Supply Chain Realignment: Implications for Global Trade

Report by: Sam Fraser, Najwa Haska, Kolby Kayworth, Hanfei Liu, Kento Mori, Hongyi Zou, Rasmus Edelmann, & Reid Champlin

Faculty Advisor: Merit E. Janow, Dean Emerita, SIPA and Professor of Practice in International Economic Law and International Affairs

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Project Overview

Original Question

→ Which global supply chain shifts should Trade Finance anticipate over the next 3–5 years amid rising geopolitical tensions and shifting demand?

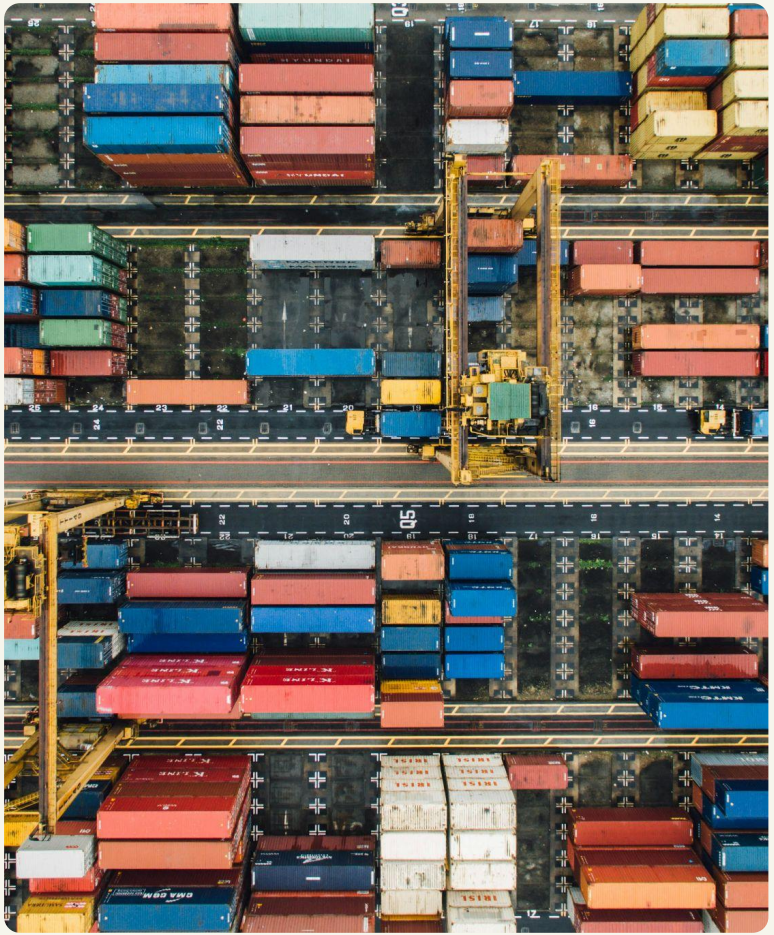
Our Answer

We hypothesize that 3 trends will characterize the global trade landscape over the next 3-5 years:

01 Rise of “Connector” Countries

02 Reshaped Global Trade Relationships

03 Continued Focus on Trade Resilience



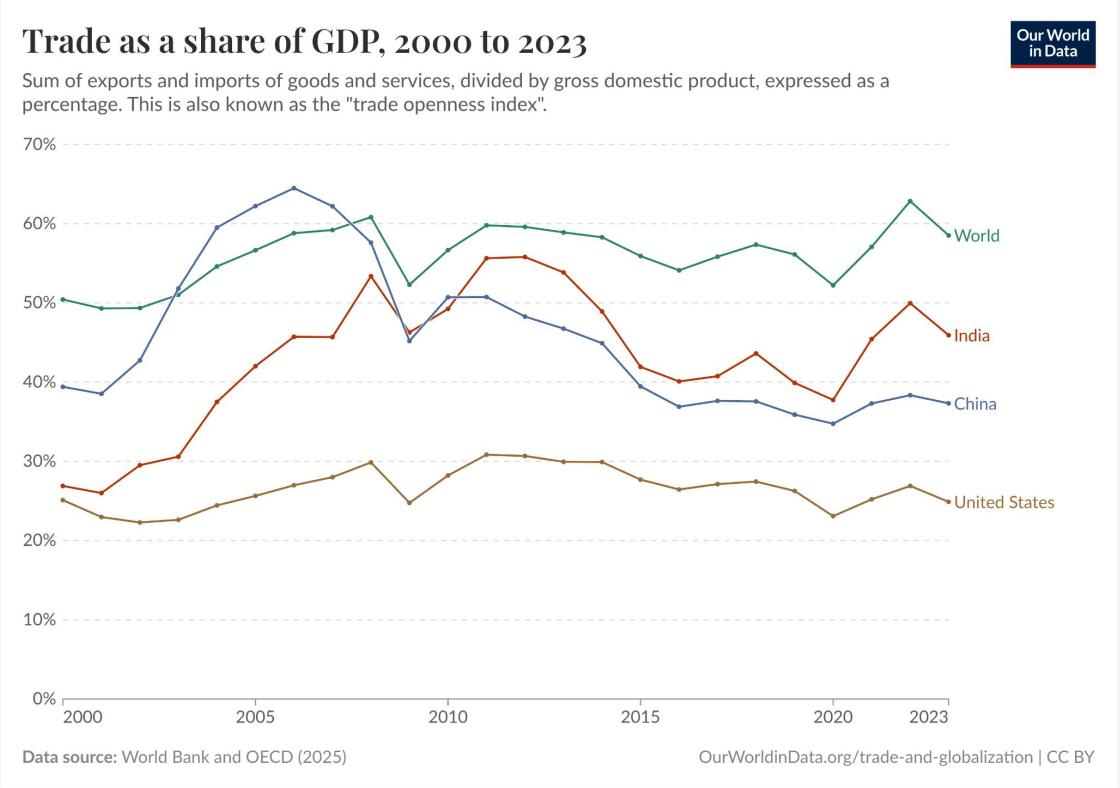
Major Trade Trends

2000 – present

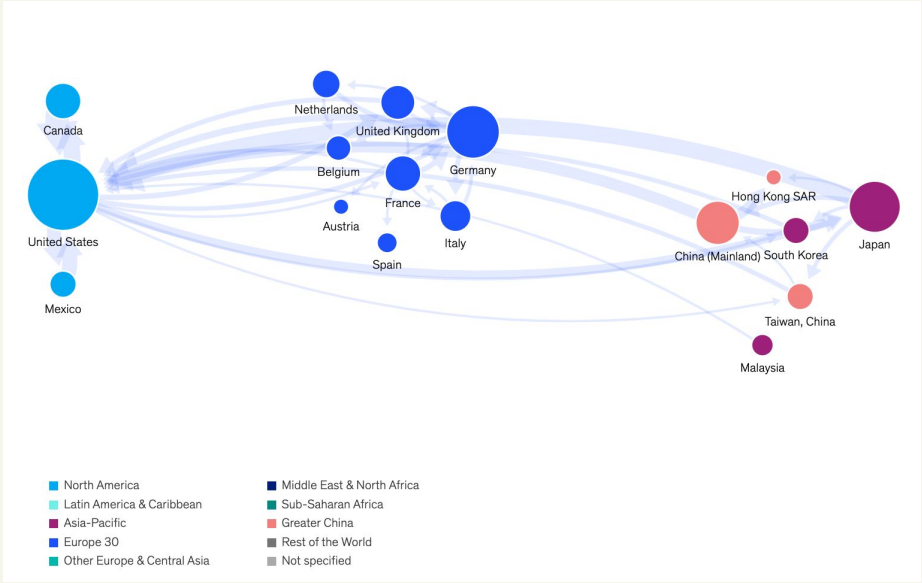
While Global Trade has remained stable…

Despite growing concerns over "deglobalization," global goods trade has continued to track global GDP and maintain modest growth since the early 2000s.

Meanwhile, services trade has consistently outpaced goods trade in growth rate.

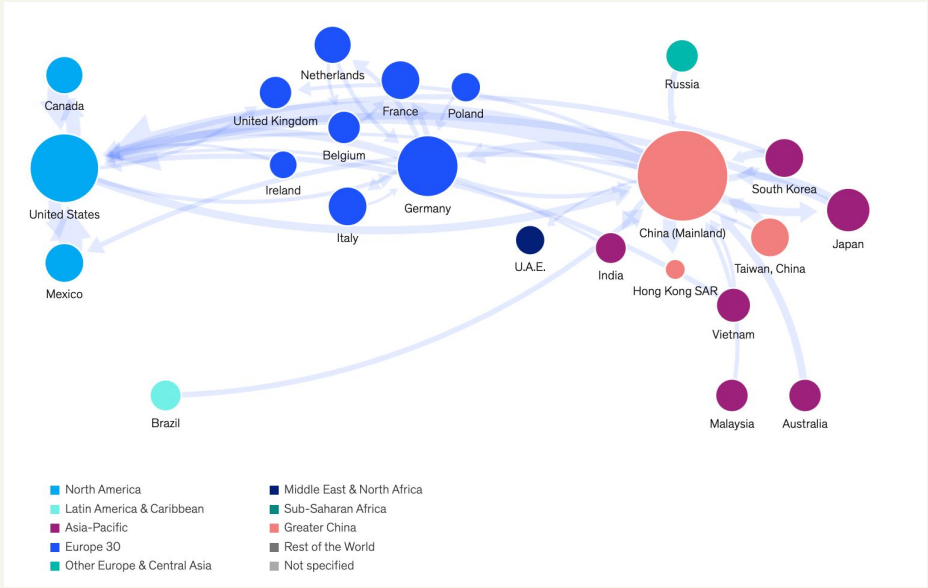


...the pattern of trade has changed significantly.



Global Trade Flows, Global Exports, 2000

Source: McKinsey Global Trade Explorer



Global Trade Flows, Global Exports, 2023

Source: McKinsey Global Trade Explorer

Key Drivers of Shifting Global Supply Chains

Structural

Technology & Automation

Efficiency gains and automation have grown trade volumes while pushing supply chains closer to home.

New Sources of Risk

Crises like pandemics and wars **reroute trade**, and emerging threats—cyberattacks and climate shocks—add further instability.

Policy

Trade Protectionism

Protectionist measures shift prices and production, and U.S. policies risk unforeseen global trade disruptions.

Industrial Policies

Economic policy now serves national security, with subsidies steering production toward favored sectors and regions.

Geopolitics

Geopolitical Realignments

Geopolitical tensions and protectionism are redirecting trade routes, but **global fragmentation hasn't happened yet.**

Rising Emerging Economies

Developing and emerging markets are capturing more trade through **regional pacts** like RCEP, CPTPP, and EU-Mercosur.

*Please see pages 34-43 of the Appendix for our research findings on each of these areas.

Outcomes

Based on these findings, we've identified 3 key trends that have emerged in recent years. We hypothesize that these **will be crucial in shaping the global trade landscape over the next 3-5 years**

01 Rise of "Connector" Countries

Amidst U.S.-China tensions, intermediary countries will continue to grow as important trade hubs, driving shifts in trade patterns and composition.

02 Reshaped Global Trade Relationships

While trade restrictive measures will continue to rise, many countries will hedge by expanding their trade relationships across diversified partners, altering trade corridors, patterns of dependence, and demand for finance mechanisms.

03 Continued Focus on Trade Resilience

New sources of risk such as geopolitical shifts, trade policy uncertainty (TPU), and disruptive climate events mean firms will increasingly prioritize supply chain resilience (efforts to manage risk), leading to measurable changes in trade flows and increased demand for risk mitigation.

Source: 'Connector' countries in a geoeconomically fragmented world

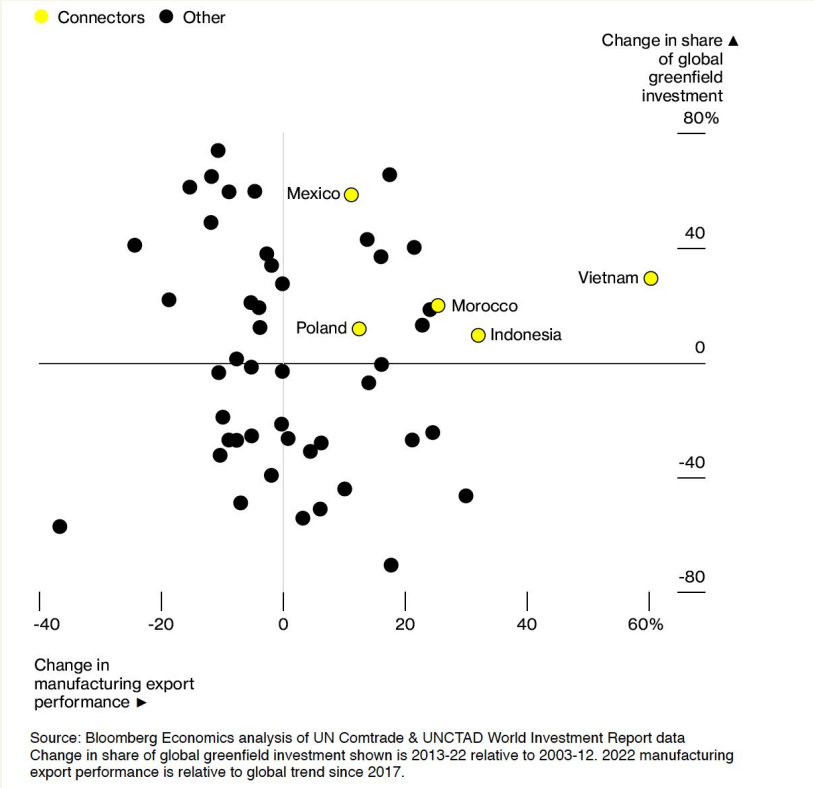
A note on “Connector Countries”

Not all connector countries are alike.

Vertical (e.g., Mexico, Malaysia, Indonesia, Poland): concentrated in a few industries and vulnerable when key partners clash.

Horizontal (e.g., Morocco, Vietnam): diversified across sectors, enabling them to stay neutral amid geopolitical tensions.

Highlighted Connectors lead Manufacturing Export Growth and Greenfield FDI



Source: Bloomberg Economics analysis of UN Comtrade & UNCTAD World Investment Report data
Change in share of global greenfield investment shown is 2013-22 relative to 2003-12. 2022 manufacturing export performance is relative to global trend since 2017.

Source: 5 Key Connectors in the World, Bloomberg

Looking Ahead

How will our hypotheses unfold under the current trade war?

U.S. Tariff Policy and Potential Responses

Current State

As of now, 10% universal tariffs are in place, "reciprocal" tariffs are paused for negotiations, and 145% tariffs cover most Chinese imports to the U.S.

Observed Responses

Discuss, diversify, and de-risk

1. **Negotiate with the U.S. while de-risking** from it
2. Work with other partners to **reduce U.S. dependence and bolster trade order**

Possible Results

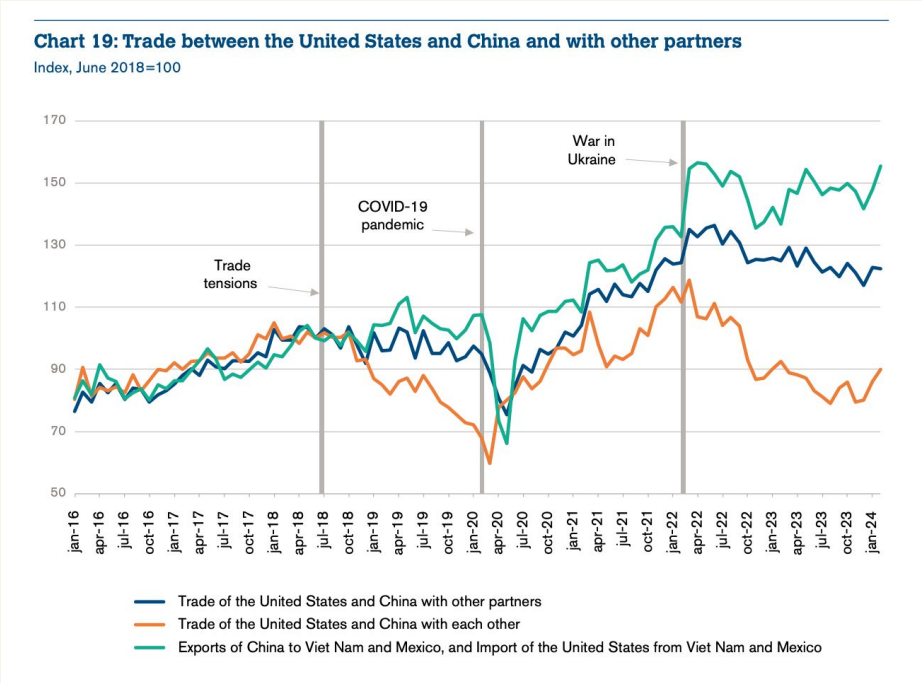
1. Many countries may manage to **avoid or significantly reduce "reciprocal tariffs"** — especially as pressure mounts on U.S. administration to avoid further economic disruption
2. **10% universal tariff** is likely to remain for foreseeable future, though some countries or products may be granted carve outs through negotiations

Evaluating the Tariff War

By the end of tariff negotiations, we expect ASEAN trade with both the US and China to grow. We also expect greater value-added production to move to these countries.

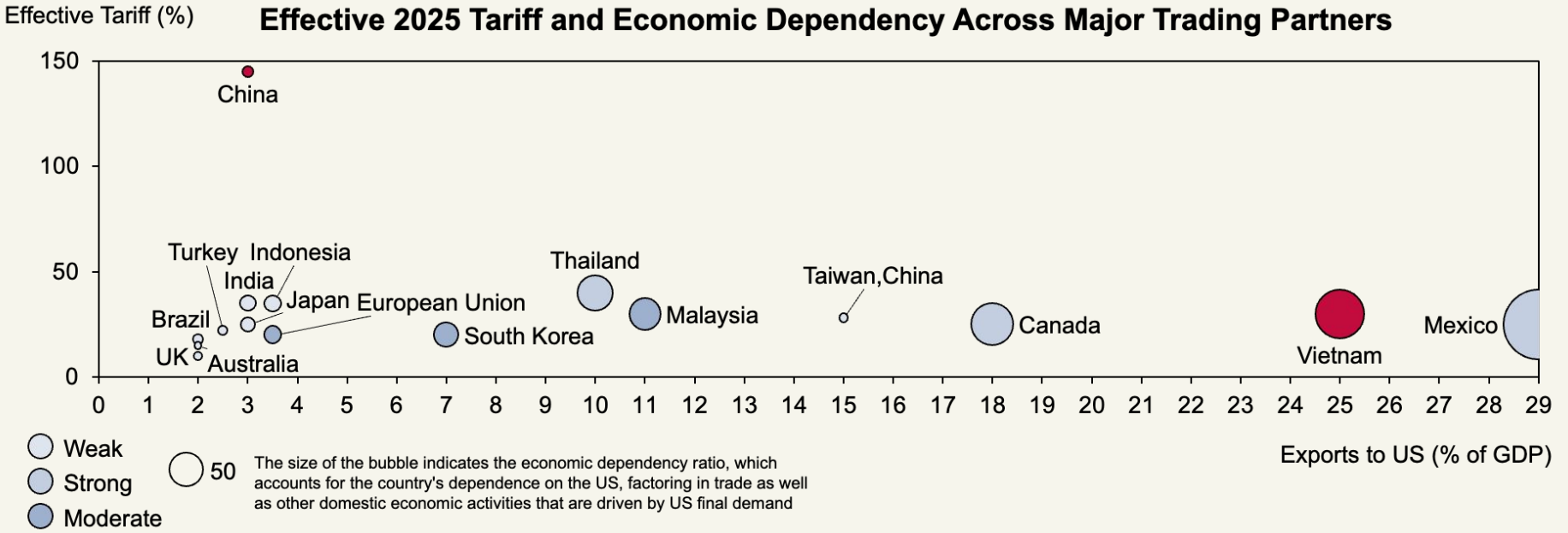
Key Historical Lessons & Evidences

- The first Trump administration's trade helped accelerate the movement of some stages of global value chains from China to ASEAN countries, particularly Vietnam — the "China +1" phenomenon.
- Tariffs reinforced comparative advantage-driven shifts in lower value manufacturing from China to ASEAN.



Evaluating the Tariff War

China +1 has left ASEAN countries highly exposed to U.S. tariffs, making negotiations urgent



Data Source: MasterCard, WTO

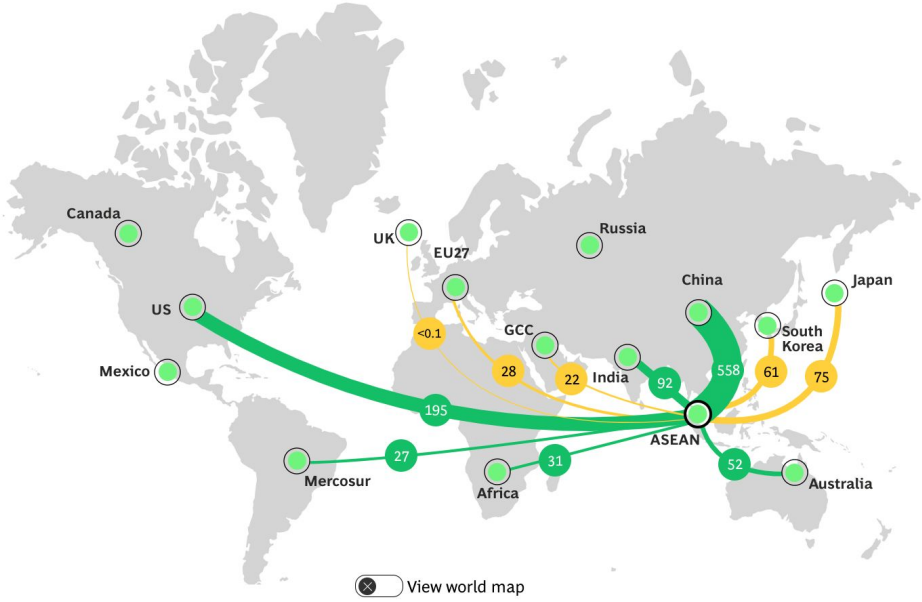
Evaluating the Tariff War

Current Dynamics Assessment

- "China +1" and transshipment will be focal points of any trade negotiations between the U.S. and ASEAN countries.
- We expect that in these negotiations, the economic advantages of ASEAN nations as new manufacturing hubs will prevail.
    - While pure transshipment and fraudulent labeling will face crackdowns, we expect that ultimately **manufacturing supply chains in ASEAN will actually deepen.**

Key question: **Will ASEAN countries be forced to "choose" between trade with the U.S. or China?**

ASEAN change in goods trade 2023 vs. 2033 (constant 2010 USD $billions)

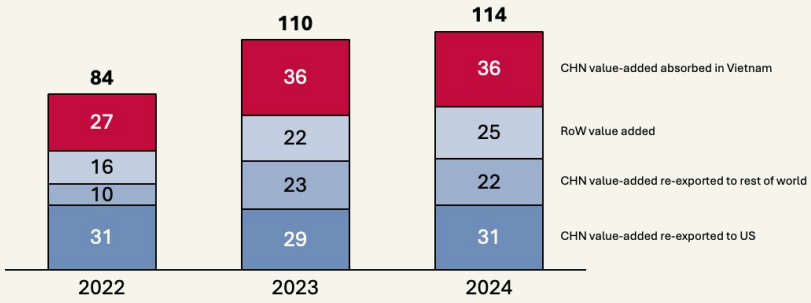


Sources: BCG Global Trade Model 2024; UN Comtrade; Oxford Economics; IHS Markit; World Trade Organization; BCG analysis.
Note: Floating foreign-exchange rates are used for the entire period. Bilateral trade with the GCC does not include GCC's hydrocarbons exports.

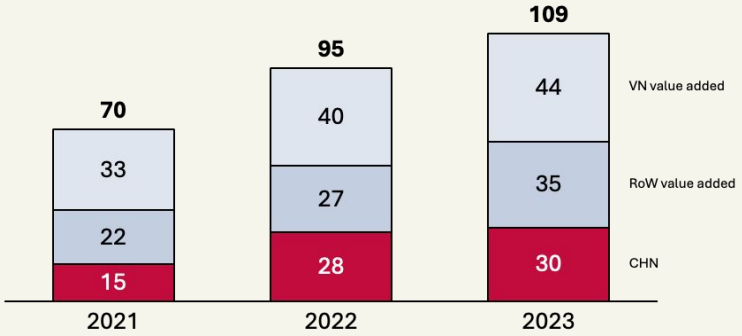
Evaluating the Tariff War

Only ~30% of Chinese imports to Vietnam were re-exported to US in 2023; the rest supports **broader export base** or local consumption.

Vietnam's export composition, $B



Vietnam's imports from China, $B



Emerging connector countries (i.e., **Thailand, Vietnam, Morocco** increasingly add value through **specialized, cost-effective manufacturing and assembly** embedded in regional and global supply chains — (e.g. textiles, electronics, automotive parts, and industrial goods).

In contrast, traditional trade connector countries (i.e., Singapore, Netherlands, and UAE) primarily provide logistics, transshipment, and financial infrastructure, acting as high-efficiency gateways that consolidate, route, and enable the flow of goods, capital, and services across continents.

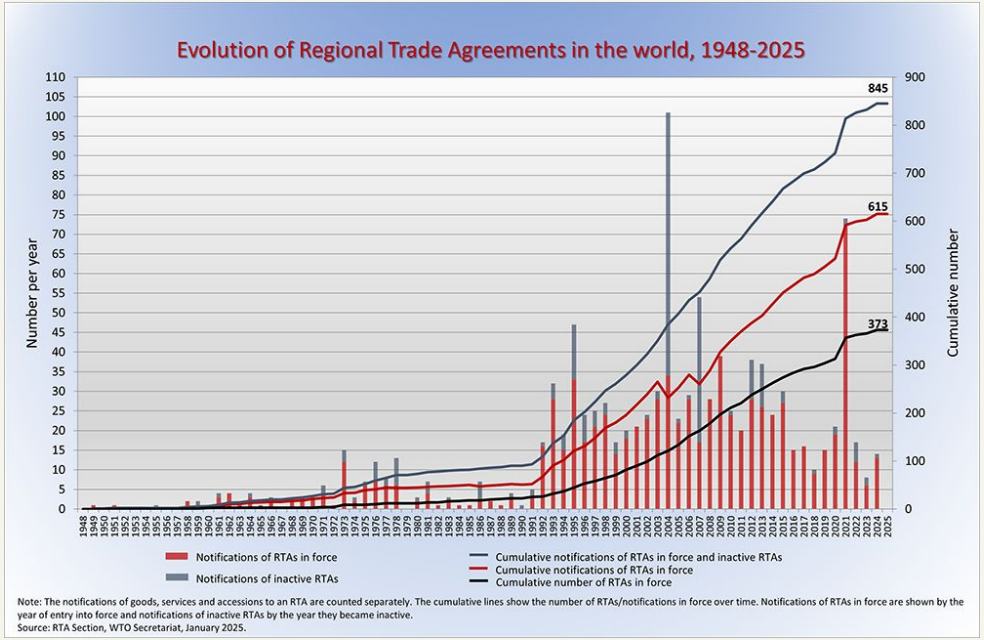
Sources: Bloomberg, OECD, WTO, McKinsey, Asian Development Bank and CEIC

Evaluating the Tariff War

The 2025 tariff war reinforces **long-term realignment of trade partnerships**, as countries diversify supply and demand dependencies to **hedge against geopolitical shocks.**

Key Historical Lessons & Evidences

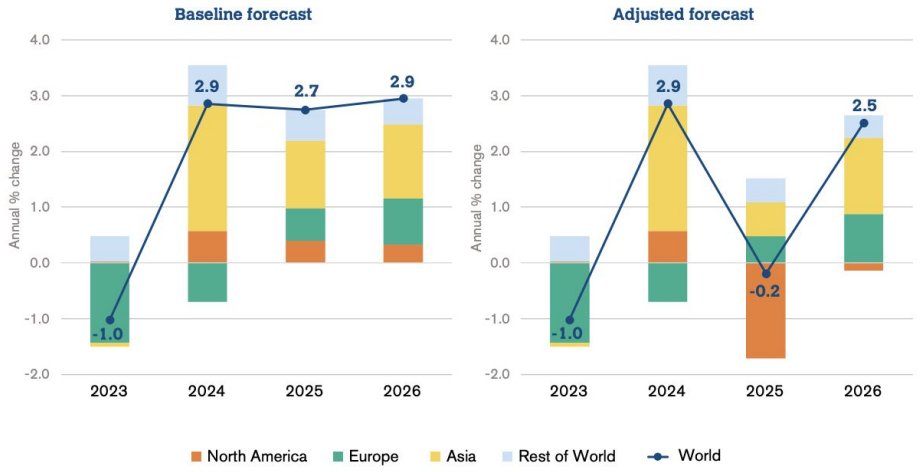
- Major regional free trade agreements in the world — including the **RCEP, CPTPP, AfCFTA, and EU-Mercosur** — have entered into force in recent years or are presently undergoing ratification.
- These demonstrate that trade integration continues to be a priority and development strategy for many countries.
- As the U.S. steps back from global trade and the rules-based trade order, the persistence of such agreements suggests that other countries will step forward and fill the void.



Evaluating the Tariff War

Chart 2: Contributions to world merchandise trade volume growth by region, 2023-2026

Annual % change



Note: Trade refers to sum of exports and imports. Figures for 2025 and 2026 are projections.
Source: WTO Secretariat estimates.

Current Dynamics Assessment

- Leaders in the UK, Canada, and New Zealand have called for “coalitions of the willing” to facilitate trade and shore up the rules-based trade system, and have suggested engaging Asia-Pacific and Global South nations in these efforts.
- China has responded with outreach to Europe and by doubling down on its strategy to expand exports to the Global South.
- We expect that building new trade ties and finding new export markets will be a central element of many countries tariff responses.

Evaluating the Tariff War

"Concluding trade deals and opening up new markets is a key element of the EU's strategy to respond to Trump's tariffs." — Bloomberg

Reported Trade Talks in Progress

- Politico reports on the EU's trade talks:
  - Trump's tariffs have given new momentum to **EU-Mercosur ratification** process.
  - Ongoing **EU-India** talks — von der Leyen and Modi have both set goal of inking deal this year.
  - High prospects of agreement with **Australia**, and exploring cooperation with CPTPP.
  - Talks in progress with **Indonesia, Malaysia, Philippines, and Thailand.**
  - Agreed to launch trade talks with the **UAE** in April.*
- **Japan, China, and South Korea** held their first economic dialogue in 5 years on March 30, agreeing to promote regional trade.
- **ASEAN and the GCC** are planning talks aimed at a new trade agreement.

"Deals that were awaiting adoption or ratification as of last year would add more than **€185B worth of trade to the [EU's] tally."*

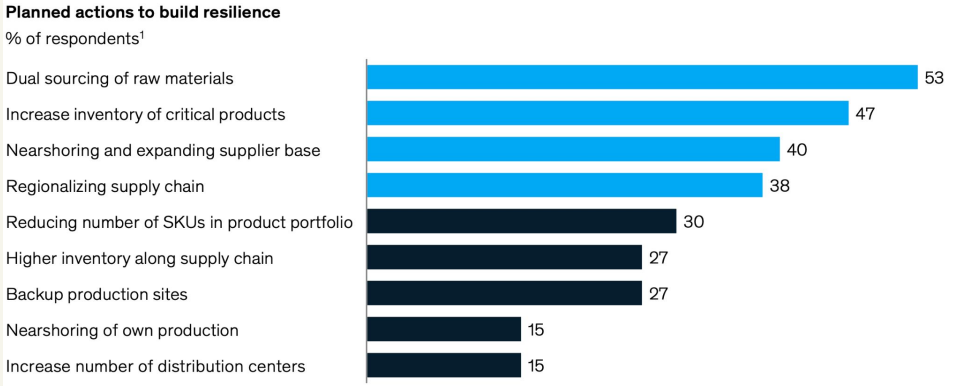
Evaluating the Tariff War

The compound effect of tariffs, geopolitical risk, and climate volatility has turned supply chain resilience from a theoretical goal into a core operational and financial priority.

Surveyed business leaders are increasing resilience in supply chains and production through multiple strategies.

93% of global supply chain leaders are planning to increase resilience[1]

44% would increase resilience even at expense of short-term savings[2]



1. McKinsey survey of global supply chain leaders, May 2020.
2. McKinsey survey of business executives, May 2020.

Source: McKinsey survey of business executives, May 2020 (n = 605); McKinsey survey of global supply chain leaders, May 2020 (n = 60); McKinsey Global Institute analysis

Key Historical Lessons & Evidences

- Past tariffs, the Russia-Ukraine War, and the Covid-19 pandemic disrupted trade and prompted firms to re-evaluate supply chain practices.
- Key measures in past crises: dual sourcing of key inputs, and buildup of inventory buffers.
- But **cost efficiency remains paramount** — firms have sought to bolster resilience with minimal sacrifice to their bottom line.

Evaluating the Tariff War

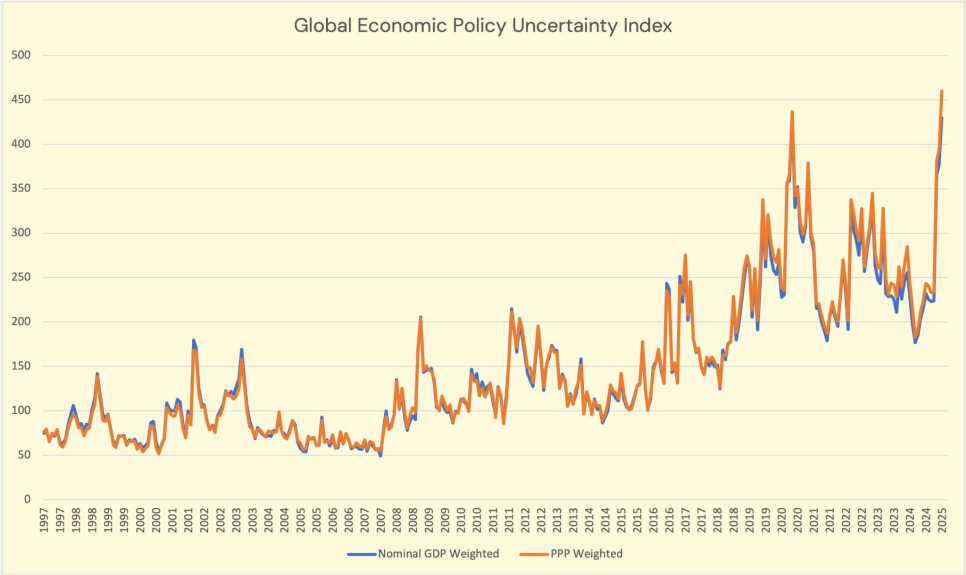
Current Dynamics Assessment

Many firms have **put investments on hold** due to tariffs.

Potential **resilience measures** going forward:

- *Diversification* and duplication of supply chains to limit exposure to tariffs on any one country.
- *Reshoring* supply chains to U.S., but only where it would make economic sense to do so *absent* high tariffs.
- *Relocating* supply nodes to countries identifiable as less exposed to tariff risk.

  See: Apple seeking to build *all* U.S.-bound iPhones in India, promising new U.S. jobs and investments.



Source: Economic Policy Uncertainty Index by Baker, Bloom, and Davis. Based on media coverage

Implications for Trade Finance

What a Rewired Global Trade Landscape Means for Financing Demand

Key Takeaways

Trend	Implication
01 | Connector Countries	
a **Origin & destination complexity jumps**	Goods transit through 2–3 hubs instead of 1, fragmenting documentary flow and FX legs
b **In-transit inventory & title risk intensify**	More trans-shipment ↔ longer exposure between BL issuance and final delivery
c **Demand for digital interoperability soars**	SMEs inside free-trade-zones must plug into multiple customs & banking rails
d **Connector FX liquidity spikes**	Dirham, Dong, Peso, Lira turnover grows → higher appetite for trade-linked hedging
02 | Reshaped Trade Relations	
a **Shift from USD-centric settlements**	RMB, INR, AED clearing requests; local-currency LCs, avoid sanctions or SWIFT costs
b **Proliferation of bilateral FTAs**	Tariff codes, rules-of-origin & cumulation benefits generate new documentary workload
c **Regional clusters need tier-2/3 financing**	Firms near-shore to Mexico, CEE, ASEAN; smaller suppliers struggle with WC
d **Increased dual sourcing & parallel inventories**	Working-capital cycle lengthens; credit lines bifurcate per geography
03 | Focus on Resilience	
a **Credit & political-risk insurance integral to deals**	Corporates demand off-balance-sheet risk transfer; insurers tightening capacity
b **Sanctions & ESG compliance as gating factors**	More blocked vessels, forced destocking, green-supply-chain mandates
c **Commodity-price spikes stress SCF programs**	Margin calls & variation payments create liquidity squeezes for traders

Sectoral Analysis

Impact of a Sustained Tariff Conflict on the Semiconductor–Automotive Industry

Analytical Framework

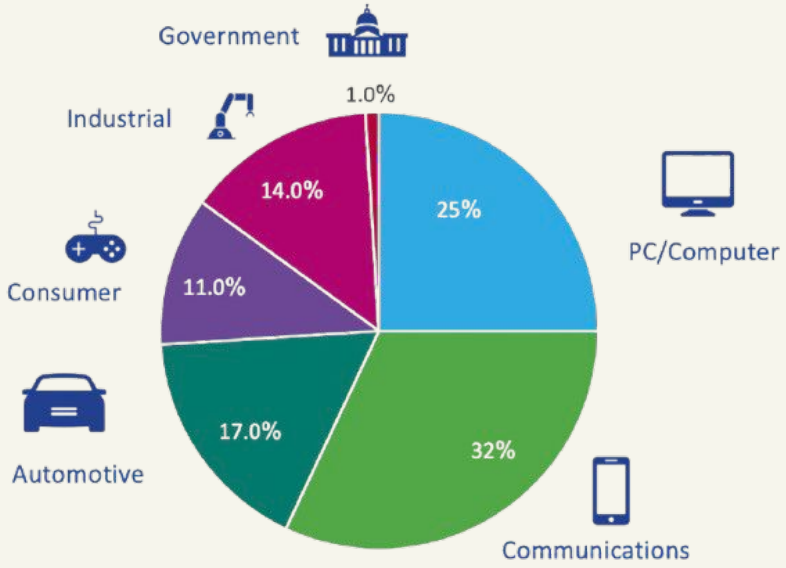
Scope of Analysis

We aim to understand how the semiconductor supply chain underpins U.S. auto manufacturing — and where that dependency creates risk in the current trade war landscape.

Driving Questions

Given ongoing trade restrictions, how are disruptions in the semiconductor sector affecting U.S. auto manufacturing? What risks and opportunities does this create for auto-sector clients?

The automotive industry is among the largest consumers of semiconductors



2023 Total Global Semiconductor Market: $526.9 Billion

Source: SIA, 2024 Factbook

Four automotive trends are accelerating semiconductor demand

Electric Vehicles
New Powertrain, Charging Infrastructure, Modularization

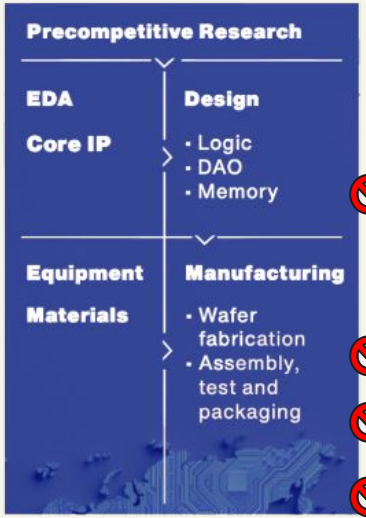
Autonomous Vehicles
Sensors, Navigation & Guidance

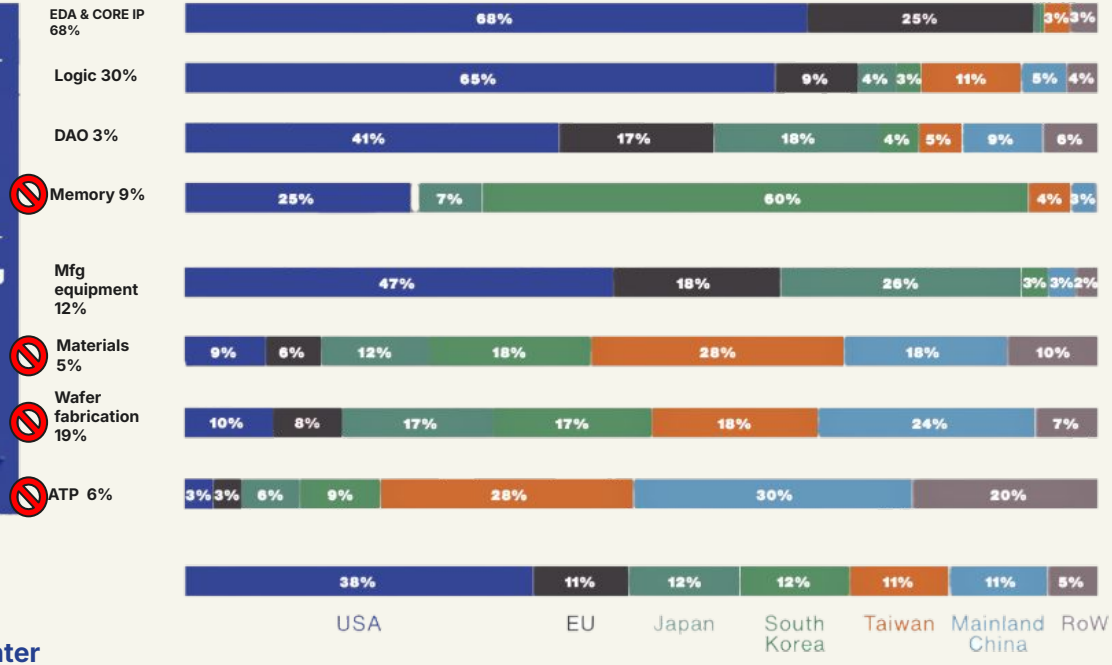
Connected Vehicles
Cloud infrastructure

Mobility as a Service

Mapping the Automotive Semiconductor Supply Chain

Semiconductor industry value-added by activity and region, 2022 (%)





Source: Emerging Resilience in the Semiconductor Supply Chain, BCGxSIA, May 2024

Semiconductors Enter Here via Tier 1 Suppliers (e.g., Bosch, Denso, Continental, etc)

Raw Materials & Part Manufacturing → **Vehicule Assembly** → **Quality Control & Testing** → **Distribution, Retail, & Aftermarket Services** → **End-Users Services**

Trade War Scenario: How U.S. Semiconductor Vulnerabilities Amplify Trade War Risks

Trade War Exposure for U.S. Auto Clients is Concentrated in Non-U.S. Parts of the Semi Supply Chain. However, Protection Measures Are Deepening Exposure, Not Easing It.

Areas of Vulnerability	Dominant Foreign Players	Current U.S Trade Measures (as of April 2025)	Form of Disruption in the U.S.
Memory	South Korea Japan	25% tariff on Chinese memory chips, increased to **50% tariffs**	Supply Shortages Price Surges
Wafer Fabrication	Taiwan South Korea	**Export controls on advanced chip making equipment** to China **CHIPS Act incentives** for domestic production &	Production Bottlenecks Longer Lead Times
Materials	Japan Taiwan EU	**Tariffs on rare earth imports** **Stockpiling** under Defense Production Act	Cost Inflation Sourcing Delays
Assembly, Testing, Packaging (ATP)	SouthEast Asia (Vietnam, Malaysia)	Section 232 **investigation into semiconductor imports** for national security concerns	Cost Inflation Production Bottlenecks

Trade War Scenario: How U.S. Semiconductor Vulnerabilities Amplify Trade War Risks (cont.)

Other Areas of Vulnerability	Dominant Foreign Players	Current U.S Trade Measures (as of April 2025)	Form of Disruption in the U.S.
Capital Equipment	Netherlands (ASML)	10% tariffs on imports from European Union	Cost Inflation Lower competitiveness
STEM Labor & Skill	China South Korea Japan	-	Bottlenecks in scaling advanced manufacturing capacity

China's Retaliation Magnifies Fragilities

Legacy Node Dominance as Leverage

China produces **>90% of mature-node chips**

Origin Rule Reclassification

China now defines chip origin by **wafer/IP location**, not final assembly → U.S. firms using Southeast Asia for ATP are still **exposed to Chinese tariffs**.

Trade War Scenario: How Vulnerabilities Cascade Across the U.S. Auto Supply Chain

1

Current Trade War

2

Semiconductor Manufacturing Disruption

- Memory Supply Shortages
- Wafer Fabrication Bottlenecks
- Materials Sourcing Delays
- Cost Inflation for ATP

(e.g., Magna International, Aptiv)

3

Impact on Tier 1 Auto Suppliers

- Input Shortages & Production Delays
- Cost Past-Through Pressure
- Working Capital Strain

(e.g., Intel, TI)

3

Impact on U.S. Automakers

- Production Cuts and Delayed Vehicle Launches
- Margin Compression

(e.g., GM, Ford Motor Company)

5

Takeaways for Trade Financiers

?

Key Takeaways - Liquidity & Risk

	Factors	Why	Intensity
Liquidy Opportunities	**Semiconductors Fabricators** *(e.g., Intel, TI, Micron, GlobalFoundries)*	Delays or overruns in fab construction due to equipment tariffs → need **capex bridge financing, and possibly inventory financing.**	**High**
	Tier 1 Suppliers *(e.g., Magna, Aptiv)*	Facing input cost inflation and longer lead times → need **working capital to secure inventory.**	**Medium**
Risk Hotspots	**Auto OEMs** *(e.g., GM, Ford Motor Company)*	Margin compression from cost pass-through failure → **risk of credit deterioration and delayed investment.**	**High**
	Midsize Auto Parts firms *(e.g., Gentex, Visteon)*	Overreliance on mature-node chips from China → **risk of production halts and inventory write-downs.**	**High**
	Tier 2/3 Suppliers *(e.g., Shape, Cooper)*	Cost inflation and limited passthrough → **risk of refinancing challenges and restructuring pressure.**	**High**

What the Auto–Semi Sector Tells Us About Our Hypotheses

Rebuilding a fully domestic semiconductor supply chain remains out of reach for the U.S. over the next 3–5 years.

This constraint will force firms to adapt by **reconfiguring global trade relationships** and **building resilience** through diversification and financing strategies.

01 | Connector Countries

- U.S. firms must **reconfigure**—not relocate—their trade relationships.
- U.S. OEMs and Tier 1s will **deepen supply ties with connector countries** like Malaysia, Vietnam, and Thailand.

02 | Reshaped Trade Relations

03 | Focus on Resilience

- U.S. firms will by **layering new suppliers,** securing long-term sourcing agreements, and diversifying jurisdictional exposure.
- Firms are likely to invest in **inventory buffers** and **pre-shipment guarantees** as part of their resilience strategy.

Appendix

Key Drivers of Shifting Global Supply Chains

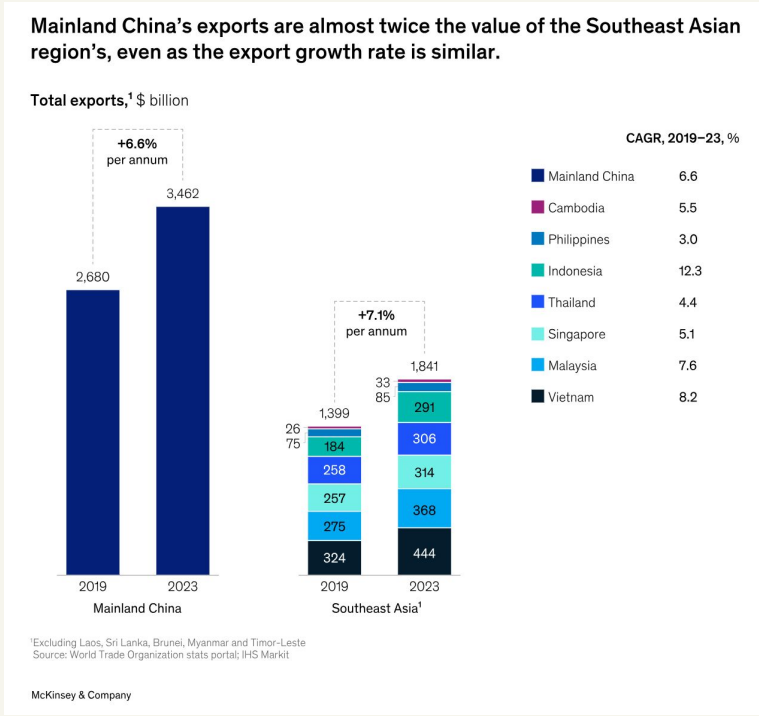
A Deeper Analysis of Each Driver

Since early 2010, lower labor costs have shifted comparative advantage to ASEAN

Rising labor costs in China have worked in concert with geopolitical pressures to **shift some manufacturing to ASEAN**.

Despite this, **China** remains **Asia's export powerhouse** with rapid export growth rate.

Among ASEAN, **Vietnam** and **Indonesia** stand out with particularly high export growth.

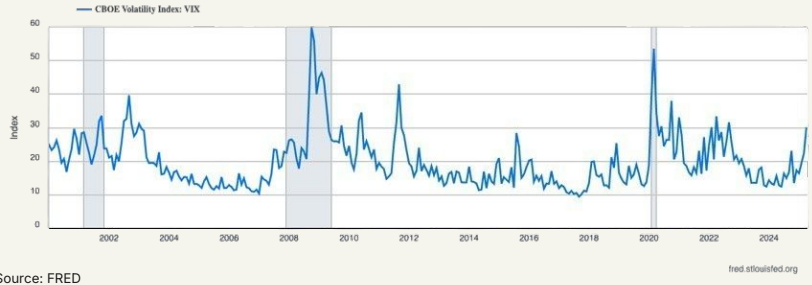


This has coincided with a **surge** in **Chinese outbound FDI to ASEAN**, reaching $24 billion in 2023

Persistent uncertainty has become the new normal…

- **Disruptions** to global trade have become **more frequent** and **more severe**.
- COVID-19, the Russia-Ukraine War, and Trump tariffs are the most prominent examples, and each caused shifts in the patterns and composition of trade.
- This environment of uncertainty is **likely to persist**, and firms will have to plan for similar large scale disruptions in the future.
- Increased supply chain resilience will therefore gain greater importance.

VIX Index, 2000-2025



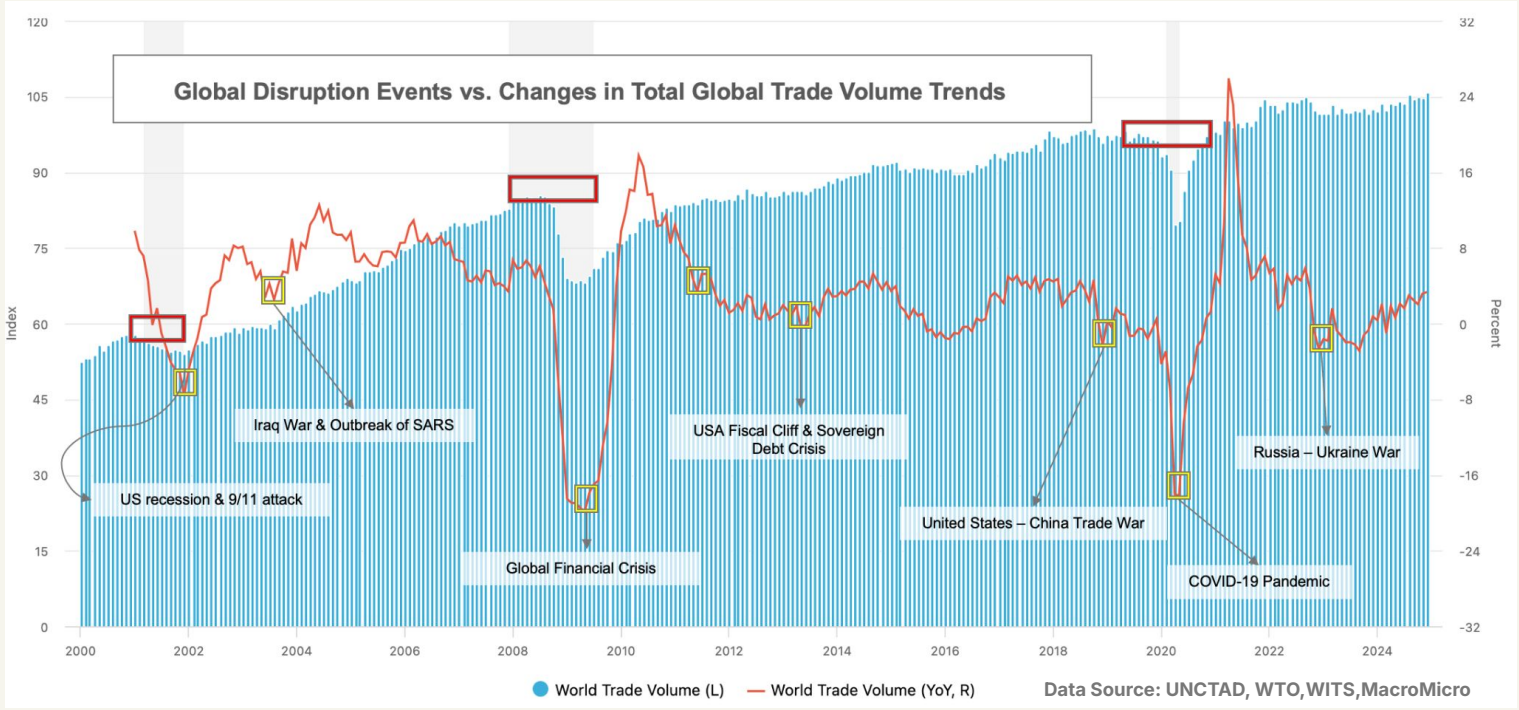
Source: FRED

Economic Policy Uncertainty Index, 2000-2025

Source: Global Economic Policy Uncertainty Index. Scott Baker, Northwestern University; Nick Bloom and Steven Davis, Stanford University

Persistent uncertainty has become the new normal…

Frequent global disruptions — from trade wars to pandemics — have caused sharp and recurring drops in trade volume, making volatility a structural feature of global trade over the past two decades.



...and business react with a greater focus on resilience in supply chains.

According to business leaders, resilience is defined as a way of **prioritizing risk over cost efficiency** in supply chains.

In reality, it is an expense in the forms of **duplication, options, hedges, insurance, and more**.

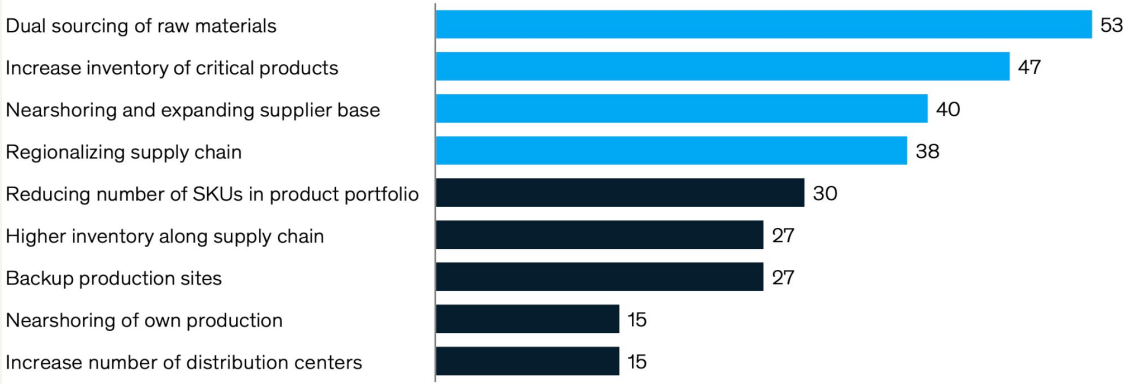
Surveyed business leaders are increasing resilience in supply chains and production through multiple strategies.

93% of global supply chain leaders are planning to increase resilience[1]

44% would increase resilience even at expense of short-term savings[2]

Planned actions to build resilience

% of respondents[1]



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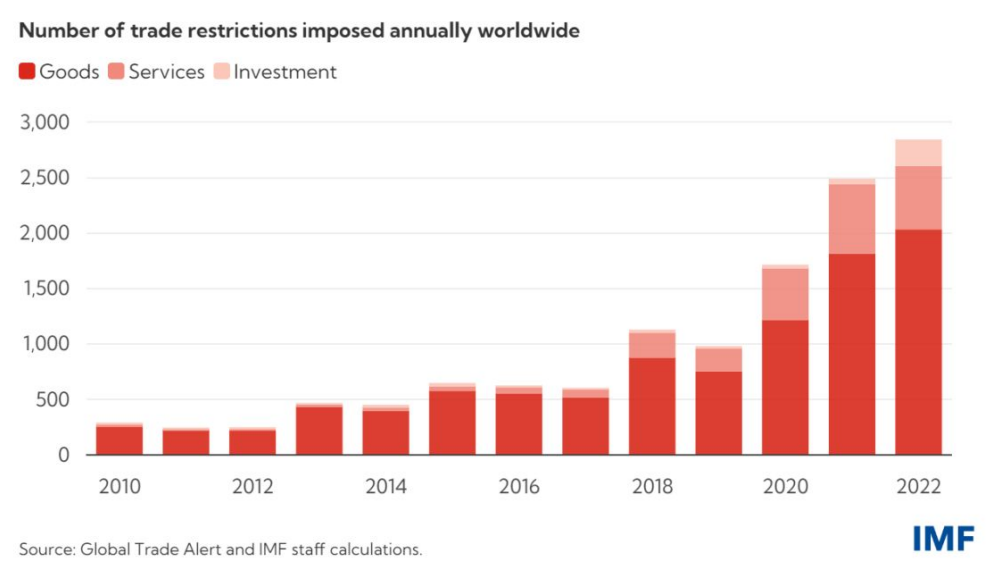
Many countries continue to seek free trade alongside a rise in trade-restrictive measures in others

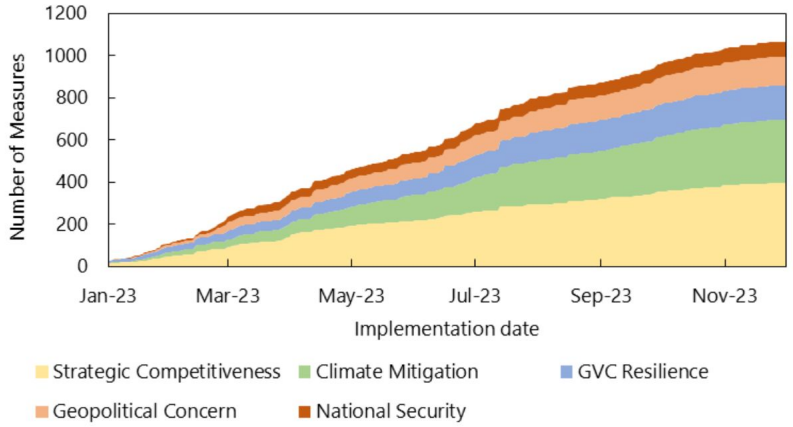
- Two of the world's largest trade agreements — **RCEP and CPTPP** — have entered into force in recent years, while major markets like the **EU and Mercosur are actively negotiating agreements**.
- At the same time, **protectionist measures** are **on the rise** across regions and national income levels.
- The Trump administration's current approach makes the **U.S. an outlier** — no other significant economy has embraced protectionism to this degree.



… with a re-emergence of industrial policy.

- Many countries have adopted new industrial policies in recent years, major examples being the **U.S. IRA and CHIPS Acts, the European Green Deal, and Made in China 2025**.
- These policies aim to **boost domestic manufacturing** in various priority industries.
- EMDEs are increasingly using industrial policy to try to move up value chains.
- **Industrial policies alter comparative advantage** and have the potential to change patterns of manufacturing and trade.
- Ruta and Rotunno (2024) found that for EMs, **exports in subsidized industries grew 15% faster compared to other industries.**

Figure 5: Trade Distortive Industrial Policies with Stated Motivation

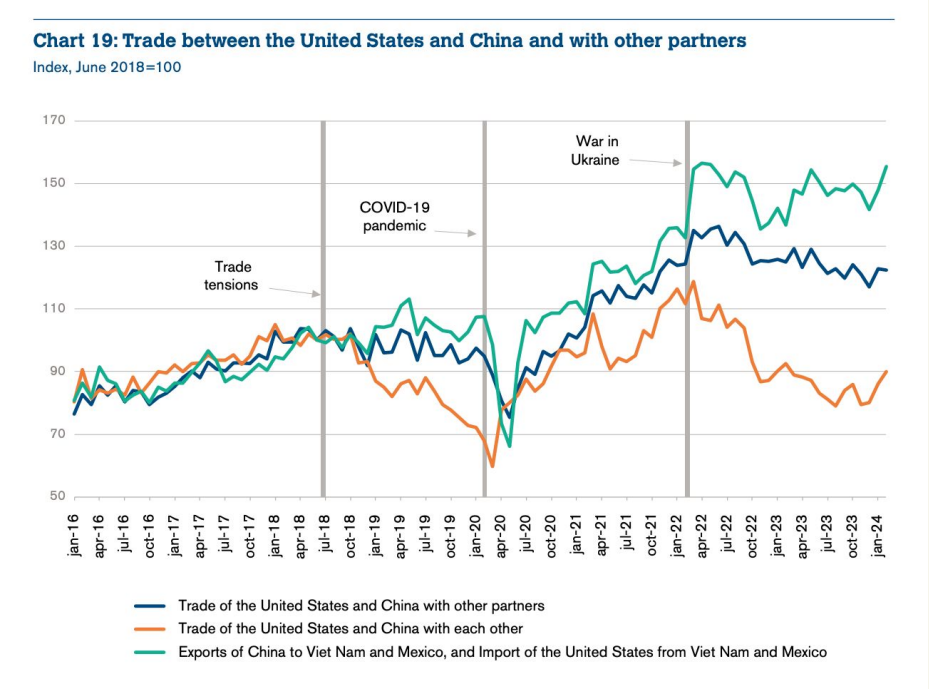


Note: Cumulative stock of measures. For measures with multiple motives, each motive is given equal weight.

Source: International Monetary Fund, 2024

We find evidence for a trend of geopolitical fragmentation, but the overall magnitude is small

- Countries at the center of current geopolitical conflicts have s**ignificantly reduced direct trade with rivals.**
  - Tariffs, export restrictions, and shifts in comparative advantage have led to a drop in U.S.-China trade.
  - Russia's invasion of Ukraine and resulting sanctions have led to an even larger drop in Russia-EU trade.
- There does not appear to a be a broader fragmentation into geopolitical blocs, however, and **geographical distance of trade is increasing.**
- Meanwhile, some countries have emerged as **"connector economies,"** serving as intermediaries for trade between rivals.



Source: WTO Global Trade Outlook 2024

While there is little support for a “regionalization” trend

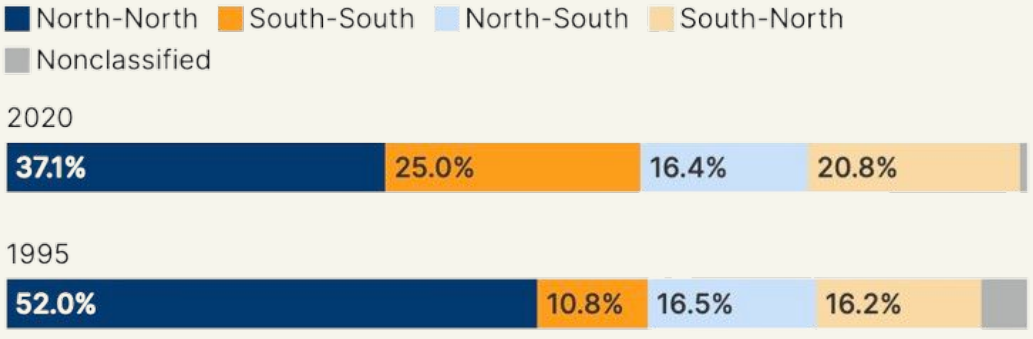
- Despite proliferation of regional trade agreements, **data does not support the notion of a broad trend toward regionalization** or “nearshoring.”
- Increased trade within regions does not appear to be diverting from or replacing more distant global trade.
- According to the **2025 DHL Global Connectedness Tracker**, the geographical distance traveled by traded goods and services has increased steadily over the past decade.
- At the same time, **intraregional trade has remained relatively stable at just over 50% of total global trade.**

Figure 8: Average Distance and Regionalization

Data Source: DHL Global Connectedness Tracker

Emerging economies represent a larger share of global trade…

- We're seeing a clear decline in North-North trade—from over 50% in 1995 to 37% in 2020—while South-South trade has more than doubled.
- This transition reflects the **growing manufacturing and consumption capacity of emerging economies**, which will increasingly influence how and where trade finance is deployed.

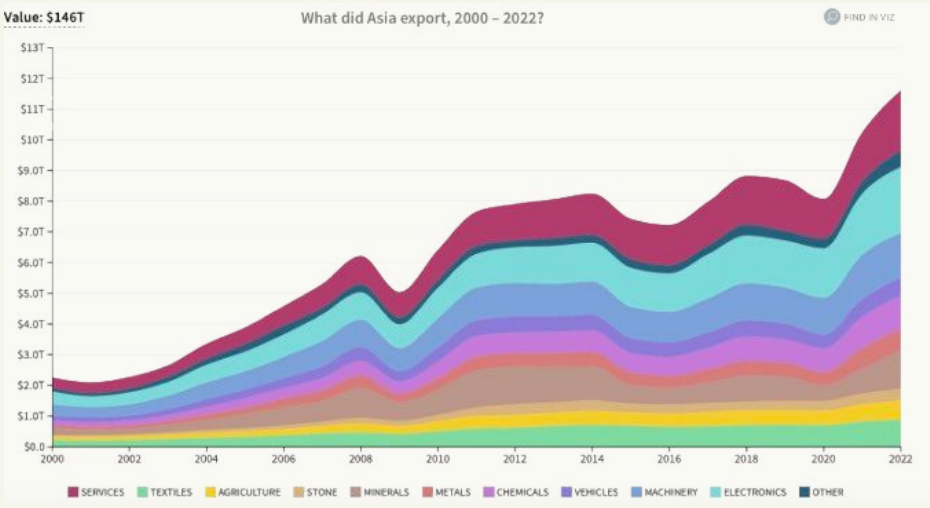


Source: UNCTAD Trade and Development Report 2022

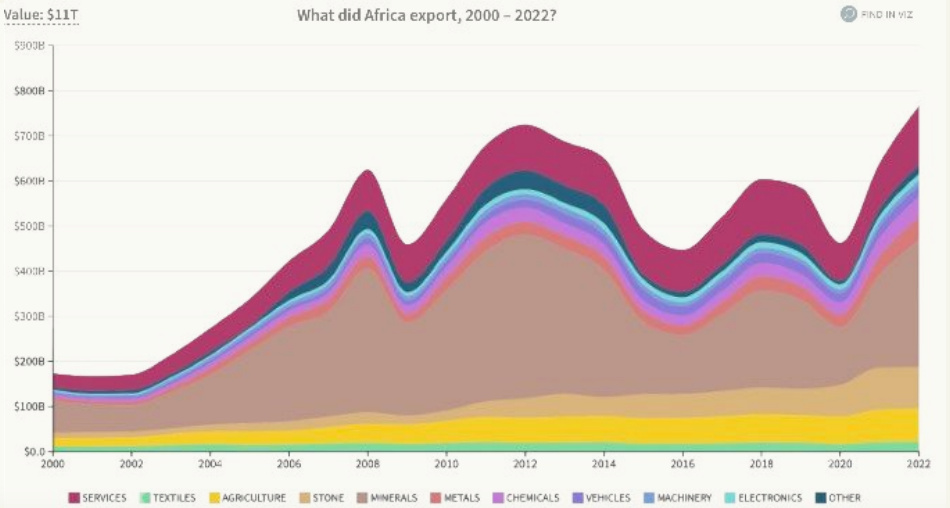
Global Economy and Development at BROOKINGS

...and composition of trade from emerging economies has become more diversified.

Export profiles in emerging regions like Asia and Africa have become **more diversified** over the past two decades, expanding beyond primary goods into a broader mix of industrial, consumer, and tech-related products.



Source: The Atlas of Economic Complexity, Harvard University



Source: The Atlas of Economic Complexity, Harvard University

Sectoral Analysis

China’s Viewpoint: Vulnerabilities in its Semiconductor Supply Chain

China's Viewpoint - Vulnerabilities in the Chinese Semiconductor Supply Chain

Areas of Vulnerability	Dominant Foreign Players	Current U.S Trade Measures (as of April 2025)	Form of Disruption in China
Capital Equipment *(e.g., lithography machines)*	Netherlands	Export bans on GPUs and advanced processors	Production Bottlenecks Limited Competitiveness
Design Software & Intellectual Property	United States	U.S. export restrictions on advanced design software	Limitations on chip innovation
High-End Chips	United States	Export bans on GPUs and advanced processors	Performance gap in AI, data centers, and supercomputing

Takeaways

Semiconductor Manufacturing Disruption

- Stuck at 14nm and above → limited advanced chip competitiveness
- Gaps in domestic tools and materials → fragmented production ecosystem
- Lower yield and performance → higher costs and slower scale-up
- Strategic impact on AI, defense, supercomputing, and EV sectors