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

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Abstract

This paper examines the short-run impact of the 2025 U.S. tariffs on consumer prices using a unique integration of high-frequency retail pricing data, product-level country-of-origin information, and detailed tariff classifications. By linking daily prices from major U.S. retailers to Harmonized System (HS) codes and import origins, we construct custom price indices that isolate the direct effects of tariff changes across product categories and trading partners. Our analysis reveals rapid pricing responses, though their magnitude remains modest relative to the announced tariff rates and varies by country of origin. Both imported and domestic goods are affected, suggesting broader pricing and supply chain spillovers. These findings offer timely evidence for policymakers, businesses, and consumers navigating the immediate consequences of trade policy changes.

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

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1 Introduction

Tariffs have significant economic impacts that directly affect businesses, consumers, and policymakers. Understanding how tariffs influence retail prices is crucial, as price changes determine consumers' purchasing power, shape business decisions, and inform government trade policy. Despite their importance, measuring the price effects of tariffs at the retail level remains a challenge. Official price statistics and traditional surveys typically provide data with low frequency and with significant delays, limiting their usefulness for timely policy analysis. Furthermore, such aggregate measures lack sufficient granularity, obscuring which specific product categories are most affected or how goods from particular countries respond differently to tariff adjustments. A more detailed and timely analysis is therefore essential to provide clarity and actionable insights into the short-run price effects of tariff changes.

To address these challenges, we conduct an empirical analysis that combines micro-level retail price data with detailed information on product origin and tariff classifications. Our approach links daily prices from major U.S. retailers to country-of-origin data, allowing us to observe how imported and domestic products in specific categories responded to the 2025 trade policy changes. We match these products to their corresponding tariff lines using publicly available data from the United States International Trade Commission, which provides detailed information on effective tariff rates and their revisions, disaggregated by HS10 code and country. Using this integrated dataset, we construct custom price indices across various dimensions—by category, country of origin, or tariff exposure—and examine their movements around the implementation of the tariffs. This granular and high-frequency view allows us to identify which types of goods were affected, how quickly prices responded, and whether the impact varied by country of origin or sector, offering insights not visible in conventional price statistics.

The remainder of the paper is organized as follows. Section 2 outlines the data sources and explains how we integrate them to construct the core dataset. This includes a description of the retail price data, the procedure for matching products to their countries of origin, and our approach to leveraging tariff information from the United States International Trade Commission to determine effective tariff rates at the product-country level. Section 3 details the methodology for constructing custom price indices that capture the impact of tariffs across various product categories and source countries. It also introduces a set of graphs illustrating short-run effects around the time of tariff implementation and discusses the main findings and limitations of our approach. Finally, Section 4 concludes.

2 Data Sources

2.1 Micro-level Retail Prices

We use micro-level retail price data provided by PriceStats, a private firm, whose data have been used before in academic papers by members of the Billion Prices Project and other researchers (Cavallo, 2013; Cavallo & Rigobon, 2016). The dataset consists of daily prices collected by scraping the online stores of large multichannel U.S. retailers. These prices are collected at the product level and include detailed information such as product descriptions and unique identifiers. Each good is also categorized using COICOP (Classification of Individual Consumption According to Purpose), the standard classification system employed by most national statistical agencies worldwide to construct the Consumer Price Index (CPI).

The product coverage is broad among retail goods, with full coverage in categories such as furnishings and household goods, recreation and culture (including electronics), and food and non-alcoholic beverages. Furthermore, (Cavallo, 2017) shows that online prices from this dataset closely mirror those found in physical stores for the same retailers.[1]

For this version of the paper, we restrict our analysis to data from two large U.S. retailers, for which detailed country-of-origin information is available, as described below. While the sample is limited in terms of the number of retailers, the high frequency, granularity, and immediate availability of the data enable us to analyze short-run pricing dynamics across a broad range of consumer goods in response to the 2025 tariff measures.

2.2 Country-of-Origin Information

To assess the impact of country-level tariffs, we supplement retail price data with product-level information on countries of origin. Since this information is not typically available on retailer websites, we used a multistep procedure to recover it using product identifiers. First, we obtain the Universal Product Codes (UPCs) for items in the PriceStats dataset. We then matched these UPCs to the unique product identifiers used by a large online-only retailer that publicly displays country-of-origin information for most of its items. Finally, we collected the corresponding country-of-origin data from the retailer's website. This matching process allowed us to link daily retail prices with the country in which each product was manufactured, a crucial step to analyze the differential effects of the 2025 tariffs based on origin.

Table 1 summarizes the distribution of products in our dataset by country of origin. We observe a total of 198,718 products with daily price information and identified country of origin. Almost half of these products originate from China (48.3%), followed by the United States (29.1%). India, Turkey, and Taiwan together account for approximately 11% of the

[1] See (DellaVigna & Gentzkow, 2019) for more evidence of uniform pricing within chains in the U.S..

sample, while the remaining products come from a diverse set of countries, each contributing a relatively small share.

Table 1: Product Counts by Country of Origin

Product Origin	**Frequency**	**Percentage (%)**
China	95,973	48.30
USA	57,820	29.10
India	10,929	5.50
Turkey	6,216	3.13
Taiwan	4,945	2.49
Vietnam	3,897	1.96
Canada	2,641	1.33
Mexico	2,422	1.22
Others	13,875	6.98
Total	**198,718**	**100.00**

Table 2 presents the distribution of products across different COICOP categories. The majority fall under the category of "Furnishings, household equipment and routine household maintenance," which accounts for nearly 60% of the sample. "Recreation and culture" is the second-largest category, with over 40,000 products. In contrast, categories such as "Alcoholic beverages, tobacco and narcotics" and "Housing, water, electricity, gas and other fuels" represent less than 1% of the total.

Table 2: Number of Products by Category

Category Name	**Products**	**Percentage (%)**
Furnishings & Household	117,745	59.30
Recreation and culture	40,758	20.53
Miscellaneous goods and services	11,550	5.82
Transport	10,657	5.36
Food and non-alcoholic beverages	7,769	3.91
Health	3,629	1.83
Communication	3,517	1.77
Housing, water, electricity, gas and other fuels	1,982	1.00
Alcoholic beverages, tobacco and narcotics	919	0.46
Total	**198,526**	**100.00**

The distribution of countries and product categories in our sample is characteristic of large general-merchandise retailers in the U.S., which specialize in offering a broad selection of affordable consumer goods. The predominance of products from China, along with the concentration in categories such as household furnishings and recreational items, reflects typical sourcing practices and inventory structures in this segment of the retail U.S. market.

2.3 Affected Trade Categories

Under the current U.S. tariff regime, trade restrictions are often applied selectively, targeting specific products rather than all imports from a given country. These measures rely on detailed trade classifications to enable product-level precision. To capture this granularity, we identify affected goods by tracking changes in tariff rates at the 10-digit level of the Harmonized System (HS), the international standard for classifying traded products. Our analysis draws on data from the Harmonized Tariff Schedule (HTS) revision archive, beginning with revision 10 from 2024 onward, which allows us to pinpoint HS10 codes that experienced tariff changes during this period.

Because our retail price data are organized according to the COICOP (Classification of Individual Consumption According to Purpose) system—commonly used in consumer expenditure statistics—we use a concordance to link HS codes to COICOP categories. Using this mapping, we can classify each COICOP category as either "affected" or "non-affected," depending on whether it includes at least one HS code that was subject to a tariff change.

3 Method: Price Index Construction

To analyze the effects of tariffs across different dimensions, we construct a set of custom price indices using micro-level data, using the methods described in (Cavallo, 2013). These indices differ in how products are grouped: in some cases, we classify goods by country of origin; in others, we group them into domestic versus imported, affected versus unaffected by tariffs. This flexible structure allows us to examine price dynamics along several axes and is particularly useful given the complexity and shifting scope of recent tariff announcements.

We begin by standardizing and cleaning the raw price data. Missing prices are replaced with the most recently available value for up to 90 consecutive days. Products with no observed prices for over 90 days are temporarily removed from the sample until they reappear. Extreme price changes are treated as outliers and excluded from index calculations.

To construct the daily price indices, we first compute price relatives at the product level—that is, the ratio of a product's price on a given day to its price on the last observed day. These relatives capture the daily rate of price change for each item. We then calculate the unweighted geometric mean of these price relatives across all products within a given

grouping (e.g., country of origin, product category). This yields a daily average price change for the group. The index is initialized at one in the earliest observation period and updated recursively by multiplying the previous day's index value by the current day's average relative. This chained matched-model approach allows us to capture cumulative price movements over time while accommodating product entry and exit. No adjustments are made for quality or seasonality.

3.1 Results

This section presents a set of selected graphs that illustrate key patterns in price dynamics across countries, product categories, and tariff exposures. These visualizations highlight representative trends observed in the analysis. In the subsections that follow, we provide additional details and context to aid interpretation of each plot.

3.1.1 Domestic vs Imported Goods

Figure 1 compares the price index of goods produced in the United States with those manufactured abroad. At this point, we are not distinguishing between affected and unaffected categories, but simply highlighting overall differences between domestic and imported goods.

Our data span from October 1, 2024 to April 16, 2025. During the first three months, imported goods show a decline of approximately 2 percentage points around the holiday season, while domestic goods fall by about one percentage point through early March. Given the composition of the sample and the use of a matched-model price index, a mild deflationary trend—particularly during the holidays—is expected. This pattern reflects seasonal discounting and turnover in product assortments, both of which are common features in retail pricing data.

The 2025 tariffs on Chinese goods first became binding on February 4, at a rate of 10%, but had little immediate effect on retail prices.[2] The situation changed on March 4—marked by a dashed vertical line in the figure—when the U.S. imposed 25% tariffs on imports from Canada and Mexico, along with an additional 10% tariff on Chinese goods. Immediately afterward, the prices of both imported and domestic goods increased by approximately 1.2 percentage points. The increase was similar in magnitude between the two groups, though slightly smaller for domestic products. After April 2, imported goods prices began to increase again at a higher and steadier rate, coinciding with the announcements of new tariffs on "Liberation Day".

[2]See Appendix Table A for a timeline of U.S. tariffs implemented in 2025.

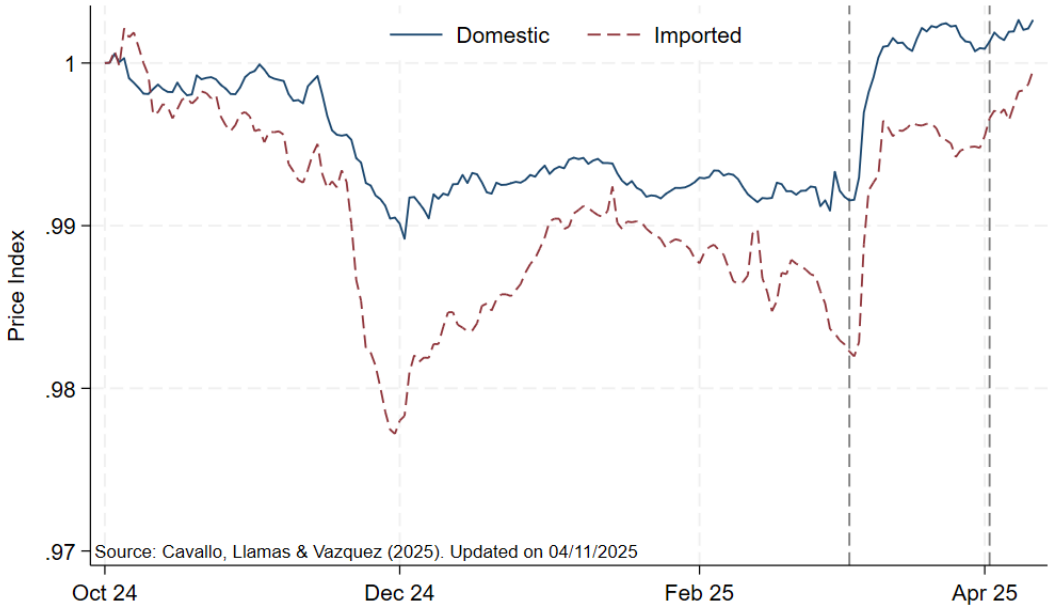

Figure 1: U.S. Retail Price Indices - Domestic vs Imported

Note: Data from two large U.S. retailers. Vertical lines denote major tariff events.

These findings are consistent with patterns observed during the first round of U.S. trade tensions in 2018–2019. In that earlier period, Cavallo, Gopinath, Neiman, and Tang (2021) documented relatively rapid price increases in certain product categories—particularly those facing large and highly visible tariffs such as washing machines—yet overall retail price increases were modest. The limited pass-through at the time suggested a range of short-run retailer adjustment mechanisms, including margin reductions, inventory front-loading, and trade diversion. Our current results similarly indicate that, in the immediate aftermath of new tariff measures, retail price responses remain small in magnitude relative to the size of the tariffs. However, the time horizon covered in this paper is much shorter—spanning only a few days and weeks following the policy change. The speed of these initial adjustments, despite their limited scale, suggests that retailers may be prepared to react quickly to policy shocks, even as uncertainty around the persistence and scope of the measures tempers the overall magnitude of their pricing responses.

In addition, similar price increases observed for domestic and imported goods suggest that tariffs have broader effects beyond directly targeted products. Several mechanisms could explain this pattern. First, as tariffs increase the cost of imported goods, retailers can anticipate a shift in consumer demand toward domestic alternatives. In expectation of this substitution, they may raise prices on U.S.-made products, particularly in categories where domestic and foreign goods are close substitutes (Flaaen, Hortaçsu, & Tintelnot, 2020). Second, many domestically produced items depend on imported inputs—such as components, packaging, or raw

materials—from countries subject to tariffs (Amiti, Redding, & Weinstein, 2019). Even if final assembly occurs in the U.S., local firms may adjust prices in anticipation of future cost pressures.

3.1.2 By country of origin

To examine how tariff effects differ across specific trading partners, we compare the evolution of price indices for products originating specifically from China, Mexico, Canada, and the United States. These were the first countries to be affected by tariffs in early 2025.

Figure 2 shows prices indices constructed using all available products for each of these countries. Once again, we see a seasonal drop in prices for imported goods around the holidays, affecting all three foreign countries by roughly the same magnitude.

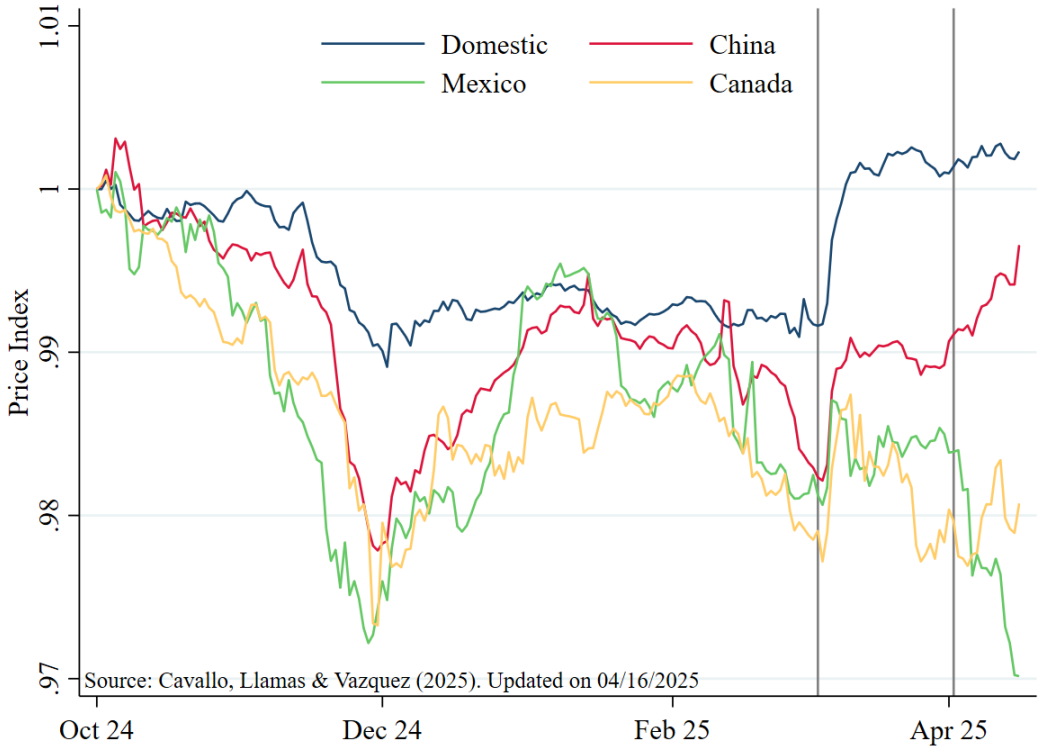

Figure 2: U.S. Retail Price Indices by Country of Origin

Note: Data from two large U.S. retailers. Vertical lines denote major tariff events.

Following the implementation of tariffs on March 4, some clear price increases can be seen in all countries. The magnitude of the increase is largest—and quite similar—for Chinese and Canadian goods, while prices for Mexican goods also rise, though to a slightly lesser extent. The main differences lie in the persistence of these increases. Prices of Chinese goods remain elevated and begin rising again in early April, while prices of Mexican and Canadian goods resume their downward trends during March. This divergence likely reflects a larger number of exemptions

(for example, for all USMCA-compliant goods) and the expectation that a trade agreement with these countries may soon be reached. This seems especially true in the case of Mexican goods, which have declined in recent weeks. In contrast, the price index for Chinese goods continued to rise steadily following the escalation of trade tensions and related announcements in the first weeks of April.

3.1.3 Domestic Prices in Affected and Unaffected Categories

We now combine data on the country of origin and HS code categories to distinguish between goods that are affected by tariffs and those that are not. At the time of writing, all imported goods in our sample are subject to at least the baseline tariff of 10%. However, we can differentiate domestic goods based on whether their COICOP subcategories have been directly targeted at the HS code level. This distinction is illustrated in Figure 3.

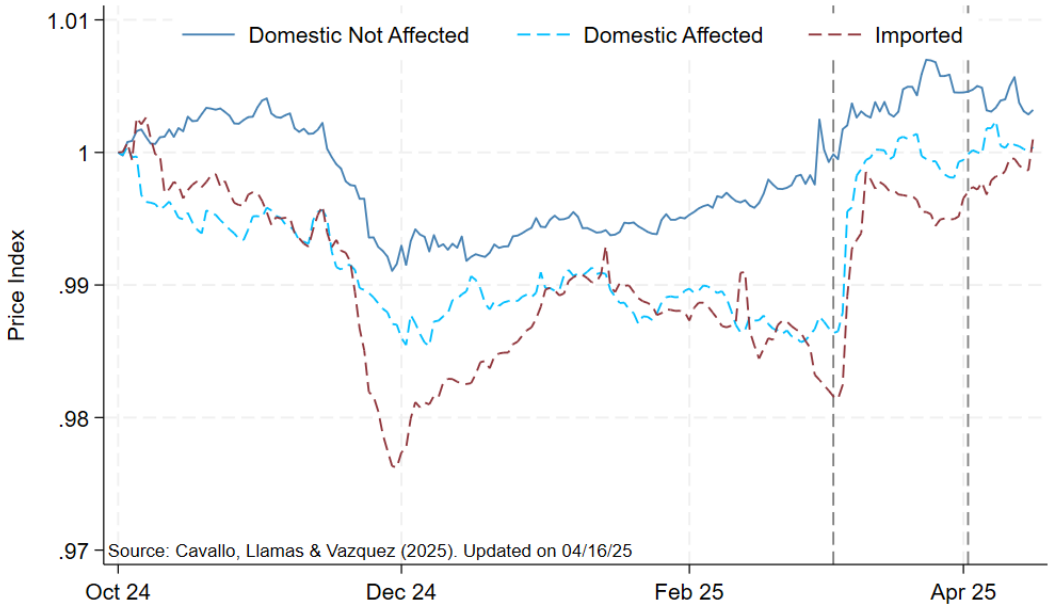

Figure 3: U.S. Retail Price Indices in Affected and Unaffected Categories

Note: Analysis restricted to categories identified as affected by tariff-related changes.

The results show that domestically produced goods in *affected* categories experience similar price increases to their imported competitors, while domestic goods in unaffected categories exhibit a more gradual price increase over time.

The gradual and sustained increase in prices of domestic goods in categories not directly affected by tariffs may reflect broader spillover effects within supply chains. Products formally exempt from tariffs might still rely on affected inputs, leading to indirect cost increases. Policy uncertainty itself can prompt precautionary pricing: firms may raise prices gradually in anticipation of future disruptions or further tariff expansions. Another possibility is strategic pricing

behavior: retailers could use the tariff shock as an opportunity to revise prices more broadly, either to preserve margins amid rising uncertainty or to maintain relative pricing structures across categories. Lastly, the price-setting processes—whether algorithmic or human—may not be fully equipped to isolate tariff-exposed items at the level of granularity available in our data, leading to broader, less targeted price responses.

4 Conclusion

This paper provides a timely analysis of the short-run impact of the 2025 U.S. tariffs on consumer prices by leveraging a novel combination of high-frequency retail price data, detailed country-of-origin information, and tariff classifications. Through custom price indices and targeted visualizations, we capture how prices evolved across affected and unaffected categories, and between imported and domestic goods. Our findings highlight the nuanced and immediate effects of trade policy changes, revealing variation in price dynamics that are not visible in aggregate statistics.

Our analysis reveals that the announcement of U.S. tariffs prompted rapid but modest price adjustments, with the extent of these changes varying by product origin and category. The most pronounced price increases occurred among imported goods. However, domestic products also saw similar gains, likely driven by expectations of rising input costs and shifts in consumer demand. Notably, we observe differences across countries: price increases for Chinese goods were both larger and more persistent than those for products from Canada and Mexico, where retailers may have viewed the tariffs as more temporary or less likely to be sustained. Importantly, price pressures extended beyond directly affected categories, with even unaffected sectors showing gradual increases—suggesting broader strategic pricing and supply chain spillovers. These findings underscore the wide-ranging impact of trade policy, which can influence retail prices far beyond the specific goods targeted by tariffs.

This paper is being written as new announcements are made on a daily basis. As trade policies continue to evolve, we will expand our analysis to reflect new developments. Future iterations will not only update and expand the dataset, but also incorporate refined tracking methods to produce more accurate, timely insights. Our goal is to support evidence-based decision-making by policymakers, businesses, and consumers navigating the shifting landscape of international trade.

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Appendix

A Timeline of U.S. Tariff Measures Enacted in 2025

Date	Description
February 4, 2025	The United States imposes a 10% tariff on all imports from China.
March 4, 2025*	The United States implements the following tariffs: • 10% on imports of Canadian energy products, including oil, natural gas, and electricity. • 25% on all other imports from Canada. • 25% on all imports from Mexico. • Increases tariffs on all imports from China from 10% to 20%.
March 4, 2025	The United States exempts imports from Canada and Mexico satisfying USMCA rules of origin requirements, and lowers the tariff on potash to 10%.
March 12, 2025	The U.S. enforces 25% tariffs on steel, aluminum, and derivative products, as previously announced on February 10.
April 2, 2025*	"Liberation Day" announcements: baseline 10 percent tariff on nearly all countries, with additional reciprocal tariffs for countries identified as contributing to sustained U.S. trade deficits.
April 3, 2025	The 25% tariffs on automobiles, announced on March 26, take effect. Tariffs on automobile parts are delayed but scheduled to be implemented no later than May 3, 2025.
April 10, 2025	A baseline 10% tariff on imports from nearly all countries goes into effect, as part of the measures announced on April 2. China's tariffs are raised to 125%
April 11, 2025	Exemptions announced for a list of products that contain semiconductors, including smartphones and other consumer electronics.

Source: Trump's Trade War Timeline 2.0: An Up-to-Date Guide (2025), Peterson Institute for International Economics.

*Note: * These events are marked with vertical lines in some of the figures throughout the paper.*