ИКОНОМИЧЕСКИ ИЗСЛЕДВАНИЯ
ECONOMIC STUDIES

Volume 34(6), 2025

Igor Kryvovyazyuk[1]
Igor Britchenko[2]
Liubov Lipych [3]
Pavlo Kravchuk[4]
Natalia Galaziuk[5]
Oleksandr Burban[6]

IMPACT OF GLOBAL RISKS ON ECONOMIC DOWNTURN IN COUNTRIES WORLDWIDE: ANALYSIS OF THE CAUSES OF THE SITUATION AND OPPORTUNITIES FOR GROWTH RECOVERY[7]

The purpose of the article is to study the opportunities for resuming the economic growth of economies, considering the impact of global risks on its dynamics. The article provides a comprehensive analysis of the economic growth dynamics of over 200 countries from 1961 to 2023, revealing a general trend of declining growth rates, which is confirmed by the data of observations of GDP dynamics in the USA, Great Britain, Germany, Albania, Ukraine, Mongolia, China, Paraguay, Indonesia, and Sudan. It is defined that these trends are caused by the negative impact of global risks on the dynamics of economic growth of world countries. A contemporary map of the interconnections of categories and types of global risks is presented, illustrating the intertwining of geopolitical, economic, social, environmental, and technological risks. A selection of the five most influential global risks that affected the economic downturn of the world economy from 2006 to 2023 has been formed through logical-structural analysis and generalization method, demonstrating the predominant influence of economic and environmental factors. The analysis of the unique causes of economic downturn under the influence of global risks, conducted using the Ishikawa diagram, allowed to include a set of economic, environmental, social, geopolitical, technological, and other causes. The proposed political-legal, market, organizational-economic, and financial-investment mechanisms for accelerating economic recovery define the priority directions for restoring economic growth, considering the impact of global risks. The provided suggestions have practical significance for the elaboration of economic development strategies for countries to restore economic growth.
Keywords: global risks; economic downturn; GDP; logical-structural analysis; Ishikawa diagram
JEL: C19; F01; F43; O47; O57

[1] *Igor Kryvovyazyuk, Lutsk National Technical University, Department of Entrepreneurship, Trade and Logistics, PhD, Professor, ORCID 0000-0002-8801-4700, e-mail: krivovyazukigor@gmail.com.*
[2] *Igor Britchenko, State Higher Vocational School Memorial of Prof. Stanislaw Tarnowski, Dr.Sc. (Economics), Professor, ORCID 0000-0002-9196-8740, e-mail: ibritchenko@gmail.com.*
[3] *Liubov Lipych, Lutsk National Technical University, Department of Entrepreneurship, Trade and Logistics, Dr.Sc. (Economics), Professor, ORCID 0000-0002-9059-7271, e-mail: lglipych@gmail.com.*
[4] *Pavlo Kravchuk, Lutsk National Technical University, Department of International Economic Relations, PhD, Assistant Professor, ORCID 0000-0002-4736-4915, e-mail: p.kravchuk@lntu.edu.ua.*
[5] *Natalia Galaziuk, Lutsk National Technical University, Department of International Economic Relations, PhD, Assistant Professor, ORCID 0000-0001-7918-4268, e-mail: n.galazyk@lntu.edu.ua.*
[6] *Oleksandr Burban, Lutsk National Technical University, Department of Entrepreneurship, Trade and Logistics, PhD, Assistant Professor, ORCID 0000-0002-6130-8397, e-mail: o.v.burban9@gmail.com.*
[7] This paper should be cited as: *Kryvovyazyuk, I., Britchenko, I., Lipych, L., Kravchuk, P., Galaziuk, N., Burban, O. (2025). Impact of Global Risks on Economic Downturn in Countries Worldwide: Analysis of the Causes of the Situation and Opportunities for Growth Recovery. – Economic Studies (Ikonomicheski Izsledvania), 34(6), pp. 66-86.*

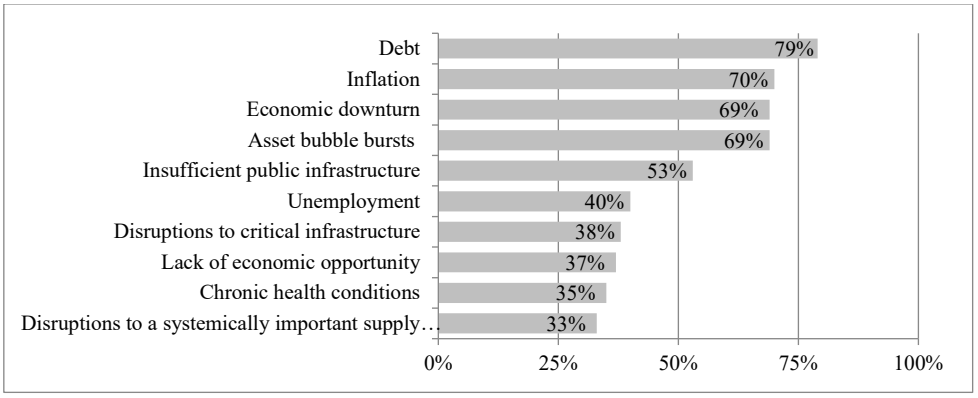
1. Introduction

For a long time, modern economies worldwide have lost their resilience due to the growing negative impact of numerous risks: geopolitical, which contribute to the disruption of the global order and the need for a shift towards power-based regulation (Yu, Wang, 2023), economic, which deepen the uncertainty of the market environment, cause financial destabilization and economic crises (Phan et al., 2021; Kryvovyazyuk, 2014b; Iordache et al., 2023), environmental, which cause irreversible ecosystem degradation and threats to the safety of human life (Prăvălie, 2021; Tong et al., 2022), social, which exacerbate dissatisfaction among certain population groups due to excessive social polarization and limited access to income and development opportunities (Stewart et al., 2020; de Soysa, Vadlamannati, 2023) and technological risks, which contribute to further stratification of labour markets between developed and developing economies (World Economic Forum, 2024).

The excessive negative impact of these risks has a global and simultaneously catastrophic effect on the economic development of national economies, not only over the past decade but over a much longer economic period. This impact is influenced by numerous factors, including globalization and the informatization of society, as noted by contemporary scholars in various scientific studies (Stiglitz, 2003; Adrian et al., 2019; Asafo-Adjei Emmanuel et al., 2023).

According to recent surveys, among the key economic problems of countries that need to be addressed are debt repayment, inflation, the emergence of "bubbles", and economic downturns (Figure 1).

Figure 1. Key economic problems of the countries worldwide



Source: built by the authors according to the World Economic Forum (2024).

While the study of solving the problems of debt repayment, reducing inflation and unemployment in countries, the emergence of "bubbles," the development of public infrastructure, etc. is relatively well studied both from the theoretical and practical point of view, the study of the impact of global risks on economic processes is still not sufficiently deeply studied.

Currently, there is already a discussion around solving the problem of the excessive negative impact of global risks on the economic growth processes of the world's economies, which makes it impossible to maintain their sustainability (Poruchnyk et al., 2021) and, as a result, leads to an economic downturn (World Economic Forum, 2024). However, there are very few such studies, which emphasize the importance and relevance of a comprehensive analysis of the impact of global risks on the decline in the economic growth rates of countries around the world, generalization of the reasons for the current situation, and the need to find opportunities for their recovery.

Accordingly, the object of research in this paper is the system of global risks, which can influence the dynamism of economic development of countries of the world with varying strength and depth. The subject of the research is the theoretical, methodological and analytical justification of the cause-and-effect interaction of global risks and the economic growth of the economies of the countries. The main purpose of the study is to determine the possibilities of resuming the economic growth of economies, taking into account the impact of global risks on their dynamics.

The high degree of validity of the scientific provisions, conclusions and recommendations presented in the work is ensured by the comprehensive application of scientific research methods, in particular, such as: abstraction and logical generalization – when studying theoretical approaches to justifying the cause-and-effect interaction of global risks and economic growth of countries' economies; analysis of "big data" – in the process of data processing to summarize the annual GDP growth rates of countries around the world; logical-structural analysis – when determining structural shifts in the dynamics of GDP of different countries around the world; the method of analyzing causes and effects based on the Ishikawa diagram – to summarize and illustrate the reasons for the decline of countries' economies under the influence of global risks; tabular and graphical analysis – to visualize, analyze and demonstrate research results; the generalization method – when formulating conclusions and developing proposals.

The structure of the article is organized as follows: in section 2, a critical analysis of existing theoretical approaches to justifying the cause-and-effect interaction of global risks and economic growth of countries economies is carried out; in section 3, a comprehensive approach to forming a system of interconnections between the strategic goal, objectives, theoretical framework and scientific-methodological basis for studying the possibilities of restoring economic growth of economies based on the results of studying the impact of global risks on the economic downturn of economies is revealed; section 4 presents the results of the analysis of the dynamics of economic growth of economies and global risks, unique reasons for the decline of economies under the influence of global risks, as well as proposed mechanisms for accelerating the economic revival of economies taking into account the influence of global risks. Section 5 summarizes the conclusions and recommendations, as well as future research areas.

2. Review of Literature

Modern scholars are actively debating the issue under study. At the same time, it is important to pay attention to the issues of defining the essence, establishing criteria and types of global risks that may affect economic processes in countries around the world, and studying the existing interrelationships between individual categories that determine the focus of this work.

In fact, global risks are exogenous factors that can determine the decisions of economic agents, which are prone to more or less significant ways of hindering economic growth (Gomes, 2022) or causing its inhibition.

Lund S. et al. (2020), in a research paper examining the relationships between risk exposure, resilience and recovery of global value chains, propose the following approach to the distribution of risk exposure, specifying them as: acute climate change, macroeconomic/financial crises, trade wars, pandemics, chronic climate change, cyberattacks, terrorism, supplier bankruptcy. However, this list does not cover the set of existing risks, which the authors do not include, for example, military actions, social polarization, limited access to resources, lack of economic opportunities, etc. It is also advisable to use the systematization of risks and their categorization.

This problem is partially solved in the work of Yatsenko O.M. et al. (2019), which notes that the system of distribution of the world economy is accompanied by the growing influence of global challenges and risks, the failure to take into account the impact of which reduces the efficiency of the functioning of the economies of countries and trade between them. The authors propose to divide global risks into 5 categories: technological, environmental, geopolitical, economic and social, which is fully consistent with the current challenges of the global economy. Also, among the listed categories, the most threatening risks and tools for preventing their negative impact are identified. The disadvantage here is the lack of study of the relationship between global risks and the development of economic processes in countries around the world, and their periodic recurrence, which would allow us to identify certain patterns of influence of such risks on the dynamics of economic indicators.

Kose M.A. & Terrones M.E. (2015) paid more attention to the relationship between economic growth and the cyclicality of economic development of countries. Thus, when studying global catastrophic economic events, scientists focus on four periods: 1975, 1982, 1991, and 2009. The authors analyze the changes that occur during the global business cycle due to the depth of destruction caused by global recessions, focusing on the ways of global recovery that accompanied the exit from such recessions in the periods under study. They outlined how economies deal with growth failures, noting that downturns and recoveries are features of cyclical development. The main need for economies is to develop better policy tools to reduce the losses associated with economic downturns and to implement mechanisms to accelerate economic recovery.

As defined in the content of some scientific studies, the excessive negative impact of global risks can lead to disruptions in global business cycles, cause global economic asymmetries and crises, making it impossible for the global economy to develop in a positive linear way (Poruchnyk et al., 2021). It should be noted that there are also alternative views on the study

of this impact (Lawrence et al., 2024). At the same time, the numerous disruptions in economic development identified due to the impact of global risks require an analysis of the causes of this situation, as well as the consequences they can cause.

Sillmann J. et al. (2022) noted that scientific knowledge about individual systemic risks is often deep, but our understanding of the causal mechanisms linking these risks and the consequences they generate remains shallow. For example, the annual Global Risk Report identifies obvious connections between different types of risks but does not consider in detail the strengthening of feedback (World Economic Forum, 2024).

Exceptional attention should be paid to the scientific works of Sharma S. and Soederberg S. (2019), who propose to use global risk management as a central organizational structure in managing global development and to encourage the role of business in achieving sustainable development goals to address the problems of risk exposure. The authors consider global risk management as a dynamic and, at the same time, an uneven strategy that serves to consolidate and normalize the role of business as an active agent of development.

The global risks considered by scientists can cause numerous negative macroeconomic effects. In particular, of an economic nature – market instability, economic slowdown, inflation, disruption of business operations, deterioration of supply chains, and investment outflows; environmental – loss of yield; social – social tension in society; geopolitical – loss of territories and resources, destruction of infrastructure; technological – increasing cyber threats, information wars. This requires an in-depth analysis of not only the scope of global risks but also their impact on the dynamics of economic growth of countries.

Modern scholars have also carried out a comprehensive analysis of emerging markets and developing countries, paying considerable attention to the lessons of their global recession of 2009-2019, and considering policy options for these economies to boost growth and prepare for the possibility of a new global downturn (Kose, Ohnsorge, 2021). Attention is paid to the determinants of external crises, based on data from 62 countries over the period 1970-2019, to better guide macro-financial prudential policy. It was also found that countries with developed economies are more resilient to these risks (Cavallo et al., 2022). Additionally, the interconnection between the economic crisis caused by COVID-19 and the economic policies of countries was assessed (Chang et al., 2023), as well as the risks of transition from the global pandemic crisis to a model of long-term economic growth (Yussuf et al., 2023). At the same time, the authors also partially summarized measures that will help avoid economic downturns (Benabed, Bulgaru, 2023; Salavrakos, Palmadessa, 2023).

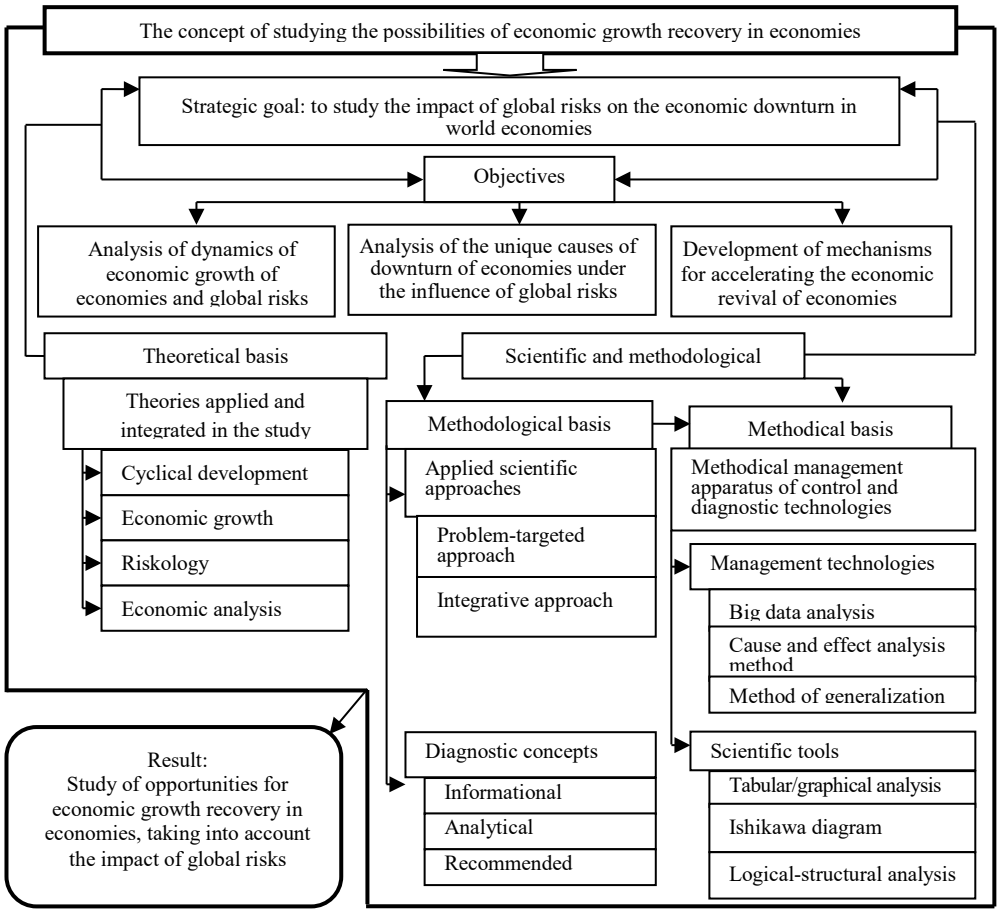
The fragmentary nature of the analysis of the issues raised in this paper, with attention to the negative impact of certain global risks on economic processes in countries, requires a detailed logical-structural analysis of the reasons that caused such changes and further study of the possibilities of recovering their growth rates, which was the purpose of the paper.

3. Methodology

In this article, we propose a problem-targeted scientific approach, which, in combination with the methods used, ensures the achievement of the research objective – to study the possibilities of recovering the growth rates of national economies based on the results of the analysis of the unique causes of their economic downturn and to study the relationship between the impact of global risks and the dynamism of GDP.

A comprehensive vision of the interrelationships of the strategic goal, objectives, theoretical framework and scientific-methodological basis for studying the possibilities of economic growth recovery becomes fundamental in the formation of its subject area in accordance with the conceptual approach to implementation (Figure 2).

Figure 2. The concept of studying the possibilities of economic growth recovery in economies, taking into account the impact of global risks



Source: developed by the authors.

The concept of studying the possibilities of restoring the economic growth of economies is based on a goal that provides a study of the impact of global risks on the economic downturn of the world's economies. This approach is formed on the basis of the appropriate theoretical basis by integrating the key provisions of theories of economic growth and cyclical development of economic systems, principles of economic analysis and concepts of risk theory. At the same time, the achievement of the strategic goal of implementing the proposed concept is also ensured by applied scientific approaches and diagnostic concepts, as well as applied management technologies and scientific tools.

Global recessions are cyclical in nature, which inevitably affects the slowdown in the economic growth of the economies of the world, and this demonstrates the relationship between economic growth and the cyclicality of the economic development of economies. The implementation of the principles of economic analysis during the study of the impact of global risks on the economic downturn of economies will ensure the implementation of a comprehensive analysis of the studied issues, and the application of the main concepts of risk theory – clarification of the level of global risks and their grouping.

The practical implementation of the idea requires the preparation of the necessary analytical basis for the study: generalization of analytical conclusions based on the results of the analysis of the dynamics of economic growth of economies and global risks that caused their changes in different periods, clarification of the unique causes of the recession of world economies that arose under the influence of global risks, as well as identification of opportunities for recovering economic growth in modern conditions.

This is achieved through the widespread use of methodical management apparatus of management technologies and diagnostics of economic processes. To solve the tasks set, the following management technologies and scientific tools were used: big data analysis (to summarize the annual GDP growth rates of more than 200 countries), tabular and graphical analysis (to visualize, analyze and demonstrate the research results), logical-structural analysis (when identifying structural shifts in the dynamics of GDP of different countries of the world), cause-and-effect analysis based on the Ishikawa diagram (in order to explain and further illustrate the reasons for the downturn in the economies of countries under the influence of global risks), and generalization method (when determining trends in certain phenomena and indicators, formulating conclusions and developing proposals).

The reliability of the results obtained is ensured by the use of the research design and the collected data. To obtain the information databases, the authors used a target sampling method based on the compilation and processing of information from the World Bank (2024, a, b) for the period 1961-2023 and the World Economic Forum (2006, 2020, 2024) for the period 2006-2023.

Thus, the proposed concept is intended to provide a comprehensive study of the possibilities for restoring economic growth of economies, taking into account the impact of global risks.

4. Results and Discussion

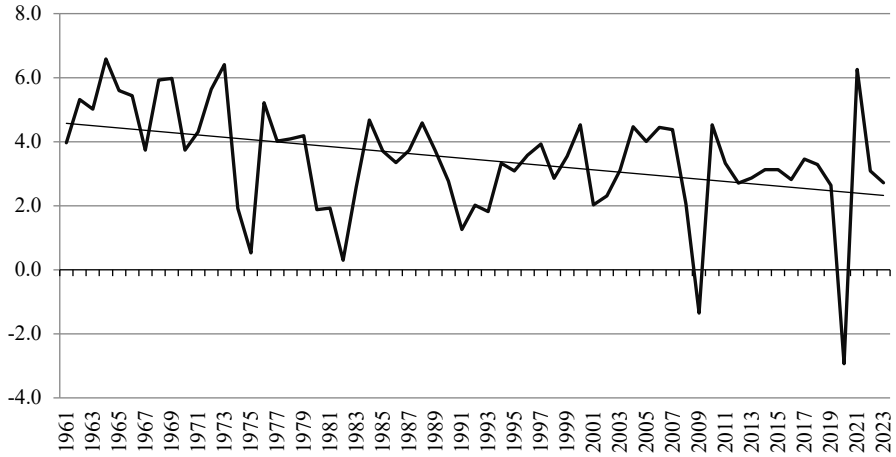
Ensuring economic growth, in the long run, is one of the priority goals of macroeconomic policy in the world, as it indicates an increase in production and total income, improved use of natural resources, a high level of technological sophistication of the economy, proper organizational support, and capital raising, which together ensure the growth of welfare in the country (Kryvovyazyuk I.V., 2014, a). However, global risks have a significant impact on the achievement of the goals set by countries, which affects the dynamics of economic growth, causing the need for an analytical study of this interdependence.

4.1. Analysis of the dynamics of economic growth of economies and global risks

The application of the big data analysis method to determine the annual GDP growth rate based on data from more than 200 world economies made it possible to establish that during the 63-year period under study, there is a clearly expressed cyclical pattern of gradual reduction in the economic growth rates of the world's economies with critical points in 1975, 1982, 1991, 2001, 2009 and 2020 (Figure 3).

An analysis of the dynamics of annual GDP growth of world economies revealed that the duration of the economic cycle in the period 1961-2023 is mainly 7-11 years with a sharp decline in growth in 2009 (-1.4%) and 2020 (-2.9%), which was caused by the U.S. real estate market crisis and subsequent financial consequences for countries around the world, and, accordingly, the spread of the COVID-19 pandemic.

Figure 3. Annual GDP growth of world economies (%)



Source: calculated by the authors based on World Bank data (2024a).

For a more in-depth study, we choose the period of 2006-2023, when the greatest slowdown in economic growth rates was recorded and which corresponds to two full economic cycles of their development. The dynamism of economic growth rates, indicators of the level of

their economic development, and geographical representativeness served as criteria for the selection of world economies for further research.

The criteria for selecting the world's economies for further research were the dynamism of economic growth rates, indicators of their economic development, and geographical representativeness. Additionally, it should be noted that the selected countries are centres of geopolitical, economic, or environmental global risks (in particular, trade wars are constantly being waged between the United States and China, which has an impact on the destabilization of the global economy; Ukraine has become a military arena where a full-scale war is being waged and the largest geopolitical conflict since World War II is taking place, involving the United States, the United Kingdom, Germany, and China; a military coup took place in Sudan; Indonesia is a place of constant cataclysms and environmental disasters of a global scale; Paraguay is a place of transnational and social challenges, etc.).

Analyzing the data on the economic growth rates of individual economies in the world in 2006-2023 (Table 1), we see that its average value was: for the United States – 1.9% (at the beginning of the study period 2. 8%); for the UK – 1.25% (2.4%); for Germany – 1.26% (3.8%); for Albania – 3.47% (5.9%); for Ukraine – (-1.09%) (7.6%); for Mongolia – 6.32% (8.6%); for China – 7.86% (12.7%); for Paraguay – 3.76% (4.8%); for Indonesia – 4.92% (5.5%); for Sudan – (-.76%) (6.5%). This confirms the fact of a steady economic downturn in the economies, regardless of whether they belong to developed countries with a transitional market economy or developing countries.

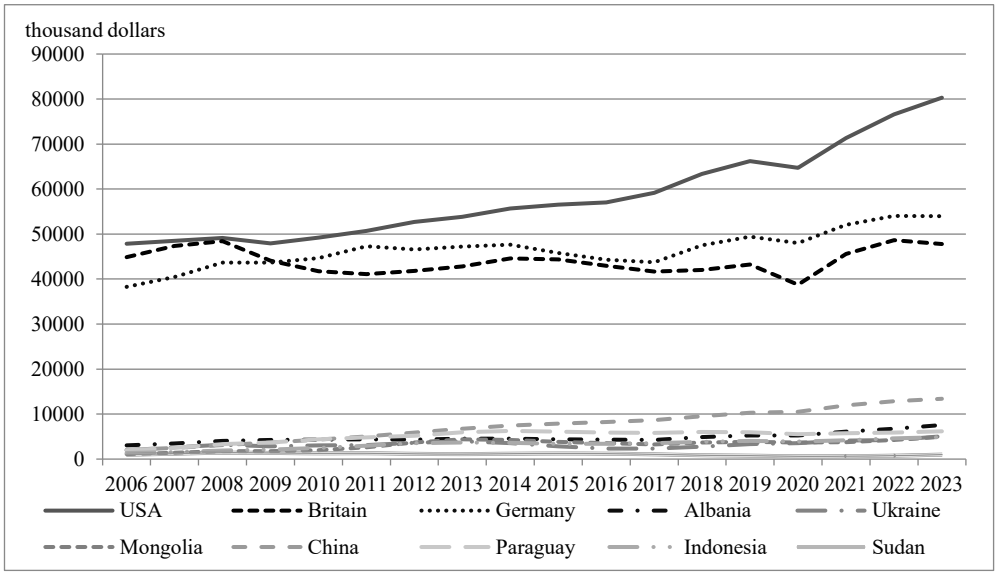
Table 1. GDP dynamics of selected world economies, 2006-2023 (%)

Countries	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Developed countries																		
USA	2.8	2.0	0.1	-2.6	2.7	1.6	2.3	2.1	2.5	2.9	1.8	2.5	3.0	2.5	-2.2	5.8	1.9	2.5
Britain	2.4	2.6	-0.2	-4.6	2.2	1.1	1.5	1.8	3.2	2.2	1.9	2.7	1.4	1.6	-10.4	8.7	4.3	0.1
Germany	3.8	3.0	1.0	-5.7	4.2	3.9	0.4	0.4	2.2	1.5	2.2	2.7	1.0	1.1	-3.8	3.2	1.8	-0.3
Countries with a transitional market economy																		
Albania	5.9	6.0	7.5	3.4	3.7	2.5	1.4	1.0	1.8	2.2	3.3	3.8	4.0	2.1	-3.3	8.9	4.9	3.4
Ukraine	7.6	8.2	2.2	-15.1	4.1	5.4	0.2	0.0	-10.1	-9.8	2.4	2.4	3.5	3.2	-3.8	3.4	-28.8	5.3
Mongolia	8.6	10.2	8.9	-1.3	6.4	17.3	12.3	11.6	7.9	2.4	1.5	5.6	7.7	5.6	-4.6	1.6	5.0	7.0
Developing countries																		
China	12.7	14.2	9.7	9.4	10.6	9.6	7.9	7.8	7.4	7.0	6.8	6.9	6.7	6.0	2.2	8.4	3.0	5.2
Paraguay	4.8	5.4	6.5	-0.3	11.1	4.3	-0.7	8.3	5.3	3.0	4.3	4.8	3.2	-0.4	-0.8	4.0	0.2	4.7
Indonesia	5.5	6.3	6.0	4.6	6.2	6.2	6.0	5.6	5.0	4.9	5.0	5.1	5.2	5.0	-2.1	3.7	5.3	5.0
Sudan	6.5	5.7	3.8	-2.8	3.9	-3.2	-17.0	2.0	4.7	1.9	3.5	0.7	-2.7	-2.2	-3.6	-1.9	-1.0	-12.0

Source: built by the authors based on World Bank data (2024a).

The recorded decline of economic growth in the world economy leads to a "freezing" of companies' capital and assets, and deterioration of business conditions. It causes a drop in securities prices and depreciation of international payment instruments during a period of growing crisis, increases economic instability, and leads to social problems. The difference in economic growth between countries has led to a significant difference in the living standards in these countries it has been observed for many years (Figure 4).

Figure 4. Comparison of per capita incomes in selected world economies



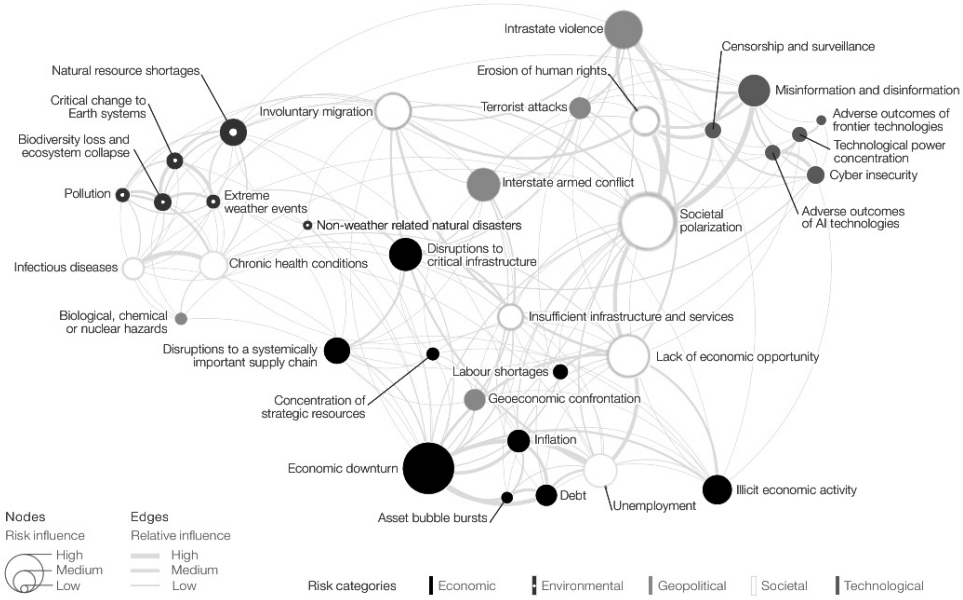
Source: built by the authors based on World Bank data (2024, a, b).

A comparison of the economic growth rates and per capita incomes of individual world economies shows a huge gap in per capita incomes between countries that have maintained economic growth rates for 60 years (the United States, the United Kingdom, Germany), the last 25 years (China), only 15 years (Albania, Indonesia), or show unstable changes in growth rates (Ukraine, Mongolia, Paraguay, Sudan). It should be noted that the level of income per capita in the United States increased by 67.82% between 2006 and 2023, in the United Kingdom by 6.58%, and in Germany by 41.02%. In the countries with transitional market economies per capita income growth was characterized by much higher dynamics: in Albania – 148.2%, in Ukraine – 160.0%, and in Mongolia – 345.95%. In developing countries, the level of income per capita changed as follows: in China – increased by 550.49%, in Paraguay – increased by 214.72%, Indonesia – increased by 258.09%, while in Sudan it fluctuated significantly (from 2006 to 2015 it increased by 29.17%, and then, by 2023, decreased by 20.16%; the overall growth from 2006 to 2023 was only 3.13%). Among the reasons that explain the significant increase in per capita income growth in developing and transition economies compared to developed countries are: increased capital investment in riskier and, at the same time, profitable projects, a decline in population growth, donor lending by developed countries on a non-repayable basis, etc.

The economic downturn in the world economies is well-founded and can be explained by the impact of global risks, which can have both a social origin due to interactive complexity and arise due to negative externalities, the society of organizations and the “error-proneness” versus “error-avoidance” of large technical systems (Le Coze J.-C., 2023), be related to environmental impacts (Qazi, Al-Mhdawi, 2023), or other factors.

For a comprehensive assessment of global risks, this study relies on the annual reports on global risks (World Economic Forum, 2006; World Economic Forum, 2020; World Economic Forum, 2024), where a thorough and in-depth assessment of the main risks facing the global economy is carried out. These reports divide global risks into five categories, namely geopolitical, economic, societal, environmental, and technological. Although they have distinctive features, in most cases the risks are intertwined, so their interaction should be viewed from an integrated perspective. We present the interaction of global risks in 2024 in the map of their interconnections (Figure 5).

Figure 5. Plane of global risks: map of interconnections



Source: World Economic Forum (2024).

It was established that, taking into account the variability of the external environment, the impact of certain global risks was not sustainable, and therefore this requires clarification of the list of risks that could cause the economic downturn of world economies, by forming their sample. Its formation is based on the results of an annual survey of more than 11,000 respondents who answered the question "Which five risks are most likely to pose the biggest threat to your country in the next two years?" and chose global risks from a list of 23-36 identified risks (World Economic Forum, 2006; World Economic Forum, 2020; World Economic Forum, 2024).

Summarizing the results of surveys for the period 2006-2023 made it possible to determine the presence of 34 global risks that had a direct or indirect impact on the economic downturn of the countries (Table 2).

Table 2. Top 5 global risks in terms of impact (2006-2023)

Rg	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
1	OPSh	BAP	BAP	AsPC	AsPC	FsCr	FinF	FinF	FsCr	WCr	CAF	WMD	WMD	WMD	CAF	InDi	EWE	ECr
2	InPd	DG	DG	DG	DG	CC	WCr	WCr	CAF	Ch(I)D	WMD	EWE	EWE	CAF	WMD	CAF	CLC	CLC
3	TRM	ISCW	ChHL	O(G)PS	OPS	GPLC	FdCr	FsCr	WCr	WMD	WCr	WCr	ND	EWE	BDL	WMD	CAF	RI
4	CC	Pd	OPSh	Ch(I)D	Ch(I)D	AsPC	FsCr	WMD	UNPL	ISCW	IM	ND	CAF	WCr	EWE	BDL	SCN	FdCr
5	KBR	OPSh	Pd	FsCr	FsCr	EPV	EPV	CAF	IBD	CAF	EPV	CAF	WCr	ND	WCr	NRCr	BDL	CCI

Note. AsPC – Asset price collapse, BAP – Blow up in asset prices, BDL – Bio-diversity loss, CAF – Climate action failure, CC – Climate change, CCI – Cyber-attacks on critical infrastructure, Ch(I)D – Chronic/Infectious disease, ChHL – China hard landing, CLC – Cost-of-living cisis, DG – Deglobalization, ECr – Energy crisis, EPV – Energy price volatility, EWE – Extreme weather events, FsCr – Fiscal crises, FdCr – Food crisis, FinF – Financial failure, GPLC – Geopolitical conflict, IBD – Infrastructure breakdown, InPd – Influenza pandemic, IM – Involuntary migration, ISCW – Interstate and civil wars, KBR – Knowability and risk, ND – Natural disasters, NRCr – Natural resource crises, O(G)PS – Oil (gas) price spikes, OPSh – Oil Price Shock, Pd – Pandemics, RI – Rising Inflation, SCE – Social cohesion-erosion, TRM – Terrorism, WCr – Water crises, WMD – Weapons of mass destruction, UNPL – Unemployment.

Source: built by the authors based on the World Economic Forum (2006, 2020, 2024).

The significant number and variety of global risks that occurred in terms of their impact on the dynamics of economic growth in the world in 2006-2023 requires further logical and structural analysis in accordance with the waves of cyclical development of economic processes. Thus, during the first wave of cyclicality (2006-2014), the dominance of economic risks can be traced, the share of which in the studied list is 48.9%, while the share of social risks is 17.8%, geopolitical risks – 17.8%, environmental risks – 11.1%, technological risks – only 4.4%. During the second wave of cyclicality (2015-2023), the situation changed significantly, and the impact of environmental risks dominated, with a share of 44.4% in the list, while the share of social risks was 26.7%, geopolitical risks – 17.8%, economic risks – 6.7%, and technological risks – 4.4%.

Analyzing the impact of economic risks on the dynamics of economic growth in the world, we can say that it was more negative during the first wave of cyclicality (2006-2014) compared to the second wave (2015-2023). For comparison, the average decline in the U.S. GDP growth during the first wave was 1.1%, while during the second wave it was 0.6%; for the UK, the decline was 1.3% and 0.8%, respectively; for Germany – 2.3% and 0.45%; for China – 2.8% and 1.2%; for Sudan – 6.1% and 3.0%. This is quite natural, since during the first wave, the number of economic risks that had an impact was predominant compared to other types of global risks.

The presented research results demonstrate the impact of global risks on the world economies. At the same time, scientists note the multicriteria nature of this impact, which causes controversy over the results. A number of works note that such risks can negatively affect people's quality of life, economic stability, physical and mental well-being, and social cohesion, intensify existing inequalities and create new problems for marginalized groups (Guo et al., 2024). They can also have an impact on the corporate value of companies (Cohen, 2023), and the growth of capital investment, which can affect economic growth, control of external pressures, and business risk in countries with effective public policies (Sun et al., 2023). Other researchers suggest focusing on the study of external financial conditions and lending in order to prevent economic risks that can significantly affect macroeconomic dynamics and GDP growth (Lloyd S. et al., 2024). In order to avoid the negative impact of

global risks on economic growth, timely risk monitoring is necessary (Alonso, Molina, 2021), ensuring that the unique causes of the downturn of world economies are identified.

4.2. Analysis of the unique causes of economic downturns under the influence of global risks

The modern economy of the countries of the world is increasingly characterized by the destabilizing influence of global risks, which cause its economic downturn. To analyze the cause-and-effect relationship between the impact of global risks and the downturn of economies, we will build an Ishikawa diagram (Ishikawa, 1974), which provides a number of advantages over the use of risk assessment methods such as event tree analysis, fault tree analysis, decision tree analysis, or Bow-Tie analysis (ISO, 2018):

- Identifying areas where data should be collected for further study.
- Facilitating the identification of the root causes of the problem under analysis.
- Providing an opportunity to identify the determining factors of desired and undesired impacts.
- Presenting a graphical illustration of the results in an easy-to-understand manner.

The Ishikawa diagram is based on the results of annual surveys of respondents (representatives of the private business sector, academics, government, civil society, and international organizations) from all regions of the world. At the same time, most of them came from Europe (38%), North America (18%), Latin America and the Caribbean (9%), and South Africa (8%). The latest survey took into account the responses of 1,490 respondents who assessed the current risk landscape, short- and long-term risk landscape, short-term severity, long-term severity, consequences, risk governance, risk outlook, global efforts, global political environment for cooperation, outlook for the world and sample distribution (World Economic Forum, 2024).

While working with the Ishikawa diagram, the causes (factors) that in any way affect the economic downturn of the countries of the world were identified. They were brought into line with the previously identified criteria for the division of global risks, and they were grouped by cause-and-effect blocks. The insignificant and non-principled factors of non-global nature were excluded. As a result, all unique causes are summarized in the following 6 groups: economic, environmental, social, geopolitical, technological and others.

Economic causes. Many countries are experiencing growing financial and fiscal problems as a result of high debt burdens which are caused by excessive interest rates, economic support during the pandemic, and stimulus measures to support economies. This has a negative impact on the efficiency of the economic activity of enterprises, which is already extremely low (Britchenko et al., 2018), pricing policy, and the sustainability of importing countries (Yemelyanov et al., 2023). Illegal economic activity increases the size of the shadow economy and the need for greater government control. The negative impact of such risks leads to increased market volatility, a decline in investor confidence, and a negative impact on the economic growth of countries (Global Diplomatic Forum, 2023). At the same time,

moderate inflation and oil and gas prices, to which most economies have become accustomed, have a positive impact on economic growth.

Environmental causes. Natural disasters, as well as biodiversity loss, climate change and disruption caused by anthropogenic impacts, are the most common causes of environmental global risk, indirectly causing economic downturns in world economies. Extreme weather conditions (hurricanes, floods, droughts) disrupt supply chains between countries (Qin et al., 2023; Kryvoviaziuk, 2013), destroy infrastructure (Clarke et al., 2021), and negatively affect yields and production continuity (Yadav et al., 2021). According to the World Health Organization's research, due to dramatic changes in climate conditions, the risks of excessive mortality will increase and by 2030 will be almost 2 times higher than today, which will reduce the ability to create additional value with human capital, which is a significant global risk in terms of impact on the dynamics of economic growth of the countries of the world. The escalation of climate-related risks poses a threat to businesses around the world, especially in those countries whose economic activity is significantly affected by the stability of weather conditions. Accordingly, countries have to improve their ability to predict the emergence of climate threats and respond faster and better to the impacts of extreme weather, fully consider extreme climate conditions when developing infrastructure, and formulate and implement their emissions commitments to prevent serious damage to the global supply chain (Qin et al., 2023).

Social causes. The growth of population and limited natural resources has led to the emergence of such crises as the water crisis and the food crisis. The population of most African countries and some Asian countries still suffers from hunger and lack of drinking water. The spread of chronic and infectious diseases and the COVID-19 pandemic have revealed how a global health crisis can significantly impact economies and disrupt business operations (Global Diplomatic Forum, 2023). Although vaccination efforts have made significant progress, potential pandemics remain significant risks to be taken into consideration. Accordingly, governments and businesses should work towards developing healthcare infrastructure, with the goal of strengthening the healthcare system.

Geopolitical causes. The last decade (and especially the last few years) has become a real global challenge for countries, international governmental and military structures and associations in the context of unprecedented growth of geopolitical tensions since the Cold War. The war in Ukraine, terrorist threats from the Middle East, and presidential coups in Africa could have far-reaching consequences for the global economy. At the same time, trade disputes between the United States and China, existing sanctions and territorial conflicts between many countries significantly impede international cooperation. All of the above causes significant disruption of supply chains, especially in the Black Sea region. The existing geopolitical tensions create uncertainty, which may lead to a further increase in the negative impact of global risks, a further decline in investor confidence and a corresponding impact on economic growth.

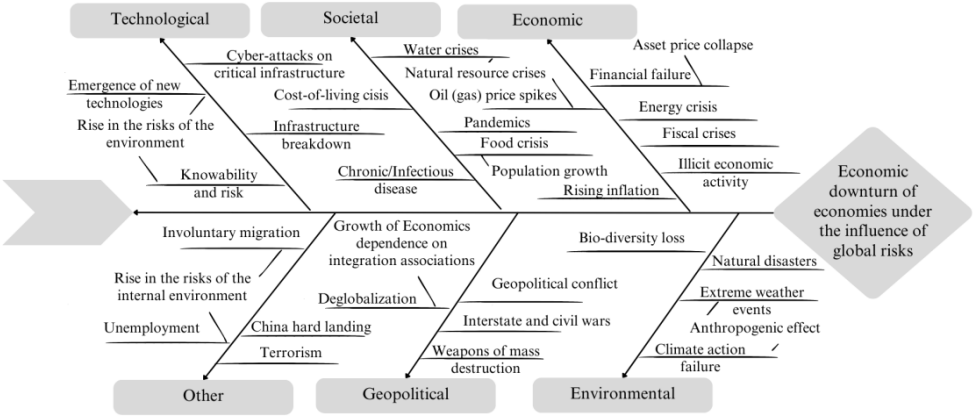
Technological causes. The accelerated adoption of technology in the context of digital transformation and business innovation (Kryvovyazyuk et al., 2023) has brought enormous benefits, but at the same time exposed businesses and governments to unprecedented cybersecurity risks. Cyberattacks, especially in the context of rising geopolitical tensions, targeting critical infrastructure, government structures, financial institutions, and businesses,

cause significant damage. Such damage is already estimated at USD 6 trillion for companies operating in the market (World Economic Forum, 2024). Companies should be vigilant in implementing robust cybersecurity measures to protect their operations and defend against potential breaches, improving strategic capabilities (Kryvovyazyuk and Strilchuk, 2016). It is also necessary to take into account the significant destruction of infrastructure caused by military actions in Ukraine, Russia, Israel and other countries of the world, which should be restored in the near future. The impact of technological risks is mitigated to a certain extent by such factors as the development of the knowledge society and the introduction of new technologies.

Other causes. A number of factors identified as significant and global in terms of their influence on the dynamics of economic growth of the countries are difficult to assign to a particular group due to their comprehensive and integrated impact. Terrorism can be considered as a technological factor (if it manifests itself in the form of cyberattacks on government structures, financial institutions, critical infrastructure, etc.), a social factor (if it threatens society, for example, by spreading viruses or poisonous substances), an economic factor (impact on the financial stability of the country under attack), an environmental factor (if there is a threat to the environment), etc. Factors such as unemployment and uncontrolled migration tend to be economic and social global risks at the same time. China's hard landing had geopolitical, economic and social consequences for world economies and caused the largest economic downturn in the entire period of the study.

The Ishikawa summary diagram graphically illustrates the reasons for the decline of countries' economies under the influence of global risks (Figure 6).

Figure 6. Causes of economic downturns in economies under the influence of global risks



Source: built by the authors based on World Economic Forum data (2006, 2020, 2024).

However, it should be taken into account that the defined list of unique causes of economic downturns under the influence of global risks is debatable and can be presented more widely. For example, it is also proposed to consider the role of national governments (Challoumis, 2024), polycrises, or causal interactions between crises (Lawrence et al., 2024).

Taking into account the trend of increasing interconnectedness of world economies, it should be understood that the causal nature of the impact of global risks on economic growth has the potential to be far-reaching, which is likely to cause uncertainty in global markets and business disruptions around the world.

4.3. Mechanisms for accelerating economic recovery considering the impact of global risks

To overcome today's global challenges and reduce the negative impact of global risks on national economies, it is essential to focus on developing infrastructure and implementing modern technologies, addressing social issues and geopolitical conflicts, overcoming environmental threats and economic crises, and ensuring the implementation of effective risk management strategies. Governments, society, and businesses must work together to tackle current challenges by developing appropriate mechanisms to accelerate the economic recovery of economies.

The mechanisms for accelerating the economic recovery of world economies can be appropriately grouped as follows: market mechanisms, political-legal mechanisms, organizational-economic mechanisms, and financial-investment mechanisms.

Market mechanisms. First of all, it is important to recognize that there are market imperfections that impede economic growth, which is especially evident in the context of global risks. These include price imbalances, flaws in tax regulation, the presence of a shadow economy, limited access to resources among countries, and the cost-of-living crisis. Accelerating the economic recovery of countries under such circumstances involves several mechanisms, among which the regulation of the development of a social market economy plays a key role. The main task of this mechanism is to balance the contradictions that arise in countries with different levels of per capita income to overcome the cost-of-living crisis. Support for socially vulnerable groups of the population and further development of social entrepreneurship in developing countries will also be important. Such actions will help reduce the negative impact of social and economic global risks, positively influencing economic growth. The obstacles posed by the shadow economy should be overcome by legalizing economic activities that are currently restricted and by implementing a more attractive tax regime for such activities, which could increase budget revenues; simultaneously, the role of institutions should be strengthened. It is quite difficult to overcome the problems of price imbalances (oil, gas, certain types of resources), because of the influence of monopolies. Typically, this is overcome by changing supply or demand in the stock markets. Partially, this issue can be resolved through international negotiations. Collectively, these measures will help mitigate the cause-and-effect impact of economic risk. At the same time, the economic growth of modern society not only requires the assurance of market mechanisms but also entails state intervention, necessitating the application of political-legal mechanisms.

Political-legal mechanisms. Political and legal institutions regulate economic forces by using specific levers and tools of influence (Malizia et al., 2020). While the regulation of political stability and accountability has a minimal impact on economic growth, control of corruption and government effectiveness have a significantly negative impact, whereas the rule of law

and regulatory quality have a significantly positive effect (Beyene, 2024). The implementation of economic incentives and legislative monitoring of the causes of economic downturns will provide additional benefits to economic and environmental regulatory policies, thereby fostering intensified economic growth. We see the solution to the energy crisis through the further development of the "green economy", primarily through environmental and financial regulation at both the national and international integration levels. It should also be noted that government environmental policies aimed at increasing renewable energy consumption in developing economies have a positive impact on GDP growth and greenhouse gas emissions (Mohsin et al., 2021). Both developed and developing countries share responsibility for environmental pollution, which has reached global proportions, although awareness and stricter laws in developed countries have contributed significantly to environmental protection (Ukaogo et al., 2020). In a multipolar world, the most acceptable mechanism for resolving geopolitical conflicts is dynamic diplomacy based on timely monitoring of global and regional military and terrorist threats. International multilateral cooperation is an effective mechanism for preventing conflicts by establishing appropriate diplomatic channels and developing strategic partnerships. The application of these political-legal mechanisms will reduce the negative impact of economic, geopolitical, and, to some extent, environmental global risks.

Organizational-economic mechanisms. Overcoming the threats of global risks requires changes in approaches to managing economic systems. One successful example of such changes can be seen in the Chinese model of technological progress and structural changes for economic growth (Zhou et al., 2021). The country's transition from imitation to innovation has enabled unprecedented rates of economic growth. Accordingly, we recommend that governments develop policies and strategies that could foster economic growth through technological innovations and structural changes, based on digital transformation. To this end, it is advisable to improve mechanisms for talent development, enhance the digital literacy of employees, and ensure the sustainable development of the digital economy; refine the mechanism for monitoring changes in the market environment to accompany the development of the digital economy; and ensure the flow of capital into sectors with a higher degree of digitization, thereby promoting economic development and growth. Overall, these proposed measures are intended to mitigate the negative impact of technological and economic global risks.

Financial-investment mechanisms. At the current stage of the development of world economies, green financing policies are among the most effective tools that can help improve the scale and quality of economic growth while reducing its dependence on natural resources, albeit at the expense of slower growth rates (Ouyang et al., 2023). And thus contribute to reducing environmental and economic global risks. However, this is particularly relevant to the developed countries that possess sufficient financial resources to implement "green" projects. To enhance the attractiveness of investments and ensure rapid growth in infrastructure investment, which is one of the main factors for sustainable economic growth, it is necessary to stimulate investment activity by developing public-private partnerships and project financing tools, as well as creating a favourable business environment for their organization based on high technology and added value (Tolaganova, Ochilov, 2024). This, in turn, will mitigate the negative impact of technological risks. At the same time, some

authors argue that only foreign investments should be considered as an indicator of economic attractiveness (Osei, Kim, 2023), which may not be as significant for transition economies and developing countries. An effective macroeconomic policy in countries around the world will ensure the development of an effective financial sector, which will positively influence the increase in savings and investments, as well as the rate of economic growth. When considering the impact of financial-economic mechanisms on a more global scale, a contradiction arises: "investment growth – production growth – economic growth – increased environmental pollution – investment in the environment – production constraints – reduced growth".

It should be emphasized that the proposed mechanisms are intended to ensure the proper acceleration of economic recovery in world economies from the perspective of implementing the concept of exploring the possibilities for recovery of their economic growth.

5. Conclusion

This study selected data on the annual GDP growth rates of over 200 economies from 1961 to 2023, highlighting a significant slowdown in economic growth during the period from 2006 to 2023. It utilized observations from the World Economic Forum for the same period regarding emerging global risks and analyzed the unique causes of the downturn of world economies under the influence of global risks. Based on the results of the cause-and-effect interaction between the economic downturn of economies and global risks, mechanisms for accelerating the economic recovery of economies, considering the impact of global risks, have been proposed. The final results of the study are as follows.

Firstly, the results of a comparative analysis of the economic growth rates of various world economies revealed that the rates of GDP decline are significantly lower in developed countries than in countries with transition economies and developing countries. Secondly, the assessment of global risks in categories such as economic, environmental, geopolitical, social, and technological during the period 2006-2014 demonstrates a predominant influence of economic risks, whereas the period 2015-2023 shows a predominant influence of environmental risks. Thirdly, empirical research in this article establishes that the causes of economic downturns of economies can vary significantly across different economic cycles. Fourthly, cause-and-effect analysis plays a crucial role in explaining the existing interaction between global risks and economic growth. The use of the Ishikawa diagram in this analysis clearly illustrates the causes of the economic downturn of economies under the influence of global risks.

According to the summarized conclusions, it can be stated that global risks negatively impact the dynamics of economic growth, causing a slowdown in its growth rate, and negatively affecting the development of economic activity in countries around the world. However, countries are able to use the opportunities to recover economic growth if they timely take into account the impact of global risks and apply market, political-legal, organizational-economic, and financial-investment mechanisms to accelerate economic recovery. It is important to emphasize that a significant portion of current research is focused on analyzing the negative impact of specific global risks on economic processes, while studies on how to

mitigate or eliminate this negative impact in particular national economies are noticeably lacking. In light of this, we believe that future research should be deepened in the following directions: to explore the possibilities of applying mechanisms to accelerate economic recovery in the context of their implementation for economies in different regions of the world; to demonstrate how such mechanisms can be implemented in interaction with each other; to study the effectiveness of implementing mechanisms to accelerate the economic recovery of countries' economies in view of specific global risks that have negatively affected their economic growth.

Contribution of individual authors

Igor Kryvovyazyuk and Igor Britchenko developed the concept and methodology and carried out project administration.
Liubov Lipych has made a literature review and formal analysis.
Pavlo Kravchuk and Natalia Galaziuk were responsible for the statistics and visualization.
Oleksandr Burban has justified the relevance of the theme and has made a formal analysis ma carried out validation for the materials of the research.
All of the authors have made a great contribution to the results of the research and were involved in all discussions.

Conflict of Interests

The Authors declare that there is no conflict of interest.

References

Alonso, I., Molina, L. (2021). A GPS navigator to monitor risks in emerging economies: the vulnerability dashboard. Occasional Papers, 2111, Banco de España.

Asafo-Adjei, Emmanuel et al. (2023). Conditional effects of local and global risk factors on the co-movements between economic growth and inflation: Insights into G8 economies. – Heliyon, 9(9), e19570. https://doi.org/10.1016/j.heliyon.2023.e19570.

Benabed, A., Bulgaru, A. (2023). Global Economic Recession as a Major Risk Beyond Business Insights and Economies. – Proceedings of the International Conference on Business Excellence, 17(1), pp. 221-225. https://doi.org/10.2478/picbe-2023-0024.

Beyene, A. B. (2024). Governance quality and economic growth in Sub-Saharan Africa: the dynamic panel model. – Journal of Economic and Administrative Sciences, 40 (2), pp. 404-418. https://doi.org/10.1108/JEAS-08-2021-0156.

Britchenko, I., Monte, A.P., Kryvovyazyuk, I., Kryvoviaziuk, L. (2018). The comparison of efficiency and performance of Portuguese and Ukrainian enterprises. – Ikonomicheski Izsledvania, 27(1), pp. 87-108.

Cavallo, E. A., Fernández-Arias, E., Rinaldi, J. M. (2022). The Risk of External Financial Crisis. – IDB Working Paper Series; 1389. http://dx.doi.org/10.18235/0004579.

Challoumis, C. (2024). The Role of National Governments, Domestic Economies, and Enforcement and Escape Savings in Economic Stability: Lessons from the Greek Economic Crisis. – Procedia on Economic Scientific Research, 11, pp. 213-229. DOI: 10.2139/ssrn.4630497.

Chang, L., Mohsin, M., Iqbal, W. (2023). Assessing the nexus between COVID-19 pandemic-driven economic crisis and economic policy: lesson learned and challenges. – Environ Sci Pollut Res, 30, pp. 22145-22158. https://doi.org/10.1007/s11356-022-23650-0.

Clarke, B. J., Otto, F. E. L., Jones, R. G. (2021). Inventories of extreme weather events and impacts: Implications for loss and damage from and adaptation to climate extremes. – Climate Risk Management, 32, 100285. https://doi.org/10.1016/j.crm.2021.100285.

Cohen, G. (2023). The impact of ESG risks on corporate value. – Review of Quantitative Finance and Accounting, 60, pp. 1451-1468. https://doi.org/10.1007/s11156-023-01135-6.

Iordache, A. M. M., Zamfir, I.-C., Ionescu, A. (2023). Studying the cyclicality of the economy and prediction of new high risk of economic crises: a case study on the European countries from 1995 to 2018. – Economic Research (Ekonomska Istraživanja), 36(1), pp. 296-311. https://doi.org/10.1080/1331677X.2022.2076143.

Ishikawa, S. (1974). Fixed Points by a New Iteration Method. – Proceedings of the American Mathematical Society, 44(1), pp. 147-150. https://doi.org/10.2307/2039245.

ISO (2018). Risk management – Guidelines ISO 31000:2018. Switzerland: ISO.

Global Diplomatic Forum (2023). Global Risks and Their Potential Impact on Economic Growth, Global Markets, and Business Operations. What does the next year look like? Available at: https://www.linkedin.com/pulse/global-risks-potential-impact-economic-growth/ [Accessed 22 June 2024].

Gomes, O. (2022). Global Risks and the Theory of Economic Growth. – In: Bevanda, V. (ed.). – International Scientific-Business Conference – LIMEN 2022, 8, pp. 1-9.

Guo, X., Chmutova, I., Kryvobok, K., Lozova, T., Kramskyi, S. (2024). The race for global leadership and its risks for world instability: Technologies of controlling and mitigation. – Research Journal in Advanced Humanities, 5(1), pp. 178-191. https://doi.org/10.58256/5wzf9y48.

Kose, M. A., Terrones, M. E. (2015). Collapse and Revival: Understanding Global Recessions and Recoveries. Washington: International Monetary Fund. https://doi.org/10.5089/9781513570020.071.

Kose, M. A., Ohnsorge, F. (2021). A Decade after the Global Recession: Lessons and Challenges for Emerging and Developing Economies. World Bank Publications: Washington.

Kryvoviaziuk, I. (2013). Implementation of matrix approach to management of enterprise's logistic development based on a concept of "demand-driven techniques". – Economic Annals-XXI, 9-10(1), pp. 60–64.

Kryvovyazyuk, I. V., Strilchuk, R. M. (2016). Strategic opportunities management at engineering enterprises. – Actual Problems of Economics, 183(9), pp. 144-155.

Kryvovyazyuk, I. V. (2014a). «Ice age» of economic growth. – Actual Problems of Economics, 7 (157), pp. 29-34.

Kryvovyazyuk, I. V. (2014b). Crisis and innovative activity of industrial enterprises in Ukraine. – Actual Problems of Economics, 9 (159), pp. 218-223.

Kryvovyazyuk, I., Britchenko, I., Smerichevskyi, S., Kovalska, L., Dorosh, V., Kravchuk, P. (2023). Digital Transformation and Innovation in Business: the Impact of Strategic Alliances and Their Success Factors. – Economic Studies (Ikonomicheski Izsledvania), 32 (1), pp. 3-17.

Lawrence, M., Homer-Dixon, T., Janzwood, S., Rockstöm, J., Renn, O., Donges, J. F. (2024). Global polycrisis: the causal mechanisms of crisis entanglement. – Global Sustainability, 7, e6. doi:10.1017/sus.2024.1.

Le Coze, J.-C. (2023). Global risks. In: Karner, Ch. & Hofäcker, D. (eds) Research Handbook on the Sociology of Globalization. Cheltenham: Edward Elgar Publishing. https://doi.org/10.4337/9781839101571.

Lloyd, S., Manuel, E., Panchev, K. (2024). Foreign Vulnerabilities, Domestic Risks: The Global Drivers of GDP-at-Risk. – IMF Econ Rev, 72, pp. 335-392. https://doi.org/10.1057/s41308-023-00199-7.

Lund, S., Manyika, J., Woetzel, J., Barriball, Ed, Krishnan, M., Alicke, K., Birshan, M., George, K., Smit, S., Swan, D., Hutzler, K. (2020). Risk, resilience, and rebalancing in global value chains. New York City: McKinsey Global Institute.

Malizia, E., Feser, E. J., Renski, H., Drucker, J. (2020). Understanding Local Economic Development. 2nd ed. London: Routledge.

Mohsin, M., Kamran, H. W., Nawaz, M. A., Hussain, M. S., Dahri, A. S. (2021). Assessing the impact of transition from nonrenewable to renewable energy consumption on economic growth-environmental nexus from developing Asian economies. – Journal of Environmental Management, 284, 111999. https://doi.org/10.1016/j.jenvman.2021.111999.

Osei, M. J., Kim, J. (2023). Financial development and the growth effect of foreign direct investment: Does one size fit all?. – International Economics, 173, pp. 276-283. https://doi.org/10.1016/j.inteco.2023.01.001.

Ouyang, H., Guan, C., Yu, B. (2023). Green finance, natural resources, and economic growth: Theory analysis and empirical research. – Resources Policy, 83, 103604. https://doi.org/10.1016/j.resourpol.2023.103604.

Phan, D. H. B., Iyke, B. N., Sharma, S. S., Affandi, Y. (2021). Economic policy uncertainty and financial stability – Is there a relation?. – Economic Modelling, 94, pp. 1018-1029. https://doi.org/10.1016/j.econmod.2020.02.042.

Poruchnyk, A., Kolot, A., Mielcarek, P., Stoliarchuk, Y., Ilnytskyy, D. (2021). Global economic crisis of 2020 and a new paradigm of countercyclical management. – Problems and Perspectives in Management, 19(1), pp. 397-415. http://dx.doi.org/10.21511/ppm.19(1).2021.34.

Prăvălie, R. (2021). Exploring the multiple land degradation pathways across the planet. – Earth-Science Reviews, 220, 103689. https://doi.org/10.1016/j.earscirev.2021.103689.

Qazi, A., Al-Mhdawi, M. K. S. (2023). Exploring dependencies among global environmental, socioeconomic, and technological risks. – Environmental Impact Assessment Review, 98, 106912. https://doi.org/10.1016/j.eiar.2022.106912.

Qin, M., Su, C.-W., Umar, M., Lobonț, O.-R., Manta, A. G. (2023). Are climate and geopolitics the challenges to sustainable development? Novel evidence from the global supply chain. – Economic Analysis and Policy, 77, pp. 748-763. https://doi.org/10.1016/j.eap.2023.01.002.

Salavrakos, I. D., Palmadessa, A. L. (2023). The Global Economic Crisis: Historical Roots, Lessons Learned, and Implications for Geopolitical Stability. – In: Akande, A. (eds.). Globalization, Human Rights and Populism. Springer, Cham. https://doi.org/10.1007/978-3-031-17203-8_43.

De Soysa, I., Vadlamannati, K. C. (2023). Free market capitalism and societal inequities: Assessing the effects of economic freedom on income inequality and the equity of access to opportunity, 1990-2017. – International Political Science Review, 44(4), pp. 471-491. https://doi.org/10.1177/01925121211039985.

Sharma, S., Soederberg, S. (2019). Redesigning the business of development: the case of the World Economic Forum and global risk management. – Review of International Political Economy, 27(4), pp. 828-854.

Sillmann, J., Christensen, I., Hochrainer-Stigler, S., Huang-Lachmann, J., Juhola, S., Kornhuber, K., Mahecha, M., Mechler, R., Reichstein, M., Ruane, A. C., Schweizer, P.-J., Williams, S. (2022). ISC-UNDRR-RISK KAN Briefing note on systemic risk. Paris: International Science Council.

Stewart, A. J., McCarty, N., Bryson, J. J. (2020). Polarization under rising inequality and economic decline. – Science Advances, 6(50), eabd4201. DOI: 10.1126/sciadv.abd4201.

Stiglitz, J. E. (2003). Globalization and growth in emerging markets and the New Economy. – Journal of Policy Modeling, 25(5), pp. 505-524. https://doi.org/10.1016/S0161-8938(03)00043-7.

Sun, C., Abbas, H. S. M., Xu, X., Gillani, S., Ullah, S., Raza, M. A. A. (2023). Role of capital investment, investment risks, and globalization in economic growth. – International Journal of Finance & Economics, 28, pp. 1883-1898. https://doi.org/10.1002/ijfe.2514.

Tobias, A., Boyarchenko, N., Giannone, D. (2019). Vulnerable Growth. – American Economic Review, 109 (4), pp. 1263-89. DOI: 10.1257/aer.20161923.

Tolaganova, R., Ochilov, B. (2024). Directions for improving investment attraction mechanisms. – Eurasian Journal of Academic Research, 4(1 Part 2), pp. 144-151.

Tong, S., Bambrick, H., Beggs, P.J., Chen, L., Hu, Y., Ma, W., Steffen, W., Tan, J. (2022). Current and future threats to human health in the Anthropocene. – Environment International, 158, 106892.

Ukaogo, Prince O., Ewuzie, U., Onwuka, C. V. (2020). 21 - Environmental pollution: causes, effects, and the remedies. – Microorganisms for Sustainable Environment and Health, Elsevier, pp. 419-429. https://doi.org/10.1016/B978-0-12-819001-2.00021-8.

World Bank. (2024). GDP growth (annual %). Washington: World Bank, DC.

World Bank. (2024). GNI per capita (current US$). Washington: World Bank, DC.

World Economic Forum. (2006). Global Risks 2006, Cologny/Geneva.

World Economic Forum. (2020). The Global Risks Report 2020 (15th ed.), Cologny/Geneva.

World Economic Forum. (2024). The Global Risks Report 2024 (19th ed.), Cologny/Geneva.

Yadav, P., Jaiswal, D. K., Sinha, R. K. (2021). 7 – Climate change: Impact on agricultural production and sustainable mitigation. Global Climate Change, Elsevier, pp. 151-174. https://doi.org/10.1016/B978-0-12-822928-6.00010-1.

Yatsenko, O. M., Nitsenko, V. S., Mardani, A., Tananaiko, T. S. (2018). The impact of global risks on the world trade and economic environment. – Financial and Credit Activity: Problems of Theory and Practice, 4(27), pp. 435-444. https://doi.org/10.18371/fcaptp.v4i27.154279.

Yemelyanov, O., Petrushka, T., Lesyk, L., Havryliak, A., Yanevych, N., Kurylo, O., Bodakovskyy, V., Skoropad, I., Danylovych, T., Petrushka, K. (2023). Assessing the Sustainability of the Consumption of Agricultural Products with Regard to a Possible Reduction in Its Imports: The Case of Countries That Import Corn and Wheat. – Sustainability, 15, 9761. https://doi.org/10.3390/su15129761.

Yu, M., Wang, N. (2023). The Influence of Geopolitical Risk on International Direct Investment and Its Countermeasures. – Sustainability, 15(3), 2522. https://doi.org/10.3390/su15032522.

Yussuf, A. A., Okunkova, E. A., Ioda, J. V., Tleptserukov, M. A., Butova, L. M. (2023). Assessment of the Risks of Transition from a Global Pandemic Crisis to a Model of Long-Term Economic Growth. – In: Popkova, E.G. (eds.). Sustainable Development Risks and Risk Management. Advances in Science, Technology & Innovation. Springer, Cham. https://doi.org/10.1007/978-3-031-34256-1_14.

Zhou, X., Cai, Z., Tan, K. H., Zhang, L., Du, J., Song, M. (2021). Technological innovation and structural change for economic development in China as an emerging market. – Technological Forecasting and Social Change, 167, 120671. https://doi.org/10.1016/j.techfore.2021.120671.