DOI: http://doi.org/10.31617/1.2025(164)04
UDC 339.13:330.322]:331.17=111

TELNOVA Hanna
https://orcid.org/0000-0002-5724-7229

Doctor of Sciences (Economics), Associate Professor, Professor of the Department of Economics Competition Policy
State University of Trade and Economics
19, Kyoto St., Kyiv, 02156, Ukraine
g.telnova@knute.edu.ua

MARKET CONCENTRATION AND INNOVATION ACTIVITY: A STATISTICAL ANALYSIS

The article investigates the relationship between market concentration and innovation activity across sectors of the Ukrainian economy using modern analytical tools. The aim of the research is to identify and quantitatively assess the causal links between market concentration, enterprise profitability, and the level of innovation activity. The analytical base includes data from 33 sectors of the national economy. In the first stage, methods of cluster analysis, regression modeling, mutual information, and Bayesian networks were applied to identify potential causal relationships, followed by the construction of a structural equation model with direct and indirect effects. The results show that market concentration has a negative direct impact on sectoral innovation activity, while indirect channels through profitability and return on assets are statistically insignificant. This indicates that increased competition stimulates innovation development, whereas excessive concentration suppresses innovation. The nonlinear (U-shaped) relationship between concentration and innovativeness was not confirmed. The practical significance of the research lies in the possibility of using the results to improve competition and innovation policies, design cluster development strategies, and identify sectors with the greatest potential for innovation stimulation.

Keywords: industry, market concentration, innovative activity, profitability, factor.

ТЕЛЬНОВА Ганна
https://orcid.org/0000-0002-5724-7229

д. е. н., доцент, професор кафедри економічної теорії та конкурентної політики
Державного торговельно-економічного університету
вул. Кіото, 19, м. Київ, 02156, Україна
g.telnova@knute.edu.ua

РИНКОВА КОНЦЕНТРАЦІЯ ТА ІННОВАЦІЙНА АКТИВНІСТЬ: СТАТИСТИЧНИЙ АНАЛІЗ

Викладено результати дослідження взаємозв'язку між рівнем ринкової концентрації та інноваційною активністю галузей економіки України з використанням сучасного інструментарію. Метою дослідження є виявлення та кількісна оцінка причинно-наслідкових зв'язків між концентрацією ринку, прибутковістю підприємств і рівнем інноваційної діяльності. Аналітичну базу становлять дані 33 галузей національної економіки. Застосовано методи кластерного аналізу, регресійного моделювання, взаємної інформації та байєсівських мереж для виявлення потенційних каузальних зв'язків, а також побудовано модель структурних рівнянь із прямими та опосередкованими ефектами. Отримані результати показали, що ринкова концентрація має негативний прямий вплив на інноваційну активність галузей, тоді як опосередковані канали через прибутковість і рентабельність є статистично незначущими. Це свідчить про те, що підвищення конкуренції стимулює інноваційний розвиток, зокрема надмірна концентрація пригнічує інновації. Нелінійний (U-подібний) зв'язок між концентрацією та інноваційністю не підтвердився. Практичне значення дослідження полягає у можливості використання результатів для удосконалення конкурентної та інноваційної політики, формування кластерних стратегій і визначення секторів з потенціалом для стимулювання інновацій.

Ключові слова: галузь, ринкова концентрація, інноваційна активність, прибутковість, фактор.

JEL Classification: L10, L11, L60, O31.

Introduction

The scientific discussion on the impact of market concentration on the innovative activity of companies does not lose its relevance. Experts consider the issue of the relationship between the level of competition and innovation, the rationality of innovation in certain market structures, the feedback effect of innovation on the dynamics and structure of markets, and factors stimulating innovative activity. OECD publications (OECD, 2023) state that competition policy plays a key role in stimulating innovation and its driving factors. However, fundamental theories also support the thesis that high concentration can both stimulate the development of new technologies due to the available resources of large companies and restrain them by reducing competition. Establishing a statistically proven relationship between market concentration in industry markets and innovation activity is a particularly important scientific and practical task for substantiating the state policy of Ukraine on stimulating innovation, antitrust policy, and strategic planning for the development of domestic enterprises in the context of macroeconomic stabilization and post-conflict economic recovery.

According to Schumpeter (1942), in monopoly markets, large companies have comparatively better resources to finance innovation. Further scientific discussion has led to the conclusion that monopoly can reduce the incentives for innovative activity, since an individual company does not have competitive pressure (Arrow, 1962; Nelson & Winter, 1982). More recent empirical studies establish an inverse relationship between the level of competition and innovation and substantiate the thesis that moderate competition contributes to maximum innovative activity (Aghion et al., 2005). Scholars Ali et al. (2025) prove that in highly concentrated markets, companies tend to prefer short-term innovation policies due to the limited number of entities that compete aggressively to increase or maintain their market share. In support of Schumpeter's (1942) concept, but with a different justification, it has been proposed that industry sectors with increasing concentration tend to attract a large share of researchers with a simultaneous decrease in research and development productivity (Manera, 2022). At the same time, in studies by foreign scholars (Wang et al., 2025; Ma & Li, 2025), market competition is indicated as a key or indirect factor for enhancing the innovative activity of enterprises with the motive to maintain or expand their market share.

National authors emphasize the mutual influence of competition and innovative activity, emphasizing that in competitive markets, innovative activity increases due to the desire for competitive advantages, and the intensification of innovative activity contributes to increased competition (Ivanova, 2020; Mazaraki & Melnyk, 2010; Motyakin & Bilotserkivets, 2025; Umantsiv, 2023).

Given the significant theoretical achievements of foreign and national scientists, the relationship between market concentration and innovative activity in the sectors of the Ukrainian economy remains fragmentary and requires empirical (economic and statistical) research.

The aim of the research is to identify and quantify the cause-and-effect relationships between the level of market concentration (CR_4) and innovative activity in the sectors of the Ukrainian economy.

The hypotheses of the research are:

H1: increased competition in the industry stimulates innovative activity, since companies strive to maintain market share.

H2: there is a nonlinear (U-shaped) relationship between concentration and innovative activity: innovations grow with moderate concentration, but fall with excessive monopolization.

H3: the impact of market concentration on innovative activity differs by sector of the economy depending on resource potential and financial attractiveness (profitability indicators).

The methodology for testing the above hypotheses is based on the following thesis. Based on statistical data on the share of innovatively active enterprises by industry, the share of profitable enterprises, the level of operating profitability (State Statistics Service of Ukraine, 2025) and the calculated level of market concentration (based on data from the Rating of Companies "Top 1000" (2025) for 2024), a multidimensional cluster analysis was conducted (hierarchical – to determine the number of clusters and K-means – for more accurate clustering), the result of which is the formation of typical characteristics of classes of industries of the Ukrainian economy by indicators of market concentration, profitability and innovative activity, which will allow identifying the general provisions of hypotheses H1 and H3.

It is proposed to formulate statistical relationships using correlation analysis, linear (1) and nonlinear (2) regression models:

$$Inn\_act_i = \beta 0 + \beta 1 \cdot CR_{4i} + \beta 2 \cdot Profit\_Q_i + \beta 3 \cdot Prof\_OA_i + \varepsilon_i, \quad (1)$$

$$Inn\_act_i = \beta 0 + \beta 1 \cdot CR_{4i} + \beta 2 \cdot CR_{4i}^2 + \varepsilon_i, \quad (2)$$

where: Inn_acti – share of innovatively active companies in industry i;
CR4i – market concentration (market share of the 4 largest companies by revenue) in industry i;
Profit_Qi – share of profitable companies in industry i;
Prof_OAi – profitability of operating activities in industry i.

The assessment of the significance of factors in the models using the p-value criterion makes it possible to prove the direct linear (1) or inverse (2) impact of market concentration on innovative activity in the sectors of the Ukrainian economy (testing hypotheses H1, H2, H3).

The absence of a confirmed statistical relationship in the models (1, 2) using the p-value criterion necessitates the use of the Mutual Information Matrix to assess nonlinear dependencies and the Bayesian Network method as a way to identify the directions of causal relationships between variables by sector and refine hypotheses. If p-value < 0.05 is established, a direct causal relationship is stated. The methods are implemented in the R environment.

The final confirmation or refutation of the hypotheses put forward is proposed to be carried out on the basis of structural equation modeling (Structural Equation Modeling, SEM). This is a modern statistical approach that combines regression analysis, factor analysis, and causal modeling to evaluate complex systems of relationships between variables. In the context of the analysis of innovative activity and market concentration, SEM will allow us to assess:

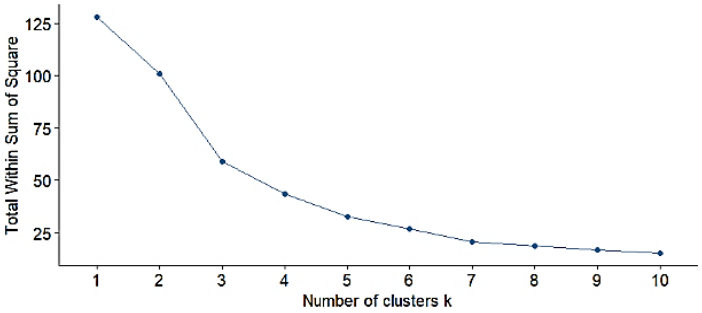
- whether the market structure (CR_4) directly or indirectly affects innovative activity (Inn_act);
- through which variables (the share of profitable companies (Profit_Q) or the profitability of operating activities (Prof_OA) this effect is realized;
- the strength of direct and indirect effects that form the overall effect of concentration on the innovative behavior of enterprises.

SEM combines hypotheses of the theory of innovation and competitive behavior with empirical causal assessment, allowing us to form substantiated recommendations for competitive and innovation policy.

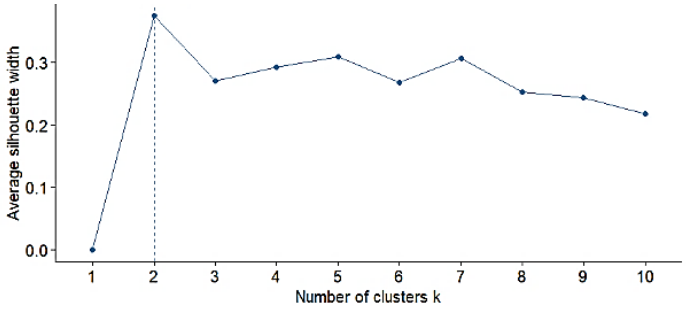
The article has four main analytical blocks, reflecting the stages of empirical research of the relationship between market concentration and innovative activity of sectors of the Ukrainian economy. In the first section, a typology of sectors is carried out by a set of indicators of innovativeness and the level of market concentration. Several stable groups of sectors are obtained, which differ in the level of competitiveness and innovative activity, which makes it possible to outline potential structural patterns of development. The second section is aimed at quantitatively assessing linear and nonlinear dependencies between market concentration and innovative activity. In the third, an approach is applied that allows to identify potential causal relationships without assuming linearity: a mutual information matrix and Bayesian network algorithms for constructing a directed graph of dependencies between key indicators. The fourth section contains a structural equation model in the study of innovative activity in the sectors of the Ukrainian economy, which deepens the previous analysis, allowing to assess direct and indirect effects between variables.

1. Cluster analysis of Ukraine's economic sectors based on indicators of innovation activity and market concentration

Conducting a hierarchical cluster analysis based on the formed database of 33 sectors of the Ukrainian economy showed the feasibility of creating six clusters (with seven clusters, the statistical indicators turned out to be worse) (*Figure 1*).



a) jump method



b) silhouette method

Figure 1. Determining the optimal number of clusters of Ukraine's economic sectors

Source: compiled by the author in R based on data from the State Statistics Service of Ukraine (2025) and the calculated level of market concentration based on data from the Top 1000 Companies Rating (2025).

The diagram of clusters of Ukraine's economic sectors based on hierarchical analysis is shown in *Figure 2*.

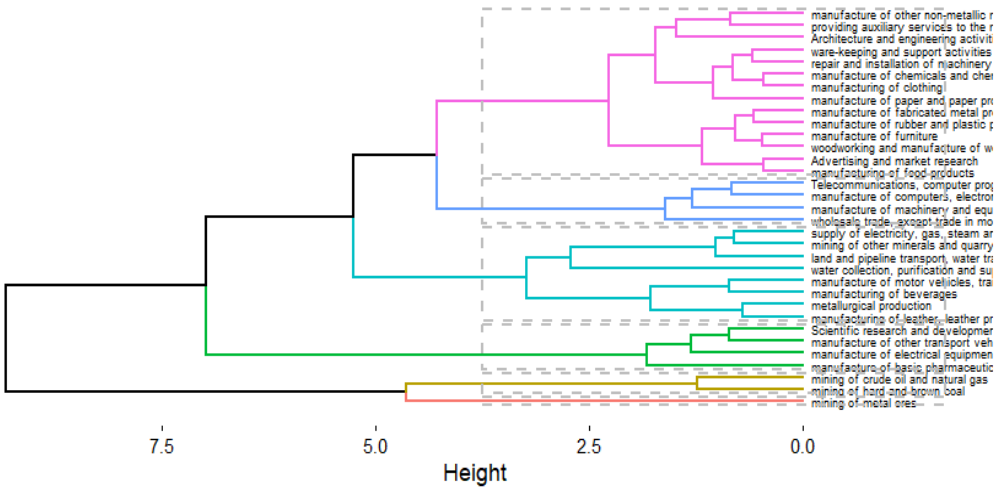


Figure 2. Diagram of clusters of Ukraine's economic sectors based on hierarchical analysis

Source: compiled by the author in R based on data from the State Statistics Service of Ukraine (2025) and the calculated level of market concentration based on data from the Top 1000 Companies Rating (2025).

Statistical parameters of clustering using the K-means method (*Table 1*) demonstrate that the clusters are separated, but not very clearly and some objects may be "on the border" between the clusters (the value of the average silhouette width is 0.33, Calinski-Harabasz Index ≈ 22.19).

Table 1

Average values of the studied indicators
of Ukraine's economic sectors by clusters

Clusters	Number of sectors	mean_CR_4	mean_Profit_Q	mean_Prof_OA	mean_Inn_act
1	16	22.7	72.3	7.2	13.4
2	4	22.1	71.5	12.9	45.6
3	2	93.1	45.9	30.6	6.1
4	1	65.3	24.6	6.4	35.3
5	4	14.5	74.5	23.2	15.8
6	6	41.4	60.1	0.5	8.0

Source: compiled by the author in R based on data from the State Statistics Service of Ukraine (2025) and the calculated level of market concentration based on data from the Top 1000 Companies Rating (2025).

The highest innovative activity is observed in clusters 2 (production of basic pharmaceutical products and pharmaceutical preparations, production of electrical equipment, production of other vehicles, scientific research and development) and 4 (mining of metal ores). At the same time, moderate market concentration, a high share of profitable companies and average operating profitability are noted in cluster 2, while cluster 4, represented by only one observation, has high market concentration and insignificant profitability indicators.

The lowest level of innovative activity is in cluster 3 (mining of hard and brown coal, extraction of crude oil and natural gas) and cluster 6 (mining of other minerals and quarrying; production of leather, leather products and other materials; metallurgical production; supply of electricity, gas, steam and conditioned air; water intake, purification and supply; land and pipeline transport, water transport, air transport) with high market concentration, which indirectly confirms hypothesis H1. At the same time, cluster 3 is characterized by high operating profitability, which in a certain way casts doubt on hypothesis H3 and the initial provisions of Schumpeter's (1942) concept regarding the tendency of large companies to finance innovations in a low-competitive market.

Cluster 1 is represented most widely: provision of support services in the field of extractive industry and quarrying; food production; beverage production; clothing production; wood processing and manufacture of wood and cork products, except furniture, manufacture of straw and plant materials for plaiting; paper and paper products production; production of chemicals and chemical products; production of rubber and plastic products; production of other non-metallic mineral products; production of fabricated metal

products, except machinery and equipment; production of motor vehicles, trailers and semi-trailers; furniture production, repair and assembly of machinery and equipment; warehousing and support activities in the field of transport, postal and courier activities; activities in the fields of architecture and engineering, technical testing and research; advertising activities and market research. Market concentration in the industry is average, and the share of profitable companies is high – on a par with cluster 2, however, innovative activity in the indicated industries is significantly lower, which does not provide clear confirmation of hypotheses H1 and H3.

Industries of cluster 5 (manufacture of computers, electronic and optical products; manufacture of machinery and equipment not classified elsewhere; wholesale trade, except trade in motor vehicles and motorcycles; telecommunications (telecommunication), computer programming, consulting and related activities, provision of information services) are characterized by the lowest market concentration and fairly high profitability indicators, but this does not contribute to the growth of innovative activity of companies.

Thus, none of the hypotheses put forward as a result of the cluster analysis of the sectors of the Ukrainian economy has found clear confirmation or refutation.

2. Regression analysis of Ukraine's economic sectors by indicators of innovation activity and market concentration

At the first stage of the regression analysis, a correlation matrix between the indicators was constructed (*Table 2*).

Table 2

Correlation matrix of the studied indicators of Ukraine's economic sectors

Indicators	CR_4	Profit_Q	Prof_OA	Inn_act
CR_4	1.0000000	–0.626616478	0.178499538	–0.20929966
Profit_Q	–0.626616478	1.0000000	0.004377153	0.03360372
Prof_OA	0.178499538	0.004377153	1.0000000	0.10171581
Inn_act	–0.20929966	0.03360372	0.10171581	1.0000000

Source: compiled by the author in R based on data from the State Statistics Service of Ukraine (2025) and the calculated level of market concentration based on data from the Top 1000 Companies Rating (2025).

Correlation analysis shows that a close negative relationship is observed between market concentration and the share of profitable enterprises, i.e., in more concentrated markets. There are fewer profitable companies and vice versa. The main potential dependence that requires research is the negative correlation between CR_4 and innovative activity. Potentially, this means that high market concentration (monopoly) reduces incentives for innovation, which is consistent with the hypotheses put forward. Other factors (profitability) have a weak effect on innovative activity.

The constructed linear model (1) is characterized by a low level of the coefficient of determination ($R^2 = 0.0858$), the absence of a significant linear dependence on market concentration or profitability in general (F-statistic = 0.907, p = 0.4497) and the statistical insignificance of individual factors (*Table 3*).

Table 3

Statistical parameters of linear modeling of the dependence of innovation activity on the studied indicators of Ukraine's economic sectors

Coefficient	Estimate Std.	Error	t-value	p- value
Intercept	34.7110	19.1298	1.814	0.080
CR$_4$	–0.2096	0.1365	–1.536	0.135
Profit_Q	–0.2033	0.2434	–0.835	0.410
Prof_OA	0.2180	0.2386	0.913	0.369

Source: compiled by the author in R based on data from the State Statistics Service of Ukraine (2025) and the calculated level of market concentration based on data from the Top 1000 Companies Rating (2025).

Similarly, the constructed parabolic regression (2) did not show statistical significance: $R^2 = 0.045$, p = 0.505, both coefficients CR4 and $CR4^2$ are insignificant (*Table 4*), which indicates the rejection of hypothesis H2 about a U-shaped or inverse relationship between market concentration and innovative activity.

Table 4

Statistical parameters of nonlinear modeling of the dependence of innovation activity on the market concentration of Ukraine's economic sectors

Coefficient	Estimate Std.	Error	t-value	p- value
Intercept	21.41	6.75	3.173	0.0035
CR$_4$	–0.1763	0.3676	–0.48	0.635
CR$_4^2$	0.000581	0.00377	0.154	0.879

Source: compiled by the author in R based on data from the State Statistics Service of Ukraine (2025) and the calculated level of market concentration based on data from the Top 1000 Companies Rating (2025).

Thus, regression analysis of cross-sectoral data of 33 sectors of the Ukrainian economy for 2024 showed that the level of concentration and profitability indicators are not statistical predictors of the innovative activity of domestic companies.

3. Mutual information matrix and causal graph method in the study of innovation activity

The analysis conducted and the mutual information matrix formed in the R environment (*Figure 3*) demonstrate a weak relationship between market concentration and the number of profitable companies and operating profitability, between operating profitability and innovativeness, a more noticeable relationship between innovative activity and the number of

profitable firms, and practically no relationship between concentration and the level of innovative activity. The greatest relationship is noted between the share of profitable companies in the industry, the profitability of companies, and operating profitability.

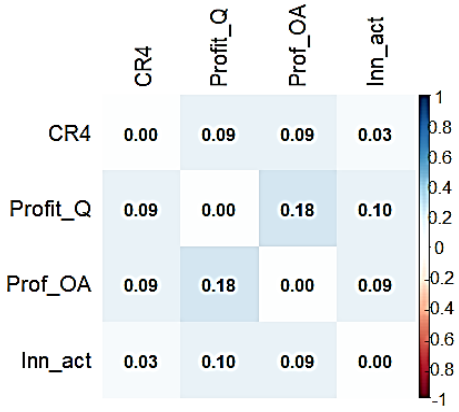


Figure 3. Matrix of mutual dependencies of indicators of innovation activity in Ukraine's economic sectors

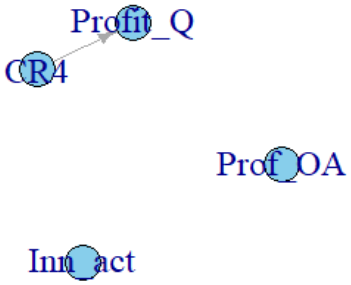


Figure 4. Causal relationships between indicators of innovation activity in Ukraine's economic sectors

Source: Figure 3; 4 compiled by the author in R based on data from the State Statistics Service of Ukraine (2025) and the calculated level of market concentration based on data from the Top 1000 Companies Rating (2025).

The results of causal analysis, as well as correlation analysis, confirm the presence of only individual, mostly weak statistical relationships between indicators of market structure, profitability and innovative activity of industries. This indicates the complex, multifactorial nature of innovation processes, where the direct impact of market concentration on innovativeness is not decisive. At the same time, the identified causal relationship between concentration and profitability indicates a possible indirect mechanism of action of market power through financial resources that can be directed to innovative development. This configuration of relationships creates the basis for further construction of a structural equation model (SEM), which will allow assessing the direct and indirect effects between the key determinants of innovative activity.

4. Structural equation model in the study of innovation activity in Ukraine's economic sectors

The structural equation model was constructed to identify the direct and indirect effects of market concentration, profitability and efficiency of enterprises on the level of innovation activity of sectors of the Ukrainian economy. The SEM method combines the properties of factor and regression analysis, which allows simultaneously assessing latent (hidden) and observed variables, as well as checking complex systems of relationships between them.

The structural model assumes that the level of market concentration (CR_4) acts as a basic exogenous variable that affects both directly and indirectly – through the share of profitable enterprises (Profit_Q) and operating profitability (Prof_OA). The model reflects hypothesis H3 that higher market concentration forms a specific competitive environment that can change incentives for innovation through the financial capacity of the sector.

The obtained standardized coefficients confirm the dominance of the direct negative impact of CR_4 on innovative activity ($\beta = -0.36$; $p = 0.10$), which is at the threshold of statistical significance $\alpha = 10\%$ (*Table 5*).

Table 5

Statistical parameters of the structural equation model of innovation activity in Ukraine's economic sectors

Direct and indirect impact	β	p-value
$CR_4 \rightarrow$ Profit_Q	–0.627	0.000
$CR_4 \rightarrow$ Prof_OA	+0.298	0.170
Profit_Q → Prof_OA	+0.191	0.378
Prof_OA → Inn_act	+0.167	0.330
Profit_Q → Inn_act	–0.193	0.373
$CR_4 \rightarrow$ Inn_act	–0.360	0.101
ind1 ($CR_4 \rightarrow$ Profit_Q → Prof_OA → Inn_act)	–0.02	0.518
ind2 ($CR_4 \rightarrow$ Profit_Q → Inn_act)	–0.10	0.34
ind3 ($CR_4 \rightarrow$ Prof_OA → Inn_act)	+0.05	0.43
total_ind (total indirect)	–0.075	0.37
total (direct + indirect)	–0.434	0.085

Source: compiled by the author in R based on data from the State Statistics Service of Ukraine (2025) and the calculated level of market concentration based on data from the Top 1000 Companies Rating (2025).

Indirect paths through financial variables turned out to be weak and statistically insignificant (total_ind = –0.075; p = 0.37). Despite the statistically insignificant indirect effect through profitability, the overall effect of the level of market concentration on innovative activity remains negative (total effect = –0.434; p = 0.085), which indicates a tendency to decrease innovative dynamics with increasing market monopolization at $\alpha = 0.10$ (10%).

The results obtained are generally consistent with hypothesis H1 regarding the ambivalent role of market concentration in stimulating innovation. On the one hand, high concentration can create a resource base for innovation due to profits and scale of activity. However, according to the data of the domestic economy sectors, excessive market power reduces incentives for innovative activity. The absence of significant indirect effects through profitability and the share of profitable enterprises indicates that

financial results are not a key mediator of innovativeness (rejection of hypothesis H3), instead the structural state of competition is decisive. This is consistent with the concept of innovative competition, according to which dynamic competition, rather than monopolistic stability, is the driver of innovative development. Thus, the structural model confirms that for increasing innovative activity in Ukraine, strengthening the competitive environment is more important than increasing capital concentration.

Conclusions

Thus, the analysis revealed that market concentration has a predominantly negative direct impact on the innovation activity of the sectors of the Ukrainian economy, while indirect channels through the profitability of enterprises and operating profitability are statistically insignificant. This partially confirms hypothesis H1 – increased competition really creates incentives for innovation, and excessive market concentration suppresses their development. Hypothesis H2 about a nonlinear (U-shaped) dependence was not empirically confirmed: the parabolic model did not reveal significant coefficients, which indicates the absence of an optimal level of concentration at which innovation activity would grow. At the same time, a negative impact of market concentration on innovation activity is recorded at the threshold of statistical significance ($p \approx 0.1$).

Regarding hypothesis H3, the results indicate that the strength and direction of the relationship between concentration and innovativeness may differ across sectors depending on their financial stability, but within the framework of the generalized model these differences did not reach statistical significance. Thus, innovation dynamics in Ukraine are formed mainly under the influence of market structure, rather than financial performance of enterprises, which indicates the need to strengthen competition policy as a tool to stimulate innovative development. A promising direction for further research is the integration of dynamic models with time lags to analyze the impact of structural market changes on long-term trajectories of innovative and economic development.

REFERENCE / СПИСОК ВИКОРИСТАНИХ ДЖЕРЕЛ

Aghion, P., Bloom, N., Blundell, R., Griffith, R., & Howitt, P. (2005). Competition and Innovation: an Inverted-U Relationship. *The Quarterly Journal of Economics*, *120*(2), 701–728. https://doi.org/10.1093/qje/120.2.701

Ali, A., Afzal, M. B., & Ahmad, K. (2025). Market Concentration and Innovation Horizon: Evidence from the US Firms. *ACADEMIA International Journal for Social Sciences*, *4*(3), 803–824. https://doi.org/10.63056/ACAD.004.03.0415

Arrow, K. (1962). The Economic Implications of Learning by Doing. *Review of Economic Studies*, (29), 155–173.

Ivanova, V. (2020). Competition and innovative activity as components of the model of intensive economic development. *Bulletin of Postgraduate Education. Series "Social and Behavioral Sciences"*, *12*(41), 124–141. https://doi.org/10.32405/2522-9931/2522-9958-2020-12(41)-124-141	Іванова, В. В. (2020). Конкуренція та інноваційна активність як складові моделі інтенсивного розвитку економіки. *Вісник післядипломної освіти. Серія "Соціальні та поведінкові науки"*, *12*(41), 124–141. https://doi.org/10.32405/2522-9931/2522-9958-2020-12(41)-124-141

Ma, B., & Li, H. (2025). Antitrust laws, market competition and corporate green innovation. *International Review of Economics & Finance*, (97), 103768. https://doi.org/10.1016/j.iref.2024.103768

Manera, A. (2022). *Competing for Inventors: Market Concentration and the Misallocation of Innovative Talent.* https://ssrn.com/abstract=4212815. http://dx.doi.org/10.2139/ssrn.4212815

Mazaraki, A., & Melnyk, T. (2010). Innovation as a source of strategic competitive advantages. *Bulletin of the Kyiv National University of Trade and Economics*, (2), 5–17.	Мазаракі, А., & Мельник, Т. (2010). Інновації як джерело стратегічних конкурентних переваг. *Вісник Київського національного торговельно-економічного університету,* (2), 5–17.
Motyakin, I., & Bilotserkivets, V. (2025). Global competition as a factor of innovative development. *Investments: practice and experience*, (9), 54–62. https://doi.org/10.32702/2306-6814.2025.9.54	Мотякін, І. В., & Білоцерківець, В. В. (2025). Глобальна конкуренція як фактор інноваційного розвитку. *Інвестиції: практика та досвід*, (9), 54–62. https://doi.org/10.32702/2306-6814.2025.9.54

Nelson, R. R., & Winter, S. G. (1982). *An Evolutionary Theory of Economic Change*. Cambridge, MA: Harvard University Press.

OECD. (2023). *Competition and Innovation: A Theoretical Perspective*, *OECD Competition Policy Roundtable Background Note*. www.oecd.org/daf/competition/competition-and-innovation-atheoretical-perspective-2023.pdf.

Schumpeter, J. (1942). *Capitalism, Socialism, and Democracy*. New York: Harper & Bros.

State Statistics Service of Ukraine. (2025). https://www.ukrstat.gov.ua/operativ/oper_new.html	*Державна служба статистики України*. (2025). https://www.ukrstat.gov.ua/operativ/oper_new.html
Top 1000 companies ranking. (2025). https://top-1000.com.ua/	*"Top-1000" Рейтинг компаній*. (2025). https://top-1000.com.ua/
Umantsiv, Yu. M. (2023). Transformational processes in the economy in the context of global competition: the digital dimension. *Economic theory and law*, (2), 75–84. https://doi.org/10.31359/2411-5584-2023-53-2-75	Уманців, Ю. М. (2023). Трансформаційні процеси в економіці в умовах глобальної конкуренції: цифровий вимір. *Економічна теорія та право*, (2), 75–84. https://doi.org/10.31359/2411-5584-2023-53-2-75

Wang, Y., Zhou, N., Gao, J., Jiang, P., Yan, X., Zhang, M., & Chen, L. (2025). Tax incentive policies, market competition, and corporate innovation. *Finance Research Letters*, *85*(A), 107896. https://doi.org/10.1016/j.frl.2025.107896

Conflict of interest. The author certifies that she doesn't have financial or non-financial interest in the subject matter or materials discussed in this manuscript; the author has no association with state bodies, any organizations or commercial entities having a financial interest in or financial conflict with the subject matter or research presented in the manuscript. Given that the author is affiliated with the institution that publishes this journal, which may cause potential conflict or suspicion of bias and therefore the final decision to publish this article (including the reviewers and editors) is made by the members of the Editorial Board who are not the employees of this institution.

The author received no direct funding for this research

Telnova, H. (2025). Market concentration and innovation activity: a statistical analysis. *Scientia fructuosa, 6*(164), 52–63. http://doi.org/10.31617/1.2025(164)04

Received by the editorial office 28.09.2025.
Accepted for printing 02.11.2025.
Published online 16.12.2025.