

Trade Wars and Disruptions in Global Supply Chains in an Era of Growing Uncertainty

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Abstract. This article examines how global supply chains are reshaping themselves in response to the changing world order. The article focuses on conceptual changes in global trade, in particular the paradigm shift from prioritizing efficiency to an emphasis on sustainability, as well as the growing role of technological sovereignty as a key element of national economic strategy. Based on the obtained results, it is concluded that despite the negative impact of factors such as trade conflicts, supply chain disruptions and a high degree of global uncertainty, these challenges simultaneously open up new opportunities for innovative development, increased adaptability, and strategic restructuring. The article highlights the importance of proactive and sustainable management approaches that can transform crisis phenomena into impulses for inclusive and long-term economic growth at both the national and global levels. © 2025 Bull. Natl. Acad. Sci. Georg.

Keywords: trade wars, global supply chains, uncertainty, technological sovereignty

Introduction

Modern forms and paradigms of globalization are shaped by rapid technological advancement, changes in the structure of the global economy, and the evolution of the social and political landscape (Rodrik, 2011; Stiglitz, 2002). Integrated global supply chains, liberalized trade, and multilateral institutions underpin a world increasingly connected by the flow of goods, capital, and information. From escalating trade tensions between major powers, to the economic fallout from the COVID-19 pandemic and regional wars, the global economy is undergoing a profound transformation. The assumptions that once governed international trade – predictability, cooperation, and the primacy of market logic – are being challenged by the resurgence of self-interested

state strategies and geopolitical rivalries, against a backdrop of growing global uncertainty (Baker et al., 2016; Bedianashvili, 2023).

At the core of this transformation are changes in global supply chains. Once designed to minimize costs and maximize speed, these networks are now being redesigned to improve resilience, national security, and political coherence.

The aim of the study presented in this article is to comprehensively analyze the structural transformation of global supply chains in the context of the new multipolar economic order.

Trade wars and the transformation of interdependence into an instrument of strategic pressure. The collapse of the old-world order began in large part with the trade war (Rodrik & Stiglitz,

2025; Wilson, 2025). In 2018, the United States imposed massive tariffs on Chinese goods, citing unfair trade practices, intellectual property theft, and growing economic imbalances. China took retaliatory measures. What began as a bilateral trade dispute quickly escalated into a broader decoupling strategy targeting sensitive sectors such as technology, telecommunications and advanced manufacturing. In the context of the trade war, tariffs, sanctions, export bans and investment restrictions have become weapons of government control, while the distinction between economic competition and geopolitical confrontation has become blurred.

Recent and contemporary crises – the COVID-19 pandemic, the Russo-Ukrainian war, and the trade war initiated by President Trump – point not to the end of globalization as such, but to the end of its hyper-globalized phase (Rodrik, 2021), and the transition first to a turbulent (Papava, 2022a) and then to a confrontational (Papava, 2022b) form. Taken together, these factors have led to a stage of deeply confrontational globalization (Papava, 2025a).

Globalization today is taking on new forms, driven by technological breakthroughs, the reconfiguration of global economic influence, and the fast-paced transformation of social and political landscapes (Acemoglu, 2025; Papava, 2025b; Papava & Bedianashvili, 2024; Stiglitz & Rodrik, 2025).

As geopolitical rivalries intensify, both companies and governments are being forced to rethink their dependencies. The old conceptual logic – efficiency above all else – is clearly giving way to new guidelines based on security, control, and consistency.

A “fragmented world order” is emerging as a system characterized by: a) trading blocs aligned with geopolitical camps, where countries prioritize reliable partners over economic feasibility; b) the erosion of multilateralism, with major powers using trade as a strategic tool, and; c) the restructuring of global supply chains driven by risk management and political considerations (Quah, 2025).

Assessments and disruptions in global supply chains. While the US-China trade war exposed the fragility of geopolitical trust (Bown, 2021), the COVID-19 pandemic exposed the structural weaknesses of global supply chains themselves. During the lockdowns, the once-invisible systems that seamlessly connected factories, ports, and warehouses around the world came to a virtual standstill. As borders closed, demand patterns shifted dramatically, and production ground to a halt, forcing companies and governments to scramble for critical goods – from personal protective equipment to semiconductors. The pandemic crisis revealed just how heavily and unjustifiably reliant the world had become on hyper-optimized, just-in-time supply chains with virtually no margin for error (Bedianashvili, 2021; Marin, 2021; Papava, 2022b).

The pandemic triggered a strategic rethink: the assumption that lean, globalized supply chains are inherently efficient has given way to a growing awareness of their dangerous fragility. Resilience has become the new imperative – ensuring continuity of supply in the face of shocks, even at the cost of rising prices or excess capacity. This shift has taken two particular forms: supplier diversification by region to prevent overdependence on a single country or market, and nearshoring and reshoring to bring production closer to end consumers or within national borders.

Governments have become more actively involved in ensuring supply chain security. National stockpiles of essential goods have increased, and subsidies and industrial policy have once again become part of economic planning. In the US, Europe, and some Asian countries, large-scale public investments are now being directed toward securing domestic production capacity in areas such as vaccines, semiconductors, pharmaceuticals, and clean energy technologies. The legacy of the pandemic is clear: global supply chains are no longer viewed solely as economic instruments, but rather as strategic assets, vulnerable to disruption, and linked to national security (Papava & Maisaia,

2023), social and economic sustainability (Papava & Bedianashvili, 2024), and technological sovereignty (Edler et al., 2020).

Fragmentation of the global economy and global supply chains. In the context of the fragmentation of the global economic system, the role of multilateral institutions has significantly diminished. As a result, more and more countries are turning to bilateral agreements, regional partnerships, or special agreements that reflect political rather than purely economic interests (e.g., De Bièvre & van Ommeren, 2021).

As global trust declines, countries are increasingly reorienting their economic ties toward shared strategic interests (e.g., Ruta, 2023). These regional arrangements are not simply trade zones, but expressions of economic security doctrines created in response to a world in which global rules can no longer protect common interests.

Governments increasingly view technological self-sufficiency as a matter of national survival. What was once a global race for innovation is now evolving into a strategic competition between systems, with each seeking to control key nodes in the supply chain. Under these conditions, the importance of technological sovereignty increases significantly (e.g., Farrell & Newman, 2019).

In analyzing and summarizing various approaches, technological sovereignty can be defined as the ability of a state or union of states to preserve and develop the critical technologies necessary for well-being, competitiveness, and the ability to act sovereignly, without one-sided structural dependence on other economic regions. First of all, this concerns those strategically important technologies needed for the performance of state functions (defense, security, administration), meeting public needs (energy, housing, healthcare, transport), and economic competitiveness (e.g., Benner, 2015; Edler et al., 2020).

Technological sovereignty, along with economic and social sovereignty, is becoming one of the

main capabilities of a sovereign state as an integral socio-economic system (Bedianashvili, 1995).

A key feature of the evolving global economic order is the emergence of a new logic of trade – one where strategic expediency, sustainability, and control outweigh traditional goals like economic efficiency and scale. In these circumstances, it is clear that trade is no longer reducible to comparative advantage.

It is important to consider that global supply chains have significant macrosystemic effects (e.g., Bai et al., 2024; Finck & Tillmann, 2022). Markets no longer dictate supply chain decisions on their own, as active strategic government intervention is becoming increasingly important (Rodrik & Stiglitz, 2025). In this context, it is conceptually justified to ensure the sustainable global competitiveness of the country, ensuring it has developed adaptive capacities throughout its socio-economic system (Bedianashvili & Kokhreidze, 2024; Papava & Bedianashvili, 2024).

The interplay of trade wars, global supply chains, and global uncertainty: Challenges and opportunities. While trade wars may temporarily benefit certain industries, they often lead to a slowdown in overall economic growth. Reduced trade volumes and higher commodity prices can undermine economic growth both domestically and globally.

Trade wars are not just an economic issue, but also a reflection of broader geopolitical tensions. Trade restrictions can worsen diplomatic relations between countries, affecting cooperation in other areas, such as defense, climate change, and international security.

Global uncertainty refers to the unpredictability of global events and economic conditions, including political, environmental, and technological changes. In this environment, businesses and governments may have difficulty making long-term decisions, investments may be delayed, and consumer confidence may decline.

When trade wars and global uncertainty intersect, their effects can be mutually reinforcing. Trade tensions can make global markets more volatile, while uncertainty can increase the risk of further escalation. For example, during the COVID-19 pandemic, trade wars became more prominent as countries began restricting exports of vital goods (such as medical supplies), and global trade slowed due to lockdowns and supply chain disruptions.

Furthermore, the rise of nationalism and protectionism, which is often associated with trade wars, could increase global uncertainty, as countries put their own interests above international cooperation, leading to fragmentation of the world's economy.

Technological disruptions (e.g., automation, artificial intelligence [AI]), while presenting many opportunities, also pose challenges for existing jobs and industries. Automation, for example, can lead to job losses, and companies may find it difficult to retrain their workforce or adapt to new technologies. At the same time, when considering new opportunities, those very technological advances should be highlighted. Despite the challenges associated with automation, it also creates opportunities to improve business efficiency, reduce labor costs, and develop new products, while AI can be used to improve decision-making, customer service, and predictive analytics, giving companies a competitive edge.

Environmental disasters and the increasing frequency of extreme weather events (such as hurricanes, wildfires, and floods) threaten industries that rely on stable environmental conditions, such as agriculture, insurance, and tourism. Green technologies and the shift to sustainability have driven innovation in areas such as renewable energy, electric vehicles, green manufacturing and sustainable agriculture. As sustainability becomes more important, companies may adopt circular economy practices.

New geopolitical opportunities should also be highlighted. Despite political instability, countries

can form new strategic alliances or trade agreements that create fresh avenues for economic and business growth.

In a world increasingly shaped by deepening confrontational globalization, managing trade relations and reducing uncertainty are key to maintaining global economic stability. However, in a political environment marked by global forces in flux, this is likely to be a persistent challenge that necessitates a tailored approach. The global economic order has always been geopolitical, with its rules adapting to realities, and a historical tendency toward increased protectionism during times of crisis, often accompanied by a redistribution of the power centers (O'Rourke, 2025).

Conclusion

The era of unimpeded globalization is transforming into a new phase; one that is characterized by increased complexity and growing internal contradictions in the global economic system. Global supply chains, once designed for cost reduction and speed, have now become instruments of national power and political alignment.

The challenge for governments is to find a balance between openness and autonomy, between cooperation and control – ensuring the global sustainable competitiveness of their country is matched by the high adaptability of their entire socio-economic system. For corporations, the imperative is to move beyond efficiency to resilience, adaptability, and strategic positioning. And for the international community, the main challenge is to create new frameworks for cooperation in an era of confrontational globalization that is defined more by rivalry than by consensus.

Businesses and governments that act proactively, flexibly, and with a forward-looking mindset can turn these challenges into real opportunities for inclusive socio-economic development with sustainable results.

ეკონომიკა

სავაჭრო ომები და გლობალური მიწოდების ჯაჭვების რღვევები მზარდი გაურკვევლობის ეპოქაში

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სტატიაში გამოკვლეულია, თუ როგორ ხდება გლობალური მიწოდების ჯაჭვების კონფიგურაციის ცვლილება ცვალებადი მსოფლიო წესრიგის საპასუხოდ. ყურადღება ეთმობა გლობალურ ვაჭრობაში კონცეპტუალურ ცვლილებებს, კერძოდ, ეფექტიანობიდან მდგრადობაზე გადასვლას, ასევე ტექნოლოგიური სუვერენიტეტის მზარდ როლს, როგორც ეროვნული ეკონომიკური სტრატეგიის ძირითად ელემენტს. კვლევის შედეგების საფუძველზე, ნაშრომში აღნიშნულია, რომ ისეთი ფაქტორების უარყოფითი გავლენის მიუხედავად, როგორიცაა სავაჭრო კონფლიქტები, მიწოდების ჯაჭვების ფუნქციონირების დარღვევები და გლობალური გაურკვევლობის მაღალი ხარისხი, ეს გამოწვევები ერთდროულად აჩენს ახალ შესაძლებლობებს ინოვაციური განვითარებისთვის, გაზრდილი ადაპტირებისა და სტრატეგიული რესტრუქტურისთვის. ნაშრომში მინიშნებულია პროაქტიური და მდგრადი მართვის მიდგომების მნიშვნელობაზე, რომლებსაც შეუძლია კრიზისული მოვლენების გარდაქმნა ინკლუზიური და გრძელვადიანი ეკონომიკური ზრდის იმპულსებად როგორც ეროვნულ, ასევე გლობალურ დონეზე.

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