An Anatomy of the Great Reallocation in US Supply Chain Trade

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IMF 26th Jacques Polak Annual Research Conference

6-7 November 2025

Introduction No Longer "Looming"...

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An update on the "Great Reallocation" in patterns of US import sourcing:

- ► **Trump 1.0 tariffs:** Enacted 2018-2019.
 - ▶ Around 20 percentage points of additional US tariffs on China.
 - Largely kept in place under the Biden administration (2020-2024).
 - ▶ Document: Short- to medium-run responses to these tariffs.
 More granular look at HS6 products. Heterogeneity in responses: across countries, timing, margins, product characteristics.

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 - ▶ Document: Short- to medium-run responses to these tariffs.
 More granular look at HS6 products. Heterogeneity in responses: across countries, timing, margins, product characteristics.
- ▶ Trump 2.0 tariffs: Announced on 2 April 2025.
 - ▶ "Liberation Day" tariffs ranged from 10%-50%. For China: 34%.
 - **Document:** Preliminary responses to these announcements (with necessary caveats).

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- 2. Diversification: In sources of US imports, with a reduced dependence on China.
 - But... limited to a reshuffling among the US' top-20 import sources.
- 3. Reallocation: China lost substantial share in the US import market, down from 21% in 2017 to 13% in 2024.
 - Vietnam, Mexico, and Taiwan, the main gainers → "Nearshoring" + other stable regional value chains (Alfaro and Chor 2023; Dang et al. 2023; Grossman et al. 2024; Freund et al. 2024; Garred and Yuan 2025).

Introduction

A Series of Stylized Facts (cont.)

- 4. Margins: Reallocation occurred primarily through intensive margin shifts, except for a few partners (Vietnam, India).
- 5. Timing: "On Impact" vs "Wait and See"
 - From 2021 onward, decreases in China's import share spread to goods that are more contract-intensive (Nunn 2007) and relationship-sticky (Martin et al. 2023).
 - ► Trace out path of responses for different trade partners and margins with Jorda (2005) local projections.

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 - ► Trace out path of responses for different trade partners and margins with Jorda (2005) local projections.
- Post "Liberation Day": Reallocation accelerated toward trade partners with lower announced tariffs.
 - ▶ China's share in US imports shed a further 4pp (by July 2025).
 - Now 9%: back to where it was in 2001, China's year of accession to the WTO.

Introduction Related Literature

1. **US-China Tariff War:** Amiti et al. (2019); Fajgelbaum et al. (2019); Bown (2021); Fajgelbaum et al. (2019); Chor and Li (2024); etc.

2. Reallocation responses to Trump 1.0 tariffs:

- Vietnam: Ngoc and Wie (2023); Mayr-Dorn et al. (2023); Rotunno et al. (2023); Nguyen and Lim (2023); Iyoha et al. (2024); Wu (2025)
- Mexico: Utar et al. (2023); Chen et al. (2025); Arizala et al. (2025)
- Fragmentation, more broadly: Aiyar et al. (2023); Fernández-Villaverde et al. (2024); Gopinath et al. (2025); Schulze and Xin (2025); Conteduca et al. (2025), Bonadio et al. (2025)
- 3. **Responses to Trump 2.0 tariffs:** Ignatenko et al. (2025); Rodriguez-Clare et al. (2025); Cavallo et al. (2025); etc.

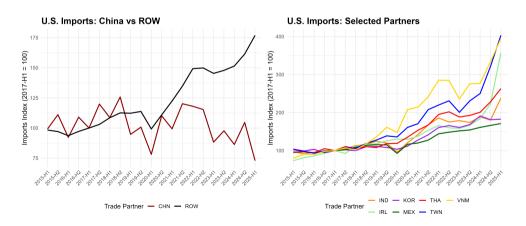
Data and Empirical Findings

Data Prologue

- USA Trade Online: HTS 10-digit trade data.
 - In practice, work with HS6 codes (concorded to 2017 vintage).
 - ▶ Word of caution with 10-digit codes during this period (Grant 2023)
- ► Tariffs:
 - ► Trump 1.0: weighted-average of additional China duties for HTS10 codes, maximum level enacted over 2018-2019 (from Bown 2021)
 - Trump 2.0: As announced. (Interpret as threat points.)
- Product characteristics:
 - Capital/skill intensity (NBER-CES); Quality ladder length (Khandelwal 2010); contracting intensity (Nunn 2007); relationship stickiness (Martin et al. 2023); upstreamness (Antràs et al. 2012).

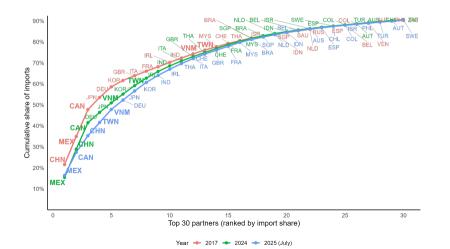
Fact 1: Not Deglobalization Yet

- ▶ US imports from China have slipped in levels, particularly since 2023.
- ▶ But this decoupling is specific to China. Imports from the rest of the world continued to rise, even into 2025H1.



Fact 2: Diversification, but Limited

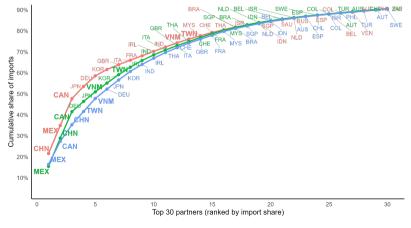
- Cumulative import share accounted for by the top import trade partners has fallen.
 - CHN no longer in the top spot; but MEX not as dominant as CHN was.



Fact 2: Diversification, but Limited

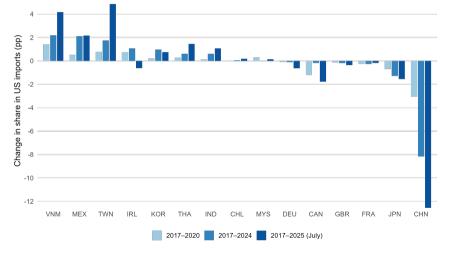
- ► A reshuffling among a stable cast of the top-20 import trade partners.
 - ▶ Only "newcomer" in the top-20: NLD
 - Limited entry by new actors outside of established industrial clusters

 By industries



Fact 3: Reallocation in Import Shares

- Since 2017, China has seen a large, persistent decline in its share of the US import market.
- ▶ Main gainers have been Vietnam, Mexico, and (more recently) Taiwan.



Fact 3: Reallocation in Import Shares

Remarks:

- Between 2017-2024: Top-ten products by fall in imports from CHN include: (i) electronics (e.g., routers and comms equipment, computer parts, laptops, mobile phones); (ii) furnishings (e.g., electric lamps, upholstered wood seats)
 - ▶ Notably: Section 301 tariffs on laptops and mobile phones was 0!
 - ⇒ Supply chains are moving out of China, even with no tariffs on the final good.

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 - ⇒ Supply chains are moving out of China, even with no tariffs on the final good.
- Overlap with products in which VNM saw the largest export growth: Is this rerouting?
 - Available evidence suggests that VNM's exports to the US appear to contain a significant amount of domestic value added (Iyoha et al. 2024, Freund 2025)
- ► MEX saw gains in a more diversified range of products, including: electronics, furnishings, auto parts, and vehicles.
- TWN's import share increase comes later in the sample period: Al investment boom?

Fact 4: Margins

Decomposition into Intensive vs Extensive Margins

Let X_{ct}/X_t be the share (by value) of US imports from trade partner c at time t. Then:

$$\begin{split} \frac{X_{c,t+h}}{X_{t+h}} - \frac{X_{ct}}{X_t} &= \frac{N_{c,t+h} \bar{X}_{c,t+h}}{N_{t+h} \bar{X}_{t+h}} - \frac{N_{ct} \bar{X}_{ct}}{N_t \bar{X}_t} \\ &= \underbrace{\left(\frac{N_{c,t+h}}{N_{t+h}} - \frac{N_{ct}}{N_t}\right) \frac{\frac{\bar{X}_{c,t+h}}{\bar{X}_{t+h}} + \frac{\bar{X}_{ct}}{\bar{X}_t}}{2}}_{\text{Extensive margin}} + \underbrace{\left(\frac{\bar{X}_{c,t+h}}{\bar{X}_{t+h}} - \frac{\bar{X}_{ct}}{\bar{X}_t}\right) \frac{\frac{N_{c,t+h}}{N_{t+h}} + \frac{N_{ct}}{N_t}}{2}}_{\text{Intensive margin}}. \end{split}$$

where:

- \triangleright N_{ct} : Number of HS6 products imported, from c at time t
- $ightharpoonup \bar{x}_{ct}$: Average imports per active HS6 product, from c at time t

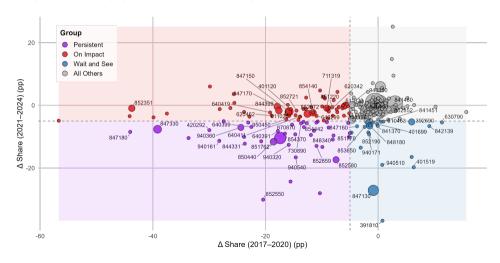
Fact 4: Margins
Decomposition into Intensive vs Extensive Margins

	Δ share (pp)	Extensive margin	Intensive margin	
Period: 2017-2020				
China	-3.04	-0.14 (4.6%)	-2.90 (95.4%)	
Vietnam	1.43	0.37 (26.2%)	1.05 (73.8%)	
Mexico	0.51	0.19 (37.5%)	0.32 (62.5%)	
Taiwan	0.78	-0.04 (-5.0%)	0.82 (105.0%)	
Ireland	0.74	0.04 (5.0%)	0.71 (95.0%)	
Korea, South	0.21	0.00 (0.8%)	0.21 (99.2%)	
Thailand	0.28	0.01 (1.8%)	0.28 (98.2%)	
India	0.12	0.06 (49.0%)	0.06 (51.0%)	
Period: 2021-20)24			
China	-4.40	-0.11 (2.5%)	-4.28 (97.5%)	
Vietnam	0.57	0.27 (47.7%)	0.30 (52.3%)	
Mexico	1.95	0.13 (6.8%)	1.82 (93.2%)	
Taiwan	0.84	-0.12 (-14.3%)	0.96 (114.3%)	
Ireland	0.55	-0.17 (-30.7%)	0.72 (130.7%)	
Korea, South	0.67	0.06 (8.7%)	0.61 (91.3%)	
Thailand	0.26	0.01 (4.9%)	0.25 (95.1%)	
India	0.08	0.08 (92.0%)	0.01 (8.0%)	

- Intensive margin responses accounted for the bulk of import share shifts.
- (Net) entry on the extensive margin played a prominent role in the gains by VNM, IND, and to a lesser extent, MEX.
 - (Gains by other trade partners mostly through existing capabilities.)

Fact 5: Timing ("On Impact" vs "Wait and See")

Heterogeneity in timing of CHN import share responses: (i) "On Impact" (2017-2020); (ii) "Wait and See" (2021-2024); (iii) "Persistent" drop; (iv) All Others.



Fact 5: Timing ("On Impact" vs "Wait and See")

	(1)	(2)	(3)
Dep. Var.:	Δ CHN share (pp)	Δ CHN share (pp)	Δ CHN share (pp)
· · · · · · · · · · · · · · · · ·	2017-2020	2021-2024	Mar-Jul 2025
Addl. CHN tariff (wtd.)	-0.003***	0.000	0.003***
	[0.001]	[0.001]	[0.001]
Capital intensity	-0.009	-0.005	-0.012***
capital intensity	[0.013]	[0.008]	[0.003]
Skill intensity	-0.066***	-0.029***	-0.015**
,	[0.021]	[0.010]	[0.007]
Quality differentiation	0.001	-0.005	-0.006
•	[0.005]	[0.004]	[0.004]
Contracting intensity	0.017	-0.047*	-0.057***
,	[0.072]	[0.025]	[0.022]
Relationship stickiness	-0.010	-0.032***	-0.009**
	[0.011]	[0.010]	[0.005]
Upstreamness	0.025**	0.014**	0.009**
	[0.010]	[0.006]	[0.004]
Δ CHN import share (pp), 2015-2017	-0.151**	-0.072	0.014
	[0.070]	[0.055]	[0.043]
Δ CHN import share (pp), 2017-2020		-0.055	-0.043
		[0.064]	[0.035]
Δ CHN import share (pp), 2021-2014			0.191*
			[0.103]
01	4.000	4.000	2.064
Observations	4,220 0.293	4,220	3,864 0.284
R-squared	-0.293 -0.0401	0.213 -0.0178	-0.0171
In-sample mean In-sample sd	-0.0401 0.142	-0.0178 0.134	-0.0171 0.163
HS 2-digit FE	0.142 Y	0.134 Y	0.103 Y
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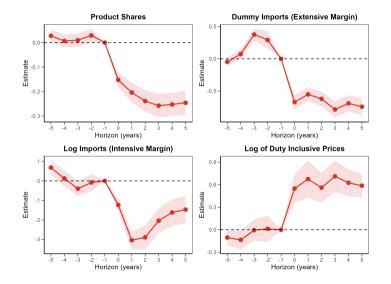
- Since 2017, steady shift away from China for skill-intensive products.
- ➤ Starting in 2021, this reallocation spread to goods with higher sunk costs for forming supply chain links: contract-intensive, relationship-sticky products. ("Wait and see" phase over).

Local Projections: Specification

$$y_{p,t+h}^{i \to US} - y_{p,t}^{i \to US} = \beta_{\tau}^{h} \Delta \ln \left(1 + \tau_{p,t}^{CHN \to US} \right) + \delta_{P} + \delta_{t} + \varepsilon_{p,t}.$$

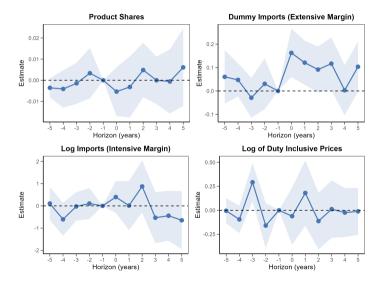
- $\triangleright y_{p,t}^{i \to US}$:
 - (i) import share: i's share in US imports;
 - (ii) extensive margin: indicator variable;
 - (iii) intensive margin: log imports per active product;
 - (iv) duty-inclusive unit values.
- $ightharpoonup au_{p,t}^{CHN o US}$: Additional China tariff imposed by the US on product p at time t
- β_{τ}^{h} : Cumulative response at horizon h to the China tariff shock Note: t = 0 is 2018-2019.
- δ_P : HS2 fixed effects; δ_t : time fixed effects

Local Projection Responses China's Imports in the US (2013-2024)



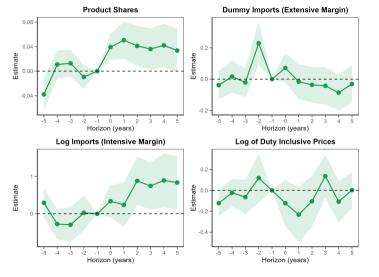
- Big reaction of CHN import share, on both intensive and extensive margins
- At its peak (h = 3), implies around a 5pp decrease in import share of the typical tariffed product
- Pass-through \approx 0.71. (Amiti et al. 2019, 2020; Fajgelbaum et al. 2019; Cavallo et al. 2021)

Local Projection Responses Vietnam's Imports in the US (2013-2024)



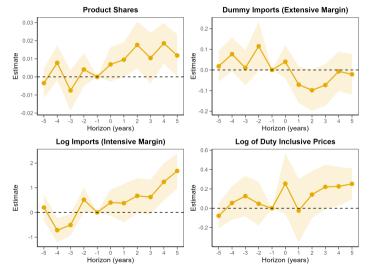
- Response of Vietnam's exports to the US mainly on the extensive margin.
- Significant increases in import share seen among products with low capital intensity

Local Projection Responses Mexico's Imports in the US (2013-2024)



- Intensive margin response of Mexico's exports to the US, later in the sample period (unlike VNM)
- Particularly products with above-median contracting intensity

Local Projection Responses Taiwan's Imports in the US (2013-2024)

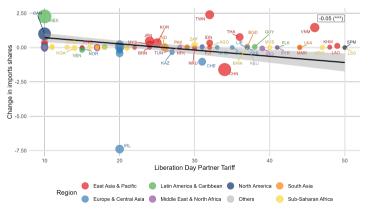


- ► Taiwan's import share in the US rises toward the end of the window
- Driven by intensive margin rise in computer-related products, particularly those with above-median relationship stickiness
- Accompanying increase in unit values

Fact 6: Post-Liberation Day

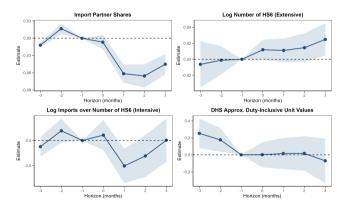
- ▶ Reallocation away from China accelerated in the months after April 2025, shifting toward trade partners (esp., CAN and MEX) who saw lower Liberation Day tariffs.
- ▶ Dramatic unwinding in China's import share back to 2001 levels ($\approx 9\%$).

Figure: Changes in US Imports by Major Trade Partners (March to July 2025)



Fact 6: Post-Liberation Day (cont.)

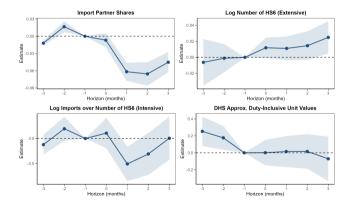
Figure: Local Projection Responses: Cross-Country (Mar-Jul 2025)



- ► Faster reaction in US import shares compared to the Trump 1.0 tariffs
- ... even though not all Liberation
 Day tariffs have been enacted

Fact 6: Post-Liberation Day (cont.)

Figure: Local Projection Responses: Cross-Country (Mar-Jul 2025)



- ► Faster reaction in US import shares compared to the Trump 1.0 tariffs
- ... even though not all LiberationDay tariffs have been enacted
- Despite uncertainty about details, no uncertainty about protectionist intent
- Suggests firms had incurred sunk costs during earlier phases of the trade war, to search out and plan alternative sourcing and supply chain arrangements, that could be activated at short notice.

Concluding Thoughts What Lies Ahead with the Great Reallocation?

A full circle moment? With some takeaway messages...

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A full circle moment? With some takeaway messages...

- Surprising resilience in US supply chains, even under heavy policy and geopolitical strain
 - Decoupling specific to China (Fact 1); Diversification (Fact 2)
 - ► Growth in imports from ROW (Fact 1) means tariffs per se not likely to close the US trade deficit (Obstfeld 2025; Itskhoki and Mukhin 2025)
 - ▶ But clear centrifugal forces: shifts out of China in contract-intensive, relationship-sticky goods (Fact 5); persistence (Fact 3) and acceleration after Liberation Day (Fact 6)
- ► Reallocation can in principle present opportunities for other trade partners, but extent to which this is occurring appears limited
 - ► Shifts largely on the intensive margin (Fact 4), and toward a stable cast of established trade partners and industrial clusters (Fact 2)

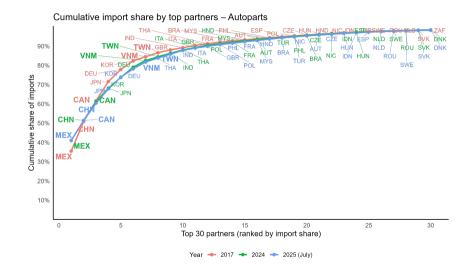
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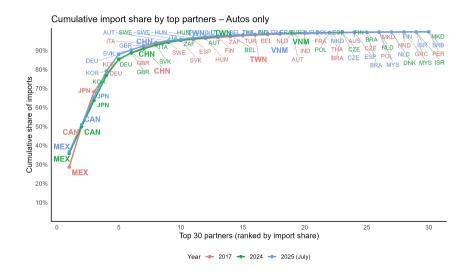
- Can global trade bounce back?
 - Will largely depend on what features of US trade policy endure, even outliving the second Trump administration
 - Conjecture: Some forms of protection against China likely to persist.
 Given as: concerns about trading with China quite entrenched, even among the US general public (Alfaro et al. 2023)
- Can the rules-based multilateral trading system bounce back?
 - US' willingness to take on a leadership role in such a system vs. direct bilateral dealings as the "new normal"

Appendix

Fact 2: Cumulative Share of US Imports by Top Trade Partners For key industry clusters • Back

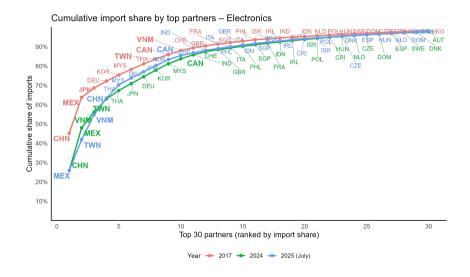


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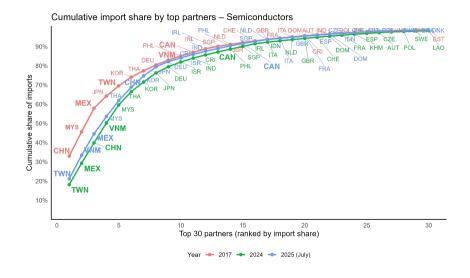


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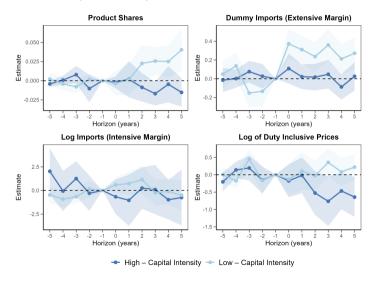
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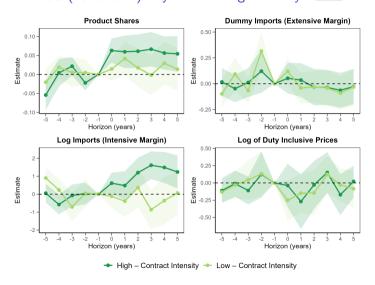
Fact 2: Cumulative Share of US Imports by Top Trade Partners For key industry clusters • Back



Local Projection Responses Vietnam's Imports in the US (2013-2024): By Capital Intensity • Back



Local Projection Responses Mexico's Imports in the US (2013-2024): By Contracting Intensity Pack



Local Projection Responses

Taiwan's Imports in the US (2013-2024): By Relationship Stickiness Pack



