and a low standard deviation (St. Dev = 0.990).

The P–P plot shows a consistent alignment of points around the regression line, without the presence of heavy tails, thereby confirming the adequacy of the regression model.

Residual analysis is a crucial component of statistical validation, ensuring the reliability and relevance of the regression results. The methods applied support the soundness of the constructed models.

Conclusion

Based on the conducted research, it can be concluded that the implementation of blockchain technology is driven by the need for Bulgarian enterprises to position themselves more effectively within global supply chains. This alignment holds the potential to bridge the competitiveness gap with corporations operating in highly developed economies.

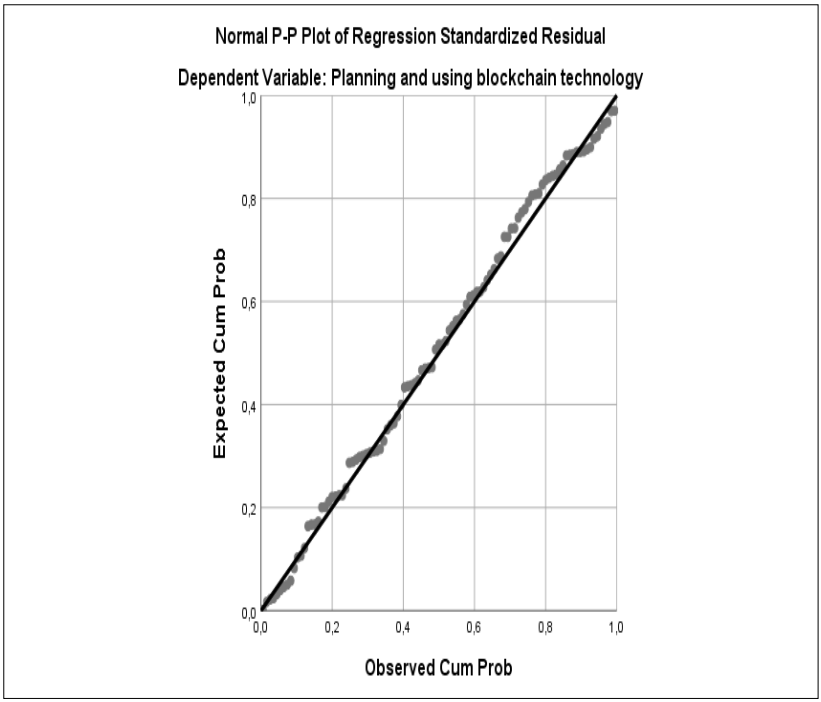


Fig. 4.3 - P–P Plot of Standardized Residuals

A regression model was constructed to measure the influence of significant latent motivating and limiting factors on the competitiveness of supply chains in Bulgarian corporations. This model is also applicable for future empirical studies.

Latent motivating and limiting factors were derived from the main research constructs and included in a linear regression

analysis. The resulting equation confirmed the correct direction of influence and demonstrated that the implementation of blockchain technology can significantly enhance supply chain competitiveness, offering strategic advantages.

In testing the hypotheses, the study followed the standard rule used in statistical tools like SPSS and R: the alternative hypothesis is accepted when the confidence interval does not include the value "0". Specifically:

- For motivating factors, the interval must start and end with positive values;
- For limiting factors, it must be entirely negative.

By this criterion, the study successfully meets its objectives.

Upon analyzing the statistical data, several key observations can be made, including a predominance of positive attitudes compared to negative ones. The holistic approach through residual analysis further confirms the relevance and applicability of blockchain technology in the business environment.

4.2. TRENDS AND DYNAMICS OF THE EFFECTIVE DEVELOPMENT OF THE MORTGAGE LENDING MARKET BY BANKING INSTITUTIONS OF UKRAINE UNDER MARTIAL LAW CONDITIONS

The mortgage lending market is one of the key segments of a country's financial system, directly influencing the level of socio-economic development, the state of the construction industry, the investment activity of the population, and the formation of the housing market. In the context of modern global challenges, and especially during the period of martial

law in Ukraine, the role of mortgage lending has gained new strategic importance, as it functions not only as a housing provision instrument but also as a mechanism for maintaining economic stability and supporting the country's recovery[589].

The period of 2020–2025 is extremely complex and simultaneously transformative for the Ukrainian banking sector. Starting in 2020, the country's financial system operated under the conditions of the global COVID-19 pandemic, which led to a decline in business activity, reduced household solvency, and a temporary contraction of lending activity. From 2022 onwards, the situation became significantly more difficult due to the full-scale military invasion, which resulted in the destruction of housing stock, mass population migration, loss of household income, and increased credit risks within the banking sector[590].

Martial law has significantly reshaped the functioning of the mortgage lending market. Banking institutions were forced to revise their credit policies, tighten borrower requirements, and reduce the volume of long-term lending due to a high level of uncertainty. At the same time, the state began to actively implement housing support programs, including partial interest rate compensation mechanisms, state guarantees, and affordable mortgage schemes, which helped to partially stabilize the market[591].

An important trend during the studied period is the accelerated digitalization of banking services and the expansion of online mortgage lending. Financial institutions have been

[589] Balayan O. V. Economic Mechanisms of Mortgage Lending: Study Guide. Lviv: Ivan Franko Lviv National University, 2022. 245 p.

[590] Kravchuk Yu. O. Innovative financial instruments in mortgage lending. Bulletin of Economic Science. 2022. No. 2. pp. 51–56.

[591] Ministry of Finance. Real estate price dynamics. Website: https://index.minfin.com.ua/ua/economy/index/houseprice/ (Accessed: 05.04.2026).

increasingly shifting toward remote customer service models, integrating fully digital application processes, and reducing the need for physical branch interaction. This transformation includes the widespread use of automated credit scoring systems for evaluating borrowers' solvency, digital verification of income and employment data, as well as the implementation of electronic document management and e-signature technologies. As a result, the mortgage application process has become significantly faster, more transparent, and more convenient for borrowers.

The development of digital mortgage platforms has also improved financial inclusion by expanding access to credit services for population groups located in smaller cities and rural areas, where the physical presence of bank branches is limited. In addition, digitalization has proven especially important under conditions of martial law, when security risks, population displacement, and infrastructural disruptions have restricted traditional banking operations. Online servicing has allowed banks to maintain continuity of mortgage lending processes, ensure customer support, and reduce operational risks associated with physical service delivery[592,593].

Another significant advantage of digital transformation is the improvement in risk assessment accuracy. The use of advanced analytical tools, big data technologies, and automated decision-making systems enables banks to more precisely evaluate borrower creditworthiness, reduce human error, and minimize the probability of non-performing loans. This

[592] Harazha O. P. Standardization of property valuation in the world. Scientific Bulletin of the International Humanitarian University. Economics and Management Series. Odesa: IHU, 2019. Issue 17. pp. 36-42.

[593] The Global Economy – Mortgage Rates: Website. URL: https://www.theglobaleconomy.com/economies/ (Accessed: 02.04.2026).

contributes to greater efficiency of mortgage portfolios and strengthens the overall stability of the banking sector.

Special attention should also be given to the changes in the macroeconomic environment, which have had a profound impact on the development of the mortgage market. Variations in the National Bank of Ukraine's key policy rate, persistent inflationary pressures, exchange rate volatility, and a general decline in household real incomes have significantly constrained demand for long-term credit products. High interest rates increase the cost of borrowing, thereby limiting the affordability of mortgage loans for a large segment of the population. At the same time, rising construction costs, driven by higher prices for building materials, logistics disruptions, and labor market imbalances, have contributed to an overall increase in real estate prices. In combination with housing shortages in relatively safer regions of the country, this has created additional pressure on demand for mortgage financing. Many households view real estate not only as a consumption good but also as a form of long-term investment and financial security, which further stimulates demand in the post-war recovery context[594,595].

Moreover, the impact of wartime conditions has led to significant structural changes in the housing market. Internal migration has increased demand for housing in western and central regions, while eastern and frontline areas have experienced a decline in real estate activity. This uneven distribution of demand further complicates the implementation of mortgage programs and creates regional disparities in housing affordability.

[594] Kulikov V. P. Financial mechanisms for attracting investment into housing through mortgage. Journal of Economic Research. 2021. No. 5. pp. 38–43.

[595] Lytvynenko O. V. Role of mortgage lending in Ukraine's housing sector development. Scientific Bulletin of Chernivtsi University. Economics Series. 2021. No. 2. pp. 18–24.

Thus, the study of trends and dynamics in the development of the mortgage lending market in Ukraine under martial law conditions is highly relevant. It enables a deeper assessment of the efficiency of existing banking mechanisms, identification of key operational and structural challenges, and evaluation of the resilience of the financial system under crisis conditions. Furthermore, it provides a basis for formulating strategic directions for the recovery, modernization, and long-term development of the mortgage market in the post-war period, with a focus on digital transformation, risk management improvement, and enhanced accessibility of housing finance for the population[596].

The aim of this study is to conduct a comprehensive analysis of the trends and dynamics of the mortgage lending market development by banking institutions in Ukraine under martial law conditions (2020–2025), as well as to identify the main problems, risks, and prospects for its further functioning in the context of national economic recovery (Table 4.10).

Thus, the analysis of the data presented in Table 4.10 indicates that 2020 marked the beginning of a gradual recovery of Ukraine's mortgage market after a prolonged period of stagnation. The total volume of mortgage lending increased by 36% compared to 2019, reaching UAH 3.8 billion over the year. In particular, in December 2020 alone, 743 mortgage loans were issued for a total amount of UAH 521 million. Approximately 88% of all mortgage lending in the market was concentrated within five leading banks[598].

[596] Oliinyk N. I. Mortgage lending as a factor in construction sector stimulation. Financial Space. 2022. No. 1. pp. 39–45.

Table 4.10 - Mortgage Lending Market in Ukraine 2020–2025

Year	Loans (borrowers)	Amount (UAH billion)	Average interest rate	Features and trends
2020	3,640	3.8	14–16.9%	Market growth begins; 36% increase in volume; 88% of the market concentrated in 5 banks
2021	6,570	>5.2	~13.6%	Peak activity; volume increased 2.2–2.9 times; interest rate decrease
2022	2,009	1.96	—	Sharp decline due to war; almost complete market suspension in March–May
2023	6,114	9.1	7.6%	Recovery driven by the "єОселя" ("eOselia") program; Kyiv region accounts for 50% of transactions
2024	8,300+	14.2	7.6%	Stabilization; activity decline in H2 (-33%)
2025	—	—	—	Further decline in activity (-25% compared to H2 2024)

Source: compiled by the author based on the reviewed sources[597,598]

[597] Official website of the NBU. Mortgage lending development strategy. URL: https://bank.gov.ua/admin_uploads/article/Strategy_Mortgage_2025.pdf?v=14

[598] Ministry of Finance. Real estate price dynamics. Website: https://index.minfin.com.ua/ua/economy/index/houseprice/ (Accessed: 05.04.2026).

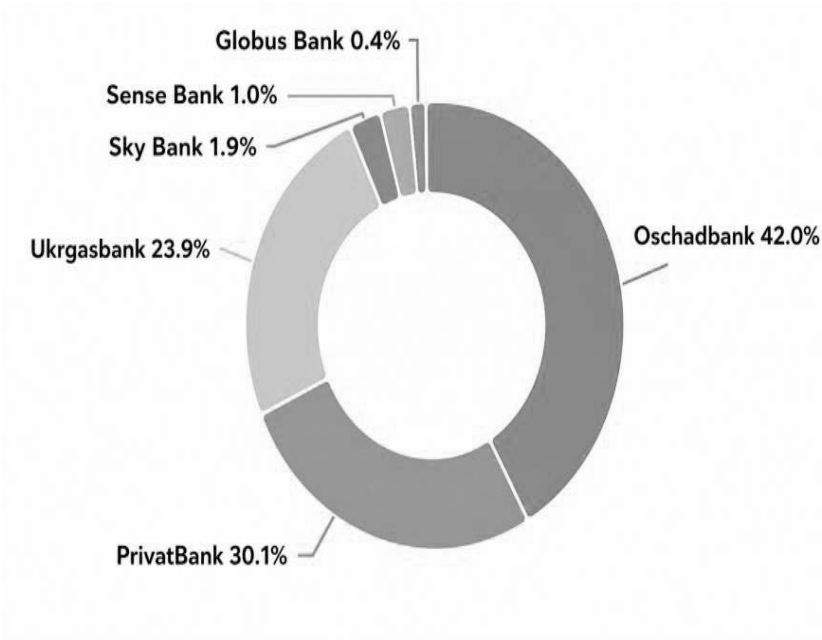


Fig. 4.4 - Number of Ukrainian banks participating in the state mortgage lending program "eOselia" as of July 1, 2025

Source: compiled by the author based on NBU data[599,600]

At the same time, a downward trend in average effective interest rates was observed: rates decreased to around 14% on the secondary market and 16.9% on the primary market. Overall, annual lending growth amounted to 11.5%, which signaled a positive shift and the gradual revitalization of the banking sector's mortgage activity.

To ensure the sustainable functioning of the program, on December 24, 2024, the Cabinet of Ministers of Ukraine

[599]Official website of the NBU. Mortgage lending development strategy. URL: https://bank.gov.ua/admin_uploads/article/Strategy_Mortgage_2025.pdf?v=14

[600]Ministry of Finance. Real estate price dynamics. Website: https://index.minfin.com.ua/ua/economy/index/houseprice/ (Accessed: 05.04.2026).

adopted Resolution No. 1486 on the recapitalization of the company "Ukrfinzhytlo" in the amount of UAH 20 billion through the issuance of domestic government bonds. This decision is aimed at attracting additional financial resources for further lending, including the transfer of funds to partner banks, which, in turn, will use them to issue new mortgage loans to the population.

In 2025, the priority direction will remain the development of affordable mortgage financing for housing purchases on the primary market. Such a policy will not only contribute to providing the population with housing but will also stimulate the development of the construction industry and related sectors, which as a whole will have a positive impact on the recovery and growth of the national economy[601].

New bank mortgage loans in Ukraine represent a set of credit obligations provided by banking institutions to individuals for the purpose of purchasing, constructing, or reconstructing residential real estate. This category primarily includes loans for the acquisition of housing on both the primary and secondary markets, including finished apartments or houses, as well as properties under construction[602].

An important role is played by loans provided within state targeted support programs such as "eOselia" and "Affordable Mortgage at 7%," which offer preferential conditions for certain social groups (military personnel, public sector employees, etc.).

In addition, new mortgage products include loans for the construction or reconstruction of individual housing, corporate mortgages (with employer participation in financing housing for

[601] Ministry of Finance. Real estate price dynamics. Website: https://index.minfin.com.ua/ua/economy/index/houseprice/ (Accessed: 05.04.2026).

[602] NBU. About mortgage lending. Website: https://bank.gov.ua/ua/stability/mortgage (Accessed: 05.04.2026).

employees), as well as regional co-financing programs initiated by local self-government authorities.

The combination of these forms of lending forms a modern structure of the new mortgage market, ensuring adaptability to the needs of various population groups and promoting increased investment in residential real estate. The volumes of new mortgage loans for the period 2020–2025 are presented in Fig. 4.5.

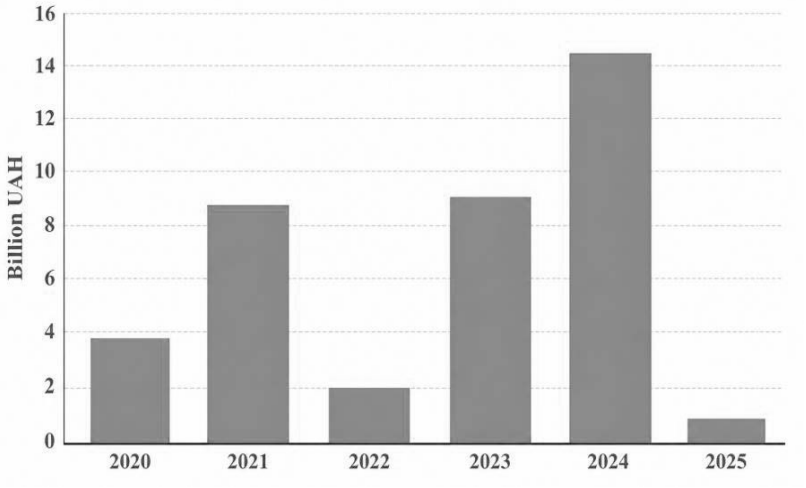


Fig. 4.5 - Volumes of New Mortgage Loans for the Period 2020–2025

Source: developed by the author based on NBU data[603,604]

Thus, according to Figure 4.5, it can be concluded that during the period 2020–2025, the volume of new mortgage loans in Ukraine experienced significant fluctuations, driven by

[603]Ministry of Finance. Real estate price dynamics. Website: https://index.minfin.com.ua/ua/economy/index/houseprice/ (Accessed: 05.04.2026).

[604] NBU. About mortgage lending. Website: https://bank.gov.ua/ua/stability/mortgage (Accessed: 05.04.2026).

both macroeconomic factors and the impact of the full-scale war.

In 2020, the volume of mortgage lending amounted to UAH 3.8 billion, which can be explained by increased demand due to the reduction of the NBU discount rate and the introduction of the initial stages of the "Affordable Mortgage at 7%" program[605].

In 2021, the market demonstrated record growth, with lending reaching UAH 8.9 billion, which is 134% higher than the previous year; meanwhile, the average interest rate on the secondary market in December was 13.6%. However, in 2022, a sharp decline to UAH 2.0 billion (–78% y/y) was observed, caused by the suspension of mortgage financing following the onset of the full-scale invasion. Recovery of activity began only in September 2022 with the launch of the "eOselia" program. In 2023, the volume of new mortgage loans reached UAH 9.1 billion (+364% y/y), with 95% of transactions concluded under the state program "eOselia" (6,114 loans). In 2024, growth continued, and total mortgage lending reached UAH 14.6 billion (+61% y/y), of which more than 8.5 thousand were concessional loans. The share of the primary market in the lending structure increased to 24%.

At the beginning of 2025, further growth was recorded: mortgage lending amounted to UAH 0.87 billion, which is 29% higher than the level of December 2024. The effective average interest rate on loans reached 8.3%[195].

The total number of mortgage loans issued during the 2023–2024 period is presented in Table 4.11, 4.12.

[605] NBU. About mortgage lending. Website: https://bank.gov.ua/ua/stability/mortgage (Accessed: 05.04.2026).

Table 4.11 - Volumes of New Mortgage Loans Issuance for the Period 2023–2024

Period	New loans outside the "eOselia" program, mln UAH	"eOselia" at 3%, mln UAH	"eOselia" at 7%, mln UAH	"eOselia" total, mln UAH	Total amount, mln UAH	New loans outside the "eOselia" program, mln UAH
Jan–Oct 2023	308.29	7,102.52	1,746.91	8,849.43	9,157.72	308.29
Jan–Oct 2024	400.09	8,594.00	4,412.00	13,006.02	13,406.12	400.09

Source: appendices to the report and the NBU Financial Stability Report[606]

The data presented in Table 4.11 demonstrate a significant expansion of mortgage lending activity in Ukraine during the period 2023–2024. The total volume of new mortgage loans increased from UAH 9,157.72 million in January–October 2023 to UAH 13,406.12 million in the same period of 2024, indicating a substantial upward trend in market development. A key driver of this growth was the state-supported "eOselia" program, which continued to dominate the structure of mortgage lending. Its total volume increased from UAH 8,849.43 million in 2023 to UAH 13,006.02 million in 2024. In particular, loans under the 7% rate segment showed the most dynamic growth, more than doubling over the analyzed period. At the same time, lending outside the "eOselia" program remained relatively stable but demonstrated only a minor increase, confirming the continued dependence of the mortgage market on state support mechanisms. Overall, the results highlight the strengthening

[606] NBU. About mortgage lending. Website: https://bank.gov.ua/ua/stability/mortgage (Accessed: 05.04.2026).

role of government programs in ensuring mortgage market recovery and expansion in Ukraine[607].

Table 4.12 - Volumes of New Mortgage Loans Issuance for the Period 2023–2024

Structure	Jan–Oct 2023	Jan–Oct 2024
New loans outside "eOselia"	3.37%	2.98%
"eOselia" at 3%	77.56%	64.11%
"eOselia" at 7%	19.08%	32.91%
"eOselia" total	96.63%	97.02%
Total	100.00%	100.00%

Source: appendices to the report and the NBU Financial Stability Repor [609]

Table 4.12 presents the structural distribution of newly issued mortgage loans in Ukraine for the period January-October 2023 and January–October 2024. The data illustrate the changing composition of mortgage lending between market-based loans and those issued under the state-supported "eOselia" program, including its 3% and 7% interest rate segments. The analysis allows for assessing the degree of state influence on mortgage market development and identifying shifts in borrower preferences and lending conditions over time.

The structure of mortgage lending remained highly concentrated within the "eOselia" program throughout both periods, accounting for over 96% of all new mortgage loans in 2023 and slightly increasing to 97.02% in 2024. This confirms the dominant role of state support in sustaining mortgage market activity in Ukraine. At the same time, the internal structure of

[607] Official website of the NBU. Mortgage lending development strategy. URL: https://bank.gov.ua/admin_uploads/article/Strategy_Mortgage_2025.pdf?v=14

the program changed noticeably. The share of loans under the 3% rate decreased from 77.56% to 64.11%, while the share of loans under the 7% rate increased from 19.08% to 32.91%. This shift indicates a gradual reorientation of demand toward less subsidized financing conditions.

Overall, the data highlight the continued dependence of the mortgage market on government-backed mechanisms, while also showing a gradual diversification within the "eOselia" program itself.

Thus, the dynamics of the total volume of new mortgage loans for the period January–October 2024 show an increase of 46.5% compared to the same period in 2023, rising from UAH 9,157.72 million to UAH 13,406.12 million. This indicates an intensification of the mortgage lending market despite the difficult macroeconomic conditions in the country.

The share of loans outside the state program "eOselia" decreased: in 2023 it accounted for 3.37%, while in 2024 it fell to only 2.98%. This reflects a declining role of market-based (non-program) lending in the overall structure. The main reason for this trend is the attractive conditions of the state program, in particular subsidized interest rates of 3% and 7%, which encourage households to participate in state-supported mortgage schemes.[608]

A notable shift in demand is observed from "eOselia at 3%" toward "eOselia at 7%." In 2023, the 3% program dominated (77.56% of the total volume), whereas in 2024 its share decreased to 64.11%. In contrast, the volume of "eOselia at 7%" increased more than 2.5 times, from UAH 1,746.91 million to UAH 4,412 million, with its share rising to 32.91%. This may indicate an expansion of the borrower base and a

[608]Official website of the NBU. Mortgage lending development strategy. URL: https://bank.gov.ua/admin_uploads/article/Strategy_Mortgage_2025.pdf?v=14

relaxation of access conditions to the program, allowing broader segments of the population to benefit from mortgage financing[609].

These structural changes in the mortgage market are driven by state intervention through subsidized interest rates, which is a classic instrument of countercyclical fiscal policy. Such policy stimulates housing demand, supports the construction sector, and simultaneously improves household living conditions. This corresponds to the fiscal multiplier model, according to which government support in one sector of the economy generates positive spillover effects in related sectors.

The Housing Price Index (HPI) is a standardized indicator reflecting changes in housing prices. It is compiled by the State Statistics Service of Ukraine based on transactions in both the primary and secondary real estate markets. The faster growth of prices in the primary market compared to the secondary market indicates higher demand for new, higher-quality housing, driven by mortgage programs, limited supply, and low interest rates. The elevated housing inflation in 2025 is a logical consequence of government incentives, rising construction costs, and consumer expectations.

The +15% index level in 2024 represents the highest value in eight years, indicating strong demand and a shortage of supply. The persistent dominance of the primary market over the secondary market (by 3–4 percentage points) suggests a strategic focus of investment on new housing developments. This dynamic creates favorable conditions for mortgage lending, as capital investment in new housing continues to grow.

[609]Official website of the NBU. Mortgage lending development strategy. URL: https://bank.gov.ua/admin_uploads/article/Strategy_Mortgage_2025.pdf?v=14

Figure 4.6 presents the dynamics of the Housing Price Index in the primary residential real estate market in Ukraine, according to the State Statistics Service (base year 2020 = 100%). It demonstrates steady price growth throughout 2020–2025, with only minor slowdowns in certain periods. The highest increase was recorded in 2021, when the index rose by 16.7% compared to the previous year, nearly twice the growth rate observed in 2020. Despite the overall economic slowdown and the impact of the full-scale war, the index continued to grow in 2022 at a rate of 12.7%[610].

In subsequent years, the market exhibited a more moderate but still positive growth trajectory, reflecting gradual stabilization under conditions of ongoing uncertainty. Demand for primary housing remained relatively resilient, supported by urban reconstruction needs and changing demographic patterns. At the same time, rising construction costs and currency fluctuations contributed to maintaining upward pressure on prices. Overall, the observed dynamics indicate that the Ukrainian primary housing market continues to adjust to structural economic challenges while preserving its long-term growth trend[611].

Thus, in 2023–2024, growth rates somewhat stabilized, remaining within 11–12% annually, which indicates a gradual market recovery. As of Q1 2025, an increase of 4.3% was recorded compared to December 2024.

[610]Official website of the NBU. Mortgage lending development strategy. URL: https://bank.gov.ua/admin_uploads/article/Strategy_Mortgage_2025.pdf?v=14

[611]Ministry of Finance. Real estate price dynamics. Website: https://index.minfin.com.ua/ua/economy/index/houseprice/ (Accessed: 05.04.2026).



Fig. 4.6 - Housing Price Growth Index (%) in the Primary Market for 2020–2025

Source: developed by the author based on NBU data[612]

Considering the traditional seasonality of the market and the increased demand for primary real estate, an acceleration in the price index growth rate is expected in Q2–Q3 2025[613].

The average effective interest rate on new mortgage loans in Ukraine during 2020–2025 shows a tendency toward a gradual decline compared to the pre-war period, which is a result of state intervention in the form of preferential mortgage programs, as illustrated in Figure 4.7.

[612]Official website of the NBU. Mortgage lending development strategy. URL: https://bank.gov.ua/admin_uploads/article/Strategy_Mortgage_2025.pdf?v=14

[613]Ministry of Finance. Real estate price dynamics. Website: https://index.minfin.com.ua/ua/economy/index/houseprice/ (Accessed: 05.04.2026).

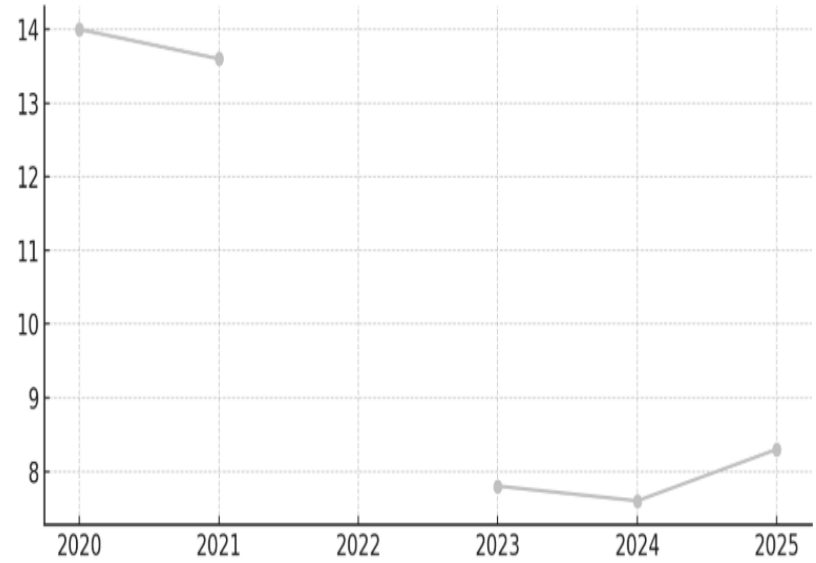


Fig. 4.7 - Average effective interest rate on new mortgage loans (%) for 2020–2025

Source: developed by the author based on NBU data[614]

Thus, as shown in Figure 4.7, in 2020 the average effective interest rate on secondary market mortgage loans was around 14%, and in 2021 it decreased to 13.6%. In 2022, the market experienced a significant slowdown due to the full-scale invasion, and from March to August 2022 mortgage lending was effectively suspended. After the launch of the "eOselya" program in the second half of 2022, loans with fixed rates of 3–7% became dominant, which significantly reduced the average indicator. In 2023, the average effective rate was approximately 7.8%, and during April–December 2024 it was around 7.6%. In January 2025, an increase to 8.3% was recorded, which is explained by the introduction of new restrictions within the

[614]Official website of the NBU. Mortgage lending development strategy. URL: https://bank.gov.ua/admin_uploads/article/Strategy_Mortgage_2025.pdf?v=14

"eOselya" program and a gradual shift of part of the demand toward market-based lending conditions.

The introduction of new, more stringent credit approval standards by financial institutions leads to higher requirements for borrowers and makes access to mortgage financing more difficult. One of the key factors influencing the volume of mortgage lending is the repayment term, as this parameter determines both the financial burden on households and the risks for lenders[615].

Table 4.13 - Distribution of New Mortgage Loans by Maturity in Ukraine, 2020–2025 (%)

Year	Up to 10 years	10–15 years	Over 15 years
2020	56.4	32.1	11,5
2021	48.7	36.8	14,5
2022	41.2	38.0	20,8
2023	35.6	34.5	29,9
2024	29.1	32.4	38,5
2025	25.3	30.7	44,0

Source: developed by the author based on NBU data[617]

During 2020–2025, a trend toward a gradual increase in the average duration of mortgage agreements was observed: while in 2020 loans with maturities of up to 10 years predominated, in 2023–2024 the share of agreements with repayment terms exceeding 15 years almost doubled. This dynamic is driven both by the implementation of the state program "eOselya", which provides preferential long-term lending conditions, and by banks' efforts to reduce the monthly burden on borrowers while maintaining clients' creditworthiness at an acceptable level (Table 4.13).

[615]Official website of the NBU. Mortgage lending development strategy. URL: https://bank.gov.ua/admin_uploads/article/Strategy_Mortgage_2025.pdf?v=14

As shown in Table 4.13, during the analyzed period of 2020–2025, the Ukrainian mortgage market experienced a pronounced structural transformation in the distribution of loans by repayment maturity. One of the most notable trends is the consistent decline in the share of short-term mortgage loans (up to 10 years), which decreased significantly from 56.4% in 2020 to 29.1% in 2024. This reduction reflects a gradual departure from short repayment cycles that previously dominated the market structure[616].

In parallel, a substantial expansion of long-term mortgage lending can be observed. The share of loans with maturities exceeding 15 years increased more than threefold, rising from 11.5% in 2020 to 38.5% in 2024. This shift indicates a fundamental change in both lender behavior and borrower preferences, suggesting a stronger orientation toward long-term financial planning and more sustainable debt servicing strategies.

The observed transformation is largely driven by structural and institutional factors within the housing finance system. In particular, banks have increasingly promoted longer repayment periods as a mechanism to reduce monthly payment burdens and expand borrower eligibility. From the perspective of households, longer loan maturities significantly improve affordability conditions in the context of rising housing prices and economic uncertainty. At the same time, such a redistribution of loan maturities helps to mitigate short-term liquidity risks in the banking sector by spreading credit exposure over extended time horizons. Overall, these developments reflect the adaptation of the mortgage market to changing socio-economic conditions, regulatory adjustments, and evolving risk management practices.

[616]Official website of the NBU. Mortgage lending development strategy. URL: https://bank.gov.ua/admin_uploads/article/Strategy_Mortgage_2025.pdf?v=14

In 2025, this long-term orientation became even more pronounced. The share of mortgages with maturities up to 10 years further declined to 25.3%, influenced by both increasing property prices and deliberate banking strategies aimed at enhancing affordability through extended repayment schedules. Similarly, the 10–15-year segment continued its downward trend, falling to 30.7%. In contrast, the proportion of loans exceeding 15 years reached a record level of 44.0%, representing the highest value observed within the entire analysis period[617].

This development clearly demonstrates a growing preference for mortgage products that minimize monthly financial pressure on borrowers. It also highlights the increasing importance of state-supported and partnership-based mortgage initiatives, which are explicitly designed to encourage long-term lending and improve access to housing finance under more favorable repayment conditions.

Figure 4.8 presents the dynamics of the distribution of new mortgage loans by maturity in Ukraine over 2020–2025, visually confirming a steady and structural shift of the market toward long-term mortgage instruments, particularly those exceeding 15 years.

Thus, Figure 4.8 demonstrates a clearly defined trend toward the extension of mortgage lending terms in Ukraine. While in 2020 the majority of loans were issued for a period of up to 10 years (56.4%), by 2025 this share had more than halved, declining to 25.3%. In contrast, the proportion of loans with maturities exceeding 15 years increased significantly from 11.5% in 2020 to 44.0% in 2025 indicating the gradual formation of long-term mortgage practices. The reduction in the

[617] Official website of the NBU. Mortgage lending development strategy. URL: https://bank.gov.ua/admin_uploads/article/Strategy_Mortgage_2025.pdf?v=14

share of medium-term loans (10–15 years) has been moderate and is explained by a shift toward longer loan tenures.

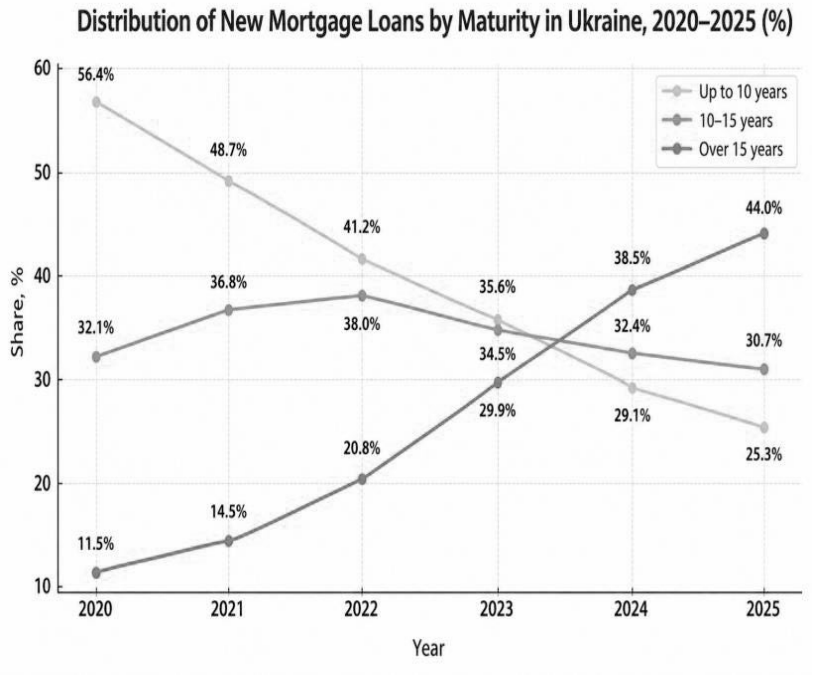


Fig. 4.8 - Dynamics of the distribution of new mortgage loans in Ukraine by maturity in 2020–2025

Source: compiled by the author based on NBU data[618,619]

In 2025, an additional 951 Ukrainian households received loans under the "єОселя" program totaling UAH 1.7 billion. In total, the program has issued 28,000 loans worth over UAH 25.8

[618] Official website of the NBU. Mortgage lending development strategy. URL: https://bank.gov.ua/admin_uploads/article/Strategy_Mortgage_2025.pdf?v=14

[619] Ministry of Finance. Real estate price dynamics. Website: https://index.minfin.com.ua/ua/economy/index/houseprice/ (Accessed: 05.04.2026).

billion, with PrivatBank ranking second among participating banks in terms of lending volume (nearly 90%).

This dynamic can be attributed both to rising housing costs and to the expansion of state-backed borrower support programs. Overall, the mortgage market is transitioning toward a more stable financing model focused on long-term affordability of credit[620].

The program involves various categories of borrowers, including representatives of the security and defense sector, medical workers, educators, researchers, war veterans, and internally displaced persons, who are eligible for preferential interest rates of up to 3% per annum. Other categories of citizens receive loans at a rate of 7% per annum. The bank is also expanding remote mortgage processing via the Privat24 mobile application, allowing clients to complete all stages of the transaction without visiting a branch[622].

This approach creates differentiated financing that targets the most vulnerable population groups. After the 10th year, the interest rate increases to 6% or 10%, respectively, reflecting the need to regulate the compensation mechanism. The key parameters of the program (minimum down payment of 20%, term of up to 20 years, and loan amount up to UAH 5 million) are designed to balance affordability with financial sustainability. Additional costs such as insurance, notary fees, and property valuation, while increasing the total expense, ensure protection for both borrowers and lenders and are typical for the mortgage market.

The development of the mortgage lending market is a key factor influencing the stability of the housing sector and the overall financial system in Ukraine. Among the leading financial institutions actively operating in this segment, JSC CB

620 Official website of the NBU. Mortgage lending development strategy. URL: https://bank.gov.ua/admin_uploads/article/Strategy_Mortgage_2025.pdf?v=14

"PrivatBank" holds a significant position due to its large-scale mortgage portfolio and participation in state-supported lending programs. In recent years, the bank's mortgage activity has been strongly shaped by macroeconomic conditions, changes in interest rate policy, and the implementation of government initiatives aimed at improving housing affordability[621].

A particularly important driver of mortgage market development is the state program "eOselya", which was introduced to expand access to housing finance for different categories of the population, including socially vulnerable groups. The program has become an essential tool for stimulating demand for mortgage loans while ensuring preferential lending conditions through partial state compensation of interest rates[623].

This section provides an analysis of the structure of the mortgage credit portfolio of JSC CB "PrivatBank", with a particular focus on the characteristics of lending under the eOselia" program. It examines the composition of mortgage loans, borrower segments, loan conditions, and the role of state support in shaping lending dynamics. The analysis aims to identify key trends and assess the effectiveness of the program in enhancing mortgage accessibility in Ukraine.

JSC CB "PrivatBank", established in 1992, is the largest state-owned bank in Ukraine and one of the country's systemically important financial institutions. As of 2025, the bank serves more than 19 million active customers, including both individuals and small and medium-sized enterprises. Its operations are supported by an extensive service network comprising over 1,100 branches, approximately 5,000 ATMs, and more than 10,000 self-service terminals across Ukraine. The bank is 100% state-owned, and its authorized capital at the

[621] Official website of the NBU. Mortgage lending development strategy. URL: https://bank.gov.ua/admin_uploads/article/Strategy_Mortgage_2025.pdf?v=14

beginning of 2025 amounted to UAH 206 billion, confirming its stability and reliability within the national banking system[622].

The strategic focus of PrivatBank is primarily directed toward the retail segment; however, the bank is also actively developing services for small and medium-sized businesses by providing modern financial instruments and support programs for entrepreneurs. A key asset of the bank is the Privat24 digital platform, which ensures convenient and fast access to banking services. By early 2025, more than 15–16 million users actively utilized its functionality, making Privat24 one of the most powerful online banking systems in the country. In parallel, the bank continues to expand its corporate service portfolio, particularly in lending, by introducing new financing programs and partnership solutions.

The bank's financial performance in recent years demonstrates its efficiency and resilience. In 2024, profit before tax reached UAH 81 billion, while net profit amounted to UAH 40.1 billion, representing a 6% increase compared to 2023. PrivatBank paid a record UAH 40.9 billion in corporate income tax to the state budget, along with nearly UAH 3 billion in other taxes, confirming its significant contribution to public finances and socio-economic development. In Q1 2025, the bank showed further growth: profit before tax reached UAH 20.3 billion, net profit amounted to UAH 16.9 billion, while customer funds increased to UAH 487 billion. At the same time, the net loan portfolio expanded to more than UAH 130 billion, indicating growing demand for bank financing and strong trust in the institution.

Beyond financial performance, PrivatBank makes a substantial contribution to Ukraine's economic development. The bank actively supports the agricultural sector and small and

[622] Official website of the NBU. Mortgage lending development strategy. URL: https://bank.gov.ua/admin_uploads/article/Strategy_Mortgage_2025.pdf?v=14

medium-sized enterprises by implementing new lending programs. Another important direction is the attraction of international funding: in 2025, PrivatBank signed several agreements with international financial institutions, including the EBRD, which provided additional financing for Ukrainian businesses in the amount of over €600 million.

Thus, in 2025, PrivatBank confirmed its status as a financial leader in Ukraine. Its large customer base, strong infrastructure, digital transformation, and stable financial results make it a key element of the national banking system. Moreover, the bank continues to play an important socio-economic role by ensuring access to financial services, generating significant budget revenues, supporting businesses, and implementing innovative financial solutions. The structure and dynamics of the assets of JSC CB "PrivatBank" are presented in Table 4.14.

Thus, based on the data presented in Table 4.14, it can be concluded that during the analyzed period there is a clear upward trend in the total volume of the bank's assets. In the period from 2021 to 2025, both the structure and scale of assets of JSC CB "PrivatBank" underwent significant changes, reflecting the bank's adaptation to macroeconomic conditions as well as the transformation of its financial strategy. Total assets demonstrated steady growth, increasing from UAH 401,385 million in 2021 to UAH 956,714 million in 2025, which indicates nearly a twofold expansion of the institution's operations.

Table 4.14 - Structure and Dynamics of Assets of JSC CB "PrivatBank" for 2021–2025, UAH million

Indicators	2021	2022	2023	2024	2025	Change (+/–)
Cash and cash equivalents	52,835	96,380	152,282	160,136	91,122	–69,014
Due from banks	26,243	103,837	134,237	116,414	90,600	–25,814
Loans and advances to customers	68,218	68,084	92,019	102,698	116,999	+14,301
Investment securities	222,277	239,752	271,847	286,126	339,928	+53,802
Other assets	31,812	32,605	29,683	27,200	18,065	–9,135
Total assets	401,385	540,658	680,068	692,574	956,714	+264,140

Source: compiled by the author based on the financial statements of JSC CB "PrivatBank"[623]

In 2021–2022, the main drivers of asset growth were the increase in cash and cash equivalents (from UAH 52,835 million to UAH 96,380 million) and a sharp rise in due from banks (from UAH 26,243 million to UAH 103,837 million). These changes were largely driven by crisis conditions and the need to maintain liquidity. At the same time, the customer loan portfolio remained relatively stable, while investment securities formed the largest share of assets, increasing to UAH 239,752 million[624].

In 2023, the bank demonstrated a significant expansion across all major asset categories. Cash and cash equivalents rose to UAH 152,282 million, due from banks increased to UAH 134,237 million, and loans and advances to customers reached

[623] Official website of PrivatBank. URL: https://privatbank.ua/ (Accessed: 05.04.2026).

[624] Official website of the NBU. Mortgage lending development strategy. URL: https://bank.gov.ua/admin_uploads/article/Strategy_Mortgage_2025.pdf?v=14

UAH 92,019 million. As in previous periods, investment securities remained the dominant component of assets (UAH 271,847 million), which was associated with the active placement of funds in government securities to maintain liquidity and reduce risk exposure[214].

As of 2024, the bank continued to expand its asset base, reaching UAH 692,574 million. However, the pace of growth somewhat slowed. Cash and cash equivalents increased to UAH 160,136 million, and loans and advances to customers rose to UAH 102,698 million, while due from banks decreased to UAH 116,414 million, indicating an optimization of interbank operations. Investment securities reached UAH 286,126 million and remained the key component of total assets.

In 2025, a substantial increase in total assets was observed, reaching UAH 956,714 million. The most significant contribution to this growth came from investment securities, which increased by UAH 53,802 million compared to 2024 and reached UAH 339,928 million. A notable increase was also recorded in the customer loan portfolio, which rose to UAH 116,999 million, reflecting the intensification of mortgage and corporate lending activities. In contrast, cash and cash equivalents decreased by UAH 69,014 million, and due from banks declined by UAH 25,814 million, which may indicate a reallocation of resources toward investment operations and lending activities. Other assets also decreased to UAH 18,065 million, reflecting improved asset management efficiency[625].

Overall, during 2021–2025, PrivatBank demonstrated dynamic asset growth, a strategic shift toward investment securities, and a gradual expansion of its loan portfolio. This indicates the bank's financial stability, its ability to adapt to

[625] Official website of the NBU. Mortgage lending development strategy. URL: https://bank.gov.ua/admin_uploads/article/Strategy_Mortgage_2025.pdf?v=14

economic challenges, and its active role in supporting economic financing[626].

Following a conservative lending strategy (providing relatively small loans with shorter maturities), the bank continues to gradually expand its lending operations, as further reflected in Table 4.15.

Table 4.15 - Dynamics of the Loan Portfolio of JSC CB "PrivatBank" by Borrower Categories for 2021–2025, UAH million

Indicators	2021	2022	2023	2024	2025	Change (+/–)
Loans to legal entities	4,091	5,340	6,386	8,177	37,163	+30,777
Loans to individuals	60,992	54,739	70,767	81,287	79,837	+9,070
Loans to small and medium-sized enterprises (SMEs)	11,903	21,311	25,454	23,806	–	–
Total loans	79,055	81,390	102,607	113,270	116,999	14,392

Source: compiled by the author based on the financial statements of JSC CB "PrivatBank"[627]

During the period from 2021 to 2025, the loan portfolio of JSC CB "PrivatBank" demonstrated a steady upward trend, reflecting the bank's active lending policy and its ability to adapt to changing market conditions. The total volume of loans increased from UAH 79,055 million in 2021 to UAH 116,999 million in 2025, representing an overall growth of nearly 48% over the five-year period. This expansion indicates not only the recovery of lending activity but also the strengthening of the bank's role in financial intermediation within the economy.

[626] Official website of PrivatBank. URL: https://privatbank.ua/ (Accessed: 05.04.2026).

[627] Official website of PrivatBank. URL: https://privatbank.ua/ (Accessed: 05.04.2026).

In 2022, the bank slightly reduced lending to individuals, from UAH 60,992 million to UAH 54,739 million, primarily due to heightened wartime risks and a general decline in household solvency. At the same time, lending to legal entities and small and medium-sized enterprises (SMEs) increased, reflecting a strategic shift toward supporting business activity and maintaining economic stability during a period of significant uncertainty. This reallocation of credit resources highlights the bank's flexibility and responsiveness to macroeconomic challenges[216].

In 2023, the loan portfolio began to recover alongside the gradual revival of economic activity. Loans to individuals rose to UAH 70,767 million, indicating renewed consumer demand and improving financial confidence among households. The corporate segment also showed positive dynamics, supported by government initiatives and targeted lending programs aimed at sustaining business operations. SME lending remained an important component of the portfolio, contributing to the diversification of credit risk and the stimulation of entrepreneurial activity.

Throughout 2024, PrivatBank continued to expand its lending operations, increasing the total loan portfolio to UAH 113,270 million. The most notable growth occurred in the retail segment, where loans to individuals increased significantly, reflecting a rebound in consumer demand and the gradual normalization of economic conditions. Corporate lending also strengthened its position, while support for SMEs remained a key priority, ensuring balanced development across different borrower categories.

As of 2025, the total volume of loans to customers reached UAH 116,999 million. The most substantial increase was observed in loans to legal entities, which rose to approximately UAH 37,163 million (an increase of UAH 30,777

million compared to 2024). This sharp growth was driven by the expansion of financing for corporate clients and the introduction of new business-oriented lending programs. Loans to individuals also increased to UAH 79,837 million (up by UAH 9,070 million), confirming the continued development of the retail lending segment. These trends indicate that the bank has significantly strengthened its role in supporting economic recovery and promoting business activity (Table 6)[628].

Table 4.16 - Structural Analysis of the Retail Loan Portfolio of JSC CB "PrivatBank" in 2021–2024

Indicators	2021	2022	2023	2024	Change (+/–)
Credit cards	45,314	46,593	54,500	61,761	16,447
Mortgage loans	9,858	3,912	9,759	10,673	815
Consumer loans	5,343	3,880	5,610	7,453	2,110
Car loans	394	328	885	1,400	1,006
Other loans	83	26	13	–	–
Net retail portfolio	60,992	54,739	70,767	81,287	20,295

Source: compiled by the author based on the financial statements of JSC CB "PrivatBank"[629]

Overall, in 2025 PrivatBank not only maintained a stable growth trajectory of its loan portfolio but also reinforced its position in corporate and SME lending, while continuing to hold a leading role in the retail segment. Such a strategy reflects a well-balanced credit policy aimed at simultaneously supporting business development and meeting the financial needs of the

[628] Official website of the NBU. Mortgage lending development strategy. URL: https://bank.gov.ua/admin_uploads/article/Strategy_Mortgage_2025.pdf?v=14

[629] Official website of PrivatBank. URL: https://privatbank.ua/ (Accessed: 05.04.2026).

population, thereby contributing to sustainable economic growth.

As of the end of March 2025, the net retail loan portfolio of JSC CB "PrivatBank" reached UAH 117.8 billion, marking an increase of approximately UAH 36.5 billion compared to the end of 2024 (UAH 81.3 billion). As illustrated in Table 2.6, lending to individuals at the bank showed a consistent upward trajectory from 2021 through mid-2024. The most rapidly expanding segment was credit cards, with volumes rising from UAH 45,314 million to UAH 61,761 million, highlighting the growing adoption of cashless transactions and the increasing reliance on card-based borrowing among customers.

Following a sharp contraction in 2022, mortgage lending gradually regained momentum. This recovery can be attributed to the revitalization of the real estate market, improving macroeconomic conditions, and the roll out of government-backed housing finance initiatives, particularly the "eOselia" program.

Consumer lending also exhibited a positive trend, albeit more moderate compared to credit cards. During the period under review, the volume of consumer loans increased by UAH 2,110 million, reflecting a gradual improvement in household purchasing capacity and financial confidence.

Meanwhile, the car loan segment recorded the most notable proportional increase, expanding from UAH 394 million to UAH 1,400 million. This growth was largely driven by temporary tax incentives, including exemptions from import duties on vehicles, which stimulated demand for automobile purchases.

PrivatBank continues to play a leading role in the mortgage lending market and is actively involved in implementing the state-supported "єОселя" program. This initiative has enabled thousands of Ukrainian households to

access housing finance on more favorable terms. As of October 1, 2024, the bank had issued 3,866 mortgage loans totaling UAH 5.7 billion, accounting for 27.2% of all loans provided under the program. Notably, 73% of these loans were granted at a preferential rate of 3%, while the remaining 27% were issued at 7%, underscoring strong customer confidence in the institution[630].

In 2025, the positive dynamics of retail lending persisted. PrivatBank further reinforced its position in the mortgage segment by expanding the "єОселя" program and introducing new financial solutions tailored to retail clients. Mortgage lending volumes continued to grow, maintaining a substantial share within the bank's overall portfolio.

Table 4.17 - Mortgage Lending Program at JSC CB "PrivatBank" under the State Program "eOselia"

Parameter	Details
Minimum loan amount	100,000 UAH
Maximum loan amount	Up to 5,000,000 UAH
Loan term	From 12 to 240 months (up to 20 years)
Down payment	From 20% of the property value
Interest rate	3% per annum (with compensation) up to year 10; 6% from year 11
Interest rate (without compensation)	7% per annum (up to year 10); 10% from year 11

Source: compiled by the author based on the financial statements of JSC CB "PrivatBank"[631]

Credit cards remained the dominant retail lending instrument, while car loans continued to expand in response to

[630] Official website of PrivatBank. URL: https://privatbank.ua/ (Accessed: 05.04.2026).

[631] Official website of the NBU. Mortgage lending development strategy. URL: https://bank.gov.ua/admin_uploads/article/Strategy_Mortgage_2025.pdf?v=14

sustained consumer demand. Overall, the bank solidified its leadership in retail lending and demonstrated a strong capacity to respond to evolving market conditions (Table 4.17).

In summary, mortgage lending in Ukraine remains a crucial driver of real estate market development and a key mechanism for improving access to housing. However, its full potential is still constrained by several structural challenges that limit the formation of a stable and accessible mortgage system.

One of the main obstacles remains regional disparity. The level of economic development, investment attractiveness, and banking activity differs significantly across regions. Large cities such as Kyiv, Kharkiv, and Lviv concentrate the majority of credit resources, while in less developed and remote regions the opportunities to obtain mortgage financing are considerably limited. This creates unequal conditions for the population and deepens socio-economic disparities in the housing market[632].

An important factor negatively affecting the accessibility of mortgage lending is the imbalance between rising real estate prices and household income dynamics. Increasing construction costs, high housing demand in large cities, and limited supply result in housing becoming increasingly unaffordable for a significant part of the middle class. Additional upward pressure on prices is driven by speculative transactions, where investors, due to the lack of alternative financial instruments, channel capital into real estate, further stimulating price growth. This is especially evident in the premium housing segment, where demand from wealthier individuals creates additional price pressure.

Labor migration also has a significant impact on the market, contributing to increased housing demand in large cities, while in less developed regions demand is declining.

[632] Mortgage in Europe. Website: https://ipotekaved.ru/za-granicey/ipoteka-v-evrope.html (Accessed: 14.03.2026).

Such an imbalance leads to uneven development of the real estate market and complicates the implementation of mortgage programs in regions with lower economic activity.

Banks, taking into account currency and credit risks, are forced to set relatively high interest rates, which reduces the affordability of mortgage lending for the population. In addition, inflationary pressure decreases borrowers' real incomes and increases the likelihood of loan defaults[633,634].

An important aspect remains the improvement of risk management systems and mechanisms for assessing the collateral value of real estate. The introduction of more effective tools for evaluating borrowers' creditworthiness and the condition of collateral properties would help reduce credit risks and enhance the level of protection for banking institutions. Another issue is the limited resource base of banks for long-term lending. Due to the high cost of long-term financial resources, most Ukrainian banks focus on short-term loans, which reduces the volume of mortgage lending and restrains market development.

Thus, the further development of mortgage lending in Ukraine requires the implementation of comprehensive reforms aimed at: stimulating long-term lending; expanding state support programs for borrowers; reducing regional disparities in access to mortgage financing; and improving credit risk management mechanisms. Only through the implementation of such measures can the mortgage market become an effective tool for increasing housing affordability and ensuring the stable development of the construction sector.

633 Shpylova N. S. Mortgage lending in Ukraine's economic recovery system. Investments: Practice and Experience. 2022. No. 14. pp. 47–52.

634 Yatsenko H. A. Problems and prospects of housing mortgage development in Ukraine. Economy and Management. Dnipro: DNU, 2021. No. 3. pp. 98–104.

Conclusion. The conducted research provides a comprehensive analysis of the mortgage lending system in Ukraine, including its organizational and economic mechanisms, current state of development, key challenges, and future prospects. The findings allow for a number of general conclusions regarding the role of mortgage lending in the socio-economic development of the country and its importance in improving housing affordability for the population.

Mortgage lending is one of the key instruments of the financial system, ensuring the interconnection between the banking sector, the real estate market, and households. Its development directly influences the activation of the construction industry, stimulation of domestic demand, improvement of living conditions, and overall economic growth. However, the effectiveness of the mortgage market largely depends on macroeconomic stability, household income levels, the cost of credit resources, and the effectiveness of state housing policy.

The study shows that the current mortgage market in Ukraine demonstrates certain positive trends, particularly due to the implementation of state support programs such as “eOselia” and the gradual recovery of lending activity in the banking sector. The participation of commercial banks in such programs contributes to reduced interest rates for selected categories of borrowers, thereby partially improving housing affordability. Nevertheless, the overall scale of mortgage lending remains insufficient compared to population needs and the standards of developed European markets.

One of the major constraints identified is the high cost of credit resources, driven by macroeconomic instability, inflationary pressure, and elevated financial risks. High interest rates significantly reduce household borrowing capacity and limit demand for mortgage loans. Additionally, the imbalance

between rapidly increasing real estate prices and slower income growth further decreases housing affordability, particularly for the middle-income population.

Regional disparities also remain a significant issue. Mortgage lending is concentrated mainly in large urban centers, while less developed regions have limited access to credit resources. This contributes to uneven socio-economic development and deepens territorial inequality in housing opportunities. Labor migration and demographic shifts further intensify these imbalances, affecting housing demand distribution across regions.

Another important limitation is the insufficient long-term resource base of banks. Most financial institutions rely on short-term funding sources, which restricts their ability to provide long-term mortgage loans. Combined with high credit, currency, and interest rate risks, this leads to conservative lending policies that further constrain market development.

The study also highlights the importance of state support mechanisms in expanding access to mortgage financing. Government programs play a crucial role in reducing financial barriers for households; however, their effectiveness depends on stable funding, transparent implementation, and adequate targeting of beneficiary groups. Programs such as “eOselia” demonstrate significant potential but require further improvement and scaling.

In general, the future development of mortgage lending in Ukraine requires a comprehensive reform approach. This includes reducing the cost of credit resources, ensuring macroeconomic stability, developing long-term financial instruments, and improving banking sector liquidity. Strengthening risk management systems and introducing modern borrower assessment tools will also contribute to a more stable and efficient mortgage market.

Furthermore, reducing regional disparities in mortgage access and expanding state support programs are essential for ensuring balanced development of the housing market. These measures will help improve social equity and support sustainable regional growth.

In conclusion, mortgage lending in Ukraine has significant development potential; however, its full realization depends on addressing existing structural limitations and implementing consistent systemic reforms. With the appropriate policy framework and institutional improvements, the mortgage market can become an effective mechanism for improving housing affordability and a key driver of national economic development.

4.3. DESTABILIZATION OF THE FINANCIAL SECURITY OF BUSINESS ENTITIES UNDER THE INFLUENCE OF HYBRID FINANCIAL CONFLICTS

The financial interests of business entities operate in a dynamic and competitive market environment, where they are closely intertwined with the aspirations of other economic actors. A destructive imbalance between the financial objectives of an enterprise, external stakeholders, and its own personnel gives rise to conflicts that directly threaten the financial security of the business. Most of these threats represent destructive manifestations of contradictions that emerge in the course of market interactions. Since financial and business activities involve continuous engagement with a wide range of counterparties, the alignment of the parties' interests is critically important at every stage of cooperation. An additional source of internal threats is human capital, as employees often become a source of latent or overt conflicts. The situation in the financial

sphere intensified significantly during the crisis caused by the COVID-19 pandemic, which triggered large-scale economic imbalances both in Ukraine and worldwide. The consequences of such financial conflicts include the disruption of established business relationships, deterioration of cooperation with public authorities, erosion of business reputation, and, consequently, the loss of the enterprise's investment attractiveness.

The destructive impact of conflicts in the financial sphere is manifested through the breakdown of stable relationships with counterparties, the destabilization of interactions with public authorities, and the deterioration of business reputation, which significantly reduces the investment attractiveness of a business entity. At the same time, ineffective management, delayed responses to emerging threats, legal inconsistencies, and corruption-related pressure exerted by public officials collectively lead to a critical decline in the financial security of entrepreneurship.

The causes and stages of conflict development have been extensively examined by both Ukrainian and international scholars, resulting in the emergence of numerous theoretical approaches. Among the diverse methodological perspectives in modern conflict studies, the sociological approach (G. Simmel, L. Coser, R. Dahrendorf, K. Boulding, G. Le Bon, and others) occupies a central position, viewing conflict as a collision of objective and subjective contradictions. In his works, L. Coser argues that conflict arises when one party seeks to preserve an existing state of affairs, such as social status or acquired privileges, while another party seeks to change it; alternatively, conflict emerges when both parties aim to change a given situation but differ in their objectives and methods of achieving that change [635]. R. Dahrendorf, in his *conflict model of society*,

[635] Coser L.A. Social Conflict and the Theory of Social Change. *The British Journal of Sociology*. Vol. 8, №3. (Sep., 1957). pp. 197–207.

maintains that all relationships between groups of individuals pursuing mutually incompatible goals-which, in their most general form, involve the desire of both competitors to obtain something that can be possessed by only one-constitute social conflict[636]. According to the motivational approach (M. Deutsch, G. McClintock), conflict is understood as the perceived incompatibility of the intentions and interests of opposing parties. From this perspective, particular emphasis is placed on subjective and motivational factors influencing the development of conflict interactions. M. Deutsch argues that conflict exists whenever incompatible actions or aspirations arise. Such incompatibilities manifest themselves either as internal tension (a struggle of motives) or as hostile actions between individuals or groups competing for limited values or resources[637].

From a psychological perspective, conflict is viewed as the highest degree of intensification of contradictions and confrontation between participants in social interaction, expressed in the form of overt or covert struggle for mutually exclusive interests. Since the evolution of society, organizations, and individuals is inherently based on pluralism of opinions and the selection among alternatives, conflicts constitute a natural and indispensable driving force of development.

Despite differences in the interpretation of the concept, the existing scientific approaches do not contradict but rather complement one another. They all converge on the

http://www.csun.edu/~snk1966/Lewis%20A%20Coser%20Social%20Conflict%20and%20the%20Theory%20of%20Social%20Change.pdf

[636] Dahrendorf R. Class and Class Conflict in Indastrial Society. Stanford University Press. 1959. URL : https://cominsitu.files.wordpress.com/2019/01/ralf-dahrendorf-class-and-class-conflict-in-industrial-society-1.pdf

[637] Deutsch, M. (1969). *Conflicts: Productive and Destructive*. *Journal of Social Issues*, 25(1). Available at: https://www.researchgate.net/publication/229568996_Conflicts_Productive_and_Destructive

understanding that the root cause of any conflict is an objective contradiction that arises in the course of social interaction [638][4].

Conflict arises only when two or more parties not only recognize the divergence of their interests but also actively oppose one another. An objectively existing difference in goals and interests, as well as the awareness of such opposition by individuals or groups, does not in itself create the actual conditions necessary for the development of conflict.

A prerequisite for the development of conflict is the emergence of a potential for tension within a social system (e.g., a work collective). The transformation of this potential tension into actual, openly manifested tension, which is reflected in the social expectations, positions, and specific social actions of individuals or groups, indicates that a subject of conflict has been formed and is capable of initiating a conflict situation [639].

A concept closely related to the notion of conflict is the term conflict situation. Although these concepts are closely connected, they should be distinguished. A conflict situation implies opposing positions of the parties regarding a particular issue, the pursuit of conflicting goals, the use of different means to achieve these goals, and the emergence of disagreements during discussions or disputes. In contrast, conflict is characterized by mutual negative attitudes that arise when desires, interests, or opinions collide. A conflict situation constitutes the objective basis of a conflict, reflecting the existence of a real contradiction in the interests and needs of the parties. Therefore, it does not yet represent a conflict, since the

[638] Yastrubetska, L.S. (2022). *Financial Security of Business Entities in Ukraine under Hybrid Threats: A Monograph*. Lviv: Ivan Franko National University of Lviv. 370 p.

[639] *The Concept of a Conflict Situation*. Available at: https://confman.ptngu.com/index4.html

existing objective contradiction may remain unrecognized by the participants in the interaction for some time [640,641].

A conflict situation involves opposing positions of the parties on a particular issue, the pursuit of conflicting goals, the use of different means to achieve them, and differences in interests, desires, and other factors. Numerous conflict situations develop into actual conflicts only when the balance of interests between the interacting parties is disrupted and certain conditions are met. Thus, a conflict situation is a prerequisite for the emergence of conflict. For such a situation to escalate into a conflict, an external influence, trigger, or incident is required.

An incident is an interaction that enables its participants to recognize the existence of an objective contradiction in their interests and goals.

An incident (or trigger) is characterized by the activation of one party's actions that affect, even unintentionally, the interests of another party. The actions of a third party may also serve as an incident. For example, a colleague's remark made after a difficult conversation with management may become the trigger for a conflict.

Two types of incidents are distinguished: latent and open. A latent incident develops at the level of the participants' awareness of the contradiction but may not manifest itself in their actual relationships or reactions. An open incident, in contrast, occurs as a series of conflict-related actions directed by the participants toward one another [642].

The emergence of conflicts depends on the presence of a conflict situation, a trigger or incident, and conflictogens. These

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[640] Dutkevych, T.V. (2005). *Conflictology with Fundamentals of Management Psychology: A Study Guide*. Kyiv: Center for Educational Literature. 456 p.

[641] *The Concept of a Conflict Situation*. Available at: https://confman.ptngu.com/index4.html

[642] *Lecture Notes on the Course "Conflict Management and Negotiation"*. Available at: https://api.dspace.wunu.edu.ua/api/core/bitstreams/a8e6091e-6992-4a46-a2cb-c9d56281a3fe/content

components constitute the mechanism of conflict development. According to V.P. Sheinov, three formulas for the emergence of conflicts can be distinguished based on the relationship between these components [644]:

1. Accumulation of conflictogens:

$$CG_1 + CG_2 + CG_3 + \ldots = C \quad (4.1)$$

The mechanism of conflict development according to the first formula is based on an individual's negative perception of and negative reaction to a conflictogen directed against them.

2. Presence of a conflict situation and an incident:

$$CS + I = C \quad (4.2)$$

The second formula reflects the dependence of conflict (C) on the existence of a conflict situation (CS) and an incident (I).

3. Accumulation of conflict situations:

$$CS_1 + CS_2 + CS_3 + \ldots = C \quad (4.3)$$

The third formula reflects the dependence of conflict (C) on the accumulation of several conflict situations (CS).

When a single conflict situation arises, the emergence of conflict is likely. However, if one conflict situation gives rise to another or if several independent conflict situations arise simultaneously, conflict becomes inevitable. These conflict formulas make it possible to analyze many conflicts efficiently and identify potential ways of resolving them. Nevertheless, they should not be regarded as a universal method for assessing and resolving all conflicts. Rather, they serve as practical guidelines in the complex and often contradictory process of conflict management.

Words, actions, or even inaction that may lead to conflict are referred to as conflictogens. Literally, the term conflictogen means "that which generates conflict," as the suffix -gen denotes something that produces or gives rise to. The nature and subtle danger of conflictogens can be explained by the fact that people

tend to be far more sensitive to words directed at them than to the words they address to others.

This heightened sensitivity stems from the natural desire to protect oneself and one's dignity from potential threats. At the same time, people are generally less attentive when it comes to the dignity of others and, consequently, tend to monitor their own words and actions less carefully.

Conflictogens are particularly dangerous because of an important phenomenon known as the escalation of conflictogens. This principle implies that when a person is confronted with a conflictogen, they tend to respond with an even stronger one, often choosing the strongest response available. As a result, the interaction escalates and may eventually develop into an open conflict.

The main manifestations of conflictogenic behavior typically include the following [643]:

1.open distrust.

2. interrupting the interlocutor.

3. belittling the significance of the other person's role.

4. emphasizing differences between oneself and the interlocutor to the latter's disadvantage.

5. persistent unwillingness to admit one's own mistakes or acknowledge another person's correctness.

6. underestimating the partner's contribution to a common task while exaggerating one's own contribution.

7. constantly imposing one's own point of view.

8. insincerity in judgments or statements.

9. abruptly accelerating the pace of the conversation and unexpectedly terminating it.

[643] Yastrubetska, L.S. (2022). *Financial Security of Business Entities in Ukraine under Hybrid Threats: A Monograph*. Lviv: Ivan Franko National University of Lviv. 370 p.

10. inability to listen to and understand the interlocutor's point of view, as well as many other behaviors that are generally perceived very negatively by others.

Developing a culture of effective communication requires an understanding of the words and actions that may cause harm. People sometimes use inappropriate expressions without realizing that they may offend others. The wide variety of conflictogens is generally classified into three main groups [644]:

1) the desire for superiority.

2) manifestations of aggressiveness.

3) manifestations of selfishness (egocentrism).

1. The Desire for Superiority

The desire for superiority is manifested when one of the interlocutors demonstrates behaviors or attitudes that imply their dominance over the other person. Such manifestations include:

Direct expressions of superiority, such as giving orders, making threats, criticizing, expressing negative judgments, making accusations, mocking, or ridiculing the other person.

Patronizing attitudes, often disguised as goodwill, through phrases such as "Calm down," "Don't be offended," or "You're an intelligent person, yet you...".

Boasting, expressed through enthusiastic accounts of one's own successes and achievements. Among peers, such behavior often provokes obvious irritation, as people generally do not tolerate demonstrations of superiority within an equal social environment.

Excessive confidence in one's own correctness, expressed through categorical statements such as "I am certain," "I believe," "Definitely," or "Without a doubt." Such assertions

644 Yastrubetska, L.S. (2022). *Financial Security of Business Entities in Ukraine under Hybrid Threats: A Monograph*. Lviv: Ivan Franko National University of Lviv. 370 p.

typically encourage the other party to question or refute these uncompromising claims.

Imposing unsolicited advice. When individuals insist on presenting their opinions as advice, others often develop a desire to act in the opposite way rather than follow the recommendations.

Interrupting the interlocutor, raising one's voice, or constantly attempting to correct another person. Such behavior conveys the impression that only the speaker deserves to be heard and that their opinions are more valuable than those of others.

2. Manifestations of Aggressiveness

Aggressiveness may appear either as a stable personality trait characteristic of a particular individual, as a situational response to specific circumstances, or as an expression of natural aggressiveness.

Natural aggressiveness may result from an individual's attempt to assert themselves within a social environment (family, workplace, or peer group) or may represent a form of protest against dependence on a dominant figure, such as a parent, supervisor, or another person of higher status or authority.

Situational aggressiveness usually arises as a reaction to unfavorable circumstances. These may include poor physical well-being, a negative emotional state, or difficulties in family, social, or professional relationships. Most often, situational aggressiveness develops as a response to a conflictogen. In accordance with the principle that "like begets like," retaliatory aggression further intensifies emotional tension and leads to an escalating exchange of increasingly aggressive reactions.

3. Manifestations of Selfishness

The word selfishness originates from the Latin word ego, meaning "I." Selfishness is a value orientation characterized by

the predominance of self-serving interests and needs regardless of the interests of other people.

Manifestations of selfishness usually constitute a powerful conflictogen because selfish individuals seek to achieve their own goals, often at the expense of others. This perceived injustice commonly gives rise to a conflict situation. In most cases, selfishness is considered a consequence of inadequate upbringing or socialization.

To prevent or resolve conflicts, it is essential to minimize the presence of conflictogens in communication. According to Sheinov V. P., conflictogens can be neutralized through the following approaches:

1. Neutralizing Superiority

Feelings of superiority can be reduced by:

allowing the interlocutor to feel valued and competent in your eyes;

consciously downplaying one's own achievements and advantages;

recognizing that modesty is perhaps the only effective means of overcoming vanity and feelings of superiority over others.

2. Managing Aggression

Like any other emotion, aggression requires an outlet. However, expressing aggression toward others usually results in an even stronger aggressive response.

Several methods may be used to reduce psychological tension associated with heightened aggressiveness:

Passive method. This involves talking openly about one's emotions or sharing one's concerns with someone else. Emotional expression, including crying, serves an important psychological function by relieving emotional tension. Women often find this form of emotional release more socially acceptable than men, who are generally less likely to express

vulnerability or cry. Nevertheless, psychologists recommend that everyone occasionally allow themselves such emotional release, as it contributes to maintaining psychological well-being.

Active method. Psychological relief may also be achieved through physical activity. Experimental studies have shown that adrenaline, a hormone associated with stress and tension, is effectively metabolized during physical exercise. Any form of physical activity can be beneficial, including sports such as running, tennis, volleyball, or swimming, as well as physically demanding household activities such as chopping wood, sawing, or digging.

Logical and psychological method. This approach involves consciously changing one's pattern of thinking. Improving emotional well-being largely depends on adopting a more positive cognitive orientation. As the well-known principle of success suggests, "Success is achieved by those who think in terms of success."

3. Overcoming Selfishness

Any extreme is generally considered undesirable, and this also applies to selfishness. When selfishness becomes excessive, individuals often lose the affection and support of others, including their closest relatives. In such cases, developing empathy, improving interpersonal perception, and participating in communication skills training can help reduce egocentric behavior and foster healthier relationships.

Approaches to Conflict Management

Conflict management is based on two principal approaches: structural and interpersonal methods [645].

1. Structural Methods

[645] Yastrubetska, L.S. (2022). *Financial Security of Business Entities in Ukraine under Hybrid Threats: A Monograph*. Lviv: Ivan Franko National University of Lviv. 370 p.

Structural methods focus on organizational changes aimed at preventing conflicts.

Clarification of job requirements: informing employees about their responsibilities, organizational rules, and compensation systems.

Coordination mechanisms: establishing a clear organizational hierarchy, chain of command, and decision-making procedures.

Superordinate organizational goals: encouraging cooperation among different departments to achieve common objectives.

Reward systems: motivating employees and reinforcing desirable behavior through appropriate incentives and recognition.

2. Interpersonal Methods

Interpersonal methods reflect the behavioral styles individuals adopt in conflict situations.

Avoidance: deliberately withdrawing from confrontation and postponing or refusing to address the problem.

Accommodation (Smoothing): emphasizing common interests while minimizing disagreements in order to maintain harmony.

Competing (Forcing): imposing one's own position without taking the interests or opinions of the other party into account.

Compromise: mutual concessions in which each party partially accepts the other's viewpoint.

Problem-solving (Collaboration): jointly analyzing disagreements and seeking an optimal solution that satisfies the interests of all parties.

When making complex decisions that require consideration of diverse perspectives, it is advisable to encourage open discussion and adopt the problem-solving

(collaborative) style. The other approaches may help limit or temporarily suppress conflict; however, they do not provide an optimal long-term resolution because they fail to fully address the interests and viewpoints of all participants.

The concept of conflict of interest should be distinguished and understood as a situation in which a decision must be made despite a contradiction between one's personal interests and the interests of another party. In particular, in the context of interactions between business and government, a conflict of interest may arise when a public official has personal financial interests that could influence decisions contrary to the interests of the state.

In particular, the Law of Ukraine 'On Prevention of Corruption' defines the following types of conflicts of interest [646]:

Potential conflict of interest – the existence of a private interest in the area in which a person performs official or representative duties that may affect the objectivity or impartiality of decision-making or the performance or non-performance of actions while exercising such powers.

Actual conflict of interest – a contradiction between a person's private interests and their official or representative duties that affects the objectivity or impartiality of decision-making or the performance or non-performance of actions while exercising such powers.

Thus, the concept of a conflict of interest refers to an imbalance between the interests of the participants caused by differing expectations regarding their interaction.

[646] *On Prevention of Corruption: Law of Ukraine* №49, Art. 2056, dated October 14, 2014. Available at: https://dp.court.gov.ua/tu04/inshe/korup/zakon

Based on an analysis of the principal theories of conflict studies and the views of leading scholars in this field [647, 648, 649, 650], the following characteristics of conflict can be identified:

Conflict is a natural social phenomenon because every individual possesses a unique combination of physical, social, psychological, and economic characteristics that, under certain circumstances, may lead to an imbalance of interests.

Conflicts can generate positive outcomes in the process of social development by stimulating social progress and contributing to the preservation of the cohesion of social groups and institutions.

Conflict processes occurring at the societal level, within business entities, and among individuals are closely interconnected.

Conflicts are conditioned by persistent and unavoidable social phenomena associated with the existence of a governing minority and a governed majority, creating the conditions for various forms of social conflict.

At the same time, contemporary challenges and threats create an objective need for a comprehensive study of conflicts. This requires not only examining conflict as a socio-psychological phenomenon but also revealing the specific nature of financial conflict as a distinct social phenomenon. Particular attention should be devoted to investigating its nature, underlying causes, internal structure, classification, and

647 Kuzheliev, M.O. (2011). Corporate Conflicts: A Mechanism for Protecting Owners' Interests Based on the Theory of Meta-Interests. *The World of Finance: Scientific Journal of Ternopil National Economic University*, 4, 162-166.

648 Lahovska, O., & Shaidetska, I. (2016). Corporate Conflicts and Information Asymmetry: Causes and Ways of Overcoming. *Economic Analysis*, 26(1), 170-178. Available at: http://dspace.wunu.edu.ua/bitstream/316497/13291/1/26.pdf

649 Nazarov, N.K. (2014). Conflicts at the Enterprise: Definition, Causes, and Types. *Scientific Bulletin of Kherson State University*, 5(2), 198-201.

650 Stohnii, K.O. (2015). Study of the Preconditions for the Emergence of Corporate Conflicts. *Business Inform*, 4, 311-315. Available at: http://nbuv.gov.ua/UJRN/binf_2015_4_51

principal characteristics in order to develop effective conflict management mechanisms.

Although several scientific approaches to understanding financial conflicts have been proposed in the academic literature, many aspects of their dynamics remain insufficiently explored. In particular, O. Pidkhomnyi emphasizes only that the key determinant of such conflicts is a specific financial transaction that possesses its own internal logic and determines the behavior of the opposing parties [651].

Accordingly, financial conflict may be defined as a confrontation between participants in financial relations caused by the incompatibility of their interests and value orientations that arises in the course of joint financial and economic activities.

For a more comprehensive understanding of this concept, a financial conflict can be regarded as a destructive interaction among participants in financial relations resulting from contradictions in their interests during the formation, allocation, or utilization of financial resources. Its fundamental characteristic is that the parties hold fundamentally different views regarding the management and distribution of financial resources.

The principal elements and characteristics of financial conflicts are presented in Fig. 4.18:

– parties to the conflict – participants in financial relations whose interests have been infringed, as well as individuals who openly or implicitly support one of the parties;

– subject matter of the conflict – the object of the dispute over which the participants have competing claims (e.g., financial resources, assets, authority, reputation, or a project concept);

[651] Pidkhomnyi, O.M. (2012). *Financial Security of Ukraine in the Context of Globalization: A Monograph*. Lviv: SPOLOM. 360 p.

– conditions of the conflict – the external context and environment in which the confrontation arises and develops;

– motives of the conflict – the internal driving forces of the parties, including their needs, interests, goals, and beliefs;

– perceptions of the conflict – each participant's subjective interpretation and understanding of the conflict situation;



Fig. 4.18 - Systematization of the Elements and Characteristics of Financial Conflicts

Source: Developed by the authors based on [652]

[652] Yastrubetska, L.S. (2022). *Financial Security of Business Entities in Ukraine under Hybrid Threats: A Monograph*. Lviv: Ivan Franko National University of Lviv. 370 p.

– behavioral strategies – the specific actions adopted by the parties, such as avoidance, competition, accommodation, compromise, or collaboration.

The choice of a particular behavioral strategy in a financial conflict depends on the specific circumstances of each situation, as well as on the individual psychological characteristics and behavioral predispositions of the conflict participants. In our opinion, the findings of a study conducted by P. Coleman and R. Ferguson, involving 149 professional conflict mediators, are particularly valuable for the development of theoretical and practical tools for conflict prevention and the enhancement of financial security [653][15].

The researchers identified three key factors that determine the behavior of the parties and the outcomes of dispute resolution:

1. conflict intensity. Conflict intensity refers to the amount of effort or energy required to resolve a dispute. From this perspective, conflicts may be classified as either relatively easy to resolve or difficult to settle;

2. conflict structure. This factor concerns the nature of the dispute, specifically whether it originates from objective circumstances or subjective goals. Conflicts may be based on cooperative, mutually beneficial objectives, in which the parties share common views on the problem and seek constructive solutions, or on non-cooperative objectives characterized by destructive competition;

3. conflict transparency. The findings indicate that conflict intensity is one of the earliest and most significant indicators of the behavior of competing parties: the higher the intensity of the conflict, the more aggressive the interaction between the parties becomes.

[653] Coleman, P., & Ferguson, R. (2016). *Making Conflict Work: Harnessing the Power of Disagreement*. Kyiv: Nash Format. 320 p.

The study further demonstrated a direct relationship between conflict intensity and the level of aggression displayed by the participants. Moreover, the existence of a common objective was found to significantly accelerate the resolution of disputes. Another important factor is the clear articulation of the underlying disagreement: accurately defining the problem increases the parties' willingness to engage in mediation and facilitates a constructive resolution of the conflict.

Consideration of these factors, particularly conflict transparency, is critically important both for the financial dimension of the conflict resolution process and for the overall system of financial security. Hidden motives and concealed actions have a detrimental effect on the financial security of business entities.

Within the framework of this study, particular attention is devoted to tax conflicts as a specific category of financial conflicts. The theoretical and practical aspects of this issue, including the legal framework governing the application of tax legislation and the administrative protection of taxpayers' rights, have been comprehensively examined in the works of I. Vashchenko, A. Yezerov[654, 655], and other scholars specializing in public tax regulation.

Globalization and the digitalization of finance have ushered in a new era of geopolitical conflicts. Direct military confrontations are increasingly being replaced by hybrid methods of influence.

For Ukraine, the study of this issue has become critically important due to the Russian Federation’s prolonged aggression. The foundations of this strategy were outlined by Russian

[654] Vashchenko, I. V. (2002). *Conflicts: Current State, Problems, and Directions for Their Resolution in Internal Affairs Bodies*. Kharkiv: National University of Internal Affairs. 255 p.
[655] Yezerov, A. (2008). *Constitutional Conflict as a Phenomenon and Process in Ukraine: A Monograph*. Odesa: Yurydychna Literatura. 240 p.

General V. Gerasimov in 2013. In his report "The Value of Science in Prediction" (often referred to as the "Gerasimov Doctrine"), he described the concept of asymmetric actions, which combine conventional military force with non-military instruments of destabilization.

Hybrid warfare integrates multiple dimensions of influence, including:

– diplomatic pressure and international isolation;

– economic sanctions and trade blockades;

– energy coercion through restrictions on the supply of energy resources;

– financial cyberattacks targeting banking and financial systems;

– information operations aimed at demoralizing society;

– intelligence operations and acts of sabotage.

The practical and technological implementation of this strategy against Ukraine was coordinated by Kremlin ideologist V. Surkov. His approach was based on creating internal instability and artificially deepening divisions within society.

The Russian Federation actively employs historical and ideological narratives, information operations, financial and economic instruments, military and quasi-military means, as well as terrorist acts and nuclear coercion to achieve its political objectives both in Ukraine and in the broader geopolitical arena.

The phenomenon of hybrid conflicts has been comprehensively examined by Western scholars and practitioners. As early as 2014, F. M. Breedlove noted: "What we are seeing from Russia now is a hybrid approach to warfare. It involves using every available instrument of power to create

problems that can subsequently be escalated through military capabilities" [656].

Similarly, R. Burnsby and S. Reeves emphasize the difficulty of identifying contemporary conflicts because they frequently combine characteristics of forms of confrontation that were traditionally considered unrelated. As a result, state actors increasingly employ indirect asymmetric tactics, including cyberattacks and terrorist acts, to gain strategic advantages, while non-state armed groups and insurgent movements increasingly integrate elements of conventional warfare, including the use of heavy weaponry [657].

The conceptual differences between Western and Russian interpretations of this phenomenon have been thoroughly analyzed by K. Kasapoglu[658]. In Western strategic thinking, hybrid warfare is generally understood as a multidimensional form of conflict involving multiple instruments of power. In contrast, the Russian approach treats "hybridity" as a mechanism for conducting deep offensive operations combined with the concept of reflexive control.

H. Lasswell and G. Lasconjarias characterize hybrid conflict as the synergistic use by state or non-state actors of all available instruments of influence against a target, ranging from cyber capabilities and strategic communications to nuclear weapons and other highly destructive methods[659]. Expanding

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[656] Vandiver, J. (2014, September 4). *SACEUR: Allies Must Prepare for Russia's "Hybrid War"*. *Stars and Stripes*. Available at: http://www.stripes.com/news/saceur-allies-must-prepare-for-russia-hybrid-war-1.301464

[657] Reeves, S.R., & Barnsby, R. E. (2013). *The New Griffin of War: Hybrid International Armed Conflicts. Harvard International Relations Council*, 34(3). Available at: https://go.gale.com/ps/i.do?id=GALE%7CA316203914&sid=googleScholar&v=2.1&it=r&linkaccess=abs&issn=07391854&p=AONE&sw=w

[658] Kasapoglu, C. (2015, November). *Russia's Renewed Military Thinking: Non-Linear Warfare and Reflexive Control*. *NATO Research Paper*, №121. Available at: https://nsarchive.gwu.edu/document/16337-nato-defense-college-russia-s-renewed-military

[659] Lasconjarias, G., & Larsen, J.A. (2015). *NATO's Response to Hybrid Threats*. NDC Research Division. 337 p. Available at: https://www.files.ethz.ch/isn/195405/fp_24.pdf

upon this perspective, P. Pindiak argues that hybrid confrontation encompasses multilevel efforts aimed at destabilizing state institutions and polarizing society through covert operations designed to influence political leadership[660].

Many researchers also advocate alternative terms such as hybrid conflict, gray-zone warfare, or proxy warfare. Several scholars, including E. Foley and C. Kaunert, prefer the concepts of gray-zone warfare or proxy warfare rather than hybrid conflict. Proxy warfare is understood as a strategy for minimizing the direct costs of military engagement through the use of human or technological substitutes. The range of such instruments is extensive, encompassing irregular armed groups, cyber operations, and the deployment of unmanned aerial vehicles (UAVs) [661].

Russia's invasion has resulted in enormous human, territorial, and economic losses for Ukraine. The aggression has effectively destroyed the foundations of traditional diplomatic relations between the two states. In the long term, the only realistic model of interaction is likely to remain one of confrontational coexistence, which may vary from limited and forced interaction to a prolonged state resembling a Cold War.

Against Ukraine, the Russian regime employs virtually the entire spectrum of hybrid warfare instruments from direct military aggression to coordinated economic, energy, informational, and other measures designed to destabilize the country from within. Many of these methods including information sabotage, espionage, the export of corruption, the

[660] Pindjak, P. (2014, November 18). *Deterring Hybrid Warfare: A Chance for NATO and the EU to Work Together*. *NATO Review*. Available at: https://www.nato.int/docu/review/articles/2014/11/18/deterring-hybrid-warfare-a-chance-for-nato-and-the-eu-to-work-together/index.html

[661] Foley, E., & Kaunert, C. (2022). Russian Private Military and Ukraine: Hybrid Surrogate Warfare and Russian State Policy by Other Means. *Central European Journal of International and Security Studies*, 16(3), 172-192. Available at: ыhttps://www.cejiss.org/images/docs/Issue_16-3/Foley_Kaunert_-_16-3_web.pdf

discrediting of public institutions, and support for destructive political forces are also actively employed against European countries.

Russian hybrid aggression seeks to systematically undermine and discredit the fundamental European values that unite the Member States of the European Union. The Kremlin attempts to disorient European societies, cultivate pro-Russian lobbying networks among political elites, and artificially intensify divisions between EU Member States and European institutions[662]. Consequently, Russia's contemporary strategy has expanded beyond reducing European influence within its self-proclaimed "sphere of privileged interests" in the post-Soviet region. It now involves large-scale hybrid expansion directed at the European Union itself. Its ultimate objectives include weakening and fragmenting the EU, reducing the strategic influence of the United States in Europe, and fundamentally reshaping Europe's security architecture and political order in accordance with Russian geopolitical interests.

Hybrid warfare is a specific form of armed conflict in which conventional military operations play only a supporting role. Its primary objective is to impose the aggressor's political, economic, and strategic objectives through the coordinated use of military and non-military instruments of influence.

The Russian Federation is not the originator of this strategy, and Ukraine is not its first victim. Elements of hybrid threats existed long before the term *hybrid warfare* was introduced. Nevertheless, it was Russia's aggression against Ukraine that compelled the international community to recognize and actively discuss the phenomenon of hybrid

662 *Analytical Report and Collection "Russia's Hybrid War: A Challenge and Threat to Europe." National Security and Defence*, №9-10, 2016. Kyiv. 96 p. Available at: https://razumkov.org.ua/uploads/journal/ukr/NSD167-168_2016_ukr.pdf

warfare, particularly among those states that perceive the Kremlin as a direct threat to their national security.

An analysis of the domestic situation in the Russian Federation suggests three key factors that contributed to the Kremlin's decision to wage war:

excess revenues – a rapid increase in the revenues of the Russian federal budget;

centralization – excessive concentration of political power accompanied by systemic corruption;

imperialism – the ambitions of the Russian political elite to restore Russia's status as a "great power."

Russia's aggression against Ukraine, which has continued since February 2014, constitutes a full-scale war aimed at depriving Ukraine of its independence and preventing the restoration of its internationally recognized borders. Russian propaganda and the official rhetoric of the Kremlin have no legal or political significance for Ukraine or the international community, as the Russian Federation has effectively placed itself outside the framework of international law through its actions. The prolonged aggression has prompted an increasing number of states and international institutions to abandon the ambiguous terminology used during the initial months following the occupation of Crimea and to acknowledge the true nature of the conflict.

This hybrid war has exposed the inability of global and regional security organizations including the United Nations (UN), the Organization for Security and Co-operation in Europe (OSCE), the European Union (EU), and the Council of Europe to effectively resolve regional conflicts, resulting in a significant decline in their credibility. At the same time, military operations in eastern Ukraine revealed new approaches employed by Russia in the military domain. The occupied territories of Crimea and parts of the Donetsk and Luhansk regions were

effectively transformed into testing grounds for advanced weapon systems, military equipment, and contemporary operational concepts and special operations.

Hybrid warfare has become an important subject of scholarly research and international policy coordination aimed at developing effective responses to this contemporary security challenge. Russian hybrid warfare relies on a broad spectrum of instruments, ranging from the dissemination of panic-inducing disinformation and manipulation of public opinion to the mobilization of religious institutions, networks of influence within the economy and political institutions, and the application of so-called soft power.

Since 2014, Ukrainian scholars and practitioners have concentrated on studying the instruments of hybrid warfare in order to develop a resilient model of socially oriented public governance. The theoretical foundations of this field have been developed in the works of V. Horbulin (editor of the collective monograph World Hybrid War: The Ukrainian Front published by the National Institute for Strategic Studies), O. Bazaluk (The Theory of War and Peace: The Geophilosophy of Europe), and R. Dodonov (The Conflict in Eastern Ukraine through the Lens of Socio-Philosophical Reflection)[663, 664, 665].

According to R. Dodonov, hybrid warfare represents an integration of conventional, irregular, and asymmetric methods of conflict. It is based on the continuous manipulation of political and ideological contradictions and the coordinated use of regular armed forces, special operations units, intelligence

[663] Dodonov, R. (2016). *The Conflict in Eastern Ukraine through the Lens of Socio-Philosophical Reflection*. Vinnytsia: GLOBUS PRESS. 200 p.

[664] Dodonov, R.O. (Ed.). (2017). *Hybrid Warfare: In Verbo et in Praxi: A Monograph*. Vasyl' Stus Donetsk National University. Vinnytsia: Nilan-LTD. 412 p.

[665] Mahda, Y. *The Beginning of the Russian Federation's Hybrid Aggression against Ukraine: The Bifurcation Point*. Available at: https://eppd13.cz/wp-content/uploads/2018/2018-5-2/07.pdf

services, media resources, and political provocateurs. The instruments of such confrontation include cyberattacks, economic coercion, proxy forces, paramilitary organizations, terrorist groups, and criminal networks. Illicit mechanisms including smuggling, drug trafficking, and illegal arms trade are also actively employed to undermine the adversary[665].

The term hybrid warfare entered the international security discourse in 2006, when the armed forces of the United States and NATO used it to analyze the activities of Hezbollah during the Lebanon Israel conflict. NATO analysts classified these events as representing a new form of warfare and defined hybrid means as a highly integrated combination of overt and covert military, paramilitary, and civilian instruments of influence[666].

The conceptualization of hybrid threats and the development of international countermeasures have evolved along several principal directions. One of the most significant developments was the strengthening of NATO's collective defence policy. At the 2016 Warsaw Summit, the Alliance officially recognized that severe hybrid attacks could, under certain circumstances, trigger the application of Article 5 of the Washington Treaty, thereby extending the principle of collective defence to hybrid threats. The North Atlantic Council was consequently granted the authority to assess the nature and severity of hybrid attacks and determine appropriate collective responses to activate the collective security mechanism in response to non-conventional aggression while simultaneously adopting a dedicated strategy for countering hybrid threats [667].

The EU regulatory framework. The European Union's Joint Framework on Countering Hybrid Threats defines hybrid

[666] *Wales Summit Declaration*. (2014, September 5). NATO Official Website. Available at: https://www.nato.int/cps/en/natohq/official_texts_112964.htm

[667] *Warsaw Summit Communiqué*. (2016, July 9). North Atlantic Treaty Organization. Available at: https://www.nato.int/cps/en/natohq/official_texts_133169.htm

threats as a coordinated combination of coercive, subversive, conventional, and unconventional methods including economic, diplomatic, technological, and military instruments employed by state or non-state actors to achieve strategic objectives without crossing the threshold of a formally declared war [668].

Institutionalization of security structures. To strengthen practical responses to hybrid threats, the European Union established the EU Hybrid Fusion Cell within the EU Intelligence and Situation Centre (EU INTCEN). In addition, the European Centre of Excellence for Countering Hybrid Threats was created to conduct research on hybrid threats and develop appropriate countermeasures.

The analytical approach of the International Institute for Strategic Studies. In its 2015 Military Balance report, the International Institute for Strategic Studies (IISS) characterized hybrid warfare as an integrated campaign combining military and civilian instruments including information operations, covert intelligence activities, and economic pressure to achieve strategic surprise and psychological advantage[669].

Contemporary hybrid conflicts are aimed at undermining an adversary's military and political system through psychological pressure and material disruption, including coercion, bribery, sabotage, and disinformation. This model integrates various military doctrines while focusing primarily on the cognitive, ideological, and value-based dimensions of society.

During the preparatory stage, hybrid threats evolve covertly and non-linearly. Their objective is not necessarily the

[668] European Commission. (2016). *Joint Communication to the European Parliament and the Council: Joint Framework on Countering Hybrid Threats – A European Union Response*. Brussels. Available at: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016JC0018&from=EN

[669] International Institute for Strategic Studies (IISS). (2015). *The Military Balance 2015*. Available at: https://www.iiss.org/publications/the-military-balance/the-military-balance-2015

complete occupation of territory although the seizure of particular regions remains possible but rather the establishment of political control over a state through influence exerted on citizens, political leaders, businesses, and security institutions. Consequently, effective countermeasures against hybrid threats require coordinated efforts not only from the security and defence sector but also from government ministries, the private sector, civil society organizations, and the broader public.

Hybrid threats pose different levels of risk to Ukraine and the Member States of the European Union due to three principal differences [670].

First, in Ukraine, hybrid warfare has already evolved into an armed conflict involving regular Russian military forces, mercenaries, and the supply of weapons, whereas for EU Member States these threats remain predominantly covert.

Second, EU Member States generally occupy relatively favorable positions in the Fragile States Index, as effective governance and resilient public institutions significantly reduce the impact of Russian destabilization efforts. Strong state institutions and comparatively low levels of structural violence substantially mitigate the effects of hybrid threats originating from Russia.

Third, the long-standing connections between segments of Ukraine's political and business elites and the Russian leadership weakened the Ukrainian state from within, thereby enabling the Kremlin to transform hybrid pressure into open military aggression in 2014.

According to experts, both Ukraine and Europe must develop comprehensive strategic approaches to counter Russian

[670] Bozhko, V. *Features and Lessons of Russia's Hybrid War against Ukraine*. Available at: http://intel.org.ua/nukma/gibridnaja_vojna/

hybrid aggression, establish flexible and effective response mechanisms, and strengthen European unity in addressing external security threats[671].

As asymmetric challenges to national security, hybrid threats require corresponding asymmetric responses. Ukraine's experience demonstrates that states with weak institutions are particularly vulnerable to such conflicts, as they are unable to compete with an aggressor possessing superior military and economic capabilities. Therefore, one of the highest priorities is the development of resilient public institutions capable of protecting citizens' rights and effectively representing the public interest.

At the same time, governments should strengthen their analytical and intelligence capacities in order to improve the timely assessment, forecasting, and management of emerging risks. Another important asymmetric instrument is the enhancement of political culture and civic education, thereby reducing the influence of extremist or marginal movements that hostile actors have traditionally exploited as instruments of destabilization.

On 24 February 2022, the Russian Federation launched its full-scale invasion of Ukraine, marking a new phase in its prolonged hybrid aggression. Information pressure, disinformation campaigns, and propaganda had for years prepared the ground for this attack. This conflict cannot be classified as a conventional war, as the aggressor has systematically violated fundamental principles of international law. Rather than a traditional confrontation between armed forces, the world has witnessed widespread war crimes committed against the civilian population. Furthermore, the

[671] Razumkov Centre. (2016). *Russia's Hybrid War: A Challenge and Threat to Europe*. Kyiv. p. 88.

Kremlin has officially denied the existence of a war, instead using the propagandistic term "special military operation" and attempting to justify the invasion through false narratives of "demilitarization" and "denazification."

Among the financial and economic instruments of hybrid warfare employed by the Russian Federation against Ukraine, the following were of particular strategic importance:

– undermining public administration and foreign economic activity through intelligence and agent networks;

– expanding Russian capital within Ukraine's banking sector to gain control over financial flows;

– implementing trade war strategies, including the blockade of maritime logistics, restrictions on transit routes, and discriminatory trade measures;

– imposing price manipulation in markets for strategically important goods and services;

– covert or direct acquisition of strategically significant enterprises to restrain or halt their development;

– creating Ukraine's critical dependence on Russian energy supplies and the nuclear energy sector;

– using businesses affiliated with the aggressor to launder illicit proceeds, finance terrorism, and support collaborationist political movements.

The financial and economic instruments of hybrid warfare that Russia employed against Ukraine over several decades systematically undermined the country's financial security. This process created the conditions for the aggression of 2014, its subsequent escalation, and ultimately the full-scale invasion of 2022.

An analysis of interstate hybrid conflicts and their impact on states, businesses, and the global environment demonstrates that financial security constitutes a comprehensive systemic category. It integrates the interests of all key stakeholders,

including the international community and interstate organizations, the state and its institutions, business entities, households, and individual citizens.

The origins of understanding conflicts as phenomena operating on two interconnected levels can be traced back to Plato, who emphasized the common nature of both civil and interstate conflicts. Drawing upon the realities of his time, he distinguished between internal wars (conflicts among ethnically related Greek city-states) and external wars (conflicts between the Greeks and so-called "barbarians"). Despite differences in their immediate causes, Plato argued that both types of conflict shared a common underlying motivation. External wars were regarded as natural instruments of defense and geopolitical differentiation, whereas internal conflicts resulted from social injustice, the destruction of societal harmony, and an insatiable desire for material wealth. A similar perspective was later advanced by Jean-Jacques Rousseau, who associated the emergence of war with the institution of private property and the growth of socio-economic inequality[672]. Consequently, regardless of the level at which a conflict unfolds from traditional interstate confrontation to contemporary hybrid conflicts involving business organizations the principal mechanisms and instruments employed to achieve strategic objectives remain fundamentally similar.

The existence of numerous forms of conflict, particularly financial conflicts, together with the diversity of terminology used in conflict studies, complicates the development of a unified conceptual and categorical framework. This creates a need for a systematic classification of financial conflicts that reflects contemporary trends in their hybrid evolution.

[672] Dodonov, R.O. (Ed.). (2017). *Hybrid Warfare: In Verbo et in Praxi: A Monograph*. Vasyl' Stus Donetsk National University. Vinnytsia: Nilan-LTD. 412 p.

To strengthen the financial security of business entities, this study proposes classifying financial conflicts according to an updated set of characteristics. In particular, several new classification criteria are introduced as evaluation indicators[673]:

1. By the parties involved, financial conflicts may be classified into conflicts:

– between owners;
– between owners and top managers;
– between top managers and financial and credit institutions;
– between top managers and public authorities;
– between top managers and other business entities;
– between employees.

2. By the sphere of occurrence, financial conflicts may arise:

– in the investment and innovation sphere;
– in the credit and lending sector;
– in the field of taxation;
– in other areas of financial activity.

3. By their relationship to the business entity, financial conflicts are classified as:

– internal conflicts, arising among participants within a business entity and typically resolved through internal governance mechanisms established by the company's constituent documents;
– external conflicts, arising between representatives of a business entity and external stakeholders within its economic environment and generally resolved with the involvement of competent public authorities.

[673] Yastrubetska, L.S. (2022). *Financial Security of Business Entities in Ukraine under Hybrid Threats: A Monograph*. Lviv: Ivan Franko National University of Lviv. 370 p.

4. By their impact on financial security, conflicts may be:

– high-impact conflicts;

– low-impact conflicts;

– conflicts with no significant impact on financial security.

5. By the nature of their origin, conflicts may be:

– objectively determined conflicts, arising from complex circumstances affecting the parties because of external or internal factors;

– subjectively determined conflicts, resulting primarily from personal motives, perceptions, or behavioral characteristics of the participants.

6. By the level of interaction between participants, conflicts are classified as:

– vertical conflicts, occurring between employees and their supervisors or managers;

– horizontal conflicts, occurring among employees at the same organizational level.

7. By duration, conflicts may be:

– short-term conflicts, usually resulting from misunderstandings, mistakes, or miscalculations that can be resolved relatively quickly;

– long-term conflicts, associated with substantial disagreements regarding financial management strategies and tactics, as well as objective difficulties in their implementation.

8. By organizational and legal form, conflicts include:

– conflicts in shareholder relations (corporate conflicts);

– conflicts arising within enterprises operating under other forms of ownership.

9. By the consequences for financial security, conflicts may involve:

– an acceptable level of financial and reputational losses;

– a critical level of financial and reputational losses;

– a catastrophic level of financial and reputational losses.

10. By their effect on financial security, conflicts are classified as:

– constructive conflicts, capable of generating positive outcomes for a business entity by revealing significant problems, encouraging organizational improvement, and facilitating the elimination of underlying causes of disagreement;

– destructive conflicts, which hinder organizational development, reduce financial performance, and negatively affect employee motivation and productivity.

11. By the multiplicity of instruments affecting financial security, conflicts may be classified as:

– simple financial conflicts;

– hybrid financial conflicts.

Contemporary global challenges demonstrate that both present and future conflicts increasingly assume hybrid forms. Accordingly, this study proposes introducing a new classification criterion the multiplicity of instruments influencing financial security and distinguishing hybrid financial conflicts as an independent field of scientific inquiry. This approach facilitates a more comprehensive understanding of their nature and supports the development of effective countermeasures.

Within this framework, the concept of a hybrid financial conflict is introduced and theoretically substantiated. It is defined as a latent confrontation within the financial sphere involving the coordinated implementation of the parties' concealed interests through a complex system of diverse methods and instruments of influence.

Hybrid financial conflicts represent a form of confrontation in which financial instruments including economic sanctions, cyberattacks on banking systems, and

currency manipulation are employed either instead of, or alongside, military force to destabilize a state. They combine economic pressure, information operations, and technological threats in pursuit of geopolitical objectives without the formal declaration of war.

Financial and economic warfare, together with instruments of geoeconomic pressure, consists of five principal components:

– politicization of capital – the transformation of financial resources into instruments of political influence;

– sanctions-based isolation – the freezing of foreign assets and the disconnection of a country from the SWIFT international payment system;

– cyberattacks on the banking sector – targeted attacks against critical digital financial infrastructure;

– artificial market destabilization – speculative manipulation of energy prices and exchange rates;

– information-driven destabilization – the deliberate creation of panic to provoke large-scale capital outflows.

At every level of governance, financial security has its own specific characteristics. Nevertheless, the fundamental patterns observed in interstate hybrid conflicts may be extrapolated to the microeconomic level, particularly to business organizations. Such extrapolation involves transferring methods characteristic of hybrid warfare such as cyberattacks, information operations, economic pressure, and other hybrid instruments to the corporate environment, where they threaten the financial stability, competitiveness, and long-term sustainability of business entities.

Legal pressure, logistical sabotage, and economic coercion to the corporate sector. Their primary objectives are to destabilize business operations, facilitate corporate raiding, undermine corporate reputation, or enable hostile takeovers.

Today, business entities also operate in an environment characterized by hybrid confrontation over financial interests. At the microeconomic level, this manifests itself through:

Covert mechanisms of influence: hostile takeovers, deliberate bankruptcies, and disinformation campaigns targeting corporate brands.

Asymmetric threats: cyberattacks on financial infrastructure, disruption of logistics, and manipulation of product and service markets.

Information and psychological pressure: the deliberate creation of panic among investors, customers, and employees.

Accordingly, protecting the financial interests of businesses under contemporary conditions requires the implementation of measures designed to counter not only traditional economic risks but also emerging hybrid threats.

Modern business protection requires a transition from fragmented security functions to the establishment of an Integrated Security Management Center. This analytical hub consolidates physical, information, financial, and legal security functions to enable the early detection of abnormal processes and emerging threats.

A critical component of such a system is operational and communication resilience, which can be achieved through:

– continuous monitoring of the media and information environment;

– building and maintaining a loyal customer base together with rapid responses to disinformation campaigns;

– deployment of backup Data Processing Centers (DPCs) or Data Centers (DCs);

– diversification of supply chains and optimization of logistics routes;

– insurance against political and hybrid risks;

– proactive crisis communication, including continuous media monitoring, engagement with key stakeholders, and rapid containment of reputational attacks.

The foundation for structuring these processes is provided by internationally recognized standards. In particular, comprehensive audits conducted in accordance with ISO/IEC 27001 ensure the three fundamental principles of information security confidentiality, integrity, and availability (CIA) while the COSO Enterprise Risk Management (COSO ERM) framework provides an effective methodology for identifying, assessing, and managing integrated organizational risks.

Table 4.18 - Hybrid Financial Conflicts

Source Domain	Instrument of Influence	Target of Impact	Synergistic Effect
Geopolitics	Economic sanctions	State-owned banks, public debt	Market isolation, sovereign default
Cyberspace	Cyberattacks (hacker attacks)	Payment systems, stock exchanges	Trading disruption, loss of liquidity
Information	Fake news (disinformation)	Depositors' confidence	Mass cash withdrawals (bank run)
Energy	Price coercion (energy price blackmail)	Trade balance	Hyperinflation, GDP decline

Source: Compiled by the author based on [674, 675, 676]

[674] Yastrubetska, L.S. (2022). *Financial Security of Business Entities in Ukraine under Hybrid Threats: A Monograph*. Lviv: Ivan Franko National University of Lviv. 370 p.

[675] Vlasiuk, S., Shemaieva, L.H., Liashenko, O.M., et al. (2016). *Fiscal Security of Ukraine under Hybrid Warfare: Challenges, Risks, Threats, and Response Measures: Analytical Report*. Kyiv: National Institute for Strategic Studies (NISS). 71 p.

[676] Kasperovych, Yu.V. (2019). *Fiscal Security of the State under Hybrid Warfare: Analytical Report*. Kyiv: Phoenix. 128 p

Hybrid financial conflicts operate through the interaction and mutual reinforcement of multiple domains of influence. Table 4.18 illustrates how the application of one instrument amplifies the effects of others.

The most common hybrid financial conflicts in business include:

External corporate threats – corporate raiding (hostile takeovers), unfair competition, and industrial espionage.

Conflicts with counterparties and the market – corruption schemes and commercial bribery, money laundering through business partners, conflicts with public authorities (tax disputes and business activity restrictions), consequences of participation in the shadow economy, as well as corruption pressure and extortion by public officials.

Conflicts in the financial and credit sector – deliberate or fraudulent bankruptcy, failure to meet obligations to banks and investors.

Internal threats (personnel security) – employee financial fraud and asset misappropriation, as well as the disclosure of confidential information to third parties.

Dynamic economic and political changes are transforming the nature of financial conflicts, giving them a hybrid character. Today, entrepreneurial activity is affected by three major destabilizing factors:

Modified corporate raiding. The illegal seizure of businesses has become increasingly sophisticated. Raiders employ corrupt connections within public authorities, economic espionage, deliberate leaks of confidential financial information, and criminal schemes.

Internal financial fraud. Managers and employees frequently engage in intentional unlawful actions for personal gain. Such conflicts manifest themselves through asset

misappropriation, corruption, and the unauthorized use of confidential corporate information.

Aggressive unfair competition. Macroeconomic uncertainty and the consequences of prolonged crises, including the COVID-19 pandemic, have significantly disrupted the balance of market interests. In order to survive in an increasingly competitive environment, businesses are more likely to resort to illegal or quasi-legal methods of competitive pressure.

The use of unfair competition practices enables certain companies to obtain unjustified commercial advantages by misleading consumers, business partners, and public authorities.

Contemporary structural reforms in Ukraine, particularly in the fiscal sphere, have been significantly complicated by external factors such as political instability, the consequences of the COVID-19 pandemic, and the destructive effects of war. These factors create a challenging business environment and generate serious conflicts between enterprises and the state.

Relations in the field of taxation are inherently conflict-prone, reflecting a direct clash between the private interests of businesses and the public interests of society. Owing to the imperative nature of state regulation, individual business interests are subordinated to public interests. To resolve such disputes, Ukraine has established an appropriate legal framework, institutional mechanisms for protecting taxpayers' rights, and specialized public institutions.

Despite the availability of legal remedies, the combination of unfavorable factors has generated what can be described as a hybrid financial conflict between businesses and tax authorities.

This phenomenon is characterized by the following features:

Latent nature – a hidden manifestation of business dissatisfaction with the state's tax policy.

Protest behavior – resistance to the methods employed by fiscal authorities.

Economic consequences – a large-scale shift of businesses into the shadow economy.

The expansion of the shadow economy is a direct consequence of excessive tax pressure. Since taxes are not only a source of budget revenues but also an instrument of state influence on business, excessively high tax rates make tax evasion economically attractive. This creates incentives for businesses to operate in the informal sector. Therefore, state tax policy should be based on balancing the interests of fiscal authorities and taxpayers while creating conditions for effective cooperation between them.

The shadow economy is an integral component of every national economic system; however, its scale and consequences vary considerably depending on the effectiveness of public governance. In developed countries, its size generally remains limited (approximately 5-12% of GDP) and does not threaten economic stability. In contrast, in developing countries it may exceed 30% of GDP, thereby undermining socio-economic institutions.

The shadow economy in Ukraine originated during the Soviet period. It expanded rapidly during the Perestroika period (1985–1991), and by the time Ukraine gained independence, a substantial informal sector had already been established.

Inherited from the Soviet era, the shadow sector expanded rapidly during the first years of Ukraine's independence. The principal determinant of this process was the absence of a comprehensive national concept of market transformation based on an interdisciplinary approach research by economists, sociologists, political scientists, and cultural scholars has also taken into account the mental and socio-cultural characteristics of Ukrainian society.

The shadow economy became the subject of extensive research by both Ukrainian and foreign scholars as early as the second half of the twentieth century.

The concept of the "shadow economy" is not universal across all countries. In international practice, synonymous terms are frequently used, including "informal," "parallel," "underground," "second," "fictitious," "unrecorded," and the "black market economy."

To date, scholars have not developed a universally accepted definition of the essence of the shadow economy or its structural components.

According to an early definition proposed by IMF economist Vito Tanzi, the shadow economy is the part of Gross National Product (GNP) that is not captured by official statistics because economic entities conceal or understate their income[677].

Among foreign researchers, the statistical approach to defining the shadow economy predominates. In particular, German scholar Ulrich Thiessen considers it to include activities that create new value but are ignored by official statistics[679]. Peter Gutmann shares a similar view, defining it as any economic activity that is not recorded by statistical authorities[678]. Likewise, Edgar L. Feige, in one of the classical definitions, classifies as "shadow" all forms of economic activity that, for various reasons, fall outside the scope of official accounting[681].

Similarly, P. Gutmann defines the shadow economy as economic activity that is not registered by official authorities[679].

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[677] Skoruk, O. V. (2017). Shadow Economy: Essence, Causes, and Ways of Overcoming. *Economy and Society*, 11, 127-131. Available at: https://economyandsociety.in.ua/journals/11_ukr/20.pdf

[678] Turchynov, O.V. (1995). *Shadow Economy: Theoretical Foundations of Research*. Kyiv: Artek. 300 p.

[679] Skoruk, O. V. (2017). Shadow Economy: Essence, Causes, and Ways of Overcoming. *Economy and Society*, 11, 127-131. Available at: https://economyandsociety.in.ua/journals/11_ukr/20.pdf

This demonstrates the predominance of the statistical approach among Western scholars.

O.V. Turchynov states that the shadow economy is economic activity that is not recorded, monitored, or taxed by the state and/or is aimed at generating income through violations of existing legislation[680]. In our opinion, this author supports the definition of the shadow economy proposed by Western scholars, particularly E. Feige and P. Gutmann.

S.M. Mochernyi, Ya.S. Larina, O.A. Ustenko, and S.I. Yurii define the shadow economy as a type of economic activity aimed at obtaining illicit income, avoiding state, supranational, and public control, and evading taxes while conducting otherwise legal economic activities[681].

Professor Z.S. Varnalii interprets the shadow economy as a multidimensional phenomenon based on a set of economic relations between entrepreneurs that remain beyond state control. The primary objective of such relations is to obtain excessive profits through the deliberate concealment of financial results and tax evasion, while the methods employed may range from purely criminal to legally permissible but socially unethical practices [682].

Thus, the shadow economy can be defined as concealed or unconcealed economic activity aimed at intentionally or involuntarily obtaining excessive profits through uncontrolled socio-economic relations [683].

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[680] Turchynov, O.V. (1995). *Shadow Economy: Theoretical Foundations of Research*. Kyiv: Artek. 300 p.

[681] Mochernyi, S. V. (Ed.). (2005). *Economic Encyclopedic Dictionary* (Vol. 2). Lviv: Svit. 568 p.

[682] Varnalii, Z. S. (Ed.). (2009). *Economic Security: A Textbook*. Kyiv: Znannia. 647 p.

[683] Skoruk, O. V. (2017). Shadow Economy: Essence, Causes, and Ways of Overcoming. *Economy and Society*, 11, 127-131. Available at: https://economyandsociety.in.ua/journals/11_ukr/20.pdf

Economic literature does not provide a single approach to structuring shadow economic activity. Researchers classify its components according to the legality of activities, the motives for concealment, and statistical accounting.

E. Feige distinguishes between legal and non-concealed activities that are nevertheless exempt from taxation and excluded from official statistics ("informal economy") and illegal, deliberately concealed economic activity ("underground economy"). P. Gutmann identifies three components of the shadow economy: illegal, concealed, and informal activities[685].

O.V. Turchynov identifies four structural elements of the shadow economy: (1) economic activity that is not concealed from state authorities but, for objective or subjective reasons, is not recorded, monitored, or taxed; (2) legal economic activity in which taxes, fees, penalties, and other mandatory payments are wholly or partially evaded through violations of tax or other economic legislation; (3) illegal economic activity deliberately concealed from state authorities; and (4) activities aimed at generating income through the commission of crimes or assistance in committing crimes that entail criminal liability[684].

Z.S. Varnalii distinguishes the following three main components of the shadow economy [685]:

Informal economy – household activities involving the production and consumption of goods and services for personal or family use.

Criminal economy – the production and sale of prohibited goods and services, such as narcotics and explosives.

Illegal economy – the unlawful production and sale of otherwise legal goods without proper documentation and/or business registration.

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[684] Turchynov, O.V. (1995). *Shadow Economy: Theoretical Foundations of Research*. Kyiv: Artek. 300 p

[685] Varnalii, Z. S. (Ed.). (2009). *Economic Security: A Textbook*. Kyiv: Znannia. 647 p.

Depending on the legality of goods and the nature of the activity, the shadow economy is generally divided into the following categories:

grey economy (informal/concealed): legally permitted economic activities that are intentionally hidden from the state in order to evade taxes. Examples include undeclared employment ("envelope wages") and underreporting actual business profits;

black economy (illegal): activities that are prohibited by law or inherently criminal. These include drug trafficking, arms trafficking, smuggling, racketeering, human trafficking, and financial fraud.

Pink economy (informal household economy): small-scale income-generating activities conducted by individuals without business registration because of their limited scale or the absence of a legal registration requirement. Examples include renting out property without a formal contract, private tutoring, and selling home-grown agricultural products.

The shadow economy remains a significant challenge for many countries. In Ukraine, according to the International Monetary Fund, it accounts for approximately 45% of GDP. As of 2026, official estimates by the Ministry of Economy indicate that the shadow economy amounts to approximately 31% of GDP. This reduces state budget revenues, creates unfair competition for legitimate businesses, and undermines the social protection of employees.

Participants in the shadow economy employ a wide variety of illegal schemes, continuously evolving the methods they use[688]:

use of fictitious business entities;

use of conversion centers;

use of transactions with non-residents registered in offshore jurisdictions.

The main drivers behind the use of offshore schemes include political and economic instability, an imperfect tax system, excessive fiscal pressure, and the criminalization of the economy. Offshore activities tend to expand under conditions of corruption, weak protection of property rights, and national currency depreciation. This demonstrates that hybrid financial conflicts are closely interconnected not only through their implementation mechanisms but also through the common factors that trigger their development.

The proliferation of offshore business activities is particularly characteristic of countries with high levels of corruption, unstable national currencies, and inadequate protection of property rights. Consequently, this further confirms the existence of a close interrelationship among hybrid financial conflicts, manifested both in the mechanisms of their implementation and in their underlying causes[686].

The substantial scale of the shadow economy negatively affects all economic processes within the country and reduces the investment attractiveness of domestic business entities, thereby lowering the level of financial security of both the state and individual enterprises. Moreover, the existence of a large shadow economy distorts information about actual economic indicators, making effective macroeconomic and microeconomic analysis impossible and hindering the adoption of sound managerial and legislative decisions. We agree with the opinion of Professor Z.S. Varnalii that ignoring such a complex and multidimensional phenomenon as the shadow economy results in serious errors in determining macroeconomic indicators, inadequate assessment of key economic processes and trends, and both tactical and strategic

[686] Yastrubetska, L.S. (2022). *Financial Security of Business Entities in Ukraine under Hybrid Threats: A Monograph*. Lviv: Ivan Franko National University of Lviv. 370 p.

miscalculations in ensuring the competitiveness of the national economy [687].

In Ukraine, the main causes of the shadow economy include the absence of a fully developed market environment; insufficient institutional support for economic policy; ineffective management of state-owned property and inadequate protection of property rights; systemic shortcomings of the tax system; imbalances in state regulatory policy; deficiencies in budgetary policy; distortions in the structure of employment; weaknesses in the judicial system; and corruption [688].

The above-mentioned causes of the shadow economy lead to several adverse consequences for the formal economy, including:

– loss of tax revenues to the state budget, resulting in difficulties in fulfilling the government's financial obligations;

– ineffectiveness of managerial decision-making due to the lack of complete and objective official information on the development of economic processes in Ukraine;

– reduction of domestic investment resources because shadow entities are unable to openly invest income concealed from taxation, resulting in capital flight abroad.

Declining interest among potential strategic investors in Ukrainian enterprises, which significantly slows privatization processes and the financial recovery of industrial production[689].

Thus, the current processes of Ukraine's political and economic transformation demonstrate that, among the many threats to the country's economic security requiring

[687] Varnalii, Z. S. (Ed.). (2006). *Shadow Economy: Essence, Features, and Ways of Legalization: A Monograph*. Kyiv: National Institute for Strategic Studies (NISS). 574 p.

[688] Tkachenko, A.V. (2012). The Shadow Economy and Its Impact on the Economic System. *Business Inform*, №10, pp. 47-51.

[689] Varnalii, Z. S. (2006). *The Shadow Economy: Essence, Features, and Ways of Legalization: A Monograph*. Kyiv: National Institute for Strategic Studies (NISS). 576 p.

comprehensive solutions, the problem of the shadow economy deserves particular attention.

The factors that complicate the detection of shadow economic activities include the following[690]:

– creating the appearance of lawful business activity while concealing the true nature of financial and business transactions;

– adoption of regulatory acts that excessively strengthen the protection of commercial and banking secrecy, thereby restricting the access of supervisory authorities to information on completed transactions;

– use of corrupt relationships with public officials to conceal criminal activities;

– use of forged documents and nominee persons, making it more difficult to identify individuals involved in criminal activities;

– difficulty in identifying the beneficial owners and actual managers of fictitious business entities involved in implementing shadow economic schemes;

– use of modern information technologies in criminal business schemes to manage financial flows through bank accounts without visiting banking institutions, enabling remote access to and control over funds;

– use of advanced banking products that facilitate cash withdrawals outside banking institutions (e.g., bank payment cards);

– inefficient coordination among public authorities responsible for detecting shadow economic schemes and exchanging relevant information.

[690] Yastrubetska, L.S. (2022). *Financial Security of Business Entities in Ukraine under Hybrid Threats: A Monograph*. Lviv: Ivan Franko National University of Lviv. 370 p.

The high level of the shadow economy in Ukraine critically hampers the country's development. Although it is impossible to eliminate this phenomenon entirely, a targeted strategy can substantially reduce its scale. Achieving this objective requires mutual trust and integrity between the government and society. The principal threats posed by the shadow sector include a significant loss of tax revenues, a decline in real GDP accompanied by accelerating inflation, rising unemployment and declining living standards, as well as the weakening of economic security and social protection.

Accordingly, the priority areas for reform include the modernization of legislation governing financial and banking activities; the maximum simplification of procedures for establishing and operating innovative businesses; strict prevention of the registration of fictitious enterprises; and the adaptation of successful anti-crisis practices implemented in economically unstable countries.

International experience demonstrates that bankruptcy law constitutes an effective legal instrument for resolving property disputes. Through a clearly regulated legal framework, bankruptcy procedures ensure a fair balance and compromise between the conflicting financial interests of creditors and debtors.

On the one hand, these mechanisms protect creditors' interests by enabling them to recover their property rights through the liquidation, transfer, or acquisition of the debtor's assets or through corporate restructuring. On the other hand, reorganization procedures are intended to preserve the viability of the business entity and facilitate its continued operation.

The term "bankruptcy" has numerous interpretations across the social sciences, political science, and even the natural sciences. Today, it is widely used in political science as well. The diversity of definitions reflects the multifaceted nature of

bankruptcy, the ambiguity of its manifestations, and the unpredictability of its consequences. Theoretical research into the essence of bankruptcy remains ongoing.

According to I.V. Oleksandrenko and L.I. Ishchuk, bankruptcy serves as a mechanism of the market economy whose primary purpose is to eliminate inefficient enterprises that are unable to meet their financial obligations or operate at a loss to themselves and other market participants [691].

According to N.G. Seisebayev and O.V. Topchaniuk, studying the essence of bankruptcy requires an analysis of the enterprise's crisis condition, which necessitates the application of specialized management methods and arises as a consequence of declining solvency in fulfilling its financial obligations [692].

As noted by V.I. Rudyka, Yu.M. Velykyi, and O.D. Zioma, a profound financial crisis ultimately results in a business entity's complete inability to satisfy its obligations to creditors [693].

The principal legislative act governing bankruptcy proceedings in Ukraine is the Code of Ukraine on Bankruptcy Procedures of September 19, 2024, No. 3985-IX [694]. According to the Code, bankruptcy is the inability of a debtor, except for an insurer or a credit union, as recognized by the commercial court, to restore its solvency through rehabilitation or restructuring procedures and to satisfy creditors' monetary claims established in accordance with the procedures prescribed

[691] Oleksandrenko, I.V., & Ishchuk, L.I. (2015). The Main Causes of Enterprise Bankruptcy. *Economic Forum*, No. 2, pp. 222-226.

[692] Seisebaieva, N. H., & Topchaniuk, O.V. (2016). Methods for Analyzing and Forecasting Enterprise Bankruptcy. *Young Scientist*, №11, pp. 678-681.

[693] Rudyka, V. I., Velykyi, Y. M., & Zyoma, O.D. (2018). The Economic Essence of the Concept of Bankruptcy: Causes and Consequences for Enterprises. *Market Infrastructure*, №18, pp. 127-132. Available at: http://www.market-infr.od.ua/journals/2018/18_2018_ukr/23.pdf

[694] Code of Ukraine on Bankruptcy Procedures, Law №3985-IX of September 19, 2024. Available at: https://zakon.rada.gov.ua/laws/show/2597-19

by the Code by any means other than liquidation proceedings or debt repayment procedures.

Article 209 of the Commercial Code of Ukraine defines bankruptcy as the inability of a debtor to restore its solvency and satisfy creditors' claims recognized by the court other than through a court-ordered liquidation procedure[695].

Article 219 of the Criminal Code of Ukraine defines bankruptcy as the persistent financial insolvency of a business entity[696].

An analysis of the economic literature indicates that the prevailing contemporary approach views bankruptcy as a mechanism for eliminating inefficient and insolvent enterprises from the market. From an economic perspective, bankruptcy arises from the chronic inability of a business entity to meet its obligations to creditors, acquiring official legal status only after an appropriate court decision. It should be noted that despite the dynamic nature of the external environment and the emergence of new sources of financial instability, the fundamental interpretation of bankruptcy in both theory and practice remains unchanged: legal criteria continue to play the decisive role in its identification.

The bankruptcy of enterprises gives rise to numerous destructive economic consequences, including declining consumer demand, reduced production volumes, increasing indebtedness to suppliers, banks, and the state budget, chronic delays in wage payments, and growing uncertainty in market conditions. As a consequence, businesses lose their traditional domestic and international markets, socio-economic instability intensifies, the legal environment undergoes continuous

[695] Commercial Code of Ukraine, Law No. 436-IV of January 16, 2003 (as amended on January 1, 2020). Verkhovna Rada of Ukraine. Available at: https://zakon.rada.gov.ua/laws/show/436-15

[696] Criminal Code of Ukraine, Law No. 2341-III of April 5, 2001. Verkhovna Rada of Ukraine. Available at: https://zakon.rada.gov.ua/laws/show/2341-14

transformation, and, in some cases, even the political system and the structure of the national economy may be fundamentally altered [697].

The causes of business insolvency are traditionally classified into external and internal factors. External factors are objective in relation to the bankrupt enterprise and include global economic crises, political instability, shifts in the state's foreign economic policy, ineffective or poorly justified government reforms, general deterioration of the macroeconomic environment, and imperfections in the legal and regulatory framework[698].

Internal factors, which are subjective from the perspective of the bankrupt enterprise, include delayed or inadequate responses to changes in the market environment; persistent deficiencies in corporate economic policy; shortcomings in strategic planning and business development; ineffective management practices; a low technological level of production or service provision; significant deficiencies in labor organization; growing levels of indebtedness; unjustified investment decisions made under conditions of limited financial resources; and insufficient or irregular application of available bankruptcy diagnostic methods[700].

Bankruptcy represents the final stage of a profound systemic crisis. It results from a combination of internal factors that depend entirely on managerial decisions[700], including delayed and inadequate responses to market changes, chronic errors in economic policy, ineffective management, the absence of a sound long-term development strategy, obsolete production technologies or service delivery systems, serious shortcomings

[697] Rudyka, V. I., Velykyi, Y. M., & Zyoma, O.D. (2018). *The Economic Essence of the Concept of "Bankruptcy": Causes and Consequences for the Enterprise. Market Infrastructure*, №. 18, pp. 127-132

[698] Epifanova, I.M. (2017). *Bankruptcy of Enterprises: A Range of Unresolved Issues. Economics: The Realities of Time*, 1(29), 55-63.

in workforce organization, uncontrolled growth of liabilities, poorly justified investment projects under conditions of financial constraints, and the neglect or irregular use of bankruptcy forecasting and diagnostic methods.

Under current economic conditions, the principal prerequisites for corporate financial insolvency include the following destructive factors:

– market monopolization by multinational corporations and intensified competition resulting from large-scale corporate mergers;

– the cross-border nature of financial crises (the domino effect) due to the integration of global economic systems;

– instability and rapid changes in the direction of the global economy;

– internal organizational failures and corporate governance scandals;

– force majeure events, including environmental disasters, pandemics, and technological catastrophes;

– increasing consumer expectations and diversification of customer needs;

– the necessity of adopting knowledge-intensive and high-tech production technologies;

– risks associated with digitalization, including cybercrime and online financial fraud;

– destabilization of global markets caused by threats of international terrorism;

– the shortening of product life cycles [699].

From the economic and legal perspective, four principal types of bankruptcy are distinguished:

[699] Rudyka, V., Velykyi, Y.M., & Zyoma, O.D. (2018). *The Economic Essence of the Concept of "Bankruptcy": Causes and Consequences for the Enterprise. Market Infrastructure*, №18, pp. 127-132.

Actual bankruptcy – a condition in which an enterprise is unable to repay its debts or restore operations because of the complete loss of its capital.

Technical bankruptcy – temporary insolvency caused by excessive accounts receivable despite an overall excess of assets over liabilities.

Intentional bankruptcy – the deliberate creation or aggravation of insolvency by the owners or managers of a business.

Fictitious bankruptcy – the knowingly false declaration of insolvency with the intention of misleading creditors.

The bankruptcy of domestic enterprises destabilizes the country's socio-economic environment. It results in job losses, rising unemployment, declining tax revenues at all levels of government, and increasing social tensions. Consequently, there is a pressing need to establish an effective system of preventive anti-crisis management capable of neutralizing and eliminating destructive factors before they lead to insolvency.

The principal directions for preventing corporate bankruptcy include:

– continuous monitoring of the enterprise's financial condition and identification of risk factors;

– periodic assessment of bankruptcy probability and forecasting of adverse scenarios;

– implementation of an effective early warning system and rapid response mechanisms for eliminating threats;

– planning business activities with due consideration of both quantitative and qualitative changes in economic conditions.

The establishment of an effective control system and the implementation of anti-crisis management constitute the primary means of ensuring economic security and preventing corporate bankruptcy. To avoid corporate crises, it is necessary

to develop a comprehensive system for the early detection, prevention, and management of bankruptcy that adequately reflects real socio-economic processes and enhances an enterprise's ability to operate successfully under conditions of increased risks and uncertainty[700].

Article 219 of the Criminal Code of Ukraine defines bankruptcy as the persistent financial insolvency of a business entity[701].

An analysis of the economic literature indicates that the prevailing contemporary approach regards bankruptcy as a mechanism for eliminating inefficient and insolvent enterprises from the market. The economic essence of bankruptcy is derived from the chronic inability of a business entity to fulfill its obligations to creditors, which acquires official legal status only after an appropriate court decision. It should be noted that, despite the dynamic nature of the external environment and the emergence of new causes of financial instability, the fundamental interpretation of bankruptcy in both theory and practice remains unchanged: legal criteria continue to play the decisive role in its identification.

The bankruptcy of enterprises generates a number of destructive economic consequences, including declining consumer demand, reduced production volumes, increasing indebtedness to suppliers, banks, and the state budget, chronic delays in wage payments, and growing uncertainty in market conditions. Consequently, businesses lose their traditional domestic and foreign markets, socio-economic instability intensifies, the legal framework undergoes continuous transformation, and, in certain cases, even the political system

[700] Sukrusheva, H.O. (2017). Causes and Consequences of Bankruptcy of Domestic Enterprises under Current Conditions. *Economy and Society*, №9, pp. 682-686.

[701] Criminal Code of Ukraine, Law No. 2341-III of April 5, 2001. Verkhovna Rada of Ukraine. Available at: https://zakon.rada.gov.ua/laws/show/2341-14

and the overall structure of the national economy may be fundamentally altered[702].

Within the system of economic causes of business insolvency, scholars traditionally distinguish between external and internal factors. External factors are objective in relation to a particular bankrupt enterprise. They include global economic crises, political instability, changes in the state's foreign economic policy, ineffective or unjustified government reforms, the general deterioration of the macroeconomic environment, and imperfections in the legal and regulatory framework.

Fictitious bankruptcy refers to the deliberate false declaration of insolvency with the intention of misleading creditors.

The bankruptcy of domestic enterprises destabilizes the country's socio-economic environment. This process is accompanied by job losses, rising unemployment, declining tax revenues at all levels of government, and increasing social tension. Therefore, there is a need to establish an effective system of preventive anti-crisis management to ensure the timely identification, neutralization, and elimination of destructive factors.

The principal directions for preventing corporate bankruptcy include:

continuous monitoring of the enterprise's financial condition and identification of risk factors;

periodic assessment of the probability of bankruptcy and forecasting of adverse scenarios;

implementation of an effective early warning system and rapid response mechanisms for eliminating potential threats;

[702] Rudyka, V. I., Velykyi, Y. M., & Zyoma, O.D. (2018). *The Economic Essence of the Concept of "Bankruptcy": Causes and Consequences for the Enterprise. Market Infrastructure*, №. 18, pp. 127-132.

planning business activities while taking into account quantitative and qualitative changes in economic conditions.

The establishment of an effective control system together with the implementation of anti-crisis management constitutes a key instrument for ensuring economic security and preventing corporate bankruptcy. To prevent enterprises from entering a crisis state, it is necessary to develop a comprehensive system for the early detection, prevention, and management of bankruptcy that adequately reflects actual socio-economic processes and enhances an enterprise's capacity to operate successfully under conditions of heightened risks and uncertainty[703].

N. Marusiak notes that anticipating threats of a corporate financial crisis is aimed at the systematic assessment of an enterprise's financial condition. Preventing bankruptcy and ensuring the timely identification of threats to financial security are possible through continuous monitoring of the enterprise's financial performance[704].

Effective crisis forecasting requires the timely identification of its early latent symptoms. The primary indicators of impending financial distress are adverse signals from external stakeholders and destructive internal developments.

External indicators (market reactions) include complaints from suppliers and business partners, growing concerns expressed by banks and creditors, declining customer demand, and negative consumer feedback.

[703] Sukrusheva, H.O. (2017). Causes and Consequences of Bankruptcy of Domestic Enterprises under Current Conditions. *Economy and Society*, №9, pp. 682-686.

[704] Marusiak, N. (2021). Enterprise Bankruptcy: Essence, Causes, and Consequences. *Economy and Society*, Issue 33. Available at: https://economyandsociety.in.ua/index.php/journal/article/view/897/860

Internal indicators (management and financial performance) include an insufficient level of employee qualifications, unfavorable changes in the structure of assets and liabilities, rapid growth of accounts receivable and accounts payable, and a persistent decline in the enterprise's overall revenues.

Pursuant to Article 4 of the Code of Ukraine on Bankruptcy Procedures, the following measures are established for the prevention of bankruptcy[705]:

the owners (founders, shareholders) of the debtor and the relevant public authorities are required to take all necessary measures to prevent bankruptcy;

once signs of insolvency begin to emerge, the head of the debtor enterprise must notify the founders and owners of the property accordingly;

founders, owners, and creditors may provide financial assistance sufficient to satisfy all outstanding obligations to creditors, as well as obligations related to insurance contributions, taxes, and mandatory payments, thereby facilitating the debtor's financial rehabilitation;

upon receiving such financial assistance, the debtor assumes corresponding obligations toward the provider of the assistance in accordance with applicable legislation.

The following basic strategies are commonly applied to overcome a corporate financial crisis:

– implementation of comprehensive measures aimed at restoring solvency and liquidity;

– optimization of the organizational structure through mergers, acquisitions, or consolidations;

– restructuring of the management system, assets, and operating activities;

[705] Code of Ukraine on Bankruptcy Procedures, Law №. 2597 of October 21, 2019. Verkhovna Rada of Ukraine. Available at: https://zakon.rada.gov.ua/laws/show/2597-19

– liquidation of the enterprise where overcoming bankruptcy is no longer possible.

"The economic assessment of the costs associated with implementing anti-crisis measures is the decisive criterion for selecting an enterprise rehabilitation strategy. Priority should be given to the financial recovery option that ensures the maximum economic effect while minimizing the required resources" [706].

To select an effective rehabilitation strategy, it is necessary to accurately assess the enterprise's current financial condition by determining the specific stage of the financial crisis. Practical experience demonstrates that financial rehabilitation is most effective when destructive processes have not yet become irreversible.

According to Article 166-16 of the Code of Ukraine on Administrative Offenses, unlawful actions during bankruptcy proceedings include the intentional concealment of property or

information relating to property, the transfer of property into another person's possession, its disposal or destruction, as well as the falsification, concealment, or destruction of documents reflecting business or financial activities, provided that such actions are committed by a founder (participant) or an official of a business entity during bankruptcy proceedings and result in substantial material damage[707] [57].

The principal motives underlying abuses committed by debtors during bankruptcy proceedings include concealing other criminal offenses, minimizing or evading tax liabilities, conducting fictitious rehabilitation procedures for the unlawful write-off of debts, and unjustified avoidance of obligations owed to creditors.

[706] Bodnar, O., Hrynchuk, Yu., & Berezhanskyi, S. (2019). Features of Financing Rehabilitation Measures. *Modern Economics*, №17, pp. 39-44.

[707] Code of Ukraine on Administrative Offenses (version effective until May 7, 2017, Articles 1-212-21), Law №8073-X of December 7, 1984. Verkhovna Rada of Ukraine. Available at: https://zakon.rada.gov.ua/go/80731-10

Unlawful actions by creditors are often aimed at artificially initiating bankruptcy proceedings as an instrument of unfair competition. The primary objective of such abuse is the forced redistribution of the debtor's assets and their acquisition at artificially reduced prices.

Since Ukraine gained independence, two principal strategies have been employed to deliberately drive enterprises into insolvency: the accumulation of liabilities within the debtor company and the transfer of its valuable assets to newly established entities. The most common methods include:

Asset manipulation schemes: direct sale of assets at prices significantly below market value; exchange transactions in which the debtor receives unnecessary or substantially overvalued assets; diversion of resources through donations or charitable contributions; transfer of assets to newly established legal entities in exchange for a nominal or disproportionately small ownership interest; unauthorized withdrawal and misappropriation of cash from the company's accounts; and the deliberate destruction or concealment of corporate assets.

Financial and contractual fraud: payment for fictitious intangible services (such as marketing, consulting, or legal services); transfer of funds to counterparties under contracts that exist only formally; and concealment of information regarding receivables owed to the debtor by other companies that could otherwise be used to settle outstanding liabilities.

Artificial accumulation of liabilities and managerial misconduct: deliberate increase of indebtedness to affiliated creditors through excessive penalties, fines, and damage claims; and the intentional adoption of managerial decisions that undermine the enterprise's financial condition.

Abuse by creditors: creditors seek not merely to recover outstanding debts but to obtain control over the debtor's business, including deliberately forcing the company into

liquidation in order to acquire its assets at substantially undervalued prices.

Effective bankruptcy prevention is based on the timely forecasting of an enterprise's solvency and the identification of the underlying causes of financial distress. The principal cause of corporate crises is ineffective management. Deficiencies in the management of operating, financial, and investment activities prevent enterprises from adapting to changing market conditions and effectively responding to external threats.

Bankruptcy is a double-edged instrument of the market economy. On the one hand, it removes non-viable enterprises from the market, thereby promoting economic efficiency. On the other hand, it generates significant adverse economic and social consequences. To minimize these risks, both the state and the business sector should maintain continuous financial monitoring.

The positive functions of bankruptcy (market cleansing) include the elimination of inefficient and loss-making enterprises, the reallocation of capital to more efficient businesses, and the encouragement of operational optimization. Its negative consequences for the state and the market include the creation of financial risks for solvent business partners, reduced tax revenues, declining overall profitability due to inefficient allocation of resources, job losses, and rising unemployment.

Despite the diversity of instruments employed, hybrid financial conflicts exhibit several common characteristics:

– the actual initiator of the conflict generally remains anonymous or acts through nominee persons;

– the attacker employs relatively inexpensive instruments (such as cyberattacks and disinformation campaigns) to inflict substantial financial losses;

– economic pressure, market manipulation, information operations, and cyberattacks are used simultaneously;

– the distinction between peacetime and wartime becomes blurred, as financial pressure is maintained continuously;

– private banks, investment funds, and payment systems become either the primary targets or the principal instruments of attack;

– the victim's financial losses are ultimately converted into political or geopolitical concessions.

Yastremska identifies the following principal types of hybrid financial conflicts: corporate raiding, financial fraud, unfair competition, corruption, conflicts in the financial and credit sector, conflicts involving public authorities, and money laundering of criminal proceeds[708].

In such conflicts, the primary objective is not the physical destruction of infrastructure but rather the destabilization of economic stability, the erosion of confidence in the national currency, and the restriction of access to capital.

The hybrid nature of these conflicts lies in the synergistic application of multiple methods of pressure on the financial system of an enterprise or a state. These include the artificial freezing of bank accounts, sanctions pressure, destructive tax competition, disruption of logistics chains, cyberattacks on banking applications, electronic payment infrastructure and accounting systems, the deliberate dissemination of disinformation to provoke panic among investors, customers, and bank depositors, as well as the creation of artificial stress and uncertainty aimed at destabilizing managerial decision-making.

[708] Yastrubetska, L.S. (2022). *Financial Security of Business Entities in Ukraine under Hybrid Threats: A Monograph*. Lviv: Ivan Franko National University of Lviv. 370 p.

The principal threat posed by hybrid financial conflicts is the destruction of the financial stability of business entities. To counter these threats, researchers advocate replacing the traditional security paradigm. Instead of attempting to preserve static stability, businesses should develop the capacity to adapt flexibly to continuous change and respond to threats in real time. This approach combines financial analysis (including liquidity monitoring) with socio-psychological assessment of employees and management, as well as the evaluation of organizational vulnerabilities using adapted balance-based assessment methodologies (for example, identifying critical operational sectors) to facilitate rapid recovery following attacks.

Hybrid financial conflicts possess a dual nature. On the one hand, they generate destructive consequences for corporate financial security and constitute a significant threat to society. On the other hand, within a market economy such conflicts are inevitable, and their constructive resolution performs an important positive functional role.

Conflicts evolve together with society and serve as a natural driver of its development. This phenomenon has been extensively examined by classical sociological scholars. Georg Simmel regarded conflict as a universal social phenomenon, arguing that a conflict-free society lacks the mechanisms necessary for self-development, whereas contradictions stimulate individuals and organizations toward improvement[709]. Ralf Dahrendorf emphasized the constructive effects of conflict, considering it the primary source of development in any social system[710].

[709] Svyrydenko, V.M. (2011). Conflicts in the Field of Taxation: A Theoretical and Legal Perspective. *Current Issues of State and Law*, Issue 57, pp. 535-543. Available at: http://nbuv.gov.ua/UJRN/apdp_2011_57_80

[710] Dahrendorf, R. (1959). *Class and Class Conflict in Industrial Society*. Stanford University Press. Available at: https://cominsitu.files.wordpress.com/2019/01/ralf-dahrendorf-class-and-class-conflict-in-industrial-society-1.pdf

Table 4.19 - Dual-Sector Impact of Hybrid Financial Conflicts

Hybrid financial conflict	
Destructive Vector (Threats)	**Constructive Vector (Opportunities)**
Artificial hindering of operational and strategic development High risk of unlawful corporate takeover (raiding) Forced liquidation or bankruptcy of the business entity	Proactive identification of latent vulnerabilities within internal systems Rehabilitation and purification of the organizational structure from destructive elements Development of an adaptive and advanced model of market interaction

Source: Developed by the authors

Lewis A. Coser, in his theory of positive-functional conflict, demonstrated that conflict is an inherent component of group interaction, reducing social tension, mitigating contradictions, and strengthening internal group cohesion [711].

Supporting the views of these scholars, it should be emphasized that conflict constitutes a fundamental mechanism for maintaining dynamic equilibrium within socio-economic systems. Accordingly, the ability of enterprises to preserve such equilibrium under conditions of hybrid financial conflicts forms the foundation of their financial security.

The dual-sector impact of hybrid financial conflicts on business entities is presented in Table 4.19.

A crisis recognized in a timely manner stimulates business transformation by acting as a filter that exposes weaknesses in the security system and eliminates its inefficient elements. This creates opportunities for developing a new, more advanced

[711] Coser, L.A. (1957). *Social Conflict and the Theory of Social Change*. *The British Journal of Sociology*, 8(3), 197-207.

model of interaction with the economic environment. Therefore, the strategic objective of security policy is to develop methodological foundations for protecting business entities, with mandatory consideration of the factor of hybrid financial conflicts.

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