

Strategic Responses to Global Trade Barriers and Policy Shifts

Dr. G. Arasuraja, Associate Professor, St. Joseph's Institute of Technology, Chennai, Tamil Nadu, India.

arasurajag@stjosephstechnology.ac.in

Geopolitical competition, supply chain disruptions due to COVID-19, and a wave of new industrial policy legislation have come together over the past two years to create an environment where the liberal trade consensus that ruled for 30 years after the establishment of WTO has broken down. This paper identifies and describes the current environment of trade policy activism—including tariff increases, export controls, investment screening, and digital regulatory barriers — quantifies the cumulative effect of these activities on the global economy through early 2025 using data from Global Trade Alert, WTO, and IMF, and suggests a four-dimensional strategic response framework for companies that operate in fragmented markets. This paper emphasizes that businesses must begin to move from a reactive approach to compliance toward an architecture of proactive trade strategy, embedding as part of their permanent strategy competencies of market diversification, technology robustness/resiliency, regulatory intelligence—as well as stakeholder diplomacy.

The post-World War II international trading system was built on a bargain that, on the surface, looked very simply. Countries would agree not to impose trade barriers against other member

nations in return for access to those other countries markets; and if there were any violations of this trust, an independent multilateral system would adjudicate those disputes. For decades, this bargain worked well enough to facilitate an enormous expansion of global trade. From 1990 to 2007, world trade grew at an average annual rate of 7.2% — very much outpacing global GDP growth. Businesses based their business strategies on continued openness: building lean, geographically dispersed supply chains; concentrating production in the lowest-cost locations; and, optimistically assuming that they would continue to have access to the markets where they did business.

That era is over. The US and China have been involved in a trade war since 2018, the COVID-19 pandemic lasted from 2020-2021, Russia invaded Ukraine in 2022, and the world has seen a proliferation of new industrial policy laws including but not limited to The US Inflation Reduction Act, The EU Chips Act, and India's Production Linked Incentives scheme which has changed the treatment of trade from one of background liberalization to commercial competition between countries through government controlled commercial policies. The

removal of the ability for the WTO's dispute settlement body to act as a systemic stabilizer due to the US withholding the approval of any new members since 2019 limits their ability to compete with one another in the use of commercial policies directed by their governments.

The New Trade-Policy Landscape

From Embedded Liberalism to Active Commercial Competition

Ruggie (1982) defined 'embedded liberalism' as the settlement that occurred after WWII due to a balance between open markets and social protections which required the countries involved to follow certain rules regarding trade for the ability to manage their respective economies [1]. What has emerged since then is what Evenett, Fiorini, and Lukaszuk (2021) refer to as 'managed trade' whereby governments of all major economies have engaged in the use of government directed commercial practices as tools of industrial policy, security, and foreign policy with justification pursuant to a 'security exception' (see GATT Article XXI) which has expanded beyond its original scope. The means by which countries are pursuing managed trade have been far-ranging across the entire spectrum of policies. For example, with regards to tariffs, as of 2025, US companies will pay Section 301 tariffs on approximately \$370 billion worth of imports from China, whereas on November 2024, EU countries imposed definitive countervailing duties up

to 35.3% against all electric vehicles imported from China. Regulatory differences - inconsistent product standards, certification requirements, and rules of origin - are a systematic barrier to market access at the non-tariff level, despite having low formal tariffs.

Export Controls, Technology Restrictions, and Investment Screening

A new type of trade barrier in the convergence of commercial and security policy is represented by increased US restrictions on exports of advanced semiconductors and semiconductor manufacturing equipment (as of October 2022 and again as of October 2023), preventing Chinese companies from obtaining access to these technologies which can be used for both military and commercial purposes. The Netherlands and Japan have aligned their export control regimes with the US in 2023 creating what is in effect a multilateral technology export control regime outside of any WTO agreement. Investment review processes have similarly expanded substantially. According to OECD data there were 38 jurisdictions with formal processes to review foreign direct investment in 2024 and only 11 in 2010. The Foreign Subsidies Regulation of the EU, effective from October 2023, creates a further level of scrutiny for foreign-subsidised firms competing for public contracts and / or entering into acquisitions above specified thresholds. All of these actions have increased the cost and complexity of engaging in cross-

border investments beyond what can be measured by standard trade-costs.

Digital Trade and Regulatory Fragmentation

The digital economy is now very large and growing rapidly as it includes many elements of cross border-digital data flows (such as cloud computing and e-commerce), accounting for 12% of global goods trade and likely a much higher percentage of

services. At the same time, regulatory fragmentation arising from digital trade is arguably the largest area of regulatory fragmentation. The EU GDPR, the Indian Digital Personal Data Protection Act of 2023, the Chinese Data Security Law, and a growing number of laws regarding data localisation across Indonesia, Vietnam, Brazil, and other countries are all creating complex compliance systems that segregate the digital economy based on legal jurisdictions.

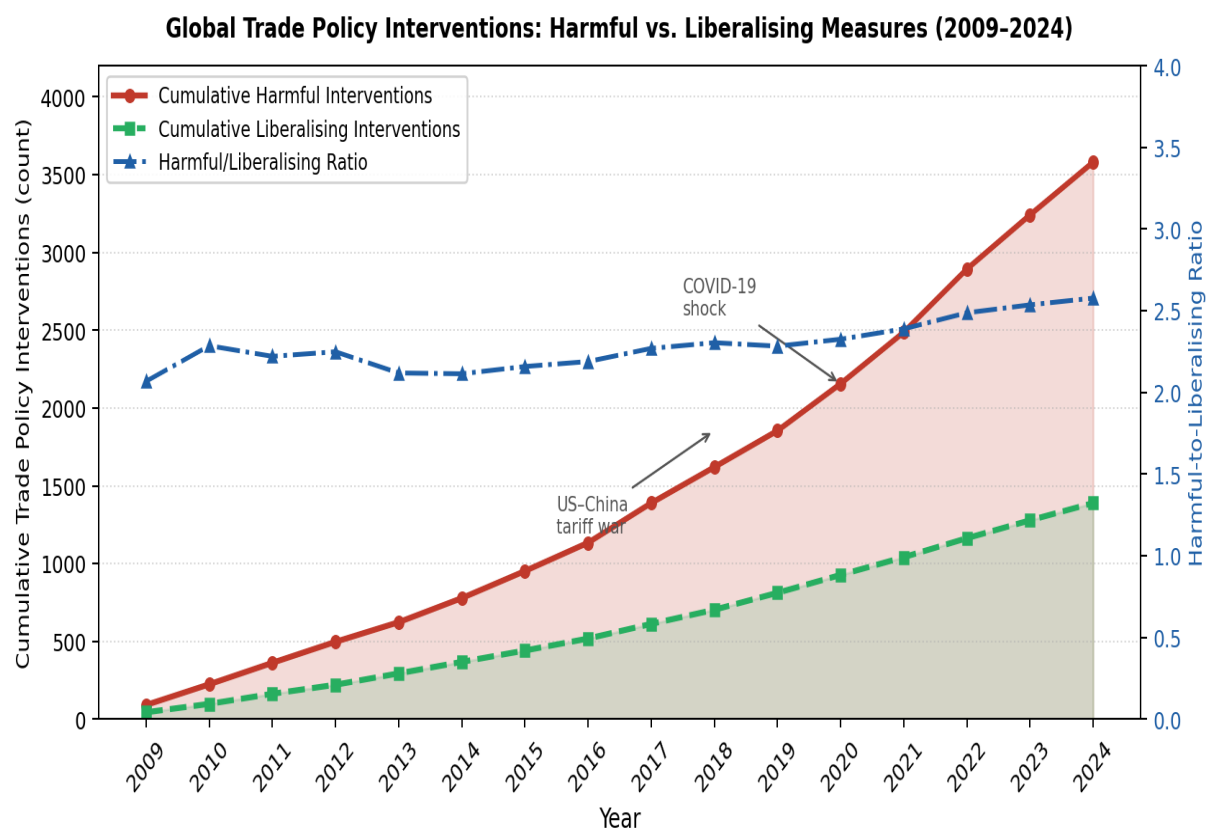


Figure 1: Cumulative global trade policy interventions: harmful vs. liberalising measures, and harmful-to-liberalising ratio (2009–2024). sources: evenett, S.J. et al., global trade alert annual report 2024 (St. Gallen: SIAW-HSG); authors' calculations [2]

Quantifying the Shift: Evidence from Global Trade Alert

As demonstrated in figure 1, the Global Trade Alert (GTA) database has recorded countries' actions affecting international commerce since 2009. These data show a reorientation of trade policy that is permanently changing (not cyclically). By the end of 2024, cumulative harmful interventions (tariffs, export restrictions, subsidies that discriminate against foreign firms, and non-tariff measures) will reach about 3,580 while cumulative liberalising measures will reach roughly 1,390. The ratio of Harmful to Liberalising interventions was nearly 2:1 in 2009 and will increase to about 2.6:1 by 2024.² There are two timeframes in which we're able to see turning points. The first turning point relates to the January 2019 US/China tariff spat

and the resulting retaliatory actions taken by many countries and a rapid rise in the number of harmful interventions. The second turning point relates to the COVID-19 pandemic, which led to the imposition of numerous export restrictions on medical supplies, semiconductors, and food which are still in place today in the wake of the immediate health crisis. According to the IMF's 2024 World Economic Outlook, if we were to fully split the global economy into two competing blocks, there could be a permanent reduction in global output of 7 percent. Markets where most of the reduction will occur will be smaller, and more dependent upon trade. Reduction of the total trade volume worldwide due to partial fragmentation (the current path taken) is expected to be 8 to 12 percent, based on the most recent available data when compared to the year 2018 [4].

Table 1: Corporate strategic responses to contemporary trade barriers

Corporate Strategy	Key Mechanism	Leading Regions	Risk / Limitation
Supply-chain nearshoring	Relocate production to proximate/allied nations	USA, EU, Japan, India	Higher unit costs; supplier scarcity
Friend-shoring & ally trade	Preferential sourcing within geopolitical blocs	USA, EU, ASEAN, CPTPP	Smaller supplier base; political dependency
Export-market diversification	Expand sales across RTA corridors (AfCFTA, RCEP)	China, EU, South Korea	Market development lead times
Technology decoupling prep	Duplicate R&D, IP localisation, dual-spec products	USA, Taiwan, Netherlands, KR	Duplication costs; standards fragmentation
Digital trade compliance	Modular data architectures meeting localisation rules	EU, India, Indonesia, Brazil	Regulatory uncertainty; high IT capex
Policy & trade diplomacy	Engage in FTAs, WTO reform, bilateral investment treaties	All major traders	Long negotiation cycles; political risk

Sources: Synthesised from Alfaro & Chor (2023); Bown (2024); OECD (2024); authors' analysis [3][5][6].

While this statistic highlights the reduction in total trade volume across industries, the global aggregate can mask very different trends by sector; for example, exports from technology sectors subject to export controls are likely to be impacted much more negatively by changes in trading relationships than those of consumer products; economies which rely heavily on

commodities exported to China will have very different exposure profiles from those which are integrated into a European Union value chain. This means that a firm's response to these developments should be specific to its degree of exposure rather than generic in nature (Table 1).

A Four-Dimensional Strategic Response Framework



Figure 2: Global trade fragmentation

The findings contained in Sections Two and Three demonstrate that the current trade-policy environment is not going to change significantly, nor is it feasible to make simple, defensive adjustments to a firm's overall business strategy. Therefore, the design of any multi-dimensional strategic framework should be based on a proactive approach. In order to help firms understand where their vulnerabilities lie, the proposed framework will consist of four dimensions, which are interrelated as shown in figure 2.

Dimension 1 — Supply-Chain Architecture Redesign

One of the first things that a corporation can do in response to the potential impact of tariffs and/or export controls is to re-configure their supply chains. Recent research by Alfaro & Chor (2023) has shown that there is a statistically significant re-direction of U.S.-based multinational corporations' supply chains towards Mexico, India, and Vietnam since the imposition of the tariffs in 2018; this is particularly evident in the electronics and machinery sectors.⁵ Nearshoring and friendshoring are part of this trend, but have many hidden disadvantages, one of which is that short-distance and/or close-to-source supply chains usually cost between 8 and 15 percent more per unit than the optimal global supply chains they are replacing; as well as requiring several years to develop the supplier ecosystems that are required to support high-complexity manufacturing. As a result, re-designing a

corporation's supply chain will not be a quick fix. Supply Chains Require Systematic Mapping To prepare for uncertainty (both political and economic), companies must first consider developing robust supply chains, which requires: 1) systematically mapping their supply chains and identifying key single-source dependencies, 2) pre-qualifying alternative suppliers in multiple global regions, particularly priority nearshore locations, and investing in the development of those suppliers, and 3) conducting scenario-based "stress tests" with a variety of tariffs and export-control scenarios. Companies that had completed this foundational work prior to 2020 experienced much faster recovery times than others from pandemic-induced disruptions to their supply chains, so are therefore predicted to be much more resilient to shocks from tariffs.

Dimension 2 — Market Portfolio Diversification

Businesses with a high concentration of their revenue in only a few/non-diverse export markets are at an increased risk from changes in trade policy. For example, companies that generate significant portions of their revenue from only one of the following three corridors — U.S.-China, EU-Russia, UK-EU — will find themselves at a higher risk of losing that revenue if that corridor becomes a policy battleground than companies with diversified revenue sources across multiple corridors.

The way the global economy is structured and organized around regional trade agreements is having a significant impact on businesses' global access to markets. The Regional Comprehensive Economic Partnership (RCEP), which includes trade agreements from 15 economies in the Asia-Pacific region, and the Comprehensive and Progressive Trans-Pacific Partnership (CPTPP), as well as the African Continental Free Trade Area (AfCFTA), are creating preferential corridors that are offsetting some of the loss of multilateral trade opportunities. According to the International Monetary Fund (IMF), full RCEP implementation is projected to create an additional \$245 billion of trade by 2030.⁴ Firms with an existing market footprint in the CPTPP and/or AfCFTA regions will have alternative access to markets compared to companies that are only exporting with Most-Favored-Nation rates. Detailed technology resilience and regulatory compliance

Dimension 3 — Technology Resilience and Regulatory Compliance

The pressures of export restrictions and the decoupling of technologies require businesses from affected sectors to maintain two separate technology systems that will meet the requirements of both U.S. aligned customers and Chinese aligned customers. The terms "Dual-Spec" design is often used to describe this arrangement. This is both costly and operationally difficult. However, businesses that focus on a

single technology standard will be exposed to existential threats due to the potential for changes to the lists of controlled technologies. The analysis from the OECD for 2023 as it relates to digital regulations estimated compliance costs across digital services to have a similar impact to an average 14% tariff, impacting SMEs disproportionately based on their limited budgets for compliance versus the expense of the regulations. In order to be resilient in the event of future digital regulation, companies can invest in modular architecture that allows for reconfiguration of systems to comply with local regulations on a jurisdiction-by-jurisdiction basis without requiring a full-scale redesign. Companies also can actively participate in international standards organizations as well as developing their internal capabilities around regulatory intelligence that will provide them with advance warning of new compliance requirements.

Dimension 4 — Stakeholder Diplomacy and Policy Engagement

Another element of strategically responding to challenges presented by new and changing international trade policy is proactive participation in trade policy formulation. Companies that simply view trade policy as something that happens to them miss out on the ability to influence it. In addition to participating in business associations, trade councils, investment-treaty networks, and trade committees of the W.T.O., there are several

avenues for creating and disseminating the viewpoints of business before they become established norms in the regulatory landscape. The importance of reforming the World Trade Organization (WTO) cannot be overstated. According to Bown (2024), the dysfunctionality of the Appellate Body allows for an opportunity to form mini multilateral agreements at a higher level of diplomacy and willingness to cooperate among businesses. However, for this to happen, the private sector has to be a part of this process in a way that is considered credible. Most large sophisticated firms consider their abilities to work in public affairs and international trade as part of their first-tier strategic asset pool, along with their ability for logistics and legal compliance.

Recommendations and Conclusion

For Corporate Leaders

Corporate leaders need to perform a systematic trade exposure audit that maps all sources of revenue and material production to the bilateral trade agreement most likely to be disrupted, creating pricing regarding alternative routing in a variety of tariffs. Develop a trade intelligence capability that is a standing function; meaning a continuous monitoring of notifications by the WTO, the expansion of Export Control lists, as well as investment screening decisions, rather than a periodic consulting assignment. Create scenario planning capabilities based on an explicit modelling of possible [geopolitical]

fragmentation trajectories, not just demand and supply sensitivity/impact. Invest in the development of suppliers in priority near-shore and friend-shore locations sufficient time ahead of actual disruption to avoid the need for emergency relocation.

For Policymakers

Policymakers need not confuse industrial policy with protectionism. Supporting foundations of domestic industry such as R&D incentives, skills investment, and the provision of infrastructure are consistent with multilateral trade disciplines and are a source of positive externalities. While tariffs and export controls are a cost to other third-party countries and create a retaliation cycle, they ultimately have a negative effect on global welfare. Reforming the WTO has to include restoring a functioning dispute settlement system due to its utility as a global public good and warranted diplomatic investment at this stage. Regional Trade Agreements must also include high standards of digital trade agreements, open non-binding rules of origin, and strict investor-state dispute mechanisms that provide true certainty to the businesses involved.

Conclusion

Currently, the fragmentation of the global trading system should not be viewed as a temporary deviation from long-term history of reinvigorating economic liberalism, but rather an

essential structural change with unpredictable direction and outcome. Firms that view the current disruptions as merely a cyclical anomaly to be tolerated rather than adapted to will be disadvantaged competitively as the structural transition progresses. Conversely, firms that develop the four-dimensional strategic framework identified in this article, including redesigned supply chains, diversified market portfolios, new technology resilience, and engagement in regulatory reform, will be able not only to survive disruption but to take advantage of opportunities created by asymmetric responses to disruption. The key strategy discussed in this article is the need for firms to manage trade as a first order strategic discipline rather than a subordinate function behind operations/administration or legal compliance. As states actively compete with each other for commerce, companies need to actively create resources and elevate the level of engagement in their companies so that they can create a competitive position in the next decade earlier than others will realize it exists.

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