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Private capital in the transformation of healthcare systems: international experience and lessons for Ukraine

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Приватний капітал у трансформації систем охорони здоров'я: міжнародний досвід та уроки для України

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Introduction

Modern healthcare systems in the context of globalization are undergoing profound structural transformations driven by the combination of demographic aging, rapid technological progress, and an increasingly complex geopolitical landscape. In this context, private capital – institutionally represented by private equity (PE) funds – acts as one of the key agents of transformation in the sector, providing not only financial resources but also managerial expertise and innovative models of value creation. The activity of PE funds in the healthcare sector requires thorough analysis, as it combines the potential to enhance efficiency and innovation with the risks associated with prioritizing financial outcomes over social and ethical values.

For Ukraine, which operates under martial law and faces an energy crisis, attracting private capital may become a strategic instrument for modernizing the healthcare system. However, the success of this process directly depends on taking into account international experience and adapting it to national realities while considering the needs for security, accessibility, and quality of medical care for the population.

The **purpose** of the study is to conduct a comprehensive analysis of the role of private capital in the transformation of healthcare systems based on international experience, to assess its impact on the efficiency, innovativeness, and quality of medical services, as well as to develop practical recommendations for adapting these mechanisms to modernize Ukraine's healthcare sector under the conditions of martial law and European integration.

Object, materials and research methods

The object of the study is the transformation of healthcare systems under the influence of private capital in the context of global challenges. This encompasses strategies of value creation (financial engineering, operational excellence, commercial growth, technological innovation), their impact on efficiency, service quality, and the financial sustainability of medical institutions, as well as the adaptation of international experience for the modernization of the national healthcare service system – particularly in the context of Ukraine.

The research materials include: official reports of international organizations (WTO, WHO, Eurostat); analytical papers by leading consulting companies (Bain & Company, McKinsey); scientific publications on healthcare and investment activities; and program documents of regulatory initiatives such as the Joint Commission International (USA), QHA Trent (United Kingdom), and the Australian Council on Healthcare Standards International (Australia).

The research methods are based on a comprehensive approach aimed at ensuring the scientific validity and practical relevance of the results. The following methods were used:

Comparative analysis – to assess private capital strategies in healthcare across key regions (the USA, the EU, and Asia), particularly in relation to financial engineering, operational efficiency, and innovative models.

Case analysis – to conduct an in-depth study of the activities of leading private equity funds, including "buy-and-build" and "sale-leaseback" transactions, as well as successful cases of production localization.

SWOT analysis – to identify strengths and weaknesses, opportunities and threats in the context of attracting private capital to Ukraine's healthcare system.

Statistical analysis – based on data on healthcare investment deals (2021–2024) and the performance of different investment models (short-term and long-term).

Research results

Private capital (PC) is increasingly transforming the architecture of the global healthcare system. This transformation is based on four key strategies: financial engineering, operational excellence, commercial growth,

and technological innovation. Although the purpose of these instruments is to enhance efficiency and scale up business operations, their implementation is often accompanied by significant regulatory and ethical challenges. These issues are particularly relevant for resource-constrained countries such as Ukraine, which is currently functioning under martial law. The analysis of international experience makes it possible to outline both the potential and substantial risks associated with involving private capital in the modernization of the national pharmaceutical sector.

Private capital activity in the healthcare sphere remains high: in 2024, the global volume of deals reached USD 115 billion, marking the second-highest figure in history. Geographically, according to sources [1; 2], the largest share of transactions occurred in North America (65%), Europe (22%), and Asia (12%), while China experienced a sharp 49% decline. The scale of PC's influence is illustrated by the experience of the United States, where between 2003 and 2017 there were 42 transactions covering 282 hospitals across 36 states [3].

Each private capital strategy carries a dual potential. On the one hand, ***financial engineering*** – particularly leveraged buyouts (LBOs) – ensures rapid profitability growth. On the other hand, however, it creates substantial debt burdens that often limit investment in the quality of medical services [3; 4].

Operational excellence is achieved through automation and radical optimization of administrative processes. According to expert estimates [5], this potentially allows savings of up to USD 265 billion annually in the United States alone. Nevertheless, this efficiency comes at a cost: empirical studies indicate that after staff structure optimization, the frequency of hospital complications may increase by 25.4% [6].

Commercial strategies such as "buy-and-build" promote rapid market consolidation (for instance, 621 deals in the dental sector in 2024) and business scaling. However, the consequence of such consolidation is often an increase in the prices of medical services, which is estimated to average 6.7% [3; 7].

Finally, ***technological innovations***, particularly the use of artificial intelligence, open the way to reducing costs by 5–10% [8]. Yet, the short-term investment horizons of private capital (3–7 years) often limit investors' willingness to finance long-term scientific research and development [9]. Thus, each of the key private capital strategies has a dual effect, combining financial benefits with significant risks for the healthcare system (Table 1).

As shown in Table 1, private capital (PC) strategies provide significant financial and operational benefits but are closely associated with risks of declining service quality and rising prices. This systemic contradiction requires a careful balance between regulatory support for investment and the strict protection of public interests.

The involvement of private capital in the healthcare sector through long-term funds, continuation vehicles (CVs), and accelerated acquisitions creates new opportunities for stable financing but is accompanied by considerable ethical and systemic risks. Traditional PE funds with short ownership horizons (3–5 years) are focused on rapid profit generation, which limits investment in long-term innovations, particularly in pharmaceutical R&D projects [16]. In contrast, long-term or "core" funds with an investment horizon of up to 15 years and a target return of 12–14%, as well as long-hold buyout funds with a term of up to 24 years, reduce transactional and tax costs, ensuring doubled after-tax returns. At the same time, in 2024, low liquidity (distributions at the level of 11% of net asset value) increased pressure on short-term financial results [17].

The spread of CV and CV-squared funds, as in the case of PAI Partners with Froneri, allows investors to avoid exit deadlines but creates the risk of accumulating obsolete assets [18]. Private capital ownership in healthcare is often associated with lower system-level efficiency due to its focus on short-term profitability [19]. Examples include sale–leaseback transactions, such as those between

Table 1

Private Capital Value Creation Strategies in Healthcare: Instruments, Outcomes, and Regulatory Requirements

Strategy	Key Instruments	Results	Risks	Regulatory Requirements
Financial Engineering	LBO (60–90% debt), financial restructuring	Improvement of margin by 2%, revenue growth from profitable services	High debt burden, limited investment in service quality	Antimonopoly supervision, transaction transparency
Operational Excellence	Automation, reduction of administrative staff (by 33%)	Savings up to USD 265 billion per year, stable clinical outcomes	Increase in complications (patient traumatic falls +27.3%, infections +37.7%)	GMP for sterile products, computerized systems (EudraLex Annex 1, 11)
Commercial Growth	"Buy-and-build," market consolidation (621 deals in dentistry, 136 in Europe)	Business scaling, expanded market presence	Price increases for medical services (6.7%), "hidden consolidation"	Antimonopoly regulation, price control
Technological Innovations	AI, digital tools (140 healthcare IT deals)	Cost reduction by 5–10%, improved efficiency	R&D limitations due to short investment horizons (3–7 years)	Process validation, GMP for computerized systems (EudraLex Annex 11, 15)

Source: compiled by the authors based on [1–15].

Prospect Medical Holdings and Medical Properties Trust, which generate significant rental expenses and complicate the financial sustainability and resale of hospitals [20].

For Ukraine, this implies that accelerated acquisitions and financial strategies may prioritize financial gains over healthcare investments, necessitating regular risk reassessment every 3–4 years. Although long-term funds can provide stable investment in the modernization of pharmaceutical production capacities [16], high deal multiples (12.1× EBITDA in Europe) incentivize cost-cutting, which may negatively affect the quality of medical services [17].

Between 2018 and 2023, CV funds demonstrated a 1.4× return on investment but simultaneously increased the risk of retaining low-efficiency assets [18]. In U.S. hospitals under private capital control during 2009–2019, the rate of hospital complications rose by 25%, including infections after central line placements (+38%) and patient falls resulting in injuries during hospital stays (+27%) [21]. Staff reductions in these hospitals often led to a decline in service quality, although some operators (e.g., HCA) achieved better outcomes by prioritizing managerial innovation.

An additional systemic challenge is the vulnerability of supply chains. According to FDA estimates, as of 2018, about 60% of drug manufacturers serving the U.S. market were located abroad, and 72% of active pharmaceutical ingredient (API) producers were based outside the United States (including 13% in China). The number of Chinese enterprises doubled between 2010 and 2019 [22; 23]. Chronic drug shortages, persisting for more than two decades, are partly driven by quality issues and geopolitical risks, as highlighted by S. Shondelmeyer [24]. Financial pressure from sale–leaseback agreements has led to deferred maintenance and reduced service quality, as illustrated by the case of Prospect Medical.

For Ukraine, this underscores the need to ensure backup supply chains and develop local pharmaceutical manufacturing capacities.

Long-term funds and continuation vehicles also face challenges related to rapidly changing regulatory environments. In 2024, competition for capital and reduced management fees made regulatory compliance more difficult [17]. CV-squared funds reduce ownership transparency and may raise antitrust concerns. U.S. private capital–owned hospitals were more likely to transfer critically ill patients, thereby masking negative clinical outcomes [21]. Supervision is further complicated by the heterogeneous impact of different investors.

Problems with FDA inspections – such as limited resources, advance notice of visits, language barriers, and insufficient information on API production volumes in China – make risk assessment difficult. The European Union seeks to reduce inspection duplication through Mutual Recognition Agreements (MRA) with selected countries; however, these remain incomplete. Imports of APIs from countries without MRAs (including Ukraine) require additional GMP compliance confirmation [25]. Meanwhile, financial instruments such as sale–leaseback agreements limit operators' ability to meet regulatory requirements due to accumulated debt pressure.

Although long-term funds and continuation vehicles (CVs) can contribute to the localization of pharmaceutical production and reduce Ukraine's import dependence, factors such as low liquidity, increasing hospital complications, rising costs, inspection challenges, reliance on imported APIs, chronic drug shortages, regulatory barriers [26], and financial pressure from sale–leaseback agreements underscore the need for enhanced oversight. For Ukraine, it is essential to combine the use of these instruments with regular risk monitoring and harmonization with European regulatory standards.

The future development of Ukraine's healthcare system will be determined by the interplay of global trends in digitalization, integration into the European space, and internal reforms in financing and management. The involvement of private capital is viewed not only as a financial tool but also as a structural factor of transformation – through infrastructure modernization, managerial optimization, and more efficient resource utilization. At the same time, the dynamics of its impact vary across sectors, from pharmaceutical manufacturing to healthcare services. To provide a systematic assessment of potential and challenges, a two-part SWOT analysis was conducted, with the first part focusing on the healthcare system as a whole – particularly on the institutional and economic aspects of private capital involvement.

An additional factor contributing to the improvement of quality and investment attractiveness of Ukrainian medical institutions is international accreditation. For instance, in Ukraine, the Joint Commission International (JCI) has granted certification to the multifunctional medical center *Leleka*, while the *Into-Sana* clinic is currently systematizing its internal processes in accordance with JCI requirements.

Regarding UK accreditations, the State Institution "Heart Institute of the Ministry of Health of Ukraine" obtained certification from QHA Trent, which equates the state clinic to leading global healthcare providers. The first private clinic in Ukraine to receive QHA Trent certification was *Isida*. In addition, international standards applied in Ukraine include Accreditation Canada and the Australian Council on Healthcare Standards International (ACHSI).

Compliance with these standards involves a comprehensive quality management system covering patient safety, process efficiency, and strategic resource management. International accreditation has become an important instrument for the modernization of medical institutions, enhancing both patient trust and investment appeal.

A synthesis of the results of the SWOT analysis (see Table 2) indicates that Ukraine's healthcare system is gradually entering a phase of structural modernization, where private capital and international accreditation are becoming catalysts for managerial, technological,

Table 2

SWOT Analysis of the Impact of Private Capital and International Accreditation on the Transformation of Ukraine's Healthcare System

Strengths	Weaknesses
Increased operational efficiency: private capital stimulates the implementation of modern management methods, digital solutions, energy management, and financial optimization in medical institutions	***Underdeveloped public–private partnership market:*** most hospitals remain municipal non-profit enterprises with limited access to investment mechanisms
Positive experience of international integration: Ukraine's participation in the EU4Health program (2021–2027) has opened access to financing for innovations in public health, e-medicine, and patient safety	***Limited institutional capacity for managing private investment:*** lack of standardized quality control models and monitoring mechanisms for private operators
Potential for digital transformation: the development of eHealth, telemedicine, clinical analytics, and artificial intelligence tools enhances the quality and accessibility of medical services while reducing costs	***Low level of autonomy of medical institutions*** in making investment decisions due to bureaucratic barriers and dependence on state funding
Orientation toward EU standards and international accreditation: implementation of Directive 2011/24/EU on patients' rights in cross-border healthcare, as well as compliance with JCI, QHA Trent, Accreditation Canada, and ACHS International standards, promotes higher quality, safety, and international trust	***High risk of inequality in access to healthcare services:*** the privatization of profitable segments may exacerbate social differentiation among regions
Opportunities	**Threats**
Development of public–private partnerships: through the creation of hybrid co-financing models, where investors provide technological upgrades while the state preserves social guarantees	***Risk of commercialization of basic healthcare services:*** the focus on profitability may reduce the quality of care in socially significant areas (oncology, pediatrics, rehabilitation)
Attraction of grant and credit financing from international organizations (EBRD, IFC, USAID, EU4Health) for the modernization of medical infrastructure, staff training, and R&D development	***Possible monopolization of the healthcare market*** by large network operators, reducing competition and increasing prices
Integration into the European medical space and international accreditation system: accreditation of medical institutions (such as JCI for Leleka Medical Centre) increases trust and attracts foreign patien	***Geopolitical instability*** and macroeconomic risks reduce the interest of long-term investors, increasing dependence on short-term capital
Development of regional cooperation and cross-border health programs (EU4Health, Horizon Europe), which expand the service market and promote standardization	***Insufficient coordination among the Ministry of Health, local communities, and the private sector*** in implementing joint projects creates risks of management system fragmentation

Source: compiled by the authors based on [9; 24; 27–31].

and regulatory change. The implementation of European and international standards (EU4Health, JCI, ISO/EN 15224, QHA Trent) creates conditions for improving the quality of medical services and strengthening patient trust; however, this process must remain consistent with the system's social function. An essential task is to achieve a balance between the economic efficiency of private investment and social equity in access to healthcare.

Currently, the pharmaceutical industry and the medical sector function as interrelated but multilevel areas of integration. While the pharmaceutical sector forms the infrastructural foundation (production, innovation, regulatory harmonization), the healthcare service system represents the practical domain where these trends are realized. It is precisely at the level of municipal non-profit medical enterprises that the tangible impact of private capital manifests itself – through hospital modernization, the introduction of management technologies, the development of partnership formats, and the implementation of international quality standards.

In this context, the subsequent analysis (Table 3) focuses on the micro level – the direct functioning of healthcare institutions. These institutions represent the fundamental units where the economic efficiency of investment intersects with the social responsibility of the system. The SWOT analysis at this level makes it possible to outline how private capital influences the quality, accessibility, and stability of medical service delivery.

As demonstrated by the SWOT analysis presented in Table 3, in the context of the development of Ukraine's healthcare service sector, it is advisable to implement a hybrid model of public–private partnership (PPP) that does not involve the full privatization of hospitals but instead focuses on creating forms of co-ownership or co-management. Within such a model, the private investor assumes responsibility for capital investment, technological modernization, or management functions, while the state or local community retains social obligations related to service accessibility.

A noteworthy example is Germany, where the Helios network operates more than 80 hospitals and numerous outpatient centers, illustrating the scalability potential of private management in the healthcare sector [30]. In Poland, the Żywiec hospital project, implemented as a PPP with a 30-year contract duration, serves as a significant

Table 3

SWOT Analysis of the Impact of Private Capital on Ukraine's Healthcare Service Sector (Hospitals and Medical Centers)

Strengths	Weaknesses
Capital injection for modernization: private capital ensures the renewal of material and technical infrastructure, reconstruction of facilities, and implementation of energy-efficient solutions, thereby improving the quality of medical services	***Tendency toward staff reduction:*** optimization of personnel in privatized hospitals often leads to increased workloads for doctors and deterioration in service quality
Operational management efficiency: private operators introduce modern management methods, process automation, and KPI models, which increase productivity and reduce administrative costs	***Financial instability due to debt burden:*** the use of LBO mechanisms or debt financing may lead to increased indebtedness and limited resources for further development
Innovative medical technologies: the use of AI, telemedicine, and big data for robot-assisted diagnostics increases treatment accuracy and reduces patients' hospital stays	***Risk of market monopolization:*** excessive concentration of private capital within large networks leads to reduced competition and increased healthcare service costs
Opportunities	**Threats**
Creation of centers of excellence: private investors can develop high-tech clinics, R&D laboratories, and training bases, contributing to the advancement of medical standards	***Deterioration in care quality due to aggressive commercialization:*** studies indicate that after privatization, the frequency of complications rises and patient satisfaction declines
Development of medical tourism: investments in clinics oriented toward foreign patients generate foreign currency inflows and additional resources for the healthcare system	***Rising service costs:*** market consolidation leads to higher medical tariffs, limiting access to care
Implementation of European quality standards: private capital can become a driver for integrating JCI, ISO, and ISO/EN 15224 standards, thereby strengthening trust in healthcare institutions	***"Cherry-picking" effect:*** private clinics focus on profitable segments, leaving complex or costly cases to public hospitals
Public–private partnership: the development of hybrid management models (co-financing, joint operation, management contracts) enables hospital modernization without full privatization	***Financial traps:*** long-term leases ("sale–leaseback") or short-term fund orientations (3–7 years) create risks of financial instability in the institutional environment

Source: compiled by the authors based on [3–8; 20; 21; 30; 31].

precedent: the private partner (*InterHealth Canada*) is responsible not only for construction and equipment but also for operation and the delivery of medical services throughout the contract term. This cooperation format combines infrastructure modernization with social responsibility but requires robust regulatory mechanisms to limit financial risks and establish mandatory quality-of-care standards.

In the medium term (by 2030), private capital may become a catalyst for the structural diversification of healthcare services – driving the development of the diagnostics market, rehabilitation services, digital clinics, and medical tourism – while the core hospital network will remain under the management of the state or the National Health Service of Ukraine. This approach will enable the combination of financial efficiency and social equity, which is an essential prerequisite for the sustainability of Ukraine's healthcare system.

Discussion of the Research Results

The obtained results confirm the key role of private capital (PC) in transforming global healthcare systems through four strategic components: financial engineering, operational excellence, commercial growth, and technological innovation. These findings align with the conclusions of Bain & Company [1] and A. Offodile [3], who also note record investment levels and active market consolidation. The record volume of transactions in 2024 (USD 115 billion) and their geographical distribution (North America – 65%, Europe – 22%, Asia – 12%) [1; 2] indicate increased investment activity in this sector, making it one of the key drivers of structural change in healthcare.

The analysis reveals a significant ambivalence in the impact of private capital, which fully corresponds to the results of the systematic review by A. Borsa [11] and the research of S. Kannan [6]. On the one hand, financial and operational advantages include potential annual savings of up to USD 265 billion in the United States through administrative process optimization [5] and cost reductions of 5–10% through the implementation of artificial intelligence [8]. On the other hand, systemic risks are evident: an increase in debt burden (especially through LBO mechanisms), as confirmed by S. Kaplan and P. Strömberg [4]; a rise in medical service prices by an average of 6.7% [3; 7]; and a 25% increase in hospital complication rates [6; 21]. This contradiction highlights the need for a careful balance between financial efficiency and quality of care – a conclusion also supported by research emphasizing the integration of social and ethical priorities into investment strategies [16; 19].

Prospects for further research

Future research should focus on mechanisms for balancing financial efficiency and social responsibility in the context of private capital investment – specifically, the analysis of optimal regulatory models that ensure a combination of investment attractiveness with guaranteed

accessibility and quality of healthcare, taking into account the particularities of the national market.

Conclusions

The conducted study demonstrates that private capital serves as a catalyst for structural change in healthcare systems, yet its impact is significantly ambivalent. On one hand, investments drive infrastructure modernization, the implementation of innovative technologies, and the improvement of operational efficiency. On the other hand, the focus on short-term financial returns often leads to increased debt burdens, staff reductions, and the deterioration of healthcare service quality – contradicting the social mission of healthcare.

The success of this transformation will depend on the ability of Ukrainian institutions to maintain an effective balance between the investment attractiveness of the sector and the guarantee of social standards for accessibility and quality of medical care.

Bibliography

1. Bain & Company. *Global healthcare private equity and M&A report 2025* [Internet]. 2025 [cited 2025 Sep 2]. Available from: https://www.bain.com/globalassets/noindex/2025/bain_report_global_healthcare_private_equity_2025.pdf.
2. Economy Middle East. *Global healthcare private equity deal value hits $115bn in 2024, second-highest on record* [Internet]. 2025 [cited 2025 Sep 2]. Available from: https://openminds.com/market-intelligence/news/2024-global-health-care-private-equity-deal-value-tops-115-billion-second-highest-since-2019/.
3. Offodile II AC, Cerullo M, Bindal M, Rauh-Hain JA, Ho V. Private equity investments in health care: an overview of hospital and health system leveraged buyouts, 2003–17. *Health Aff (Millwood)*. 2021;40(5):719–726. DOI: 10.1377/hlthaff.2020.01535.
4. Kaplan SN, Strömberg P. Leveraged buyouts and private equity. *J Econ Perspect*. 2009;23(1):121–146. Available from: https://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.23.1.121.
5. Sahni NR, Mishra P, Carrus B, Cutler DM. *Administrative simplification: how to save a quarter-trillion dollars in US healthcare* [Internet]. McKinsey & Company; 2021 [cited 2025 Sep 2]. Available from: https://www.mckinsey.com/industries/healthcare/our-insights/administrative-simplification-how-to-save-a-quarter-trillion-dollars-in-us-healthcare.
6. Kannan S, Bruch JD, Song Z. Changes in hospital adverse events and patient outcomes associated with private equity acquisition. *JAMA*. 2023;330(24):2365–2375. DOI: 10.1001/jama.2023.23147.
7. Appelbaum E, Batt R. *Private equity buyouts in healthcare: who wins, who loses?* Working Paper No. 118 [Internet]. Center for Economic and Policy Research; 2020 [cited 2025 Sep 2]. DOI: 10.36687/inetwp118.
8. Singhal S, McLeod A, Bansal N. *Value creation through business model innovation in US healthcare* [Internet]. McKinsey & Company; 2024 [cited 2025 Sep 2]. Available from: https://www.mckinsey.com/industries/healthcare/our-insights/value-creation-through-business-model-innovation-in-us-healthcare.
9. Private Equity Stakeholder Project. *PESP private equity hospital tracker* [Internet]. 2025 [cited 2025 Sep 2]. Available from: https://pestakeholder.org/private-equity-hospital-tracker/.
10. Sevilir M, Gao J, Kim Y. Private equity in the hospital industry. *J Financ Econ*. 2025. Forthcoming. Available from: https://esmt.berlin/about/press/esmt-berlin-research-shows-private-ownership-boosts-hospital-performance.
11. Borsa A, Bejarano G, Ellen M, Bruch JD. Evaluating trends in private equity ownership and impacts on health outcomes, costs, and quality: systematic review. *BMJ*. 2023;382:e075244. DOI: 10.1136/bmj-2023-075244.
12. Bugbee M, O'Grady E, Fenne M. *Private equity healthcare deals: 2024 in review* [Internet]. Private Equity Stakeholder Project; 2025 [cited 2025 Sep 2]. Available from: https://pestakeholder.org/wp-content/uploads/2025/02/PESP_Report_HC-Acquisitions_2025.pdf.
13. Cerullo M, Yang KK, McDevitt RC, Maddox KJ, Roberts JW, Offodile II AC. Research: what happens when private equity firms buy hospitals? *Harv Bus Rev* [Internet]. 2023 [cited 2025 Sep 2]. Available from: https://hbr.org/2023/03/research-what-happens-when-private-equity-firms-buy-hospitals.
14. European Medicines Agency. *Good manufacturing practice* [Internet]. 2025 [cited 2025 Sep 2]. Available from: https://www.ema.europa.eu/en/human-regulatory-overview/research-development/compliance-research-development/good-manufacturing-practice.
15. European Commission. *EudraLex – volume 4 – good manufacturing practice (GMP) guidelines* [Internet]. 2025 [cited 2025 Sep 2]. Available from: https://health.ec.europa.eu/medicinal-products/eudralex/eudralex-volume-4_en.
16. MacArthur H, Elton G, Haas D, Varma S, McKay M. *Are longer holding periods the wave of the future in private equity?* [Internet]. Bain & Company; 2018 [cited 2025 Sep 2]. Available from: https://www.bain.com/insights/are-longer-holding-periods-the-wave-of-the-future-in-private-equity-forbes/.
17. Bain & Company. *Global private equity report 2025* [Internet]. 2025 [cited 2025 Sep 2]. Available from: https://www.bain.com/globalassets/noindex/2025/bain-report_global-private-equity-report-2025.pdf.
18. Financial Times. *Private equity groups are snapping up companies at the fastest pace in two years* [Internet]. 2025 [cited 2025 Sep 2]. Available from: https://www.ft.com/content/58e95295-c1c3-4376-9055-90bd98b8838d.
19. Karamardian M, Jagtiani E, Chawla A, Nembhard IM. An update on impacts of private equity ownership in health care: extending a systematic review. *Health Manag Policy Innov* [Internet]. 2024;9(2). Available from: https://hmpi.org/2024/06/19/an-update-on-impacts-of-private-equity-ownership-in-health-care-extending-a-systematic-review/.
20. Klein L. *Private equity legacy clouds sale of Prospect's hospitals* [Internet]. CT Insider; 2025 [cited 2025 Sep 2]. Available from: https://www.ctinsider.com/business/article/prospect-connecticut-hospitals-sale-21019578.php.
21. National Institutes of Health. *Infections and falls increased in hospitals owned by private equity firms* [Internet]. 2024 [cited 2025 Sep 2]. Available from: https://www.nih.gov/news-events/nih-research-matters/infections-falls-increased-private-equity-owned-hospitals.

22. U.S. Government Accountability Office. *Drug safety: preliminary findings indicate persistent challenges with FDA foreign inspections*. GAO-20-262T [Internet]. 2019 [cited 2025 Sep 2]. Available from: https://www.gao.gov/products/gao-20-262t.

23. U.S. Food and Drug Administration. *Safeguarding pharmaceutical supply chains in a global economy* [Internet]. 2019 [cited 2025 Sep 2]. Available from: https://www.fda.gov/news-events/congressional-testimony/safeguarding-pharmaceutical-supply-chains-global-economy-10302019.

24. Schondelmeyer SW. *Designing a resilient U.S. drug supply: efficient strategies to address vulnerabilities*. Testimony before the U.S.-China Economic and Security Review Commission [Internet]. 2025 [cited 2025 Sep 2]. Available from: https://www.uscc.gov/sites/default/files/2025-06/Stephen_Schondelmeyer_Testimony.pdf.

25. European Medicines Agency. *Mutual recognition agreements (MRA)* [Internet]. 2025 [cited 2025 Sep 2]. Available from: https://www.ema.europa.eu/en/human-regulatory-overview/research-development/compliance-research-development/good-manufacturing-practice/mutual-recognition-agreements-mra.

26. European Commission. *Good manufacturing and distribution practices* [Internet]. 2025 [cited 2025 Sep 2]. Available from: https://health.ec.europa.eu/medicinal-products/good-manufacturing-and-distribution-practices_en.

27. Directive 2011/24/EU of the European Parliament and of the Council of 9 March 2011 on the application of patients' rights in cross-border healthcare. *Off J Eur Union*. 2011;L88:45. Available from: https://eur-lex.europa.eu/eli/dir/2011/24/oj.

28. European Commission. *Association agreement of Ukraine with EU4Health Programme (2021–2027)* [Internet]. 2022 [cited 2025 Oct 10]. Available from: https://health.ec.europa.eu/internationalcooperation/eu-ukraine-solidarity-and-cooperation-health_en.

29. Ministry of Health of Ukraine. *Ukraine receives confirmation of funding under EU4Health programs* [Internet]. 2023 [cited 2025 Oct 10]. Available from: https://moz.gov.ua/en/more-than-eur-4-million-for-public-health-projects-ukraine-receives-confirmation-of-funding-under-eu4health-programs.

30. Helios International. *Helios hospitals in Germany* [Internet]. 2025 [cited 2025 Oct 9]. Available from: https://www.helios-international.com/en/hospitals.

31. European Bank for Reconstruction and Development. *Żywiec hospital Project (Poland)* [Internet]. 2025 [cited 2025 Oct 9]. Available from: https://www.ebrd.com/home/work-with-us/projects/psd/46762.html.

Purpose. The purpose of the study is to conduct a comprehensive analysis of the role of private capital in the transformation of healthcare systems based on international experience, to assess its impact on the efficiency, innovativeness, and quality of medical services, as well as to develop practical recommendations for adapting these mechanisms to modernize Ukraine's healthcare sector under the conditions of martial law and European integration

Materials and methods. The study employed methods of comparative analysis, case analysis, SWOT analysis, and statistical analysis. The research materials included official reports of international organizations (WHO, Eurostat), analytical materials from leading consulting companies (Bain & Company, McKinsey), data from the State Statistics Service of Ukraine, scientific publications, and program documents of regulatory initiatives (Joint Commission International, USA; QHA Trent, United Kingdom; Australian Council on Healthcare Standards International, Australia). The research covered private capital value creation strategies, their impact on the financial sustainability of medical institutions, and the adaptation of international experience for Ukraine.

Results. The findings demonstrate the ambivalent impact of private capital: on the one hand, it drives infrastructure modernization, operational efficiency (with potential annual savings of up to USD 265 billion), and technological innovation (reducing costs by 5–10%); on the other hand, it leads to increased debt burden, higher service prices (by 6.7%), and deterioration in healthcare quality (a 25% rise in complications).

The future development of Ukraine's healthcare system will be shaped by the combination of global trends in digitalization, integration into the European space, and internal reforms in financing and management. The involvement of private capital is viewed not merely as a financial tool but as a structural factor of transformation – through infrastructure modernization, managerial optimization, and enhanced resource efficiency.

To systematically assess the potential and challenges, a two-part SWOT analysis was conducted, which identified that:

Ukraine's healthcare system is gradually entering a phase of structural modernization, where private capital and international accreditation serve as catalysts for managerial, technological, and regulatory transformation;

in the context of developing the healthcare service sector in Ukraine, it is advisable to implement a hybrid model of public–private partnership, which does not entail full hospital privatization but focuses on creating forms of co-ownership or co-management.

Conclusions. Private capital is a powerful catalyst for structural change in healthcare systems, yet it requires a careful balance between financial efficiency and social responsibility. For Ukraine, the optimal path lies in combining strategic partnerships with long-term investment funds and implementing comprehensive reforms alongside the development of public–private partnerships.

Key words: private capital, healthcare, digitalization, regulatory harmonization, investment strategies.

Метою дослідження є проведення багатовимірного аналізу ролі приватного капіталу в трансформації системи охорони здоров'я з дослідженням міжнародних парадигм і стратегічних підходів. Ця наукова робота прагне оцінити багатогранний вплив інвестицій приватного капіталу на операційну ефективність, інноваційний потенціал і, що найважливіше, якість надання медичних послуг. Це особливо актуально з огляду на подвійні виклики – робота в умовах тривалого воєнного стану й одночасна інтеграція в Європейський Союз.

Матеріали та методи. Матеріали дослідження: офіційні звіти міжнародних організацій (СОТ, ВООЗ, Євростату); аналітичні матеріали провідних консалтингових компаній (Bain & Company, McKinsey); наукові публікації з питань охорони здоров'я та інвестиційної діяльності; програмні документи регуляторних ініціатив, такі як Join Commission International США, QHA Trent (Велика Британія), Australian Council on Health Care Standarts International (Австралія).

Методологічна структура дослідження розроблена так, щоб забезпечити як наукову обґрунтованість, так і практичну значущість результатів. Використано синергійну комбінацію методів: порівняльний аналіз, кейс-аналіз, SWOT-аналіз, статистичний аналіз.

Результати. Результати дослідження демонструють амбівалентний вплив приватного капіталу: з одного боку, він забезпечує модернізацію інфраструктури, операційну ефективність (потенційна економія до 265 млрд дол. США щорічно) та технологічні інновації (зниження витрат на 5–10 %), а з іншого – веде до зростання боргового навантаження, підвищення цін на послуги (на 6,7 %) та погіршення якості медичної допомоги (зростання ускладнень на 25 %).

Активність приватного капіталу у сфері охорони здоров'я залишається високою: у 2024 р. глобальний обсяг угод сягнув 115 млрд дол. США, що стало другим найвищим показником в історії.

Залучення приватного капіталу у сферу охорони здоров'я через довгострокові фонди, продовжені фонди (*continuation vehicles, CVs*) та прискорені поглинання створює нові можливості для стабільного фінансування, проте супроводжується істотними етичними та системними ризиками. Майбутній розвиток системи охорони здоров'я України визначатиметься поєднанням глобальних тенденцій цифровізації, інтеграції до європейського простору та внутрішніх реформ у фінансуванні й управлінні.

Залучення приватного капіталу розглядається не лише як фінансовий інструмент, а як структурний чинник трансформації – через модернізацію інфраструктури, оптимізацію менеджменту та підвищення ефективності використання ресурсів. Для системної оцінки потенціалу та викликів проведено двочастинний SWOT-аналіз, який у підсумку ідентифікував, що:

– система охорони здоров'я України поступово переходить у фазу структурної модернізації, де приватний капітал та міжнародна акредитація стають каталізаторами управлінських, технологічних і регуляторних змін. Упровадження європейських та міжнародних стандартів (EU4Health, JCI, ISO/EN 15224, QHA Trent) створює умови для підвищення якості медичних послуг і зміцнення довіри пацієнтів, однак цей процес потребує узгодження із соціальною функцією системи. Важливим завданням є досягнення балансу між економічною ефективністю приватних інвестицій і суспільною рівністю в доступі до медичної допомоги;

– у контексті розвитку сектору надання медичних послуг в Україні доцільним є запровадження гібридної моделі публічно-приватного партнерства, яка не передбачає повної приватизації лікарень, а орієнтується на створення форм співвласності чи співуправління. У межах такої моделі приватний інвестор бере на себе функції капіталовкладень, технологічного оновлення чи менеджменту, а держава або громада зберігає соціальні зобов'язання щодо доступності послуг.

Висновки. Проведене дослідження доводить, що приватний капітал виконує роль каталізатора структурних змін у системах охорони здоров'я, однак його вплив має суттєво амбівалентний характер. З одного боку, інвестиції забезпечують модернізацію інфраструктури, запровадження інноваційних технологій та підвищення операційної ефективності. З іншого боку, орієнтація на короткострокову фінансову віддачу часто призводить до зростання боргового навантаження, скорочення персоналу та погіршення якості медичних послуг, що суперечить соціальній місії охорони здоров'я.

Успіх трансформації залежатиме від здатності українських інституцій забезпечити ефективний баланс між інвестиційною привабливістю галузі й гарантуванням соціальних стандартів доступності та якості медичної допомоги.

Ключові слова: приватний капітал, охорона здоров'я, цифровізація, регуляторна гармонізація, інвестиційні стратегії.

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