

ECONOMIC FREEDOM AS A DETERMINANT OF NATIONAL RESILIENCE

OLENA OLIINYK*

*Corresponding author: o.o.oliynuk@nuwm.edu.ua

Abstract. The article examines the impact of economic freedom on national resilience, with a particular focus on identifying the key components of financial freedom that most significantly enhance institutional and economic resilience. The dependent variable used in the study is the 2025 FM Global Resilience Index. The independent variables include the 2025 Index of Economic Freedom along with its 12 components. The influence of the independent variables on the dependent variable is assessed through correlation analysis using Microsoft Excel. The study focuses on European Union member states. The statistical significance of the obtained correlation coefficients was tested using Student's t-test.

A correlation coefficient of 0.59 between the Index of Economic Freedom and the Resilience Index indicates that countries with higher levels of economic freedom tend to exhibit greater resilience to internal and external challenges. Among the components of the Index of Economic Freedom, Business Freedom demonstrates the strongest correlation with the Resilience Index ($r = 0.88$), followed by Government Integrity ($r = 0.84$) and Property Rights ($r = 0.75$).

The study also employs cluster analysis to group EU countries based on those economic freedom indicators that show the most substantial influence on national resilience ($r > |0.5|$). The results of the cluster analysis reveal three distinct clusters of countries with similar institutional and economic characteristics. By applying both correlation and cluster analysis, the research not only uncovers the interdependencies between economic freedom indicators and national resilience but also provides well-founded recommendations for enhancing adaptability and long-term resilience in the face of contemporary global challenges.

Keywords: economic freedom, national resilience, institutional environment, economic environment, challenges, threats.

JEL Classification: H11, E02, O43, C38

1. INTRODUCTION

In today's world, marked by global challenges, political instability, armed conflicts, and economic turbulence, national resilience is gaining critical importance. One of the key factors shaping a country's capacity to withstand internal and external threats, maintain stability, and ensure sustainable development is the level of economic freedom. The indicator not only reflects the quality of the market environment, regulatory policy, and the extent of government intervention in financial processes, but also serves as a marker of a country's institutional maturity, innovation potential, and investment attractiveness.

According to the analytical data from the International Economic Freedom of the World report, there is a strong positive relationship between economic freedom and key macroeconomic and social

indicators. In countries with high levels of financial independence, GDP per capita is higher, the average citizen lives 16 years longer, reports 40% greater life satisfaction, enjoys near-universal youth literacy, benefits from a cleaner environment, and demonstrates greater tolerance toward women, minorities, and immigrants (Fraser Institute, 2024). A high level of economic freedom fosters a predictable market environment, lowers barriers to entrepreneurship, and improves resource efficiency – all of which enhance the economy's adaptability to both internal and external risks (Sayed & Abdelrahim, 2024).

Thus, economic freedom serves as an integrated indicator of the quality of the economic environment, forming a foundation not only for sustained economic growth but also for the nation's ability to respond flexibly to economic and social challenges, maintain institutional resilience, and foster trust among citizens and international partners (Gwartney & Lawson, 2003; Addi & Abubakar, 2024). Therefore, studying the impact of economic freedom on national resilience contributes not only to a deeper scientific understanding of the interrelationship between these categories, grounded in empirical evidence, but also to the development of informed recommendations for strengthening the long-term resilience of national economies in the 21st century.

2. THEORETICAL BACKGROUND

In today's world, constantly facing geopolitical crises, economic shocks, and climate change, economic resilience is of critical importance (Constantinescu, 2023). Economic resilience – the tendency of economies to bounce back from adverse shocks – has never been more crucial, given the growing prevalence and frequency of such shocks (Eichengreen et al., 2024). It is the foundation of countries' ability to adapt to challenges, maintain stability, and ensure the well-being of their populations, even during periods of global instability (Du et al., 2025; Cheng et al., 2024).

In the face of modern global turbulence, economic freedom is increasingly seen as a key factor in ensuring a state's resilience (Duan et al., 2022). The concept of financial freedom encompasses a wide range of aspects – from guarantees of property rights and freedom of enterprise to the liberalisation of markets and reduced state intervention in economic processes (Giorgio, 2024; Liu & Liu, 2025; Kandogan & Johnson, 2024). There is growing interest in the scientific literature and among the academic community in examining the role of economic freedom as a key factor in determining the resilience of national economies amid growing global instability (Akhyar & Rahmi, 2024; Sayed & Abdelrahim, 2024; Mawardi et al., 2024). There is a widely debated question of how much the level of economic freedom affects the ability of countries to effectively respond to internal and external challenges (Felzensztein et al., 2022), to adapt to new conditions (Ullah et al., 2024), maintain macroeconomic balance (Hardi et al., 2024), ensure investor confidence, and increase competitiveness (Djebali, 2024).

3. RESEARCH OBJECTIVE, METHODOLOGY AND DATA

Within this study, the 2025 FM Global Resilience Index was used as the dependent variable (Y). The FM Resilience Index is a composite indicator of a country's ability to withstand disruptive events and recover quickly from them. The index provides ranked assessments for 130 countries, each receiving an overall score ranging from 0 to 100, where higher values indicate greater resilience. What makes the index unique is its integration of data from authoritative international organisations, such as the IMF, World Bank, and the UN, with empirical data collected by FM Global engineers, who annually assess over 100,000 sites worldwide (Factory Mutual Insurance Company, 2025). This combination provides a comprehensive reflection of countries' capacities to resist and adapt to various risks. Accordingly, the FM Global Resilience Index serves as a quantitative tool for assessing institutional and economic endurance, making it particularly relevant for investigating economic freedom as a determinant of national resilience.

The 2025 Index of Economic Freedom (Heritage Foundation, 2025), developed by the Heritage Foundation, was used as the set of independent variables (X), including its 12 components: X1 –

Property Rights, X2 – Judicial Effectiveness, X3 – Government Integrity, X4 – Tax Burden, X5 – Government Spending, X6 – Fiscal Health, X7 – Business Freedom, X8 – Labor Freedom, X9 – Monetary Freedom, X10 – Trade Freedom, X11 – Investment Freedom, X12 – Financial Freedom.

The Index of Economic Freedom is well-suited to analysing the impact of economic freedom on national resilience, as it encompasses a broad range of institutional, regulatory, and market-based dimensions that collectively shape a country's economic environment. Its structure covers legal protection, fiscal stability, regulatory efficiency, and market openness, allowing economic freedom to be viewed not as a narrow indicator but as an integrated dimension. The index is constructed using a unified, consistent methodology based on data from international organisations such as the IMF, World Bank, and WTO, ensuring high reliability and the representativeness of the results.

The impact of the independent variables – the Index of Economic Freedom and its components – on the dependent variable, the FM Resilience Index, was assessed using Pearson's correlation coefficient (r), calculated in Excel using the built-in CORREL function. The analysis focused on European Union member states, which constitute a relatively homogeneous space of economic integration, share common regulatory frameworks, and possess comparable institutional foundations. This ensures methodological consistency for comparison. Furthermore, the EU exhibits significant variability in financial freedom and resilience, creating favourable conditions for identifying relevant correlations among the studied parameters.

The statistical significance of the calculated correlation coefficients was tested using Student's t -test for each correlation value, applying the following formula:

$$t = r\sqrt{(n-2)/(1-r^2)} \quad (1)$$

where r is the value of Pearson's correlation coefficient, and n is the total number of observations.

The resulting t -values were compared with the critical values of Student's t -distribution at a significance level of $\alpha = 0.05$.

In addition, cluster analysis was employed to group EU countries based on the economic freedom indicators that had the most significant influence on the FM Resilience Index – i.e., those with correlation coefficients with the dependent variable, Y , exceeding 0.5. The clustering was performed using the Orange Data Mining software, which combines an intuitive user interface with flexible machine learning tools.

The article examines the impact of economic freedom on a country's resilience, with a particular focus on identifying the key components of financial freedom that most significantly enhance institutional and economic resilience. By employing correlation and cluster analysis, the study seeks not only to uncover the relationships between indicators of economic freedom and resilience but also to develop well-funded recommendations for strengthening national adaptability and long-term resilience in the context of contemporary global challenges.

4. RESULTS AND DISCUSSION

The assessment of the impact of economic freedom and its components on national resilience was conducted by calculating the correlation coefficients between the dependent variable Y and the independent variables X1-X12 using data from European Union countries for 2025 (Table 1).

A correlation coefficient of 0.59 between the Index of Economic Freedom (X) and the Resilience Index (Y) indicates a moderate positive relationship between these two variables. This suggests that countries with higher levels of economic freedom tend to be more resilient to both internal and external challenges.

Tab. 1

*Relationship between the Resilience Index and the Index of Economic Freedom in 2025
(based on EU countries)*

Country	Y	X	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇	X ₈	X ₉	X ₁₀	X ₁₁	X ₁₂
Austria	89.6	69.7	97	94.8	75.4	46.3	13.5	63.7	81.7	81.8	72.7	79.6	60	70
Belgium	93.0	69	92.8	93	79.3	50.6	11.8	48	82.3	58.6	76.8	79.6	85	70
Bulgaria	68.4	68.8	75.7	56.6	48.5	94.2	56.7	91.1	74.9	68	70.8	79.6	60	50
Croatia	87.2	68.7	81.3	71.4	53.4	77.3	35.1	90.3	80.4	69.1	66.6	79.6	60	60
Cyprus	78.6	73.2	83.7	89.2	57.3	79.9	51.2	85.2	78.9	61.9	76.1	79.6	75	60
Czech Republic	85.4	72.9	89.9	92	68.2	78.9	42.2	71.5	81.4	57.9	68.9	79.6	70	80
Denmark	100.0	79.1	99.3	90.5	98	45	33.6	98.2	93	64.9	76.6	79.6	90	80
Estonia	84.2	78.9	93.7	93.9	84.5	80.8	48.8	90.9	83.3	62.2	68.8	79.6	90	70
Finland	93.9	77	100	97	94.8	68.2	7.3	81.5	88.3	65.6	76.1	79.6	85	80
France	87.9	64.4	92.9	84.2	74.3	54.3	0	30	81.9	60.2	70.3	79.6	75	70
Germany	94.7	71.6	95.4	93.5	86	60.5	26.9	81.1	83.7	53.3	69	79.6	60	70
Greece	73.8	60.6	77.3	70.4	51.8	60	14	58.9	78	61.7	70.7	79.6	55	50
Hungary	75.1	61.4	69.2	62.7	42.2	85.3	28.5	17.6	76.1	60.3	65.1	79.6	80	70
Ireland	92.2	83.1	94.1	95.5	84	77.6	85.1	95.8	88.1	62.4	75	79.6	90	70
Italy	79.5	60.9	82.2	78.8	60.6	57.4	9.5	0	77.6	70.7	74.2	79.6	80	60
Latvia	80.2	71.4	87.8	72.3	66.7	76.2	46.9	67.2	81.8	64	69.5	79.6	85	60
Lithuania	81.1	74.6	89.4	74.6	68.7	76.9	58.8	96	81	60.5	69.2	79.6	70	70
Luxembourg	99.5	79.5	97.8	97.2	85.7	62.7	39.4	98.5	89.2	57.5	71.9	79.6	95	80
Malta	82.6	66.8	86.2	81.5	55	70	57.5	44.8	80.7	65.2	70.5	79.6	60	50
Netherlands	84.8	78.2	95.9	95.7	86.8	54	41.6	94.7	84.8	60.1	74.7	79.6	90	80
Poland	84.9	67.1	72.3	52.3	58.4	73.8	39.7	75.9	77.8	56.8	68.5	79.6	80	70
Portugal	78.2	70.5	90.1	91.3	63.9	59.8	40.2	79.7	79.6	57.1	75.1	79.6	70	60
Romania	75.2	66.5	81.7	67	49.1	93.7	59.1	36.1	75.1	67.8	69.2	79.6	70	50
Slovakia	77.9	68.4	84.3	69.9	57.2	76.7	38.7	69.8	77	58	64.5	79.6	75	70
Slovenia	74.9	68.3	88.4	91.8	64.4	56.6	30.9	72.2	78.5	64.5	72.9	79.6	70	50
Spain	87.3	66.3	87.2	74	64.7	57.7	33.5	40.8	83.6	63.1	76.5	84.6	70	60
Sweden	95.1	77.9	96.5	95.6	92.3	51.6	31.5	97.3	84.6	66.1	74.3	79.6	85	80
Correlation coefficient with Y	0.59	0.75	0.62	0.84	-0.55	-0.20	0.34	0.88	-0.09	0.38	0.06	0.47	0.73	
Calculated value of the Student's t-test	3.70	5.69	3.98	7.64	-3.27	-1.03	1.78	9.15	-0.43	2.06	0.32	2.65	5.40	
Critical value of the Student's t-test	2.06													
Statistical Significance at $\alpha=0.05$	+	+	+	+	+	-	-	+	-	+	-	+	+	

Source: Own calculations by (Factory Mutual Insurance Company, 2025; Heritage Foundation, 2025)

In contexts characterised by a high degree of economic freedom, adequate protection of property rights, support for entrepreneurial activity, transparency of regulatory processes, and openness of the economy. These factors create favourable conditions for investment, innovation, and sustainable economic growth (Ecer & Hashemkhani Zolfani, 2022). Moreover, economic freedom enhances the efficiency of public administration, ensures institutional transparency and accountability, and fosters human capital development (Zhu et al., 2024). Such conditions enable the development of an adaptive

and flexible economy capable of withstanding shocks and recovering swiftly from crises.

Regarding the influence of the Index of Economic Freedom's components on the Resilience Index, the most significant impact is observed for X7 – Business Freedom, with a correlation coefficient of 0.88. This high level of correlation underscores the critical role of business freedom in shaping national resilience and adaptability. A high level of business freedom fosters a favourable environment for entrepreneurship, innovation, and efficient mobilisation of economic resources in response to internal and external challenges (Dempere & Pauceanu, 2022). At the same time, a free and flexible business environment fosters a diverse, inclusive, and dynamic economy, thereby enhancing a country's capacity to adapt to global market fluctuations and domestic pressures swiftly. Furthermore, business freedom supports the development of small and medium-sized enterprises (SMEs) – a crucial sector of the economy that underpins job creation, social stability, and innovation (Felzensztein et al. 2022; Shpykuliak et al., 2024). Mechanisms that ensure the efficiency and accessibility of business processes also reduce levels of corruption and informal economic activity, thereby strengthening institutional trust and improving the quality of governance (Thach & Ngoc, 2021).

Thus, business freedom not only stimulates economic growth but also reinforces institutional resilience, laying the foundation for a flexible economic system capable of withstanding crises and achieving long-term stability. Therefore, a well-developed entrepreneurial sector and favourable business conditions serve as key drivers of national resilience amid contemporary global and local challenges.

Another significant factor is government integrity, with a correlation coefficient of 0.84, which also plays a crucial role in enhancing national resilience. A high level of integrity within public institutions helps reduce corruption and increase public and business trust in government, thereby creating a favourable environment for sustainable socio-economic development. Conversely, a low level of government integrity leads to inefficient resource management, greater institutional uncertainty, and a diminished capacity of the country to respond effectively to internal and external threats (Boufounou et al. 2024). Hence, transparency and honesty in government are key factors in shaping a predictable, stable environment that strengthens national resilience.

It is worth noting the importance of property rights protection, as evidenced by the significant correlation between the Property Rights component and the Resilience Index ($r = 0.75$). This confirms the fundamental role of secure property rights in fostering resilient, predictable, and functionally stable societies. In countries where property rights are clearly defined, legally guaranteed, and efficiently enforced by judicial and administrative systems, economic agents can engage in long-term planning and invest in capital, innovation, and human resources without fear of expropriation, administrative interference, or corrupt pressure (Donis et al. 2023). Conversely, weak property rights protection creates institutional uncertainty, economic informality, capital flight, and brain drain (Dreyling, 2021; Mishchuk et al. 2024), hindering the development of a predictable economic environment and reducing a country's capacity to respond effectively to internal and external challenges.

The next component of the Index of Economic Freedom that significantly influences national resilience is Financial Freedom ($r = 0.73$). In environments characterised by high financial freedom, the banking system operates with minimal government intervention in financial institutions' activities. The central bank maintains independent oversight, limited to monitoring the fulfilment of contractual obligations and preventing fraud. Credit resources are allocated through market mechanisms; financial institutions provide a wide range of services to both individuals and businesses; and banks are free to issue loans, accept deposits, and conduct foreign exchange operations (Bagus & Howden, 2023). Moreover, foreign financial institutions operate on equal terms with domestic entities (Miranda-Agrippino & Rey, 2022). Such conditions improve access to financial resources for both businesses and citizens, stimulate competition, and enhance the efficiency of capital allocation – all of which contribute to economic stability and national resilience.

The results of the correlation analysis also revealed a moderate positive relationship between Judicial

Effectiveness and the Resilience Index ($r = 0.62$), indicating a substantial influence of judicial quality on a country's capacity to maintain balance and promote development in volatile conditions. The judicial system serves as the foundation of a country's functioning as a coherent, lawful entity. Its effectiveness extends beyond the formal operation of courts. It reflects the actual state of the rule of law, the capacity to ensure equality before the law, the protection of property rights, contract enforcement, and proper conflict resolution (Pech, 2022).

In a resilient country, both citizens and businesses must have confidence that their rights are guaranteed and can be protected in the event of violations. This confidence promotes economic activity, creates preconditions for investment, strengthens social trust, and enhances the legitimacy of governing institutions. An effective judiciary curbs corruption, reduces the risk of abuse of power and political interference (Mugellini et al. 2021), and thus contributes to a stable political environment.

At the same time, the analysis identified an inverse moderate relationship between the Tax Burden component and the Resilience Index ($r = -0.55$). This result implies that an increase in the tax burden is generally associated with a decline in a country's overall resilience. A high level of taxation, especially when excessive or non-transparent, can create substantial barriers to business formation and growth, diminish the country's investment appeal, and dampen economic activity (Venâncio et al. 2022). This, in turn, can lead to slower economic growth, weaker fiscal performance, and a rise in the shadow economy. The negative correlation between Tax Burden and resilience underscores the importance of a balanced tax policy that ensures sufficient budgetary revenues while maintaining favourable conditions for entrepreneurship, investment, and economic development. Achieving this balance is crucial to building a sustainable, competitive economy capable of adapting to contemporary global transformations and challenges.

In conclusion, the correlation analysis identified six components of the Index of Economic Freedom with a notable influence on the Resilience Index ($r > |0.5|$): Business Freedom, Government Integrity, Property Rights, Financial Freedom, Judicial Effectiveness, and Tax Burden. To comprehensively examine their role, a cluster analysis for European Union countries was conducted based on these components. This analysis enabled the classification of countries into groups with similar characteristics and institutional models. Such an approach serves as a valuable tool for developing targeted policy measures to enhance national resilience. The results of the cluster analysis, performed using the Orange Data Mining software environment, are shown in Figure 1.

The results of the cluster analysis of European Union countries enabled the distinction of three clearly defined groups of countries with similar institutional and economic characteristics. This clustering is particularly relevant, as it reflects structural differences in countries' capacity to ensure stable functioning in the face of internal and external threats.

Given the results of the cluster analysis, which revealed significant differences in economic freedom across EU countries, the next stage of the research involves developing targeted policy measures to enhance national resilience. This approach not only follows the empirical logic of the study but also aligns with contemporary academic understanding of the necessity of differentiated development management tailored to each country's institutional profile (Farias, 2023).

The first cluster (Denmark, Finland, Luxembourg, France, Austria, Belgium, the Netherlands, Germany, Sweden, the Czech Republic, Estonia, and Ireland) includes countries with high scores on the components of economic freedom, which provide a strong institutional foundation for sustainable development. These countries are characterised by the effective operation of market mechanisms, a high degree of property rights protection, minimal state intervention in the allocation of financial resources, transparent public governance, and a predictable fiscal environment. The combination of these factors fosters high levels of trust among economic agents in institutions, stimulates investment, and enhances the economy's adaptability and self-regulation capacity. This institutional architecture underpins resilience, which manifests in both macroeconomic stability and socio-economic cohesion (Casagrande & Dallago, 2022).

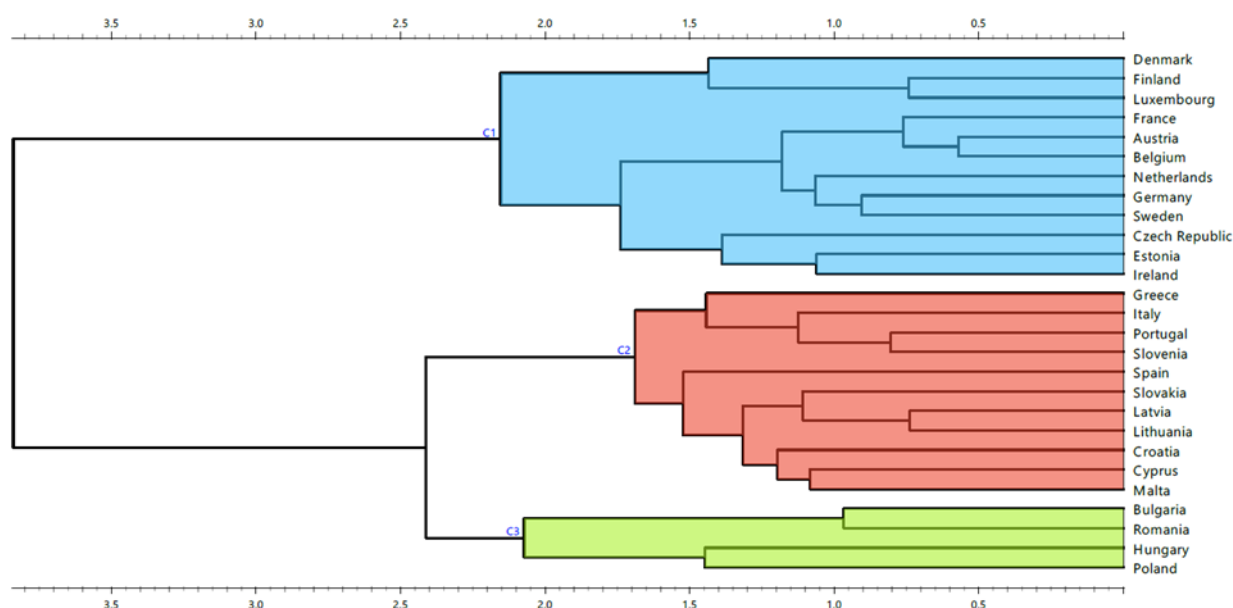


Fig. 1. Dendrogram of the cluster analysis for EU countries in 2025 based on the indicators of the Index of Economic Freedom with the most significant impact on the Resilience Index.

Source: Own elaboration

The second cluster (Greece, Italy, Portugal, Slovenia, Spain, Slovakia, Latvia, Lithuania, Croatia, Cyprus, and Malta) includes countries with moderate values of key economic freedom components. These countries are at a transitional stage of institutional modernisation: while specific reforms have been implemented, structural weaknesses persist, including insufficient judicial effectiveness, uneven implementation of the rule of law, substantial tax burdens, and limitations on financial openness. These conditions hinder the realisation of growth potential and reduce economic flexibility. Nonetheless, the presence of some positive institutional trends allows these countries to demonstrate moderate resilience, particularly under relatively stable external conditions.

The third cluster (Bulgaria, Romania, Hungary, and Poland) comprises countries with the lowest values across several indicators critical to resilience within the Index of Economic Freedom. These countries exhibit limited property rights protection, increased state intervention in the economy, relatively weak judicial systems, insufficient integrity in governance, and unstable tax regimes. This combination of factors reduces investment attractiveness, increases the risk of capital flight and the expansion of the shadow economy, restricts access to financing, and undermines the country's ability to respond to a crisis. Consequently, these countries exhibit lower resilience, underscoring the need for structural reforms as a prerequisite for long-term development.

Considering that the core components of economic freedom are unevenly developed across EU member states, it is essential to identify cluster-specific intervention strategies. These should aim not only to improve the performance of individual components but also to strengthen the national resilience systemically. Based on this approach, specific recommendations have been developed for each of the three identified clusters, as presented in Table 2.

Thus, the proposed approaches to enhancing economic freedom within each cluster are based on a comprehensive understanding of the institutional environment, the nature of existing constraints, and the countries' development potential. These strategies aim to strengthen institutional trust, increase market efficiency, improve the regulatory climate, and enhance the country's adaptive capacity to address both global and local challenges.

*Recommendations for enhancing the level of economic freedom in EU countries to ensure resilience
According to cluster-based differentiation*

Cluster	Recommendations
Cluster 1 – high level of economic freedom and national resilience	Digitisation of the regulatory environment Expansion of financial inclusion Enhancement of budgetary transparency Adaptive task regulation Institutional performance review
Cluster 2 – moderate level of economic freedom and national resilience	Institutional deconcentration Modernisation of the judicial system Promotion of tax compliance culture Development of independent oversight institutions Ensuring fair market competition
Cluster 3 – low level of economic freedom and national resilience	Constitutional strengthening of property rights Counteracting the politicisation of administrative processes Mitigation of excessive fiscal pressure Liberalisation of access to the financial sector for foreign entities Reduction of regulatory burden and optimisation of business processes

Source: Own elaboration

5. CONCLUSIONS

The findings of this study confirm that economic freedom serves as a key determinant of a country's resilience, particularly under conditions of global uncertainty and multifaceted crises. The correlation analysis revealed a moderate positive relationship between the Index of Economic Freedom and the Resilience Index ($r = 0.59$). The components exerting the most significant influence on national resilience include Business Freedom, Government Integrity, Property Rights, Financial Freedom, Judicial Effectiveness, and Tax Burden. These indicators formed the basis for the cluster analysis, which not only highlighted the structural heterogeneity among EU countries in terms of economic freedom but also underscored that institutional factors – such as transparency, integrity, effective judiciary, property rights protection, liberal regulation, and an optimal tax environment – are decisive in determining national resilience. States that ensure coherence and quality in these institutional conditions demonstrate greater adaptive capacity and are better positioned to maintain long-term resilience amid escalating global risks.

At the same time, ensuring resilience requires adaptive rather than uniform approaches to institutional development, accounting for each country's level of economic freedom. For Cluster 1 countries, the primary policy vector should focus on maintaining institutional flexibility, fostering innovation-based resilience, and enhancing the regulatory environment through digitalisation, expanding financial inclusion, and conducting regular audits of public-sector performance. In contrast, Cluster 2 countries require structural optimisation of their institutional frameworks, particularly through deconcentration of institutions, modernisation of the judicial system, and the development of a strong tax culture. Special attention should be devoted to supporting market competition by dismantling monopolies in key economic sectors and establishing favourable conditions for the creation and growth of small and medium-sized enterprises (SMEs). For Cluster 3 countries, it is crucial to strengthen property rights, combat political interference in administrative processes, and revise tax policy to ensure it has an incentive effect. Additionally, the opening of the financial sector to foreign stakeholders should

be emphasised, as it would facilitate the integration of these economies into global monetary flows and significantly enhance their investment attractiveness.

Author Contributions:

Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Supervision, Validation, Visualization, Writing – original draft, and Writing – review & editing were carried out by the sole author.

Acknowledgement: This research did not receive any outside support, including financial support.

Conflict of interest: The authors declare no conflict of interest.

REFERENCES

- [1] Addi, H. & Abubakar, A. (2024). Investment and economic growth: do institutions and economic freedom matter? *International Journal of Emerging Markets*, 19(4), 825-845. <https://doi.org/10.1108/IJOEM-07-2021-1086>
- [2] Akhyar, M., & Rahmi, R. (2024). National Economic Resilience in The Face of Global Economic Crises: Macroeconomic Perspective. *Golden Ratio of Social Science and Education*, 4(2), 190-200. <https://doi.org/10.52970/grsse.v4i2.284>
- [3] Bagus, P., & Howden, D. (2023). Consumer rights and banking contracts. *Journal of Banking Regulation*, 24, 105-114. <https://doi.org/10.1057/s41261-021-00185-x>
- [4] Boufounou, P., Eriotis, N., Kounadeas, T., Argyropoulos, P., & Pouloupoulos, J. (2024). Enhancing internal control mechanisms in local government organisations: a crucial step towards mitigating corruption and ensuring economic development. *Economies*, 12(4), 78. <https://doi.org/10.3390/economies12040078>
- [5] Casagrande, S., & Dallago, B. (2022). Socio-economic and political challenges in EU member countries: understanding the policy direction of the European Semester. *Comparative Economic Studies*, 64(3), 487-519. <https://doi.org/10.1057/s41294-021-00171-2>
- [6] Cheng, T., Zhao, Y., & Zhao, C. (2024). What determines the economic resilience of Chinese cities amid the pandemic crisis: An economic operating state perspective? *International Journal of Disaster Risk Reduction*, 104, 104389. <https://doi.org/10.1016/j.ijdrr.2024.104389>
- [7] Constantinescu, M. (2023). Measuring economic resilience for the CEE and Black Sea countries in the framework of comprehensive defence. *Security and Defence Quarterly*, 44(4), 55-83. <https://doi.org/10.35467/sdq/175379>
- [8] Dempere, J.M., & Pauceanu, A.M. (2022). The impact of economic-related freedoms on the national entrepreneurial activity. *The Journal of Innovation and Entrepreneurship*, 11, 48. <https://doi.org/10.1186/s13731-022-00237-0>
- [9] Djebali, N. (2024). Assessing the determinants of banking stability in the MENA region: what role for economic and financial freedom? *Journal of Banking Regulation*, 25(2), 127-144. <https://doi.org/10.1057/s41261-023-00220-z>
- [10] Donis, S., Gómez, J., & Salazar, I. (2023). Economic complexity, property rights and the judicial system as drivers of eco-innovations: An analysis of OECD countries. *Technovation*, 128, 102868. <https://doi.org/10.1016/j.technovation.2023.102868>
- [11] Dreyling, J. (2021). Institutional Complexity and Opportunity Structures: Weaker Actor Influence in International Intellectual Property Regulation. *Global Policy*, 12, 37-46. <https://doi.org/10.1111/1758-5899.12897>
- [12] Du, Y., Wang, Q., Song, Y., & Xin, Y. (2025). How cross-regional collaborative innovation networks affect regional economic resilience: Evidence from 283 cities in China. *Technological Forecasting and Social Change*, 215, 124057. <https://doi.org/10.1016/j.techfore.2025.124057>
- [13] Duan, C., Zhou, Y., Cai, Y., Gong, W., Zhao, C., & Ai, J. (2022). Investigate the impact of human capital, economic freedom and governance performance on the economic growth of the BRICS. *Journal of Enterprise Information Management*, 35(4/5), 1323-1347. <https://doi.org/10.1108/JEIM-04-2021-0179>
- [14] Ecer, F., & Hashemkhani Zolfani, S. (2022). Evaluating economic freedom via a multi-criteria MEREC-DNMA model-based composite system: case of OPEC countries. *Technological and Economic Development of Economy*, 28(4), 1158–1181. <https://doi.org/10.3846/tede.2022.17152>
- [15] Eichengreen, B., Park, D., & Shin, K. (2024). Economic resilience: Why some countries recover more robustly than others from shocks. *Economic Modelling*, 136, 106748. <https://doi.org/10.1016/j.econmod.2024.106748>

- [16] Factory Mutual Insurance Company. (2025). 2025 FM Resilience Index. URL: <https://www.fm.com/resources/resilience-index>
- [17] Farias, D. B. L. (2023). Country differentiation in the global environmental context: Who is 'developing' and according to what? *International Environmental Agreements: Politics, Law and Economics*, 23(3), 253-269. <https://doi.org/10.1007/s10784-023-09596-9>
- [18] Fraser Institute. (2024). Economic freedom of the world: 2024 Annual Report. URL: <https://www.fraserinstitute.org/sites/default/files/2024-10/economic-freedom-of-the-world-2024.pdf>
- [19] Felzensztein, C., Saridakis, G., Idris, B., & Elizondo, G. P. (2022). Do economic freedom, business experience, and firm size affect the speed of internationalisation? Evidence from small firms in Chile, Colombia, and Peru. *Journal of International Entrepreneurship*, 20(1), 115-156. <https://doi.org/10.1007/s10843-021-00303-w>
- [20] Giorgio, L. (2024). Economic freedom and people at risk of poverty in selected Eurozone countries. *International Economics*, 180, 100551. <https://doi.org/10.1016/j.inteco.2024.100551>
- [21] Gwartney, J., & Lawson, R. (2003). The concept and measurement of economic freedom. *European Journal of Political Economy*, 19(3), 405-430. [https://doi.org/10.1016/S0176-2680\(03\)00007-7](https://doi.org/10.1016/S0176-2680(03)00007-7)
- [22] Hardi, I., Afjal, M., Khan, M., Idroes, G. M., Noviany, T. R., & Utami, R. T. (2024). Economic freedom and growth dynamics in Indonesia: an empirical analysis of indicators driving sustainable development. *Cogent Economics & Finance*, 12(1), 2433023. <https://doi.org/10.1080/23322039.2024.2433023>
- [23] Heritage Foundation. (2025). 2025 Index of Economic Freedom. URL: <https://www.heritage.org/index/>
- [24] Kandogan, Y., & Johnson, S. D. (2024). Political economy and income inequality: how did trade liberalisation and changes in political and economic freedom affect the middle classes across the world? *Cogent Social Sciences*, 10(1), 2341702. <https://doi.org/10.1080/23311886.2024.2341702>
- [25] Liu, B., & Liu, J. (2025). Did the integrity transition promote economic growth? Empirical research based on the perspective of anti-corruption approaches. *International Review of Economics & Finance*, 104156. <https://doi.org/10.1016/j.iref.2025.104156>
- [26] Mawardi, I., Al Mustofa, M. U., Widiastuti, T., & Ghozali, M. (2024). The influence of institutional quality, economic freedom, and technological development on Islamic financial development in OIC countries. *Journal of Open Innovation: Technology, Market, and Complexity*, 10(2), 100279. <https://doi.org/10.1016/j.joitmc.2024.100279>
- [27] Miranda-Agrippino, S., & Rey, H. (2022). The global financial cycle. In *Handbook of international economics*, 6, 1-43. <https://doi.org/10.1016/bs.hesint.2022.02.008>
- [28] Mishchuk, H., Oliinyk, O., & Bilan, Y. (2024). Brain gain and country's resilience: A dependency analysis exemplified by OECD countries. *Equilibrium. Quarterly Journal of Economics and Economic Policy*, 19(2), 591-621. <https://doi.org/10.24136/eq.3096>
- [29] Mugellini, G., Della Bella, S., Colagrossi, M., Isenring, G. L., & Killias, M. (2021). Public sector reforms and their impact on the level of corruption: A systematic review. *Campbell Systematic Reviews*, 17(2), e1173. <https://doi.org/10.1002/cl2.1173>
- [30] Pech, L. (2022). The Rule of Law as a Well-Established and Well-Defined Principle of EU Law. *Hague J Rule Law*, 14, 107-138. <https://doi.org/10.1007/s40803-022-00176-8>
- [31] Thach, N. N., & Ngoc, B. H. (2021). Impact of economic freedom on corruption revisited in ASEAN countries: a Bayesian hierarchical mixed-effects analysis. *Economies*, 9(1), 3. <https://doi.org/10.3390/economies9010003>
- [32] Sayed, O. A., & Abedelrahim, S. S. (2024). Economic freedom as a catalyst for entrepreneurship: an empirical analysis of GCC countries. *Cogent Business & Management*, 11(1), 2304374. <https://doi.org/10.1080/23311975.2024.2304374>
- [33] Shpykuliak, O., Balaniuk, I., Shelenko, D., Balaniuk, S., & Sukhovii, A. (2024). The Socio-Economic Role of Small Agribusiness in the Development of Modern Ukraine and Poland. *Journal of Vasyl Stefanyk Precarpathian National University*, 11(2), 24-38. <https://doi.org/10.15330/jpnu.11.2.24-38>
- [34] Ullah, S., Ullah, A., & Zaman, M. (2024). Nexus of governance, macroeconomic conditions, and financial stability of banks: a comparison of developed and emerging countries. *Financial Innovation*, 10(1), 30. <https://doi.org/10.1186/s40854-023-00542-x>
- [35] Venâncio, A., Barros, V., & Raposo, C. (2022). Corporate taxes and high-quality entrepreneurship. *Small Business Economics*, 1-30. <https://doi.org/10.1007/s11187-020-00413-0>
- [36] Zhu, B., Yang, M., & Chu, X. (2024). Good governance and innovation: Economic freedom matters. *Technological Forecasting and Social Change*, 205, 123527. <https://doi.org/10.1016/j.techfore.2024.123527>

Olena Oliinyk, PhD in Economics, Associate Professor, Associate Professor in the Department of Human Resources and Entrepreneurship, National University of Water and Environmental Engineering, Rivne, Ukraine;
ORCID ID: 0000-0002-3941-2286

Address: National University of Water and Environmental Engineering, Rivne, Soborna str. 11.

E-mail: o.o.oliynuk@nuwm.edu.ua

Received: June 13, 2025; **revised:** August 09, 2025; **accepted:** August 25, 2025; **published:** December 31, 2025.

Олійник Олена. Економічна свобода як детермінанта стійкості країни. *Журнал Прикарпатського університету імені Василя Стефаника*, **12** (4) (2025), 6-16.

Метою статті є дослідження впливу економічної свободи на стійкість країни, зокрема визначення ключових складових економічної свободи, що найбільше сприяють підвищенню інституційної та економічної стійкості. В якості залежної змінної використано Індекс стійкості за 2025 рік. В якості незалежних змінних використано Індекс економічної свободи за 2025 рік та 12 його компонент. Вплив незалежних змінних на залежну змінну оцінено за допомогою кореляційного аналізу в програмному середовищі Excel. Об'єктом аналізу обрано країни Європейського Союзу. Статистичну значущість отриманих значень коефіцієнтів кореляції перевірено із використанням t-критерію Стюдента.

Значення коефіцієнта кореляції 0,59 між Індексом економічної свободи та Індексом стійкості означає, що країни з вищим рівнем економічної свободи мають тенденцію демонструвати кращу стійкість до внутрішніх та зовнішніх викликів. Щодо впливу окремих компонентів Індексу економічної свободи на Індекс стійкості, то найбільший вплив здійснює свобода підприємництва ($r = 0,88$). Фактор прозорості і доброчесності уряду зі значенням коефіцієнту кореляції 0,84 також має важливе значення для забезпечення стійкості країни. Вагомим є і захист прав власності ($r = 0,75$).

В межах дослідження було застосовано також кластерний аналіз для групування країн Європейського Союзу за показниками економічної свободи, які виявили найбільший вплив на стійкість країни ($r > |0,5|$). Результати кластерного аналізу дозволили виокремити три чітко окреслені кластери країн із подібними інституційно-економічними характеристиками. Завдяки застосуванню кореляційного та кластерного аналізів, в процесі дослідження було не лише розкрито взаємозв'язки між індикаторами економічної свободи та стійкістю, але й сформовано обґрунтовані рекомендації для посилення адаптивності та довгострокової стійкості країни в сучасних умовах глобальних викликів.

Ключові слова: економічна свобода, стійкість країни, інституційне середовище, економічне середовище, виклики, загрози.