Tracking the Short-Run Price Impact of U.S. Tariffs

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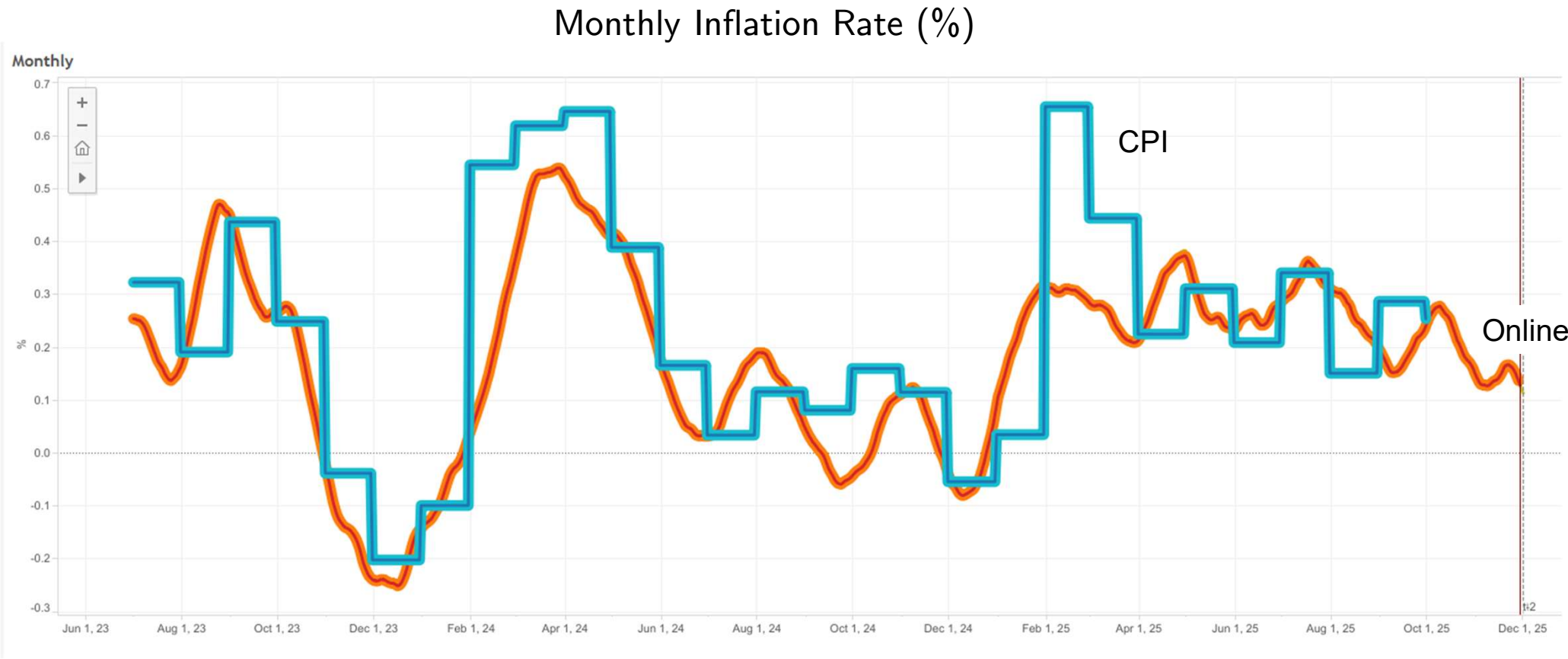
Alberto Cavallo is a co-founder and currently a consultant of PriceStats LLC, which provided proprietary price data for this research at no cost and without any right to review or influence the findings.

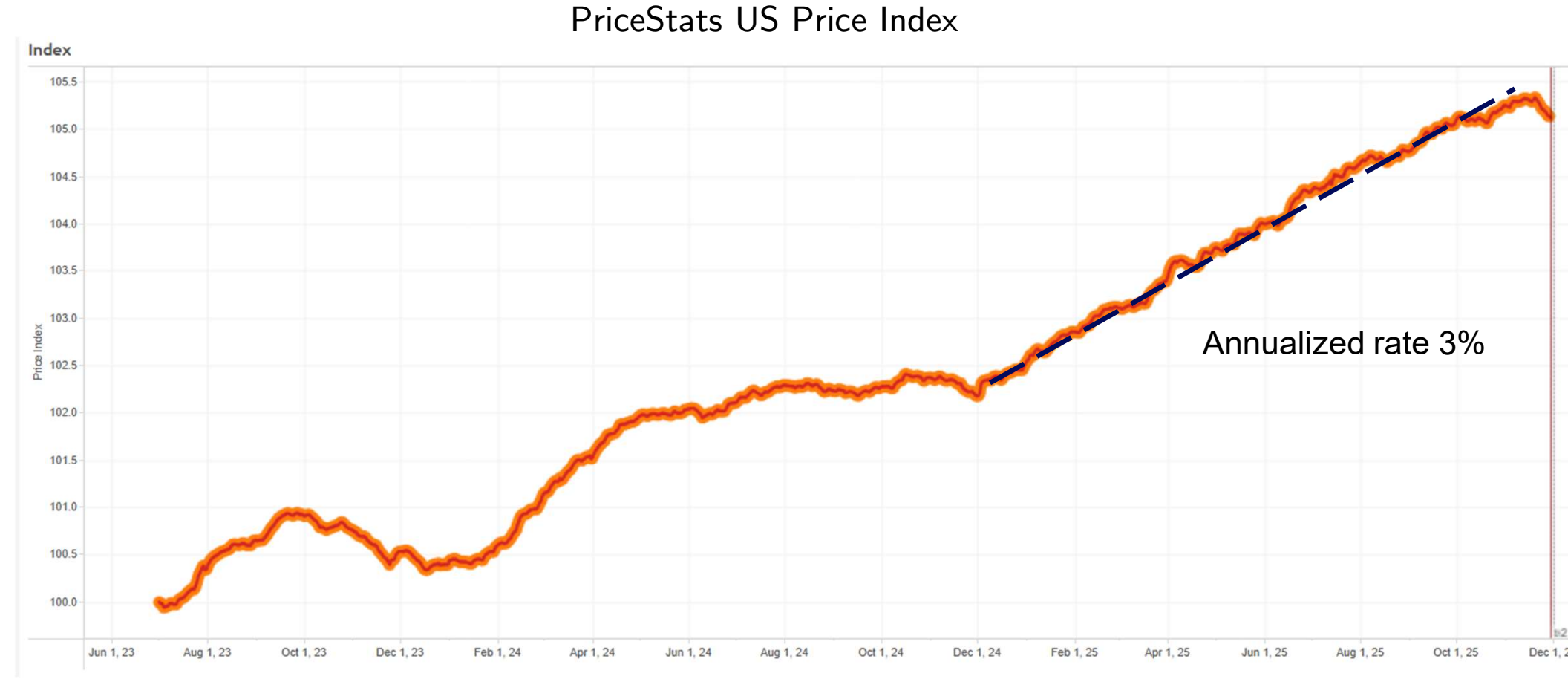
US aggregate inflation was stable through most of 2025



Source: PriceStats – State Street, BLS

Data Updated: PriceStats 9/3, CPI until July

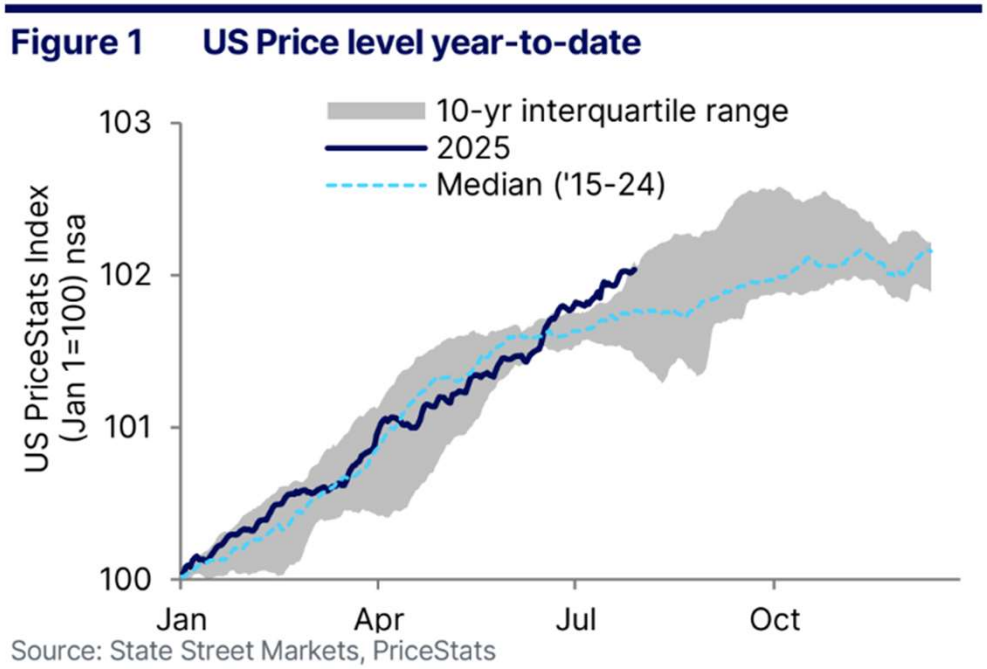
The price index had a stable annualized trend of 3% since Dec. 2024



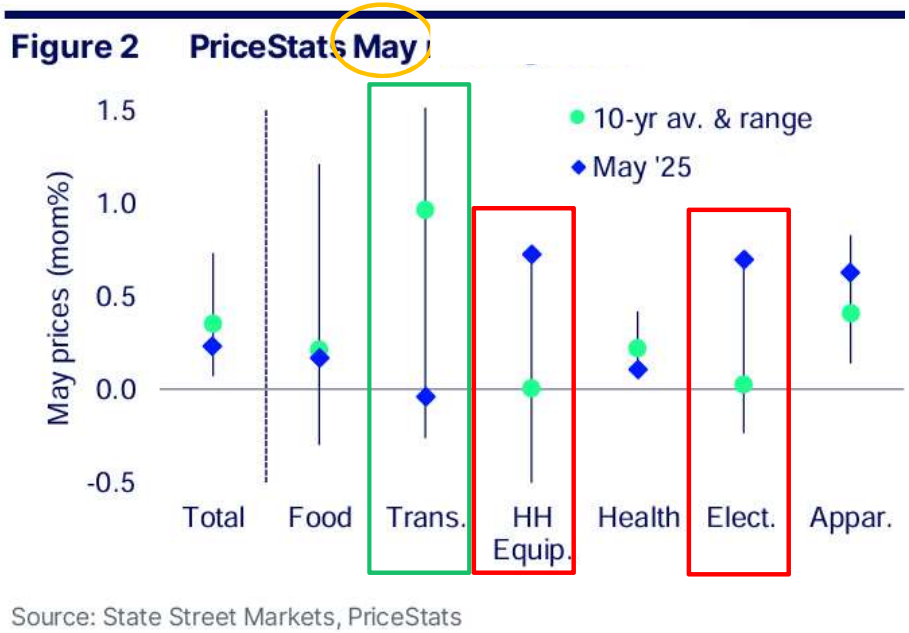
Source: PriceStats – State Street

Some signs of tariff pressure was apparent in sectoral data

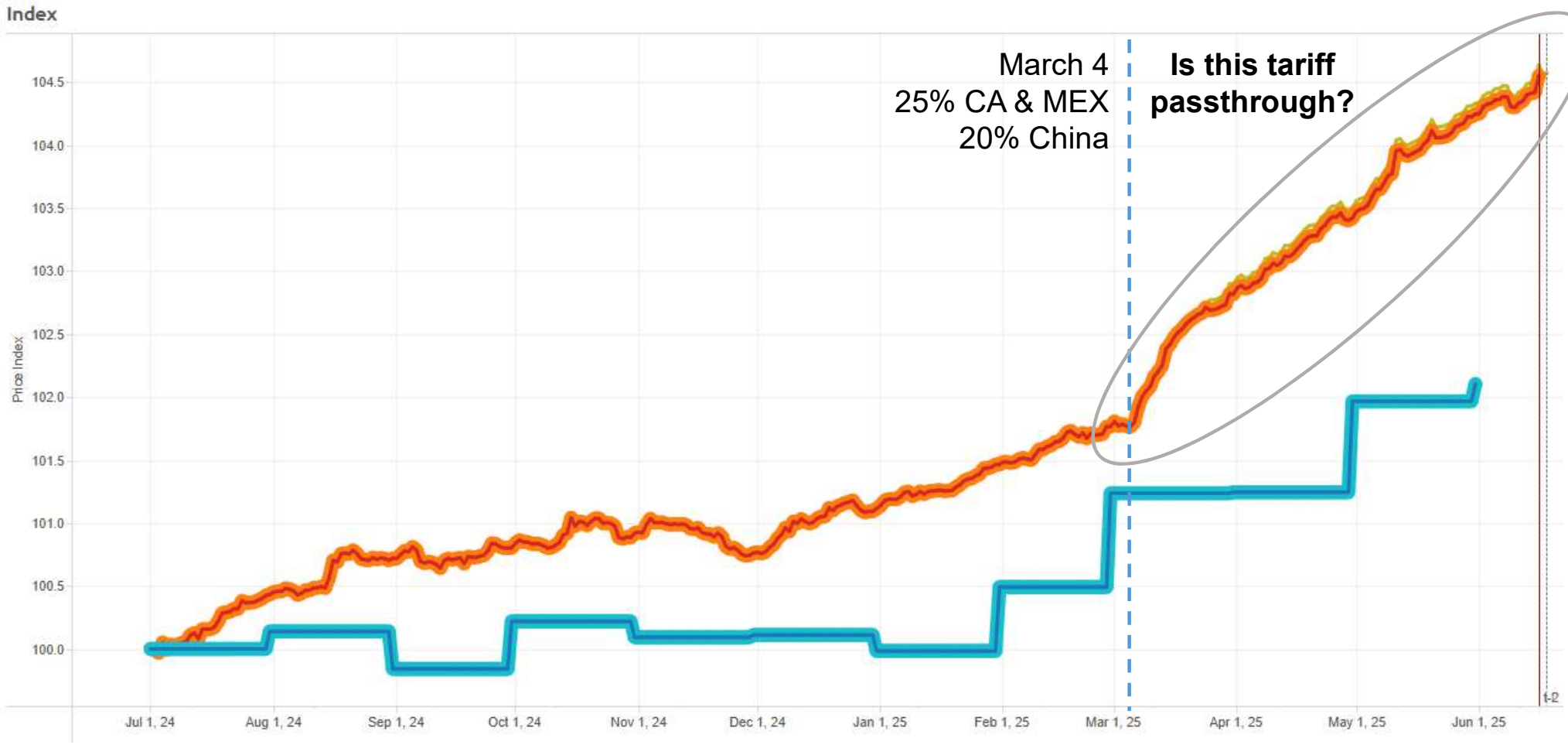
Aggregate Index – Historical Comparison



Sectors – Historical MOM Comparison



"Household Goods and Furniture" had a clear increase in trend in March

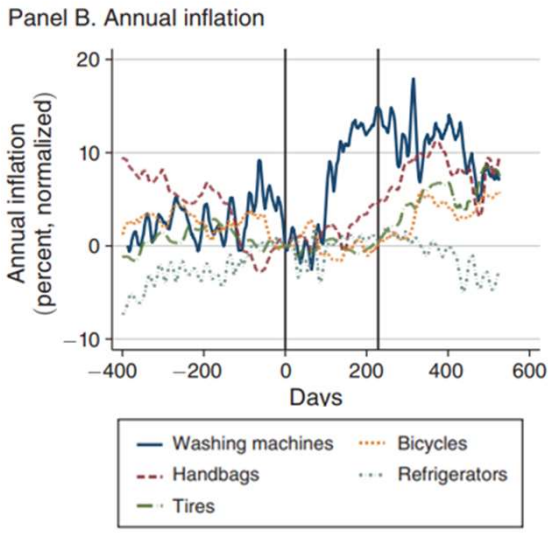


Source: PriceStats – State Street, BLS

What we learned from the 2018-2019 Trade War

- At the **border**: evidence of **full passthrough** from 2018-2019 Trade War
  - Amiti, Redding, and Weinstein (JEP 2019)
  - Fagelbaum, Goldberg, Kennedy and Khandelwal (QJE 2020)
  - Cavallo, Gopinatch, Neiman, and Tang (AERI 2021)

- **Retail** evidence is scarse and the results more mixed
  - Flaaen, Hortacsu, and Tintelnot (AER 2020) → quick passthrough for washing machines
  - Cavallo, Gopinatch, Neiman, and Tang (AERI 2021)
    - Heterogeneity across products → scope, size, visibility matters
    - Limited retail-passthrough after 1.5 years
      - Overall passthrough ~3.5% → suggests margin compression
      - Evidence of inventory front-loading and trade diversion



What could we expect from the 2025 round of US tariffs?

- Retail passthrough should be higher this time:
  - Large size of tariff rates (125%? 50%? 30%?...)
  - More sectors and countries affected
  - Expectations of persistence in trade tensions (some tariffs will remain)
  - More flexible post-pandemic price-setting environment

- However, the short-term impact can still be low and gradual
  - Tariff announcements demand-side effects→ oil price drop, recession fears
    - Retailers already worried about weakening demand (beyond tariff impact)
  - Firms have more experience with alternative adjustment mechanisms:
    - Front-loading of inventories was clear in Q1 trade data
    - Efforts to diversify supply chains going on for a while → differential tariff rates means trade diversion is still possible
  - Huge uncertainty about rates, deals, exceptions, legality → further complicates price-setting decisions

So what is happening now?

Tracking the Short-Run Price Impact of U.S. Tariffs*

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November 12, 2025

(Data through: September 8, 2025)

For updated figures and results, see the HBS Tariff Tracker

Abstract

We use high-frequency retail microdata to measure the short-run impact of the 2025 U.S. tariffs on consumer prices. By matching daily prices from major U.S. retailers to product-level tariff rates and countries of origin, we construct price indices that isolate the direct effects of tariff changes across goods and trading partners. Prices began rising immediately after the broader tariff measures announced in early March and continued to increase gradually over subsequent months, with imported goods rising roughly twice as much as domestic ones. Our estimated retail tariff pass-through is 20 percent, with a cumulative contribution of about 0.7 percentage points to the all-items Consumer Price Index by September 2025. Our results show that tariff costs were gradually but steadily transmitted to U.S. consumers, with additional spillovers to domestic goods.

Keywords: Tariffs, Prices
JEL Classification: F13, F14, E31.

- First draft April 20th
- Paper data until September 8th, six months after tariffs first introduced (results shown today)
- Website is periodically updated
  - Latest: November 1st
  - www.pricinglab.org

Daily prices from 5 large US retailers with country-of-origin and HS classification for 359K products from 108 countries

Table 2: Product Counts by Country of Origin

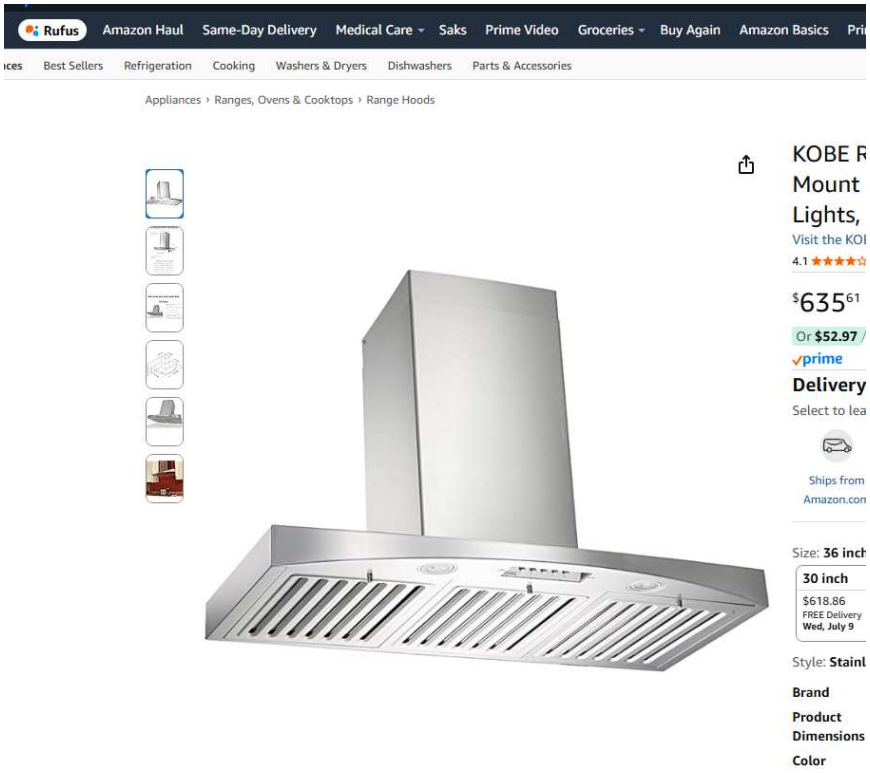
Product Origin	Frequency	Percentage (%)
US	134,577	37.48
China	128,668	35.83
India	14,560	4.05
Turkey	9,477	2.64
Vietnam	6,671	1.86
Taiwan	6,264	1.74
Mexico	5,001	1.39
Canada	4,645	1.29
Others	49,241	13.71
Total	**359,104**	**100.00**

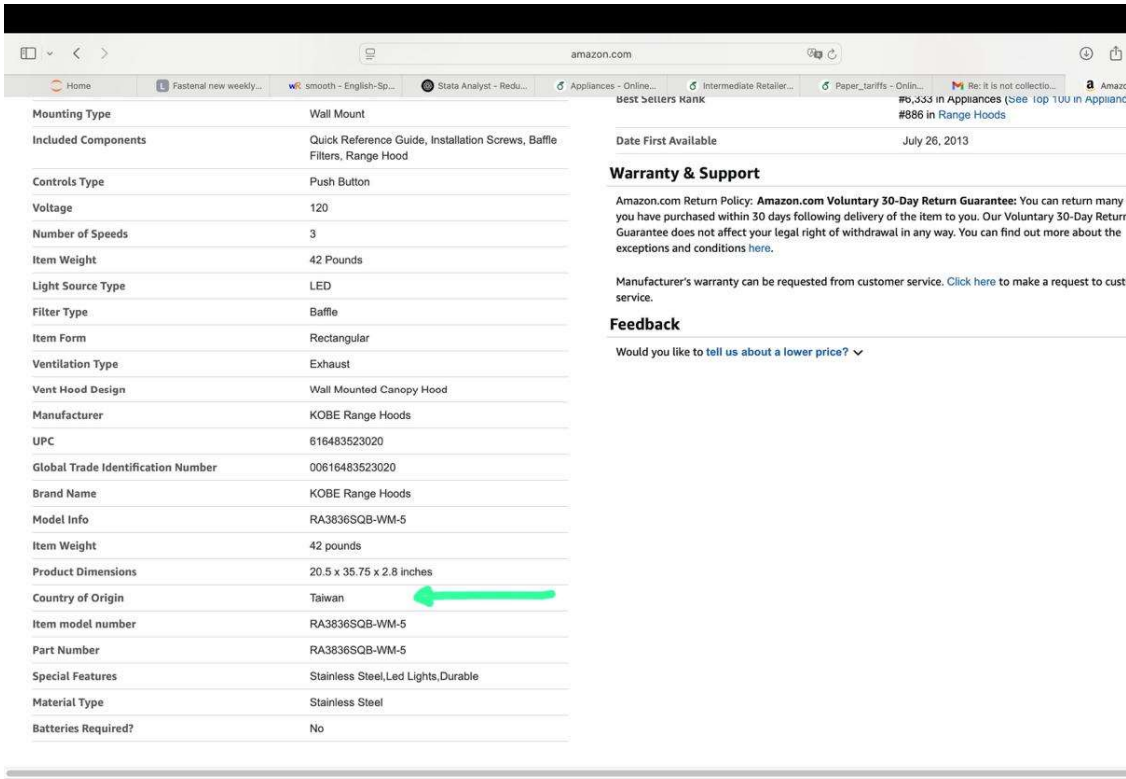
Table 3: Number of Products by Category

Category Name	Products	Percentage (%)
Furnishings & Household	192,415	53.58
Recreation and culture	77,134	21.48
Food and non-alcoholic beverages	33,195	9.24
Miscellaneous goods and services	24,671	6.87
Transport	13,854	3.86
Health	7,247	2.02
Communication	4,973	1.38
Housing, water, electricity, gas and other fuels	2,804	0.78
Alcoholic beverages, tobacco and narcotics	1,945	0.54
Clothing and footwear	866	0.24
Total	**359,104**	**100.00**

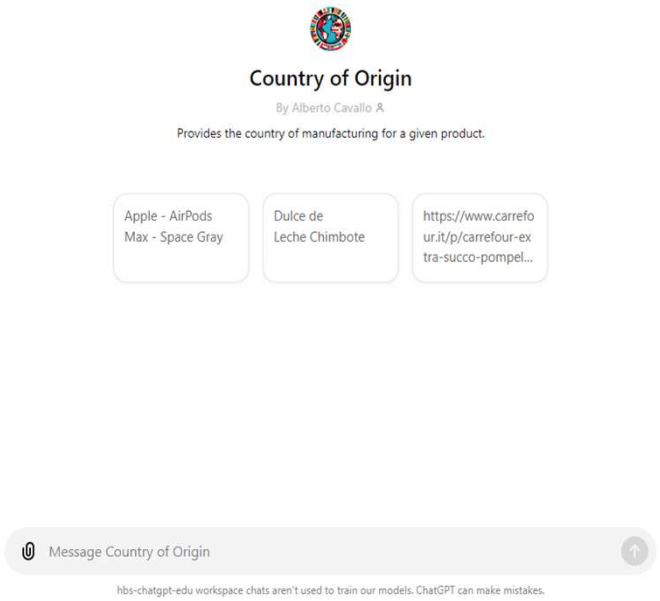
For each good, we know the country of origin

- Method 1: Scraped from the retailer's website (rare)
- Method 2: UPC bridge with Amazon
  - UPC barcode → ASIN code → Amazon website





Method 3: We ask Chatgpt



We provide a product description or URL, the LLM ***searches online*** *and provides an answer*

Example: Barilla

A more challenging (regional) example...

ChatGPT 4o

Share

where is "Yerba Mate Canarias 1kg" made?

Yerba Mate Canarias 1kg is produced in **Brazil**, even though the brand is **Uruguayan**. The company imports the yerba mate from Brazil because of the favorable growing conditions, but it is blended and packaged to suit Uruguayan taste preferences—typically strong and powdery with a high content of fine particles (polvo).

We use OpenAI`s API to get the country of origin of 14% of the sample

- 88% accuracy when the model can search online for the answer (only recently possible with APIs).
  - Validation with 10K goods with known origin information:

Prediction	Products	Accuracy (%)
Domestic/Imported	9840	88
Imported	7827	87
Domestic	2013	89
Country Of Origin	6820	85
China	3074	84
Canada	127	82
Mexico	84	68
Taiwan	200	83
Turkey	294	96
India	333	93
Vietnam	134	81
Malaysia	54	87
Other countries	507	68

Prediction	Products	Accuracy (%)
Country Of Origin		
Food and Beverages	315	90
Household and Furnishings	4171	86
Health	130	93
Transportation	372	69
Electronics and Recreation	1228	87
Miscellaneous Goods	383	92

- Still a small share of our total sample, but huge potential to expand sectors and countries

HS10 Product Classification and Tariffs Rates

- Product classification:
  - We use GenAI to run a sequential hierarchical-tree classification for each product
    - First classify at HS2, then focus on sub-branch HS4, and so on until HS10

- Tariffs rates: we identify tariffs at the country-HS10 level using 2 approaches:

  - **Statutory Tariffs:**
    - HTS Revision Archive (mostly in Chapter 99) since Oct 2024 + Federal Register announcements at the HS10 level
    - Latest was September 9

  - **Applied Tariffs:**
    - From Census data → Duties paid/ Customs Value
    - Available until July

Price indices for Imported vs Domestic Goods

Figure 1: U.S. Retail Price Indices - Domestic vs Imported

- **Quick Reactions** to major tariff announcements—often within days.
- **Gradual passthrough:** not a one-time jump, but a change in trend
- **Domestic Goods also affected**: Both imported and domestic goods had similar price hikes
  - More pricing power
  - Imported inputs
  - "spread the pain"
  - Expectations inflation
- **Limited magnitude**: Price increases relatively small (2 to 4%) compared to the size of the announced tariff rates.

Deviations from pre-tariff trends

Figure A1: U.S. Retail Price Indices With Pre-Tariff Trends - Domestic vs Imported

- Pre-tariff trends regression using the log price index, controlling for extreme outliers

  Price deviations are higher because most pre-trends are mildly deflationary

5.4% Imported
3% Domestic

Robust to longer pre-tariff trends

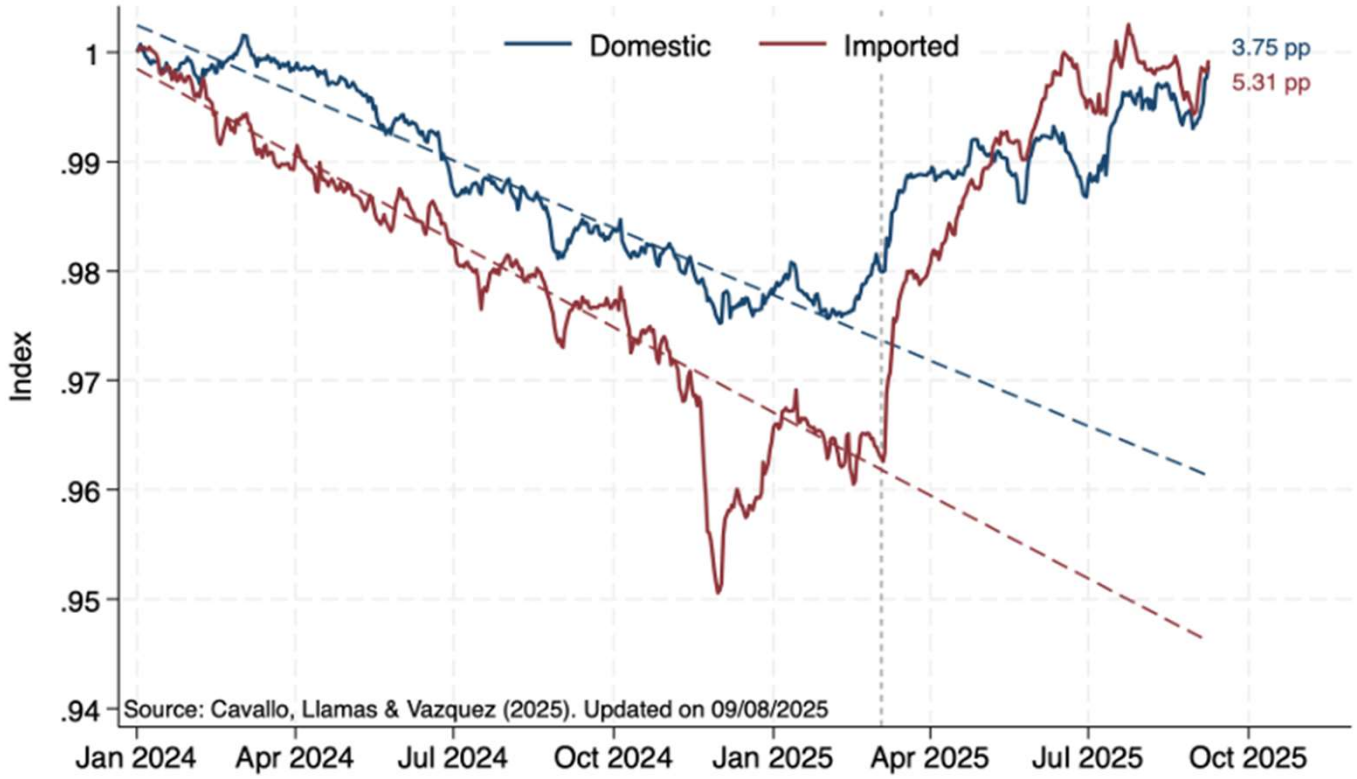
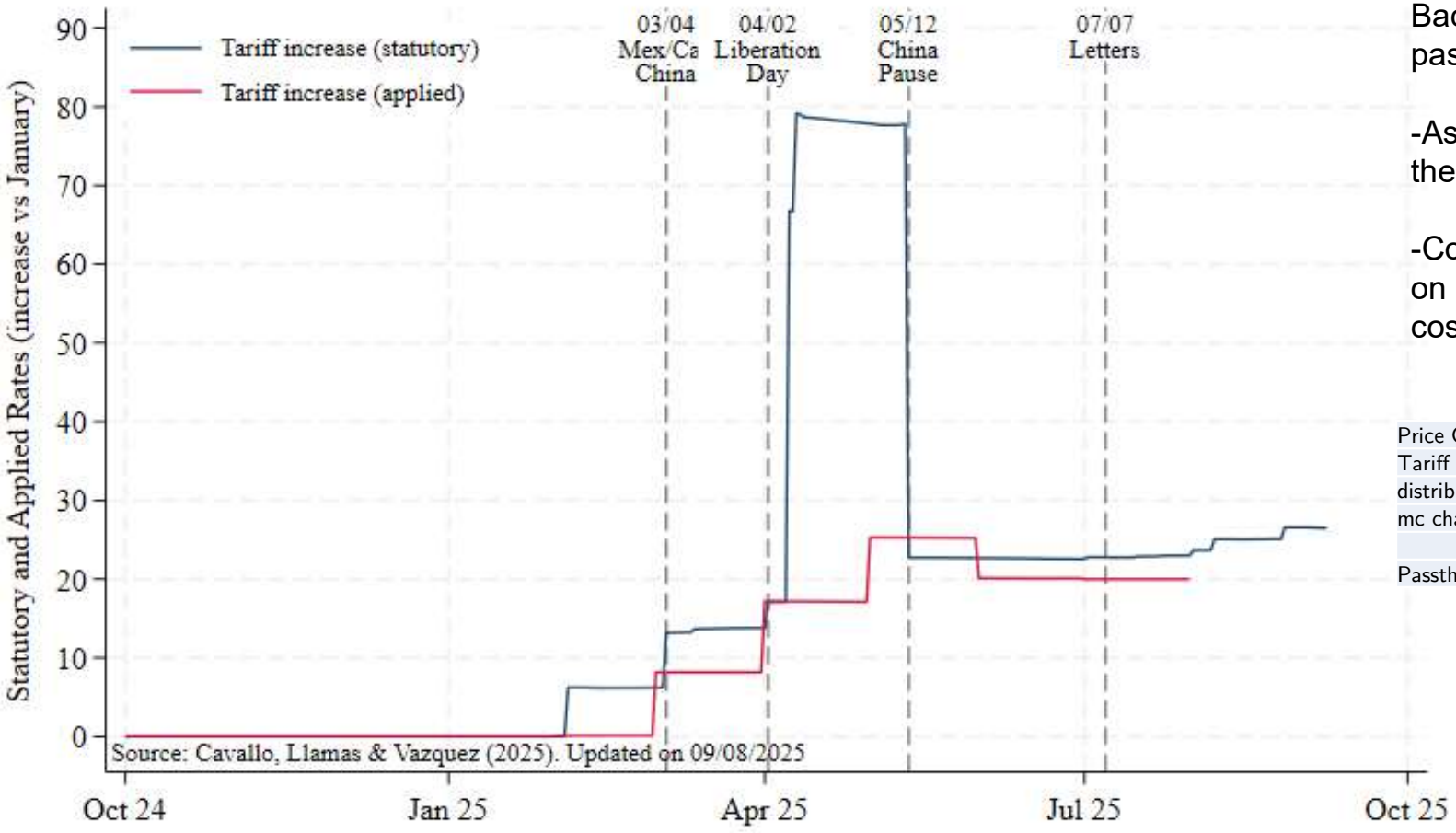


Figure A7: U.S. retail price indices with pre-tariff trends (extended horizon)

Tariff rates for our imported goods (weighted by # products in each country-hs)



Back of envelope cost passthrough:

-Assume full passthrough at the border (like in 18-19)

-Cost passthrough depends on share of distribution/local costs in marginal cost:

Price Change	5	5	5
Tariff Change	30	30	30
distribution share	0	0.25	0.5
mc change	30	22.5	15
Passthrough	0.17	0.22	0.33

Spillover effects into domestic goods, mainly in *affected* categories

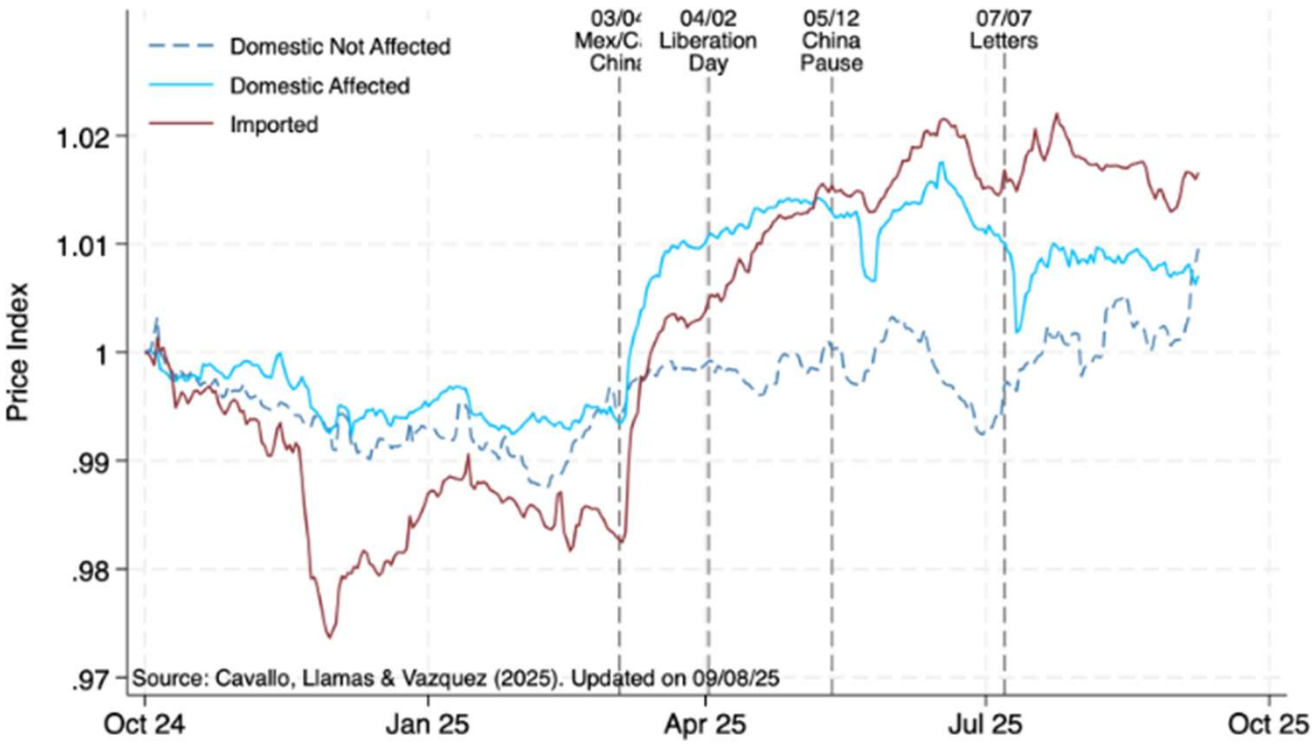


Figure 3: U.S. Retail Price Indices in Affected and Unaffected Categories

- "Affected" if domestic good is in an HS category subject to tariffs or belongs to a 3-digit COICOP category where more than 50% of goods are imported.
- **Domestic** goods in **affected categories** had similar price patterns to imported goods. → competitive pricing
- Domestic goods in **unaffected** categories have a milder increase in trend→ imported inputs effects smaller in the short run

Chinese goods have the most steady and persistent price increases

Figure 3: U.S. Retail Price Indices by Country of Origin

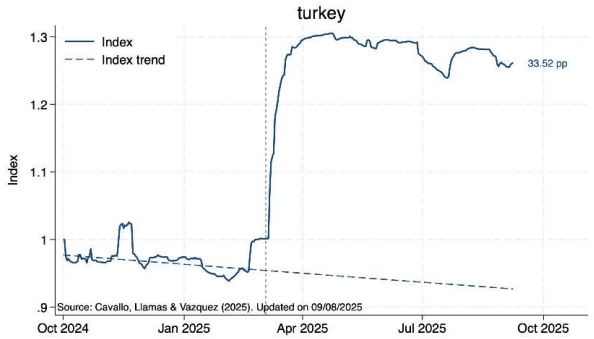
- In early March, prices rose for most goods
- After April 2nd (Liberation Day), there is a divergence
  - Chinese goods kept rising (4.5% vs trend)
  - Canadian prices rose, then stabilized (3.5% vs trend)
  - Mexican prices fell roughly along the pre-tariff trend (0.12% vs trend)

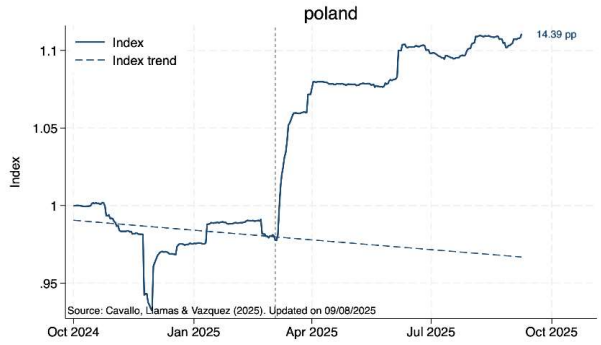
→ USMCA exceptions
→ Expectations of a deal?

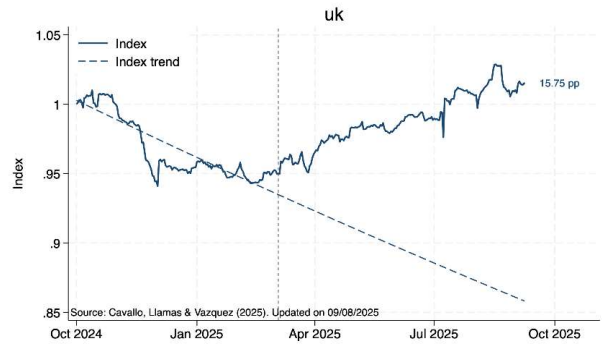
Other countries (with more than 1000 products)

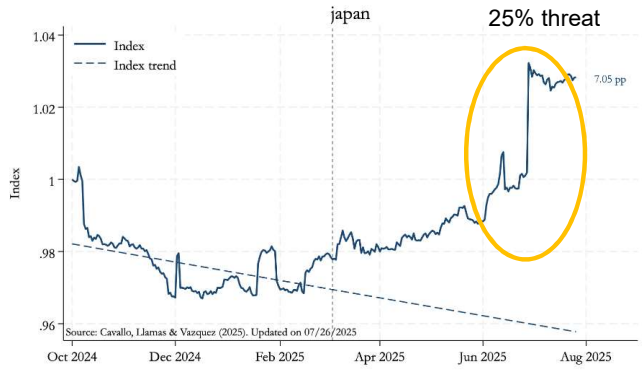
Table 4: U.S. Retail Price Level Changes by Country of Origin

Country	Price Change	Price Change vs. Pre-Tariff Trend
Turkey	26.08	33.52
Poland	13.30	14.39
United Kingdom	6.55	15.75
Thailand	5.33	7.38
Japan	5.11	7.51
Italy	4.27	5.72
India	4.05	9.19
France	3.90	4.80
Vietnam	3.88	6.37
China	3.56	4.56
Switzerland	3.02	4.16
Germany	3.01	4.20
Malaysia	2.82	10.38
Pakistan	2.03	3.41
United States	1.92	3.01
Canada	1.87	3.56
Taiwan	1.65	1.63
Korea	0.47	1.59
Mexico	−0.71	0.12
All Countries	**2.97**	**4.40**









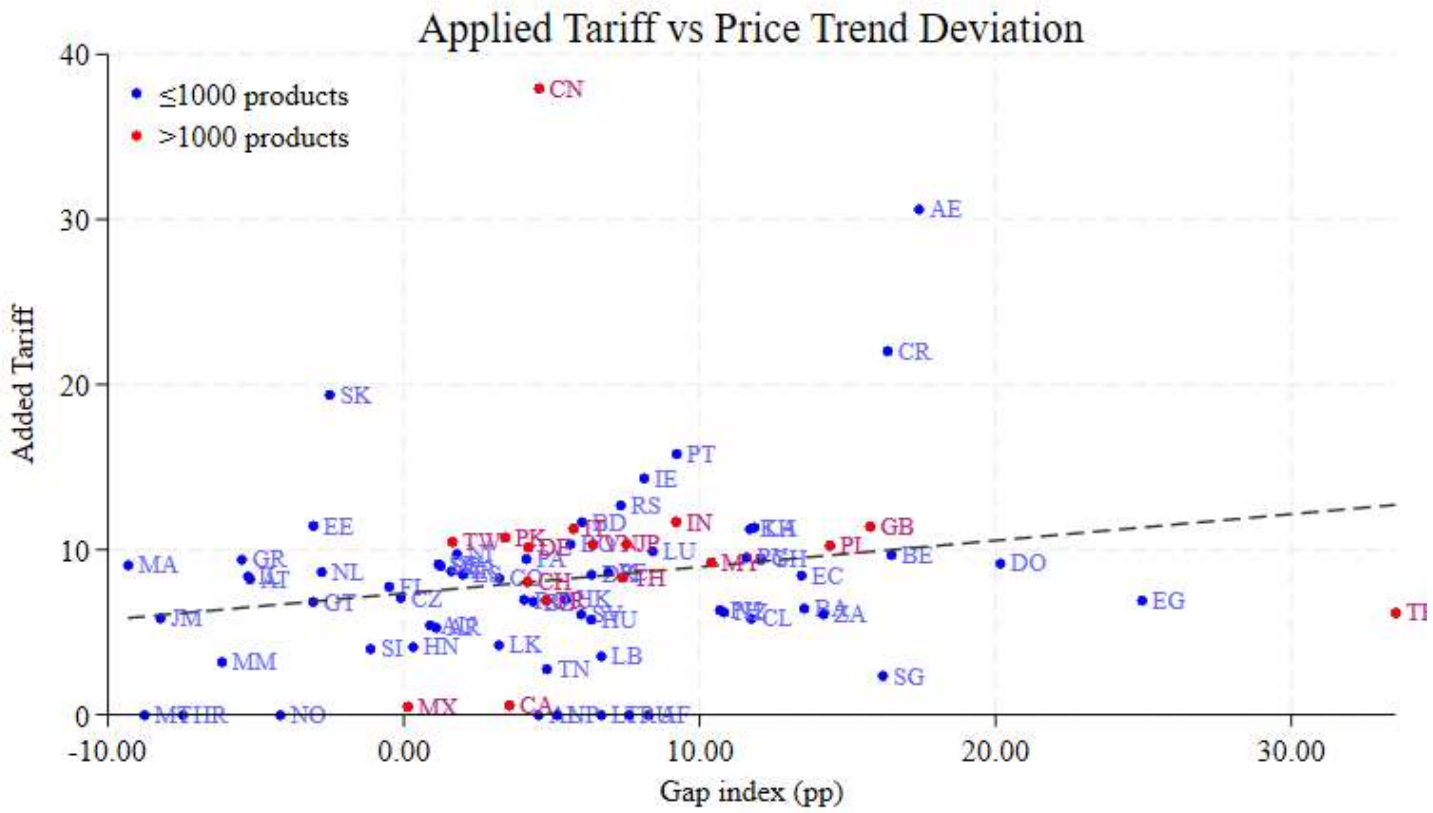
Other countries (with more than 1000 products)

Table 4: U.S. Retail Price Level Changes by Country of Origin

Country	Price Change	Price Change vs. Pre-Tariff Trend	Applied Tariffs (July)	Statutory Tariffs (September)
Turkey	26.08	33.52	9.8	15.0
Poland	13.30	14.39	9.5	15.1
United Kingdom	6.55	15.75	5.0	9.9
Thailand	5.33	7.38	5.9	19.6
Japan	5.11	7.51	13.0	14.8
Italy	4.27	5.72	8.4	15.1
India	4.05	9.19	6.1	48.9
France	3.90	4.80	6.8	10.0
Vietnam	3.88	6.37	5.4	20.1
China	3.56	4.56	27.5	29.6
Switzerland	3.02	4.16	2.0	35.8
Germany	3.01	4.20	9.5	14.9
Malaysia	2.82	10.38	5.7	18.8
Pakistan	2.03	3.41	9.7	19.0
United States	1.92	3.01	—	—
Canada	1.87	3.56	2.9	35.2
Taiwan	1.65	1.63	2.2	20.3
Korea	0.47	1.59	12.4	10.3
Mexico	−0.71	0.12	4.4	24.9
All Countries	**2.97**	**4.40**	**18.4**	**26.4**

China is the outlier → low passthrough

Price Deviations vs Tariff Rates



Note: Applied rates until July. Statutory are current.

Furnishings and Household Goods are the most impacted categories

Table 5: Retail Price Changes by Sector

Category	Price Change			vs. Pre-Tariff Trend		
	All	Imports	Domestic	All	Imports	Domestic
Furnishings, household equipment	4.21	4.93	2.06	6.74	7.93	3.57
Miscellaneous goods and services	2.94	3.96	1.67	5.20	6.62	3.42
Health	1.75	2.22	1.96	2.67	2.54	3.18
Food and non-alcoholic beverages	1.55	1.67	1.58	1.59	2.27	1.49
Recreation and culture	1.58	1.82	1.50	0.66	0.01	2.42
All sectors	**2.97**	**3.72**	**1.92**	**4.40**	**5.44**	**3.01**

Notes: "Price Change" columns measure differences between March 4 and September 8 2025; "vs. Pre-Tariff Trend" columns show deviations from trends estimated over October 2024–March 2025. Results are reported separately for all, imported, and domestic goods.

Cheapflation within categories

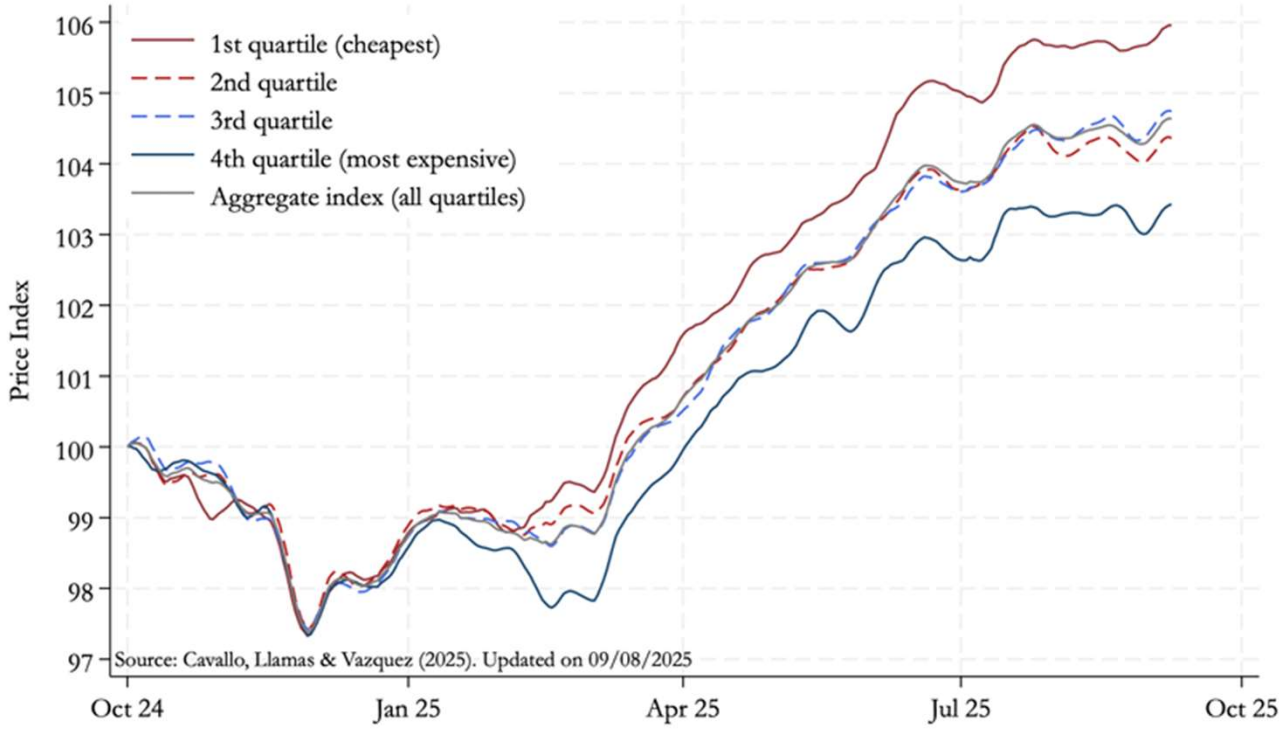


Figure 5: Price Indices of Imported Goods by Price-Level Quartile

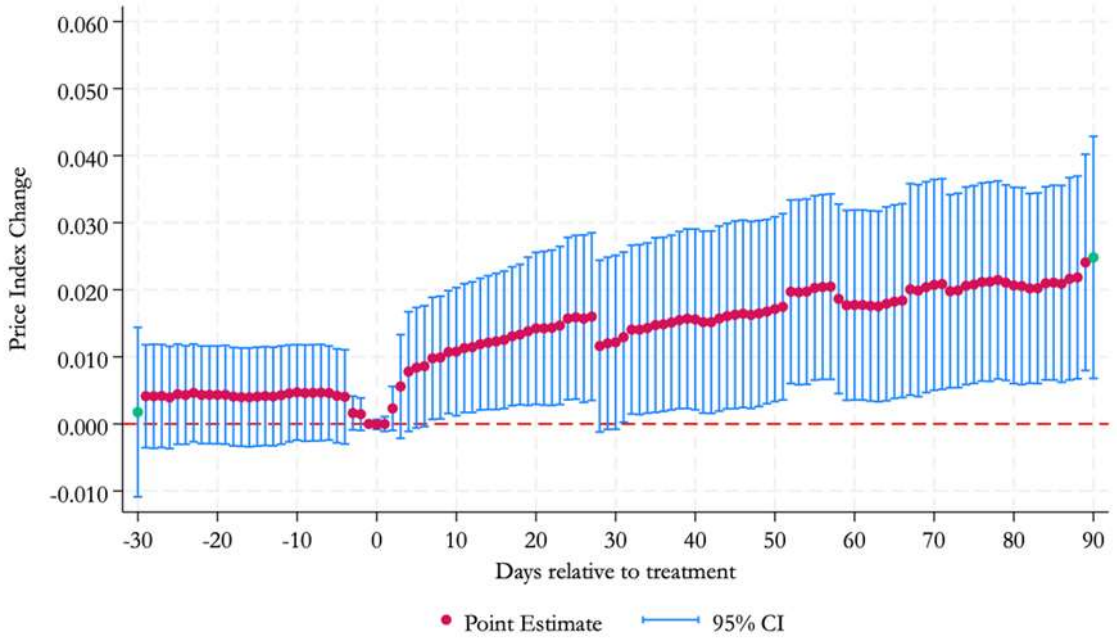
- Cavallo & Kryvtsov (2024) "Price Discounts and Cheapflation During the Post-Pandemic Inflation Surge." JME
- Mongey & Waugh (2025) “Pricing Inequality” → low-priced goods tend to have lower margins

→ Producers of cheaper varieties are likely less able to absorb the shock

(note: for the same reason, smaller firms may also have more passthrough than those in our sample)

Hi-frequency event study: affected-unaffected categories

- Use HS classification to distinguish affected vs unaffected *within* 1-digit categories
  - Imported, Domestic affected, Domestic-unaffected (untreated group)
- March 4th event. Controls for common shocks & seasonality via time fixed effects



- **Gradual and persistent**, rather than one-time jump and/or transitory

Figure 5: Event-study daily estimates for 90 days around tariff implementation.

Passthrough Regressions at the product level

$$\Delta \ln p_{it} = \sum_{\ell=0}^{6} \gamma_\ell \, \Delta \tau_{i,t-\ell} + \alpha_k + \varepsilon_{it}.$$

Table 6: Pass-through Regression of Statutory and Applied Tariffs with Monthly Data

Variable		(1) Statutory	(2) Applied	(3) Dev. trend - Applied	(4) Dev. trend - Applied
Tariffs 6 mo.	$\left(\sum_{\ell=0}^{6} \gamma_\ell\right)$	0.041	0.141	0.200	
		(0.015)	(0.013)	(0.013)	
Over 20%	$\left(\sum_{\ell=0}^{6} \gamma_\ell^O\right)$				0.203
					(0.014)
Under 20%	$\left(\sum_{\ell=0}^{6} \gamma_\ell^U\right)$				0.034
					(0.040)
Adjusted R^2		0.001	0.002	0.002	0.003
Observations		462,546	374,214	309,911	309,911
Products		133,834	127,407	107,873	107,873
Sector Fixed effects		Yes	Yes	Yes	Yes

Notes: Table reports estimated coefficients from distributed-lag regressions of monthly log price changes on changes in statutory or applied tariff rates, as described in Section 4.2. Pass-through is measured as the cumulative response over six months. Standard errors are clustered by 3-digit COICOP sector.

- 6-month passthrough on applied tariffs up to 20% (when measured as deviations from trend)
  - A 20% applied tariff would lead to a 4% price increase in affected products in same sector
  - Higher than in 2018-2019, but still incomplete

Impact on Headline CPI

- We construct a weighed index using official CPI weights, then measure deviations from pre-tariff trend
- Estimate impact on CPI basket given we cover about 29% of the all-items CPI weights

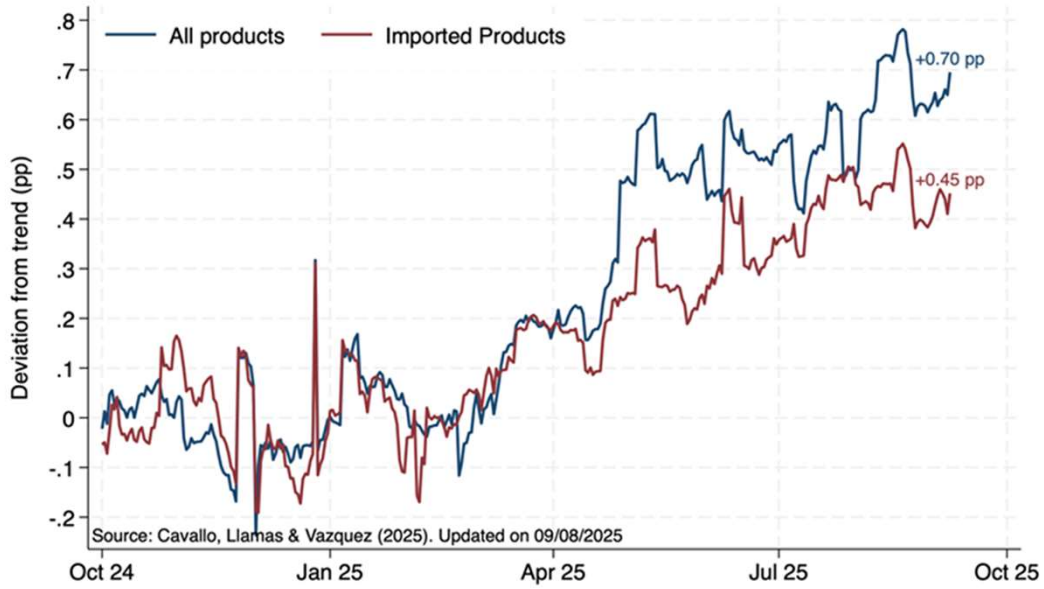


Figure 7: Cumulative Impact of Tariffs on All-Items CPI-U, NSA.

- Imports alone: 0.45pp
- Imports + domestic: 0.70 pp

- Implies annual rate in NSA CPI would have been 2.2% instead of 2.9% in September.

Heterogeneity in disaggregated categories

Table A4: Price Changes Relative to Pre-Tariff Trend (%)

Category	All	Imported	Domesti
Carpets and other floor coverings	36.23	38.51	36.61
Other articles of clothing and clothing accessories	10.93	12.29	5.71
Coffee, tea and cocoa	8.67	11.16	9.08
Other personal effects	7.65	7.21	9.43
Photographic and cinematographic equipment and optical instruments	6.68	6.11	11.54
Major tools and equipment	6.41	6.08	2.82
Gardens, plants and flowers	6.34	5.97	0.64
Furniture and furnishings	5.75	5.43	2.96
Major durables for indoor and outdoor recreation including musical instruments	5.49	3.08	9.56
Glassware, tableware and household utensils	5.41	7.06	-2.05
Fruits	5.40	6.09	4.28
Household textiles	5.00	4.88	2.83
Materials for the maintenance and repair of the dwelling	4.99	5.14	5.44
Major household appliances whether electric or not and small electric household appliances	4.95	5.96	2.68
Other medical products; therapeutic appliances and equipment	4.91	3.92	3.91
⋮	⋮	⋮	⋮
Vegetables	0.22	3.55	-2.58
Fuels and lubricants for personal transport equipment	-0.62	-0.11	-0.46
Equipment for the reception, recording and reproduction of sound and picture	-1.30	-3.48	6.02
Milk, cheese and eggs	-1.30	8.71	-3.16
Sugar, jam, honey, chocolate and confectionery	-2.00	-1.31	-1.29
Beer	-2.48	-11.07	-1.50
Oils and fats	-3.17	-1.88	-5.55
Equipment for sport, camping and open-air recreation	-4.43	3.43	-11.07
Spirits	-6.19	-7.57	-5.35
Information processing equipment	-8.15	-9.42	10.81
Mean	3.18	3.48	2.92

Coffee: Brazil

Fruits…avocado?

Most food down here

What about Avocados?

Newsweek

Avocado Prices Set To Soar Because of Trump Tariffs

The cost of avocados could soar in the US if Donald Trump follows through with tariffs on all goods from Mexico.

Nov 28, 2024

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FOOD

Why Trump's tariffs on Mexico would mean higher avocado prices at the grocery store

DECEMBER 23, 2024 · 5:00 AM ET

By James Doubek

Los Angeles Times

That extra dab of guacamole on your burrito could cost more because of new tariffs

That extra dab of guacamole on your burrito could cost more because of new tariffs · Trump's 25% tariffs on imports from Mexico went into effect...

Mar 4, 2025

The Detroit News

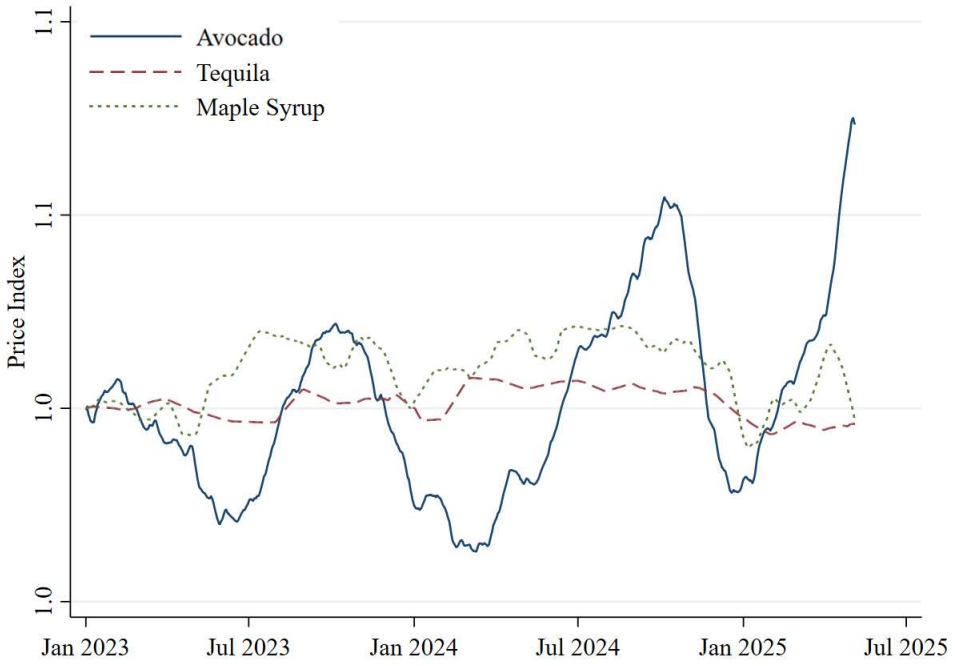
Trump's Mexico tariffs poised to raise already high avocado prices

President Donald Trump is likely to make them more expensive with his plan to slap 25% tariffs on Mexican imports beginning on Saturday.

Jan 31, 2025

Focusing on "selected" goods can be misleading...

Price Index



Source: PriceStats

Annual Inflation

Source: PriceStats

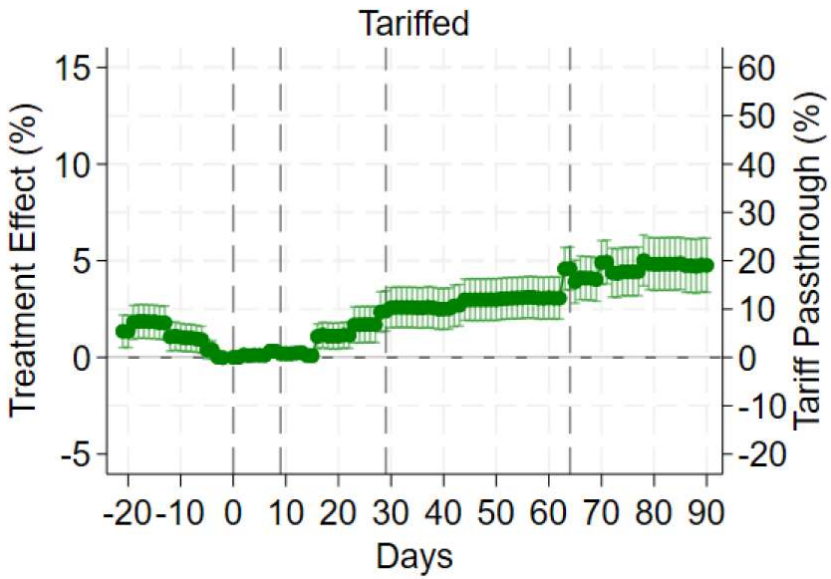
- One reason avocado prices may have risen so much is they were widely discussed in the media (visibility)

Main Takeaways

- Few signs of tariff impact in aggregate inflation statistics
  - Some upward pressure in household, furniture and core goods → high share of Chinese imports
  - Fuel and other major sectors compensated
- Micro data uncovers a **gradual** retail passthrough
  - There are **some quick price responses**, particularly for Chinese household goods
  - **Domestic goods also impacted** → particularly those competing directly with imports
  - **Limited magnitude** relative to the size of tariffs (3%-5% price increases vs trend), with passthrough rates of **20%**.
    - Higher passthroughs for some countries and categories.
  - Significant impact on CPI: **0.7 percentage points** in 6 months
- Huge uncertainty remains → delays pricing decisions and passthrough

Related papers (preliminary results)

- Retaliation Tariffs in Canada
  (with O. Kostyshyna, O. Kryvtsov, M. Vieyra)



- Uncertainty and Price-Setting Behavior
  (with Nick Bloom & Gaston Garcia-Zavaleta)

Figure 2: Average Uncertainty

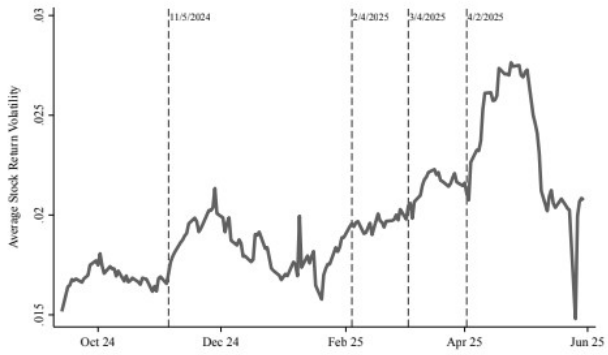
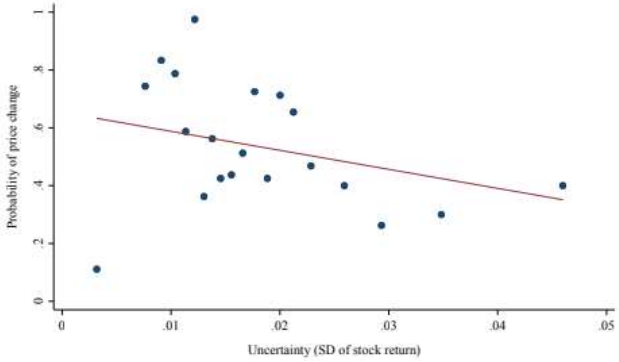
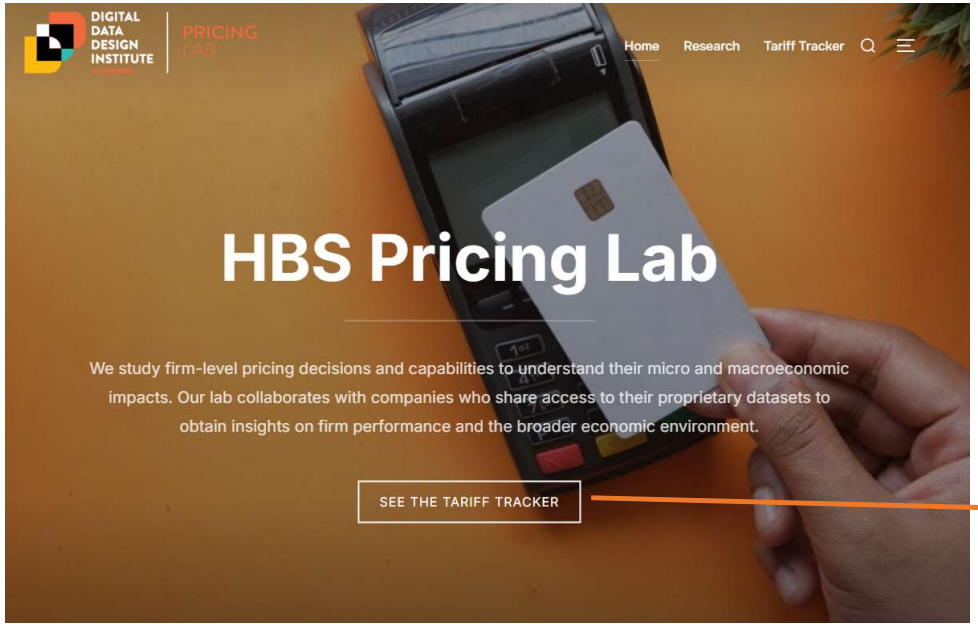
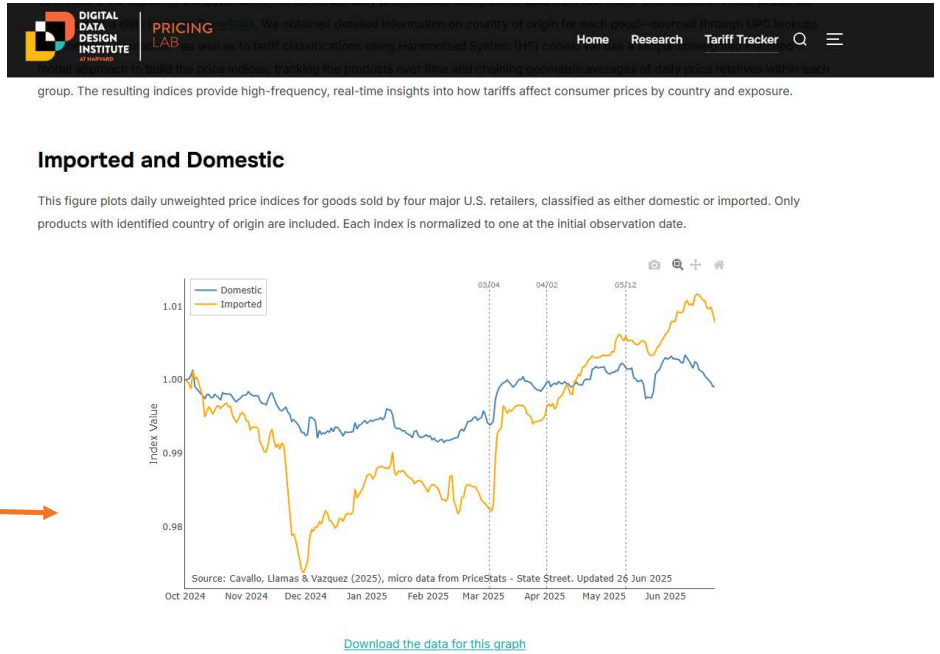


Figure 4: Relationship Between Uncertainty and Probability of Price Adjustment



HBS Pricing Lab – Tariff Tracker





www.pricinglab.org

Tariff Tracker

https://www.pricinglab.org/tariff-tracker/