



UNIVERSITÀ  
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**SIS**  
School of  
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Studies

# TRADE WARS AND THE GLOBAL ECONOMY

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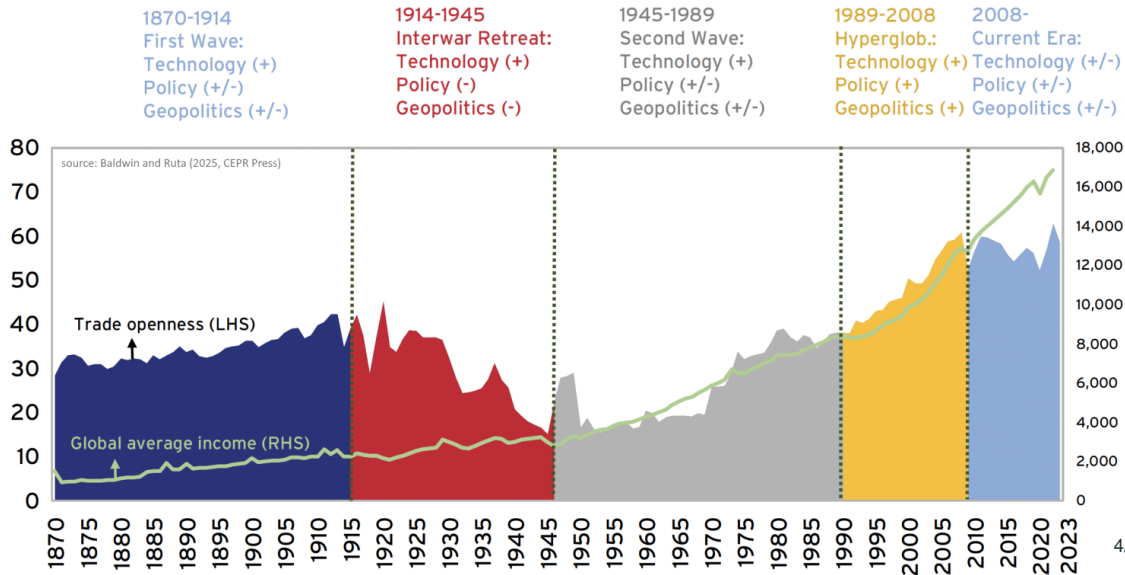
64th ISODARCO Course

- Some Context: from Globalization to Fragmentation
- Trade War: Tariffs and Other Amenities
- End of Dollar Dominance?

# A GLOBAL WORLD

- the last decades have seen an increasing economic interdependence, spurred by rapid growth in the global **flows** of goods (and services, labor, capital):
  - in 2023 the world produced **5 times** as much output as in 1970
  - in the same period, world export has increased by a factor of **12**
- global trade accounts now for 60% of GDP, compared to 20% in the 1950s
- is this **new**?
- is this **irreversible**?
- does economic integration lead to convergence around a set of universal values? (democracy, fundamental rights, civil liberties, . . . )

# LOOKING BACK: TRADE INTEGRATION



# PHASES OF GLOBALIZATION

Scholars (Aiyar et al. 2023) identify 5 different phases of globalization:

1. **industrialization** era: gold standard and reduction in transport costs lead to booming international trade
2. **interwar** era: dramatic reversal of globalization (conflicts + protectionism)
3. **Bretton Woods** era: new institutional setup (IMF, World Bank, GATT), trade liberalization, integration among OECD countries
4. **hyperglobalization** era: creation of WTO, integration of many emerging economies into world trade (e.g. former Soviet bloc, China)
5. **slowbalization** era: leveling off of cross-border trade and capital flows

# DRIVERS OF GLOBALIZATION

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depending on the direction and strength of each element, globalization has taken different turns

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- **British hegemony** grants stability and safe maritime routes
- progressive **reduction of trade barriers**, from the UK (1846 repeal of corn laws) to the RoW
- 1<sup>st</sup> decoupling/unbundling: consumption no longer linked to (local) production
- concentration of production in few countries (economies of scale) and **great divergence**

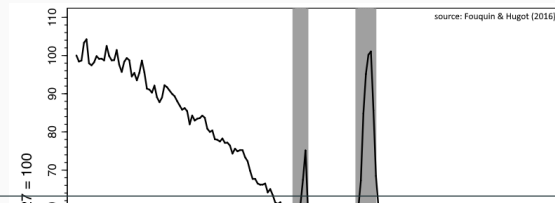


**Figure 2. U.S. Average Effective Tariff Rate Since 1790**

Customs duty revenue as a percent of goods imports

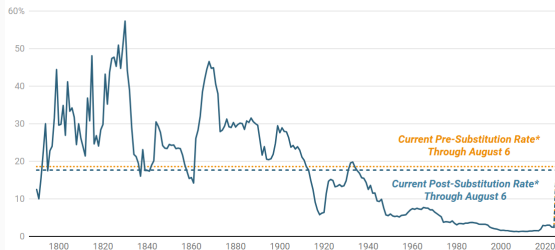


Chart: The Budget Lab • Source: Historical Statistics of the United States Ea424-434, Monthly Treasury Statement, Bureau of Economic Analysis, The Budget Lab analysis. • Created with [Datawrapper](#)

## IMPACT OF TRADE COSTS: TRANS-ATLANTIC WHEAT TRADE AND PRICE GAPS (1800–2000)

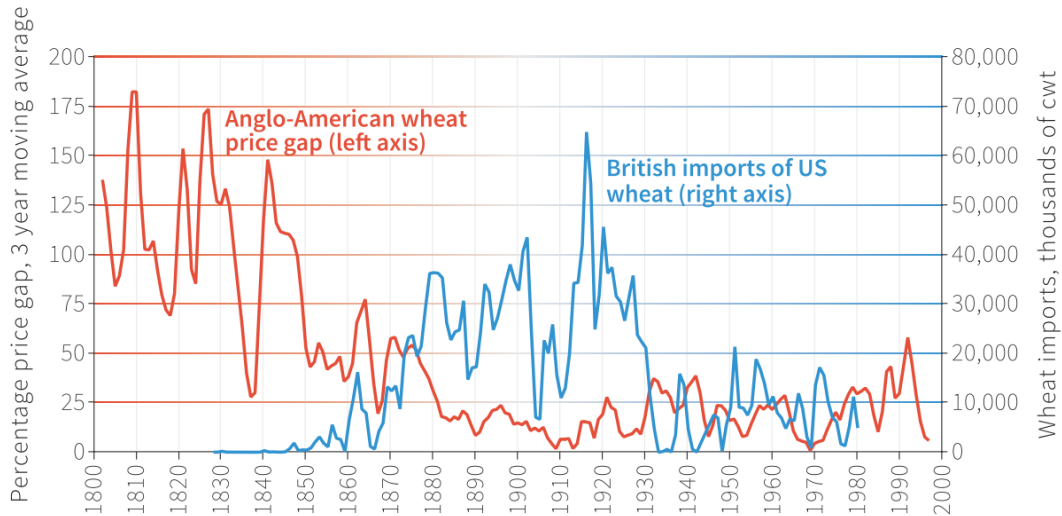


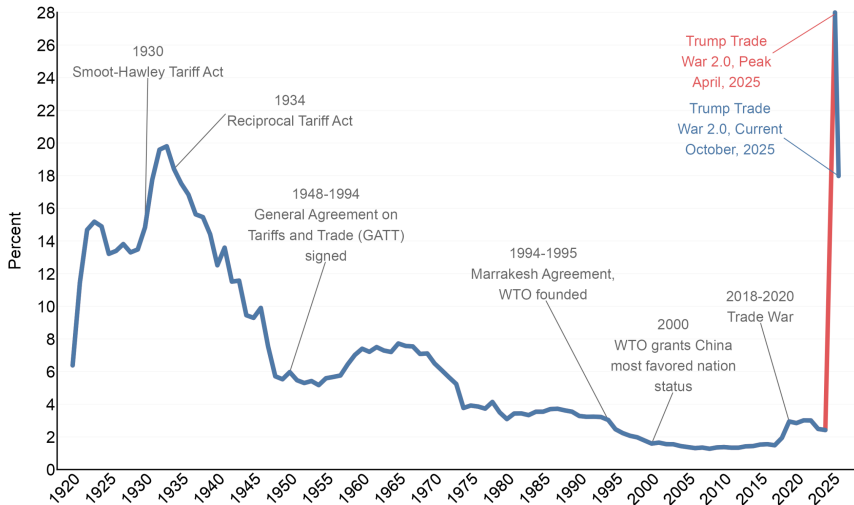
**Figure 16.4** *The Anglo-American wheat trade (1800-2000).*

## 2 - GLOBALIZATION IN RETREAT: THE INTERWAR PERIOD

- Policy and Geopolitics are the driving forces behind the retreat of globalization during 1915–1945
- first, World War I, then countries' reaction to the Great Depression
- the **Smoot-Hawley Tariff Act** (signed into law in June 1930) raised tariffs to 60% on many categories of US imports
- tariffs were meant to protect farmers, but ended up raising trade barriers across the board
- other countries retaliated swiftly  $\implies$  trade collapsed
- by the late 1930s, the world had split into isolated trading blocks

# POLITICAL WILL: US TARIFFS (1920–2025)

## U.S. EFFECTIVE TARIFF RATES



Source: Yale Budget Lab, October, 2025.

Note: The value illustrated for 2025 is the highest effective tariff rate, which was observed in April, 2025.

Econofact: econofact.org

### 3 - SECOND WAVE OF GLOBALIZATION: 1945–1989

- **policy**, i.e. the desire to avoid the mistakes of the 1930s, leads the post-war push toward economic integration
- new institutions (IMF, World Bank) and agreements (GATT) setup to govern the world economy
- technology (containers, air cargo) has a supporting role
- geopolitics plays both sides: US hegemony in the West leads to stability and increasing integration, but Cold War limits breadth of globalization

## 4 - HYPERGLOBALIZATION: 1990–2008

- the end of the Cold War ushers in a period of rapid increase in world trade
- all factors push in the same direction
- ICT revolution → outsourcing and offshoring
- creation of the WTO (1995) and entry of China (2002)

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- 2<sup>nd</sup> decoupling/unbundling: access to new technology from low-wage countries
- fragmentation of production along Global Value Chains → Great Convergence

⇒ the nature of trade changes: imports often an important input to domestic production, rather than a threat to it

## TWO TYPES OF GLOBALIZATION

lower trade costs allows for the separation of consumption and production (**1st unbundling**)

→ concentration of production + international trade

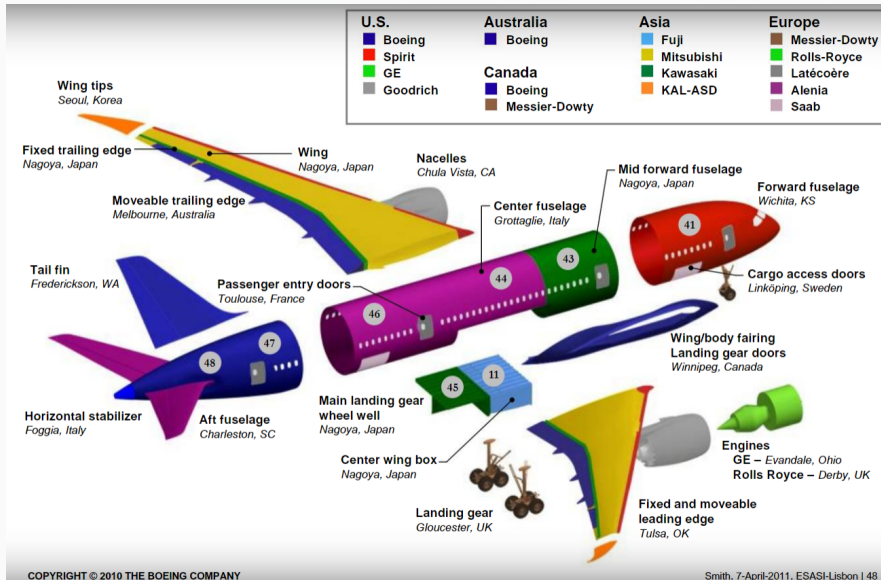
ICT triggers flow of ideas and **2nd unbundling**

→ fragmentation of production (GVC)

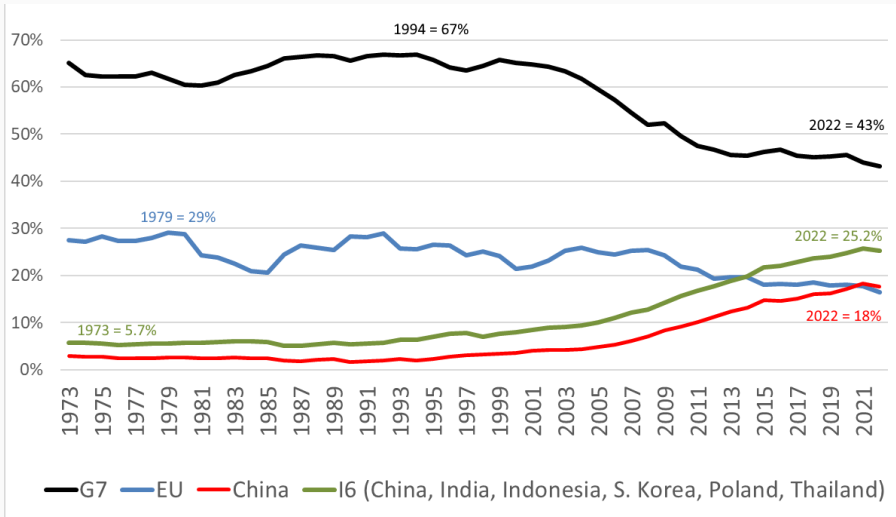
## OUTSOURCING & OFFSHORING

- the ICT revolution has drastically reduced communication costs
- rapid circulation of knowledge and know-how
- it is much easier to coordinate complex activities remotely
- the production chain is “sliced up” in several phases, distributed across different countries to exploit specific location advantages
- advanced knowledge is combined with low (labor) costs
- **global value chains** (GVC) → trade in parts and components
- often these GVC has a strong *regional* feature → not all countries benefit from this reorganization of production, but only those “close enough” to headquarter economies
- face-to-face interaction still relevant and costly

# BOEING GVC



# THE GREAT CONVERGENCE



## 5 - SLOWBALIZATION

- since the 2008 financial crisis, trade has remained fairly stable as a share of global GDP
- while countries avoided blatant protectionism (unlike in the 1930s), trade restrictions have been creeping up, often in the form of *non-tariff* barriers
- in 2018 the first trade war started between the US and China

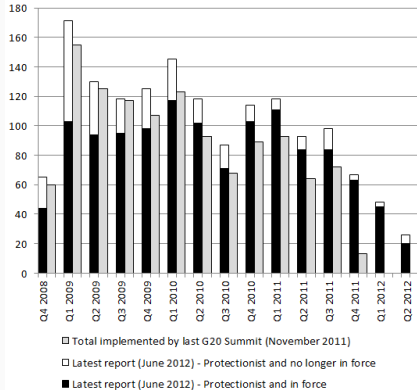
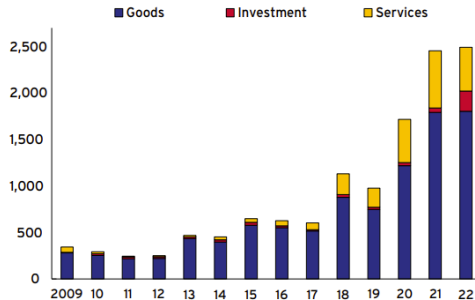


FIGURE 2 TRADE RESTRICTIONS  
(number)



Sources: Global Trade Alert, updated as of 7 December 2022.

# **FROM GLOBALIZATION TO FRAGMENTATION?**

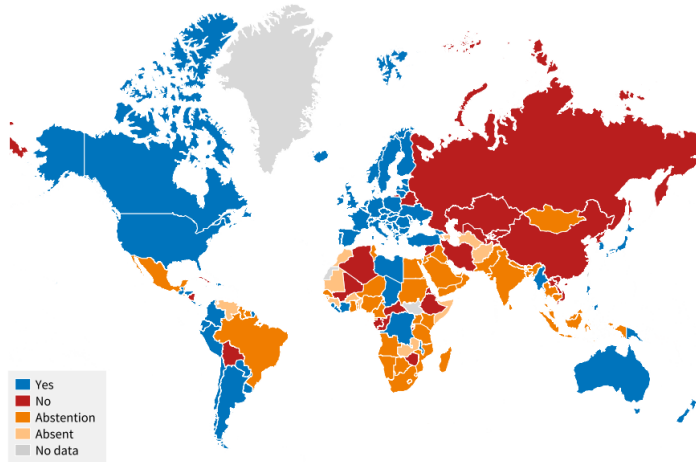
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# IS GLOBALIZATION OVER?

In recent years the driving forces of globalization seem to work in reverse:

- increase in **geopolitical tensions** and US-China trade war
- increase in **trade barriers** and restrictions
  1. trade restrictions during Covid-19 pandemic (vaccines, face masks, . . .)
  2. Ukraine war and sanctions
  3. US tariffs in 2025
- new **technological advances** (e.g. robotization, 3-D printing) reduce the advantage of production in low-wage countries
- the pandemic and the war in Ukraine have stressed the importance of **resilience** to shocks → fragmentation → from efficiency to security

**Figure 8** UN Vote on Suspension of Russian Membership in the Human Rights Council



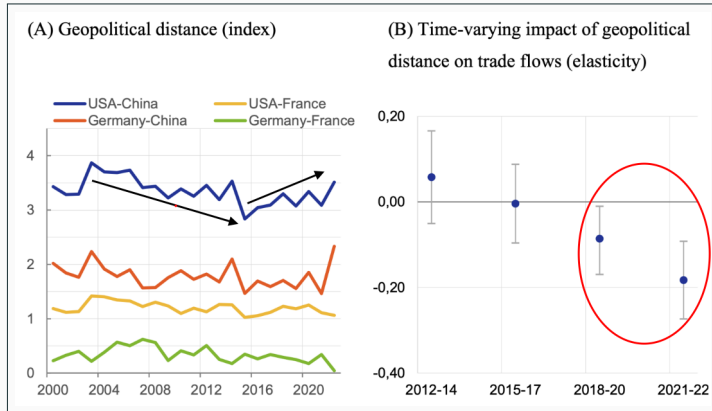
**Notes:** This Figure shows the UN General Assembly vote on the resolution adopted on 7 April 2022 concerning the suspension of the rights of membership of the Russian Federation in the Human Rights Council.

**Source:** UN General Assembly Resolution ES-11/L.4.

Source: Baur, Dorn, Flach, Fuest (2023)

# TRADE RECONFIGURATION

- as a result, global trade is undergoing significant **reconfiguration**
- shift from **efficiency-driven** to **security-conscious** trade patterns
- since 2018, geopolitical distance increasingly relevant driver of trade (Bosone et al. 2024, VoxEU)



# TRADE WARS

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- in March 2018 the US announced tariffs of 25% on steel and 10% on aluminum under **national security** grounds (—→ this clause gives more leeway to countries under WTO rules)
- in response, China, the EU and Canada have implemented retaliatory tariffs:
  - **China**: tariffs of up to 25% on 120 US food products
  - the **EU**: 25% tariff on \$3.4 bil of US exports (cranberries, Harley Davidson motorcycles, blue jeans, and bourbon)
  - **Canada**: tariffs on US products totaling \$12.8 bil (steel and aluminum, agricultural and food products, other consumer goods)

## US-CHINA TRADE WAR ESCALATION

- the US imposed a 10% tariff on an additional \$200 bil. of imports from China (50% are intermediate goods, 24% consumer goods)
- China further retaliated with 5–10% tariffs on \$60 bil. of US Goods (mainly intermediate inputs and capital equipment)

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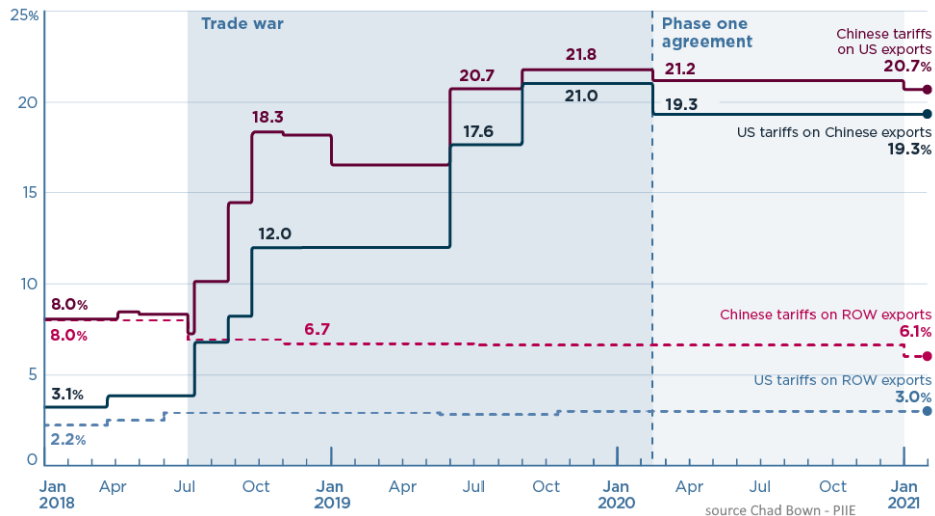
## Effects

- steel tariffs have raised the price of steel products in the US by almost 9% → 8,700 more jobs in the US steel industry, but steel users pay an extra \$650,000 for each job created
  - as a result of the retaliatory tariffs by the EU, Harley-Davidson announces it will shift motorcycle production outside the US (to avoid tariffs)
- while some firms benefit, trade wars create large **uncertainty** which is detrimental to business

Note: Biden administration **did not** rolled back US tariffs on China

# TRADE WAR I – TIMELINE

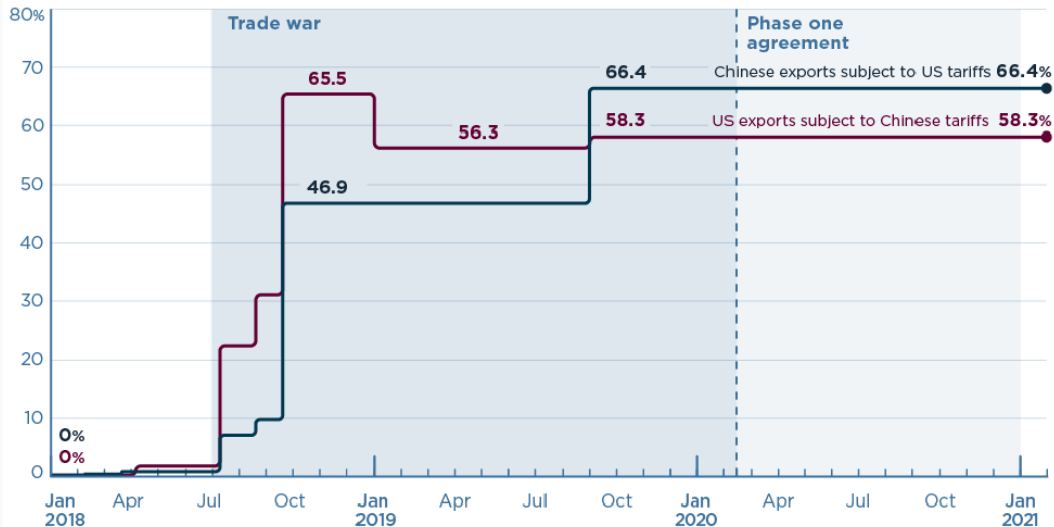
a. US-China tariff rates toward each other and rest of world (ROW)



# TRADE WAR I – SHARE OF TRADE SUBJECT TO TARIFFS

b. Percent of US-China trade subject to tariffs

source Bown - PIIE



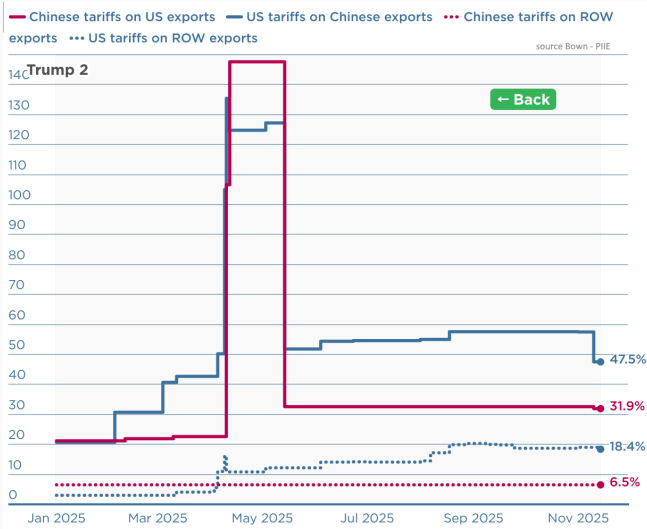
# 2025 TRADE WAR

- on April 2, 2025 the Trump administration announced sweeping new tariffs
- a baseline tariff of 10% on imports from all countries
- a “individualized” reciprocal tariff on the (60) countries with which the US has the largest trade deficits
- reciprocal tariffs range between 10 to 50 percent
- main aim is to reduce bilateral trade deficits

## **Fun (so to speak...) Facts**

- Norfolk Island (population 2,188 people – 1,600km north-east of Sydney), received a tariff of 10% + 19%
- St.Pierre-et-Miquelon (5,819 inhabitants) got 50% because it exported \$3.4 million to the US in July 2024 with nothing going the other way

# TRADE WAR II – TIMELINE

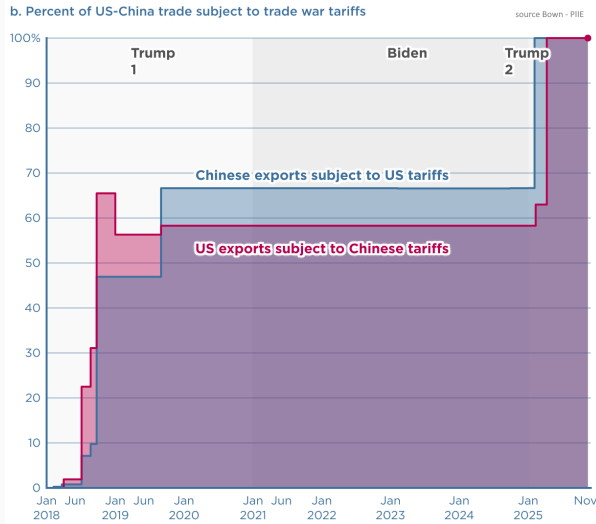


- a lot of uncertainty
- a lot of TACO(s)

# TRADE WAR II: SHARE OF GOODS HIT BY TARIFFS

- all imports subject to import tariffs

see Chad Bown (PIIE) detailed timeline of events



## TRADE WAR II – THIS TIME IS DIFFERENT

- US tariffs are country-specific → this breaches the **non-discrimination** principle, which is key to the WTO system (requires all WTO members to be treated equally)
- tariffs cover all exports → demise of the principle “*small yard with high fence*” (Biden administration)
- tariffs now used to achieve **wide range of objectives**:
  - re-industrialization (investment in US economy);
  - trade concessions (reduction of foreign tariffs, commitments to buy US goods, ...);
  - political pressure (Bolsonaro trial, Iran);
  - security issues (Fentanyl and migration)

→ **weaponization of trade**

# HOW WILL THE TRADE WAR END?

- full-fledged escalation has been avoided: cost of total confrontation too high (**MAD** peace?)
- in a world of GVCs, imports are a crucial ingredient for domestic production → tariffs are often counterproductive
- trade barriers are here to stay: efficiency takes a back seat compared to “**economic security**”
- demolition of WTO rule brings **uncertainty** for firms: will trade deals and commitments be respected? are more TACO(s) on the menu?

# TARIFFS

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- a tariff is a tax on imports: it makes foreign goods more expensive and thus lowers demand for imports
- as such it protects domestic producers of import-competing goods at the expense of consumers

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e.g. steel tariffs have raised the price of steel products in the US by almost 9% → 8,700 more jobs in the US steel industry, but steel-using companies face higher production costs

## RATIONALE

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- tariffs move the economic system away from efficiency: higher prices, less variety, less output with same inputs

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- the gain from the tariff comes at the expenses of trade partners → foreign countries likely to retaliate
- if all countries impose tariffs, then nobody gains and everybody loses → coordination problem
- to break the potential deadlock, multilateral GATT/WTO negotiations require countries to reduce tariff by the same *proportional* amount

# REACTIONS TO 2025 TARIFFS

Countries reacted differently to US tariffs:

- negotiations (many)
- retaliation (very few)
- countermeasures (China)
  
- 14 countries + EU signed “tariff deals” with the US
- in return for a reduction in US tariffs, countries have pledged to invest in the US, lower their own tariffs, purchase US goods, align more closely to US policies, . . .
- economic considerations vs. non-economic US power (eg. EU concessions)
- only 2 of the deals (US-Malaysia and US-Cambodia) include binding elements
  
- political Vs. economic motivation of trade war (see Baldwin)

# EXPORT CONTROLS

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## CHINA'S STRENGTHS

- unlike many other countries, China has retaliated fiercely to US tariffs
- Chinese **tariffs** are aimed at US exporters (e.g. agricultural exports)
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- extensive use of **export controls** aimed at all companies importing intermediate materials
- in some sectors, China acts almost like a monopolist → **critical minerals** used in many applications (digital and green technologies)
- China is a major player even for minerals it doesn't directly mine, thanks to a significant market share in refining

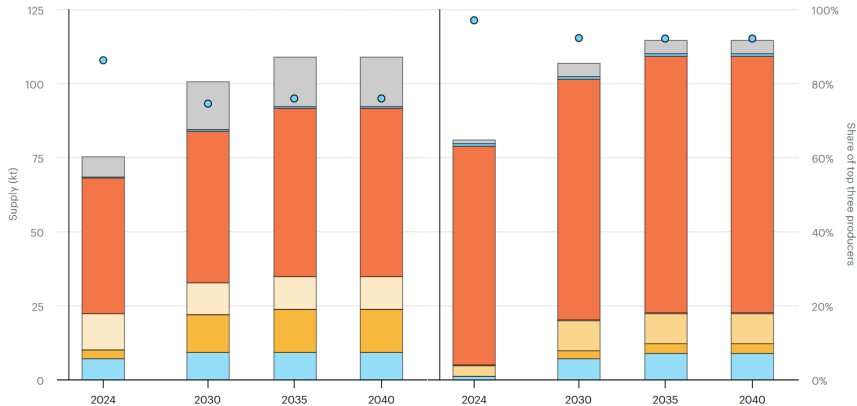
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- Chinese export controls applied to **all countries** (non-discriminatory) to warn others not to join forces with the US
- export controls (administrative procedures rather than outright export bans) give the Chinese government more flexibility and yet are opaque, generating uncertainty

# CRITICAL MINERALS - RARE EARTHS

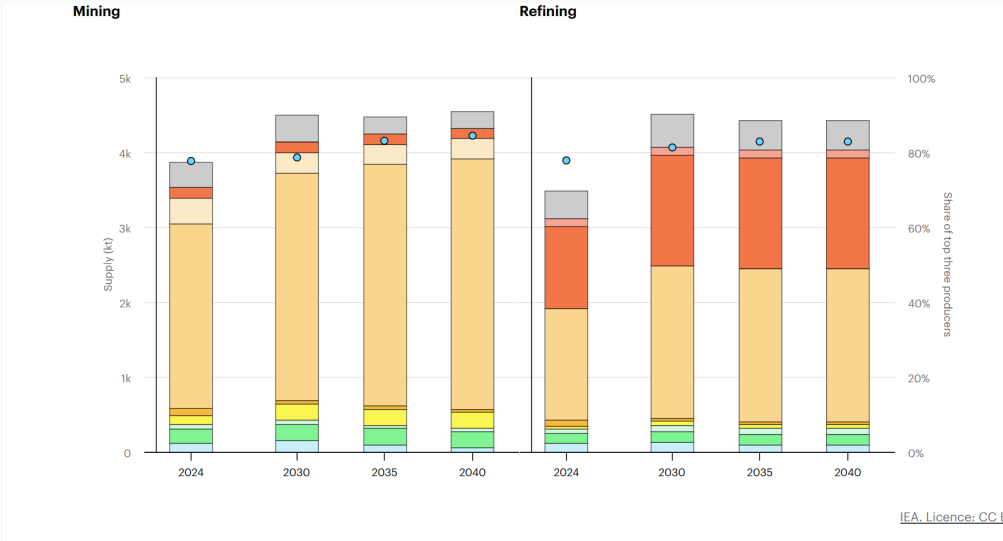
Mining

Refining



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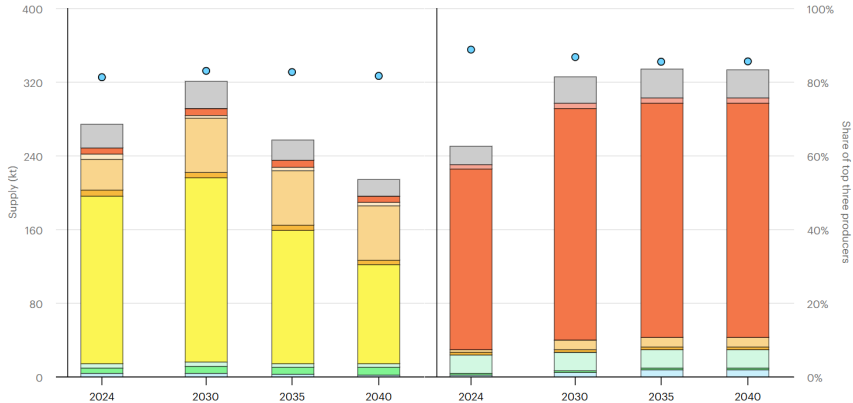
# CRITICAL MINERALS - NICKEL



# CRITICAL MINERALS - COBALT

## Mining

## Refining

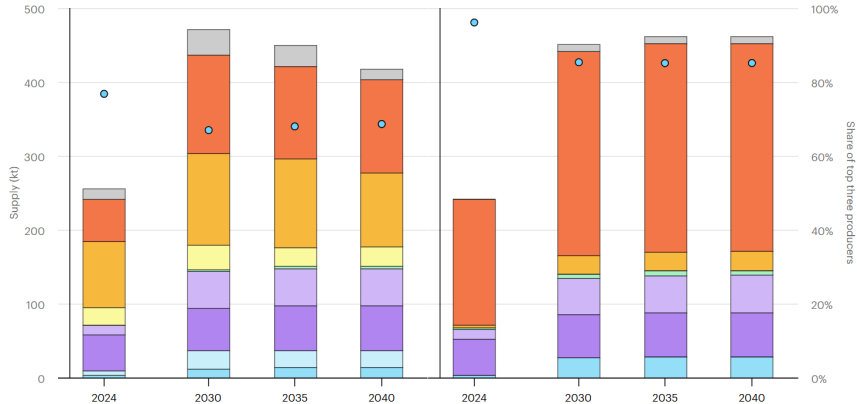


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# CRITICAL MINERALS - LITHIUM

## Mining

## Refining



IEA. Licence:

- until recently, export controls (and FDI screening) used only for dual-use products and technology and the defense sector (small yard with high fence)
- during the trade war, they have become a “conventional weapon”
- **trade-off**: the more effective they are, the stronger the incentive for importing countries to diversify away from countries using export controls → over-use may backfire
- critical minerals in one direction, advanced semiconductors in the other

# FDI SCREENING

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# FDI SCREENING

- screening of foreign direct investment (FDI) exemplifies expansion of “economic security”
- breadth and depth of screening on the rise: more sectors and lower ownership thresholds trigger reviews

**Figure 1: Number of countries introducing or expanding security-related investment screening (1995-2022)**

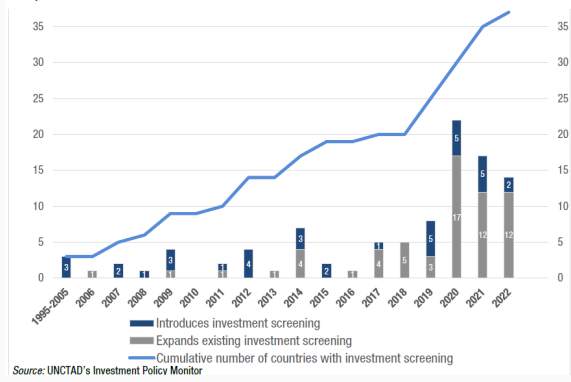
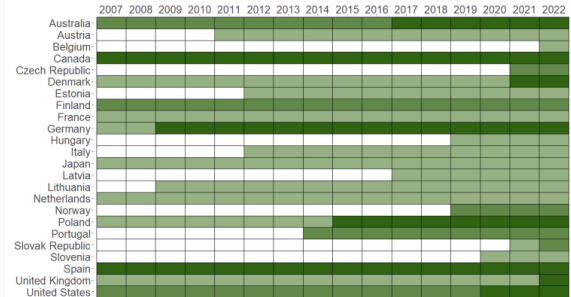


**Figure 1** The rise of investment screening mechanisms in advanced economies



**Note:** Most countries that did not have an investment screening mechanism (white tiles) have adopted such mechanisms over the past decade (green). A number of countries have shifted from sectoral mechanisms (where the government has the authority to review a list of sectors, shown in light green) to a cross-sectoral (green) or mixed mechanism (dark green), where the government can review investments in any sector and subject a specific list of sectors to stricter review requirements.

Source: PRISM database; Bauerle Danzman and Meunier (2023b).

# FDI SCREENING: EVOLUTION AND GLOBAL TRENDS

- Foreign Direct Investment (FDI) screening is a formal process used by states to assess, authorize, condition, or prohibit foreign investments to balance economic benefits with national security risks
- Countries have moved from dispersed regulations to **dedicated national laws** to increase visibility and codify screening procedures
- Timeline:

2006-09 adoption tripled following the global financial crisis

2020-21 regulatory activity peaked as the pandemic heightened concerns over “opportunistic takeovers”

- global trend but European countries particularly active

## EXPANDING MOTIVATIONS AND SCOPE

- the scope has widened beyond traditional defense sectors or critical infrastructure to include **technological sovereignty**
- key protected sectors:
  - Technology: dual-use areas like AI, quantum computing, and semiconductors
  - Data: access to citizens' financial, health, or genetic data
  - Media: protect pluralism and prevent misinformation
- **supply chain resilience** has become a major concern following global shocks → increased protection for critical inputs (energy, food, and medicine)

