

<https://doi.org/10.31891/2307-5740-2025-346-5-36>

УДК 339.727.22(477):322:355

CHERKASHYNA Tetiana

Simon Kuznets Kharkiv National University of Economics

<https://orcid.org/0000-0003-3675-0391>e-mail: t.cherkashyna@outlook.com

THE IMPACT OF FOREIGN DIRECT INVESTMENT ON ECONOMIC GROWTH IN THE CONDITIONS OF SYSTEMIC CRISIS: EMPIRICAL EVIDENCE FROM UKRAINE

The article is devoted to the determining of the quantitative impact of foreign direct investment (by industry affiliation) on economic growth in Ukraine in the conditions of systemic crisis (2019-2023) using multifactor correlation analysis in programming environment MS Excel. In the research as independent variables (or regressors) were chosen the following indicators: the size of foreign direct investment in machinery, the size of foreign direct investment in agriculture, fisheries and forestry, the size of foreign direct investment in the food industry, the size of foreign direct investment in construction, the size of foreign direct investment in metallurgy and metal production, the size of foreign direct investment in wholesale and retail trade and vehicle repair, the size of foreign direct investment in finance and insurance, the size of foreign direct investment in real estate transactions. As dependent variable (or regressand) was chosen the size of gross domestic product of Ukraine. The research consisted of five stages that are the following formation of the input data base (stage 1), selection of the most significant factors for multifactor correlation analysis (stage 2), evaluation of the input data required for multifactor correlation analysis (stage 3), modeling the relationship between input factors and the performance indicator (stage 4), economic interpretation of the results of multifactor correlation analysis (stage 5). As a result, it has been investigated that three factors had the greatest impact on economic growth in Ukraine in 2019-2023. These are size of foreign direct investment in agriculture, fisheries and forestry, size of foreign direct investment in construction and size of foreign direct investment in wholesale, retail trade and repair of motor vehicles. Increase in direct foreign investments in these sectors of Ukrainian economy will accelerate the modernization of production capacities, create new, more flexible management systems, and prepare all the necessary scientific and technological conditions for overcoming the systemic crisis and further structural changes.

Keywords: foreign direct investment (FDI), foreign capital stock, investment attractiveness, economic growth, gross domestic product (GDP), multifactor correlation analysis, regression model.

ЧЕРКАШИНА Тетяна

Харківський національний економічний університет імені Семена Кузнеця

ВПЛИВ ПРЯМИХ ІНОЗЕМНИХ ІНВЕСТИЦІЙ НА ЕКОНОМІЧНЕ ЗРОСТАННЯ В УМОВАХ СИСТЕМНОЇ КРИЗИ: ЕМПІРИЧНІ ДОКАЗИ З УКРАЇНИ

Статтю присвячено визначенню кількісного впливу прямих іноземних інвестицій (за галузевою приналежністю) на економічне зростання в Україні в умовах системної кризи (2019-2023) за допомогою багатофакторного кореляційного аналізу у програмному середовищі MS Excel. У дослідженні у якості незалежних змінних (регресорів) були відібрані наступні показники: обсяг прямих іноземних інвестицій у машинобудування, обсяг прямих іноземних інвестицій у сільське, рибне та лісове господарство, обсяг прямих іноземних інвестицій у харчову промисловість, обсяг прямих іноземних інвестицій у будівництво, обсяг прямих іноземних інвестицій у металургійне виробництво і виробництво металевих виробів, обсяг прямих іноземних інвестицій в оптову та роздрібну торгівлю, ремонт автотранспорту, обсяг прямих іноземних інвестицій у сферу фінансів і страхування, обсяг прямих іноземних інвестицій в операції з нерухомістю. У якості залежної змінної (регресанда) було обрано обсяг валового внутрішнього продукту України. Дослідження було проведено у п'ять етапів: формування масиву вхідних даних (етап 1), відбір найбільш суттєвих для кореляційного аналізу факторів (етап 2), оцінка вихідної інформації, необхідної для кореляційного аналізу (етап 3), моделювання зв'язку між факторами і результативним показником (етап 4), економічна інтерпретація результатів кореляційного аналізу (етап 5). У результаті дослідження було встановлено, що впродовж 2019-2023 рр. найбільший позитивний вплив на економічне зростання в Україні здійснювали такі показники: обсяг прямих іноземних інвестицій у сільське, рибне та лісове господарство; обсяг прямих іноземних інвестицій у будівництво; обсяг прямих іноземних інвестицій в оптову та роздрібну торгівлю, ремонт автотранспорту. Збільшення прямих іноземних інвестицій саме у ці галузі національної економіки України дозволить прискорити модернізацію виробничих потужностей, створити нові, більш гнучкі системи управління та підготувати належні науково-технологічні умови для виходу з системної кризи та подальших структурних змін.

Ключові слова: прямі іноземні інвестиції (ПІІ), іноземний капітал, інвестиційна привабливість, економічне зростання, валовий внутрішній продукт (ВВП), багатофакторний кореляційний аналіз, регресійна модель.

Стаття надійшла до редакції / Received 12.09.2025

Прийнята до друку / Accepted 06.10.2025

STATEMENT OF THE PROBLEM AND ITS RELATIONSHIP WITH IMPORTANT SCIENTIFIC OR PRACTICAL TASKS

One of the key economic problems is attracting of foreign direct investment (FDI) as it allows to use country's resource and industrial potential more efficiently as well as contributes to technological upgrading and modernization of enterprises that, in turn, ensures a positive trend in gross added value (GAV). The study of the impact of foreign direct investment on economic development is very important for recipient countries because it allows to identify

optimal paths for their integration into the global economy, ensuring sustainable development and improving the welfare of a nation. Besides, a deep analysis of such processes contributes to better understanding of the mechanisms of interaction between investors and recipient countries that helps governments to develop effective strategies for attracting foreign direct investment and minimizing existing risks. It explains the need to develop scientifically proved approaches for assessing and modeling the impact of foreign direct investment on the economic development of various countries around the world.

ANALYSIS OF RESEARCHES AND PUBLICATIONS

Many scientists analyzed relationship between FDI and economic growth pace in different groups of countries. For example, G. Vintilă and A.-R. Mocanu [1] using panel EGLS regression models with fixed-effects, and R. Almarik, R. Shaheen and M. Ahmed [2] using cointegration and vector error correction model proved positive impact of FDI on economic development of advanced economies and proposed to support healthy economic growth by tools of fiscal, monetary and social policies. Using vector autoregression (VAR) I. Todorov, T. Tsvetkov, S. Mirchova and K. Durova [3] investigated impact of FDI flows on the economic growth in Central and Eastern European countries and stated that the main factors influencing on economic development in the new EU members are human development index (HDI) and inflation rate but not foreign direct investment. In turn, F. Ebgchaei [4] investigated the link between FDI and GDP in Middle Eastern and North African countries in 1980-2020 using two-factor production function. They revealed that there is close positive relationship between FDI and GDP in Egyptian, Saudi Arabian, Moroccan, Tunisian, Turkish and Yemeni economies but it is not observed the positive effect of FDI on GDP in Jordan and Iran. Besides, A. Bénétrix, H. Pallan and U. Panizza [5] analyzed the quantitative relationship between FDI and GDP in emerging and developing countries and concluded that FDI positively affect on GDP only in countries with sufficiently well-developed financial sectors or high levels of human capital. In other economies FDI don't promote sustainable and inclusive economic growth.

Employing Keynesian economic growth models, vector autoregressive regression (VAR) models and vector error correction model (VECM), some economists analyzed the effect of foreign capital stock on economic growth pace in selected countries, in particular, in the United States (D. Susilo [6]), India (M. Rashid, S. Ansari, A. Khan and M. Amir [7]), China (X. Du, H. Zhang, Y. Han), Vietnam (H. Nguyen [8], K. Nguyen [], Q. Nguyen, N. Trinh), Tajikistan (M. Abduvaliev), Kenia (N. Mose [9], E. Kipchirchir [9]), Tanzania (H. Utouh [10], E. Mchukwa [10], R. Tibuhinda [10], N. Mwitta), Nigeria (J. Ukangwa, V. Ikechi), etc.

There are also publications devoting to the analysis of the impact of types of investment on GDP. It mostly tells about positive effect of foreign investment in perspective infrastructure projects or renewable energy on economic development [11-13]. In particular, A. Nassani, M. Imran, K. Zaman, H. Khan and M. Hafar [11] determined renewable energy investments, trade policies and technological innovation as key drivers of accelerating economic growth in European and central Asian countries.

It should be noted that scientific articles relating to the analysis of the impact of FDI on economic growth in Ukraine also exist. With the help of regression analysis, I. Babets in [14] proved the need of increasing both the total size of FDI and the size of investment involved in high-tech industries. M. Bida [15] compared the role of FDI in Ukraine, EU countries and selected non-EU economies. Bida found the higher impact of FDI on GDP in Ukraine than in other analyzed countries that is explained by lower level of diversification of Ukrainian economy and higher sensitivity to external economic shocks. However, researches conducted by S. Loza [16], N. Nechaeva [17], T. Oriekhova and A. Svirhun [18] are mostly analytical so they don't allow to determine quantitative impact of FDI on economic environment in Ukraine. It is caused the need to deep methodological tools for finding the quantitative relationship between FDI and economic growth at national level.

HIGHLIGHTING OF UNRESOLVED PARTS OF THE GENERAL PROBLEM TO WHICH THE ARTICLE IS DEDICATED

Despite on the significant number of publications, studies devoting to determining of the quantitative impact of foreign direct investment on economic growth in Ukraine are insufficient. This necessitates further research in that area.

FORMULATION OF THE AIM OF RESEARCH

The aim of current research is to determine the quantitative impact of foreign direct investment (by industry affiliation) on economic growth in Ukraine in the conditions of systemic crisis (2019-2023) using multifactor correlation analysis.

PRESENTATION OF THE MAIN RESEARCH MATERIAL

The determining of the quantitative impact of foreign direct investment (by industry affiliation) on economic growth in Ukraine in the conditions of systemic crisis was carried out using multifactor correlation analysis in programming environment MS Excel (module «Data - Data Analysis») (Fig. 1). The research period was 5 years (from 2019 to 2023).

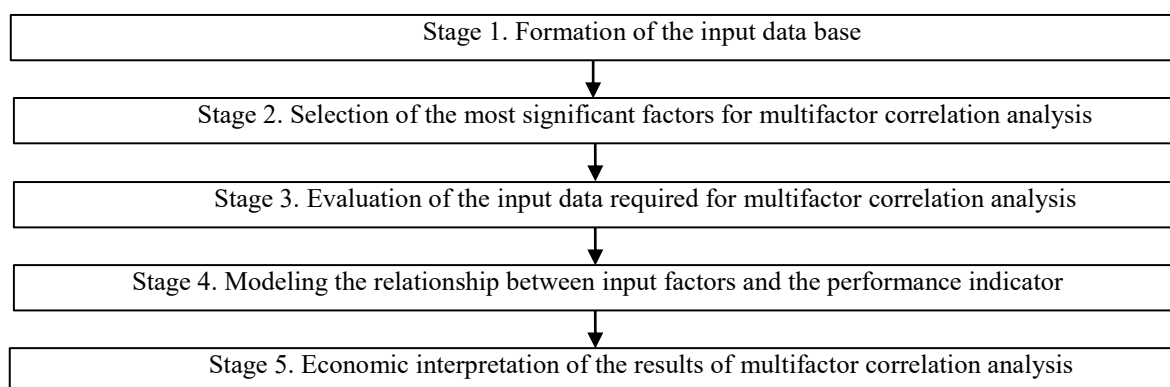


Fig. 1. Stages of determining the quantitative impact of foreign direct investment on the dynamics of economic growth in Ukraine in the conditions of systemic crisis using multifactor correlation analysis

At the beginning of the research a matrix of input data characterizing the dynamics of foreign direct investment (by industry affiliation) and GDP of Ukraine during 2019-2023 was generated (Table 1). In the research as independent variables (or regressors) were chosen the following indicators: the size of foreign direct investment in machinery (x_1), the size of foreign direct investment in agriculture, fisheries and forestry (x_2), the size of foreign direct investment in the food industry (x_3), the size of foreign direct investment in construction (x_4), the size of foreign direct investment in metallurgy and metal production (x_5), the size of foreign direct investment in wholesale and retail trade, and vehicle repair (x_6), the size of foreign direct investment in finance and insurance (x_7), the size of foreign direct investment in real estate transactions (x_8). As dependent variable (or regressand) was chosen the size of gross domestic product of Ukraine.

Table 1
Input data for determining the quantitative impact of foreign direct investment on the dynamics of economic growth in Ukraine

Indicator	Years				
	2019	2020	2021	2022	2023
Size of gross domestic product of Ukraine, mln US dollars	153 781	155 582	199 770	161 990	178 760
Size of foreign direct investment in machinery, mln US dollars	1 089.9	1 219.6	1 415.8	1 018.5	1 099.8
Size of foreign direct investment in agriculture, fisheries and forestry, mln US dollars	1 489	1 638.2	3 004	2 792.4	3 416.6
Size of foreign direct investment in the food industry, mln US dollars	4 174.9	3 699.9	4 147.5	3 394.6	3 872.2
Size of foreign direct investment in construction, mln US dollars	885.3	1 029.4	1 169.9	811	993.9
Size of foreign direct investment in metallurgy and metal production, mln US dollars	3 992.8	3 461	4 374.8	2 643.7	2 509.3
Size of foreign direct investment in wholesale and retail trade, and vehicle repair, mln US dollars	7 582,3	8 271,2	10 188	8 324.8	9 525.6
Size of foreign direct investment in finance and insurance, mln US dollars	5 226,8	4 834,2	5 945,4	3 860,6	4 631,4
Size of foreign direct investment in real estate transactions, mln US dollars	5 355,3	4 923,4	5 031,1	3 728,6	3 994
Size of foreign direct investment in real estate transactions, mln US dollars	24 413,3	23 014,3	30 469,8	24 412,5	24 908

In order to conduct the second and third stages of the correlation analysis, the indicators of multiple correlation and pairwise correlation were calculated. According to the calculated coefficients of correlation, it should be excluded for further research the following indicators: size of foreign direct investment in the food industry (x_3), size of foreign direct investment in metallurgy and the production of metal products (x_5), size of foreign direct investment in real estate transactions (x_8) as they had a low impact on the size of GDP of Ukraine in 2019-2023 ($r_{xy} < 0.5$). The factors included in this model are size of foreign direct investment in agriculture, fisheries and forestry (x_2), size of foreign direct investment in construction (x_4) and size of foreign direct investment in wholesale, retail trade and repair of motor vehicles (x_6) which have a significant impact on the size of GDP of Ukraine ($r_{xy} > 0.74$) but correlate miserably with each other ($r_{xx} < 0.85$) (Fig. 2).

After selection of factors and estimation of the input data the nature was studied and the relationship between the factors and the performance indicator was modeled (Fig. 3). As shown from Fig. 3, the value of the coefficient of determination in the models equals 0.9856 that indicates on the following fact. Built regression explains 98.56% of the variance of GDP dynamics of Ukraine and the obtained model is statistically significant.

	A	B	C	D	E	F	G	H	I	J
1		Y	X1	X2	X3	X4	X5	X6	X7	X8
2	Y	1								
3	X1	0,70451	1							
4	X2	0,74611	0,09968	1						
5	X3	0,3806	0,52775	-0,144	1					
6	X4	0,74428	0,94514	0,23637	0,53211	1				
7	X5	0,2653	0,73072	-0,4278	0,74999	0,54838	1			
8	X6	0,96699	0,65992	0,80535	0,24052	0,76159	0,09051	1		
9	X7	0,55108	0,84396	-0,1128	0,89465	0,79348	0,89056	0,42881	1	
10	X8	-0,0441	0,5373	-0,6762	0,7714	0,42459	0,90575	-0,1742	0,80625	1
11										

Fig. 2. Results of correlation analysis of determining the quantitative impact of foreign direct investment on the dynamics of economic growth in Ukraine

RESULTS

Regression Statistics	
Multiple R	0,9927706193415
R-squared	0,9855935026277
Normalized R-squared	0,9423740105107
Standard error	4645,6562808455
Observations	5

Analysis of variance					
	df	SS	MS	F	Significance of F
Regression	3	1476500424,92024	492166808,307	22,80437493	0,1524554728541
Balance	1	21582122,2797587	21582122,2798		
Total	4	1498082547,2			

	Coefficients	Standard error	T-statistics	P-Value	Lower 95%	Higher 95%	Lower 95%	Higher 95%
Y-intersection	-106787,36642483	67393,9485391435	-1,5845245566	0,358402142	-963108,67454241	749533,941693	-963108,6745424	749533,9416927
X2	-44,378405923955	23,7312753163363	-1,870038813	0,312617401	-345,91284874385	257,156036896	-345,9128487439	257,1560368959
X4	-244,78870453458	134,822355920518	-1,8156388298	0,320496321	-1957,8691618741	1468,2917528	-1957,869161874	1468,291752805
X6	71,274030236303	28,9542536207184	2,46160827248	0,245654242	-296,62464425167	439,172704724	-296,6246442517	439,1727047243

Fig. 3. Results of regression analysis of determining the quantitative impact of foreign direct investment on the dynamics of economic growth in Ukraine

The obtained equation of the correlation-regression of dependence of GDP of Ukraine on the size of foreign investments (by industry affiliation) is described as:

$$Y = -106787,37 - 44,38x_2 - 244,79x_4 + 71,27x_6 \quad (1)$$

Thus, the author's hypothesis about the positive link between the dynamics of foreign direct investment (by industry affiliation) and GDP of Ukraine was confirmed and deepened. In other words, size of foreign direct investment in agriculture, fisheries and forestry (x_2), size of foreign direct investment in construction (x_4) and size of foreign direct investment in wholesale, retail trade and repair of motor vehicles (x_6) had the greatest impact on economic growth in Ukraine in 2019-2023.

As for the flow of investments in agriculture, forestry and fisheries of Ukraine, they only did not decrease but even increased comparing with pre-war times (from 1 489 mln US dollars in 2019 to 1 489 mln US dollars in 2023). Nowadays Ukraine is already a major exporter of wheat to the EU countries but due to its geographic location and Ukrainian chernozems there is the potential to grow many other agricultural crops in Ukraine. Besides, modern farm enterprises producing animal products and engage in gardening successfully develop in Ukraine. Therefore, investments in agriculture, forestry and fisheries of Ukraine will always yield profit. At the same time, despite the great potential of this sector for investors, it is observed an actual problem that is soil degradation. Maximizing production efficiency without properly considering the conditions for maintaining soil fertility in the future may lead to a decline in the fertility of chernozems. Close attention should be paid to soil pollution due to the war: according to estimates by the Ministry of Environmental Protection and Natural Resources of Ukraine more than 5 million hectares of agricultural land are contaminated. It is important for investors to take these factors into account and become guarantors of maintaining ecological safety in the agro-industrial complex [20, p. 260-264].

As for the wholesale and retail trade sector, along with automotive repair in Ukraine, it is the second most attractive for foreign investors after the industry that is explained by the following facts. From one hand, trading activities are the most common form of entrepreneurial activity in Ukraine and, from the other hand, starting in trade business does not require large financial investments. From the consumers' viewpoint, domestic and foreign trade are extremely important as they provide access to a wide range of goods and services that meet human needs. For these

reasons, direct foreign investments in wholesale, retail trade and repair of motor vehicles can lead to the modernization of infrastructure, improvements in logistics and the implementation of new business models in Ukraine in the conditions of systemic crisis.

The third industry that had a significant impact on GDP of Ukraine during 2019-2023 was construction. Despite on number of risks (instability of the timelines for the commissioning of buildings, high size of initial capital), construction was very profitable industry until 2022. Now analysts are noting an increase in the supply and demand for commercial franchises (restaurants, fast foods, industrial zones), co-living spaces (similar to hostels with investments, at least, \$10 000) and residential real estate through crowdfunding and corporate ownership ('buying a share') [16; 17; 20]. The increase in the number of small investors will indicate on increase in the level of investment institution culture and extend the return periods of projects. It should be added that new investment trends in the real estate market will play a significant role in the post-war recovery and reconstruction of Ukraine.

The size of foreign direct investments in metallurgical production and production of metal products impacted insignificantly on economic growth in Ukraine from 2019 to 2023. Despite on the fact that the metallurgical industry is one of the «budget-forming» and export-oriented sectors of the Ukrainian economy, the growth of metallurgical products in the structure of commodity exports indicates the dominance of low-tech industries in that industry and, as a result, the low innovativeness of the realized goods. Such approach conserves structural imbalances in Ukrainian economy, complicates the transfer of investment resources to more progressive types of economic activities and deepens lag of Ukraine behind advanced countries.

The food industry is one of the strategic sectors of the Ukrainian economy that ensures the country's food security and also has a minor positive impact on economic growth in Ukraine. The food industry is characterized by a quick return on investment, a wide base of agricultural raw materials for the production of food, beverages and tobacco products. Due to high domestic demand and low price elasticity for food products in Ukraine, enterprises in this sector are less dependent on fluctuations in global commodity markets. However, relative to other sectors, the food industry has not become a factor for economic growth in comparison to other industries. The reasons for this may include limited export potential, especially in wartime conditions, low added value that cannot ensure a high level of economic growth, or a complex system of state regulation that hinders the sector's ability to adapt to market conditions.

CONCLUSIONS FROM THE RESEARCH AND PROSPECTS FOR FURTHER EXPLORATIONS

Summarizing the results of the built multifactor correlation-regression model, it can be concluded the following. Firstly, the main reserve for recovery and acceleration of economic growth in Ukraine is the financial support of the development of construction that is undoubtedly the driving force of scientific and technical progress in a market economy and a necessary precondition for the technical and technological renewal of other sectors. The proclaimed course towards European integration requires aligning Ukrainian standards for both production and construction with European ones which necessitates additional capital investments in the fixed capital of this sector. Secondly, foreign direct investment in agriculture, fisheries and forestry has the significant impact on economic growth of Ukraine that is quite expected as there are all the necessary conditions for the successful development of this sector in Ukraine (favorable natural and climatic conditions, fertile lands, strong production potential). However, the unfounded state policy of reforming the agricultural sector and the lack of a developed infrastructure for the agricultural product market led to a prolonged crisis in this industry and put Ukrainian food security at risk. Serious incentives for foreign investors should be higher profitability of this industry in Ukraine comparing with other countries around the world, quick returns of agricultural production as well as cheap labor and underdeveloped market of goods and services. Thirdly, foreign and domestic trade require support from investors. Creating favorable conditions for attractiveness of direct foreign investments in wholesale, retail trade and repair of motor vehicles can lead to the modernization of infrastructure, improvements in logistics and the implementation of new business models in Ukraine in the conditions of systemic crisis. As a whole, the conducted correlation-regression analysis confirms the author's opinion that the modernization of production capacities and the creation of new, more flexible industries will accelerate adaptation of Ukrainian economic system to scientific and technological advance.

Further investigations will be devoted to formation of practical recommendations how to attract foreign direct investment in construction as a key driver of Ukrainian economy in post-war recovery.

References

1. G. Vintilă, A.-R. Mocanu. G20 Member Countries and their FDI's Potential to Influence the Economic Growth - Econometric Evidence Revealing a Positive Effect. *Journal of Economics Studies and Research*. 2024. Vol. 2024. PP. 1-9.
2. Almarik R., Shaheen R. & Ahmed M. The impact of foreign direct investment on economic growth: Empirical evidence in G20 countries. *International Journal of Advanced and Applied Sciences*. 2024. Vol. 11. No. 10. PP. 90-98.
3. Todorov I., Tsvetkov T., S. Mirchova & K. Durova. Impact of foreign direct investment on the economic growth of the new member states from Central and Eastern Europe. *Ekonomski Pregled*. 2022. Vol. 73. No. 6. PP. 847-880.
4. Ebghaei F. The Impact of Foreign Direct Investment on Economic Growth in the MENA Region. *İzmir İktisat Dergisi*. 2023. Vol. 38. No. 2. PP. 321-335.
5. Bénétrix A., Pallan H. & Panizza U. The Elusive Link Between FDI and Economic Growth Policy. Prospects Group. World Bank Group. Research Working Paper 10422. 2023. 52 P.
6. D. Susilo. The Impact of Foreign Direct Investment on Economic Growth (a Causal Study in the United States). *BISE: Jurnal Pendidikan Bisnis dan Ekonomi*. 2018. Vol. 4 No. 1. PP. 72-85.

7. Rashid M., Ansari S., Khan A. & Amir M. The Impact of FDI and Export on Economic Growth in India: An Empirical Analysis. *Asian Journal of Economics, Finance and Management*. 2023. Vol. 9. Issue 2. PP. 33-41.
8. Nguyen K., Nguyen H. T. The Impact of Investments on Economic Growth: Evidence from Vietnam. *Journal of Asian Finance, Economics and Business*. 2021. Vol. 8. No 8. PP. 345-353.
9. Mose N., & Kipchirchir E. Foreign Direct Investment and Economic Growth in Kenya: A Comprehensive Analysis. *Asian Journal of Economics, Business and Accounting*. 2024. Vol. 24. Issue 2. PP. 1-13.
10. Utouh H., Mchukwa E. & Tibuhinda R. N. The Effects of Foreign Direct Investment on Economic Growth (Gross Domestic Product) in Tanzania. *Economic Insights – Trends and Challenges*. 2024. Vol. 13 No. 2. P. 89- 100.
11. Nassani A., Imran M., Zaman K., Khan H. & Hafar M. Financial integration and economic growth: impact of renewable energy investments, technology transfer, and climate change on Europe and central Asian economies. *Financial Innovation*. 2025. Vol. 11. Issue 41.
12. Ibrahimov Z., Hajiyeva S., Seyfullayev I., Mehdiyev U. & Aliyeva Z. The impact of infrastructure investments on the country's economic growth. *Problems and Perspectives in Management*. 2023. Vol. 21. Issue 2. PP. 415-425. doi:10.21511/ppm.21(2).2023.39
13. Hoa P. X., Xuan V. N., Thu N. T., & Huong L. M. Nexus of innovation, foreign direct investment, economic growth and renewable energy: New insights from 60 countries. *Energy Reports*. 2024. Issue 11. PP. 1834- 1845.
14. Babets I. Modeliuvannia vplyvu priamykh inozemnykh investytsii na ekonomiku Ukrainy v umovakh povoiennoi vidbudovy. Herald of Khmelnytskyi National University. 2023. No 1 (80). C. 131-143.
15. Bida M. B. Modeliuvannia vplyvu priamoho inozemnoho investuvannia na ekonomichniy rozvytok krain. Biznes-Inform. 2024. № 8. C. 165-174.
16. Loza S. Investuvannia v Ukraini: osnovni tendentsii, problemy ta perspektyvy aktyvizatsii. Visnyk Khmelnytskoho natsionalnoho universytetu. Ekonomichni nauky. 2022. № 2. Tom 2. C. 297-306.
17. Nechaeva N. Vidnovlennia PII: hlobalni perspektyvy ta mozhlyvosti dlia Ukrainy. Acta Academiae Beregsiensis. Economics. 2024. Volume 5. Vypusk 5. PP. 132-144.
18. Oriekhova T., Svirhun A. The influence foreign investments on economic growth. *Економіка і організація управління*. 2023. № 4 (52). PP. 40-48.
19. Derzhavna statystyka Ukrainy [Elektronnyi resurs]. URL: <https://www.ukrstat.gov.ua/> (data zvernennia: 21.06.2025)
20. Lebedenko O. V. Rozvytok aharnoho rynku v konteksti zabezpechennia natsionalnoi bezpeky derzhavy [Transformatsiia ekonomiky Ukrainy v umovakh hlobalnykh vyklykiv: aktualni problemy, suchasni realii, stratehii rozvytku: monohrafiia / za zah. red. L. M. Kurbatskoi]. Dnipro: HRANI, 2022. C. 254-268.