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T. Kopotiienko,
PhD in Economics, Associate Professor, Associate Professor of the Department of Financial Analysis and Audit, State University of Trade and Economics
ORCID ID: https://orcid.org/0000-0001-6107-9937
A. Busenko,
Higher education student,
State University of Trade and Economics
ORCID ID: https://orcid.org/0009-0001-8923-1213
A. Pakhalchuk,
Higher education student,
State University of Trade and Economics
ORCID ID: https://orcid.org/0009-0002-0109-2384
V. Lymansky,
Higher education student,
State University of Trade and Economics
ORCID ID: https://orcid.org/0009-0008-3503-0150

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THE MULTI-VECTOR POTENTIAL OF ANTI-CORRUPTION FINANCIAL INVESTIGATIONS AND AUDITING IN ENSURING THE ECONOMIC SECURITY OF CRITICAL INFRASTRUCTURE FACILITIES IN LIGHT OF NATO PRINCIPLES

Т. Ю. Копотієнко,
к. е. н., доцент, доцент кафедри фінансового аналізу та аудиту, Державний торговельно-економічний університет
А. О. Бусенко,
здобувач вищої освіти, Державний торговельно-економічний університет
А. В. Пахальчук,
здобувач вищої освіти, Державний торговельно-економічний університет
В. Ю. Лиманський,
здобувач вищої освіти, Державний торговельно-економічний університет

МУЛЬТИВЕКТОРНИЙ ПОТЕНЦІАЛ АНТИКОРУПЦІЙНИХ ФІНАНСОВИХ РОЗСЛІДУВАНЬ ТА АУДИТУ У ЗАБЕЗПЕЧЕННІ ЕКОНОМІЧНОЇ БЕЗПЕКИ ОБ'ЄКТІВ КРИТИЧНОЇ ІНФРАСТРУКТУРИ З УРАХУВАННЯМ ПРИНЦИПІВ НАТО

In the context of increasing threats to national security, the resilience of critical infrastructure enterprises has become one of the key priorities of strategic management. Corruption risks within the critical infrastructure sector extend beyond economic losses, transforming into a direct threat to the state's defense capability. This determines the relevance of identifying and implementing effective preventive anti-corruption mechanisms. In the context of Ukraine's Euro-Atlantic

integration, particular relevance and strategic importance are attached to incorporating NATO integrity principles into the national practice of anti-corruption financial investigations and auditing.

The purpose of this study is to substantiate the multi-vector potential of anti-corruption financial investigations and auditing, which combines the functions of detection, prevention, and performance assessment, in order to reduce systemic corruption risks and strengthen economic security at critical infrastructure facilities in accordance with NATO principles.

The article proposes an approach to conceptualizing the multi-vector potential of anti-corruption financial investigations and auditing, transforming them into a proactive instrument of strategic development. It is substantiated that the potential of anti-corruption financial investigations and anti-corruption auditing constitutes a multi-vector and synergistic instrument combining the following potentials: economic and security potential, aimed at reducing financial losses and preventive management of security risks; organizational and legal potential, focused on improving compliance systems and the regulatory framework; social and human-resource potential, implemented through the formation of an anti-corruption culture, enhancement of trust, and development of educational potential; institutional and international potential, consisting in integration with state institutions and international anti-corruption regimes operating in accordance with NATO security principles. It is substantiated that cooperation with international partners and adaptation to global anti-corruption standards are not merely one of the available options, but a fundamental prerequisite for the implementation of all the above-mentioned vectors of potential.

It is determined that the potential of anti-corruption auditing performed by the internal audit service lies in ensuring structural independence, which enables the provision of independent and unfiltered risk assessments free from potential managerial and political interference. This is critically important for optimizing anti-corruption mechanisms and strengthening corporate ethics. The principles of integrity and ethical governance, which are fundamental to NATO, provide the basis for the development of an anti-corruption culture. Anti-corruption financial investigations and auditing perform not only a control function but also a preventive one, contributing to the establishment of standards of conduct, enhancement of trust, and increased staff accountability.

The integration of NATO principles into the system of anti-corruption financial investigations and auditing will contribute to the comprehensive implementation of all vectors of potential — from internal resilience and management efficiency to the development of personnel integrity and international cooperation in the context of contemporary security challenges.

В умовах посилення загроз національній безпеці, стійкість підприємств критичної інфраструктури є одним з ключових пріоритетів стратегічного управління. Корупційні ризики у сфері критичної інфраструктури виходять за межі економічних збитків, перетворюючись на пряму загрозу обороноздатності держави. Це обумовлює актуальність пошуку та впровадження дієвих превентивних антикорупційних механізмів. У контексті євроатлантичної інтеграції України особливої актуальності та стратегічного значення набуває врахування у національній практиці антикорупційних фінансових розслідувань та аудиту принципів доброчесності НАТО.

Метою дослідження є обгрунтування мультивекторного потенціалу антикорупційних фінансових розслідувань та аудиту, що поєднує функції виявлення, превенції та оцінки ефективності, для зниження системних корупційних ризиків та зміцнення економічної безпеки на об'єктах критичної інфраструктури з урахуванням принципів НАТО.

У статті запропоновано підхід до виокремлення мультивекторного потенціалу антикорупційних фінансових розслідувань та аудиту, що трансформує його у проактивний інструмент стратегічного розвитку. Обгрунтовано, що потенціал антикорупційних фінансових розслідувань та антикорупційного аудиту є мультивекторним, синергетичним інструментом, що поєднує потенціали: 1) економіко-безпековий, спрямований на зниження фінансових втрат та превентивне управління безпековими ризиками; 2) організаційно-правовий, що фокусується на вдосконаленні комплаєнс-систем та нормативної бази); 3) соціально-кадровий, що реалізується через формування антикорупційної культури, підвищення довіри та розвиток освітнього потенціалу; 4) інституційно-міжнародний, що полягає в інтеграції з державними інституціями та міжнародними антикорупційними режимами, які функціонують згідно з безпековими принципами НАТО. Обгрунтовано, що взаємодія з міжнародними партнерами та адаптація до глобальних антикорупційних стандартів є не просто однією з опцій, а фундаментальною умовою реалізації всіх вищеописаних векторів потенціалу.

Визначено, що потенціал антикорупційного аудиту, що виконується службою внутрішнього аудиту, полягає у забезпеченні структурної незалежності, що дозволяє надавати правдиву, не-фільтровану оцінку ризиків в обхід потенційного управлінського та політичного втручання, що є критично важливим для оптимізації антикорупційних механізмів та корпоративної етики. Принципи доброчесності та етичного управління, що є базовими для НАТО, формують підгрунтя для розвитку антикорупційної культури. Антикорупційні фінансові розслідування та аудит виконують не лише контрольну, а й превентивну функцію, сприяючи утвердженню стандартів поведінки, підвищенню довіри та відповідальності персоналу.

Інтеграція принципів НАТО у систему антикорупційних фінансових розслідувань та аудиту сприятиме комплексній реалізації всіх векторів потенціалу — від внутрішньої стійкості й ефективності управління до розвитку кадрової доброчесності та міжнародної взаємодії у контексті сучасних безпекових викликів.

Key words: anti-corruption financial investigations, audit, anti-corruption audit, internal audit, forensic, digital audit, corruption risk analysis, critical infrastructure facilities, economic and national security, ESG, NATO principles.

Ключові слова: антикорупційні фінансові розслідування, аудит, антикорупційний аудит, внутрішній аудит, форензік, digital аудит, аналіз корупційних ризиків, об'єкти критичної інфраструктури, економічна та національна безпека, ESG, принципи НАТО.

PROBLEM STATEMENT

Ensuring the continuous and effective operation of critical infrastructure facilities is a fundamental prerequisite for national security. During the war, instances of corruption at critical infrastructure facilities become a direct threat to national security. They not only lead to financial crimes [1], but also create systemic vulnerabilities that can be exploited by an aggressor. Corruption in the security and defense sector, for example, can disrupt the supply of vital resources [2]. The experience of international missions in conflict zones confirms that corrupt practices can directly threaten the success of a mission and long-term stability [3]. Thus, corruption risks at critical infrastructure enterprises go beyond economic losses, becoming a factor that reduces the state's defense capability and enhances the effectiveness of enemy sabotage and subversion. Systemic manifestations of corruption in the critical infrastructure and defense sectors can be overcome through effective anti-corruption financial investigations and anti-corruption audits. In the context of Ukraine's Euro-Atlantic integration and its aspiration to join the defense Alliance, incorporating NATO's integrity principles into national anti-corruption financial investigation and audit practices takes on particular relevance and strategic importance.

ANALYSIS OF RECENT SCIENTIFIC RESEARCH

Scientific works and analytical reports on critical infrastructure management increasingly identify corruption as a systemic vulnerability. The World Bank and other international institutions focus on characterizing corruption vulnerabilities in infrastructure [4]. Studies highlight specific schemes prevalent in strategic sectors: collusion between contractors and supervising officials, significant changes to contract terms to inflate prices, as well as the substitution of products or work that do not meet contract specifications [5]. Recent studies emphasize the link between corruption and cybersecurity. IT departments are found to be vulnerable due to corrupt procurement schemes, which are catalyzed by the spread of pirated software [6]. Networks built on unlicensed software become easy targets for ransomware and hacktivists.

At the same time, the theory and methodology of anti-corruption financial investigations and audits are evolving. Researchers pay particular attention to the importance of anti-corruption financial investigations and audits in the field of public procurement according to NATO standards. Thus, Nazarova K.O., Gordopolov V.Yu., and Shirchenko B.S. in their work explore the theoretical and practical aspects of procurement audits according to NATO standards [7].

Researchers are devoting significant attention to the development of anti— corruption auditing. Its objectives are defined as follows: assessing corruption risks; identifying instances of corruption; evaluating the effectiveness of anti-corruption measures; and providing recommendations for mitigating corruption risks and others. Anti-corruption auditing does not operate in isolation; internal audit must share information and collaborate with other functions, such as fraud investigation, the legal department, and compliance [8]. Modern approaches integrate anti-corruption auditing into the overall corporate governance system. The UN offers to businesses practical guides on creating an "effective ethics and compliance program to combat corruption" [9]. It is noted that anti-corruption oversight is a key component of the "G" in ESG, and commitment to an ethical culture is fundamental to a company's operation [10].

IDENTIFICATION OF PREVIOUSLY UNRESOLVED PARTS OF THE OVERALL PROBLEM

An analysis of scientific and regulatory sources underscores the importance of researching the theory and practice of anti-corruption financial investigations and audits. In our opinion, it is particularly relevant to study and reveal the multi-vector potential of anti-corruption financial investigations and anti-corruption audits in the critical infrastructure sector, as the beneficial effects of anti-corruption activities are in fact, quite multifaceted. Anti-corruption financial investigations and audits, if they are well-organized, can serve as tools for directly influencing the economic security of critical infrastructure enterprises and, consequently, the national security of the state. The greatest potential of anti-corruption financial investigations and audits lies not only in identifying violations but also in assessing the strengths of anti-corruption policies and procedures, helping to identify systemic shortcomings [11].

THE AIM OF THE RESEARCH

The aim of the research is to substantiate the multi-vector potential of anti-corruption financial investigations and audits, which combine the functions of detection, prevention, and effectiveness assessment, to reduce systemic corruption risks and strengthen economic security at critical infrastructure facilities, taking into account NATO principles.

Presentation of the main research material. In the current context of strategic economic sectors, anti-corruption financial investigations at critical infrastructure enterprises go beyond the traditional understanding of control. Anti— corruption financial investigations are viewed not only as a means of retrospective verification but also as an active tool for strategic development. The key term in this study is "potential" — the sum of hidden opportunities, resources, areas of influence, and growth points activated by anti-corruption activities.

The rationale for "multi-vectority" is based on the fact that both anti— corruption financial investigations and audits are not considered as exclusively punitive or verification-based options. Instead, anti-corruption financial investigations and audits are comprehensive tools capable of catalyzing positive changes simultaneously in three environments:

— government sector — by providing objective data to improve regulatory policy and enhance the efficiency of public asset management;

— corporate — by optimizing business processes, strengthening internal control systems, and increasing investment attractiveness;

— public — by restoring trust in institutions that provide vital services and fostering zero tolerance for corruption.

Thus, a paradigm shift is taking place. Instead of answering the question "What was violated?", anti-corruption financial investigations and audits in the critical infrastructure sector focus on the question "What systemic vulnerabilities could lead to collapse in the future?" Given the wide range of actors involved in conducting anti-corruption financial investigations, these should also be considered as a tool for forward-looking management and forecasting of corruption risks by promoting transparency and continuous accountability [12].

To visualize and organize these areas of influence, it is appropriate to group them into the corresponding vectors as it is shown in Fig. 1.

Let's consider the vectors of the potential of anti-corruption financial investigations and auditing of critical

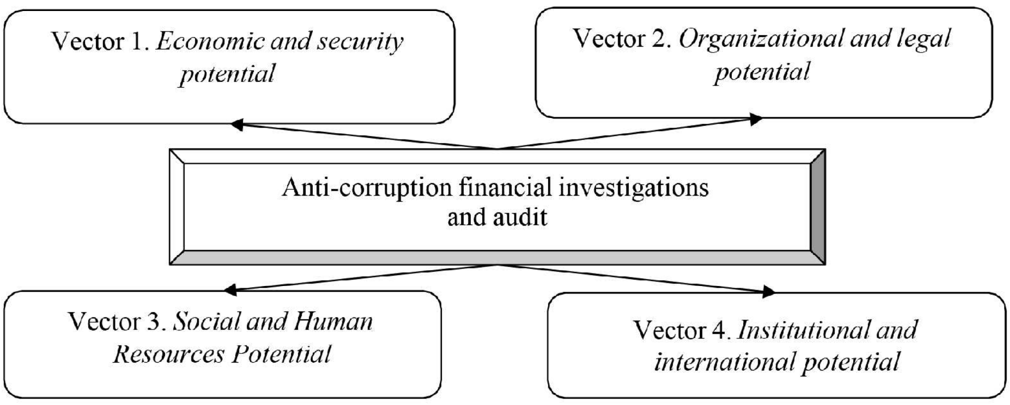

Fig. 1. Vectors of the multi-vector potential of anti-corruption financial investigations and auditing in the critical infrastructure sector

Source: authors' own work.

infrastructure facilities shown in Fig. 1:

1. The "economic and security potential" vector is directed inward toward the enterprise, focusing on sustainability, efficient resource utilization, and the protection of assets from unlawful encroachments;

2. the "organizational and legal capacity" vector — also directed inward, focusing on improving management processes, the regulatory framework, compliance functions, and corporate governance;

3. The "social and human resources potential" vector is directed toward personnel and internal culture, focusing on ethics, fostering an anti-corruption mindset, trust, and the development of human capital;

4. The "institutional and international potential" vector is outward-facing, focusing on interaction with state and international institutions, integration into global standards, and strengthening reputation at the macro level.

The following analysis is dedicated to detailed examination of each of these potentials.

Economic and security potential can be considered as a comprehensive concept comprising two components: security and economic. The economic potential of anti-corruption financial investigations and audits is realized through direct and indirect reductions in financial losses. Corruption generates enormous losses, measured on a global scale. Studies on loss assessment methodologies provide the following figures: "baseline estimates of annual costs from corruption and efficiency losses amount to nearly 2 trillion US dollars" [13]. Speaking specifically about auditing, at the level of a critical infrastructure enterprise, auditing allows to identify specific "loss points": non-transparent procurement, fictitious contracts, and inefficient use of assets.

However, the economic potential (as a component of economic and security potential) of anti-corruption financial investigations and audits is not limited to mere savings. Its deeper function lies in restoring the "educational function" [13]. Broken audit and anti-corruption financial investigation systems compromise the entire educational function of governments [13]. When anti-corruption financial investigations and audits demonstrate systemic effectiveness, the result is not only the recovery of funds but also learning how to avoid losing resources in the future.

For energy, transportation, or water supply enterprises, funds saved from corruption schemes can be redirected toward modernizing equipment and improving operational resilience. In its "Lifelines" report, the World Bank highlights problems with infrastructure that is poorly designed, operated, or maintained [14].

Investors, particularly international ones, consider transparency as a key factor in reducing risks. Research by S. Hallegatte for the World Bank illustrates the link between the Corruption Perceptions Index and infrastructure quality [14]. Regular, independent anti-corruption audits and effective, results-oriented anti-corruption financial investigations serves as a strong signal to the market, confirming that investments will be protected from misuse.

The second component of economic and security potential is the security component. At critical infrastructure enterprises, corruption risks directly translate into national security risks. In sectors where an error or failure can lead to man-made disasters or the collapse of vital services, the potential of anti-corruption financial investigations and audits takes on a preventive and security-oriented character. In this context, NATO's principles of resilience and risk management enhance the ability of critical infrastructure facilities to counter internal financial threats. Anti— corruption financial investigations and audits serve as tools for identifying and minimizing losses, which aligns with NATO's approaches to protecting critical systems as a component of economic security.

Risk management, which is an integral part of auditing, is defined as a systematic tool for identifying corruption vulnerabilities [4]. The potential of auditing and anti-corruption financial investigations lies in reframing corruption offenses. They cease to be merely financial abuses and are reclassified as security threats.

For example, if an audit or anti-corruption financial investigation at a nuclear power plant reveals that uncertified equipment is being supplied due to a corrupt collusion, the main problem is no longer the embezzlement of funds but the immediate threat of a radiation accident. If safety protocols are ignored at a transportation hub due to bribery, hundreds of lives are put at risk. The United Nations Office on Drugs and Crime (UNODC) explicitly states that effective management of corruption risks can "protect law enforcement operations and human safety" [15].

An audit provides management and government regulators with a sound basis for prioritizing anti-corruption measures specifically as an element of physical and operational security. It allows for the early detection of not only existing violations but also the prediction of future threats. The analytical component of the audit helps understand the environments in which the enterprise operates [16] and develop systematic recommendations to address fundamental risk factors, rather than merely their consequences. Anti-corruption financial investigations establish the evidence base for violations and bring cases to prosecution.

Next, we will examine Vector 2, "organizational and legal capacity". Realizing economic and security benefits is impossible without a solid internal foundation. The organizational and legal capacity of anti-corruption financial investigations and audits lies in their ability to serve as tools for internal development, establishing robust management and control systems. It is complemented by the principles of the principles of good governance promoted by NATO, specifically transparency, accountability, and the rule of law. Their implementation through financial audit and anti-corruption investigation mechanisms, as well as within the Building Integrity initiative, helps align internal procedures with international standards and enhances the effectiveness of the compliance system.

Anti-corruption audits act as a catalyst for improving the regulatory framework at two levels: corporate and national. At the corporate level, audit results (identified gray areas, gaps in internal regulations, opportunities for abuse of discretionary powers) form the basis for developing or updating anti-corruption policies, codes of ethics, and compliance procedures.

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At the higher level, the audit serves as a feedback mechanism for policymakers. When auditors at critical infrastructure sites systematically identify the same gaps in sector-specific legislation (for example, in public procurement or licensing procedures), these findings can form the basis for proposals to amend legislation at the national level.

Audit practice, based on international standards, facilitates their implementation. For example, the Recommendations on Good Practices in Internal Control, Ethics, and Compliance from the Organization for Economic Cooperation and Development (OECD) provide guidelines that audit helps to implement in practice at each individual enterprise [17].

The core of organizational capacity lies in optimizing the internal control system. Modern management approaches identify five key components of effective control: control environment, risk assessment, control activities, information and communication, and monitoring. Anti-corruption audits assess how effective these components are in practice, not just on paper. Regarding anti-corruption financial investigations, they may be conducted not only by entities external to the critical infrastructure enterprise but also by internal entities — in the form of forensic diagnostics.

In the academic and practical debate regarding the role of auditing within the corporate governance framework, the "Three Lines Model". It clearly delineates roles in risk management [18].

For critical infrastructure enterprises, especially state-owned enterprises (SOEs), where significant political pressure or conflicts of interest often exist [19], the implementation of such a model is of crucial importance. The potential of anti— corruption auditing, performed by the internal audit function, lies in ensuring structural independence.

Internal audit (the third line of defense) has the highest level of independence and objectivity [18] and reports directly to the highest governing body (the supervisory board, audit committee), rather than to operational management (the first and second lines). This independence allows audits to provide a truthful, unfiltered assessment of risks, bypassing potential managerial and political interference.

Let us examine the third vector: "social and human resources potential". Critical infrastructure enterprises operate in close connection with society. Their actions or omission directly impact citizens' quality of life. In connection with the above-mentioned, the social and human resources potential of anti-corruption financial investigations and audits takes on particular significance. In this context, the principles of integrity and ethical management, which are fundamental to NATO, form the foundation for the development of an anti-corruption culture. Financial investigations and audits serve not only a control function but also a preventive one, contributing to the establishment of standards of conduct and the enhancement of staff trust and accountability.

Enterprises that provide energy, water, transportation, and communication services are the foundation of the social contract. Corruption in these sectors is perceived by citizens as extremely painful, as it undermines trust in institutions [20]. The social potential of anti-corruption financial investigations and audits is realized not so much through the mere fact of conducting these measures as through the transparency of the results obtained. Anti-corruption financial investigations and audits whose results are hidden from the public do not restore public trust. This potential is activated only when anti-corruption agencies publicly report on the vulnerabilities identified and, what is more important, on the measures taken to address them.

A study on barriers to effective governance by L. M. Sule, E. D. Hoshen, and A. Umar indicates that public awareness campaigns could help foster a stronger anti— corruption culture [20]. Reports from anti-corruption entities, adapted for the general public, become part of such a campaign.

Anti-corruption financial investigations and anti-corruption audits reveal gaps not only in procedures but also in competencies, ethical standards, and staff culture. The fight against corruption is a process that requires profound cultural changes. A study by the SDA emphasizes the importance of education, asserting that the fight against corruption requires a multifaceted approach that integrates education starting from elementary school [21].

In this context, anti-corruption financial investigations and anti-corruption audits serve as catalysts for two levels of educational potential. At the micro level (intra-corporate), the results of such measures clearly indicate which specific departments or categories of employees (for example, in the procurement or permitting departments) require immediate and targeted training on ethics and compliance. As noted in the SDA study, training and education must become top priorities [21]. Anti-corruption audits provide the baseline data for developing such training programs.

At the macro (national) level, anti-corruption financial investigations and audits form the labor market. This demand stimulates the emergence of relevant educational programs at universities, similar to ethics courses in European educational systems [21].

The final vector examined is "institutional and international capacity". The institutional potential of anti-corruption financial investigations and anti-corruption audits lies in their ability to integrate and interact with the broader national and international anti-corruption architecture.

In this context, the principles of interoperability, a comprehensive approach, and transparency — which are characteristic of NATO — ensure the integration of national financial control and audit practices into the international environment. This helps build trust among partners, strengthen institutional capacity, and enhance the country's economic security.

At the national level, the potential of anti-corruption financial investigations and anti-corruption audits lies in their integration with public financial control systems (e.g., the Accounting chamber) and preventive bodies (the National Agency on Corruption Prevention). Creating a unified information framework for risks helps avoid duplication of functions and strengthens overall oversight.

At the international level, the potential lies in developing cooperation with global anti-corruption organizations, such as the Group of States against Corruption

(GRECO), the Organization for Economic Cooperation and Development (OECD), and Transparency International. Aligning with global standards and implementing international recommendations is critically important for Ukraine.

Institutional capacity is clearly evident in monitoring reports. The National Agency on Corruption Prevention publishes reports on Ukraine's fulfillment of international obligations [22].!!!

International integration fulfills another, less obvious but crucial function: it serves as an external anchor for the depoliticization of domestic reforms. Conducting anti-corruption financial investigations, anti-corruption audits, and implementing compliance at politically sensitive state-owned critical infrastructure enterprises [19] often faces fierce resistance from domestic elites. However, when the implementation of transparent audit procedures becomes a formal requirement of international agreements — for example, to receive funding from the International Monetary Fund [22] or to further European integration — reformers within enterprises and the government receive an effective, non-political mandate to implement changes. The potential of anti-corruption auditing in this case lies in using international commitments as a tool to overcome internal resistance.

An analysis of institutional capacity shows that cooperation with international partners and adaptation to global anti-corruption standards are not merely one of several options, but a fundamental prerequisite for realizing all the aforementioned vectors of potential. The economic, security, and organizational opportunities of anti-corruption financial investigations and anti-corruption audits at critical infrastructure enterprises are impossible without deep integration into global processes.

CONCLUSIONS

The potential of anti-corruption financial investigations and anti-corruption audits is a multi-vector, synergistic tool that combines economic-security, organizational- legal, social-human resources, and institutional-international potentials. Realizing this potential is a factor not only in the economic security and efficiency of critical infrastructure enterprises but also in the national security of the state. Due to the synergy of anti-corruption financial investigations and audits, there is a shift from reactive detection of violations to proactive identification of systemic vulnerabilities and preventive risk management, which is critically important in the context of military threats. Integrating NATO principles into the system of anti-corruption financial investigations and audits of critical infrastructure facilities will facilitate the comprehensive realization of all aspects of potential. Such an approach will not only help reduce corruption risks but will also form a systemic foundation for strengthening the country's economic security.

Література:

1. Герасименко О. М. Загрози об'єктам критичної інфраструктури України в умовах воєнного стану. Науковий вісник УНУ. 2024. № 84 (3). С. 257—263.

2. FACT SHEET: U.S. Achievements in the Global Fight Against Corruption. URL: https://surl.li/xcohjr (дата звернення: 04.05.2026).

3. Corruption Threats & International Missions Practical guidance for leaders. URL: https://surl.li/zpuowc (дата звернення: 04.05.2026).

4. Edgardo C. J., Sanjay P. Publication: The Many Faces of Corruption: Tracking Vulnerabilities at the Sector Level. World Bank, 2007. URL: https://surl.lu/xoumdd (дата звернення: 04.05.2026).

5. Pattanayak S., Verdugo-Yepes C. Protecting Public Infrastructure from Vulnerabilities to Corruption: A Risk-Based Approach. URL: https://surl.li/zkgtyk (дата звернення: 04.05.2026).

6. Peacock R. The impact of corruption on cybersecurity: Rethinking national strategies across the Global South. URL: https://surl.lu/xthwsw (дата звернення: 04.05.2026).

7. Назарова, К. О., Гордополов, В. Ю., & Ширченко, Б. С. Аудит закупівель за стандартами НАТО. Актуальні проблеми сталого розвитку, 3 (3), 2026, 170—175.

8. Auditing Anti-corruption Activities, 2nd Edition. The Institute of Internal Audiotrs. URL: https://surl.li/yjozaf (дата звернення: 04.05.2026).

9. An Anti-Corruption Ethics and Compliance Programme for Business: A Practical Guide. United Nations, 2013. 118 p.

10. Professional Accountants in Business and Anti-Corruption Compliance. URL: https://surl.li/ktgqdp (дата звернення: 04.05.2026).

11. McDevitt A. Supreme audit institutions? anti-corruption strategies. URL: https://surl.li/qobyyw (дата звернення: 04.05.2026).

12. GUID INTOSAI 5270 Guideline for the Audit of Corruption Prevention. URL: https://surl.li/nwrjgp (дата звернення: 04.05.2026).

13. Estimating the Costs of Corruption and Efficiency Losses from Weak National and Sector Systems Development Policy Paper. URL: https://surl.li/uhaijq (дата звернення: 04.05.2026).

14. Hallegatte S., Rentschler J., Rozenberg J. LIFELINES The Resilient Infrastructure Opportunity. World Bank Group. URL: https://surl.li/tqvgqg (дата звернення: 04.05.2026).

15. State of integrity a guide on conducting corruption risk assessments in public organizations. United Nations, 2020. 72 p. URL: https://surl.li/bqtoia (дата звернення: 04.05.2026).

16. A Guide for Anti-Corruption Risk Assessment. URL: https://surl.li/zhoejs (дата звернення: 04.05.2026).

17. Recommendation of the Council for Further Combating Bribery of Foreign Public Officials in International Business Transactions. URL: https://surl.lt/pzmfmw (дата звернення: 04.05.2026).

18. Raboczki M. B. Internal audit functions and corporate governance: Evidence from Hungary. Society and Economy. 2018. № 40 (2). P. 289—314.

19. Governance infrastructure assessment framework. URL: https://surl.li/dvmzkv (дата звернення: 04.05.2026).

20. Sule L. M., Hoshen E. D., Umar A. Corruption as A Barrier to Effective Governance in Key Sectors of Nigeria. International Journal of Research and Innovation in Social

ISSN 2306-6814

Science. 2025. URL: https://surl.li/mpnabz (дата звернення: 04.05.2026).

21. The eu and 21 ST CenTuRY SeCuRITY. URL: https://surl.li/axxycg (дата звернення: 04.05.2026).

22. Звіти щодо виконання міжнародних зобов'язань взятих Україною в антикорупційній сфері. URL: https://surl.li/mgozmt (дата звернення: 04.05.2026).

References:

1. Herasymenko, O. M. (2024), "Threats to critical infrastructure facilities of Ukraine under martial law", Naukovyj visnyk UNU, vol 84 (3), pp. 257—263.

2. FACT SHEET: U.S. (2024), "Achievements in the Global Fight Against Corruption", available at: https://surl.li/xcohjr (Accessed 04.05.2026).

3. Transparency International (2014), "Corruption Threats & International Missions Practical guidance for leaders", available at: https://surl.li/zpuowc (Accessed 04.05.2026).

4. Edgardo, C. J. and Sanjay, P. (2007), "The Many Faces of Corruption: Tracking Vulnerabilities at the Sector Level", World Bank, available at: https://surl.lu/xoumdd (Accessed 04.05.2026).

5. Pattanayak, S. and Verdugo-Yepes, C. (2026), "Protecting Public Infrastructure from Vulnerabilities to Corruption: A Risk-Based Approach", available at: https://surl.li/zkgtyk (Accessed 04.05.2026).

6. Peacock, R. (2024), "The impact of corruption on cybersecurity: Rethinking national strategies across the Global South", available at: https://surl.lu/xthwsw (Accessed 04.05.2026).

7. Nazarova, K. O., Hordopolov, V. Yu., & Shyrchenko, B. S. (2026), "Procurement audit according to NATO standards", Aktual'ni problemy staloho rozvytku, vol. 3(3), pp. 170—175.

8. The Institute of Internal Audiotrs (), "Auditing Anti-corruption Activities, 2nd Edition", available at: https://surl.li/yjozaf (Accessed 04.05.2026).

9. United Nations (2013), An Anti-Corruption Ethics and Compliance Programme for Business: A Practical Guide., NY, USA.

10. IFAC (2024), "Professional Accountants in Business and Anti-Corruption Compliance", available at: https://surl.li/ktgqdp (Accessed 04.05.2026).

11. McDevitt, A. (2020), "Supreme audit institutions? anti-corruption strategies", available at: https://surl.li/qobyyw (Accessed 04.05.2026).

12. GUID INTOSAI 5270 (2019), "Guideline for the Audit of Corruption Prevention", available at: https://surl.li/nwrjgp (Accessed 04.05.2026).

13. National and Sector Systems Development Policy Paper (2013), "Estimating the Costs of Corruption and Efficiency Losses from Weak", available at: https://surl.li/uhaijq (Accessed 04.05.2026).

14. Hallegatte, S., Rentschler, J. and Rozenberg, J. (2019), "LIFELINES The Resilient Infrastructure Opportunity", World Bank Group, available at: https://surl.li/tqvgqg (Accessed 04.05.2026).

15. United Nations (2020), "State of integrity a guide on conducting corruption risk assessments in public organizations", available at: https://surl.li/bqtoia (Accessed 04.05.2026).

16. United Nations (2013), "A Guide for Anti-Corruption Risk Assessment", available at: https://surl.li/zhoejs (Accessed 04.05.2026).

17. OECD (2009), "Recommendation of the Council for Further Combating Bribery of Foreign Public Officials in International Business Transactions", available at: https://surl.lt/pzmfmw (Accessed 04.05.2026).

18. Raboczki, M. B. (2018), "Internal audit functions and corporate governance: Evidence from Hungary", Society and Economy, vol. 40 (2), pp. 289—314.

19. International Bank for Reconstruction and Development / The World Bank (2021), "Governance infrastructure assessment framework", available at: https://surl.li/dvmzkv (Accessed 04.05.2026).

20. Sule, L. M., Hoshen, E. D. and Umar, A. (2025), "Corruption as A Barrier to Effective Governance in Key Sectors of Nigeria", International Journal of Research and Innovation in Social Science, available at: https://surl.li/mpnabz (Accessed 04.05.2026).

21. The Security & Defence Agenda (2014), "The EU and 21 st century security", available at: https://surl.li/axxycg (Accessed 04.05.2026).

22. National Agency on Corruption Prevention (2026), "Reports on the implementation of international obligations undertaken by Ukraine in the anti-corruption sphere", available at: https://surl.li/mgozmt (Accessed 04.05.2026).

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