How Protectionist Measures Shape the Offshoring Strategies of Chinese Firms

Lu Weilin
Liu Jingting
Banh Thi Hang



Motivation

Geopolitical Fragmentation and Redirected Investment Flows:

- Several studies have argued that a **redirection** of trade and investment flows across countries is taking place, signaling fragmentation (Aiyar et al., 2023; Freund et al., 2024).
- New evidence recently suggests significant declines in trade and FDI flows between countries in geopolitically distant blocs relative to intra-bloc flows, especially since the onset of war in Ukraine (Gopinath et al., 2025).

"China Plus One Strategy" and Connector Economies:

- Amid escalating geopolitical fragmentation, MNCs are adopting the "China Plus One Strategy"
 - Firms redirect exports and investments through **connector countries**, including **Vietnam, Indonesia, Mexico, Poland, and Morocco**. (Alfaro and Chor, 2023; Dang et al., 2023; Freund et al., 2024).
- Beyond Vietnam, other ASEAN nations have emerged as attractive destinations for the China Plus One Strategy (S&P, 2023).

Objectives of Current Research

• Provide a comprehensive overview of the protectionist measures affecting China.

• Document patterns of China's OFDI and zoom in on Chinese investment in ASEAN, with sector-level detail.

• Quantify the impact of protectionist measures on China's OFDI.

Data & Methodology

Data

- Investment: Chinese outward greenfield FDI announcements globally, 2008 2024
- Trade policies: Global Trade Alert (GTA), 2008 2024
 - Focus on (1) **export controls**, (2) **import barriers**
 - Group others into (3) other restrictive policies (coded as "red" measures), (4) other liberalizing policies (coded "green" measures), (5) neutral policies (coded "amber" measures)
- Merged investment-policy dataset: merged on 4-digit US SIC industry code, impacted country, and date

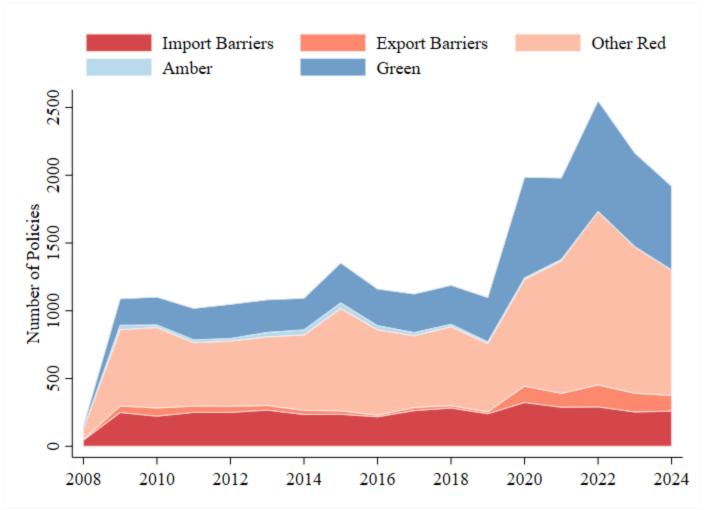
Methodology

• Gravity-equation-like specification complemented with a staggered difference-in-difference (DiD) to estimate how protectionist measures shape China's OFDI and identify the causal effect of export controls—especially toward connector economies near the US/EU market.

(I) Trends of Protectionist Measures and China's Outward FDI Globally

Protectionism Affecting China Surged

Figure 1: New Policies Affecting China (2008-2024)



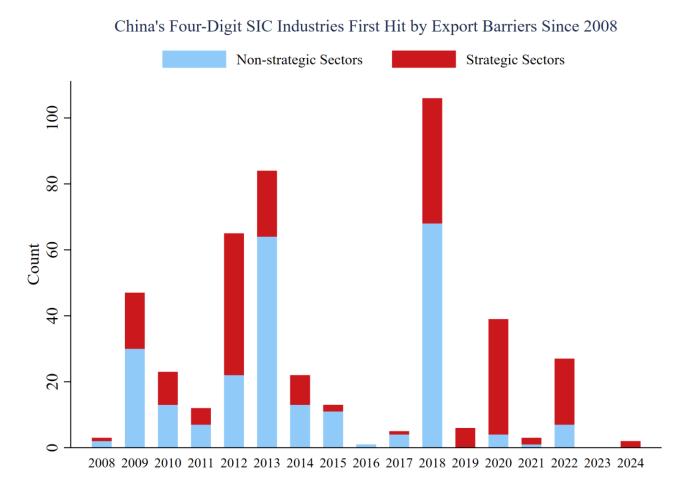
Sources: Global Trade Alert (GTA) and ACI calculations.

Protectionism surged since 2020

- ➤ COVID-19 pandemic exposed global supply chain vulnerabilities long optimized for efficiency (IMF, 2023; Alfaro and Chor, 2023).
- Import barriers increased post-Global Financial Crisis (GFC) and remained stable.
- Notably, export barriers proliferated since the US-China Trade War.
- Other red measures (i.e., subsidy, bailout) doubled in 2022.
- Implication: Transformation from trade disputes (Import Barriers) → broader economic competition regime

Industries First Hit by Export Barriers After 2018 Focused on Strategic Sectors

Figure 4: China's 4-Digit SIC Industries First Hit by Export Barriers by Sector

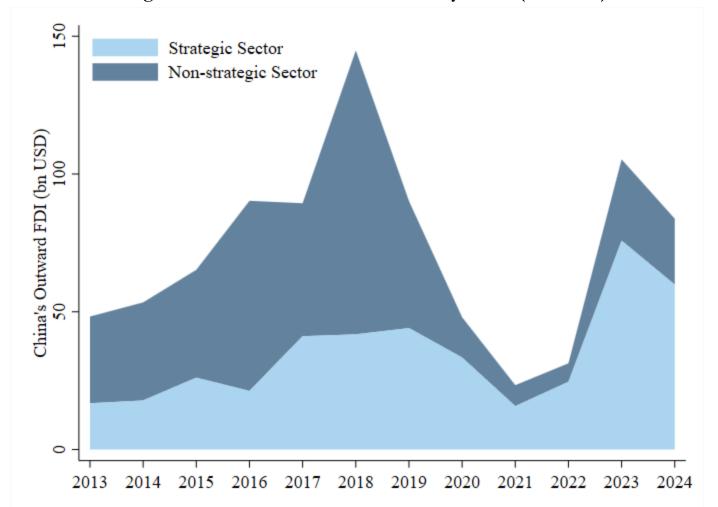


- Strategic sectors are sectors critical for national security and competitiveness (IMF, 2023).
 - > such as semiconductors, telecommunications, green transition equipment, pharmaceuticals, and strategic minerals.
- Since 2018, strategic sectors dominate industries first hit by export barriers.

Sources: Global Trade Alert (GTA) and ACI calculations.

Chinese Outward FDI (OFDI): Strategic OFDI Is Dominating

Figure 5: Annual China's Outward FDI by Sector (2013-2024)

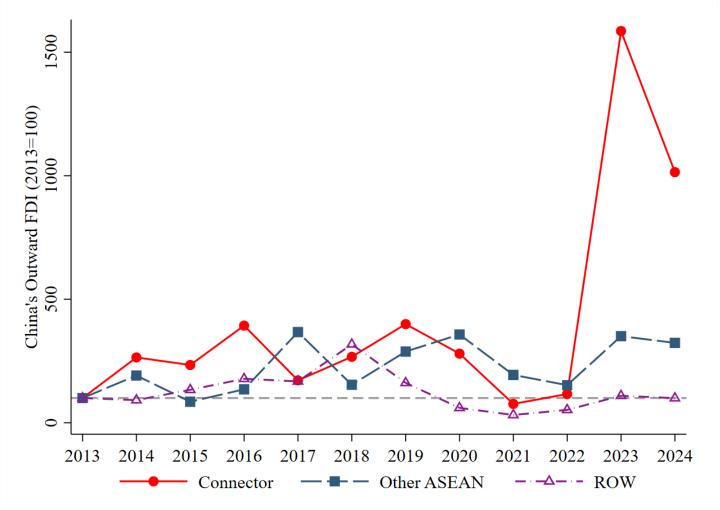


- 2018 peak coincides with the escalation of the US-China trade war.
- Post-US-China Trade War marked by a compositional shift:
 - ➤ Strategic sectors have increasingly dominated the OFDI since 2019.
- Implication: Chinese firms reallocated FDI toward strategic sectors abroad in response to rising protectionism and trade barriers.

Sources: Orbis Crossborder Investment Database and ACI calculations.

Connector and ASEAN Economies Drive China's "Plus One" Strategy

Figure 6 China's OFDI to Connector Economies vs. Other ASEAN Countries vs. ROW



Sources: Orbis Crossborder Investment Database and ACI calculations.

Connector Economies:

- Vietnam, Indonesia, Mexico, Poland, and Morocco.
- ➤ OFDI surged more than tenfold in 2023.
- Other ASEAN Members (less Vietnam and Indonesia):
 - ➤ OFDI increased after the US–China trade war and during the post-COVID period (2022–2024).

• Strategic Role:

Connector economies and ASEAN provided Chinese firms access to global value chains amid rising trade barriers.

(II) China's Outward FDI in ASEAN

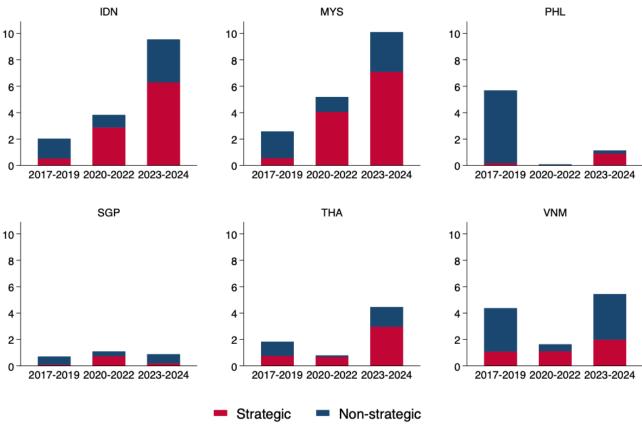
China's OFDI Focuses More on Strategic Sectors

- China's strategic OFDI to ASEAN-6 rises despite a drop in total FDI during the pandemic.
- Indonesia, Malaysia, Thailand, and Vietnam are top destinations for China's strategic OFDI. Total OFDI to Indonesia and Malaysia continues to grow during the pandemic.

Figure 7: China's OFDI in Strategic Sectors: ASEAN-6 vs. ROW

ASEAN-6 ROW (Excluding ASEAN-6) 100 100 Outward FDI (Annual Average, Billion USD) 80 60 20 2017-2019 2020-2022 2023-2024 2017-2019 2020-2022 2023-2024 Strategic Non-strategic

Figure 8: China's OFDI to ASEAN-6: Strategic vs. Non-strategic Sectors (Annual Average, Billion USD)

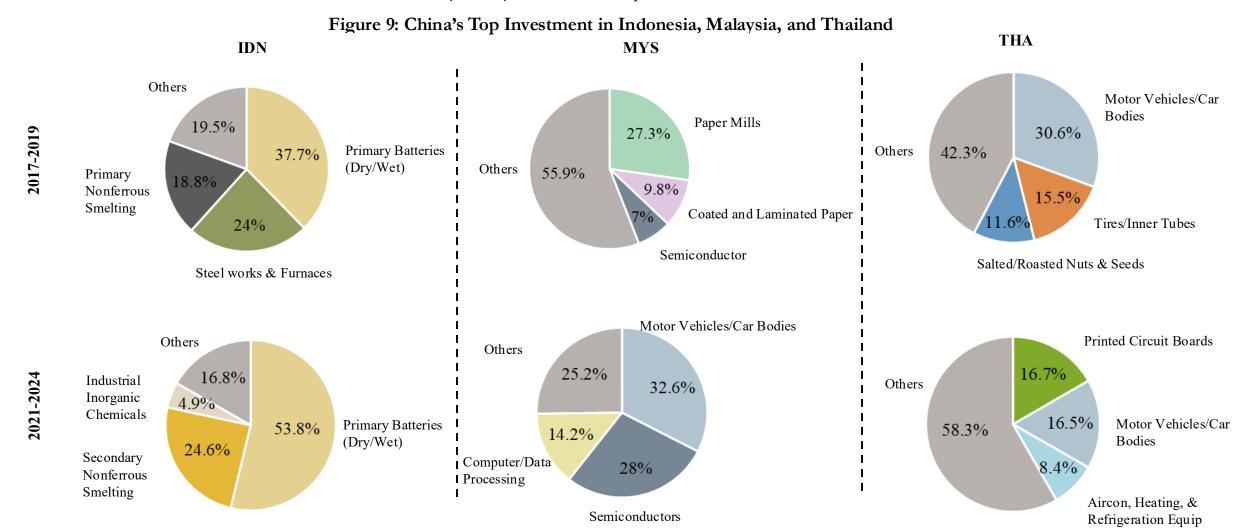


Sources: IMF (2023), Orbis Crossborder Investment Database, and ACI calculations.

Sources: IMF (2023), Orbis Crossborder Investment Database, and ACI calculations.

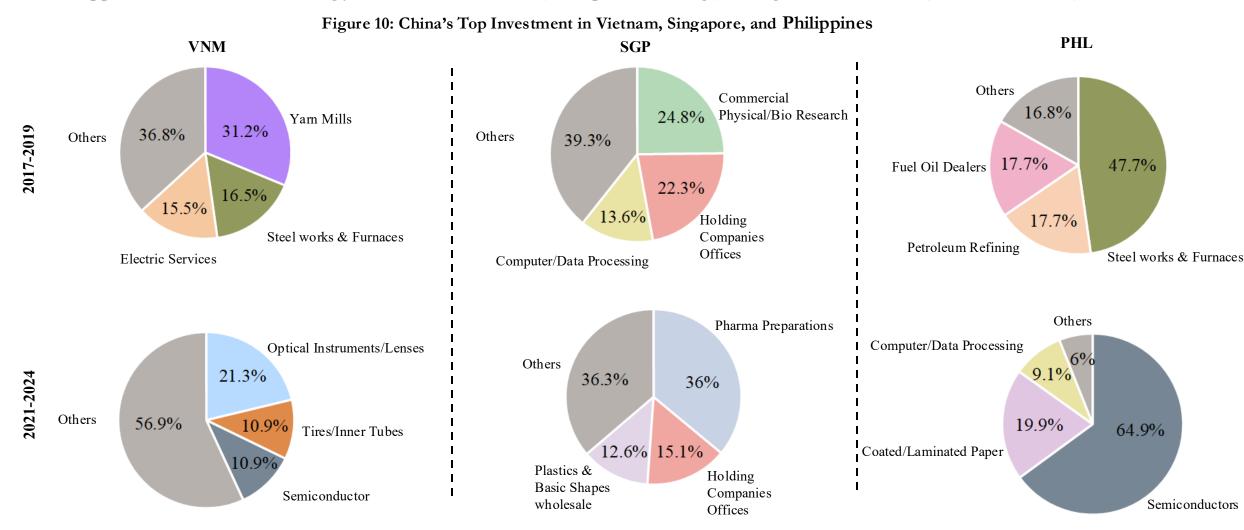
China's Strategic Focus on ASEAN: Semiconductors and Motor Vehicles

- Indonesia: Primary Batteries: 38% → 54%
- Malaysia: Low-value added (paper-related) → More tech- and automative-driven sectors (e.g., semiconductors and motor vehicles)
- Thailand: More FDI in Printed Circuit Boards (PCBs) —critical components for electronics.



China's Strategic Focus on ASEAN: Semiconductors and Motor Vehicles

- Vietnam: Traditional manufacturing (yarn mills) > Optical instruments and semiconductors
- Singapore: Still serves as the financial hub for Chinese firms; shifts toward **pharmaceutical** preparations.
- Philippines: Resource- and energy-intensive industries (steel, petrol refining) > high-value sectors (semiconductors)



(III) Assessing Impact of Protectionist Measures on China's OFDI

Quantify the Impact of Trade Policies on China's OFDI

• In simplified terms, we exploit the following equation to quantify the impact of trade policies on China's OFDI

$$ln(OFDI) = \beta_1 Export Barriers + \beta_2 Import Barriers + \gamma Controls$$

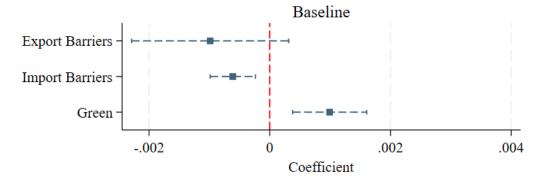
- *OFDI*: Monthly value of China's outward greenfield FDI.
- β_1 : Impact of export barriers on China's outward FDI
- β_2 : Impact of import barriers on China's outward FDI

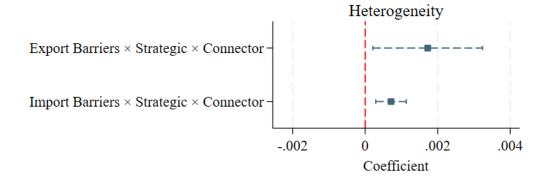
• *Controls*:

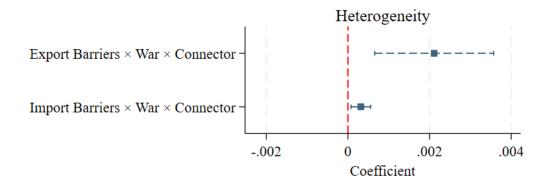
- > Destination—industry fixed effects (time-invariant structural differences across industries and host countries)
- Destination—time fixed effects (macroeconomic shocks in each host country over time)
- ➤ Other policies affecting China and the host destination.

Baseline Results and Heterogeneity

Figure 11: Baseline Results and Heterogeneity







- In general, **import barriers** consistently and significantly reduce Chinese outward FDI.
- Liberalizing (green) policies robustly promote Chinese outward FDI, with effects remaining positive and significant across specifications.
- When **strategic** sectors are targeted by import or export barriers, Chinese firms disproportionately reallocate FDI to **connector economies**.
- After US-China Trade War, Chinese firms are more willing to invest in connector economies when facing import and export barriers.

Additional Results

Causal Effect Estimation:

- Through a staggered DiD framework, using conventional two-way fixed model (TWFE) we find that
 - Compared to industries never hit by any export control measures, Chinese outward FDI increase by between
 60 percent and 70 percent in industries affected by export barriers post-policy implementation.
 - When confronted with export restrictions, Chinese firms reallocate more FDI to **Mexico** (proximate to the **US** market) and **Morocco** (close to the EU market), compared to other destinations.
 - Chinese firms reallocate more FDI overseas when **strategic** sectors are affected by export barriers in relative to non-strategic sectors.
- The causal effects are confirmed through event study analysis following Callaway and Sant'anna (2021), suggesting parallel pre-trends are satisfied.

Conclusion

- **Policy**: Recent years have seen a surge in protectionist measures: import barriers entrenched since the Global Financial Crisis, a sharp proliferation of export controls during the US–China trade war and rising subsidies and bailouts in the wake of COVID-19. These restrictions increasingly concentrate on strategic sectors such as semiconductors and motor vehicles.
- **Strategic reallocation emerges**. Chinese firms increasingly channel FDI into strategic sectors abroad as a response to rising import and export barriers.
- Connector economies buffer shocks. Serving as relocation hubs, they absorb redirected Chinese investment, mitigating the negative effects of trade barriers and sustaining access to global value chains.