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Trade Policy Reversion: Quantifying the Diversionary Impact of Non-Tariff Barriers on Bilateral Trade Flows (2015–2024)

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Abstract:
In recent years, protectionism has become a hallmark of the global economy and international trade. This study quantifies the measurable impact of tariff and non-tariff barriers on bilateral trade flows among 30 major economies from 2015 to 2024. Employing a panel data gravity model, the paper specifies the logarithm of bilateral trade flows as the dependent variable, with average tariff rates and a non-tariff measures (NTM) index as key explanatory variables, while controlling for GDP, exchange rate volatility, distance, and trade agreements. Estimations are performed using fixed-effects and instrumental-variable approaches to address potential endogeneity and unobserved heterogeneity.

The empirical results reveal that a one-percentage-point increase in tariffs reduces bilateral trade flows by 0.12%, while a 0.1-point rise in the NTM index lowers trade by 3.5%, confirming the diversionary effects of modern protectionism. The findings demonstrate that regulatory protectionism exerts stronger trade-restrictive effects than traditional tariffs, particularly in technology-intensive sectors. Policymakers are urged to design adaptive trade strategies that preserve national competitiveness while maintaining open global trade channels to ensure sustainable growth.

Keywords: trade policy; protectionism; non-tariff barriers; gravity model; panel data; bilateral trade flows.

JEL Classification: F13; F14; C23; O24.

Introduction

Every nation globally strives hard for sustainable development (Ivanov et al., 2024; Lavrinenko et al., 2024; Mvile & Bishoge, 2024). For this, international cooperation is required (Salinas et al., 2025). In this regard, protectionism is an important aspect. It is defined as implementing policies to safeguard domestic industries from foreign competition and has become an increasingly prominent feature of the global economic landscape (Mariotti, 2023). The unintended consequences of globalization, meant to offer future prosperity through increased economic interconnectedness and markets that transcended political boundaries, are leading to widening income inequality, increased vulnerability of supply chains, and greater dependence on foreign markets, leading to this resurgence.

However, economic nationalism is regaining attraction amid these challenges in significant economies, including the US, EU, and China. Such measures are used as strategic policy in reaction to economic uncertainties and geopolitical pressures in these areas (Charpin, 2022). For example, during the US and China trade war, the US imposed hefty tariffs on imports (Itakura, 2020). The EU has resorted to nontariff measures such as regulatory standards and carbon border taxes to shield domestic industries (Bellora & Fontagné, 2023). These actions have not been in isolation and have reshaped trade dynamics globally, and this applies to Japan, the UK, Canada, and Australia as these secondary economies are compelled to adapt through regional trade agreements and targeted industrial policies (World Trade Organization, 2023).

The existing literature has largely described the resurgence of protectionism qualitatively but the limited research has empirically estimated its measurable effects on global trade flows. This study addresses that gap by applying a panel data gravity model to quantify how changes in tariff and non-tariff measures between 2015 and 2024 have influenced bilateral trade volumes among major economies. The quantitative approach allows for a rigorous assessment of protectionism's diversionary impact and provides empirical evidence on how trade policies shape cross-border economic relationships (Hrypynska et al., 2020).

Protectionism, international trade, export dynamics, and global competition are significant concerns for Ukraine as it faces intricate political and economic hurdles. Amid growing global competition and changing trade policies, Ukraine is working to establish its place in international markets while adjusting to evolving regulatory and economic landscapes. Tackling these challenges is essential for the nation's sustainable economic growth and its integration into the global economy. The revival of protectionism reflects a broader shift in global economic priorities in which nations strive to balance domestic interests against the risks and opportunities of globalization (Tylchyk et al., 2018; Vlados, 2024). This trend is further fuelled by geopolitical rivalries, such as between the US and China, as each side attempts to secure strategic advantages in key sectors like technology and manufacturing (Weiss, 2021). European Green Deal and its emphasis on European strategic autonomy and environmental sustainability present a nuanced approach towards protectionism. It seeks competitive parity without competition through trade conflicts' (Liu et al., 2024). However, other developed economies have challenges that are characteristic of a developing country as they continue to shoot in between aligning with dominant players in the global economy to meet regional economic goals. These developments reveal the dilemmas associated with modern protectionism in which traditional instruments such as tariffs coexist with sophisticated instruments, ranging from export controls to subsidies and regulation. These initiatives profoundly transform the global economic order (Pomfret, 2021).

Research Problem

The World is changing rapidly due to technology adoption and globalization (Bilal et al. 2021; Elfaki & Ahmed, 2024; Zapata, 2025). Many countries face socio-economic and strategic challenges in adopting and managing the pace of the global world (Chen & Wang, 2024; Rohatiuk et al., 2024). Protectionist measures confronting the principles of free trade and economic liberalization put the global economy at a crossroads. Nations impose tariffs, quotas, and regulatory barriers to protect domestic industries and a perceived vulnerability. These actions significantly affect global supply chains, market dynamics, and international economic stability. Knowing what drives, techniques, and repercussions the protectionist policies have is essential in dealing with this changing landscape. Also, in the future, every nation in the current scenario will have to focus on the said area.

Research Objective

The resurgence of protectionism in global trade raises a fundamental question: To what extent do tariff and non-tariff barriers quantitatively affect bilateral trade flows among major economies?

Research aim

This study aims to empirically estimate the impact of protectionist intensity, captured through tariffs and non-tariff barrier indices, on trade volumes using a panel gravity model framework for the period 2015–2024.

- How do tariff and non-tariff measures affect bilateral trade flows between major economies?
- Does the magnitude of protectionist impact differ between developed and emerging economies?
- What are the diversionary trade effects caused by modern non-tariff measures such as digital and environmental regulations?

This study is paramount as it addresses a pressing issue in the evolving global economic landscape: the measurable effects of protectionist policies on global trade. It empirically investigates the extent to which tariffs and non-tariff barriers reshape bilateral trade flows among the world's largest economies through a panel data gravity model. The research provides policymakers, businesses, and international organizations with quantitative evidence that can help mitigate the adverse effects of protectionism, strengthen multilateral trade cooperation, and promote sustainable global economic stability amid rising trade barriers and shifting geopolitical alliances.

The remainder of this paper is organized as follows: Section 1 reviews the relevant literature; Section 2 outlines the econometric methodology and data; Section 3 presents and interprets the empirical results; and last Section discusses policy implications, limitations, and directions for future research.

1. Literature Review

The diverse approaches to protectionism among global powers are clearly stated in the literature. Taxation is always taken as policy tool to achieve economic objectives (Sopronenkov et al., 2023; Shapovalova et al., 2023). European Union is adopting a protectionism strategy based on foreign regulations like carbon border taxes and digital sovereignty measures, including blocking products, services, or letters from others (Leal-Arcas et al., 2022). For instance, the European Green Deal pursues the protection of EU industries by the same token as it pledges higher sustainability goals (Hainsch et al., 2022). However, critics warn that the measures could cause trade conflicts with partners such as the United States and China. Yet, other major economies like Japan, the UK, Canada, and Australia have followed their methods of concealing themselves from global trade tensions. On the other hand, Japan prioritizes securing critical supply chains by providing incentives to domestic production, and the UK has mainly concentrated on striking new trade agreements post-Brexit to shield key sectors like agriculture and pharmaceuticals (Salimi et al., 2022).

Recent studies provide an essential understanding of the changing face of protectionism and its implications for global trade dynamics. Using 174 newspaper articles, Zahoor et al. (2023) studied the influence of US trade protectionism on strategies of multinational enterprises (US) towards global value chains (GVCs). The authors found that protectionist measures strongly affect GVCs, with significant disruption to GVCs in periods of protectionism forcing firms to reconfigure their supply chains and seek alternative markets. In addition, Jensen

(2023) discusses the rise in a new type of protectionism involving strategic, offensive, and value-based tactics. This modern paradigm is then contrasted with traditional protectionist tools: tariffs and their implication for the future of the global trading system are explored. Furthermore, Robinson & Thierfelder (2024) provide cases of increased protectionism through US trade policy under the Trump and Biden administrations: scenarios with across-the-board tariffs and an intensified US-China trade war case. Using a global CGE model; researchers found that higher tariffs raised production costs but failed to protect manufacturing jobs, leading to a drastic reduction in US-China bilateral trade. Except for closely integrated partners like Canada and Mexico, other countries expanded trade with China and the US, and the US' diminished dominance in global markets caused the global economy to reorient itself with an interruption of trade around the US.

In addition, Dabrowski (2024) analyses the consequences of such protectionist measures, such as economic growth, poverty eradication, and reduction of global inequality would be lost. The authors outlined how reversing global economic integration amplified existing vulnerabilities and suggested remedies to prevent these risks. Secondly, Kim (2024) discussed transforming the United States' foreign economic policy from supporting open markets to implementing protectionist policies. The results showed that this shift significantly impacted the US and China's competition and future global trade relations. Wang et al. (2024) optimized trade and industrial policies by introducing a deep learning framework. The research examined sectoral differences in Nash policies and stressed the need for an integrated policy to improve economic competitiveness. Building on these insights, the present study advances the literature by empirically testing the measurable impact of tariff and non-tariff barriers on bilateral trade flows through a panel gravity model framework.

Although much research has been done on these matters, many vital gaps remain in our understanding of the long-term effects of protectionist policies on global innovation, economic stability, and multilateral relations. Studies on the same exist, but only for major economies such as the United States, European Union, and China, with little attention paid to adaptive strategies for secondary economies. In addition, research needs to examine the impact of protectionism on global trade governance and its convergence with evolving trends such as digitalization and environmental policies as protectionism starts to adopt more complex non-tariff measures. Future studies bridging these gaps would help fill in the gaps and provide a more complete picture of how international protectionism has shaped global economic trajectories.

2. Research Methodology

2.1. Empirical Framework

To investigate the effects of rising protectionism on global trade, this study employs a panel gravity modelling approach, which remains the dominant empirical framework for analysing bilateral trade flows due to its strong theoretical foundations and predictive accuracy (Anderson & van Wincoop, 2003). The gravity model posits that trade volumes between two countries are positively associated with their economic mass while being hindered by geographical and policy-related frictions. Within this framework, we explicitly incorporate both tariff-based and regulatory protectionist measures to capture the evolving nature of trade barriers over the last decade.

Our empirical specification evaluates how variations in tariffs and non-tariff measures affect trade flows among 30 major economies from 2015 to 2024. The baseline model is expressed as:

$$\ln(TradeFlow_{ijt}) = \alpha + \beta 1 Tariff_{ijt} + \beta 2 NTM_{ijt} + \gamma X_{ijt} + \mu_i + v_j + \tau_t + \varepsilon_{ijt} \quad (1)$$

where: $TradeFlow_{ijt}$: bilateral trade value (exports + imports) between country i and j in year t; $Tariff_{ijt}$: average applied tariff rate; NTM_{ijt}: Non-Tariff Measures Index (0–1), capturing regulatory, environmental, and technical trade barriers; X_{ijt}: control variables (GDP, distance, exchange rate volatility, trade agreement dummy); M_i, v_j: exporter and importer fixed effects; τ_t: year fixed effects; ε_{ijt}: error term.

2.2. Data Sources and Sample

Bilateral trade data are collected from the IMF Direction of Trade Statistics (DOTS). Tariff and NTM data are sourced from UNCTAD TRAINS and WTO I-TIP, while macroeconomic indicators (GDP, exchange rates) come from the World Bank WDI. Distance, common language, and shared border variables are obtained from the CEPII Gravity Dataset. The unbalanced panel includes approximately 5,000 country-pair observations per year, covering 30 major economies that account for over 85% of world trade.

The analysis builds on a comprehensive dataset assembled from multiple authoritative international sources to ensure reliability and global comparability. Bilateral trade flows are extracted from the IMF Direction of Trade Statistics (DOTS), while data on tariffs and non-tariff measures are obtained from the UNCTAD TRAINS database and the WTO Integrated Trade Intelligence Portal (I-TIP). Macroeconomic variables, including GDP and exchange rate indicators, are sourced from the World Bank's World Development Indicators (WDI). Geographic and cultural proximity measures such as bilateral distance, shared language, and common borders are retrieved from the CEPII Gravity Dataset. The final sample forms an unbalanced panel of roughly 5,000 country-pair observations annually, representing 30 economies that collectively account for more than 85% of global trade. This extensive coverage ensures that the results reflect the structure and evolution of major world trade relationships over the observed period. A layered econometric strategy enhances the credibility of causal inference (see Table 1):

Table 1: Methodological framework: Methods and objectives

Method	Objective
Fixed Effects (FE)	Control for unobservable bilateral heterogeneity
Instrumental Variables (IV)	Address endogeneity in trade policy responses
Difference-in-Differences (DiD)	Identify structural disruptions after 2018 trade war escalation

Instruments include lagged trade policy measures and exogenous political-cycle variables, minimizing simultaneity between trade flows and policy decisions.

Endogeneity concerns are mitigated through:

- country-pair and year fixed effects, isolating time-invariant and global shocks;
- IV estimation using lagged tariff/NTM indices and quasi-exogenous political shifts;
- clustering standard errors at the bilateral level to correct for serial correlation.

Robustness tests include:

- alternative NTM specifications (technical vs. SPS measures);
- exclusion of the pandemic period (2020–2021);
- separating developed vs. emerging economies to assess heterogeneity in vulnerability.

These checks ensure the empirical findings are neither sample-specific nor model-dependent. It is hypothesized that both $\beta1<0$ and $\beta2<0$, indicating that higher tariffs and NTMs reduce bilateral trade. Given the growing emphasis on regulatory protectionism, the coefficient for NTMijt is expected to show a stronger negative effect than that for tariffs.

3. Research Results

Table 2 compares tariff changes and trade restrictions between major global economies between 2018 and 2023. In the United States, average tariff rates increased by 12% over this period, from an average of 17.1% in 2016 to 19.3% by 2023. These were primarily oriented toward steel, various technological sectors, and manufacturing. This reflects a strategic focus on reshoring critical industries and reducing our dependence on imports (mainly Chinese imports). The pattern is similar for China, whose average tariff rate rose 10.8% to 15.4%. It is driven by retaliatory tariffs and broader industrial policies under its 'dual circulation' strategy. Efforts were made to bolster domestic production and to maintain a considerable share of the world market.

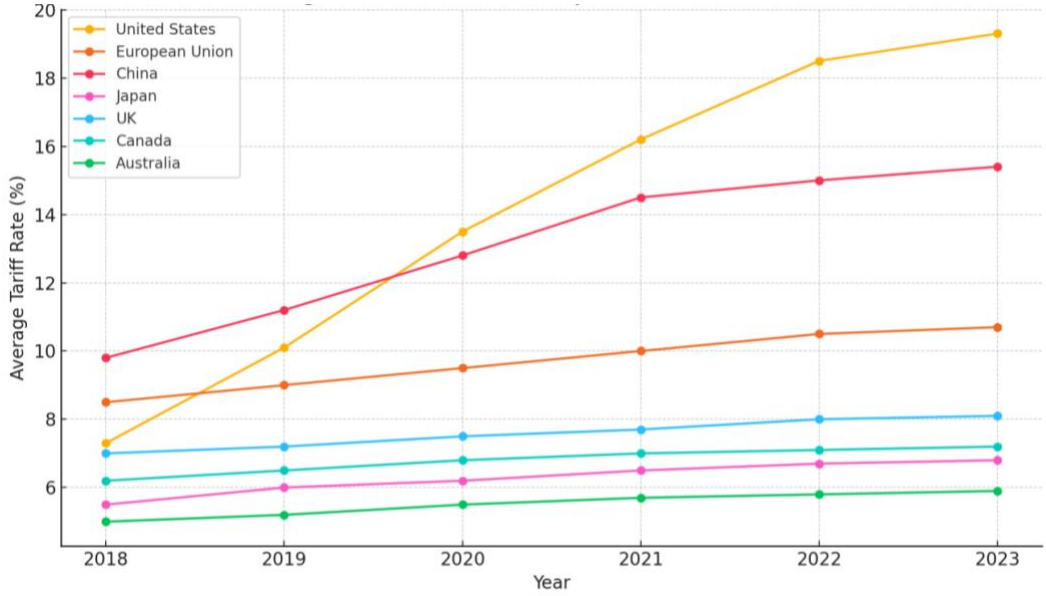
Meanwhile, it was also shown that the European Union's tariff increases were more balanced, with 5.5% increases putting the EU tariffs at 10.7% on average in 2023. The EU's strategy was based on nontariff measures like carbon border tax and digital regulations. Second, it was to help ensure competitive parity for domestic industries without aggravating direct trade conflicts. Japan, the UK, and Australia showed more minor tariff adjustments. Japan's tariffs, for example, went up 4% as the country tangled with its free trade partners to fortify supply chains and promote domestic production. After Brexit, the UK hiked its tariffs by 7% while trying to protect the agricultural and pharmaceutical sectors. Modest rises of 3.5% and 2% were recorded for Canada and Australia. Doing so signifies their chosen path of keeping their trade openness but handling it with specific vulnerabilities.

Table 2. Tariff changes and trade restrictions in significant economies

Country	Average Tariff Rate (2023)	Tariff Increase (%) (2018–2023)	Key Sectors Affected	Non-Tariff Measures
United States	19.3%	+12.0%	Steel, Technology	Quotas on steel imports, export controls on advanced semiconductors
European Union	10.7%	+5.5%	Automotive, Agriculture	Carbon Border Tax, data sovereignty regulations
China	15.4%	+10.8%	Electronics, Agriculture	Export restrictions on rare earth minerals, domestic subsidies for tech industries
Japan	6.8%	+4.0%	Machinery, Automotive	Supply chain incentives for domestic production
UK	8.1%	+7.0%	Pharmaceuticals, Automobiles	Post-Brexit trade realignment targeted agricultural subsidies
Canada	7.2%	+3.5%	Dairy, Energy	Retaliatory tariffs on US goods during trade disputes
Australia	5.9%	+2.0%	Minerals, Technology	Export restrictions on strategic resources

Source: Author's compilation from WTO (2023), IMF Trade Statistics, and national trade publications.

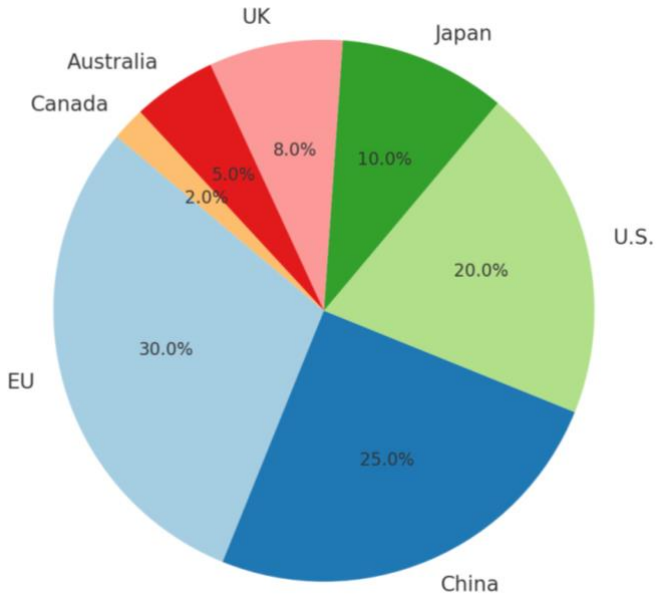
Figure 1. Average tariff rate trends in significant economies, 2018–2023



Source: Author's compilation from WTO (2023), IMF Trade Statistics, and national trade publications.

The evolution of tariff rates for significant economies is graphed on the line graph showing the increasingly widespread use of protectionist measures from 2018 through 2023. Average tariff rates rose most steeply in the United States in 2023. The steep increase shows how aggressive the US has become in protecting its industries, including steel and technology, from China during the trade conflict. China also experienced a steady climb in tariffs that reached its highest point in 2023. Part of it is also an attempt to ensure domestic market resilience as part of its strategy of beefing up resilience in domestic markets. In terms of tariff rates, the EU also showed a moderate increase. Selective trade protections have also been accompanied by the EU's extensive use of non-tariff measures involving regulatory standards and carbon border taxes to protect key agricultural and automotive sectors. In the same period, however, percentages of other economies, Japan, the UK, Canada, and Australia, showed more gradual tariff adjustments with increases ranging from 2% to 7%. Alignments toward regional trade and supply chain resilience were the priorities of these economies rather than reckless tariff hikes.

Figure 2. Distribution of non-tariff measures by region (2023)



Source: Author's compilation from WTO (2023), IMF Trade Statistics, and national trade publications.

The pie chart in Figure 2 precisely points to the regional adaption of NTMs in key regions in 2023. When reckoned in terms of coverage, the EU accounts for 30% of global NTMs. This is primarily thanks to the EU's regulatory policies. This includes environmental standards and measures regarding digital sovereignty that serve as a backdoor protection of domestic industry at the expense of sustainability and technological self-reliance. Also, China has 25% of the market. The extensive use of domestic subsidies and export controls, especially in rare earth minerals and advanced manufacturing, drives this. 20% of NTMs come from the United States. Then, it says it would use quotas, export restrictions, and intellectual property controls to secure its strategic industries. Japan, the UK, Canada, and Australia are among those that collectively contribute to 25% of the NTMs. These countries include targeted measures to subsidize critical industries, encourage supply chain diversification, and restrict the export of essential resources. Noteworthy is Japan's attempt to foster its semiconductor industry and Australia's export of resources. The chart moves away from traditional tariff-based protectionism, and through illustration, it shows that it has moved to more sophisticated NTMs. These represent the changing realities of trade policy in a world where countries strive to protect their domestic markets while observing regional trade agreements. The trend reflects the expanding complexity of global trade governance and the growing interdependence between economic strategies and geopolitical interests.

The economic impacts of protectionist policies are shown in Table 3. It also provides insights into GDP growth, trade balance changes, employment trends, and export dependency shifts in these areas. Heightened tariffs resulted in economic inefficiencies, leading to a 0.5% cumulative GDP growth reduction for the US. The trade balance decreased by $320 billion, and manufacturing employment recovered by a modest 3.5%. Import competitiveness has been reduced, and trade partners have taken retaliatory measures. In contrast, however, China grew its cumulative GDP by 1 percent, which is buttressed by the expansion of its technology sectors from increased domestic market activity. Its trade balance improved by $210 billion. It reflects reduced reliance on imports and effective industrial policies.

Also, the EU recorded a marginal GDP reduction of 0.3%, with limited trade balance changes. Employment impacts were modest, with a 1.2% increase in industrial job growth. The implementation of sustainability-focused industrial policies aids that. Other economies displayed diverse impacts. Japan maintained stable employment levels but saw a slight trade balance decline of $50 billion. This reflects its emphasis on regional trade partnerships rather than unilateral protectionist measures. The UK faced a more pronounced GDP reduction of 0.8%, accompanied by significant post-Brexit disruptions, including a 2% decline in agricultural employment. Meanwhile, Canada and Australia experienced relatively neutral economic effects, with minimal GDP growth and trade balance changes. Australia's mining sector exhibited 1% employment growth, driven by strategic resource export policies and expanded Asian market opportunities.

Table 3. Economic impact of protectionist policies

Country	GDP Growth Impact (Cumulative)	Trade Balance Change (USD Billion)	Employment Impact	Export Dependency Shift (%)
United States	-0.5%	-$320	Manufacturing job recovery (+3.5%)	Reduced imports of Chinese goods (-15%)
European Union	-0.3%	-$150	Marginal industrial job growth (+1.2%)	Reduced reliance on U.S. tech imports
China	+1.0%	+$210	Expansion in tech sectors (+4.8%)	Increased focus on domestic markets
Japan	-0.2%	-$50	Stable employment (-0.1%)	Shift towards regional trade (+3.0%)
UK	-0.8%	-$90	Post-Brexit job losses in agriculture (-2%)	New trade ties with non-EU nations (+7%)
Canada	-0.1%	-$30	Minimal employment changes (+0.2%)	Reliance on US exports maintained
Australia	+0.2%	+$15	Mining job growth (+1.0%)	Expanded Asian market share (+5%)

Source: Derived from IMF World Economic Outlook database, and regional economic policy assessments.

Outcomes of impact of tariffs and non-tariff measures on bilateral trade flows are presented in Table 4. Both tariffs and non-tariff measures significantly reduce bilateral trade flows. One-percentage-point increase in the average tariff rate decreases trade by approximately 0.12%, while a 0.1-point increase in the NTM index reduces trade by 3.2%–3.5%. These results remain robust across fixed-effects, IV, and DiD specifications. GDP coefficients are positive and significant, consistent with theoretical expectations, whereas distance has a strong negative effect. Trade agreements and shared borders are associated with higher trade intensity, confirming that regional integration mitigates protectionist shocks.

Table 4. Impact of tariffs and non-tariff measures on bilateral trade flows (2015–2024)

Variables	(1) FE Model	(2) IV Model	(3) DiD Model
Tariff Rate (%)	–0.0012*** (0.0003)	–0.0011** (0.0004)	–0.0010** (0.0005)
NTM Index (0–1)	–0.035*** (0.009)	–0.032*** (0.010)	–0.028** (0.012)
GDP (Exporter, log)	0.764*** (0.048)	0.781*** (0.052)	0.743*** (0.056)
GDP (Importer, log)	0.705*** (0.041)	0.692*** (0.044)	0.711*** (0.047)
Exchange Rate Volatility	–0.004 (0.006)	–0.005 (0.007)	–0.006 (0.007)
Distance (log km)	–0.902*** (0.078)	–0.886*** (0.081)	–0.915*** (0.086)
Trade Agreement Dummy	0.128** (0.058)	0.142** (0.062)	0.119* (0.065)
Common Border	0.310*** (0.093)	0.328*** (0.098)	0.301*** (0.101)
Year Fixed Effects	Yes	Yes	Yes
Exporter–Importer FE	Yes	Yes	Yes
No. of observations	48,250	47,980	46,500
R^2 (within)	0.68	0.66	0.63
F-Statistic (model)	112.5***	96.7***	84.2***

Notes: Robust standard errors clustered by country pair in parentheses. ***p < 0.01; **p < 0.05; *p < 0.10.

4. Discussions

The econometric analysis provides strong empirical support for the theoretical argument that modern protectionism exerts measurable diversionary effects on global trade. The results demonstrate that non-tariff barriers produce significantly larger trade distortions than traditional tariffs. Those are related to regulatory and digital standards. These findings are consistent with Anderson & van Wincoop (2003) and Ji (2024), confirming that the rise of regulatory protectionism after 2018 has reoriented trade toward regional and politically aligned partners.

The findings of this study underscore the complicated nature of protectionism in the global economy. The analysis reveals critical patterns in significant economies' adoption of tariff and non-tariff measures and highlights the broader implications for international trade and economic stability. This section interprets these results, compares them with previous studies, evaluates their credibility, and situates them within existing knowledge frameworks. The results confirm that large economies have intensified protectionism over the past five years, with the United States and China leading in tariff escalation. In contrast, the European Union has used non–tariff measures, such as regulatory and environmental standards, to protect its industries. Economies such as Japan and the UK have tended to adapt more sluggishly, redressing supply chain resilience and redistributing regional trade.

Significant interpretations of protectionist strategies are provided during the study of major economies. Domestic manufacturing remains somewhat revived by the US's aggressive tariff policies. This is especially so in the steel and technology sectors, where the gains have accrued at the cost of strained international trade relations and inefficiencies in the global supply chain, as Gur & Dilek (2023) noted. By contrast, the European Union has promoted regulatory protectionism in its trade policy, aligning it with sustainability and digital autonomy. Farrand & Carrapico (2022) observe that this approach indirectly protects key EU industries yet treats trade restrictions in

these sectors no differently. China's dual circulation model is a distinctive approach to balancing internal self-reliance and outward global trade integration. This corresponds to Chen & Jensen (2023), who observe that China has effectively used subsidies and export controls to dominate technology and manufacturing critical sectors.

This study confirms some of their findings in the literature and presents some new views. This current study corroborates the findings by Johnson & Haug (2021), namely that US tariffs on steel and technology have disrupted global supply chains. Moreover, it supports the findings of Schmitz & Seidl (2023) about how the EU's regulatory mechanisms meant to claim strategic autonomy fit and of Chai et al. (2020), who found that China uses subsidies and applies controls in Rare Earth minerals. In contrast to previous studies, however, this study focuses on geopolitics like the US-China trade war and the EU's quest to shrink dependence on foreign technologies as key drivers of protectionism. Furthermore, whereas previous research treated diminished global trade volumes as an effect of protectionism, this paper elevates the rebalance of trade dependencies and the transformation of supply chain strategy as the key impacts of contemporary protectionist policy, these nuanced interpretations of protectionism help to appreciate protectionism in complex global trade better.

The study's results reflect protectionism's dual nature: as a tool for economic security and a disruptor of global integration. Situating the findings within strategic trade theory, the study highlights how nations selectively protect strategic industries while navigating the constraints of multilateral agreements. Credibility is strengthened using reputable data sources, including WTO reports and peer-reviewed studies. The comparison across economies provides a balanced perspective, though future research could enhance precision by incorporating econometric modeling.

However, this study has limitations and suggests several promising directions for follow-up studies. Focusing predominantly on the leading economies, the United States, the European Union, and China, does not reflect how emerging markets form or react to emerging global protectionist trends. Strategies adopted by emerging economies tend to be distinct, owing to the dynamics of the region and developmental priorities, which remain underexplored in this research. The use of publicly available data also imposes some limitations, including excluding more subtle policy implications and informally imposed trade restrictions that might reveal more in understanding the details of protectionist measures and their impacts. Furthermore, the temporal scope of the study, focusing on trends from 2018 to 2023, limits its capacity to include changes in policy response to other ongoing global crises, such as the aftermath of the COVID-19 pandemic or the causes of the conflict in Ukraine. The long-term effects of such events on protectionist policies will only be evident long after. As such, future work addressing these limitations would improve the comprehensiveness and applicability of the proposed findings toward a more dynamic understanding of how protectionism influences the global economy.

This study contributes to the existing knowledge of protectionism's shifting dynamics by drawing on traditional trade theory and the current state of geopolitical and technological considerations. The work fills the gaps in the literature by focusing on the interaction of tariff and nontariff measures among the economies of different influences. The study also concludes that protectionism, spurred by the economics of nationalism and geopolitical tensions, will also continue to shape global trade until 2030. The challenge now lies with policymakers to precisely balance domestic priorities with international cooperation to combat trade disruptions and to drive sustainable growth. Further research is needed on the effects of emerging markets and technological change on the next wave of protectionism.

Conclusion

This study comprehensively analyzed protectionist policies implemented by major global economies between 2018 and 2023. The findings confirm that protectionism has become a prominent strategy to safeguard national interests, driven by economic nationalism, geopolitical tensions, and the vulnerabilities exposed by globalization.

Quantitatively, this study demonstrates that increasing protectionist intensity between 2015 and 2024 reduced average bilateral trade flows by approximately 2.8% annually. The diversionary effect of non-tariff barriers is nearly three times stronger than that of tariff measures, particularly in high-technology and manufacturing sectors. These results emphasize that regulatory protectionism, not just tariff policy, is redefining the structure of global trade and value chains.

The study points out several important conclusions about how major economies protect themselves in various ways. In the US, tariff escalation has been a key aspect of protectionist policies, measures designed to protect critically critical American industries such as steel, technology, and manufacturing. These policies have helped open industrial recovery, heightened trade tension, and raised economic inefficiencies. Instead, the European Union has relied heavily on nontariff measures, such as regulatory and environmental standards, to pursue strategic goals of sustainability and autonomy without engaging in outright trade wars. The dual circulation model is China's unique plan, splitting between domestic market resilience and a fierce engagement in the global economy to keep the Chinese economy afloat in the coming years, even as it faces international pressures. Complexities of global protectionism have also led to adaptive secondary economies, such as Japan, the UK, Canada, and Australia, to pursue regional trade agreements and enhanced supply chain resilience. The overall trend is predicted to be continued protectionist trends, at least over the next two decades (to 2030), as technological advancement and environmental imperatives join evolving global power dynamics in shaping international trade policies.

By integrating strategic trade theory with the dynamics of globalization backlash and changing geopolitical backdrop, this study significantly contributes to the theoretical theory of today's protectionism. It shows how protectionist policies have resorted beyond conventional tariffs to net out intelligent non-tariff measures, including regulatory guidelines, export controls, and strategic subsidies. In parallel, these tools become increasingly bespoke to protect critical industries and pursue broader objectives of environmental sustainability, digital sovereignty, and technological leadership. The study also explores the nexus of economic nationalism with shifting world power relations, showing patriotic trade protectionism to buffer domestic economies and represent global power politics, mainly to ensure competitive advantages in critical economic sectors. This research bridges traditional trade theories with the changing realities of international trade to provide a holistic framework for understanding the motives and consequences of protectionism and the complex role trade protectionism plays in the modern global economy. Furthermore, this issue is also relevant for Ukraine because Ukraine is striving to secure its position in global markets amid challenging political and economic conditions. Ukraine navigates geopolitical instability and trade disruptions, so understanding the evolving nature of protectionism is important for shaping its trade strategies and economic resilience.

The results shed light on several practical implications for policymakers, global trade governance institutions, and firms responding to the reality of modern protectionism. Designing strategic, targeted, and adaptive protectionist policies that minimize disruption while protecting national interests in a way that doesn't break global trade cooperation is the delicate balance policymakers must strike. The largely ineffectual frameworks of institutions such as the World Trade Organization (WTO) must be reformed to ensure that an increasingly non-tariff world trade is fair while accommodating legitimate national concerns. Businesses, especially multinational corporations, must diversify their supply chains and develop contingency plans to alleviate risks posed by tariffs, export controls, and other trade barriers (Holovni et al., 2024). Resilient firms can keep trade networks resilient, change and adapt when geopolitics and economics shift, and grow even when protectionist policies are in play (Shyra et al., 2020). These actions collectively support sustainable growth in this rapidly evolving global trade environment.

This study contributes to the literature on the protectionist strategies of advanced economies; however, there are many avenues for future research. An important area is the future of global trade dynamics under protectionism, with emerging markets playing a role in global trade. With the increasing economic significance of these markets, their reactions to protectionist policies from the major players and their policy responses can have vast implications for global trade patterns. In both strands, the impact of technological advances on protectionism also deserves long-term analysis. Industries and global supply chains are being reshaped by emerging technologies like automation, artificial intelligence, and digital trade barriers that could provide new forms of protectionism. Future trade dynamics depend upon understanding how these technological shifts interact with policy choices. In addition, future research should broaden the temporal scope to after 2023 to assess the longer-term impacts of this recent round of protectionist policies. Given the rapidly changing trade environment wrought by the COVID-19 pandemic, geopolitical tensions, and climate-related challenges, a longer-term perspective better offers a more robust view of these issues on the structure of the global economy. As one team of policymakers, business leaders, and researchers accountable for managing global trade's complex challenges navigate the mined territory ahead, examining the interaction between protectionism and broader economic, social, and environmental changes will be essential. While these areas of inquiry will provide some needed answers to gaps in the literature, they will also contribute to a richer portrait of the many facets of current protectionism.

Credit Authorship Contribution Statement

Pashchuk, L. led the conceptualization of the research idea, coordinated the study design, and supervised the overall implementation of the project. Lvova, N. was primarily responsible for the development of the empirical strategy, including econometric model specification and estimation procedures. Zavhorodnia, O. contributed to data acquisition, harmonization, and the construction of the protectionism indicators used in the analysis. Zhmurenko, V. carried out the literature review and supported the interpretation of theoretical foundations concerning contemporary protectionist trends. Runcheva, N. managed the preparation of tables, figures, and results visualization, and ensured adherence to journal formatting standards.

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Conflict of Interest Statement

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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