THE IMPACT OF GLOBAL RISKS ON THE WORLD TRADE
AND ECONOMIC ENVIRONMENT

Abstract. It is noted that the unprecedented dynamic globalization of trade and economic relations and the fourth industrial revolution cardinaly transform the global distribution system of the world economy, accompanied by the growing impact of global challenges and risks, the failure to take into account the effects of which permanently reduces the efficiency of economic functioning and international trade. For developing countries affected by geopolitical challenges, the development of partnerships with countries that are recognized as global leaders in the world economy is essential in terms of national interests and the promotion of state sovereignty.

The purpose of this paper is to characterize the impact of global risks on the formation and implementation of trade and economic policies of countries based on the methodological approaches of leading international economic institutions and organizations. Major global risks have identified rising / falling prices for assets, oil or gas, changes in the structure of trade and economic cooperation, terrorism, separatism, climate change, unemployment, income inequality, proliferation of weapons of mass destruction, cyberattacks, etc.

The following methods of scientific research were used to achieve the goal and to solve the tasks of the article: systematic structural analysis of economic processes and phenomena, method of quantitative and qualitative comparisons, tabular method of calculating the degree of influence.

The scientific novelty of the results is to study the processes of formation and implementation of trade and economic policies of countries under the influence of exogenous factors on them. The influence of exogenous factors is characterized not only according to the sectoral classification (economic, geopolitical, technological, social and natural), but also taking into account the degree of influence of the factor (global challenges and global risks) on the environment.

It is substantiated that in the conditions of globalization of the world economy, the threats receive a corresponding more serious nature. Therefore, government agencies need to develop new effective tools for their minimization in order to prevent negative effects and to implement more productive trade and economic cooperation with partner countries.

Key words: trade and economic cooperation, international trade, global challenges, global risks, protectionist trade policy.

JEL Classification: F4, F6

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ВПЛИВ ГЛОБАЛЬНИХ РИЗИКІВ НА СВІТОВЕ ТОРГОВЕЛЬНО-ЕКОНОМІЧНЕ СЕРЕДОВИЩЕ

Анотація. Означено, що безпрецедентна динамічна глобалізація торговельно-економічних відносин та четверта промислова революція кардинально трансформують систему розподілу світової економіки, що супроводжується зростанням впливу глобальних викликів та ризиків, неврахування дії яких суцільно знижує ефективність функціонування економік та ведення міжнародної торгівлі. Для країн, що розвиваються, які зазнають впливу геополітичних викликів, необхідним, з точки зору реалізації національних інтересів та відстоювання державного суверенітету, стає розвиток партнерства з країнами, які є визнаними глобальними лідерами світової економіки.

Метою наукової статті є характеристика впливу глобальних ризиків на формування та реалізацію торговельно-економічних політик країн на основі методичних підходів провідних міжнародних економічних інститутів та організацій. Магістральними глобальними ризиками визначено зростання/падіння цін на активи, нафту чи газ, зміни структури торговельно-економічного співробітництва, тероризм, сепаратизм, кліматичні зміни, безробіття, нерівність у доходах, поширення зброї масового знищення, кібератаки тощо.

Для досягнення мети і розв’язання завдань статті були використані наступні методи наукового дослідження: системно-структурний аналіз економічних процесів та явищ, метод кількісного та якісного порівнянь, табличний метод розрахунку ступені впливу.

Наукова новизна одержаних результатів полягає у дослідженні процесів формування та реалізації торговельно-економічних політик країн в умовах впливу на них екзогенних факторів. Вплив екзогенних факторів охарактеризований не тільки відповідно до секторальної класифікації (економічні, геополітичні, технологічні, соціальні та природні), а й з урахуванням ступеня впливу фактору (глобальні виклики та глобальні ризики) на середовище.

Обґрунтовано, що в умовах глобалізації світової економіки загрози отримують відповідний більш серйозний характер. Тому урядовим структурам необхідно розробити нові ефективні інструменти їх мінімізації задля запобігання негативних наслідків та реалізації більш плідного торговельно-економічного співробітництва з країнами-партнерами.

Ключові слова: торговельно-економічне співробітництво, міжнародна торгівля, глобальні виклики, глобальні ризики, протекціоністська торгівельна політика.

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ВЛИЯНИЕ ГЛОБАЛЬНЫХ РИСКОВ НА МИРОВУЮ ТОРГОВО-ЭКОНОМИЧЕСКУЮ СРЕДУ

Аннотация. Отмечено, что беспрецедентная динамическая глобализация торгово-экономических отношений и четвертая промышленная революция кардинально трансформируют систему распределения мировой экономики сопровождается ростом влияния глобальных вызовов и рисков, неучет действия которых сплошь снижает эффективность функционирования экономик и ведения международной торговли. Для развивающихся стран, подвергающихся воздействию геополитических вызовов, необходимым с точки зрения реализации национальных интересов и отстаивания государственного суверенитета, становится развитие партнерства со странами, которые являются признанными лидерами мировой экономики.

Обосновано, что в условиях глобализации мировой экономики угрозы получают соответствующий более серьезный характер. Поэтому правительственным структурам необходимо разработать новые эффективные инструменты их минимизации для предотвращения негативных последствий и реализации более плодотворного торгово-экономического сотрудничества со странами-партнерами.

Ключевые слова: торгово-экономическое сотрудничество, международная торговля, глобальные вызовы, глобальные риски, протекционистская торговая политика.

Формул: 0; рис.: 4; табл.: 6; библ.: 10.
Research Findings. Risk, as an economic category, is understood as the probability (possibility) of an event occurrence or non-occurrence, which will lead to negative effects, since the risk reflects the peculiarities of management, decision-making under conditions of possible threats or unused opportunities. Global risk is defined as an event that, if it occurs, will have a significant negative impact on the regions of the world and the group of countries over the next decade [1, p. 33], but such a time interval can hardly be named standard, because in a rapidly changing world it can be shortened and lengthened.

As priorities of global politics in the context of modern development, E. Heywood particularly highlights the risks associated, firstly, with global transformations in the spheres of economy, social and national development, first of all in the sphere of governance, and secondly, with the changing world structure and transition to the new world order, which assesses the reality of the threat of civilization conflicts, threats posed by the proliferation of weapons of mass destruction and terrorism, and thirdly, the problem of global justice and related risks of widespread poverty, inequality, loss of prospects of development, violation of human rights and the principles of democracy, gender inequality and inequality in the field of ecology. The perspectives of modern global politics are linked to the search for an optimal model of global governance, including the areas of international relations and, first of all, of the United Nations, the world economy, international law and global policy of interregional integration. Recommendations and substantiation of the possibilities of minimizing the risks of post-crisis financial sector function are represented in publications of S. Gasanov and O. Gavrilyuk [2, p.10].

While defining external factors and their degree of influence on trade and economic relations, one should understand the differences between the concepts of global challenge, risk and crisis (Fig. 1).

The global challenge is a certain signal of the existence of the danger of interaction, which is a kind of requirement of the use of preventive measures aimed at the cause of its occurrence. The global risk is already a potential danger to the development of trade cooperation and the functioning of the economy as a whole, due to the presence of global problems, as well as the growth of negative trends of relevant content. That is, the global challenge, in the condition that it was not identified in a timely manner and its possible impact was not minimized, becomes a real global risk, which leads to negative larger scale consequences with the potential to outgrow into a global crisis.

Turning to the classification of global risks, it is worth pointing out that there are different approaches, both among foreign schools, and domestic ones. Among the foreign approaches we suggest considering the Cambridge Global Risk Outlook 2017, developed by the Cambridge Risk Research Center, the Global Business Impact Index, developed by the Canadian analytic center Dun & Bradstreet and the Annual Global Risk Report 2017 of the World Economic Forum.

The Cambridge Center for Risk Assessment (CCRS) analyzes the global risks of the world economy in 2017, taking into account 22 threats subdivided into five broad categories. Using existing evidence and data on the main processes and implications for managing their assessments and combining information on threats, scientists collect data on scenarios and the implications for future risk assessment.

This center of risk studies simulates shock situations for major economies of the world and assesses them by geographic distribution, probability of occurrence and degree of influence (Fig. 2).

Over the past two years, it has shrunk for such phenomena as: market collapse, pandemic disease, rising commodity prices, – but increased for risks of intergovernmental conflicts,
separatism, cyber attacks and climatic changes, indicating a change in the nature of the functioning of global and local economies, trade cooperation.

![Fig. 2. Index of global risks affecting the economy in 2017 (by types of threats, billion dollars USA)](source)

Source: [3, p.13].

The first of the five categories includes financial, economic and trade risks: market collapse, sovereign crisis, price increases (Table 1).

**Table 1**

<table>
<thead>
<tr>
<th>Category</th>
<th>Risks</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial, economic, trade risks</td>
<td>The collapse of the market</td>
<td>The likelihood of a financial crisis that arose due to the explosion of bubble assets, the debt crisis, remains high.</td>
</tr>
<tr>
<td></td>
<td>Sovereign crisis</td>
<td>In quantitative terms, it will increase, with some countries having a higher credit period, reflecting ratings of rating agencies.</td>
</tr>
<tr>
<td></td>
<td>Growth in commodity prices</td>
<td>Growth in commodity prices from their current level is likely to take place, but this process will be less influential if they do not exceed the level of 2014.</td>
</tr>
</tbody>
</table>

Source: compiled by authors on the basis of [3, p.7].

The next category is called "geopolitics and security", which also affects the prospects of trade and economic cooperation, as related risks shape the image of countries as uncompetitive. Interstate conflicts, terrorism, social distortions, separatism – all these global risks seem to be particularly relevant today. Nowadays, the risk of intergovernmental conflicts is elevated, the growing military tension is evident in a number of geopolitical scenarios; the level of destructive conflict due to cyber war is potentially lower in terms of probability.

Natural disasters that belong to environmental risk groups continue to provoke localized economic shifts, adjusting the commodity structure of trade in these countries (Table 2).

Technological threats are one of the most rapidly changing risks for global and local economies. The probability of cyber attacks is growing fast and is likely to remain very high in the short term [8]. In the long run, international co-operation and law enforcement will reduce the risk of economic hardship by cyber-hackers. The index of solar flares is associated with a long-term decline in the baseline trend, since the operational grids reduce their vulnerability to geomagnetic damage. The risk of power outage is increasing in countries with energy shortages. The risk of a
nuclear accident is relatively unchanged, since six nuclear power plants were decommissioned in 2015.

Table 2

<table>
<thead>
<tr>
<th>Category</th>
<th>Risks</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental</td>
<td>Earthquakes</td>
<td>The threat of an earthquake usually does not change over time; therefore, the chances of occurrence correspond to the basic development trend.</td>
</tr>
<tr>
<td>Environmental</td>
<td>Typhoons</td>
<td>The risk of tropical winds over the next three years corresponds to the baseline risk level of the last 10 years.</td>
</tr>
<tr>
<td>Environmental</td>
<td>Tsunami</td>
<td>The onset of the tsunami does not depend on short-term factors.</td>
</tr>
<tr>
<td>Environmental</td>
<td>Flood</td>
<td>If a strong phase of El Niño begins, the flood risk in some regions (Latin America, Africa, India, Southeast Asia, Australia) may be increased.</td>
</tr>
<tr>
<td>Environmental</td>
<td>Volcanic eruptions</td>
<td>The volcano eruption risk is unchanged in time, so it corresponds to the long-term baseline.</td>
</tr>
<tr>
<td>Environmental</td>
<td>Drought</td>
<td>Its occurrence over the next three years corresponds to a basic risk of 10 years if there is no strong phase of El Niño.</td>
</tr>
<tr>
<td>Environmental</td>
<td>Freezing</td>
<td>The possibility of freezing in the short term corresponds to the long-term basis of the probability of events.</td>
</tr>
</tbody>
</table>

Source: compiled by authors on the basis of [3, p.9; 9].

The components of the latter category of risks are related to human health and ecology, which directly affect the ability to effectively manage international trade and dictate prices for specific products (Table 3).

Table 3

<table>
<thead>
<tr>
<th>Category</th>
<th>Risks</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social risks</td>
<td>Endemic diseases</td>
<td>Experiments of laboratories to improve understanding of mutation of pathogens carry additional risk of accidental release of artificially cultivated disease.</td>
</tr>
<tr>
<td>Social risks</td>
<td>Disease of plants</td>
<td>Diseases represent a significant risk for some of the major crops that provide most of the world's nutrition base.</td>
</tr>
<tr>
<td>Social risks</td>
<td>Pandemic</td>
<td>The chances of developing an infectious disease are increasing as the poultry and pigs worldwide grow, but improved inspection procedures, vaccine availability and pandemic preparedness can reduce the potential impact of the outbreak.</td>
</tr>
</tbody>
</table>

Source: compiled by authors on the basis of [3, p. 11].

The Canadian analytic firm Dun & Bradstreet defines its own rating of global risks that will threaten the economy and trade ability of the United States, its main trading partners, throughout the North American region and the rest of the world. Analysts highlight the top five global economic risks (Table 4).

The result of the company's annual activity is the calculation of the Global Business Impact Index, which combines the estimation of the probable impact of the event on the global business environment and the probability that the event will occur on a scale from 0 to 1000 (Fig. 3).

The company identified the risks that affect the economic environment and international trade in all regions of the world the most and assessed their impact on a scale from 1 to 100. Moreover, Dun & Bradstreet's analysts highlighted six new global economic risks in the second quarter of 2017, giving them an appropriate value in points (Fig. 4).
### Top five global economic risks by Dun & Bradstreet

<table>
<thead>
<tr>
<th>Name of risk</th>
<th>Characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protectionist global trade policy</td>
<td>Throughout the world, the temptation to close the borders remains very strong. Economic theory and experience do not give reason to believe that the United States will benefit from the strengthening of protectionism. President Tramp's recent interaction with the Chinese president was due to an increase in positive tendencies towards openness. However, the tendency to de-globalization is a serious risk for global business.</td>
</tr>
<tr>
<td>Geopolitical risk</td>
<td>The incidents in North Korea, Syria and other conflict areas create two major risks for global trade cooperation: the impact on supply chains and the risk of loss of financial channels. In addition, elections in four key European economies: France, Great Britain, Italy and Germany can be treated as a business risk, although the impact is not expected to be significant. Given the importance of these economies for the EU, the outcome of the elections will have significant implications for the future of the EU.</td>
</tr>
<tr>
<td>USA political divergence</td>
<td>Enterprises and consumers were to some degree optimistic about the future economic policy of the Trump administration since the elections. In particular, the business climate grew in anticipation of corporate tax reform. The government should provide consistent, unanimous and more detailed signals to help companies plan their strategies in anticipation of a new policy. A delay in obtaining such information may lead to anxiety among enterprises conducting international trade and the abandonment of employment and investment, deflation in the economy.</td>
</tr>
<tr>
<td>Impact of oil prices and OPEC</td>
<td>A strong USA dollar also acts as a price barrier, as well as a fundamental short- and medium-term structural approach to supply. Much will depend on whether Saudi Arabia is ready to continue to act as the initiator of price changes in the medium term. However, in the near future, Saudi Arabia wants to increase its oil prices because it wants to launch an IPO for a part of the state-owned ARAMCO company next year.</td>
</tr>
<tr>
<td>Segment digital with primary data</td>
<td>The actual reality of US policy may not meet the expectations of employment and investment globally. There may be differences between primary verbal data (mood, survey and survey), as well as digital data (GDP, inflation, capital expenditure data). Given that it is expected that the US growth will be a major factor in global acceleration in the near term, any disappointment will impede global growth.</td>
</tr>
</tbody>
</table>

Source: compiled by authors on the basis of [4].
Extending the investigation into the O'Brien bribery scandal involving 11 Latin American countries has led to the cancellation of dozens of global infrastructure projects, which has led to significant losses for foreign partners (GBI 24 out of 100);

Parliamentary elections in Italy end with the victory of parties against the EU, which will lead to further pressure on the EU (24);

The IFRS 9 for banks, which is due to come into force in January 2018, leads to a massive increase in provisions for losses in banks throughout the world and reduces the growth of lending in the banks' loan markets (20);

Permanent economic hardship and growing disappointments in government policy and corruption cause shock / revolutions in Eastern Europe and Central Asia, which led to the collapse of political regimes (18);

Russia's military activity along its eastern flank and mutual preventive measures by NATO cause a direct military conflict (16);

The USA Federal Reserve raises rates too quickly to prevent inflationary pressures, increasing pressure on emerging market economies (16).

The official position on identifying and classifying global challenges belongs to the World Economic Forum (WEF). As one of the main reports of the Forum, the Global Risk Report has been developed as a result of fruitful cooperation since its first edition in 2006. It is firmly based on current research, projects, debates and Forum initiatives. In addition, it reflects the views of the leaders of different communities got through a survey of global risks perceptions, the ideas presented in Report are the result of numerous discussions, consultations and seminars [5, p.11].

Following two previous approaches, all global risks are subdivided into 5 groups: economic, geopolitical, technological, social and natural. However, the report highlights the growing tendency to bind ties of strength and magnitude between the risks of different categories. In addition, all risks in the report are divided by the probability of occurrence and degree of influence, so WEF scientists adhere to the position that the number of listed challenges does not change year by year cardinally, like the manifestation of each of them do and which can be measured. Consequently, each year, 5 most threatening risks are highlighted, which deserve specific attention (Table 5, 6).

**Table 5**

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>Strong income</td>
<td>Chronic fiscal</td>
<td>Growth of</td>
<td>Water supply</td>
</tr>
<tr>
<td></td>
<td>inequality</td>
<td>imbalance</td>
<td>greenhouse</td>
<td>crisis</td>
</tr>
<tr>
<td>2014</td>
<td>Income inequality</td>
<td>Extreme weather</td>
<td>Unemployment</td>
<td>Climate change</td>
</tr>
<tr>
<td></td>
<td></td>
<td>phenomena</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>Interstate conflict</td>
<td>Extreme weather</td>
<td>Mistakes in</td>
<td>The crisis of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>phenomena</td>
<td>national</td>
<td>sovereignty</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>management</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>Unwanted Migration</td>
<td>Extreme weather</td>
<td>Climate</td>
<td>Interstate conflict</td>
</tr>
<tr>
<td></td>
<td></td>
<td>phenomena</td>
<td>change</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>Extreme weather</td>
<td>Unwanted Migration</td>
<td>Natural</td>
<td>Terrorist Attacks</td>
</tr>
<tr>
<td></td>
<td>phenomena</td>
<td></td>
<td>disasters</td>
<td></td>
</tr>
</tbody>
</table>

Source: compiled by authors on the basis of [6].
Scientists of the Forum have come to a number of conclusions. Inequalities in income and wealth are observed in the field of economic growth and reform. From the beginning of the twentieth century, inequalities in the levels of income and wealth in industrialized countries have been decreasing. Since the 1980s, the share of income earned by 1% of the richest people in the United States, Great Britain, Canada, Ireland and Australia has begun to rise. The main reason for this is that technology development requires from employees in-depth knowledge and, as a result, increases their remuneration; market openness and communication facilities increase global competition for talent, globalization increases the size of international corporations and compensation packages of executive directors.

In the public sphere, community building is under the way. The decade of rapid socio-economic change has deepened the gap between generations, and also brought to the fore the problems of national identity and cultural values: the polarization in societies, which leads to the growth of populism (Brexit in the EU and the presidential election in the USA), media and politicians use of the policy of "true" or false news much wider, when objective facts have less impact on the formation of public opinion than emotional appeals and personal convictions. The challenges, the governments face, are the necessity to seek inclusive ways to overcome gaps in cultural values, while saving the rights of the individual.

There are the attempts to manage risks in the technological area. Technologies radically transform our world and determine the nature of risks: it is estimated that in the United States in 1997-2007, 86% of job losses in manufacturing occurred due to automatization [10], while less than 14% – due to the development of trade, there is currently a risk of loss of almost 50% of jobs, because the nature of work is currently being transformed. Challenges in this area are caused by the creation of new joint systems, with the aim of minimizing the risks of significant social upheaval and the further growth of inequality in income.

In the sphere of geopolitics, there is an expansion of cooperation. In 2016 there were several examples, when countries gave less value to international cooperation, while their interest in building up their arsenal was growing: several key players emerged from economic unions, such as the Trans-Atlantic Partnership and the Transatlantic Trade and Economic Partnership, some important decisions of international tribunals have been rejected (China has rejected the verdict of the International Tribunal for the South China Sea, Russia, South Africa, Burundi and the Gambia have withdrawn from the International Criminal Court). These challenges reveal the need of strengthening confidence in collective security mechanisms [7] that provide for mutual accountability and respect of common rules.
In the environmental sphere, the main threat is the climate change. Despite the fact that 110 countries have ratified the Paris Agreement within the framework of the United Nations Framework Convention on Climate Change, the situation remains critical: last 16 years have been one of the warmest periods in the history of observation. To limit the risk of catastrophic climate change, it is necessary to keep global warming at a level not exceeding 2°C per year. It is recommended the challenge to be addressed in the following way: the greenhouse gas emissions should be reduced by 40-70% by 2050 and completely eliminated by 2100 [5].

Conclusions. All existing global risks are divided into 5 categories: economic, geopolitical, social, environmental and technological, and are characterized by the probability of their occurrence and degree of influence. The most threatening risks in today's conditions are growth/fall in prices for assets, oil or gas, changes in the structure of trade and economic cooperation, terrorism, separatism, climate change, unemployment, inequality in income, proliferation of weapons of mass destruction, cyberattacks, etc. Recently technological risks have received special attention, especially in the context of the beginning of the era of the fourth industrial revolution. And it is expedient for the governments of the countries to analyze them dynamically, in order to be aware and use the tools of their realization in order to prevent harmful consequences and increase the efficiency of trade and economic cooperation.

References


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