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ECONOMIC RESILIENCE AND COMPETITIVENESS: A COMPARATIVE ANALYSIS OF THE VISEGRAD GROUP COUNTRIES

ABSTRACT

The article examines the relationship between resilience and competitiveness of national economies in the Visegrad Group countries through a comparative analysis of the World Competitiveness Index and the Global Resilience Index. All four countries show a general upward trend in the Global Resilience Index for 2021-2025, while the dynamics of the World Competitiveness Index are less uniform. Resilience and competitiveness are two fundamental characteristics of the economy that determine its quality, efficiency, and ability to develop in the context of global change. Resilience ensures that the economy continues to function under the influence of shocks and crises, while competitiveness determines its ability to grow, innovate, and occupy advantageous positions in global markets. The economic model is shaped by the balance between these two characteristics.

Within the Visegrad Group countries, two models can be distinguished: the Czechia – a model of synergy between economic resilience and competitiveness; Poland, Hungary, and Slovakia – models of functional resilience with the potential to increase competitiveness. Resilience provides the basis for long-term competitiveness, while competitiveness allows the economy to grow and accumulate the resources necessary to ensure resilience. At the same time, a high level of economic resilience alone is not a sufficient condition for increasing competitiveness, as this requires the development of factors such as economic performance, government efficiency, business efficiency, and infrastructure.

Keywords: resilience, competitiveness, economy, shock influences, global instability, Visegrad group countries

JEL Classification: E60, O11, O52, P52

INTRODUCTION

In conditions of geopolitical instability, economic transformations, and global challenges such as pandemics, wars, and climate change, it is particularly important to develop economies that are not only capable of competing in global markets but also of maintaining functionality, adaptability, and resilience in times of crisis. In this context, there is a growing need for a deeper understanding of the relationship between economic resilience and competitiveness, which are key indicators of the quality of national economic development.

The relevance of the chosen topic is due to the fact that in scientific and applied fields, these concepts are often considered separately, although in practice, it is their synergy that determines the ability of the national economy to function effectively in conditions of uncertainty. A comparative analysis makes it possible to identify not only the common factors of economic resilience and competitiveness, but also the potential contradictions between achieving highly competitive positions and ensuring long-term resilience.

A comparison using the example of the Visegrad Group countries (Poland, the Czechia, Slovakia, and Hungary) is particularly relevant, as these countries have similar starting conditions for transformation after the collapse of the socialist system, as well as shared experience of European integration, but demonstrate different models of ensuring competitiveness and economic resilience. An analysis of their experience can be extremely

valuable for countries undergoing profound structural restructuring or recovery, particularly Ukraine. Thus, the study is not only relevant from a scientific point of view but also has practical significance for the formation of economic policy aimed at achieving a balanced combination of resilience and competitiveness in the face of contemporary challenges.

LITERATURE REVIEW

The issue of economic resilience and competitiveness is increasingly being studied in the context of global instability and geopolitical threats. Briguglio (2016) analyzes economic resilience and competitiveness in small countries. He showed that the resilience index has a high correlation with the global competitiveness index, proving that countries with high resilience also demonstrate competitive advantages.

Montrimas et al. (2023) use an industrial portfolios approach, finding a direct statistically significant correlation between economic resilience and competitiveness at the national level and proposing a common RC factor for both measures. Klimek et al. (2019) used input-output models to forecast economic growth and recovery through resilience indicators, demonstrating that such tools can complement classical approaches to competitiveness assessment.

Sutton et al. (2022) focus on a systemic approach to regional resilience, where competitiveness is an important determinant of the speed of economic recovery after a crisis. Santoso et al. (2024) showed in a systematic review that digital competitiveness, including technology, knowledge, and future readiness, significantly strengthens economic resilience. Osetskiy et al. (2023), ensuring the competitiveness and financial stability of transport and logistics companies is an important factor in the resilience and competitiveness of the national economy, as this sector forms the basis for the functioning of supply chains, trade continuity, and the restoration of economic activity in wartime.

The focus of scientific interest has been on Central and Eastern European countries, particularly the Visegrad Group countries, which demonstrate different approaches to ensuring national resilience in turbulent conditions. Svoboda et al. (2024) compare regional resilience and competitiveness in the V4 + 4 NUTS 2 countries. They found that regional economies with high competitiveness also demonstrate strong resilience, especially during COVID-19, and emphasize the importance of a systematic approach.

Shkuropadska et al. (2025) analyze the digital resilience of the Bucharest Nine countries and Ukraine as the ability to withstand digital shocks, overcome infrastructure gaps, ensure cybersecurity, and equal access to digital services, which is one of the key components of overall economic resilience and competitiveness. Sorokina et al. (2024) analyze the impact of digital factors on the resilience of national economies of the EU countries, emphasizing the role of digital infrastructure, the level of innovation, cybersecurity, and digital inclusion in strengthening economic resilience. The authors prove that digitalization acts as a multiplier of competitiveness, contributing to increased productivity, flexibility of business models, and the ability of economies to adapt to external shocks. Thus, the results of the study confirm that digital determinants are a key component of the resilience and competitiveness of the economy, which directly correlates with the topic of the analysis of the Visegrad Group countries.

Boiko et al. (2022) examined the economic policies of the Visegrad Group countries and Ukraine in the context of the COVID-19 pandemic. The authors compare fiscal, monetary, and structural measures to support the economy, concluding that a flexible, multi-component approach to strengthening economic resilience is important. In particular, they note the positive impact of targeted support for small businesses and stimulation of domestic demand on maintaining the competitive positions of national economies.

Lagutin et al. (2020) examine the institutional conditions for ensuring economic resilience using Ukraine as an example, but their conclusions are more broadly applicable to other countries as well. The study emphasizes the importance of synergy between state institutions, the legal environment, and market mechanisms, as well as the formation of effective institutional structures to support the economy's adaptation to external shocks. In the context of studying the competitiveness of economies, it is important to consider both behavioral and institutional aspects that determine countries' ability to develop and adapt in changing conditions.

Osiyevskyy et al. (2023) analyze the phenomenon of so-called "competition traps" caused by unconscious cognitive biases that influence strategic economic decision-making. The authors argue that an excessive focus on direct competitive actions without taking into account long-term resilience and innovation can lead to a decline in systemic competitiveness.

Lagutin et al. (2020) emphasize the importance of the institutional environment for the formation of an innovative development model. The authors argue that the quality of institutions, namely transparency, the effectiveness of regulatory mechanisms, and the protection of property rights, is a key factor in ensuring long-term competitiveness in the global

economy. They emphasize that countries that create favorable conditions for innovation are able to adapt more quickly to technological changes and increase economic resilience.

AIMS AND OBJECTIVES

The aim of the study is to assess the level of resilience and competitiveness of the Visegrad Group countries' economies through a comparative analysis of relevant international methodologies, as well as to identify the relationship between these characteristics.

METHODS

The research process involved a combination of general scientific and specific scientific methods, including: analysis and synthesis – to study the structure of competitiveness and economic resilience indices, as well as to summarize the research results; induction and deduction – to form theoretical conclusions based on empirical data and vice versa – to test hypotheses about the relationship between the World Competitiveness Index and the Global Resilience Index; comparative method – to compare the levels of competitiveness and economic resilience between the Visegrad Group countries during 2021-2025; generalization method – to formulate conclusions and recommendations based on the research results; graphical method – to visually represent changes in indices values and identify trends.

RESULTS

A number of international organizations conduct in-depth research on the resilience and competitiveness of different countries' economies, providing a comparative basis for assessing their current state and development dynamics. In particular, the European Commission views competitiveness as the ability of an economy to ensure sustainable productivity growth, improve the well-being of citizens, and withstand external shocks. The EU's strategies for the last decade (European Commission, 2021) have focused on combining digitalization, green transformation, and innovation as the basis for the long-term competitiveness and resilience of member countries' economies.

In addition, the World Economic Forum (WEF, 2020) integrates the concept of economic resilience into its assessment of competitiveness in its Global Competitiveness Report, emphasizing the importance of institutional quality, macroeconomic stability, health, skills, and innovation potential. The Organization for Economic Cooperation and Development (OECD, 2020) is also actively developing approaches to measuring economic resilience through indicators of well-being, social capital, institutional trust, economic diversification, and resilience supply chains. The OECD's analytical tools are designed to help countries shape economic policies focused on growth, adaptation, and inclusion.

Thus, international organizations offer an interdisciplinary approach to interpreting economic resilience and competitiveness, integrating institutional, behavioral, social, and innovative aspects. The common and distinctive features of the concepts of "economic competitiveness" and "economic resilience" are presented in Table 1.

Table 1. Common and distinctive features of the concepts of "economic competitiveness" and "economic resilience."			
Criterion	Economic competitiveness	Economic resilience	Common features
Essence of the concept	The ability of the economy to compete effectively in global markets.	The ability of an economy to avoid, withstand, or recover from the effects of shocks.	Both concepts characterize the quality of the functioning of the economic system.
Goal	Increased productivity, attracting investment, and export growth.	Maintaining stability, avoiding deep crises, and adapting to change.	Contribute to economic growth and long-term development.
Factors	Economic performance, government efficiency, business efficiency, and infrastructure.	Macroeconomic and physical factors.	Both characteristics depend on the effectiveness of state economic policy.
Focus on time	Focused on the medium and long term.	Focus on short-term response and long-term adaptation.	Both require strategic planning.
Assessment	Index of economic competitiveness.	Index of economic resilience.	Quantitative and qualitative indicators are used.
Challenges	High taxes, bureaucracy, and technological backwardness.	Pandemics, wars, economic crises, and climate change.	External and internal threats can affect both characteristics of the economy.

Competitiveness and economic resilience are interrelated concepts. Both characterize the quality of the national economy's functioning, but they are different in nature. Competitiveness focuses on the ability to compete, while resilience focuses on the ability to survive and adapt to challenges. Both concepts depend to a large extent on the macroeconomic environment, the functioning of institutions, fiscal and monetary discipline, i.e., they require a coordinated strategic approach. Improving one of the parameters can have a positive impact on the other. For example, a sufficiently resilient economy is able to withstand shocks without significant loss of competitive position, while a competitive economy, thanks to its high efficiency and innovation, is better able to adapt to change and recover from crises. Resilience and competitiveness should not be viewed in isolation, as they are two sides of a successful economic model. In this context, it is useful to analyze the characteristics of economic resilience and competitiveness using the example of the Visegrad Group countries.

Assessing the resilience of the Visegrad Group countries' economies

The international insurance company FM Global ranks countries based on the results of the Global Resilience Index. The company assesses 130 countries according to 18 factors, which are grouped into two categories: macro factors and physical factors. Macro factors are large-scale economic factors that reflect how well a country manages its overall economic condition and stability. Macro factors include the following indicators: energy intensity of GDP, economic productivity, healthcare spending, education level, inflation rate, political risk level, corruption control, logistics efficiency, internet usage level, urbanization level, water scarcity level, and greenhouse gas emissions level.

Physical factors are specific environmental and infrastructure factors that affect a country's ability to withstand shocks. Physical factors include the following indicators: climate risk level, climate change impact level, climate risk quality, seismic risk level, fire risk, and cybersecurity indicator.

The Global Resilience Index is calculated to assess the ability of a national economy to withstand internal and external shocks, adapt, and recover after their impact. The Global Resilience Index is rated on a scale from 0 to 100, where 0 represents the lowest level of resilience and 100 represents the highest. The Global Resilience Index for the Visegrad Group countries in 2025 is shown in Table 2.

Table 2. Global Resilience Index for the Visegrad Group countries in 2025. Note: low level (1–20 points), moderate level (21–40 points), medium level (41–60 points), sufficient level (61–80 points), high level (81–100 points). (Source: compiled by the authors according to the FM Global Resilience Index, 2025)

№	Indicators	Poland		Czechia		Slovakia		Hungary	
		Place	Points	Place	Points	Place	Points	Place	Points
	Global Resilience Index	22	84.9	21	85.4	35	77.9	39	75.1
1	Macro Score	22	75.1	21	75.6	35	71.9	39	70.2
1.1	Energy Intensity	65	78.1	87	69.5	55	80.7	67	78.1
1.2	Productivity	40	33.4	33	36.8	48	29.4	47	30.2
1.3	Health Expenditure	37	14.6	31	19.3	41	13.6	45	11.8
1.4	Education	30	80.4	28	81.2	44	74.8	47	73.4
1.5	Inflation	78	99.4	38	99.6	54	99.5	76	99.4
1.6	Political Risk	42	79.2	9	89.0	41	79.5	26	83.3
1.7	GHG Emissions	50	94.2	49	94.4	46	94.8	27	96.6
1.8	Water Stress	86	99.2	73	99.5	17	99.9	52	99.8
1.9	Urbanization Rate	22	93.9	33	89.9	31	90.6	62	81.5
1.10	Internet Usage	56	84.9	57	84.4	53	85.8	41	90.5
1.11	Logistics	32	68.2	50	54.5	50	54.5	58	50.0
1.12	Control of Corruption	44	55.5	35	60.4	50	48.8	62	41.6
2	Physical Score	22	99.5	21	100	35	88.8	39	85.2
2.1	Climate Risk Exposure	35	90.6	20	93.7	77	84.7	91	81.1
2.2	Climate Change Exposure	42	90.6	25	93.7	86	84.7	102	81.1
2.3	Climate Risk Quality	6	92.9	15	90.5	27	79.2	12	91.2
2.4	Seismic Risk Exposure	35	98.2	30	99.7	71	63.4	75	53.5
2.5	Fire Risk Quality	4	94.2	2	97.1	21	83.9	30	79
2.6	Cybersecurity	46	91.0	72	84.1	45	91.2	75	82.9

The overall economic resilience rating shows that the Czechia (85.4 points) and Poland (84.9 points) occupy leading positions among the Visegrad Four countries, which corresponds to a high level of resilience. Slovakia (77.9 points) and Hungary (75.1 points) have a sufficient level of economic resilience.

An analysis of the macroeconomic score shows that all four economies are relatively balanced, as the indicators range from 70.2 to 75.6 points, which corresponds to a sufficient level of resilience. At the same time, a detailed examination of individual components reveals noticeable contrasts. For example, all countries have only a moderate level of productivity (29.4–36.8 points), which indicates a systemic problem of low labor efficiency and the need for innovative transformation.

The situation with healthcare financing is particularly alarming. The Visegrad Group countries have low levels of spending in this area (11.8–19.3 points), which potentially limits their ability to counter long-term demographic and epidemiological challenges. In contrast, education shows a sufficient level of development in Slovakia (74.8 points) and Hungary (73.4 points), and a high level in the Czechia Republic (81,2 points) and Poland (80,4 points), which creates a basis for long-term human capital development.

All four countries have exceptionally high inflation ratings (99.4–99.6 points), which indicates effective macroeconomic policy in the area of price control. Similarly, political risk indicators range from adequate to high, with the Czech Republic scoring the highest (89.0 points). Indicators for greenhouse gas (GHG) emissions, water stress, urbanization, and internet usage are also stable, all within the high or adequate range.

Logistics infrastructure, on the other hand, shows uneven results. Only Poland achieves a sufficient level (68.2 points), while other countries have average scores (50.0–54.5 points), which may hinder the effectiveness of trade and investment. Another vulnerable area is corruption control. The Visegrad Group countries score in the average range (41.6–60.4 points) on this indicator, indicating serious institutional challenges.

An analysis of the physical score for the Visegrad Group countries shows fluctuations between 85.2 and 100.0 points, which corresponds to a high level of resilience. Accordingly, this indicates a high level of preparedness for physical threats (from climatic to technological). The indicators of climate change risk, as well as the quality of response measures, are high in Poland, the Czechia Republic, Slovakia, and Hungary. Similarly, all countries demonstrate high positions in the field of cybersecurity.

Thus, the analysis allows us to draw a number of conclusions:

1. Firstly, the Czech Republic and Poland are regional leaders in terms of economic resilience.
2. Secondly, low productivity, insufficient healthcare funding, uneven development of logistics, and corruption remain common challenges for the Visegrad Group countries.
3. Third, all countries have a high level of preparedness for physical risks, which is a positive factor in the context of global instability.

To ensure the region's resilience position, it is advisable to focus efforts on increasing labor productivity, investing in innovation, strengthening anti-corruption policies, improving infrastructure, and increasing funding for the social sector. This approach will allow the Visegrad countries not only to preserve their existing achievements but also to adapt to new challenges of global development.

Assessing the competitiveness of the Visegrad Group countries' economies

In conditions of geo-economic instability and growing competition in global markets, ensuring a high level of competitiveness of national economies is becoming increasingly important. The International Institute for Management Development (IMD) ranks countries based on the results of the World Competitiveness Index. The IMD evaluates 69 countries based on 20 factors grouped into four categories: economic performance, government efficiency, business efficiency, and infrastructure. The World Competitiveness Index for the Visegrad Group countries in 2025 is shown in Table 3.

In the overall economic competitiveness ranking, the Czechia (73.7 points) is the leader among the Visegrad Group countries, characterized by a sufficient level. Poland (53.9 points), Hungary (56.7 points), and Slovakia (42.8 points) demonstrate an average level of competitiveness, with Slovakia having the lowest score in the group. This distribution indicates uneven economic development and varying quality of public administration and business environment within the region.

Table 3. World Competitiveness Index for the Visegrad Group countries in 2025. Note: low level (1–20 points), moderate level (21–40 points), medium level (41–60 points), sufficient level (61–80 points), high level (81–100 points). (Source: compiled by the authors according to IMD, 2025)

№	Indicators	Poland		Czechia		Slovakia		Hungary	
		Place	Points	Place	Points	Place	Points	Place	Points
	World Competitiveness Index	52	53.9	25	73.7	63	42.8	48	56.7
1.	Economic Performance	25	58.6	28	57.8	60	41.5	41	51.8
1.1	Domestic Economy	34	54.9	32	55.6	53	46.6	56	44.5
1.2	International Trade	20	57.7	21	57.5	43	51.1	16	59.2
1.3	International Investment	36	50.5	29	52.4	67	35.7	39	49.1
1.4	Employment	16	62.1	20	57.7	52	48.0	36	54.4
1.5	Prices	29	54.5	31	54.4	34	53.7	28	54.9
2.	Government Efficiency	58	36.9	21	63.3	64	25.6	46	44.1
2.1	Public Finance	56	40.6	22	59.1	68	32.4	58	40.0
2.2	Tax Policy	51	43.3	46	46.4	59	38.2	34	52.6
2.3	Institutional Framework	42	49.9	14	66.7	56	41.8	43	49.7
2.4	Business Legislation	56	39.4	34	55.8	64	32.0	42	49.8
2.5	Societal Framework	39	49.8	15	63.9	43	49.1	40	49.6
3.	Business Efficiency	64	17.4	30	57.2	68	9.9	61	21.8
3.1	Productivity & Efficiency	55	39.3	27	55.9	53	40.8	57	38.4
3.2	Labor Market	63	39.9	29	55.6	68	34.7	57	44.4
3.3	Finance	48	44.9	34	55.7	57	38.5	44	46.6
3.4	Management Practices	67	24.2	32	54.5	60	38.4	63	35.8
3.5	Attitudes & Values	65	23.9	34	54.4	69	0	67	18.4
4.	Infrastructure	41	46.8	29	60.4	50	38.3	37	53.2
4.1	Basic Infrastructure	53	44.5	30	56.1	46	49.0	32	54.9
4.2	Technological Infrastructure	50	46.4	34	55.3	56	42.4	38	54.4
4.3	Scientific Infrastructure	32	51.2	23	55.2	47	39.8	31	51.5
4.4	Health & Environment	37	52.3	24	61.2	40	51.5	38	52.1
4.5	Education	40	54.6	35	56.6	46	43.9	42	52.6

A country's economic efficiency is assessed in terms of domestic and international trade, international investment, employment, and prices. All four countries show an average level in the economic efficiency sub-index. Poland has the highest score (58.6 points), followed by the Czechia (57.8 points) and Hungary (51.8 points), while Slovakia (41.5 points) is on the verge of transitioning to a moderate level. The component indicators confirm that international trade is a strong point for Poland and the Czechia, while international investment remains a problem for Slovakia (35.7 points). All four countries show average levels in the areas of employment, price stability, and domestic economic development.

Government effectiveness is assessed in terms of public finances, tax policy, institutional framework, business legislation, and social framework. According to the sub-index, the Czechia significantly outperforms other countries, scoring 63.3 points, which corresponds to a sufficient level. Poland (36.9 points), Hungary (44.1 points), and Slovakia (25.6 points) demonstrate a moderate level. Analysis of the subcomponents shows that only the Czechia has a developed institutional and social base that ensures the effective functioning of state structures and business. Other countries show an average level of institutional and social base efficiency. Efficiency in the area of public finance is characterized by a moderate level for Poland, Slovakia, and Hungary, while the Czech Republic has a sufficient level. The effectiveness of tax policy is characterized by an average level for all countries except Slovakia, which has a moderate level. The average level of business legislation quality is characteristic of the Czech Republic and Hungary, while Poland and Slovakia have a moderate level.

Business efficiency is assessed in terms of productivity & efficiency, labor market, finance, management practices, attitudes & values. The business efficiency sub-index proved to be the most problematic for all four countries. The Czechia has the highest score (57.2 points), which corresponds to the average level. Hungary (21.8 points) is at a moderate level, while

Poland (17.4 points) and Slovakia (9.9 points) are at a low level. The weakest areas are indicators related to management practices and business values. In particular, Slovakia has a zero score for the “attitudes & values” component, which indicates significant problems in the business environment. The Czechia Republic and Hungary have an average level of labor market efficiency, while Poland and Slovakia have a moderate level. The efficiency of the financial subsystem in all countries except Slovakia (moderate level) is average.

The development of countries' infrastructure is assessed in terms of basic infrastructure, technological and scientific infrastructure, health care and the environment, and education. According to the infrastructure sub-index, the Czechia (60.4 points), Hungary (53.2 points), and Poland (46.8 points) have an average level, while Slovakia (38.3 points) has a moderate level. An analysis of the subcomponents shows that all Visegrad Group countries have an average level of development in basic infrastructure, technological infrastructure, and education. Scientific infrastructure is also at an average level of development in Poland, the Czechia Republic, and Hungary, but Slovakia has a moderate level. Only the Czechia has a sufficient level in terms of “health & environment,” while all other countries are at an average level.

Thus, the analysis confirms the Czechia leadership in global competitiveness among the Visegrad Group countries. Poland, Slovakia, and Hungary are at an average level, with potential for growth if institutional reforms are implemented and business activity is stimulated. It should be noted that Slovakia lags behind most other countries in terms of most indicators.

Recommendations for all four countries include strengthening the quality of public administration, developing human capital, improving financial conditions for business, stimulating innovation, and strengthening institutional capacity. This approach will enable the Visegrad countries not only to maintain their competitive advantages but also to ensure resilience in the face of global instability.

The relationship between the level of economic competitiveness and the level of economic resilience

Figure 1 compares the World Competitiveness Index (WCI) and Global Resilience Index (GRI) values for Poland, the Czechia Republic, Slovakia, and Hungary for the period from 2021 to 2025. Both indices reflect different, albeit interrelated, aspects of economic performance.

All four countries show a general trend toward growth in the economic sustainability index. At the same time, the dynamics of competitiveness are less uniform: only the Czechia shows a clear positive correlation between WCI and GRI, while Poland, Hungary, and especially Slovakia have gaps between growing resilience and declining competitiveness.

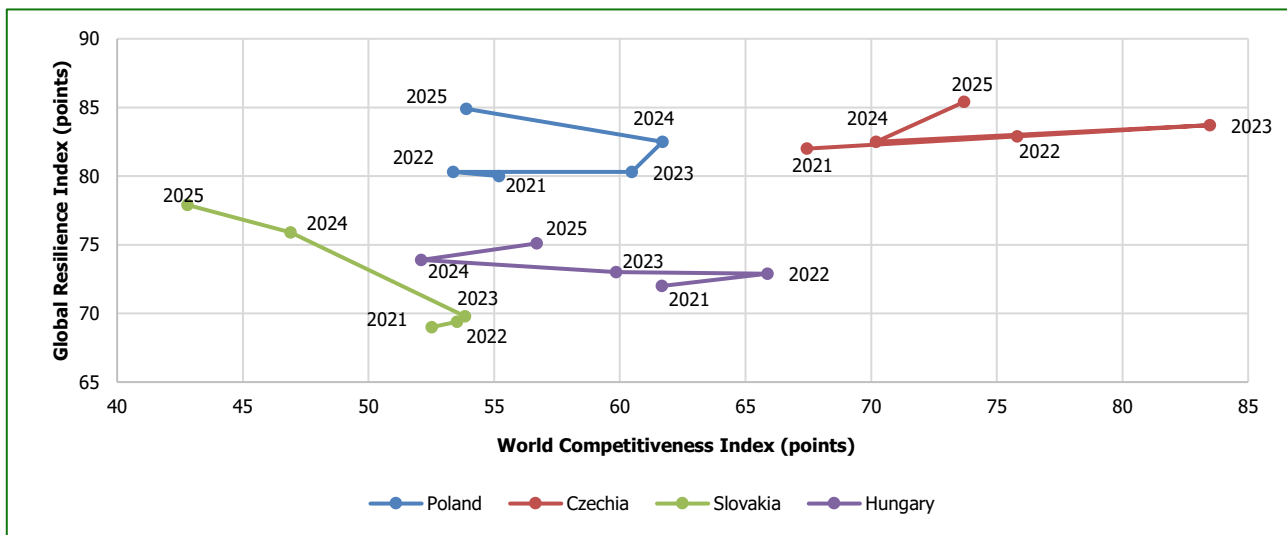


Figure 1. Trajectory of changes in the World Competitiveness Index and Global Resilience Index of the Visegrad Group Countries from 2021 to 2025. (Source: FM Global Resilience Index, 2025; IMD, 2025)

In Poland, the GRI index remains consistently high throughout the period, rising from 80.0 points in 2021 to 84.9 points in 2025. This indicates a strong institutional environment and the economy's ability to adapt to shocks. At the same time, the WCI index shows instability during 2021-2025. Rising to 61.7 points in 2024, it falls to 53.9 points in 2025. This trend may be a sign that Poland, despite having sufficient reserves to ensure economic resilience, does not always effectively transform them into increased productivity, business activity, and innovation.

The Czechia shows the most balanced and positive dynamics. The level of economic resilience will grow from 82.0 points in 2021 to 85.4 points in 2025, remaining at a high level throughout the entire period. At the same time, the level of economic competitiveness will increase from 67.44 points to 83.48 points in 2023, after which it will decline slightly to 73.7 points in 2025, which is still a high result. Thus, in the case of the Czech Republic, there is a strong correlation between resilience and competitiveness. Institutional capacity, infrastructure provision, and quality of governance have become the basis for improving the business environment and investment attractiveness of the country.

Slovakia, on the other hand, shows a negative trend. With relatively stable GRI growth from 69.0 points in 2021 to 77.9 points in 2025, the WCI declines from 52.52 points to 42.8 points. This indicates an imbalance between the system's potential and its actual economic development. The reasons for this may be insufficient innovation, corruption risks, and low-quality human capital, which prevent stability from being effectively converted into efficiency gains.

Hungary shows similar dynamics to Poland. The GRI rises from 72.0 points to 75.1 points, indicating a sufficient level of adaptability and resilience of the economy in the face of shocks. However, the WCI is declining from 65.88 points in 2022 to 52.1 points in 2024, with a slight increase to 56.7 points in 2025. This decline indicates a regression in governance and business efficiency, which is not offset even by sufficient economic resilience.

It should be noted that in 2021–2025, the resilience and competitiveness of the Visegrad Group countries' economies were significantly affected by both external challenges (the Russian-Ukrainian war, the energy crisis, and the consequences of the Covid-19 pandemic) and internal structural features (fiscal policy, labor market conditions, level of innovation, and institutional quality). Despite common threats, countries demonstrated varying degrees of ability of their economies to adapt and maintain competitive advantages in the face of change, which explains the differences in their positions in international rankings of competitiveness and economic resilience.

In summary, it can be argued that economic resilience is an important prerequisite for competitiveness, but it does not automatically guarantee it. The lack of a stable link between these two indices in Poland, Hungary, and Slovakia indicates the presence of institutional barriers, ineffective policy implementation, or weak motivation in the business sector. The Czech Republic, on the other hand, demonstrates how systematic development and policy integration can create a synergistic effect that manifests itself in both the resilience and competitiveness of the economy. In this regard, it is important for the Visegrad Group countries to develop economic strategies that not only strengthen the institutional framework but also stimulate innovative development, modernization of production, support for entrepreneurship, and human capital development.

DISCUSSION

Scientific literature increasingly emphasizes the importance of the relationship between economic competitiveness and resilience, especially in the context of global shocks and growing geo-economic turbulence. Within the scope of this study, the results of the analysis of the Visegrad Group countries indicate the ambiguous nature of this relationship. Similar observations are noted in other scientific works.

For example, Aiginger (2006) distinguishes between the concepts of a "competitive" and a "resilient" economy, noting that the former is focused on achieving results in the short and medium term (growth in GDP, exports, innovation), while resilience is associated with the long-term ability of the economy to adapt to challenges and crises. In the context of the Visegrad countries, this difference is particularly evident in the case of Poland, Hungary, and Slovakia, where increasing resilience indicators are not accompanied by an increase in the competitiveness of the economy.

Briguglio et al. (2008), analyzing the concept of "economic resilience," argue that at the micro and macro levels, it depends on four pillars: effective governance, economic openness, social development, and environmental balance. In the Czech Republic, these elements clearly interact effectively, ensuring the simultaneous growth of the WCI and GRI.

The IMD study (2024) notes that countries with stable institutions, a dynamic private sector, and investments in innovation have a better chance of transforming stability into competitive advantages. On the other hand, Kitson, Martin & Tyler (2004) emphasize that an excessive focus on stability without sufficient productivity, investment, and institutional modernization can lead to a so-called "conservative trap," where a country fails to use its existing resilience to stimulate economic breakthroughs.

It is also worth mentioning the approach of Schwab & Porter (2008), which assumes that competitiveness is not only a function of macroeconomic stability, but also a result of the quality of the microeconomic environment, business practices,

and the level of institutional trust. This explains why, even with sufficient stability indicators, some countries demonstrate a moderate level of competitiveness.

Thus, the results of this study are consistent with existing scientific approaches, but also point to the unique regional characteristics of the Visegrad Group countries. The comparative analysis confirms the view that resilience creates the foundation for competitiveness, but does not automatically guarantee it without favorable institutional and structural changes. At the same time, the synchronous growth of both indices in the Czechia demonstrates that such a transformation is possible with a comprehensive approach.

Further research can develop in several interrelated directions. First, it is advisable to deepen the comparative analysis of the resilience of the economies of the Visegrad Group countries, taking into account structural, institutional, and financial differences. Second, it is worth investigating the impact of digitalization, innovative activity, and the "green" transition on strengthening the competitive positions of these countries in the European space. Third, it is promising to study the role of human capital, social cohesion, and the quality of public administration in the formation of systemic resilience. Fourth, it is necessary to assess how geoeconomic challenges, energy dependence, changes in global value chains, and the consequences of the war in Ukraine affect the trajectories of economic development of the Visegrad countries. Finally, a relevant direction is to model scenarios for strengthening economic resilience through integration and partnership mechanisms within the EU and compare them with potential strategies for Ukraine.

CONCLUSIONS

The study analyzed the relationship between economic resilience and competitiveness in the Visegrad Group countries during 2021–2025. The results of the analysis showed heterogeneity in the dynamics of GRI and WCI both between countries and within a single country over time.

A key observation is that economic resilience does not always translate into increased competitiveness. In particular, Poland, Hungary, and Slovakia demonstrate cases where rising GRI levels are not accompanied by a corresponding increase in WCI. This trend may indicate the presence of systemic barriers, such as inefficient governance, institutional dysfunctions, moderate innovation policy, and a limited business environment. This is particularly true for Slovakia, which shows the largest gap between growing resilience and declining economic competitiveness.

In contrast, the Czechia stands out as an example of a positive scenario, where high values of both indices show a strong correlation. This may indicate the coordinated functioning of public policy, an effective institutional framework, a high-quality risk management system, and active support for competitive advantages (innovation, education, science, infrastructure, etc.). The Czechia confirms the thesis that systematically built resilience can serve as the basis for long-term economic growth and competitiveness.

At the same time, it is important to note that a high level of economic resilience alone is not a sufficient condition for increasing competitiveness. Additional factors are needed, such as effective government policy, a favorable business environment, developed infrastructure, scientific and educational potential, technological modernization, and human resource development. Thus, within the Visegrad Group countries, two models can be distinguished:

1. Czechia – a model of synergy between economic resilience and competitiveness.
2. Poland, Hungary, Slovakia – models of functional resilience with the potential to increase competitiveness.

Based on this, the state economic strategy of countries with a growing level of economic resilience should focus on transforming this trend into a source of competitive advantage, including support for entrepreneurship, investment in human capital, innovative transformation, and improving the efficiency of public administration.

ADDITIONAL INFORMATION

AUTHOR CONTRIBUTIONS

All authors have contributed equally.

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CONFLICT OF INTEREST

The Authors declare that there is no conflict of interest.

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СТІЙКІСТЬ І КОНКУРЕНТОСПРОМОЖНІСТЬ ЕКОНОМІКИ: ПОРІВНЯЛЬНИЙ АНАЛІЗ КРАЇН ВИШЕГРАДСЬКОЇ ГРУПИ

У дослідженні вивчено взаємозв'язок між стійкістю та конкурентоспроможністю національної економіки в країнах Вишеградської групи шляхом порівняльного аналізу World Competitiveness Index і Global Resilience Index. Усі чотири країни протягом 2021-2025 років демонструють загальну тенденцію до зростання Global Resilience Index, водночас динаміка World Competitiveness Index є менш однорідною. Стійкість і конкурентоспроможність є двома фундаментальними характеристиками економіки, які визначають її якість, ефективність і здатність до розвитку в умовах глобальних змін. Стійкість забезпечує збереження функціонування економіки під впливом шоків і криз, а конкурентоспроможність визначає її здатність до зростання, інновацій і посідання вигідних позицій на світових ринках. Модель економіки формується залежно від балансу між цими двома характеристиками. У межах країн Вишеградської групи можна виокремити дві моделі: Чехія – модель синергії стійкості та конкурентоспроможності економіки; Польща, Угорщина, Словаччина – моделі функціональної стійкості з потенціалом підвищення рівня конкурентоспроможності. Стійкість забезпечує основу для тривалої конкурентоспроможності, а конкурентоспроможність дозволяє економіці зростати й акумулювати ресурси, необхідні для забезпечення стійкості. Водночас сам високий рівень стійкості економіки не є достатньою умовою для зростання її конкурентоспроможності, оскільки для цього необхідний розвиток таких чинників, як економічна продуктивність, ефективність уряду, бізнесу, інфраструктури.

Ключові слова: стійкість, конкурентоспроможність, економіка, шоківі впливи, глобальна нестабільність, країни Вишеградської групи

JEL Класифікація: E60, O11, O52, P52