

Who Pays the Tariffs?

Bundesfinanzministerium — 29. Januar 2026

Julian Hinz, Aaron Lohmann, Hendrik Mahlkow, Anna Vorwig

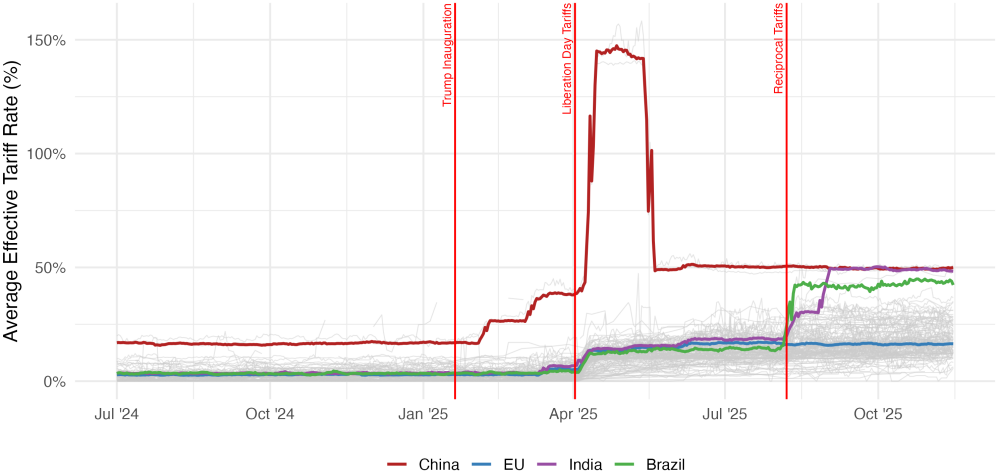


Roadmap

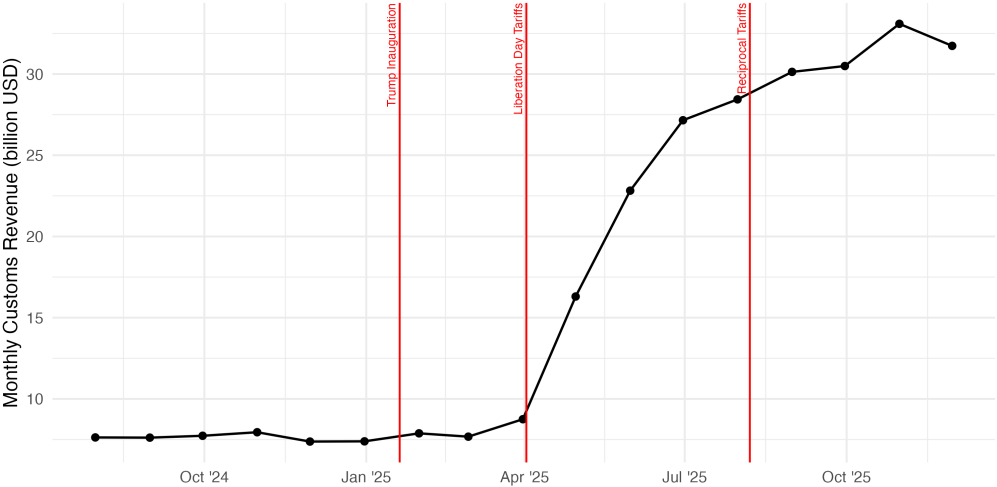
1. The 2025 tariff shock
2. Research question and approach
3. Main results
4. Validation and robustness
5. What we can learn from granular trade data
6. Key takeaways

The 2025 Tariff Shock

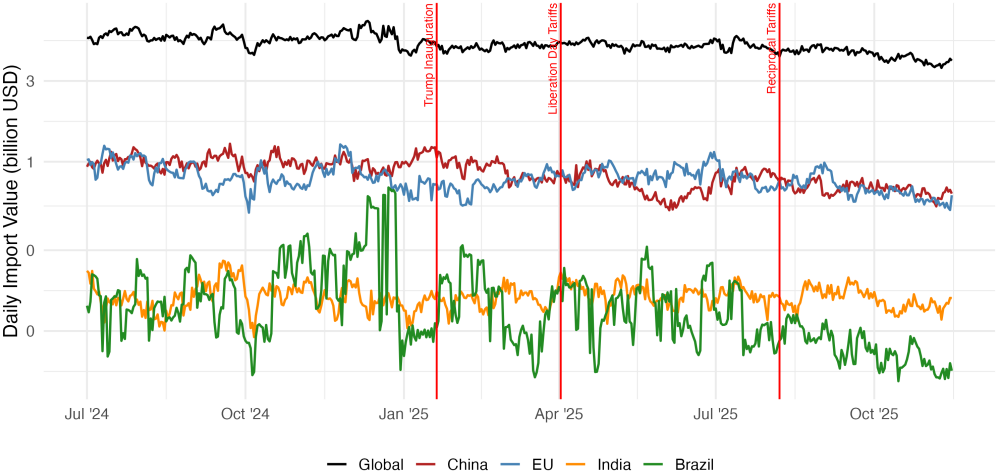
Unprecedented tariff increases in 2025



Customs revenue surged



But imports remained strong



Research Question

Who pays the tariffs?

- **Central question:** Who bears the cost of the 2025 tariffs?
- Two polar cases:
 - **Full absorption:** Foreign exporters cut prices → US consumers unaffected
 - **Full pass-through:** US import prices rise 1:1 with tariffs → US bears full cost
- Prior evidence (2018–19 trade war): Nearly complete pass-through
 - Amiti et al. (2019), Fajgelbaum et al. (2020), Gopinath et al. (2025)
- **Our contribution:** High-frequency, shipment-level evidence on 2025 tariffs

Who pays the tariffs?



Donald J. Trump



@realDonaldTrump

IT'S MIDNIGHT!!! BILLIONS OF DOLLARS IN
TARIFFS ARE NOW FLOWING INTO THE UNITED
STATES OF AMERICA!

1.32k ReTruths 4.81k Likes

8/6/25, 11:58 PM

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Data and approach

- **Primary data:** Panjiva bill-of-lading records
 - 25+ million shipments, \$3.9 trillion in value (Jan 2024 – Nov 2025)
 - Daily frequency, HS6 product detail, declared values and weights
- **Natural experiments:** Country-specific tariff shocks
 - Brazil: 50% tariff on August 6, 2025
 - India: 25% on August 7, raised to 50% on August 27, 2025
- **Method:** Event study DiD (Sun & Abraham, 2021)
 - Compare treated countries to regional controls
 - Key outcome: unit values (price per kg)

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Main Results

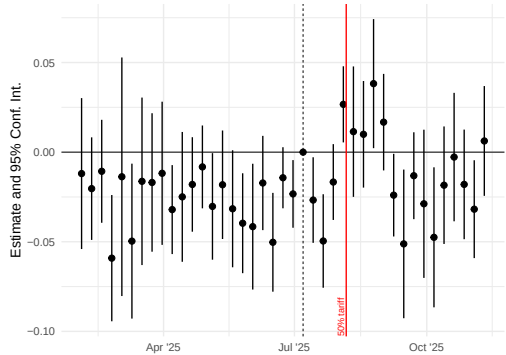
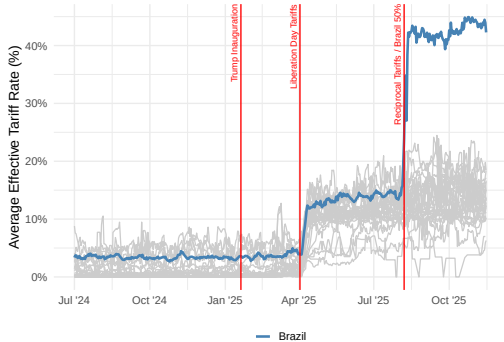
Baseline: Less than 4% exporter absorption

- Regress log unit values on log tariff rates
- Include product $\times$ date and country $\times$ product fixed effects

	Unit Value (per kg)	Unit Value (per qty)
log(1 + tariff)	−0.039* (0.024)	−0.003 (0.078)
Observations	25.6 million	25.6 million

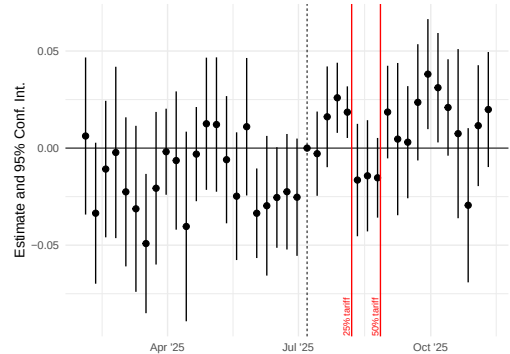
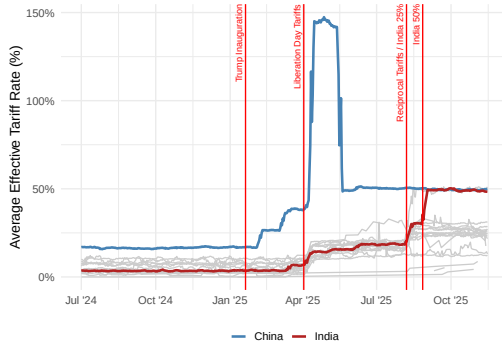
⇒ **Foreign exporters absorb <4% of tariff burden**

Brazil: No price adjustment after 50% tariff



- Pre-trends flat → parallel trends satisfied
- Post-tariff: unit values unchanged → **full pass-through**

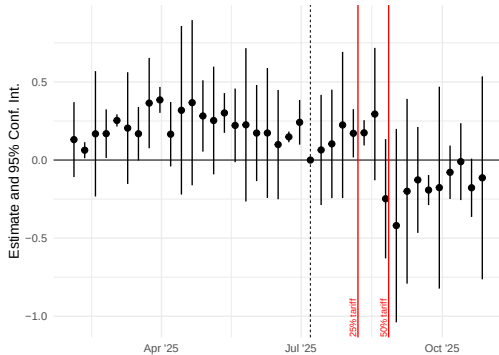
India: Same pattern with 25-50% tariffs



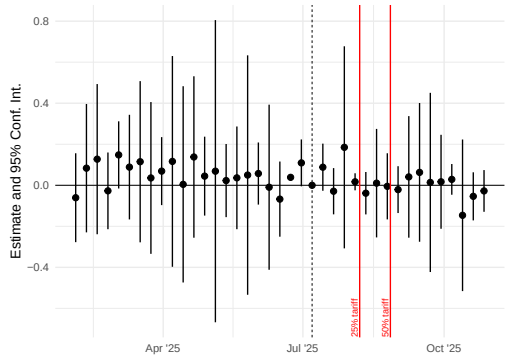
- Two tariff increases: Aug 7 (25%) and Aug 27 (50%)
- Unit values remain flat → **no price absorption by Indian exporters**

Validation

Validation: Indian export customs data (FOB prices)



Export values: -18% to -23%

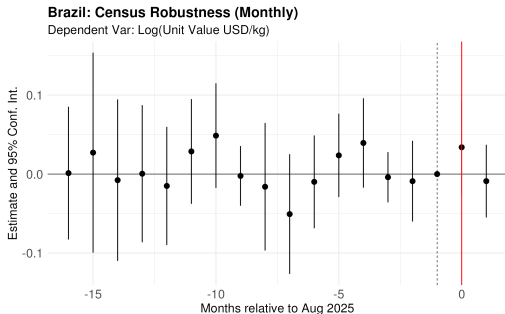


Unit values: unchanged

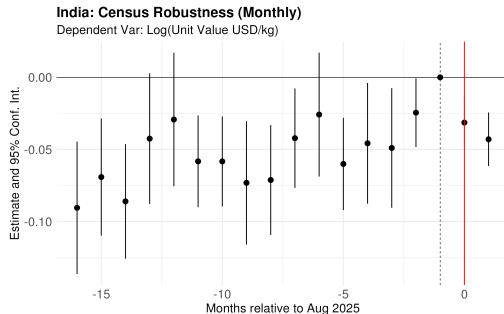
- Indian exporters reduced **quantities**, not **prices**
- FOB prices at departure confirm: no absorption at factory gate

Robustness: US Census data confirms findings

Brazil



India



- Official monthly Census statistics yield same conclusion
- India shows pre-tariff stockpiling (prices up), then reversion

What We Can Learn from Granular Trade Data

The Panjiva data: what makes it powerful

Variable	What it enables
Firm identities (exporter & importer)	Track buyer–seller relationships over time. Study which firms adjust, which exit, and which switch partners
Daily arrival date	High-frequency dynamics: anticipation, stockpiling, response timing — not possible with monthly data
Declared value (USD)	Construct prices (unit values) at the individual shipment level
Weight & quantity	Distinguish price from volume adjustment; compute unit values per kg or per unit
HS6 product code	Match to tariff schedules; identify exemptions; product-level pass-through
Origin / destination	Cross-country comparison; treatment vs. control groups
...	

Why firm-level data matters: concrete examples

- **Buyer–seller relationships:**

- We observe 760k exporters matched to 803k importers
- Small importers locked into a single supplier get price concessions (−17%)
- Large importers with many suppliers do not (−4%)
- [→] *Without firm IDs, this heterogeneity is invisible*

- **Daily frequency:**

- Indian importers stockpiled before the tariff → visible in daily data
- Weekly event studies trace adjustment in near real-time
- [→] *Monthly aggregates hide anticipation and timing dynamics*

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What could German customs data tell us?

- **The research opportunity:** German customs micro-data could enable the same type of analysis — from the German exporter perspective
- **Track German firms' responses to US trade policy:**
 - How do German exporters adjust prices, quantities, and destinations?
 - Which firms (size, sector, export intensity) are most exposed?
 - Do firms redirect exports to other markets — and how quickly?
- **Monitor uncertainty effects:**
 - Do German firms delay or accelerate shipments in anticipation?
 - How do buyer–seller relationships with US partners evolve?
 - Are there cascading effects through supply chains?

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- **Policy-relevant granularity:**
 - Identify affected sectors and regions within Germany
 - Distinguish short-run disruption from structural reorientation
 - Inform negotiation positions with evidence on actual incidence

Key Takeaways

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- **Near-complete pass-through:** Foreign exporters absorb $<4\%$ of tariffs
- **Adjustment is through quantities, not prices:**
 - Trade volumes fall sharply after tariffs
 - Unit values (prices) remain unchanged
- **US bears the cost:**
 - Tariffs function as a consumption tax on American buyers
 - No evidence that foreigners “pay” through lower prices
- **Consistent across:**
 - Countries, Data sources, Specifications

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Policy implications

- The 2025 tariffs are effectively a **tax on US consumers and firms**
- Prior research suggests downstream markups can **amplify** the effect
 - Consumers may pay more than the government collects in revenue
- Claims that foreign exporters “pay” for tariffs are **not supported** by data
- Trade adjustment occurs through **reduced volumes**
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