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TRADE WARS AS A CATALYST FOR ECONOMIC DIVERSIFICATION AND INNOVATION: GLOBAL AND NATIONAL PERSPECTIVES

ТОРГОВЕЛЬНІ ВІЙНИ ЯК КАТАЛІЗАТОР ЕКОНОМІЧНОЇ ДИВЕРСИФІКАЦІЇ ТА ІННОВАЦІЙ: ГЛОБАЛЬНИЙ ТА НАЦІОНАЛЬНИЙ

Kulinich Tetiana
PhD in Economics, Associate Professor,
Associate Professor of the Department of Management of Organizations,
Lviv Polytechnic National University
ORCID: https://orcid.org/0000-0003-0110-7080

Khainas Roman
Assistant of the Department of Business Administration, Marketing and Management,
State Higher Educational Institution "Uzhhorod National University"
ORCID: https://orcid.org/0009-0007-8414-3509

Ovodov Dmytro
Postgraduate student of the Department of Economics and Entrepreneurship,
State Higher Educational Institution "Uzhhorod National University"
ORCID: https://orcid.org/0009-0007-9557-3897

Кулініч Тетяна Володимирівна
Національний університет «Львівська політехніка»

Хайнас Роман Михайлович, Оводов Дмитро Андрійович
ДВНЗ "Ужгородський національний університет"

The relevance of this study is determined by the contemporary role of international trade, which serves not only as an arena for political and strategic confrontations but also as an instrument of economic growth. Trade wars, manifested through tariffs, sanctions, and restrictions on access to markets and technologies, increasingly affect the structure of both the global and national economies. Research shows that trade wars perform a dual function: on one hand, they destabilize international cooperation and trade flows, while on the other, they stimulate economic diversification, the implementation of new technologies, products, and production methods. Accordingly, the article aims to conduct a vector analysis of the impact of trade wars on global and national economic processes and to determine their role as a catalyst for innovative development. The results indicate that, alongside negative effects, trade wars contribute to innovation and the expansion of a state's economic structure at both global and national levels.

Keywords: trade flows, increased tariffs, import/export quotas, technical or administrative barriers, economic sanctions.

Актуальність дослідження визначається сучасною роллю міжнародної торгівлі, яка є не лише ареною політичних і стратегічних протистоянь, а й важливим інструментом економічного зростання. Торговельні війни, що проявляються через митні бар’єри, санкції та обмеження доступу до ринків і технологій, дедалі сильніше впливають на структуру як глобальної, так і національної економіки. Дослідження показують, що торговельні обмеження виконують подвійну функцію: з одного боку – дестабілізують міжнародну співпрацю та торговельні потоки, а з іншого – сприяють економічній диверсифікації, впровадженню нових технологій, продуктів та методів виробництва. Відтак метою статті є векторний аналіз впливу торговельних війн на глобальні та національні економічні процеси та визначення їх ролі як каталізатора інноваційного розвитку. За результатами дослідження встановлено, що сучасні торговельні протистояння між державами-опонентами можуть мати як вибірковий, так і глобальний характер. У разі невирішених суперечок на ранніх етапах вони еволюціонують від торговельної суперечки до конфлікту і, зрештою, до повноцінної торговельної війни, яка проявляється взаємними діями учасників, спрямованими на обмеження або руйнування торговельних переваг опонента, зокрема через митні тарифи, квоти, санкції та інші обмежувальні заходи щодо імпорту та експорту товарів і послуг. Вивчення особливостей еволюції торговельних війн демонструє їх різноспрямований вплив на глобальні економічні процеси. Доведено, що поряд із дестабілізуючою компонентою, що проявляється у скороченні обсягів торгівлі, зростанні напруженості між державами та обмеженні доступу до ринків, торговельні війни водночас стимулюють економічну диверсифікацію та інноваційний розвиток. Обмеження на імпорт, квоти, санкції та технічні бар'єри змушують країни та компанії шукати нові ринки збуту, модернізувати виробничі процеси, впроваджувати інноваційні рішення та розширювати виробництва в раніше не пріоритетних секторах, що підвищує стійкість та конкурентоспроможність економіки. Перспективи подальших досліджень можуть включати кількісну оцінку ефектів диверсифікації та інноваційного розвитку, спричинених торговельними війнами, із використанням економетричних моделей та даних про технологічне оновлення компаній і секторів економіки.

Ключові слова: торговельні потоки, підвищення митних тарифів, квоти на імпорт/експорт, технічні чи адміністративні бар'єри, економічні санкції.

Problem statement. In contemporary conditions, international trade is an arena of political and strategic confrontations and an instrument of economic growth. In particular, trade wars, manifested in the form of customs barriers, sanctions, and restrictions on access to markets or technologies, increasingly affect the structure of both global and national economies. It should be emphasized that they act not only as a destabilizing factor for international cooperation but also as a kind of catalyst for exploring new ways to expand economic structures and implement ideas, technologies, products, or production methods at both global and national levels.

On one hand, trade conflicts limit the opportunities of states and corporations in traditional areas of activity, intensify competition, and pose threats to economic security. On the other hand, they force countries to reorient toward alternative markets, stimulate the development of domestic production, foster the creation of new technological solutions, and promote strategic autonomy. For this reason, trade wars can be viewed as a dual phenomenon, which, although carrying risks, also opens up prospects for the modernization of economies at both global and national levels.

The importance of this topic stems from the increasing geopolitical turbulence, rising protectionism, and restrictions on international economic relations. In this context, the issues of diversification and innovative development are becoming strategically significant for many countries around the world, including Ukraine.

Analysis of research and publications. The systematic study of trade wars and their impacts on global and national economies has been conducted by Radchenko Y. P., Zaverbny A. S., Kalyuzhna N., Ivanov Ye. I., Yatsenko O., and Uskova D. In particular, these studies emphasize the historical dynamics of trade wars – that is, the specifics of their transition from selective trade disputes of the 17th–18th centuries to global conflicts of the 21st century – as well as the problems arising from the prolonged or episodic use of tariffs, quotas, sanctions, technical and administrative barriers, especially regarding their impact on domestic production, trade flows, the stability of the national economies of opposing countries, and international economic relations.

Identification of previously unresolved parts of the overall problem. At the same time, a systematic analysis of the role of trade wars as a catalyst for economic diversification and innovative development of states remains insufficiently explored. Nevertheless, studying these aspects is particularly relevant, as it allows governments to plan long-term development strategies rather than merely reacting to trade restrictions and to assess the potential impact of trade conflicts on economic modernization and the enhancement of competitiveness.

Formulation of the article's objectives. The article aims to analyze how trade wars affect global and national economic processes, highlighting their role as catalysts for states' diversification and innovative development.

The paper main body. The study emphasizes that trade wars are a historically established phenomenon of international trade, which began to take shape during the mercantilist period (17th–18th centuries). In fact, the transformation of this phenomenon is linked to the time when leading European states – England, France, and Spain – actively implemented restrictive measures to protect their own economic interests and strengthen their colonial empires, laying the groundwork for the first large-scale trade conflicts.

Among the earliest known examples of trade conflicts that later evolved into modern analogues of trade wars are: the English Navigation Acts (1651, supplemented in 1660, 1663, and 1673), which established strict rules for maritime trade; Franco-British trade conflicts that lasted from the early 17th to the late 18th century, combining the struggle for colonial markets with territorial wars; and Spanish-British disputes over the right to trade with the American colonies, which led to the “War of Jenkins’ Ear” (1739–1748). The main trade wars of the mercantilist period are presented in Table 1.

Based on the data presented, it is evident that at this stage, trade wars were not merely selective or prolonged. Since states constantly sought to restrict competitors’ access to profitable colonial markets, they implemented tariff barriers, monopolized markets for strategically important goods (sugar, spices, textiles, gold [3]), and strengthened their positions in maritime trade. Peaks of tension often coincided with major wars over colonial territories. Consequently, these conflicts had destructive effects on the participants. With certain exceptions, opposing states and their colonies suffered economic losses due to the loss of trade profits and increased costs of military conflicts. The monopolization of strategic goods and tariff barriers reduced competition and stimulated local production in the metropoles, rather than the development of new industries or technologies. At this stage, innovative development and economic diversification were limited due to dependence on the colonial system and the absence of global technological markets. In other words, trade wars of that period tended to destroy existing economic links and increase political tension.

In the 19th–20th centuries, before the onset of the Great Depression, trade wars reached a new

Table 1

Analysis of examples of confrontations and conflicts evolved into modern analogues of trade wars during the mercantilist period

Early trade wars	Specifics of trade war conduct	The goal of a trade war	Consequences of waging a trade war
English Navigation Acts (1651–1673)	In its pursuit of control over colonial trade and the limitation of other states’ participation in maritime commerce, England* enacted a series of special laws. These laws stipulated that goods from the colonies had to be transported on English ships or through English* ports.	protection of English* merchants and the maritime industry, monopolization of colonial markets, and increase of state revenues.	Escalation of conflicts with the Netherlands and other maritime states that sought to preserve their trade privileges.
Franco-British (English)** trade conflicts, approximately from the 1600s to the late 1700s	Conducted continuously against the backdrop of the struggle for colonial markets in North America, the Caribbean, and India. These wars combined economic measures (tariff barriers, monopolies on the trade of certain goods) with military actions over territories. Peaks of tension often coincided with major wars for colonial possessions.	Control over profitable colonies and strategic trade routes.	Weakening of colonies and merchants; strengthening of the naval power of France and Britain; development of metropolitan trade and consolidation of monopoly over strategic goods.
Spanish-British disputes – “War of Jenkins’ Ear” (1739–1748)	Disputes over the right of British merchants to trade with Spain’s American colonies combined both military actions and economic restrictions.	control over colonial markets and trade flows.	Temporary restriction of British trade; escalation of conflicts.

Note:

* We are referring to the state prior to its union with Scotland in 1707 (the Union of England and Scotland created Great Britain).

** The name “Britain” began to be used after 1707, or when referring to the entire state, including its colonies.

Source: compiled based on [1–2; 4]

scale. In fact, they became increasingly complex, and their instruments transformed: from the widespread use of simple tariffs and monopolies to more sophisticated economic tools, such as differentiated duties for various sectors, combinations of tariffs and quotas, subsidies for national industries, and anti-dumping measures. A well-known example is the tariff policy of the United States, particularly the high import tariffs on foreign goods (iron and textiles [3; 7]) enacted in 1828 and 1890, which helped protect the national industry but simultaneously provoked opposition from European states and led to trade conflicts.

At this stage, trade wars were primarily aimed at protecting national industries and limiting competition. Although some effects could stimulate the development of domestic production, they had not yet acted as a catalyst for systemic economic diversification and innovation. The Great Depression of the 1930s marked a critical point in this period: the Smoot-Hawley Tariff (1930) in the United States sharply increased import duties, causing a significant contraction of international trade and deepening the economic crisis in many countries. This period also demonstrated that trade wars can have a substantial economic impact on the global economy [1–2].

In the second half of the 20th century (approximately from the 1950s), following the end of World War II and the Great Depression, national economies began to recover and become more interconnected, while international trade grew technologically complex.

At this stage, trade conflicts became selective, as states deliberately protected specific strategic industries – such as aerospace, electronics, automobile manufacturing, and agriculture – rather than imposing broad tariff restrictions characteristic of the 19th–20th centuries. Examples of selective trade wars include [1–2]:

– Aerospace (Airbus vs. Boeing, 1970s–1990s). The United States implemented anti-dumping measures and sanctions against Airbus, accusing it of receiving government subsidies that created an uneven competitive environment for Boeing.

– Agriculture. The United States and the EU repeatedly engaged in conflicts over markets for dairy products, wheat, corn, and other goods. The EU imposed high tariffs on American corn and dairy products, while the United States responded with similar tariffs and quotas on European wheat, butter, and cheese.

In fact, selective trade wars targeted specific strategic industries or groups of goods and did not affect global markets as a whole [2]. At the same time, these restrictions encouraged economies to diversify and enhance the competitiveness of individual sectors, as states and companies were compelled to seek new markets, modernize production, and implement innovations. For example, European companies were forced to increase efficiency, invest in technology, and innovate to compete with Boeing. American companies also modernized their production. The US and the EU sought alternative markets for agricultural products and improved production through new crop varieties, storage technologies, and automation.

At the end of the 20th and the beginning of the 21st century, alongside selective trade wars, global trade wars emerged, covering a wide range of industries and exerting a systemic impact on the world economy [1]. The main factors contributing to the globalization of trade wars were globalized production chains, the growing significance of emerging economies, and international technological competition.

The most prominent example of a global trade war in the 21st century is the trade confrontation between the United States and China (2018–2020), which was driven by the US aim to reduce its trade deficit with China and limit Chinese companies' access to strategic technologies. In response, China protected its domestic producers by imposing reciprocal tariffs and restrictions on imports of American goods. The global nature of this trade war is evident not only in the fact that the confrontation affected a wide range of goods and sectors. Many products were manufactured using components from multiple countries, meaning that US and Chinese tariffs and restrictions immediately impacted the economies of third countries, including Vietnam, Mexico, the EU, South Korea, and others.

Since the use of anti-dumping measures, tariffs, and quotas reflected both sides' efforts to strengthen and protect domestic producers from competition and ensure food security, it also influenced the diversification and innovative development of the conflict participants [1–2; 5–6].

Contemporary trade confrontations and disputes between opposing states can take either a selective or a global character and are manifested through the implementation of various restrictive measures on the import or export of goods and services. If a trade disagreement is not resolved at an early stage, it may evolve through successive phases: first into a trade dispute, then into a trade conflict, and, in cases of escalation, into a trade war [5, p. 252]. The latter represents the highest level of tension in relations between countries and is characterized by reciprocal actions by the participants aimed at limiting or undermining the trade advantages and policies of the opponent (see Table 2).

The study of the evolution of trade wars demonstrates their multifaceted impact on global economic processes. Alongside their destabilizing component, trade wars simultaneously stimulate the expansion of a country's economic structure by fostering the development of new sectors, industries, or types of products, and by introducing new ideas, technologies, products, or production methods into the economy or business to enhance efficiency, competitiveness, and productivity [6–5]. Thus, trade wars not only create political and economic risks but also catalyze economic diversification and innovative development, compelling states and companies to adapt to changes in global trade and to find new sources of growth.

Thus, when access to traditional markets is restricted by tariffs, quotas, or sanctions, participating countries are compelled to seek new sources of revenue and markets. As noted by Snihova O. Y. [6], this is manifested through measures that directly stimulate (see Table 3):

– Expansion of production in new sectors that were previously not prioritized, allowing the creation of additional sources of income;

Table 2

Reciprocal actions by participating countries aimed at limiting or undermining the trade advantages and policies of the opponent

Instruments of conducting trade wars	Specific effects of each instrument in the context of trade wars	Outcomes of using each instrument in the context of trade wars: direct	Outcomes of using each instrument in the context of trade wars: indirect
Increase of customs tariffs	An increase in import duties. This measure can be applied selectively (to specific goods or sectors) or on a broad scale, affecting global trade flows.	Raising tariffs makes foreign products more expensive in the domestic market, encouraging consumers to switch to domestic goods and protecting domestic producers from foreign competition.	Countries involved in trade wars are compelled to seek alternative markets, implement new technologies, modernize production processes, and develop strategic autonomy.
Implementation of import/export quotas	Restrictions on the volume of goods that can be imported or exported from a country within a certain period. Quotas are often combined with tariffs and other measures, which enhances their protective effect.	This mechanism allows the state to control the market, prevent excessive imports, protect domestic producers, and regulate the balance of foreign trade.	
Application of economic sanctions	A set of restrictive measures targeting a specific country or group of companies aimed at compelling them to change their political or economic behavior.*	Prohibition on the export of certain goods, freezing of assets, and restrictions on financial transactions.	
Technical or administrative barriers	Regulatory restrictions, quality standards, certification requirements, licenses, and limitations on access to technologies or intellectual property.	They are used to protect strategic sectors of the economy and can be more selective in nature, affecting specific companies or industries.	

Note:

*In the context of trade wars, sanctions are used as a tool of pressure to protect national interests or to influence the behavior of another state.

Source: compiled based on [2; 4-5; 7]

Table 3

Measures stimulating economic diversification and development in the context of trade wars between states

Instruments promoting economic diversification	Specific effects of the instrument within trade wars	Outcomes of applying the instrument in trade wars
Expansion of production in sectors of the economy that were previously not prioritized.*	Creation of new enterprises or modernization of existing sectors that were previously underdeveloped; attraction of investment into new sectors.	Reduction of dependence on traditional goods and markets; creation of new sources of revenue; enhancement of economic resilience.
Reduction of dependence on specific goods from opponent countries. **	Search for alternative suppliers and markets; development of domestic production of strategic goods (if they are produced in opponent countries).	Enhancement of economic security; reduction of risks from external shocks; stabilization of the domestic market.
Promotion of domestic production and the implementation of innovations. ***	Encouragement of technological innovations, modernization of production, and improvement of labor productivity.	Improvement of national economic competitiveness; development of a modern technological base; expansion of goods exports.

Note:

*For example, the US government promoted the development of domestic semiconductor production during the dispute with China, while the EU supported domestic production of aviation components.

**For instance, during the US–China trade war in 2018–2020, the diversification of rare earth metal supply sources became a key element of the US government's trade strategies.

***For example, the development of green energy in Germany became an important part of its trade strategies during the US–China trade war in 2018–2020. These measures allowed the country to reduce dependence on Chinese technologies and components critical to the energy sector.

Source: compiled based on [1–2; 4]

– Reduction of dependence on specific countries or opponents' goods, enhancing economic resilience and security;

– Promotion of domestic production and implementation of innovations, contributing to the modernization of the technological base and increasing the competitiveness of the national economy.

In addition, there are cases where an opposing country restricts the sale of strategic technologies or equipment to competitors [2]. Notably, in 2010, during a selective trade war between China and the United States, China limited the export of rare earth metals needed for the production of high-tech components in the US. In this case, China's artificial restrictions on rare earth exports directly affected American companies that used these metals in the production of high-tech components (e.g., for electronics, defense, and aerospace industries). Due to limited access to these critical resources, US companies were compelled to seek alternative ways to sustain production, including developing alternative materials and technologies to replace or reduce the use of rare earth metals.

Thus, trade wars, while creating short-term economic difficulties, simultaneously compel economies to adapt, seek new solutions, and modernize.

Conclusions. The results of the study indicate that contemporary trade confrontations between opposing states can be either selective or global in nature. Suppose disputes are not resolved at early stages. In that case, they may evolve from a trade disagreement to a conflict and ultimately to a full-scale trade war, characterized by reciprocal actions by participants aimed at limiting or undermining the trade advantages of the opponent, including through tariffs, quotas, sanctions, and other restrictive measures on the import and export of goods and services.

The study of the evolution of trade wars demonstrates their multifaceted impact on global economic processes. Alongside the destabilizing component, manifested in reduced trade volumes, increased tensions between states, and restricted market access, trade wars simultaneously stimulate economic diversification and innovative development. Import restrictions, quotas, sanctions, and technical barriers compel countries and companies to seek new markets, modernize production processes, implement creative solutions, and expand production in previously non-priority sectors, thereby enhancing economic resilience and competitiveness.

Prospects for further research may include a quantitative assessment of the effects of diversification and innovative development caused by trade wars, using econometric models and data on technological upgrades of companies and economic sectors.

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