MODERN MECHANISMS OF MUNICIPAL HEALTHCARE MANAGEMENT

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Abstract: The current status of municipal healthcare systems in most countries is marked by a multitude of issues, primarily of a systemic and organizational nature. Presently, a noticeable disparity exists between the treatment capacity of healthcare establishments and the scale and composition of illnesses in regional and district cities. Furthermore, there is a declining assurance of medical care provision for the populace, despite the increasing expansion of normative criteria for healthcare facilities. Moreover, the management of healthcare establishments continues to adhere to conservative practices, impeding the adoption of progressive models for medical care development. Additionally, the spatial differentiation of medical exercises remains inadequate. The objective of this article is to delineate and elucidate the characteristics of key mechanisms of municipal healthcare management across various countries worldwide. Additionally, this study endeavors to delineate the domains associated with risk management within the healthcare sector by examining diverse management approaches employed in the organization of medical institutions' operations. Methodology. Throughout the study, a combination of bibliographic and analytical methods was employed to examine the existing literature on municipal healthcare management. Additionally, the utilization of generalization, substantiation, and system-structural methods aided in the practical elucidation of crucial aspects of municipal healthcare institutions management. These models prevalent in the realm of healthcare institution management. These models models prevalent in the realm of healthcare institutions management. These models are characterized, highlighting their key attributes, and the primary areas of risk management.

Keywords: Healthcare management at the local level, regulation of the healthcare industry, improvement of the healthcare network, healthcare risk management, hospital capacity, healthcare powers.

1 Introduction

In the present context, the development and enhancement of the national healthcare system is regarded as a priority area of state policy in numerous countries worldwide. The focus on the organization and functioning of this domain is driven by the imperative of consistently safeguarding, strengthening and restoring the population's health, which serves as a pivotal factor in the economic and social progress of a nation. At the local level, local self-government bodies assume a prominent role in healthcare management, specifically in facilitating the enhancement of the health of the territorial community and meeting the populace's demands for healthcare services of commendable quality.

In light of the prevailing state of operations within the local medical institution system, there is an imperative need to introduce novel regulatory mechanisms. Consequently, a comprehensive analysis of the current state of healthcare development becomes indispensable for the advancement of key healthcare directions. Ukraine's healthcare sector currently faces a multitude of adverse trends stemming from both the ongoing conflict and the systemic, long-standing industry crisis. Unlike other sectors, healthcare in Ukraine relies predominantly on funding from the state budget. The exploration and mobilization of alternative financing sources are impeded by the private sector's lack of interest and the generally unfavorable stance of healthcare authorities towards medical entrepreneurship. As a result, the primary predicament in healthcare financing lies in the insufficiency of public funds, leading to a reduction in the availability of free medical care. Notwithstanding substantial advancements in the delivery of quality, accessible, and prompt medical care to local community residents and internally displaced persons (IDPs) over the past year, it is pertinent to underscore the overarching trend of declining healthcare expenditures. Additionally, there is an observable transfer of responsibility and costs from the state to patients, posing challenges for a significant portion of the population to access healthcare services of commendable quality, given their low-income levels. It is worth noting that although there exists a considerable number of healthcare facilities operating efficiently under martial law, the aforementioned financial dynamics contribute to the impediment of equitable healthcare access.

The development of a high-quality management mechanism for medical and other institutions within the healthcare sector is a fundamental prerequisite for its efficient operation. The healthcare regulation mechanism represents a distinct component within the broader framework of economic regulation. This mechanism can be comprehended as a collection of objectives, principles, and administrative, economic, legal, and social methods. It is implemented through a system of means and is directed toward facilitating the effective and dynamic development of the healthcare sector.

The theoretical segment of this study provides a substantiation of the significance, essence, and principal theoretical and organizational facets regarding the advancement of medical infrastructure at the municipal level. This article delineates the pivotal factors that influence the state of industry development and delineates the trajectories for the progress of medical infrastructure at the municipal level. Through an examination of global experiences in modernizing the municipal healthcare system, notable avenues of successful transformation have been identified.

The practical component of this study focuses on identifying crucial practical facets of healthcare management mechanisms. Specifically, it reveals that the utilization of administrative methods within a market economy promotes the preservation of social justice and accessibility of services, while also addressing information asymmetry within the healthcare sector. Furthermore, the study highlights the employment of economic methods for state regulation, which facilitate the creation of favorable conditions for the active development of the medical sphere. The author presents a fundamental model encompassing the key constituents of contemporary healthcare management mechanisms at the municipal level, as well as mechanisms of public-private partnership in the healthcare domain, which have demonstrated efficacy in numerous countries.

The study derives conclusions regarding the examined issues, notably emphasizing that the practical implementation of effective regulatory tools is a crucial prerequisite for the efficient functioning of healthcare. Examples of such tools include the development and execution of state programs aimed at providing citizens with free medical care, as well as the establishment of rigorous oversight mechanisms for both public and private healthcare systems. Analyzing the interrelation of primary mechanisms, public-private partnership which have demonstrated effectiveness in various countries, it becomes apparent that well-established healthcare sectors often witness widespread adoption of public-private partnerships. These partnerships encompass endeavors such as facility construction and maintenance, as well as the optimization of the industry's infrastructure.

2 Literature review

The current stage of healthcare development is marked by an evident disparity between cities concerning the level of medical care and the resource potential of healthcare institutions. In recent years, there has been a noticeable escalation in territorial discrepancies regarding resource distribution and performance indicators within the healthcare system and preventive care. The challenge of bridging this gap is subject to debate and is linked to the extent to which public health is influenced by the available resources within the healthcare system. The alignment of the medical infrastructure with the population's needs serves as a crucial factor in shaping effective policies within the community health system. The accurate determination of healthcare's impact on reducing morbidity is a topic of discussion among experts, guiding practical measures for transforming the organizational and economic mechanisms governing the development and functioning of the medical sector (Diegtiar et al., 2021), (Nezhyva & Mysiuk, 2021), (Castanho, Gómez & Kurowska-Pysz, 2019).

In the contemporary context of social development, numerous factors, operating in various contexts and combinations, contribute to the heightened significance of healthcare management in shaping public health and population treatment. Among these factors, the development and utilization of cuttingedge medical technologies play a pivotal role in facilitating effective disease treatment and prevention, thereby substantially enhancing the prospects of patient recovery. Simultaneously, organizational and technological transformations, made feasible within an open economy and an expanding information landscape, work in synergy toward this objective. Examples of such transformations include the reorganization of outpatient and inpatient care, optimization of bed capacity utilization, enhancement of medical service quality, and the expansion of social partnerships within the healthcare domain, among others (Hellowell, 2019), (Thellbro, Bjärstig & Eckerberg, 2018), (Smith & Thomasson, 2018).

An essential domain for the advancement of healthcare infrastructure at the municipal level lies in the potential for cooperation concerning the resource capabilities of cities. However, the practical objectives of resource pooling, particularly economic and financial resources, frequently conflict with constitutional norms and the objectives of receiving intergovernmental transfers (Hossu et al., 2018), (Ciot, 2022).

Considering the disparity between the resource potential of healthcare and the healthcare needs of cities at the municipal level, there is a pressing need to enhance the interbudgetary mechanism for redistributing financial resources. The prevalent equalization model, employed through transfer mechanisms, to some extent, mitigates regional disparities in the physical healthcare infrastructure. However, a challenge arises in preserving medical facilities and ensuring their efficient operation as professional institutions, necessitating technical upgrades. To address this challenge, it is crucial to expand the legal authority of local governments in managing financial resources (Hassen & Bilali, 2022), (Bentley, 2022), (Maurer, Whitman & Wright, 2023).

To date, the operational execution of healthcare responsibilities for the population residing in specific territories, such as villages, cities, districts, or regions, is delegated to local governments. However, it is important to consider that at the regional and district council level, the functions of executive bodies are fulfilled by competent regional structures, while local authorities in villages and towns cannot adequately sustain primary healthcare facilities (Ha & Shin, 2022), (Lukin, 2019).

3 Aims

The primary objective of this practical study is to discern the fundamental characteristics and constituents of diverse regulatory mechanisms within municipal healthcare facilities. Furthermore, it aims to evaluate the risks associated with their implementation in distinct healthcare management systems. The research delves into the interconnections among key mechanisms of public-private partnerships, which have demonstrated effectiveness across numerous countries worldwide while outlining the principal factors contributing to the success of such partnerships.

4 Methods and materials

A practical investigation into the contemporary trends in the utilization of municipal healthcare management mechanisms was conducted, employing a systematic analysis of scientific literature on the research subject. The analysis of data involved the utilization of statistical methods for information processing, the graphical presentation of data, as well as the synthesis and analysis of data to evaluate the developmental indicators of the healthcare sector.

5 Results

An analysis of the existing scientific literature on the research topic, as well as practical instances involving diverse management mechanisms within the healthcare sector, has revealed that in the majority of countries, the key constituents of the healthcare system management process encompass the subject, subject matter, purpose, goals, principles, and tools for implementing the management mechanism. Concurrently, the subjects responsible for state regulation within the healthcare sector comprise state and local governments, legislation, executive and judicial authorities, as well as public and political associations. In regulating the healthcare industry, the state defines the purpose, objectives, directions, and principles of state policy, establishes the allocation of budgetary resources, and establishes a system of regulatory bodies.

The primary objectives of healthcare regulation encompass the identification of medical service requirements, the planning of medical institution organization, the collection of essential information, resource mobilization, the facilitation of access to high-quality medical services, disease prevention, diagnosis, and treatment, as well as the establishment of necessary restrictions and prohibitions. Consequently, in the present context, the principal goals of the state's healthcare sector regulatory mechanism entail the provision of quality healthcare services and financing to citizens, the facilitation of the adoption of state-of-the-art technologies, the development of healthcare personnel, the establishment of a robust legal framework, and the adaptation of the existing healthcare sector to evolving conditions.

During the regulation of the healthcare sector, public authorities are expected to uphold fundamental principles, including the legality, transparency, consistency, optimality, predictability, priority, efficiency, and social responsibility (refer to Figure 1). Diligently adhering to these principles is essential for enhancing the effectiveness of the state's regulatory mechanism in the healthcare sector, particularly within the framework of economic and social reform.

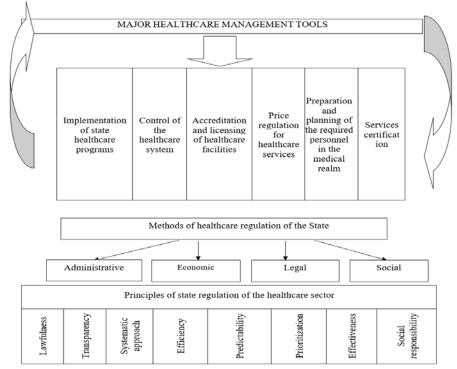


Figure 1. A basic model of modern healthcare management mechanisms at the municipal level

Source: compiled by the authors based on (Lkhaajav, 2022), (Diegtiar et al., 2021), (Diphoorn & van Stapele, 2021).

The availability of effective regulatory tools is a crucial factor in ensuring the efficient functioning of the healthcare sector. These tools are designed to establish conditions that mitigate potential negative consequences. The primary methods employed for state regulation of healthcare encompass administrative, economic, legal, and social approaches.

The healthcare sector utilizes various management tools, including:

- development and oversight of state programs aimed at providing citizens with free medical care;
- supervision and regulation of both public and private healthcare systems;
- accreditation of hospital institutions to ensure quality standards;
- issuance of licenses for the provision of medical services, ensuring compliance with regulations;
- regulation of prices for medical services to maintain affordability and fairness;
- planning and training of adequate healthcare personnel;
- certification of services to uphold quality assurance;
- authorization of the use of new technologies in healthcare;
- organization and enforcement of state sanitary and epidemiological supervision in medical institutions.

The application of administrative methods within a market economy serves to uphold social justice and ensure the accessibility of services, while also addressing information asymmetry in the healthcare market. Economic methods of state regulation are instrumental in establishing conditions that incentivize market participants to align their actions with the societal goals and objectives outlined in addressing specific tasks.

A crucial element in the functioning of an efficient healthcare regulatory mechanism, particularly in the context of reforms, is the establishment of a comprehensive legal framework. The legal mechanism possesses the vital attribute of being aligned with a specific objective, enabling the realization of a structured and interconnected system capable of achieving the desired goal by legally addressing the interests of the relevant stakeholders.

Currently, municipal law is evolving globally as an independent branch of law. It focuses on local self-government, which constitutes a distinct form of social relations associated with the organization and exercise of power within territorial communities. Notably, city councils hold significant authority over healthcare, given the concentration of the population residing in proximity to public healthcare facilities and establishments. As a substantial portion of healthcare facilities operates under municipal ownership and management, reforming the municipal administrative structure emerges as a top-priority domain in the comprehensive healthcare system reform efforts.

Taking into account the international experience of implementing diverse public-private partnership mechanisms in healthcare, we have identified those that have demonstrated effectiveness across numerous countries (see Figure 2). Figure 2 reveals that contemporary public-private partnerships primarily involve investment contracts aimed at constructing, renovating, or modernizing specific socially significant facilities. This form of partnership enables the integration of business models into the public domain and facilitates the resolution of pressing local healthcare service-related policy matters.

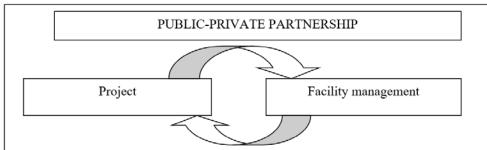


Figure 2. Interconnection of the main mechanisms of public-private partnerships in healthcare, which have proven to be effective in numerous countries

Source: compiled by the authors based on (Mia et al., 2022), (Papageorgiou et al., 2018).

The healthcare sector differs from other industries in terms of the limited number of public-private partnership projects in terms of their forms, content, contract structure, guarantees provided by public authorities, and regulatory methods. In countries with a well-developed healthcare sector, public-private partnerships are relatively prevalent and can be categorized into three main forms. Firstly, there are partnerships focused on constructing hospital infrastructure. Secondly, partnerships are established for the construction and maintenance of infrastructure facilities.

Lastly, there are public-private projects that incorporate elements from both the first and second forms.

An analysis of the European experience regarding public-private partnerships reveals that the healthcare sector ranks as the third largest industry worldwide in terms of the number of projects implemented in 2017 (Figure 3). The data indicates that approximately 17% of all registered projects within the European Union were associated with the healthcare sector.

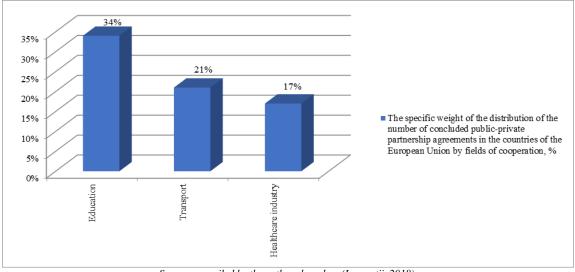


Figure 3. Share of the number of public-private partnership agreements concluded in the EU countries by sector of cooperation, %

Source: compiled by the authors based on (Lavrentij, 2018).

The subsequent mechanism for regulating economic activity within the healthcare sector is through public-private partnership (PPP) projects. An examination of international instances of PPPs in the form of projects reveals that the distinctiveness of these models and their application, particularly in the healthcare system, bestows healthcare organizations with novel avenues and levels of financing, decentralization, and management autonomy. Consequently, this enhances the economic development trajectory of the country. Facility management represents another prevalent mechanism of collaboration in the form of public-private partnerships in Western Europe. The regulatory framework for implementing facility management often entails the comprehensive transfer of all non-core business functions to the respective company through the establishment of property management agreements. Additionally, specific functions may also be delegated through subcontracting arrangements.

6 Discussion

The global experience of urban healthcare system modernization encompasses several key areas of transformation. Among these, structural and functional changes within the healthcare system take precedence. These changes involve a systematic reduction in the number of healthcare facilities, particularly at the local level, along with the regulation of hospital capacity while simultaneously enhancing their resource efficiency. Additionally, efforts are directed toward addressing territorial disparities in the provision of physical healthcare facilities and improving performance indicators (Biswas et al., 2018), (Derbali & Jamel, 2019).

To establish goals that will enhance the structural efficiency of the municipal healthcare system, it is imperative to comprehend the medical, demographic, socioeconomic, geographical, and other factors that directly or indirectly impact regional population needs and influence healthcare provision. These factors encompass demographic and socioeconomic characteristics, dynamics of socio-hygienic and socio-culturalmedical pathology, the extent of healthcare network development, financial circumstances of the population, climatic and geographical aspects, as well as medical and organizational factors (Landi et al., 2022), (Sun, Liu & Chen, 2022).

From the perspective of international practices, risk management in healthcare encompasses two primary approaches: organizational, which focuses on both internal and external factors influencing the organization, and people-oriented, which emphasizes individual errors attributed solely to the human factor. To effectively manage risks in the healthcare sector, key tools such as quality standards for medical care and modeling of outcomes should be implemented. These tools facilitate the identification, assessment, and mitigation of risks, ensuring the delivery of high-quality healthcare services (Hossein et al., 2022), (Zhang & Luo, 2022).

The extent and scope of powers related to public health in local governments of villages and cities naturally vary. It is evident that heads of local governments and competent councils, particularly in large cities and regional centers with sizable populations and a well-established network of medical facilities, possess greater authority in this domain. The distribution of powers in public health management reflects the diverse needs and resources of different administrative units (Jegers, 2018), (He & Guo, 2022).

Financial support for healthcare institutions is sourced from city budgets through targeted funding, guided by financial plans and estimates. The healthcare sector's projected expenditures are determined within the approved budgets at the corresponding levels. The allocated funds specified in the estimates are then provided to the respective budget spending units. The provision of high-quality medical care to the population relies on addressing economic challenges such as determining the level of budgetary financing, enhancing the voluntary health insurance system, improving the framework for paid medical services, and facilitating the training and adoption of new technologies in the healthcare sector. To tackle these tasks effectively, it is crucial to establish a robust mechanism that enables objective analysis and assessment of financial resource requirements, as well as the planning and optimization of their generation and utilization (Jegers, 2018), (Derbali & Jamel, 2019).

7 Conclusions

The analysis of scientific literature and the findings of the questionnaire survey revealed that the present state of the municipal healthcare system exhibits a general trend of deteriorating health among the urban population, particularly in small towns, exacerbated by the inadequate organization and subpar quality of medical care. Furthermore, there is a lack of systematic comprehension regarding the organization, financing, and incentives for optimizing the operational efficiency of healthcare institutions. Addressing the challenges within the community healthcare system can be achieved through the implementation of diverse programs of national, regional, and local significance, aligned with the current healthcare policy of the state.

In the present economic context, effective state regulation of economic processes necessitates the utilization of a flexible and efficient mechanism. The implementation of healthcare reform should be undertaken in adherence to the goals, principles, methods, and tools set at the national level.

Literature:

1. Bentley, A. (2022). Broken bread – Avert global wheat crisis caused by the invasion of Ukraine. Nature, 603, 551. https://www.nature.com/articles/d41586-022-00789-x. https://doi.org/10.1038/d41586-022-00789-x.

2. Biswas, S., Echevarria, A., Irshad, N., Rivera-Matos, Y., Richter, J., Chhetri, N., Parmentier, M. J., & Miller, C. A. (2022). Ending the Energy-Poverty Nexus: An Ethical Imperative for Just Transitions.Science and Engineering Ethics, 28, 36. https://link.springer.com/article/10.1007/s11948-022-00 383-4.

3. Castanho, R. A., Gómez, J. M. N., & Kurowska-Pysz, J. (2019). Assessing Land Use Changes in Polish Territories: Patterns, Directions and Socioeconomic Impacts on Territorial Management. Sustainability, 11, 1354. https://www.mdpi.com/2 071-1050/11/5/1354. https://doi.org/10.3390/su11051354.

4. Ciot, M.-G. (2022). The impact of the Russian–Ukrainian conflict on Green Deal implementation in central–southeastern Member States of the European Union,18 October 2022. https://rsaiconnect.onlinelibrary.wiley.com/doi/10.1111/rsp3.125 91. https://doi.org/10.1111/rsp3.12591.

5. Derbali, A., & Jamel, L. (2019). Dependence of Default Probability & Recovery Rate in Structural Credit Risk Models: Case of Greek Banks. Journal of the Knowledge Economy, 10, 711–33. https://link.springer.com/article/10.1007/s13132-017-0 473-1. https://doi.org/10.1007/s13132-017-0473-1.

6. Diegtiar, O. A., Gevorkyan, A. Yu., Cherepovska, T. V., Kuzmenko, S. H., & Mozhaykina, N. V. (2021). Adaptation of municipal governance mechanisms to European standards. Viešoji politika ir administravimas, 20, 5, 574-584. https://doi.o rg/10.13165/VPA-21-20-5-02.

7. Diphoorn, T., & van Stapele, N. (2021). What Is Community Policing? Divergent Agendas, Practices, and Experiences of Transforming the Police in Kenya. Policing: A Journal of Policy and Practice, 15, 1, 399-411. https://acad emic.oup.com/policing/article/15/1/399/5803158. https://doi.org /10.1093/police/paaa004.

8. Ha, Y.-C., & Shin, B.-S. (2022). The Impact of the Ukraine War on Russian–North Korean Relations. Asian Survey, 62, 5-6, 893–919. https://online.ucpress.edu/as/article/62/5-6/893/19412 3/The-Impact-of-the-Ukraine-War-on-Russian-North. https://doi .org/10.1525/as.2022.1800092.

9. Hassen, T. B., & Bilali, H. E. (2022). Impacts of the Russia-Ukraine War on Global Food Security: Towards More Sustainable and Resilient Food Systems? Foods, 11, 15, 2301. https://www.mdpi.com/2304-8158/11/15/2301. https://doi.org/10.3390/foods11152301.

10. He, M., & Guo, Y. (2022). Systemic Risk Contributions of

Financial Institutions during the Stock Market Crash in China. Sustainability, 14, 5292. https://www.mdpi.com/2071-1050/1 4/9/5292. https://doi.org/10.3390/su14095292.

11. Hellowell, M. (2019). Are public–private partnerships the future of healthcare delivery in sub-Saharan Africa? Lessons from Lesotho. BMJ Global Health, 4, e001217. https://gh.bmj.com/c ontent/4/2/e001217. https://doi.org/10.1136/bmjgh-2018-001 217.

12. Hossein, T., Appolloni, A., Shirzad, A., & Azad, A. (2022). Corporate Social Responsibility Disclosure (CSRD) and Financial Distressed Risk (FDR): Does Institutional Ownership Matter? Sustainability, 14, 742. https://www.mdpi.com/2071-1050/14/2/742. https://doi.org/10.3390/su14020742.

13. Hossu, C. A., Ioja, I. C., Susskind, L. E., Badiu, D. L., & Hersperger, A. M. (2018). Factors driving collaboration in natural resource conflict management: Evidence from Romania. Ambio, 1–15. https://link.springer.com/article/10.1007/s13280-018-1016-0.

14. Jegers, M. (2018). Modeling managerial altruism, CSR, & donations: A comment. Managerial & Decision Economics, 39, 425–26. https://onlinelibrary.wiley.com/doi/10.1002/mde.2915. https://doi.org/10.1002/mde.2915.

15. Landi, G. C., Iandolo, F., Renzi, A., & Rey, A. (2022). Embedding sustainability in risk management: The impact of environmental, social, and governance ratings on corporate financial risk. Corporate Social Responsibility & Environmental Management, 29, 1096–107. https://onlinelibrary.wiley.com/d oi/10.1002/csr.2256. https://doi.org/10.1002/csr.2256.

16. Lavrentij, D. (2018). Yevropejskyj dosvid publichnopryvatnoho partnerstva: case study krashhyx praktyk dlya Ukrayiny [European experience of public-private partnership: case study of best practices for Ukraine]. Vcheni zapysky NTU imeni V.I. Vernadskoho. Mexanizmy derzhavnoho upravlinnya, 29 (68) 5, 130-132. http://www.pubadm.vernadskyjou rnals.in.ua/journals/2018/5_2018/24.pdf. (in Ukrainian).

17. Lkhaajav, B. (2022). How the Russia-Ukraine War Is Changing Northeast Asia's Geopolitics. The Diplomat, March

17. https://thediplomat.com/2022/03/how-the-russia-ukraine-wa r-is-changing-northeast-asias-geopolitics/.

18. Lukin, A. (2019). Russian-Chinese Cooperation in Central Asia and the Idea of Greater Eurasia. India Quarterly, 75, 1, 1-14. https://journals.sagepub.com/doi/10.1177/097492841882147 7. https://doi.org/10.1177/0974928418821477.

19. Maurer, H., Whitman, R. G., & Wright, N. (2023). The EU and the Invasion of Ukraine: a collective responsibility to act? International Affairs, 99, 1, 219-238, https://academic.oup.co m/ia/article/99/1/219/6967342.

https://doi.org/10.1093/ia/iiac262.

20. Mia, Md. T., Islam, M., Sakin, J., & Al- Hamadi, J. (2022). The role of community participation and community-based planning in sustainable community development. Asian People Journal (APJ), 5, 1, 31-41. https://journal.unisza.edu.my/apj/ind ex.php/apj/article/view/296. https://doi.org/10.37231/apj.2022. 5.1.296.

21. Nezhyva, M. & Mysiuk, V. (2021). COVID Impact Analysis on the Dynamics of Development of the Cough, Cold, and Allergy Remedies Segment in Ukraine. Business Inform, 7, 522, 281-288. https://doi.org/10.32983/2222-4459-2021-7-281-288.354225929_COVID_Impact_Analysis_on_the_Dynamics_o f_Development_of_the_Cough_Cold_and_Allergy_Remedies_S egment_in_Ukraine.

22. Papageorgiou, K., Singh, P. K., Papageorgiou, E., Chudasama, H., Bochtis, D., & Stamoulis, G. (2020). Fuzzy cognitive map-based sustainable socio-economic development planning for rural communities, Sustainability, 12, 1, 305. https://www.mdpi.com/2071-1050/12/1/305. https://doi.org/10.3 390/su12010305.

23. Smith, E. M., & Thomasson, A. (2018). The Use of the Partnering Concept for Public-Private Collaboration: How Well Does it Really Work? Public Organization Review, 18, 191-206. https://link.springer.com/article/10.1007/s11115-016-0368-9.

https://dx.doi.org/10.1007/s11115-016-0368-9.

24. Sun, Y., Liu, S., & Chen, S. (2022). Fund style drift & stock price crash risk Analysis of the mediating effect based on corporate financial risk. China Finance Review International. https://www.emerald.com/insight/content/doi/10.1108/CFRI-11-2021-0222/full/html.

25. Thellbro, C., Bjärstig, T., & Eckerberg, K. (2018). Drivers for public-private partnerships in sustainable natural resource management-lessons from the Swedish mountain region. Sustainability, 10, 3914. https://www.mdpi.com/2071-1050/10/11/3914. https://doi.org/10.3390/su10113914.

26. Zhang, H., & Luo, Y. (2022). Enterprise Financial Risk Early Warning Using BP Neural Network under Internet of Things & Rough Set Theory. Journal of Interconnection Networks, 22, 2145019. https://www.worldscientific.com/doi/10 .1142/S02192659214501.

Primary Paper Section: F

Secondary Paper Section: FQ