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Kalina Manova, Dennis Novy, Thomas Sampson, Aaron Tang

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## Authors

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Kalina Manova, Dennis Novy, Thomas Sampson, Aaron Tang

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ROCKWOOL Foundation Berlin –  
Institute for the Economy  
and the Future of Work

Gormannstrasse 22, 10119 Berlin  
Tel: +49 (0) 151 143 444 67  
E-mail: [info@rfberlin.com](mailto:info@rfberlin.com)  
Web: [www.rfberlin.com](http://www.rfberlin.com)



# Tariff Confusion\*

Kalina Manova

*University College London,  
CEPR, CEP, CESifo*

Dennis Novy

*University of Warwick,  
CEPR, CEP, CESifo*

Thomas Sampson

*London School of Economics,  
CEPR, CEP, CESifo*

Aaron Tang<sup>†</sup>

*University College London*

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## Abstract

US trade policy in 2025 was unprecedented in the frequency, complexity and volatility of tariff announcements. This paper presents evidence that the resulting policy environment reduced trade flows because of confusion over current tariff levels. We build a new US Tariff Announcement Database for 2025 from US presidential executive orders and proclamations. For each origin country, product and month, we calculate US statutory tariffs and propose novel indicators of tariff confusion: the number of relevant announcements, the number of possible tariff calculations arising, and bounds on possible tariff miscalculation. We show that both tariff increases and tariff confusion reduced US imports during 2025, with confusion more than doubling the impact of tariffs. Moreover, tariff confusion was (i) persistent, and more damaging at higher tariff levels; (ii) mediated through lower import quantities, with little effect on import prices; and (iii) less detrimental for relationship-specific goods and origin countries with stronger trust in foreigners. Our results highlight previously unexplored consequences of the manner in which trade policy changes are implemented.

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<sup>†</sup>Manova: k.manova@ucl.ac.uk. Novy: d.novy@warwick.ac.uk. Sampson: t.a.sampson@lse.ac.uk. Tang: aaron.tang.20@ucl.ac.uk.

# 1 Introduction

Recent years have seen not only a rise in trade protectionism, but also an increase in the volatility of trade policy changes. Most dramatically, US trade policy in 2025 was unprecedented in the frequency, complexity and changeability of policy announcements. Between February and December 2025, 53 announcements introduced, delayed, reinstated or changed tariffs, with different countries and products variably affected or exempted in each case. Clarity about statutory tariffs was tested, with the US International Trade Commission (USITC) no longer providing a consolidated tariff schedule, and instead listing new tariffs under a separate rubric rather than organized as usual by product (for Most-Favored-Nation rates) or by country (for preferential trade agreements).

In an environment with frequent tariff revisions, firms may become confused about the taxes due on cross-border transactions. Indeed, business reactions across the globe indicated rising confusion during 2025. In April, *Fortune* ran the headline “Tariffs mean an economic hit for US firms – but also confusion and paperwork.” Reportedly, half the emails to customs broker Logistics Plus were “from importers scrambling to get shipments into the country as a crush of new levies came into effect,” and half “from businesses simply trying to figure out what they had to do.” By June, *Investopedia* alerted readers that “the economy is slowing down as companies can’t figure out the rules of this tariff game.” In July, *Reuters* reported on the “tariff deadline delay bring[ing] hope, confusion to trade partners, businesses.” In August, *CNBC* flagged that “confused and concerned, CEOs get to grips with [the] new tariff regime [and] a new era of tariff complexity”, and quoted the CEO of German insurance giant Allianz, “If you are not confused, I don’t know what confuses a human being.” The Cato Institute capped the year in December with “Welcome to tariff complexity hell [...] Complexity is a tax, and today US companies are paying through the nose.”<sup>1</sup>

Motivated by these anecdotes, we propose that *tariff confusion* about current policy can have first-order detrimental effects on international trade, in addition to the well-established disruptive effects of actual tariff increases and uncertainty about future tariffs. We develop the first indicators of tariff confusion, document its impact on trade, and inform mechanisms through which it operates in the context of US trade policy in 2025. We construct a new US Tariff Announcement Database (USTAD) that we use to compute monthly US statutory tariffs and four novel measures of tariff confusion by origin country and product: the number of relevant announcements, the number of possible tariff calculations arising from these announcements, and two bounds on possible tariff

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<sup>1</sup>Links to articles: i) [Fortune](#), ii) [Investopedia](#), iii) [Reuters](#), iv) [CNBC](#), and v) [The Cato Institute](#). Appendix C collates selected news stories around major US policy announcements.

miscalculation. We show that both higher US import tariffs and greater confusion about tariff levels significantly reduced US imports during 2025, with confusion more than doubling the impact of higher tariffs. Moreover, tariff confusion was persistent and more damaging at higher tariff levels; mediated through lower import quantities, with little effect on import prices; and less disruptive for relationship-specific goods and origins with stronger trust systems. Our findings point to novel effects of trade policy resulting from the manner in which it is implemented.

Our starting point is to introduce the new concept of *tariff confusion*, or confusion about the contemporaneous tariff applicable to imports of a specific product from a particular origin country at a given point in time. We explicitly focus on *confusion* about *actual current* tariff levels, as distinct from *uncertainty* about *hypothetical future* tariff levels, which the prior literature has explored (e.g. Handley and Limão, 2017). Confusion about contemporaneous tariffs can be seen as a manifestation of trade policy uncertainty in real time, with US trade policy in 2025 featuring arguably the first episode of widespread tariff confusion in a modern economy.

Our premise is that periods of frequent and complex trade policy announcements require firms to continuously *monitor* and *process* the arrival of new information, and that this information problem becomes more difficult as announcements accrue over time. Tariff confusion may thus arise because foreign exporters and/or US importers miss an announcement altogether; do not recognize its relevance to their origin-product market; or struggle to determine how it affects the import duty payable given the complexity and changeability of tariff policy.

Two examples demonstrate the scope for significant confusion about the rise in US statutory tariffs relative to January 2025. These examples illustrate not only the frequency of policy changes, but also the complexity of the stacking and exemption rules used to determine tariffs across countries within a product, within countries over time, and across products.

Take first US automobile imports in June 2025. At that point, cars were exempt from the global 10% reciprocal tariff introduced in April 2025. For the EU, cars were subject only to the blanket 25% tariff on automobiles. For Canada, USMCA-compliant cars faced no duty, while non-compliant cars incurred the flat 25% tariff on Canada but not the 25% car duty. For China, cars received both the 25% tariff on automobiles and the 20% China “fentanyl” tariff, for a total of 45%.

Consider next US imports of shoes from China. In the span of 40 days between April 5 and May 14, the additional duty over the Most Favored Nation (MFN) baseline moved from 20% (“fentanyl”) to 30% (“fentanyl” + 10% global reciprocal tariff), then 54% (“fentanyl” + 34% China tariff), then 104% (“fentanyl” + 84% China retaliatory tariff), then 145% (“fentanyl” + 125% second China

retaliatory tariff), and finally back to 30% (“fentanyl” + 10% global reciprocal tariff).

Consistent with the presence of tariff confusion, two survey snapshots of 4,400 firms in the US and Canada in March and April 2025 reveal that many were imperfectly informed about the statutory tariffs in place (Atkin et al., 2025). For example, 45% of respondents believed that tariffs on Chinese imports were below 20% in March, after announcements that had set the minimum duty to 20% above MFN, or about 42% on average across products. Moreover, 87% of firms underestimated the number of announcements that had postponed or rolled back previously announced tariffs. Of note, 40% voiced uncertainty about future tariffs, but this perception of future uncertainty remained stable throughout April even as multiple tariff announcements piled up.

To study tariff confusion, we begin by recording all US trade policy announcements in 2025 made through presidential executive orders and proclamations in our new US Tariff Announcement Database. We extract from each announcement the information needed to calculate the monthly statutory US import tariff by origin country and HTS 10-digit product. We also exploit USTAD to construct four novel indicators of tariff confusion that aim to capture the difficulty of calculating statutory tariffs during a period of turbulent trade policy. We proxy the stock of information that required *monitoring* with the cumulative number of announcements relevant to a given country-product made during 2025. As for *processing* policy updates, we proxy the range and scope for potential inaccuracy in firms’ tariff calculations with the number of possible announcement combinations they may have tracked, the highest possible tariff they may have computed, and the difference between this worst-case scenario and the actual statutory tariff.

Armed with these measures, we evaluate the short-term impact of US tariff changes and tariff confusion on monthly US imports. Tariff changes and tariff confusion are only weakly correlated, which allows us to identify their independent effects from their differential incidence across countries, products, and time. We examine the 2024-2025 period to compare the first full year of the second Trump administration to the year preceding it. Our sample thus ends before the US Supreme Court ruled in February 2026 that tariffs imposed in 2025 under IEEPA were unlawful – a ruling that generated further policy changes and confusion.

We estimate two complementary specifications. First, a levels regression that conditions on country-product and product-month fixed effects, which absorb origins’ time-invariant supply potential along with US supply and demand shocks. This specification isolates the contemporaneous effects of US trade policy on import levels using changes in tariffs and tariff confusion within country-products over time and variation across countries within a product-month. Second, a 12-

month-differences regression that includes the same fixed effects, which now account for shocks to country-product supply potential and growth in US supply and demand conditions. The differences estimates capture the effects of US trade policy on short-run import growth.

We find that both higher US import tariffs and greater confusion about tariff levels significantly reduced US imports during 2025. We estimate that a 10% higher import duty led to a 3.3% – 4.9% fall in monthly imports on average across origin countries and products, implying a relatively low short-run tariff elasticity. Conditional on the statutory tariff, an increase in any one of our four tariff confusion measures reduced imports, with each additional tariff announcement lowering US imports by 3.0% on average. Moreover, the elasticity of US imports with respect to the statutory tariff is of the same order of magnitude as that with respect to the gap between the highest possible tariff firms may have computed and the actual tariff. Very similar findings obtain in the more stringent differences specification and across a battery of robustness checks.

We use these baseline results to quantify the fall in US imports due to changes in US trade policy in 2025. We conclude that, as of December 2025, higher tariff barriers were responsible for 4%–6% lower US imports for the average origin and product relative to December 2024. Cumulative confusion about prevailing tariffs led to a substantial additional disruption of 7% – 12% that would not have occurred had tariffs been raised once and for all in a clear policy statement.<sup>2</sup>

We also assess the heterogeneous incidence of US trade policy across partner countries. For each country, we consider the highest US tariff it faced during 2025 and the implied fall in exports that month due to both statutory tariff changes and tariff confusion. The average country exported 13% less to the US at its peak tariff, of which 7% was solely due to confusion arising from multiple announcements. While this peak policy impact varies dramatically from 0.4% to 57% across countries, the contribution of tariff confusion is always substantial.

Next, we conduct a series of exercises to inform the mechanisms through which US trade policy shaped international trade in 2025. First, we show that the consequences of tariff confusion were neither transitory nor dampening over time, with both recent and 3-month lagged confusion exerting large effects. Moreover, confusion was more damaging at higher tariff rates, and its impact cannot be attributed to uncertainty about future trade policy as proxied by Liberation Day tariffs as a threat point. This evidence suggests that foreign exporters and US importers curtailed trade activity as they were not able to quickly update their beliefs about statutory tariffs and feared that

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<sup>2</sup>Our empirical design captures short-term effects during an unusual period of intensive trade policy changes, rather than medium- to long-run effects. We also identify import declines relative to a hypothetical origin-product with no tariff changes or confusion, rather than general equilibrium effects.

tariffs may exceed cut-off levels for profitable trade.

Second, the decline in US imports during 2025 was driven almost entirely by lower import quantities. We cannot reject the hypothesis of complete pass-through of higher tariffs to tariff-inclusive import prices. Similarly, only 10% – 15% of the effect of tariff confusion operated through lower tariff-exclusive prices. These patterns indicate that US importers bore the burden of tariff increases and tariff confusion during 2025. We also find that, on the extensive margin, tariff hikes prompted the US to altogether stop importing from some country-product origins, resulting in higher month-on-month and year-on-year exit rates.

Lastly, we examine heterogeneity across products and countries to inform the role of buyer-supplier relationships at a time of dynamic trade policy. We find that US imports of products that are differentiated, require more relationship-specific investments, or have stickier buyer-supplier relationships were more resilient to tariff confusion. This is consistent with a role for sunk costs of customization, relationship trust and reputation in weathering confusion shocks. It also points to the importance of buyer-supplier relational contracting during policy turbulence. In line with this, US imports from countries with more trust in foreigners were less affected by tariff confusion.

Our results provide new evidence showing that the manner in which trade policy changes are implemented shapes their consequences. This evidence contributes to several strands of research into trade policy, uncertainty, and buyer-supplier relationships. Most directly, we advance the literature on two recent “trade wars”: the US-China trade tensions of 2018-2019, and the ongoing US trade policy developments of 2025-2026. An extensive literature has established that the 2018-2019 episode significantly reduced US imports from China, with almost complete pass-through to tariff-inclusive import prices and partial pass-through to retail prices (Amiti et al., 2019, 2020; Fajgelbaum et al., 2020; Cavallo et al., 2021). Yet aggregate imports held strong, as US firms reallocated supply chains and import shares towards other origin countries, some of which intensified their own sourcing from China (Freund et al., 2024; Alfaro & Chor, 2025). Recent work further explores the reorganization of global supply chains along geopolitical lines (Aiyar et al., 2023; Bonadio et al., 2025; Gopinath et al., 2025).

A smaller number of papers have begun to study the effects of the 2025-26 trade policy changes. Early studies used quantitative trade models to predict the welfare consequences of the Liberation Day tariffs, were they to be implemented (Auray et al., 2025; Ignatenko et al., 2025; Rodríguez-Clare et al., 2025). Looking at the realized effects of the 2025 tariffs, Fajgelbaum and Khandelwal (2026) explore whether US tariffs served their stated objectives, estimate their short-run impact

on US imports, and draw welfare conclusions. Similarly, Gopinath and Neiman (2026) examine how shipping lags, exemptions, and enforcement gaps have kept actual applied tariffs at only half of the announced statutory rates, and thereby moderated the impact on US imports. Both papers present evidence consistent with our findings of declining US imports due to higher tariffs, and report comparable tariff pass-through to duty-inclusive prices of 80% – 100%. Using store microdata, Cavallo et al. (2025) in turn observe 20% pass-through to retail prices.

We make three contributions to this emerging literature. First, we assemble the USTAD database, and provide some of the first empirical estimates of the effects of US tariffs on US imports, import price pass-through, and import exit. Second, our main contribution is to propose and examine a previously unexplored mechanism through which uncertainty about the current state of trade policy affects international trade: tariff confusion. We present novel measures of tariff confusion, and document that tariff confusion had sizable, negative effects on US imports in addition to the impact of changes in statutory tariffs. Third, we identify important roles for relationship specificity, stickiness and trust in shaping the response of US imports to tariff confusion.

We also contribute to the literature on trade and uncertainty in general (Novy & Taylor, 2020) and trade policy uncertainty in particular (TPU, see Handley and Limão, 2022). While we study confusion about current statutory tariffs during a period of dynamic policy interventions and its short-term effects, this literature has examined uncertainty about future trade policy and its medium- to long-term effects. For example, Pierce and Schott (2016) and Handley and Limão (2017) establish how WTO entry stimulated China’s exports to the US by removing uncertainty over the annual renewal of its Normal Trade Relations status. On the other hand, Freeman et al. (2025) find limited effects of a sudden rise in uncertainty about future UK-EU trade barriers on UK trade after the Brexit Referendum, with Brexit effects manifesting only after (non-tariff) barriers increased with the new Trade and Cooperation Agreement. In concurrent work, De Souza et al. (2026) argue that the announcement and postponement of the Liberation Day tariffs created uncertainty over future tariff rates. They show that US imports subsequently shifted towards countries with lower Liberation Day tariffs. Our results for current confusion are robust to controlling for this measure of future TPU, even when the two concepts may overlap in the unusual 2025 environment.

In highlighting the consequences of confusion for trade activity, we also speak to the literature on bounded rationality. Simon (1955) first introduced this concept in terms of “computing capacity”, which resembles firms facing frequent, complex tariff announcements that result in confusion in our context. Theoretical and empirical research has shown that firms can engage in obfuscation to con-

fuse consumers in order to raise prices, for instance in e-commerce and mortgage markets (Gabaix & Laibson, 2006; Spiegler, 2006; Ellison & Ellison, 2009; Ellison & Wolitzky, 2012; Woodward & Hall, 2012). In comparison, the natural experiment of US trade policy provides an exogenous shock to confusion in our analysis.

Finally, we advance research on the role of customization and contractual frictions in buyer-supplier relationships. This literature has emphasized how the need for relationship-specific investments creates hold-up problems when contracts are incomplete or unenforceable. This shapes the dynamics of relationship trust and survival, as well as aggregate trade patterns. For example, Nunn (2007) shows that countries with stronger contract enforcement have a comparative advantage in sectors intensive in relationship-specific investments. Martin et al. (2026) in turn demonstrate that episodes of heightened aggregate uncertainty affect trade primarily through fewer firm links, impeding new links in sectors with high relationship stickiness and disrupting existing links in sectors with low relationship stickiness. Our findings reveal that relationship specificity and stickiness also matter for firms' response to tariff shocks and tariff confusion, echoing evidence in Alfaro and Chor (2025) that US imports of relationship-specific and sticky goods responded more slowly to the 2018-2019 trade war. Separately, the role of trust in foreigners we uncover is consistent with the conclusion in Manova et al. (2025) that buyers and suppliers in global production networks face higher transaction costs and benefit more from intermediation services when trust levels are low.

The rest of the paper is organized as follows. Section 2 reviews US trade policy developments in 2025, describes the new US Tariff Announcement Database, and introduces the concept and measures of tariff confusion. Section 3 develops our empirical strategy. Section 4 presents the baseline estimated effects of US tariffs and tariff confusion on US imports. Section 5 provides additional evidence to inform the mechanisms at play. The last section concludes.

## 2 US Tariffs and Tariff Confusion in 2025

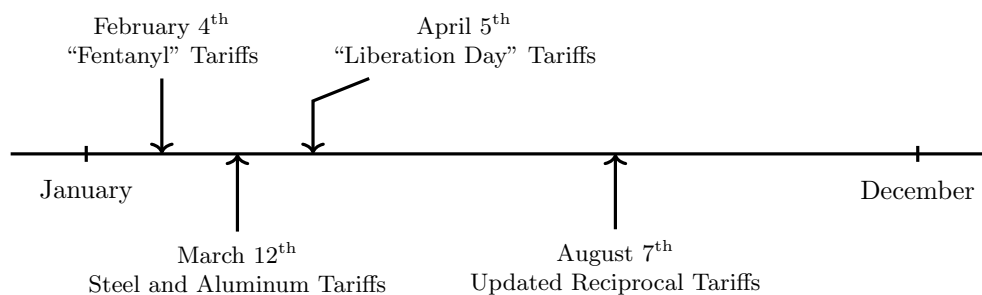
This section describes US tariff policy in 2025, and outlines how we measure tariffs and tariff confusion. We begin by briefly reviewing the timeline of US tariff changes during 2025. We then introduce a new database of US trade policy announcements in 2025, which we hand-collect from US presidential executive orders and proclamations and label the *US Tariff Announcement Database* (USTAD). We use this database to calculate monthly US statutory tariffs and to develop novel, high-frequency measures of tariff confusion.

## 2.1 US Trade Policy Timeline

US trade policy in 2025 was unprecedented in the frequency, nature and complexity of tariff interventions.<sup>3</sup> For example, the US Harmonized Tariff Schedule (HTS) that sets out product-level import tariffs saw 32 revisions in 2025, which is three times the annual average of 10.5 over the 2023-2024 period and almost twice that of 18.5 over the 2018-2019 trade war.<sup>4</sup>

Tariffs were enacted through two US federal laws, the International Emergency Economic Powers Act (IEEPA) and Section 232 of the Trade Expansion Act, which were used for origin-based and product-based duties, respectively. Given the vast number of tariff announcements, we highlight four major events to illustrate some of the key changes that occurred during 2025 (see Figure 1).

Figure 1: Key US Tariff Announcements in 2025



The first major set of tariffs introduced were the so-called “fentanyl” tariffs on China, Canada and Mexico implemented through IEEPA. For China, on February 4<sup>th</sup> all imports became subject to an additional 10% tariff stacked on top of any tariffs previously imposed through Section 301. For Canada and Mexico, although announced at the same time, tariffs were only implemented as of March 4<sup>th</sup>. All products that were not USMCA-compliant were subjected to an additional 25% tariff, while USMCA-compliant goods remained tariff-free.

A second major deck of tariffs were imposed on steel and aluminum products on March 12<sup>th</sup>. These tariffs were implemented through Section 232 of the Trade Expansion Act, which authorizes the President to set tariffs under national security concerns. This announcement replaced any previous tariffs on steel and aluminum imports via Section 232, with a uniform additional tariff of 25% on top of any MFN tariff.

<sup>3</sup>The Peterson Institute and the Global Trade Alert provide useful tariff trackers respectively at <https://www.piie.com/blogs/realtime-economics/2025/trumps-trade-war-timeline-20-date-guide> and <https://globaltradealert.org/blog/US-Tariff-Measures-Inventory>.

<sup>4</sup>Revisions occur when new tariffs are introduced or old tariff policies updated, such as a change in the tariff rate or applicable set of products.

A third major wave of tariffs arrived on April 5<sup>th</sup>, when an extensive list of country-specific rates were announced as the “Liberation Day” package. All countries were to face at least a 10% import duty, with many receiving substantially higher duties. A few days later, these country-specific tariffs were postponed for 90 days, and later further deferred to August 1<sup>st</sup>. During this period, all countries would face the minimum 10% tariff, and have the opportunity to pursue trade negotiations with the US. If a deal could be struck, the country would remain at the minimum 10% above MFN. Otherwise, it would face a higher tariff. Some countries, notably China, subsequently engaged in a retaliatory process, while others reached trade agreements and carve-outs.

The fourth and final major round of tariffs arrived on August 7<sup>th</sup> after the Liberation Day tariff postponement expired. The initial country-specific tariff rates announced in April were modified and reflected all successful trade negotiations with the US. For example, the announced EU Liberation Day tariff had been set at 20%. After negotiations with the US, the August reciprocal tariff on the EU was capped at 15%.<sup>5</sup>

In addition to these four major tariff events, many more announcements introduced, delayed, reinstated, or changed tariffs on varying countries and products. It was not just the sheer number of tariffs announced that was unique to US trade policy in 2025, but also the complex rules embedded in them that dictated which tariffs were in effect. At face value, origin-based tariffs implemented through IEEPA appeared to be applicable to all products. However, this was not the case, as certain products were exempted from these tariffs, and the exempted list of products varied across announcements.<sup>6</sup> Furthermore, over the course of the year, different stacking rules were formulated to determine which tariffs compounded. For instance, if a US firm imported a steel product from China in May 2025, the stacking rules implied that this shipment would be subject to the China “fentanyl” and steel tariffs but not the Liberation Day tariffs. By contrast, if the steel product were imported from Canada, then only the Canada “fentanyl” tariff would apply.<sup>7</sup>

## 2.2 Tariff Announcements and Statutory Tariffs

The pace and complexity of US trade policy throughout 2025 mean that examining its impact requires careful tracking of policy announcements and calculation of applicable tariffs. We construct the statutory US import tariff  $Tariff_{cpt}$  on origin country  $c$  and HTS 10-digit product  $p$  in month  $t$

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<sup>5</sup>EU products with an MFN rate below 15% were subjected to an additional tariff, such that the MFN and August reciprocal rates summed to 15%. EU products with an MFN rate above 15% were not subject to an additional tariff.

<sup>6</sup>For example, smartphones were exempted from the Liberation Day tariffs.

<sup>7</sup>For full details of the stacking rules, see Appendix B.1.1.

from two data sources: public information from the US International Trade Commission (USITC), and our novel hand-collected US Tariff Announcement Database (USTAD).

For the period prior to February 2025, we obtain comprehensive panel data on the schedule of statutory US import tariffs by country and product,  $Tariff_{cpt}$ , using the HTSUS from the USITC.<sup>8</sup> This database reports the Most Favored Nation (MFN) or the non-normal trading relations (non-NTR) rate for a given product, as well as country-product specific tariffs that account for bilateral or multilateral trade agreements (e.g. USMCA after 2020 and China tariffs in 2018 under Section 301) and product-specific exemptions and proclamations (e.g. steel and aluminum tariff in 2018 and solar panel tariffs in 2022 under sub-heading 99). We construct statutory tariffs  $Tariff_{cpt}$  accounting for any such departures from MFN. The USITC data does not account for other tariff measures such as anti-dumping duties.

Starting in February 2025, the USITC listed new US tariffs under sub-heading 99 rather than by product. US statutory tariffs by country-product at any point in time thus reflected a combination of the base USITC rate above as of January 2025 and a series of tariff impositions and exemptions announced as US presidential executive orders and proclamations.

We consistently hand-collected, digitized, and systematized all formal US trade policy announcements made in presidential executive orders and proclamations during 2025 in the new USTAD. In total, we record 53 announcements that pertained to tariffs on 233 origin countries and 18,854 different HTS-10 products. Appendix D provides a brief overview of these announcements. That it is 12 pages long yet far from comprehensive is indicative of the degree of tariff confusion that firms, trade consultants, customs agents, and economic analysts alike might experience. Our database does not cover tariff announcements made through channels other than presidential executive orders and proclamations, such as tariff mentions on social media.

We track three dimensions of tariff announcements in USTAD, and then use them to build a panel of monthly US statutory tariffs by origin and product over February-December 2025. First, US trade policy announcements sometimes covered imports from specific countries regardless of product; sometimes imports of specific products regardless of origin; and sometimes specific origin-product pairs. For each announcement  $a$  in month  $t$ , we therefore create a binary variable  $I_{acpt}$  that indicates whether it is relevant to US imports of product  $p$  from country  $c$ . For example,  $I_{acpt} = 1$  for all countries  $c$  for  $p = \text{aluminum products}$  subject to tariffs announced in March 2025, while

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<sup>8</sup>Tariff changes are often introduced in the middle of the month. In those instances, we compute a weighted average monthly tariff based on the number of days tariffs were active.

$I_{acpt} = 1$  for specific products  $p$  that were announced exempt from tariffs on  $c = \text{Canada}$ . Second, tariff announcements included both upward and downward revisions. We demarcate this with two additional indicators,  $Up_{acpt}$  and  $Down_{acpt}$ , where  $I_{acpt} = Up_{acpt} + Down_{acpt}$ .

Table 1: Summary Statistics for US Trade Policy in 2025

Sample period:	January 2025 – December 2025					December 2025				
	Mean	Std.Dev	p10	Median	p90	Mean	Std.Dev	p10	Median	p90
<i>Tariff</i>	0.17	0.18	0.00	0.14	0.37	0.20	0.15	0.00	0.15	0.45
$\Delta$ <i>Tariff</i>	0.12	0.15	0.00	0.10	0.30	0.16	0.14	0.00	0.15	0.35
<i>Tariff</i> <sup>app</sup>	0.15	0.16	0.00	0.10	0.37	0.20	0.17	0.00	0.15	0.49
<i>#Announce</i>	2.79	2.23	0.00	3.00	6.00	4.33	2.13	1.00	4.00	8.00
<i>#Up</i>	2.05	1.61	0.00	2.00	4.00	3.00	1.32	1.00	3.00	5.00
<i>#Down</i>	0.74	0.93	0.00	1.00	2.00	1.33	1.27	0.00	1.00	2.00
<i>TariffMess</i>	33.04	137.73	1.00	8.00	64.00	79.15	236.69	2.00	16.00	256.00
<i>TariffMax</i>	0.33	0.38	0.00	0.24	0.70	0.45	0.41	0.15	0.30	0.85
<i>TariffMiss</i>	0.16	0.27	0.00	0.09	0.36	0.25	0.34	0.00	0.12	0.70
<i>LibDayTariffGap</i>	0.11	0.17	0.00	0.00	0.25	0.14	0.18	0.00	0.10	0.27

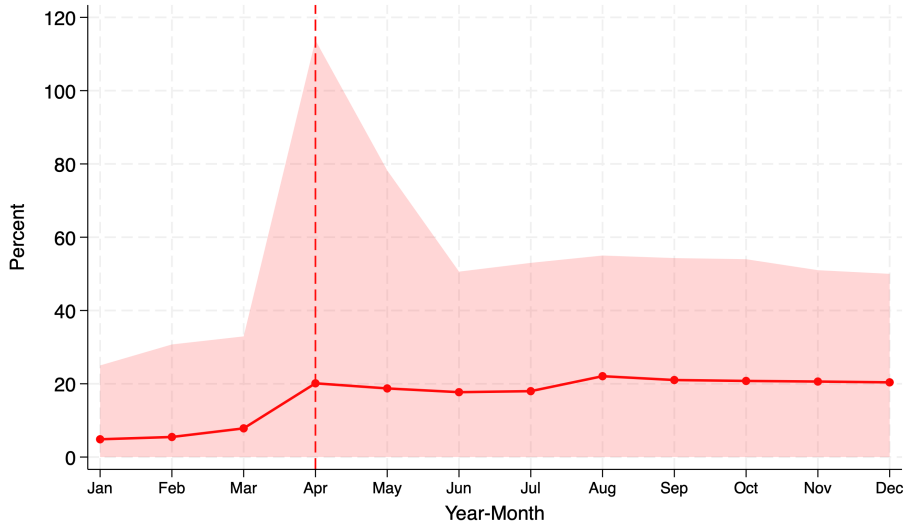
*Notes:* This table provides summary statistics for key US trade policy indicators across origins, products and months in 2025.  $\Delta$  is the 12-month change. All variables are defined in the text. *TariffMess* is divided by 1,000.

Lastly, tariff announcements sometimes replaced previously announced tariffs, and sometimes stacked on top of previous announcements. For instance, a 10% stackable tariff on top of an existing 50% tariff would add up to 60% = 50% + 10%. We process this quantitative and qualitative information, record the incremental change in tariffs  $\Delta$ *Tariff*<sub>acpt</sub>, and manually calculate the US statutory tariff *Tariff*<sub>cpt</sub> for February-December 2025.

Table 1 provides summary statistics on the US statutory import tariff across origins and products during January-December 2025. US tariffs averaged 17% over this period, with a standard deviation of 18% in the panel. Figure 2 in turn plots the evolution of the average tariff across country-product pairs over time. The average tariff increased from 4.9% in January 2025 to 20% in December 2025. A clear spike is visible around Liberation Day in April 2025, after which the average rate settles with minor fluctuations and only a moderate uptick in August 2025. The wide interquartile band around this average, however, highlights the sizable dispersion in tariff incidence across origins and products at any given point in time. In April 2025, for example, this band spans the 0% – 114% range around a mean of 20%.

As an alternative, we also use US Census Bureau data to compute the applied US tariff rate as the ratio of the calculated tariff revenue to the FOB import value by country-product-month (*Tariff*<sup>app</sup>). Figure 3 plots the average statutory US tariff in 2024 and 2025 from our database

Figure 2: US Statutory Tariffs and Interquartile Range in 2025



Notes: This figure tracks the monthly average and interquartile range of US import tariffs across origin-HTS10 product pairs in 2025.

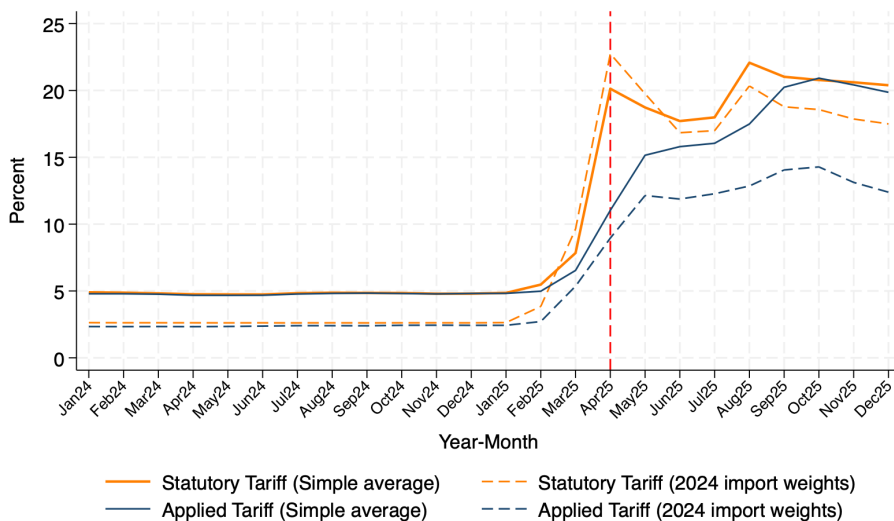
and the average applied tariff calculated from Census Bureau data. For both variables, we plot the simple unweighted average across origins and products and a weighted average using 2024 import weights. The two measures track each other closely during 2024, but diverge from February 2025 onward, with the statutory tariff rising more quickly than the applied tariff. At the end of 2024, both tariff measures stood at 4.8% using the simple average. By April 2025, the statutory tariff had increased to 20% compared to the applied tariff of 11%. This discrepancy arises in part because tariffs are in principle charged based on the policy stance at the time of shipment rather than arrival, but it is also suggestive of administrative confusion about US tariff levels during 2025.

### 2.3 Tariff Confusion

We use our USTAD to construct measures of potential confusion over US tariffs in 2025. We think of tariff confusion  $Confusion_{pct}$  as confusion during month  $t$  about the contemporaneous statutory US tariff applicable to imports of product  $p$  from country  $c$ . We explicitly focus on *confusion* about *actual current* tariff levels, as distinct from *uncertainty* about *hypothetical future* tariff levels. We discuss the relationship between confusion and uncertainty in the next subsection.

The premise of the confusion measures is that, unlike during times of stable trade policy, periods of frequent, unpredictable and complex trade policy announcements require firms to continuously *monitor* and *process* the arrival of new information. Confusion about prevailing tariff rates can

Figure 3: Average US Statutory and Applied Tariffs in 2024-2025



Notes: This figure tracks the monthly average US statutory (orange) and applied (blue) import tariffs across origin-HTS10 product pairs in 2024-2025. Solid (dashed) lines report simple (2024-imports-weighted) averages.

therefore arise for several reasons. Firms may altogether miss an announcement, or overlook an announcement’s relevance to their home country and product (for exporters to the US) or their source country and product (for importers in the US). Even when firms are aware of a relevant announcement, they may struggle to determine exactly how it affects the import duty given the complexity and changeability of tariff coverage, stacking, and up-down reversals.

We posit that firms’ information acquisition and processing problem becomes progressively more difficult as more announcements arrive and cumulate over time. This motivates four measures of tariff confusion that capture the extensive margin of announcement arrival and the intensive margin of announcement implications. We believe these measures can effectively reflect confusion over short horizons of policy turbulence, and discuss confusion persistence and belief updating over the longer run in Section 5.1. We set  $Confusion_{pct} = 0$  from January 2023 until the first trade policy interventions under the Trump administration in February 2025.

Our first measure of  $Confusion_{pct}$  aims to gauge the flow of trade policy information that needs monitoring. We proxy confusion about the US tariff on product  $p$  from country  $c$  at time  $t$  with the cumulative number of relevant announcements that have been made up to that month,  $\#Announce_{pct} = \sum_{t'=t_0}^t I_{acpt'}$  where  $t_0$  denotes February 2025.

Our other measures gauge the range and accuracy of alternative tariff calculations that firms might make when processing policy updates. Our second measure targets the number of possible

announcement combinations firms may have tracked, which we label  $TariffMess_{pct}$ . We define  $TariffMess_{pct} = 2^{\#Announce_{pct}}$ , on the presumption that firms may either correctly interpret an announcement, or instead miss or misinterpret it.<sup>9</sup>

Our third measure identifies the worst-case scenario among all possible tariff calculations, or the highest possible import tariff that firms would infer if they processed all tariff hikes and no tariff cuts. We set this upper bound to  $TariffMax_{pct} = Tariff_{pct_0} + \sum_{t'=t_0}^t Up_{acpt'} \Delta Tariff_{acpt'}$ . Our fourth and final measure of tariff confusion quantifies the difference between this upper bound and the statutory tariff. We compute  $TariffMiss_{pct} = TariffMax_{pct} - Tariff_{pct}$  to proxy how much firms might overestimate the true import duty.

Figure 4 shows how tariff confusion evolved during 2025. For each measure, we plot the monthly average and the 1-standard-deviation band across country-products. The figure reveals a dramatic rise in our measures of confusion about US tariffs during 2025. For the average origin and product, the number of tariff announcements  $\#Announce_{pct}$  firms had to take into account reached 2.8 by April 2025, increased to 3.9 by August 2025, and then stabilized to end the year at 4.3 in December 2025 (Figure 4a). On average, about 76% of all announcements entailed a rise in statutory tariffs, with the remaining 24% associated with tariff reductions (Figures 4c and 4d).

The pace and complexity of US trade policy announcements in 2025 implies that firms could arrive at 32 different possible tariff calculations  $TariffMess_{pct}$  for the average country and product by August 2025, depending on how many updates they followed and correctly interpreted (Figure 4b). This number quickly grew to 79 by December 2025. This had stark implications for the maximum possible tariff firms could have inferred:  $TariffMax_{pct}$  jumped from about 10% to about 31% for the average country-product in April 2025, hit 43% in August 2025, and stabilized around that level for the rest of the year (Figure 4e). As a result, the extent to which firms could have overestimated actual statutory tariffs  $TariffMiss_{pct}$  jumped from 0 to 11 percentage points in April 2025, rose to around 20 percentage points by June 2025, and then fluctuated around that level for the rest of the year (Figure 4f). This corresponds to firms potentially believing tariffs were twice as high as they actually were.

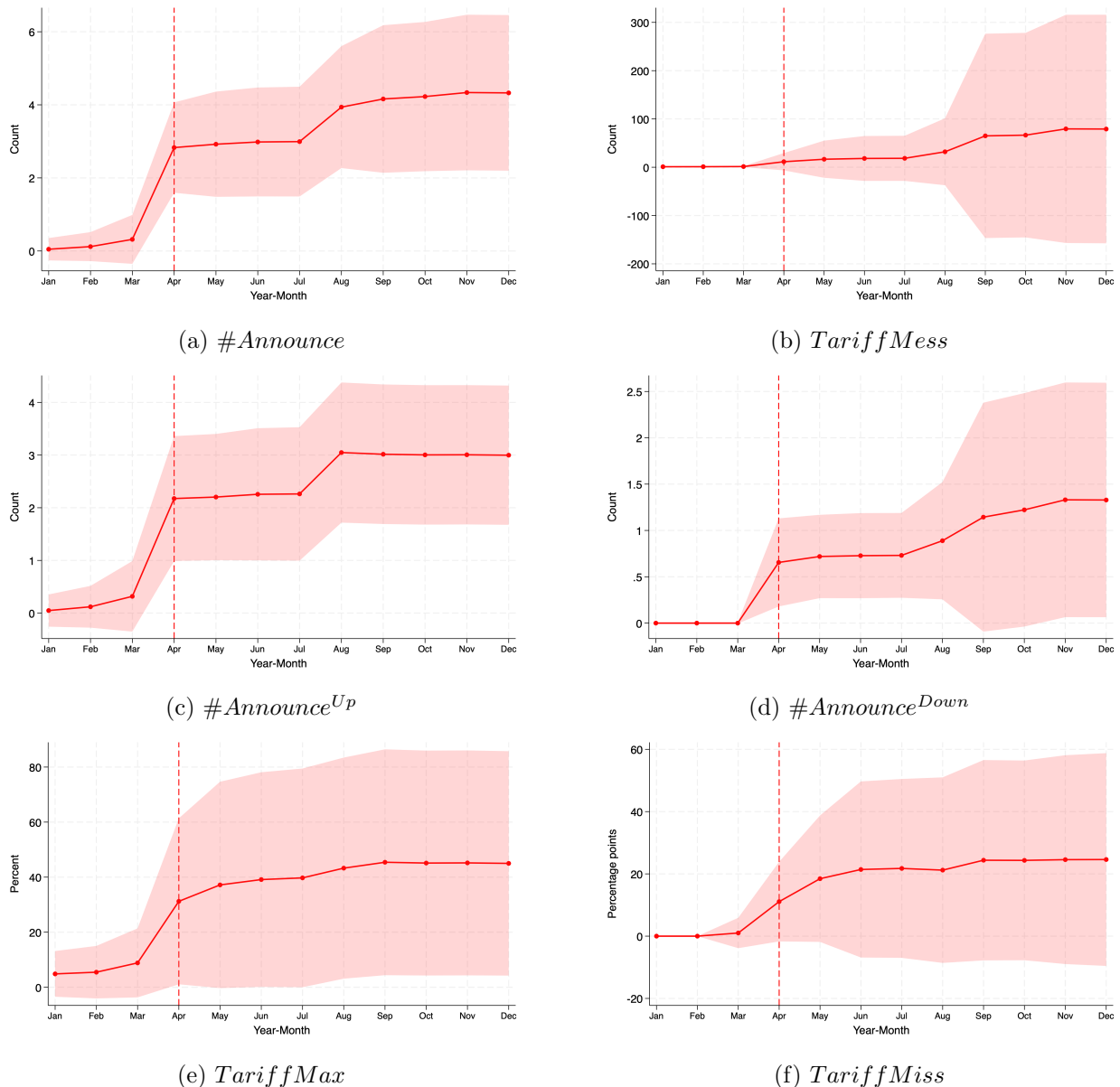
The trends in Figure 4 reveal significant scope for tariff confusion and miscalculation for the average country and product. The dispersion in tariff confusion across countries and products is even more staggering, especially as announcements cumulate over time. This is apparent from the

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<sup>9</sup> $TariffMess_{pct}$  likely provides a lower bound for the number of possible tariff calculations firms might make in that firms can misinterpret a given announcement in multiple ways.

summary statistics in Table 1 and the wide 1-standard-deviation bands around the means in Figure 4. For instance,  $TariffMess_{pct}$  averaged 33 across country-product-month triplets, with a median of 8 and standard deviation of 137.7.  $TariffMax_{pct}$  had an average of 33% and standard deviation of 38%, while  $TariffMiss_{pct}$  had an average of 16% and standard deviation of 27%.<sup>10</sup>

Figure 4: US Tariff Confusion in 2025



Notes: This figure tracks the monthly average US tariff confusion across origin-HTS10 product pairs in 2025, with 1-standard-deviation bands.  $TariffMess$  is divided by 1,000.

<sup>10</sup>Much of the variation in measured tariff confusion comes from the time series, especially in the case of  $\#Announce_{pct}$ . Cross-sectionally in a given month, there is more variation across countries than across products within countries. We illustrate this in Appendix Table A1, where we report the R-squared from regressions of each confusion measure on different sets of fixed effects.

Table 2 reports correlations between the statutory tariff and our confusion measures. It shows that tariff confusion is positively, but imperfectly correlated with statutory tariffs across countries, products and months in 2025, and that the correlation became weaker during the course of the year. This is consistent with the two measures capturing different aspects of trade policy developments during this period. Notably, the correlation of actual tariff rates with the number of possible tariff estimates  $TariffMess_{pct}$  is as low as 0.14 in the full panel of country-product-months, and 0.04 across country-products in December 2025. The correlation between tariff levels and  $\#Announce_{pct}$  stands at 0.52 in the panel and 0.24 at the end of 2025. While our proxy for the highest possible tariff estimate  $TariffMax_{pct}$  tracks actual tariffs quite closely with a panel correlation of 0.75 and 0.58 in December 2025, this intuitively reflects the lower frequency of tariff reductions than tariff hikes. On the other hand, the potential tariff overestimate  $TariffMiss_{pct}$  is significantly less correlated with tariff levels at a moderate 0.39 in the panel and 0.24 in December 2025.

Table 2: US Tariff Level, Confusion & Liberation Day Gap Correlations in 2025

	<i>Tariff</i>	<i>#Announce</i>	<i>TariffMess</i>	<i>TariffMax</i>	<i>TariffMiss</i>
<b>Sample period: January 2025 – December 2025</b>					
<i>Tariff</i>	1.00				
<i>#Announce</i>	0.52	1.00			
<i>TariffMess</i>	0.14	0.51	1.00		
<i>TariffMax</i>	0.75	0.75	0.38	1.00	
<i>TariffMiss</i>	0.39	0.70	0.44	0.90	1.00
<i>LibDayTariffGap</i>	0.53	0.51	0.11	0.67	0.58
<b>Sample period: December 2025</b>					
<i>Tariff</i>	1.00				
<i>#Announce</i>	0.24	1.00			
<i>TariffMess</i>	0.04	0.63	1.00		
<i>TariffMax</i>	0.58	0.67	0.42	1.00	
<i>TariffMiss</i>	0.24	0.69	0.48	0.93	1.00
<i>LibDayTariffGap</i>	0.34	0.36	0.06	0.57	0.52

*Notes:* This table reports correlations among US import tariffs, confusion and Liberation Day Gaps across origins, products and months in 2025.  $TariffMess$  is divided by 1,000.

Table 2 also demonstrates that the four measures of tariff confusion capture different features of trade policy complexity. The two-way panel correlations among them are in the 0.38 – 0.75 range, except for the expected tighter mapping between  $TariffMax_{pct}$  and  $TariffMiss_{pct}$  at 0.90.  $TariffMess_{pct}$  stands out as the least correlated with the other confusion measures.

## 2.4 Current Confusion and Future Uncertainty

Our measures of tariff confusion aim to capture the difficulty of calculating statutory tariffs when there are frequent and complex policy announcements, such as during 2025. How does such confusion about actual current tariff levels relate to uncertainty about potential future tariff changes?

Conceptually, confusion about contemporaneous tariffs can be seen as an unusual manifestation of trade policy uncertainty in real time. A large literature has studied TPU in the context of prolonged trade negotiations whose ultimate outcome and timeline is uncertain, but there is no uncertainty about the current state of affairs per se (e.g. Handley, 2014; Handley & Limão, 2015; Pierce & Schott, 2016; Handley & Limão, 2017; Freeman et al., 2025). For example, US-China trade arrangements required annual renewal before China joined the WTO in 2001. This exposed firms to the risk of US tariffs on Chinese imports suddenly jumping, potentially up to the significantly higher Smoot-Hawley rates of 1930. More recently, UK-EU trade flows remained tariff-free after the 2016 Brexit Referendum, but firms faced significant uncertainty over the nature, magnitude and start date of possible future trade barriers. This uncertainty lasted up until the Trade and Cooperation Agreement was finally agreed and came into effect in 2021. During both episodes, trading firms operated in an environment of known, low tariff rates with the threat that tariffs might (or might not) rise to unknown levels, at an unknown future date.

In comparison, US trade policy in 2025 presented firms with tariff changes that typically took immediate effect. Yet tariff confusion arguably arose as firms were uncertain about these contemporaneous tariff rates. Given the frequency, complexity and changeability of tariff updates, uncertainty about the future evolution of trade policy undoubtedly grew as well, but we emphasize confusion about the present over uncertainty about the future.

Empirically, our measures of confusion about contemporaneous tariffs are backward looking, and reflect the cumulative information that has arrived over a period of intensive trade policy making up to the current point in time. By construction,  $Confusion_{pct}$  thus varies across countries, products and time. While  $\#Announce_{pct}$ ,  $TariffMess_{pct}$  and  $TariffMax_{pct}$  can remain unchanged or rise within a country-product over time,  $TariffMiss_{pct}$  can and does move both up and down. In contrast, standard TPU measures are forward looking, and generally based on higher default tariffs such as MFN rates, or the difference between this fall-back and current rates. Such proxies are meant to provide an upper bound for how (much more) restrictive trade policy might become, and are by design constant over time within a country and/or product. They capture both the

worst-case tariff level and the range of other possible levels below it.

De Souza et al. (2026) propose the difference between announced Liberation Day tariffs and the 10% baseline tariff as a measure of US trade policy uncertainty in 2025, which we denote  $LibDayTariffGap_{cpt}$  and refer to as the Liberation Day Tariff Gap.<sup>11</sup> Tables 1 and 2 show that  $LibDayTariffGap_{cpt}$  has around a 0.5 correlation with our  $Confusion_{pct}$  measures, and varies significantly less across countries and products than tariffs and tariff confusion.

We revisit the relationship between confusion about current trade policy and uncertainty about its future in Section 5.1 below, where we discuss the possibility that our metrics of  $Confusion_{pct}$  in 2025 may be related to uncertainty about future US trade policy.

### 3 Empirical Design

We next use monthly data on US trade and trade policy over the 2023-2025 period to evaluate the impact of the 2025 US tariffs and tariff confusion on US imports.

#### 3.1 Data

We exploit data on US trade flows, tariffs and tariff confusion merged at the country-product-month level. We obtain information on the universe of monthly US imports over the 2023-2025 period from the US Census Bureau.<sup>12</sup> We extract import values and quantities by origin country  $c$ , HTS 10-digit product  $p$  and month  $t$ , and compute import unit values. We denote these monthly import values, volumes and prices  $X_{cpt}$ ,  $Q_{cpt}$  and  $P_{cpt}$ , respectively. We combine these trade statistics with the schedule of US import tariffs  $Tariff_{cpt}$  and measured tariff confusion  $Confusion_{cpt}$ , constructed from USITC and USTAD data as described above.

We also examine the role of country and product characteristics related to trust, customization and reputation in buyer-supplier relationships. We obtain product-level indicators for product differentiation from Rauch (1999), relationship specificity from Nunn (2007), and relationship stickiness from Martin et al. (2026).<sup>13</sup> At the country level, we consider the average self-reported trust

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<sup>11</sup>While  $LibDayTariffGap_{cpt}$  is generally fixed at the country level, there is some variation across products and over time due to product-specific tariffs and exemptions that were separately introduced. We treat China like all other countries, and set its Liberation Day tariff to the initially announced rate of 34%. For Canada and Mexico, we fix  $LibDayTariffGap_{cpt}$  at 25% based on the threatened and implemented “Fentanyl” tariffs in February and March. For all exercises including the Liberation Day Tariff Gap, we drop countries with no Normal Trade Relations status with the US, as they were not subject to the Liberation Day reciprocal tariffs.

<sup>12</sup>US Census data is available at <https://www.census.gov/foreign-trade/index.html>.

<sup>13</sup>We access product differentiation by SITC product at [https://econweb.ucsd.edu/~jrauch/rauch\\_classification.html](https://econweb.ucsd.edu/~jrauch/rauch_classification.html); relationship specificity by BEA IO industry at <https://nathannunn.arts.ubc.ca/data/>; and relationship sticki-

in foreigners from the World Values Survey (Haerpfer et al., 2024).<sup>14</sup>

### 3.2 Empirical Specification

We identify the effects of US tariff changes and tariff confusion on US imports by capitalizing on variation across countries, products and time. We estimate variants of the following two specifications:

$$\log X_{cpt} = \alpha \log(1 + \text{Tariff}_{cpt}) + \beta \text{Confusion}_{cpt} + \delta_{cp} + \delta_{pt} + \varepsilon_{cpt}, \quad (1)$$

$$\Delta \log X_{cpt} = \alpha \Delta \log(1 + \text{Tariff}_{cpt}) + \beta \Delta \text{Confusion}_{cpt} + \delta_{cp} + \delta_{pt} + \varepsilon_{cpt}, \quad (2)$$

where  $\log X_{cpt}$  is log US imports from country  $c$  of HTS 10-digit product  $p$  in month  $t$ , and  $\text{Confusion}_{cpt}$  is one of the four metrics of tariff confusion introduced above.

Specification (1) aims to capture the contemporaneous level effects of US trade policy announcements. The main coefficients of interest,  $\alpha$  and  $\beta$ , quantify the impact respectively of the actual statutory tariff and of confusion about its level. We include a full set of product-month fixed effects  $\delta_{pt}$ , which absorb shocks to demand, domestic supply, and competition that all exporters face in the US market. We also condition on country-product fixed effects  $\delta_{cp}$  to allow for stable differences in supply potential across origin countries. The impact of tariff changes and tariff confusion is thus identified from changes in the US trade policy stance within country-products over time and its cross-sectional variation across countries within a product-month. We cluster errors by HTS 8-digit product, to accommodate correlated shocks all exporters to the US face in a given product market.

We estimate equation (1) for the sample of 24 months from January 2024 through December 2025. This period allows us to compare the full first year of the second Trump administration to the full year immediately preceding it. The product-time fixed effects implicitly account for seasonal fluctuations, while the relatively short 2-year window dampens concerns about differential trends in export supply potential across origin countries.<sup>15</sup>

Two threats to the identification of coefficients  $\alpha$  and  $\beta$  are multi-collinearity and reverse causality by HS 6-digit product at <https://www.isabellemejean.com/publications.html>. We map these measures to HTS-10 products using various concordance tables. See Appendix B.2 for more details.

<sup>14</sup>We take the average response to Question 63 “Trust in people of another nationality” across respondents in a country-year, available at <https://www.worldvaluessurvey.org/WVSDocumentationWV7.jsp>

<sup>15</sup>We lack the data to directly control for high-frequency changes in countries’ export supply potential. However, provided changes in export supply conditions move sufficiently slowly, or are uncorrelated with tariffs and tariff confusion, this does not prevent us from identifying the impact of US trade policy changes in 2025.

ity. The weak correlation between tariffs and tariff confusion in Table 2 above alleviates concerns about multi-collinearity, except potentially in the case of the maximum possible tariff that firms might miscalculate if they process only upward tariff revisions. The fast pace and complex institutional context of US trade policy in 2025 make it unlikely that it would respond to developments in US imports, especially at the monthly frequency.

Equation (2) provides an alternative, more stringent way of estimating the impact of US tariffs and tariff confusion by specifying the problem in differences while maintaining the same fixed effects. In particular, we now study 12-month changes in US imports, statutory rates and tariff confusion,  $\Delta \log X_{cpt}$ ,  $\Delta \log(1 + \text{Tariff}_{cpt})$  and  $\Delta \text{Confusion}_{cpt}$ .<sup>16</sup> We continue to include country-product and product-time fixed effects,  $\delta_{cp}$  and  $\delta_{pt}$ . This means that we now explicitly allow for country-product specific trends in export supply potential, rather than only stable cross-sectional differences as in equation (1). We also accommodate differential growth rates in US demand and supply conditions, rather than only level shocks as in equation (1). We keep the sample to the January 2024 - December 2025 period, and continue to cluster by HTS-8 product.

The coefficients of interest in specification (2),  $\alpha$  and  $\beta$ , identify the impact of US tariff hikes and announcement confusion, respectively, on the annualized growth rate of US imports. In principle, these growth effects could differ from the level effects estimated in specification (1) if US import growth is driven by country-product supply trends that are correlated with tariff changes or our confusion measures. In practice, both specifications deliver similar estimates.

Specification (2) conditions on the set of observations with positive import values 12 months prior. To ensure that our results are not driven by sample selection, we also estimate specification (1) with this balanced-panel condition. Specifications (1) and (2) guide all parts of our empirical analysis, and we introduce several extensions as we go along.

## 4 Trade Effects of Tariffs and Tariff Confusion

### 4.1 Baseline Results

Our baseline estimates provide evidence that both higher US import tariffs and greater confusion about tariff levels significantly reduced US imports during 2025. Moreover, these forces exerted largely independent effects, such that confusion about the US policy stance more than doubled the total import decline caused by changes in US trade policy.

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<sup>16</sup>In practice,  $\Delta \text{Confusion}_{cpt} = \text{Confusion}_{cpt}$ , since we assume no tariff confusion prior to February 2025.

We report our baseline results from estimating equation (1) for the level effects of US trade policy in Panel A of Table 3. In Column 1, we first estimate the consequences of higher tariff barriers, ignoring any associated tariff confusion. We find that tariff increases led to lower US imports, with an elasticity of  $-0.46$ .

We next introduce each of our alternative measures of tariff confusion one at a time alongside the statutory tariff. We consistently observe large and highly statistically significant negative effects of tariff confusion that manifest in addition to the impact of changes in the statutory tariff. Holding the tariff rate constant, each additional announcement reduces US imports by 3.0% based on the coefficient estimate for  $\#Announce_{pct}$  in Column 2. Moreover, the elasticity of US imports with respect to  $Tariff_{pct}$  is of the same order of magnitude as that with respect to its potential overestimate  $TariffMiss_{pct}$  in Column 5. In fact, the highest possible tariff firms could have calculated had they heard only upward revisions can fully explain the impact of actual tariff hikes in Column 4, though we caution that this may reflect multicollinearity given the 0.75 correlation between  $Tariff_{cpt}$  and  $TariffMax_{cpt}$  reported in Table 2.

We obtain qualitatively and quantitatively very similar results when we estimate the impact of US trade policy announcements on US imports with the 12-month-difference specification (2). Across the board, the coefficient estimates from these first-difference regressions in Panel B of Table 3 are of comparable economic and statistical significance as those from the levels regressions in Panel A. Recall that these regressions include the same set of country-product and product-year fixed effects, but these play a much more stringent role in the specification in differences. This helps alleviate concerns with differential growth rates in country-product supply potential driving the baseline results in levels. In other words, our findings are consistent with exporter country-product supply conditions remaining relatively stable during our sample.

## 4.2 Quantifying Baseline Effects

We can use our baseline results to quantify the impact of US trade policy developments in 2025 on US imports. One caveat to this quantification is that it captures short-term, high-frequency trade adjustments during an unusual period of intensive trade policy making. Exporters and importers may behave differently over longer horizons. A second caveat is that our estimation strategy is difference-in-differences in spirit, and thus identifies only relative effects rather than general-equilibrium level effects. In other words, we can infer import declines at the country-product level relative to a hypothetical country-product that is not affected by tariff changes or confusion.

Table 3: US Tariff and Tariff Confusion Effects on US Imports

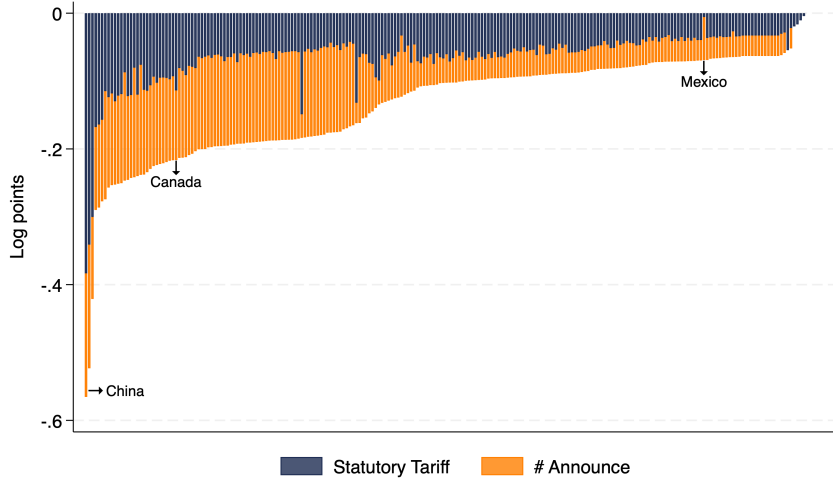
	(1)	(2)	(3)	(4)	(5)
	$\log(1 + \text{Tariff})$	$\#Announce$	$\text{TariffMess}$	$\log(1 + \text{TariffMax})$	$\text{TariffMiss}$
<b>Panel A: Levels, <math>\log\text{Imports}</math></b>					
$\log(1 + \text{Tariff})$	-0.461*** (0.0225)	-0.330*** (0.0221)	-0.490*** (0.0221)	0.00311 (0.0236)	-0.435*** (0.0215)
<i>Confusion</i>		-0.0304*** (0.00132)	-0.243*** (0.0303)	-0.547*** (0.0145)	-0.290*** (0.00716)
<i>Avg Tariff Impact</i>	-5.98	-4.32	-6.34	0.04	-5.65
<i>Avg Confusion Impact</i>		-12.22	-1.88	-15.01	-6.89
R-squared	0.870	0.870	0.870	0.870	0.870
<b>Panel B: 12-Month Differences, <math>\Delta\log\text{Imports}</math></b>					
$\Delta\log(1 + \text{Tariff})$	-0.471*** (0.0269)	-0.332*** (0.0276)	-0.496*** (0.0269)	0.0904** (0.0292)	-0.440*** (0.0261)
<i>Confusion</i>		-0.0324*** (0.00183)	-0.217*** (0.0284)	-0.661*** (0.0187)	-0.347*** (0.00924)
<i>Avg Tariff Impact</i>	-6.02	-4.34	-6.42	1.22	-5.71
<i>Avg Confusion Impact</i>		-12.96	-1.68	-17.85	-8.18
R-squared	0.237	0.237	0.237	0.238	0.238
Country-HTS10 FE	Yes	Yes	Yes	Yes	Yes
HTS10-Period FE	Yes	Yes	Yes	Yes	Yes
N	2,720,551	2,720,551	2,720,551	2,720,551	2,720,551

*Notes:* This table presents baseline estimates for the effect of contemporaneous US (log) tariffs and tariff confusion on (log) US imports by origin country, HTS-10 product and month in 2024-2025. The regression specification is in levels in Panel A and in 12-month differences in Panel B. Column headings indicate the measure of tariff confusion, with  $\text{TariffMess}$  divided by 1,000. Rows above R-squared report the percentage change in US imports attributable to the average change in tariff levels and confusion from December 2024 to December 2025. All regressions include country-product and product-month pair fixed effects. Standard errors clustered by HTS-8 product. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

In a first exercise, we impute how much lower trade flows were for the average origin country and product in December 2025 compared to December 2024 because of higher US tariffs and greater confusion over US trade policy. To this end, we calculate the average changes  $\overline{\Delta\log(1 + \text{Tariff}_{cpt})}$  and  $\overline{\Delta\text{Confusion}_{cpt}}$  across countries and products over this 12-month period. We then apply the point estimates from specification (1) to  $\overline{\Delta\log(1 + \text{Tariff}_{cpt})}$  and  $\overline{\Delta\text{Confusion}_{cpt}}$ , and report the inferred import declines in the two rows immediately below the regression coefficients in Table 3.

We conclude that as of the end of 2025, higher tariff barriers were responsible for 4% – 6% lower US imports for the average origin and product. Cumulative confusion about prevailing tariffs led to substantial additional disruption that would not have occurred had tariffs been raised once and for all in a clear policy statement. Based on the levels estimates in Panel A, the total number of policy

Figure 5: Peak US Import Decline by Exporting Country



*Notes:* This figure plots the decline in US imports by origin country due to higher tariffs (blue) and tariff confusion (number of announcements, orange). The estimate is based on the coefficients in Column 2 of Panel A in Table 3 applied to the month with the highest US tariff each country faced on average across products.

announcements were responsible for a 12.2% decline in US imports on average. Alternatively, the potential to wrongly overestimate actual tariff rates reduced US imports by 6.9% on average. These calculations imply that the decline in US imports due to tariff confusion in 2025 was of a similar magnitude to the fall caused by higher statutory tariffs.

Table 4: Peak US Import Decline across Exporting Countries

	Mean	Std. Dev
Total Import Decline	-0.13	0.08
Due to Statutory Tariff	-0.06	0.04
Due to # Announce	-0.07	0.05
% Due to # Announce	49.53	15.13

*Notes:* This table provides summary statistics for the estimated decline in US imports across origin countries in Figure 5 and its decomposition into the contribution of higher tariffs and tariff confusion.

In a second quantification exercise, we gauge the heterogeneous incidence of US trade policy across partner countries in 2025. In particular, for each country, we calculate the monthly drop in its exports to the US that can be attributed to the highest US tariff it faced during 2025, and the additional export loss solely due to the multiplicity of policy setting leading up to that highest tariff. Thus for each country, we identify the month with the highest average tariff across products, and record the cumulative number of tariff announcements it received as of that month. We then use the point estimates from Column 2 in Panel A of Table 3 to compute country-specific reductions

in exports to the US arising due to both tariffs and tariff confusion.

Figure 5 displays the results, where each bar corresponds to a different country, countries are sorted by their total reduction in exports to the US, and shading apportions this reduction to tariff hikes and announcement proliferation. Table 4 provides corresponding summary statistics for the variation across countries.

The average country experienced 13% lower monthly exports to the US at the peak US tariffs it faced. Fully 7 percentage points of this contraction can be attributed to confusion arising from multiple trade policy announcements. Even for China, which faced the highest monthly tariff (116%), a significant proportion of the decline in its exports to the US is attributed to the total number of announcements (32%). While the overall fall in imports varies from 0.4% to almost 57% across countries, the contribution of tariff confusion remains substantial across the board.

### 4.3 Robustness

We have performed an extensive series of specification checks to confirm the robustness of the baseline results in Table 3. We present three such checks here, and discuss others in Appendix A.

First, we vary the time period over which tariff levels and confusion are assumed to affect imports. In the baseline specifications, we regress imports on contemporaneous tariffs and confusion. However, shipments may take one to two months to arrive at their destination. This means that imports arriving in a given month may reflect firm decisions based on an earlier policy environment. In Tables 5 and A2, we allow for possible delays in the impact of policy interventions by lagging the tariff and confusion measures by either one or two months. The effects of lagged tariff confusion are of the same order of magnitude as of contemporaneous confusion. In addition, the negative effect of lagged tariff increases can be twice as large as that of concurrent tariff hikes.

Second, instead of using the statutory tariff to measure  $Tariff_{cpt}$ , we use the applied tariff rate ( $Tariff_{cpt}^{app}$ ) introduced in Section 2.2, and instrument the applied tariff with the statutory tariff as in Fajgelbaum and Khandelwal (2026). The results in Table 6 show that this variation leads to a higher estimated tariff elasticity of around  $-1.2$ . However, the confusion measures continue to have negative and significant effects on US imports that are additional to the impact of tariff changes. The magnitudes of the confusion coefficients are somewhat smaller than in the baseline results, but remain economically significant. For example, each additional announcement reduces US imports by 1.7% – 1.9% based on the point estimates for  $\#Announce_{cpt}$  in Column 2.

Third, we perform a placebo test to examine whether tariff confusion during 2025 has an effect

Table 5: Robustness: 1-Month Lagged Trade Policy

	(1)	(2)	(3)	(4)	(5)
	$\log(1 + \textit{Tariff})$	$\# \textit{Announce}$	$\textit{TariffMess}$	$\log(1 + \textit{TariffMax})$	$\textit{TariffMiss}$
<b>Panel A: Levels, <math>\log \textit{Imports}</math></b>					
$\log(1 + \textit{Tariff})$	-0.723*** (0.0241)	-0.581*** (0.0238)	-0.736*** (0.0236)	-0.302*** (0.0255)	-0.674*** (0.0232)
<i>Confusion</i>		-0.0285*** (0.00137)	-0.228*** (0.0277)	-0.463*** (0.0149)	-0.239*** (0.00733)
R-squared	0.870	0.870	0.870	0.870	0.870
<b>Panel B: 12-Month Differences, <math>\Delta \log \textit{Imports}</math></b>					
$\Delta \log(1 + \textit{Tariff})$	-0.822*** (0.0290)	-0.662*** (0.0293)	-0.835*** (0.0287)	-0.283*** (0.0312)	-0.760*** (0.0280)
<i>Confusion</i>		-0.0322*** (0.00187)	-0.228*** (0.0289)	-0.594*** (0.0191)	-0.301*** (0.00947)
R-squared	0.237	0.238	0.238	0.238	0.238
Country-HTS10 FE	Yes	Yes	Yes	Yes	Yes
HTS10-Period FE	Yes	Yes	Yes	Yes	Yes
N	2,720,389	2,720,389	2,720,389	2720389	2,720,389

*Notes:* This table shows that the baseline effects of contemporaneous US (log) tariffs and tariff confusion on (log) US imports in Table 3 are robust to lagging independent trade policy variables by 1 month. *TariffMess* is divided by 1,000. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

on variation in US imports over the 20 years prior to our period of interest. In particular, we construct 217 rolling 24-month panels of US imports by origin country and product during January 2004 - December 2023.<sup>17</sup> We then re-estimate the baseline specifications holding tariff levels and confusion fixed at their January 2024 - December 2025 levels, but replacing the outcome variable with import values for January 2004 - December 2005 in the first placebo regression, February 2004 - January 2006 in the second placebo regression, and so on until January 2022 - December 2023 in the last placebo regression. Figure 6 plots the distribution of the resulting 217 estimated coefficients for each confusion measure from the levels specification, with the red vertical lines indicating the corresponding baseline estimates from Table 3. The vast majority of the placebo coefficients are positive, while our baseline estimates are negative and fall far outside the range of placebo coefficients. This strongly suggests that our main results capture the effects of tariff confusion during 2025 on contemporaneous trade flows rather than any spurious association.

In Appendix A, we show that the baseline results are robust to further specification checks. In

<sup>17</sup>Data comes from Schott (2008) for 2003-2009 and from the US Census Bureau for 2010-2023.

Table 6: Robustness: Applied Tariff

	(1)	(2)	(3)	(4)	(5)
	$\log(1 + \text{Tariff}^{Eff})$	$\#Announce$	$\text{TariffMess}$	$\log(1 + \text{TariffMax})$	$\text{TariffMiss}$
<b>Panel A: Levels, logImports</b>					
$\log(1 + \text{Tariff}^{app})$	-1.220*** (0.0550)	-1.024*** (0.0652)	-1.270*** (0.0541)	0.0130 (0.0982)	-1.173*** (0.0548)
<i>Confusion</i>		-0.0173*** (0.00168)	-0.160*** (0.0248)	-0.549*** (0.0258)	-0.200*** (0.00822)
F-stat	3195.2	2301.3	3723.2	1219.4	3280.3
<b>Panel B: 12-Month Differences, <math>\Delta\log\text{Imports}</math></b>					
$\Delta\log(1 + \text{Tariff}^{app})$	-1.253*** (0.0680)	-1.033*** (0.0831)	-1.296*** (0.0673)	0.376** (0.124)	-1.192*** (0.0683)
<i>Confusion</i>		-0.0193*** (0.00232)	-0.134*** (0.0238)	-0.721*** (0.0327)	-0.257*** (0.0104)
F-stat	3100.1	2235.4	3596.7	1206.4	3177.0
Country-HTS10 FE	Yes	Yes	Yes	Yes	Yes
HTS10-Period FE	Yes	Yes	Yes	Yes	Yes
N	2,720,551	2,720,551	2,720,551	2,720,551	2,720,551

*Notes:* This table shows that the baseline effects of contemporaneous US (log) tariffs and tariff confusion on (log) US imports in Table 3 are robust to using the applied tariff, instrumented with the statutory tariff. First-stage F-statistics reported in the bottom of each panel.  $\text{TariffMess}$  divided by 1,000. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .

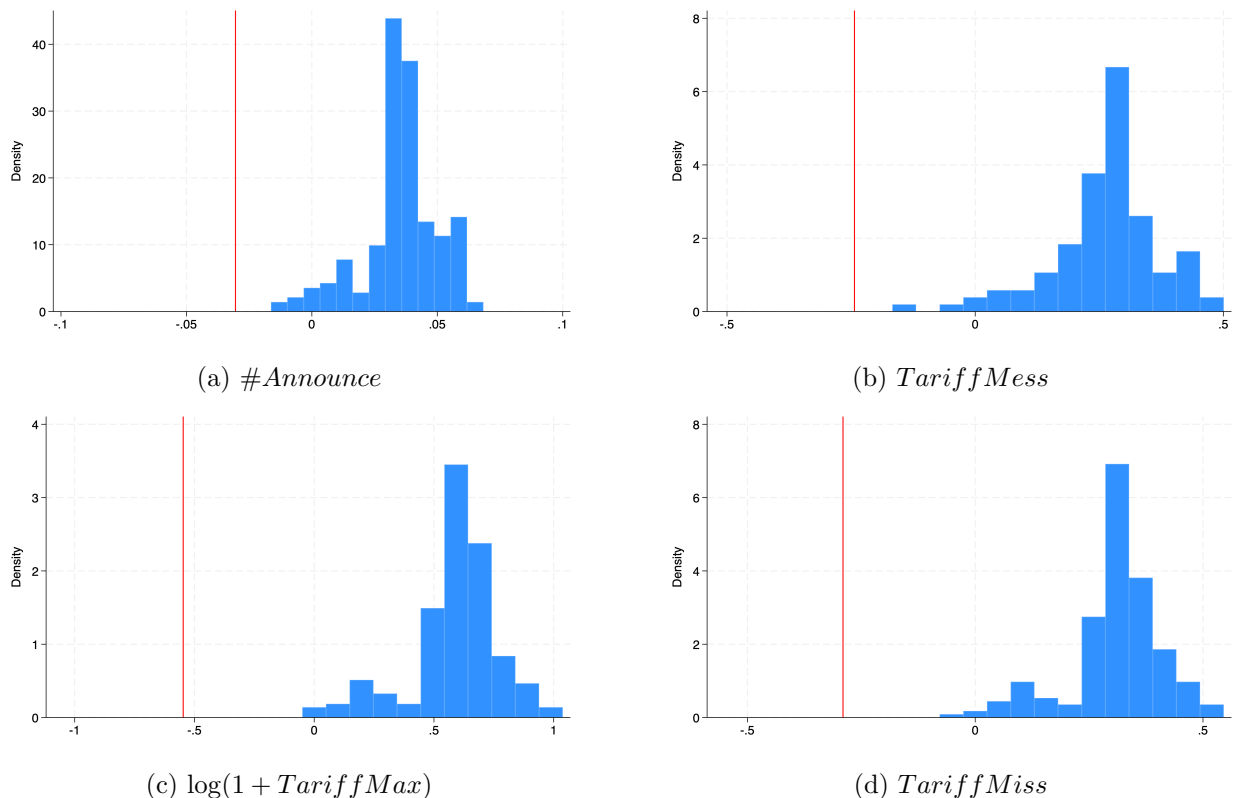
particular, we obtain similar findings when we (i) condition on country-product and country-month fixed effects instead of the baseline country-product and product-month fixed effects (Table A3); (ii) use an unbalanced panel instead of the baseline balanced panel of country-product pairs over the 24-month period (Table A4); or (iii) cluster standard errors by country-HTS8 product instead of HTS-8 product (Table A5).

## 5 Unpacking Mechanisms

Having estimated the baseline effects of tariffs and tariff confusion on US imports, we next provide evidence to inform the mechanisms through which they disrupted international trade. First, we explore the persistence of tariff confusion, its interplay with statutory tariffs, and its relationship to future trade policy uncertainty. Second, we evaluate how different margins of trade activity adjusted by decomposing trade values into prices and quantities and by analyzing the extensive margin of US import exit. Finally, we examine the role of trust and specificity in buyer-supplier relationships in mediating the trade effects of tariff changes and confusion by studying their differential impact

across countries and products.

Figure 6: Placebo Test



*Notes:* This figure plots the distribution of the 217 placebo coefficient estimates for the baseline levels specification. The red vertical line indicates the corresponding baseline estimates from Table 3.

## 5.1 Confusion Persistence, Tariff Levels, and Future Uncertainty

We start by exploring in greater depth how tariff confusion affects trade. Does confusion about prevailing tariffs resolve quickly over time? Is it more damaging when tariff rates are higher? And is confusion about current trade policy separable from uncertainty about future trade policy?

**Confusion persistence** Our baseline analysis has uncovered large effects of cumulative tariff confusion on contemporaneous trade activity. In particular, our confusion measures are designed to capture the cumulative complexity of trade policy announcements in 2025. But how persistent are the effects of tariff confusion? On the one hand, they may be short-lived if firms are able to eventually update their beliefs and internalize newly arriving trade policy updates. This would suggest that our baseline estimates capture short-run trade disruption that is likely to dissipate over time. On the other hand, confusion may have become more detrimental over the course of 2025 given the prolonged period of frequent US policy announcements. In addition, the timing of

Table 7: Contemporaneous and Delayed Tariff Confusion Effects

	Levels, $\log Imports$		12-Month Diffs, $\Delta \log Imports$	
	(1)	(2)	(3)	(4)
$\log(1 + Tariff)$	-0.417*** (0.0230)	-0.340*** (0.0226)	-0.456*** (0.0280)	-0.364*** (0.0280)
$\#Announce_{t-2 \rightarrow t}$	-0.0149*** (0.00149)	-0.0221*** (0.00157)	-0.00488* (0.00199)	-0.0135*** (0.00213)
$\#Announce_{t-3}$		-0.0424*** (0.00161)		-0.0503*** (0.00215)
Country-HTS10 FE	Yes	Yes	Yes	Yes
HTS10-Period FE	Yes	Yes	Yes	Yes
R-squared	0.870	0.870	0.237	0.237
N	2,720,551	2,720,551	2,720,551	2,720,551

*Notes:* This table distinguishes between the effects of tariff confusion over the past 3 months and cumulative confusion prior to that on US imports, based on the number of tariff announcements and the baseline levels and 12-month-differences specifications from Table 3. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

buyer-supplier contract changes and shipping logistics might delay the trade response. Both factors could lead to confusion effects becoming stronger over time.

To explore the timeline of confusion effects, we distinguish between the number of tariff announcements made in the past three months ( $\#Announce_{pc,t-2 \rightarrow t}$ ) and announcements made prior to that ( $\#Announce_{pc,t-3}$ ). By definition, these two variables sum to our baseline announcement count  $\#Announce_{pc,t}$ . We then re-estimate the main levels and 12-month-differences specifications using either only  $\#Announce_{pc,t-2 \rightarrow t}$  or both  $\#Announce_{pc,t-2 \rightarrow t}$  and  $\#Announce_{pc,t-3}$ .

In a stable trade policy environment, any initial tariff confusion is likely to fade over time. However, the results in Table 7 indicate that, if anything, the proliferation of tariff announcements is more disruptive after 3 months than immediately. We find that both recent and 3-month lagged confusion about US trade policy reduce monthly exports to the US, with the latter exerting an effect about twice as large. Both effects are in addition to trade contractions arising due to higher statutory tariffs, which remain significant across specifications. This suggests that the consequences of tariff confusion were neither transitory nor lessening over time, at least not while the US trade policy stance was developing at fast pace during 2025.

**Confusion x Tariff** We next examine whether confusion over tariff rates is more damaging to trade activity at low or high levels of statutory tariffs. Intuitively, confusion about the exact tariff level could be more detrimental when the tariff is higher, as firms may place a greater probability

Table 8: Amplified Tariff Confusion Effects at High Tariff Levels

	Levels, $\log Imports$		12-Month Diffs, $\Delta \log Imports$	
	(1) $\#Announce$	(2) $TariffMess$	(3) $\#Announce$	(4) $TariffMess$
$\log(1 + Tariff)$	0.255*** (0.0354)	-0.419*** (0.0236)	0.284*** (0.0606)	-0.431*** (0.0285)
$Confusion$	-0.00273 (0.00164)	-0.146*** (0.0189)	-0.0180*** (0.00205)	-0.150*** (0.0224)
$\log(1 + Tariff) \times Confusion$	-0.105*** (0.00444)	-0.572*** (0.0792)	-0.120*** (0.00990)	-0.670*** (0.103)
Country-HTS10 FE	Yes	Yes	Yes	Yes
HTS10-Period FE	Yes	Yes	Yes	Yes
R-squared	0.870	0.870	0.237	0.237
N	2,720,551	2,720,551	2,720,551	2,720,551

*Notes:* This table assesses how the effect of tariff confusion on US imports interacts with the tariff level, using the number of tariff announcements or possible tariff calculations (divided by 1,000) to proxy confusion and the baseline levels and 12-month-differences specifications from Table 3. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

on it being above their cut-off for profitable trade. We evaluate this possibility in Table 8, where we add the interaction  $\log(1 + Tariff_{cpt}) \times Confusion_{cpt}$  or its 12-month-differences counterpart to our baseline specifications. We focus on the number of announcements and associated number of possible tariff calculations,  $\#Announce_{pct,t}$  and  $TariffMess_{pct}$ , since the other measures of tariff confusion themselves contain information about the statutory tariff.

We find that tariff confusion is more disruptive at high tariff levels: The interaction term always enters negatively and highly significantly, with large point estimates relative to the main effect of confusion. The results in Column 1 imply that a 10-percentage-point higher tariff amplifies the decline in imports due to an additional trade policy announcement by 1.1 percentage points. The estimates in Columns 2-4 suggest that a 10-percentage-point higher tariff would magnify the impact of cumulative confusion up to that point by 40% – 66%.

### Current confusion and future uncertainty

Lastly, we investigate the relative importance of confusion about current tariff rates and uncertainty about future trade policy. One might expect that, during an episode of frequent trade policy announcements, current confusion evolves quite quickly, while expectations about the future move more slowly. Moreover, changes to confusion about the current state of affairs may be more consequential for trade adjustments in the short run, while changes to beliefs about future developments might trigger gradual trade responses over the medium term.

Table 9: Liberation Day Tariff Gap

	(1)	(2)	(3)	(4)	(5)
	$\log(1 + \text{Tariff})$	$\# \text{Announce}$	$\text{TariffMess}$	$\log(1 + \text{TariffMax})$	$\text{TariffMiss}$
<b>Panel A: Levels, <math>\log \text{Imports}</math></b>					
$\log(1 + \text{Tariff})$	-0.187*** (0.0243)	-0.175*** (0.0242)	-0.231*** (0.0247)	0.0306 (0.0249)	-0.400*** (0.0287)
<i>Confusion</i>		-0.0137*** (0.00140)	-0.169*** (0.0230)	-0.544*** (0.0243)	-0.295*** (0.0115)
<i>LibDayTariffGap</i>	-0.398*** (0.0153)	-0.329*** (0.0164)	-0.368*** (0.0157)	0.0209 (0.0245)	0.0449 (0.0239)
<i>LibDayTariffGap</i> $\times \mathbb{1}[\text{Apr}2025, \text{Jul}2025]$	-0.0208 (0.0157)	-0.0184 (0.0157)	-0.0140 (0.0157)	-0.0802*** (0.0159)	-0.116*** (0.0160)
R-squared	0.870	0.870	0.870	0.870	0.870
<b>Panel B: 12-Month Differences, <math>\Delta \log \text{Imports}</math></b>					
$\Delta \log(1 + \text{Tariff})$	-0.181*** (0.0300)	-0.170*** (0.0301)	-0.215*** (0.0306)	0.100** (0.0309)	-0.444*** (0.0349)
<i>Confusion</i>		-0.0125*** (0.00196)	-0.131*** (0.0203)	-0.703*** (0.0310)	-0.364*** (0.0147)
<i>LibDayTariffGap</i>	-0.484*** (0.0197)	-0.422*** (0.0216)	-0.461*** (0.0199)	0.0575 (0.0310)	0.0620* (0.0299)
<i>LibDayTariffGap</i> $\times \mathbb{1}[\text{Apr}2025, \text{Jul}2025]$	0.0552** (0.0210)	0.0574** (0.0209)	0.0605** (0.0210)	-0.0217 (0.0212)	-0.0622** (0.0213)
R-squared	0.238	0.238	0.238	0.238	0.238
Country-HTS10 FE	Yes	Yes	Yes	Yes	Yes
HTS10-Period FE	Yes	Yes	Yes	Yes	Yes
N	2,717,961	2,717,961	2,717,961	2,717,961	2,717,961

*Notes:* This table shows that the baseline effects of contemporaneous US (log) tariffs and tariff confusion on (log) US imports in Table 3 are robust to conditioning on Liberation Day Tariff Gap and its interaction with a dummy for April-July 2025. *TariffMess* is divided by 1,000. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

It is not obvious how best to measure the uncertainty that arose during 2025 about future US trade policy. And it is possible that our confusion measures are correlated with future trade policy uncertainty. Nevertheless, to provide some evidence on these questions, we expand our baseline specifications to include the Liberation Day Tariff Gap measure of trade policy uncertainty proposed by De Souza et al. (2026) that we discussed in Section 2.4. Recall that  $\text{LibDayTariffGap}_{pct}$  is defined as the country-specific tariff announced on Liberation Day, adjusted for any product-specific tariffs or exemptions, and less the minimum 10% tariff imposed across the board. To account for Liberation-Day tariffs no longer being threat points after policy developments in August 2025, we

include in the specification both  $LibDayTariffGap_{cpt}$  and its interaction with a dummy for the months when it was most relevant, April-July 2025.

Table 9 shows that both tariffs and tariff confusion continue to exert negative and significant effects on US imports when we control for the Liberation Day Tariff Gap. We also find that  $LibDayTariffGap_{cpt}$  itself is associated with lower US imports, although its impact is not concentrated during the April-July 2025 period as one might have expected. We view this evidence as reinforcing our conclusion that tariff confusion had a negative effect on US imports in 2025 that was distinct from the impact of uncertainty about future US trade policy. But we acknowledge that our analysis leaves open the question of how best to measure future trade policy uncertainty during 2025 and how such uncertainty affected trade.

## 5.2 Margins of Adjustment

We next examine how different margins of trade activity adjusted in response to US trade policy in 2025. Did trade flows contract because of reductions in quantities, prices, or both? Did US imports decline because buyer-supplier links were interrupted, or did partners sustain relationships but reduce trade flows?

**Import prices and quantities** The evidence indicates that the fall in US imports due to higher tariffs and tariff confusion in 2025 was entirely due to lower import quantities, with small and mostly insignificant changes in duty-free import prices. We draw this conclusion by decomposing log US imports by origin country, product and month into log import quantity and imputed log average import price, where  $\log X_{cpt} = \log Q_{cpt} + \log P_{cpt}$  by definition. We then re-run baseline specifications (1) and (2) separately for each trade margin as the outcome variable. By the properties of OLS, the coefficient estimates on each of  $\log(1 + Tariff_{cpt})$  and  $Confusion_{cpt}$  from the price and quantity regressions will add up to the baseline estimates of their total effect on the value of US imports in Table 3.

The results in Table 10 are resounding. Tariff-exclusive US import prices were not correlated with movements in the US statutory import tariff during 2025. Instead, the observed decline in the value of tariff-exclusive US imports was driven by lower import quantities. This implies that there was complete pass-through of higher US tariffs into tariff-inclusive import prices, and US importers scaled down their purchase orders accordingly. In other words, in the short run, the burden of US tariff hikes was fully borne by US importing firms, while foreign exporters did not reduce their mark-ups to absorb any of the hit.

Table 10: Import Prices and Quantities

	(1)	(2)	(3)	(4)	(5)
	$\log(1 + \text{Tariff})$	$\#Announce$	$\text{TariffMess}$	$\log(1 + \text{TariffMax})$	$\text{TariffMiss}$
<b>Panel A: Levels, <math>\log(\text{Import Quantity})</math></b>					
$\log(1 + \text{Tariff})$	-0.442*** (0.0275)	-0.326*** (0.0276)	-0.469*** (0.0270)	-0.0464 (0.0301)	-0.419*** (0.0266)
<i>Confusion</i>		-0.0269*** (0.00177)	-0.235*** (0.0287)	-0.466*** (0.0191)	-0.252*** (0.00933)
R-squared	0.890	0.890	0.890	0.890	0.890
<b>Panel B: 12-Month Differences, <math>\Delta\log(\text{Import Quantity})</math></b>					
$\Delta\log(1 + \text{Tariff})$	-0.510*** (0.0347)	-0.364*** (0.0365)	-0.536*** (0.0346)	0.0424 (0.0383)	-0.480*** (0.0340)
<i>Confusion</i>		-0.0341*** (0.00251)	-0.214*** (0.0321)	-0.652*** (0.0246)	-0.346*** (0.0120)
R-squared	0.219	0.219	0.219	0.220	0.220
<b>Panel C: Levels, <math>\log(\text{Import Price})</math></b>					
$\log(1 + \text{Tariff})$	-0.0193 (0.0153)	-0.00427 (0.0164)	-0.0203 (0.0153)	0.0495** (0.0175)	-0.0160 (0.0153)
<i>Confusion</i>		-0.00352** (0.00114)	-0.00794 (0.0105)	-0.0811*** (0.0112)	-0.0380*** (0.00550)
R-squared	0.899	0.899	0.899	0.899	0.899
<b>Panel D: 12-Month Differences, <math>\Delta\log(\text{Import Price})</math></b>					
$\Delta\log(1 + \text{Tariff})$	0.0398 (0.0216)	0.0328 (0.0231)	0.0395 (0.0215)	0.0480* (0.0240)	0.0399 (0.0215)
<i>Confusion</i>		0.00164 (0.00158)	-0.00270 (0.0150)	-0.00957 (0.0152)	-0.00107 (0.00739)
R-squared	0.196	0.196	0.196	0.196	0.196
Country-HTS10 FE	Yes	Yes	Yes	Yes	Yes
HTS10-Period FE	Yes	Yes	Yes	Yes	Yes
N	2,720,551	2,720,551	2,720,551	2,720,551	2,720,551

*Notes:* This table decomposes the baseline effects of contemporaneous US (log) tariffs and tariff confusion on (log) US imports in Table 3 into effects on (log) import prices (unit values) and quantities. *TariffMess* is divided by 1,000. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

Turning to tariff confusion, we find that the vast majority of its negative impact on US imports was likewise driven by lower import quantities, with some limited evidence of lower tariff-exclusive import prices. The estimates based on specification (1) in levels suggest that reductions in tariff-exclusive prices contributed about 10% – 15% of the total drop in US import values. This is

consistent with trade partners sharing to some degree the costs and risks associated with pricing and contracting in an environment of confusion about statutory duty rates. While this finding does not obtain in the more stringent specification (2) in 12-month differences, it does point to potential variation in how buyers and suppliers respond to actual changes in trade policy compared to greater confusion about the trade policy stance.

We caveat that the results in Table 10 should be interpreted with caution. First, they identify changes in the prices US importing firms paid for foreign goods. While these import prices feed into US firms' overall input costs and ultimately US consumer prices, we cannot directly examine the latter. Second, country-product level data allows us to capture movements in average import quantities and prices across buyer-supplier transactions. In other words, we cannot distinguish adjustments within firm-to-firm relationships from reallocations or heterogeneity across relationships.

**Import exit** The data reveals that higher US tariffs prompted US firms not only to reduce their import purchases, but also to stop importing some origin-product varieties altogether. We also find that higher policy confusion increased exit rates from month to month, but not necessarily cumulative exit over twelve months.

To study exit, we estimate variants of specifications (1) and (2) on the baseline sample of active import relationships at the country-product-month level. For the levels specification, the outcome is an indicator set to 1 if a relationship has positive imports in the previous month but not in the current month, and 0 if imports are positive in both months. Likewise, in the 12-month-differences specification, the outcome takes value 1 for relationships that are observed 12 months previously but not in the current month, and 0 for relationships that survived over these 12 months.

In Table 11, we consistently estimate large and highly significant positive effects of tariff hikes on the probability of exit from importing. By contrast, tariff confusion increases month-to-month exit in the levels specification, but does not have a robust effect on exit in the 12-month-differences specification. Our estimates for the levels specification imply that a 10% rise in the import duty would make import cessation about 0.4 percentage points more likely, compared to a base monthly exit rate of 24% in the panel. Conditional on a given tariff change, an extra 5 announcements leading up to it would increase the probability of exit by another 1 percentage point, while an extra 10% overshoot in the maximum calculated tariff would raise the exit rate by 0.4 percentage points.

The definition of month-to-month and 12-month exit from importing in Table 11 implies the sample differs between Panels A and B. To ensure that our results are not driven by sample selection, in Table A6 we consider an alternative indicator of import cessation that is set to 1 if there are

positive imports both 1 month and 12 months prior but not currently. In this restricted sample, we again estimate that higher tariffs raise the exit probability. We also find that in both the levels and 12-month-differences specifications the  $TariffMax_{pct}$  and  $TariffMiss_{pct}$  confusion measures lead to more exit, whereas  $\#Announce_{pct}$  and  $TariffMess_{pct}$  have insignificant effects.

Table 11: Exit from Importing

	(1)	(2)	(3)	(4)	(5)
	$\log(1 + Tariff)$	$\#Announce$	$TariffMess$	$\log(1 + TariffMax)$	$TariffMiss$
<b>Panel A: Levels, Import Exit Indicator</b>					
$\log(1 + Tariff)$	0.0391*** (0.00372)	0.0302*** (0.00383)	0.0407*** (0.00372)	0.00168 (0.00420)	0.0374*** (0.00370)
<i>Confusion</i>		0.00212*** (0.000248)	0.0135*** (0.00268)	0.0440*** (0.00265)	0.0212*** (0.00127)
R-squared	0.557	0.557	0.557	0.557	0.557
N	3,760,552	3,760,552	3,760,552	3,760,552	3,760,552
<b>Panel B: 12-Month Differences, Import Exit Indicator</b>					
$\Delta \log(1 + Tariff)$	0.0163*** (0.00415)	0.0212*** (0.00430)	0.0158*** (0.00418)	0.0111* (0.00479)	0.0162*** (0.00414)
<i>Confusion</i>		-0.00113*** (0.000281)	-0.00443 (0.00237)	0.00617* (0.00313)	0.00163 (0.00150)
R-squared	0.604	0.604	0.604	0.604	0.604
N	3,714,875	3,714,875	3,714,875	3,714,875	3,714,875
Country-HTS10 FE	Yes	Yes	Yes	Yes	Yes
HTS10-Period FE	Yes	Yes	Yes	Yes	Yes

*Notes:* This table reports the effects of contemporaneous US (log) tariffs and tariff confusion on the discontinuation of US imports. Panel A estimates the baseline levels specifications from Table 3, where the outcome variable is an indicator for no imports in the current month and the sample conditions on positive imports in the previous month. Panel B estimates the baseline 12-month-differences specifications from Table 3, where the outcome variable is an indicator for no imports in the current month and the sample conditions on positive imports 12 months earlier.  $TariffMess$  is divided by 1,000. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

### 5.3 Trust and Relationship Specificity

We end by exploring the role of buyer-supplier trust and relationship specificity in the response of US imports to US trade policy developments during 2025. Were trade links that require input customization and relationship-specific investments more stable during tariff hikes and heightened tariff confusion? Did trust systems help sustain trade activity when turbulent policy tested business partners' negotiations and agreements?

To shed light on these questions, we examine how US imports adjusted to changes in tariffs

and tariff confusion across countries with different contract environments and across products with varying relationship specificity. Conceptually, buyers and suppliers that have made sunk investments in customizing upstream inputs for downstream production may have greater incentives to continue trading despite rising tariffs or tariff confusion, due to the hold-up problem in finding alternative partners. These incentives may be reinforced by mutual trust built in established relationships that extends beyond input customization, such as broader understanding on contracting principles, reliable payments and delivery, or risk sharing in response to shocks.

While we are not able to analyze trade flows at the level of individual buyer-supplier links, we can exploit the exogenous variation in country and product attributes to identify the effects of trust and relationship specificity in the aggregate. As in the previous section, we caution that we characterize only high-frequency adjustments in the relatively short term and while policy turbulence is ongoing. We recognize that partnerships may evolve differently over the medium to long run, and that the pattern of this evolution may depend on the duration of policy turbulence and on policy changes that occur after it subsides.

### **Products’ relationship specificity**

We find that US imports of differentiated products that require more relationship-specific investments and exhibit higher relationship stickiness were significantly more resilient to rising confusion about US tariffs over 2025. By contrast, imports of differentiated and relationship-specific inputs were more sensitive to tariff rises, while imports of relationship-sticky inputs were less sensitive.

These results emerge from expanded versions of specifications (1) and (2) that add the interactions of  $Tariff_{cpt}$  and  $Confusion_{cpt}$  with one of three different product characteristics: (i) scope for differentiation from Rauch (1999), (ii) need for relationship-specific investments from Nunn (2007), and (iii) realized relationship stickiness from Martin et al. (2026).<sup>18</sup> Appendix Table A7 reports the two-way correlations among these measures. Although relationship stickiness is uncorrelated with the other two measures, product differentiation and contract intensity are relatively strongly correlated at about 0.60. This is consistent with these measures identifying conceptually distinct product attributes. On the one hand, relationship stickiness (iii) may be the endogenous outcome of technologically inherent product differentiation (i) and need for relationship-specific investments (ii). For example, firms may maintain longer-lasting relationships precisely when both partners

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<sup>18</sup>We use the conservative Rauch (1999) measure to flag differentiated products, and the first measure of contract intensity denoted as  $z^{rs1}$  in Nunn (2007). To concord these measures to HTS-10 products, we utilize concordance tables from UN Statistics Division for Rauch (1999) and Martin et al. (2026). For Nunn (2007), we use concordance tables from Pierce and Schott (2012) and the US Bureau of Economic Analysis. See Appendix B.2 for more details.

need to incur sunk costs to customize their production process to each other. On the other hand, sourcing relationships may be stickier for inputs that are technologically essential to production or important in a buyer's total input expenditures regardless of characteristics (i) and (ii). This could make changing suppliers very disruptive, even if the inputs need not be overly customized.

Table 12: Product Differentiation (Rauch, 1999)

	(1)	(2)	(3)	(4)	(5)
	$\log(1 + \textit{Tariff})$	$\#Announce$	$\textit{TariffMess}$	$\log(1 + \textit{TariffMax})$	$\textit{TariffMiss}$
<b>Panel A: Levels, <math>\log\textit{Imports}</math></b>					
$\log(1 + \textit{Tariff})$	-0.408*** (0.0666)	-0.116 (0.0681)	-0.297*** (0.0653)	0.210** (0.0709)	-0.382*** (0.0645)
$\log(1 + \textit{Tariff})$ $\times \textit{Differentiated}$	-0.0669 (0.0706)	-0.247*** (0.0718)	-0.215** (0.0692)	-0.247*** (0.0751)	-0.0679 (0.0683)
<i>Confusion</i>		-0.0547*** (0.00366)	-1.017*** (0.0959)	-0.737*** (0.0360)	-0.375*** (0.0181)
<i>Confusion</i> $\times \textit{Differentiated}$		0.0272*** (0.00392)	0.795*** (0.0999)	0.221*** (0.0393)	0.0986*** (0.0197)
R-squared	0.870	0.870	0.870	0.870	0.870
<b>Panel B: 12-Month Differences, <math>\Delta\log\textit{Imports}</math></b>					
$\Delta \log(1 + \textit{Tariff})$	-0.442*** (0.0772)	-0.107 (0.0787)	-0.335*** (0.0754)	0.212* (0.0822)	-0.414*** (0.0753)
$\Delta \log(1 + \textit{Tariff})$ $\times \textit{Differentiated}$	-0.0380 (0.0822)	-0.256** (0.0839)	-0.178* (0.0806)	-0.146 (0.0879)	-0.0349 (0.0802)
<i>Confusion</i>		-0.0629*** (0.00504)	-0.985*** (0.115)	-0.780*** (0.0469)	-0.398*** (0.0232)
<i>Confusion</i> $\times \textit{Differentiated}$		0.0340*** (0.00540)	0.790*** (0.118)	0.136** (0.0511)	0.0590* (0.0253)
R-squared	0.238	0.238	0.238	0.239	0.239
Country-HTS10 FE	Yes	Yes	Yes	Yes	Yes
HTS10-Period FE	Yes	Yes	Yes	Yes	Yes
N	2,696,507	2,696,507	2,696,507	2,696,507	2,696,507

*Notes:* This table reports the heterogeneous effects of contemporaneous US (log) tariffs and tariff confusion on (log) US imports of homogeneous vs. differentiated products, based on the Rauch (1999) classification and the baseline levels and 12-month-differences specifications from Table 3. *TariffMess* is divided by 1,000. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

We report the differential effects of US trade policy on goods with varying degrees of product differentiation, relationship specificity, and relationship stickiness in Tables 12, 13, and 14, respectively. The main effects of tariff confusion remain negative and significant across all specifications,

while its interaction with each of the three product attributes always enters with a significant positive coefficient of sizable magnitude. For example, the estimates imply that US imports of differentiated goods were roughly half as sensitive to announcement proliferation as homogeneous goods. And each additional announcement reduced imports of products at the 75th percentile of the distributions of either relationship specificity or relationship stickiness by 1.6 percentage points less than imports of products at the 25th percentile.

Table 13: Product Relationship Specificity (Nunn, 2007)

	(1)	(2)	(3)	(4)	(5)
	$\log(1 + \textit{Tariff})$	$\# \textit{Announce}$	$\textit{TariffMess}$	$\log(1 + \textit{TariffMax})$	$\textit{TariffMiss}$
<b>Panel A: Levels, <math>\log \textit{Imports}</math></b>					
$\log(1 + \textit{Tariff})$	-0.133 (0.0759)	0.116 (0.0749)	-0.116 (0.0754)	0.476*** (0.0816)	-0.125 (0.0729)
$\log(1 + \textit{Tariff})$ $\times \textit{Relation Specificity}$	-0.595*** (0.122)	-0.797*** (0.119)	-0.678*** (0.122)	-0.853*** (0.131)	-0.564*** (0.118)
<i>Confusion</i>		-0.0509*** (0.00442)	-0.353*** (0.101)	-0.768*** (0.0471)	-0.375*** (0.0233)
<i>Confusion</i> $\times \textit{Relation Specificity}$		0.0342*** (0.00692)	0.182 (0.141)	0.390*** (0.0798)	0.152*** (0.0398)
R-squared	0.869	0.869	0.869	0.870	0.870
<b>Panel B: 12-Month Differences, <math>\log \textit{Imports}</math></b>					
$\Delta \log(1 + \textit{Tariff})$	-0.134 (0.0889)	0.164 (0.0892)	-0.122 (0.0891)	0.521*** (0.0960)	-0.127 (0.0863)
$\Delta \log(1 + \textit{Tariff})$ $\times \textit{Relation Specificity}$	-0.603*** (0.146)	-0.872*** (0.145)	-0.669*** (0.147)	-0.768*** (0.159)	-0.560*** (0.142)
<i>Confusion</i>		-0.0626*** (0.00600)	-0.384*** (0.0958)	-0.831*** (0.0602)	-0.409*** (0.0295)
<i>Confusion</i> $\times \textit{Relation Specificity}$		0.0505*** (0.00940)	0.280 (0.144)	0.296** (0.102)	0.110* (0.0507)
R-squared	0.236	0.236	0.236	0.237	0.237
Country-HTS10 FE	Yes	Yes	Yes	Yes	Yes
HTS10-Period FE	Yes	Yes	Yes	Yes	Yes
N	2,575,912	2,575,912	2,575,912	2,575,912	2,575,912

*Notes:* This table reports the heterogeneous effects of contemporaneous US (log) tariffs and tariff confusion on (log) US imports across products with varying relationship specificity, based on the Nunn (2007) classification and the baseline levels and 12-month-differences specifications from Table 3. *TariffMess* is divided by 1,000.  
\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

Table 14: Product Relationship Stickiness (Martin et al., 2026)

	(1)	(2)	(3)	(4)	(5)
	$\log(1 + \textit{Tariff})$	$\# \textit{Announce}$	$\textit{TariffMess}$	$\log(1 + \textit{TariffMax})$	$\textit{TariffMiss}$
<b>Panel A: Levels, <math>\log \textit{Imports}</math></b>					
$\log(1 + \textit{Tariff})$	-1.802*** (0.215)	-1.013*** (0.221)	-1.582*** (0.231)	-0.602** (0.219)	-1.629*** (0.208)
$\log(1 + \textit{Tariff})$ $\times \textit{Relation Stickiness}$	0.450*** (0.0699)	0.233** (0.0715)	0.371*** (0.0748)	0.204** (0.0714)	0.401*** (0.0676)
<i>Confusion</i>		-0.113*** (0.0132)	-2.216*** (0.506)	-1.165*** (0.139)	-0.688*** (0.0667)
<i>Confusion</i> $\times \textit{Relation Stickiness}$		0.0276*** (0.00428)	0.624*** (0.154)	0.207*** (0.0458)	0.133*** (0.0220)
R-squared	0.869	0.869	0.869	0.870	0.870
<b>Panel B: 12-Month Differences, <math>\Delta \log \textit{Imports}</math></b>					
$\Delta \log(1 + \textit{Tariff})$	-1.746*** (0.242)	-0.836*** (0.249)	-1.558*** (0.254)	-0.259 (0.262)	-1.535*** (0.236)
$\Delta \log(1 + \textit{Tariff})$ $\times \textit{Relation Stickiness}$	0.427*** (0.0795)	0.173* (0.0817)	0.361*** (0.0832)	0.116 (0.0862)	0.367*** (0.0775)
<i>Confusion</i>		-0.136*** (0.0174)	-2.465*** (0.573)	-1.452*** (0.187)	-0.883*** (0.0902)
<i>Confusion</i> $\times \textit{Relation Stickiness}$		0.0345*** (0.00571)	0.711*** (0.175)	0.266*** (0.0616)	0.180*** (0.0297)
R-squared	0.238	0.238	0.238	0.239	0.239
Country-HTS10 FE	Yes	Yes	Yes	Yes	Yes
HTS10-Period FE	Yes	Yes	Yes	Yes	Yes
N	2,652,055	2,652,055	2,652,055	2,652,055	2,652,055

*Notes:* This table reports the heterogeneous effects of contemporaneous US (log) tariffs and tariff confusion on (log) US imports across products with varying relationship stickiness, based on the Martin et al. (2026) classification and the baseline levels and 12-month-differences specifications from Table 3. *TariffMess* is divided by 1,000. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

The evidence points to more nuanced effects of product attributes in the response of US imports to actual tariff movements. On the one hand, higher tariffs are dramatically more detrimental to trade in differentiated and highly relationship-specific inputs, compared to homogeneous and less customized inputs. This can be seen in the large negative and significant coefficient estimates on the interactions of  $\textit{Tariff}_{cpt}$  with relationship specificity in Table 13, especially when juxtaposed against its weaker main effects. Qualitatively similar but less robust patterns hold for the case of product differentiation in Table 12. In sharp contrast to these effects, Table 14 indicates that tariff

risers are significantly less disruptive to trade in goods with higher relationship stickiness.

While a full explanation of these findings is beyond the scope of our analysis, they point to important differences in how relationship specificity and relationship stickiness shape trade activity at a time of dynamic trade policy. In particular, buyers and suppliers in sectors with generally stickier relationships appear to sustain more trade flows in the face of both higher tariffs and greater tariff confusion. This is consistent with a role for mutual trust and fixed adjustment costs in weathering shocks to either trade costs or imperfect information. On the other hand, both product differentiation and relationship specificity make firms respond more to movements in actual tariffs but less to movements in tariff confusion. This is consistent with sunk costs of customization that prompts firms to drop partners or scale back activity only when variable trade costs exceed some threshold for certain.

**Countries' trust system** Finally, we show that US imports from countries with more trust in foreigners were significantly more resilient to tariff confusion in 2025. To this end, we expand specifications (1) and (2) to include interactions of  $Tariff_{cpt}$  and  $Confusion_{cpt}$  with the average self-reported trust in foreigners from the World Values Survey (WVS) (Haerpfer et al., 2024).<sup>19</sup>

Table 15 reports the differential impact of US trade policy measures across export countries with varying levels of trust in foreigners. While the negative level effects of tariff confusion remain strongly pronounced, the interaction between confusion and trust has a positive effect on US imports in most cases. Consistent with the evidence for relationship stickiness above, this strongly suggests that trust in foreign business partners is conducive to sellers and buyers finding mutually advantageous terms to continue trading on in the face of tariff confusion. The point estimates imply that improving trust from the lowest to the highest level would almost nullify the disruptive trade effects of multiple tariff announcements and multiple possible associated tariff calculations.

We find mixed and inconclusive results for the implications of trust in foreigners for the impact of actual tariff movements. The sign and magnitude of the estimated coefficients vary considerably across specifications, and yet they are often highly statistically significant. This noisiness might be partly driven by the smaller sample size (WVS data is available for only 66 countries). It might also point to trust playing a differential role in the response of trade partners to imperfect information about tariff rates versus actual tariff hikes, similar to the findings for product differentiation and relationship specificity above.

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<sup>19</sup>The WVS covers respondents in 66 countries who self-report their trust in foreigners in five categories from “Don’t trust at all” to “Complete trust”, which we convert to a [1,5] scale and average across respondents.

Table 15: Country Trust in Foreigners (WVS)

	(1)	(2)	(3)	(4)	(5)
	$\log(1 + \textit{Tariff})$	$\# \textit{Announce}$	$\textit{TariffMess}$	$\log(1 + \textit{TariffMax})$	$\textit{TariffMiss}$
<b>Panel A: Levels, <math>\log \textit{Imports}</math></b>					
$\log(1 + \textit{Tariff})$	-0.991*** (0.0640)	0.475*** (0.0882)	-0.671*** (0.0702)	0.316** (0.0994)	-0.186** (0.0645)
$\log(1 + \textit{Tariff})$ $\times \textit{Trust}$	0.212*** (0.0235)	-0.271*** (0.0322)	0.0982*** (0.0257)	-0.0959* (0.0397)	-0.101*** (0.0242)
<i>Confusion</i>		-0.0893*** (0.00462)	-0.929*** (0.104)	-0.583*** (0.0628)	-0.168*** (0.0423)
<i>Confusion</i> $\times \textit{Trust}$		0.0203*** (0.00173)	0.243*** (0.0316)	-0.0190 (0.0289)	-0.0715*** (0.0200)
R-squared	0.884	0.884	0.884	0.884	0.884
<b>Panel B: 12-Month Differences, <math>\Delta \log \textit{Imports}</math></b>					
$\Delta \log(1 + \textit{Tariff})$	-1.305*** (0.0795)	0.621*** (0.111)	-0.967*** (0.0841)	0.326* (0.127)	-0.378*** (0.0815)
$\Delta \log(1 + \textit{Tariff})$ $\times \textit{Trust}$	0.352*** (0.0302)	-0.299*** (0.0411)	0.236*** (0.0317)	-0.0648 (0.0512)	-0.00668 (0.0313)
<i>Confusion</i>		-0.122*** (0.00593)	-1.121*** (0.136)	-0.784*** (0.0815)	-0.260*** (0.0552)
<i>Confusion</i> $\times \textit{Trust}$		0.0320*** (0.00222)	0.330*** (0.0475)	0.0395 (0.0375)	-0.0451 (0.0261)
R-squared	0.277	0.278	0.278	0.279	0.279
Country-HTS10 FE	Yes	Yes	Yes	Yes	Yes
HTS10-Period FE	Yes	Yes	Yes	Yes	Yes
N	1,835,053	1,835,053	1,835,053	1,835,053	1,835,053

*Notes:* This table reports the heterogeneous effects of contemporaneous US (log) tariffs and tariff confusion on (log) US imports across origin countries with varying trust in foreigners, based on the World Values Survey (Haerpfer et al., 2024) and the baseline levels and 12-month-differences specifications from Table 3. *TariffMess* is divided by 1,000. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

## 6 Conclusion

Rising trade protectionism and geoeconomic tensions in recent years have increasingly meant not only greater barriers to economic activity and integration, but also heightened frequency and complexity of policy changes. US trade policy in 2025 was unprecedented in this respect, with 53 announcements introducing, delaying, reinstating and changing tariffs on differing sets of countries

and products under varying rules. In this paper, we argue that such periods of frequent and complex policy making create significant confusion as firms need to continuously monitor and process the arrival of new information. We introduce the new concept of *tariff confusion*, propose novel metrics based on newly assembled data, and establish its disruptive effects on international trade.

We build a new US Tariff Announcement Database for 2025 from US presidential executive orders and proclamations. For each origin country, product and month, we calculate US statutory tariffs and four indicators of tariff confusion: the number of relevant announcements, the number of possible tariff calculations arising, the maximum possible tariff calculated, and the possible calculation overshoot. We show that both higher tariffs and greater tariff confusion reduced US imports during 2025, with confusion doubling the impact of tariffs alone. Moreover, tariff confusion was persistent, exacerbated by higher tariffs, and dampened by relationship specificity and trust.

Our results indicate that policy confusion has first-order effects on firms' decision making, such that the nature and communication of policy implementation shape its consequences in important ways. This finding opens the door to several avenues for future research. While we have examined the short-run impact of tariff confusion during an unprecedented and prolonged period of tariff confusion, policy confusion may exert different effects over the medium to long run. These may moreover depend on the duration and ultimate resolution of policy turbulence, as well as on firms' experience and adaptation to such episodes. Separately, we have documented the disruptive effects of tariff confusion on trade flows alone. Understanding how firms update their beliefs, manage buyer-supplier relationships, and adjust trade and production activity would elucidate the impact of policy confusion on firm performance and ultimately consumer welfare. Of related interest are the consequences of policy confusion for supply chain resilience in the aggregate, and the mitigating strategies that buyer-supplier contracting or specialized intermediaries might provide. Finally, in environments where information transparency and processing may critically shape individual and aggregate outcomes, it is important to consider the optimal implementation and communication of policy changes alongside optimal policy design per se.

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## A Appendix: Additional Tables

Table A1: Sources of Variation in US Tariff Confusion in 2025

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	$\delta_c$	$\delta_p$	$\delta_t$	$\delta_{cp}$	$\delta_{ct}$	$\delta_{pt}$	$\delta_c + \delta_p + \delta_t$
<i>#Announce</i>	0.0726	0.0477	0.714	0.165	0.914	0.805	0.823
<i>TariffMess</i>	0.0349	0.0742	0.0720	0.216	0.206	0.455	0.180
$\log(1 + \textit{TariffMax})$	0.246	0.0982	0.441	0.374	0.848	0.615	0.759
<i>TariffMiss</i>	0.188	0.0537	0.264	0.263	0.849	0.442	0.493

*Notes:* This table reports the  $R^2$  from regressing each confusion measure on different sets of fixed effects to illustrate its variation across countries, products and months in 2025. The column heading specifies the fixed effects included, where subscripts  $c$ ,  $p$  and  $t$  denote country, HTS 10-digit product and month, respectively.

Table A2: Robustness - 2-Months Lagged Trade Policy

	(1)	(2)	(3)	(4)	(5)
	$\log(1 + \textit{Tariff})$	<i>#Announce</i>	<i>TariffMess</i>	$\log(1 + \textit{TariffMax})$	<i>TariffMiss</i>
<b>Panel A: Levels, <math>\log\text{Imports}</math></b>					
$\log(1 + \textit{Tariff})$	-0.665*** (0.0230)	-0.503*** (0.0236)	-0.663*** (0.0226)	-0.136*** (0.0254)	-0.603*** (0.0223)
<i>Confusion</i>		-0.0284*** (0.00149)	-0.213*** (0.0284)	-0.513*** (0.0156)	-0.204*** (0.00769)
R-squared	0.870	0.870	0.870	0.870	0.870
<b>Panel B: 12-Month Differences, <math>\Delta\log\text{Imports}</math></b>					
$\Delta\log(1 + \textit{Tariff})$	-0.813*** (0.0284)	-0.618*** (0.0295)	-0.811*** (0.0281)	-0.167*** (0.0315)	-0.734*** (0.0276)
<i>Confusion</i>		-0.0342*** (0.00200)	-0.240*** (0.0319)	-0.628*** (0.0198)	-0.260*** (0.00998)
R-squared	0.237	0.238	0.237	0.238	0.238
Country-HTS10 FE	Yes	Yes	Yes	Yes	Yes
HTS10-Period FE	Yes	Yes	Yes	Yes	Yes
N	2,720,244	2,720,244	2,720,244	2,720,244	2,720,244

*Notes:* This table shows that the baseline effects of contemporaneous US (log) tariffs and tariff confusion on (log) US imports in Table 3 are robust to lagging independent trade policy variables by 2 months. *TariffMess* is divided by 1,000. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

Table A3: Robustness - Country-Product and Country-Month Fixed Effects

	(1)	(2)	(3)	(4)	(5)
	$\log(1 + \text{Tariff})$	$\# \text{Announce}$	$\text{TariffMess}$	$\log(1 + \text{TariffMax})$	$\text{TariffMiss}$
<b>Panel A: Levels, <math>\log \text{Imports}</math></b>					
$\log(1 + \text{Tariff})$	-0.252*** (0.0339)	-0.254*** (0.0339)	-0.257*** (0.0344)	-0.0730* (0.0342)	-0.344*** (0.0383)
<i>Confusion</i>		-0.0222*** (0.00268)	-0.0348** (0.0130)	-0.321*** (0.0337)	-0.195*** (0.0227)
R-squared	0.850	0.850	0.850	0.850	0.850
<b>Panel B: 12-Month Difference, <math>\Delta \log \text{Imports}</math></b>					
$\Delta \log(1 + \text{Tariff})$	-0.214*** (0.0391)	-0.215*** (0.0391)	-0.218*** (0.0394)	-0.0367 (0.0393)	-0.299*** (0.0429)
<i>Confusion</i>		-0.0187*** (0.00309)	-0.0276* (0.0138)	-0.317*** (0.0361)	-0.181*** (0.0236)
R-squared	0.138	0.138	0.138	0.138	0.138
Exporter-HTS10 FE	Yes	Yes	Yes	Yes	Yes
Exporter-Period FE	Yes	Yes	Yes	Yes	Yes
N	2,788,935	2,788,935	2,788,935	2,788,935	2,788,935

Notes: This table shows that the baseline effects of contemporaneous US (log) tariffs and tariff confusion on (log) US imports in Table 3 are robust to conditioning on country-product and country-month pair fixed effects.  $\text{TariffMess}$  is divided by 1,000. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

Table A4: Robustness - Unbalanced Panel, Levels,  $\log \text{Imports}$ 

	(1)	(2)	(3)	(4)	(5)
	$\log(1 + \text{Tariff})$	$\# \text{Announce}$	$\text{TariffMess}$	$\log(1 + \text{TariffMax})$	$\text{TariffMiss}$
$\log(1 + \text{Tariff})$	-0.401*** (0.0209)	-0.282*** (0.0205)	-0.433*** (0.0206)	0.0323 (0.0219)	-0.378*** (0.0201)
<i>Confusion</i>		-0.0285*** (0.00119)	-0.253*** (0.0302)	-0.509*** (0.0133)	-0.279*** (0.00667)
R-squared	0.865	0.865	0.865	0.865	0.865
Exporter-HTS10 FE	Yes	Yes	Yes	Yes	Yes
HTS10-Period FE	Yes	Yes	Yes	Yes	Yes
N	3,757,530	3,757,530	3,757,530	3,757,530	3,757,530

Notes: This table shows that the baseline effects of contemporaneous US (log) tariffs and tariff confusion on (log) US imports in Table 3 are robust to using an unbalanced panel of country-product pairs over the 24-month period.  $\text{TariffMess}$  is divided by 1,000. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

Table A5: Robustness - Clustering by Country-Product

	(1)	(2)	(3)	(4)	(5)
	$\log(1 + \textit{Tariff})$	$\# \textit{Announce}$	$\textit{TariffMess}$	$\log(1 + \textit{TariffMax})$	$\textit{TariffMiss}$
<b>Panel A: Levels, <math>\log \textit{Imports}</math></b>					
$\log(1 + \textit{Tariff})$	-0.461*** (0.0196)	-0.330*** (0.0198)	-0.490*** (0.0198)	0.00311 (0.0216)	-0.435*** (0.0191)
<i>Confusion</i>		-0.0304*** (0.00133)	-0.243*** (0.0134)	-0.547*** (0.0141)	-0.290*** (0.00688)
R-squared	0.870	0.870	0.870	0.870	0.870
<b>Panel B: 12-Month Difference, <math>\Delta \log \textit{Imports}</math></b>					
$\Delta \log(1 + \textit{Tariff})$	-0.471*** (0.0248)	-0.332*** (0.0255)	-0.496*** (0.0250)	0.0904** (0.0280)	-0.440*** (0.0243)
<i>Confusion</i>		-0.0324*** (0.00176)	-0.217*** (0.0162)	-0.661*** (0.0181)	-0.347*** (0.00887)
R-squared	0.237	0.237	0.237	0.238	0.238
Exporter-HTS10 FE	Yes	Yes	Yes	Yes	Yes
HTS10-Period FE	Yes	Yes	Yes	Yes	Yes
N	2,720,551	2,720,551	2,720,551	2,720,551	2,720,551

*Notes:* This table shows that the baseline effects of contemporaneous US (log) tariffs and tariff confusion on (log) US imports in Table 3 are robust to clustering standard errors by country-product. *TariffMess* is divided by 1,000. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

Table A6: Import Exit - Restricted Sample

	(1)	(2)	(3)	(4)	(5)
	$\log(1 + \text{Tariff})$	$\#Announce$	$\text{TariffMess}$	$\log(1 + \text{TariffMax})$	$\text{TariffMiss}$
<b>Panel A: Levels, Import Exit Indicator</b>					
$\log(1 + \text{Tariff})$	0.0151*** (0.00328)	0.0139*** (0.00342)	0.0155*** (0.00328)	0.00265 (0.00378)	0.0146*** (0.00327)
<i>Confusion</i>		0.000275 (0.000228)	0.00326 (0.00198)	0.0147*** (0.00243)	0.00621*** (0.00115)
R-squared	0.473	0.473	0.473	0.473	0.473
<b>Panel B: 12-Month Differences, Import Exit Indicator</b>					
$\Delta \log(1 + \text{Tariff})$	0.0151*** (0.00328)	0.0139*** (0.00342)	0.0155*** (0.00328)	0.00265 (0.00378)	0.0146*** (0.00327)
<i>Confusion</i>		0.000275 (0.000228)	0.00326 (0.00198)	0.0147*** (0.00243)	0.00621*** (0.00115)
R-squared	0.473	0.473	0.473	0.473	0.473
Country-HTS10 FE	Yes	Yes	Yes	Yes	Yes
HTS10-Period FE	Yes	Yes	Yes	Yes	Yes
N	2,731,518	2,731,518	2,731,518	2,731,518	2,731,518

*Notes:* This table shows that the baseline effects of contemporaneous US (log) tariffs and tariff confusion on import exit in Table 11 are robust to restricting the sample to observations with positive imports both 1 month and 12 months prior. *TariffMess* is divided by 1,000. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

Table A7: Pairwise Correlations Between Product Characteristics

	<i>Differentiated</i>	<i>Relation Specificity</i>	<i>Relation Stickiness</i>
<i>Differentiated</i>	1.00		
<i>Relation Specificity</i>	0.60	1.00	
<i>Relation Stickiness</i>	0.03	-0.09	1.00

*Notes:* This table reports the pairwise correlations among differentiation status, relationship specificity and relationship stickiness across HTS 10-digit products.

## B Appendix: Data

### B.1 Construction of USTAD and Tariff Rules

#### B.1.1 Tariff Rules

To understand how the USTAD is constructed, we first explain the tariff stacking rules. Due to various tariffs announced on countries and products, imports of a product may be subject to multiple tariffs. However, it is not the case that all tariffs can be stacked on top of each other. The tariffs that can or cannot be stacked are determined by a set of hierarchical rules. The order is as follows:

1. If an import is subject to the tariffs on Automobiles and Auto-parts or Medium and Heavy-Duty Vehicles, Parts and Buses, then it is not subject to any other additional tariffs unless it originates from China. If the shipment originates from China, then it is also subject to the China “fentanyl” tariff.
2. If a product is subject to the Canada or Mexico “fentanyl” tariffs, then it is not subject to additional Section 232 tariffs.
3. If a product is subject to two or more Section 232 tariffs, then it is subject to all of these tariffs based on its content value.<sup>20,21</sup>
4. If an import is subject to Section 232 tariffs or the de-minimis tariff, then it is not subject to the reciprocal tariffs.<sup>22</sup>
5. For all other scenarios not listed from (1)-(4) above, all applicable tariffs will be cumulative (i.e. stacked on top of each other).

It is important to note, the tariffs that are stacked can vary across time. For example, on June 23<sup>rd</sup> 2025, the set of products subject to the Steel tariffs was expanded. Therefore, for any one of these products, it will no longer be subject to the Canada “fentanyl” tariffs if it originated from Canada, whereas it was before. In summary, tariff announcements can indirectly further alter the tariffs you face due to changes in the applicable or exempted product list.

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<sup>20</sup>The content value of an import is the value that is attributable to the covered products under Section 232. For example, a steel derivative such as a freezer is made up of steel and many other components. Only the steel components of the freezer are subject to the additional steel tariffs.

<sup>21</sup>We are not able to assign tariffs based on their content value because our database does not report it.

<sup>22</sup>This rule is moot in our analysis since the US Census Bureau customs data does not record de-minimis trade.

### B.1.2 Construction of USTAD

Now, we turn to how the USTAD is constructed. We first systematically categorize tariff announcements into three groups.

1. Country specific
2. Product specific
3. Country-product specific

The first group are announcements of tariffs on specific countries regardless of the product (i.e. including products on the exemption list) and were enacted solely through IEEPA (e.g. Brazil tariffs). The second group are announcements of tariffs on certain products regardless of the origin country and were enacted solely through Section 232 (e.g. Steel tariffs). The third group are announcements of country-product specific tariffs that apply import tariffs to certain products that originate from certain countries, as listed within the executive orders and proclamations (e.g. tariffs on energy products originating from Canada). After categorizing each tariff announcement, we then define a binary variable  $I_{acpt}$  that is equal to one if announcement  $a$  is relevant to imports of product  $p$  from origin country  $c$  in period  $t$ . We can now construct our key variables.

#### 1) Statutory Tariff ( $Tariff_{cpt}$ )

We construct the statutory tariff in two steps. For the period before February 2025, we obtain the statutory tariff from the HTSUS through the USITC. This reports the MFN or non-NTR rate, and any country-product specific rates that account for trade agreements. We also account for any tariff policies implemented before February 2025. From February 2025 onward, we first define the “base” rate, which is the tariff rate as of January 2025. We then manually calculate the statutory tariff by taking this “base” rate, plus all applicable tariff changes arising from US trade policy in 2025 accounting for product exemptions and the tariff rules noted above. To do so, we create variables for the tariff rate each country-HTS10-period triplet faces due to each of the following tariff policies:

1. China “Fentanyl” Tariffs
2. Canada “Fentanyl” Tariffs
3. Canada energy Tariffs

4. Mexico “Fentanyl” Tariffs
5. Steel Tariffs
6. Aluminum Tariffs
7. Steel and Aluminum<sup>23</sup>
8. Copper Tariffs
9. Automobiles and Auto-parts Tariffs
10. Lumber Tariffs
11. Medium and Heavy-duty vehicles (“Truck”) Tariffs
12. Reciprocal Tariffs
13. Aerospace Tariffs
14. Brazil Tariffs
15. India Tariffs

## 2) Total number of announcements ( $\#Announce_{cpt}$ )

To construct the total number of cumulative tariff announcements, we simply count the total number of announcements that apply to each country-product pair based on the categorization above. To differentiate between upward and downward tariff revisions, we create two variables that measure the total number of upward ( $Announce_{cpt}^{Up}$ ) and downward ( $Announce_{cpt}^{Down}$ ) revisions. The total number of announcements is then the sum of the two.

It is important to emphasize that tariff revisions may also occur indirectly. For example, on August 18<sup>th</sup> 2025, the set of products subject to Steel or Aluminum tariffs expanded. For these products, this would constitute to an upward revision. In addition, because of the stacking rules, they would be no longer subject to the reciprocal tariffs, which results in a downward revision. As a result, this tariff policy led to two tariff announcements.

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<sup>23</sup>In August 2025, the set of products subject to Steel and Aluminum tariffs was expanded to include more product derivatives. We combine the two in this case because the associated HTS codes did not clearly differentiate between the two.

### 3) Maximum Tariff (*TariffMax<sub>cpt</sub>*)

To construct the maximum possible perceived tariff, we follow the same steps as when constructing the statutory tariff with three exceptions.

First, based on the categorization listed above, we allow for observations to be subject to all applicable tariffs by ignoring tariff exemptions. For example, the reciprocal tariffs are country specific with product exemptions, such as semi-conductors. In this case, we allow semi-conductors to be subject to the reciprocal tariffs. Another example is the tariff increase on aluminum products on June 4<sup>th</sup> 2025. The tariff rate increased from 25% to 50% with the exception of products originating from the United Kingdom, which remained at 25%. In this case, we assume that the maximum possible tariff also increased to 50% for the United Kingdom too.

Second, we ignore the stacking rules. For example, imports of steel product originating from Canada will be subject to both the Canada “fentanyl” tariff and steel tariffs.

Third, we ignore downward tariff revisions. For example, the reciprocal tariff on China increased to 125% on April 10<sup>th</sup> but was lowered to 10% on May 10<sup>th</sup>. We assume that the maximum possible tariff remained at 125%.

## B.2 Concordance

Here, we explain how we merge the import data with the product characteristics measures.

### 1. Product differentiation (Rauch, 1999)

- Product differentiation is provided at the 3 and 4-digit SITC rev.2 level.
- Using the concordance table from [UNSD](#), we concord SITC codes into HS 6-digit codes which then are mapped to HTS 10-digit codes.<sup>24</sup>

### 2. Relationship-Specific Investments (Nunn, 2007)

- Contract intensity is provided at the BEA Input-Output industry level.
- Using the concordance table from [BEA](#), we map these industry codes to NAICS 1997.
- Then, because NAICS 2022 is the closest vintage to our import data, we utilize the crosswalk from [US Census Bureau](#) to concord across vintages.
- Finally, we use the concordance table from Pierce and Schott (2012) to obtain the associated NAICS codes for each HTS 10-digit product.

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<sup>24</sup>The first 6 digits of a HTS 10-digit code is the HS 6-digit code.

### 3. Relationship Stickiness (Martin et al., 2026)

- Relationship stickiness is measured at the HS 6-digit 2002 edition level.
- We map HS 6-digit codes from the 2002 edition to the 2022 edition using the concordance table from [UNSD](#), which then can be mapped to the HTS 10-digit product level.

## C Appendix: News Articles

Figure A1: Newspaper articles on Tariff Confusion

### Tariffs mean an economic hit for U.S. firms—but also confusion and paperwork

By Jeff John Roberts  
Editor, Finance And Crypto  
April 3, 2025, 3:00 PM ET

Add us on   

(a) [Fortune](#) (April 3<sup>rd</sup>, 2025)

### Fed: The Economy Is Slowing As 'Companies Can't Figure Out the Rules of This Tariff Game'

By DICCON HYATT Published June 04, 2025 05:51 PM EDT

(b) [Investopedia](#) (June 4<sup>th</sup>, 2025)

### Trump's tariff deadline delay brings hope, confusion to trade partners, businesses

By David Lawder, Andrea Shalal and Timothy Aepfel  
July 8, 2025 9:14 PM GMT+1 Updated July 8, 2025

(c) [Reuters](#) (July 8<sup>th</sup>, 2025)

### Confused and concerned, CEOs get to grips with Trump's new tariff regime

TRADE  
PUBLISHED THU, AUG 7 2025 6:29 AM EDT | UPDATED THU, AUG 7 2025 6:10 AM EDT

(d) [CNBC](#) (August 7<sup>th</sup>, 2025)

### Welcome to Tariff Complexity Hell

Complexity is a tax, and today U.S. companies are paying through the nose.

DECEMBER 3, 2025 • COMMENTARY

(e) [Cato Institute](#) (December 3<sup>rd</sup>, 2025)

One European business leader, who declined to be named, said they knew of a company that had sent four identical containers of machinery to the US and was charged different rates for each one.

(f) [Financial Times](#) (February 13<sup>th</sup>, 2026)



(g) [Bloomberg](#) (February 23<sup>rd</sup>, 2026)

## D Appendix: US Tariff Timeline

Here, we layout the timeline of all US tariff announcements made in 2025.<sup>25</sup> It does not include tariffs that were threatened. The timeline utilizes information from the Peterson Institute and numerous US federal notices.<sup>26</sup> The announcements are grouped into 13 different groups.

### 1. China “Fentanyl” Tariffs (IEEPA)

#### February 4<sup>th</sup> 2025 - “Fentanyl” tariff on China begin

**Country:** China

**Products:** All

**Action:** Additional 10% duty

**Source:** [Executive Order 14195](#)

#### March 4<sup>th</sup> 2025 - Increase in the tariff rate

**Country:** China

**Products:** All

**Action:** Increase in additional duty from 10% to 20%

**Source:** [Amendment of Executive Order 14195](#)

#### November 10<sup>th</sup> 2025 - Reducing the tariff rate

**Country:** China

**Products:** All

**Action:** Reduction in additional duty from 20% to 10%

**Source:** [Executive Order 14357](#)

### 2. Canada “Border” Tariffs (IEEPA)

#### March 4<sup>th</sup> 2025 - Canada “Border” tariffs begin

**Country:** Canada

**Products:** All products

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<sup>25</sup>Of course, given the confusion that US trade policy induced during 2025, we cannot rule out the possibility that we have missed or mis-interpreted a tariff announcement. We welcome corrections.

<sup>26</sup>For the timeline from the Peterson Institute: <https://www.piie.com/blogs/realtime-economics/2025/trumps-trade-war-timeline-20-date-guide>

**Action:** Additional 25% duty on all goods (except energy products) and 10% on energy products

**Source:** [Executive Order 14193](#)

*March 7<sup>th</sup> 2025*

- **Country:** Canada
- **Products:** All
- **Action:** All USMCA compliant goods enter duty-free
- **Source:** [Executive Order 14226](#)

*August 1<sup>st</sup> 2025 - Increase in the tariff rate*

- **Country:** Canada
- **Products:** All
- **Action:** Increase in additional duty on non-USMCA compliant goods from 25% to 35%
- **Source:** [Executive Order 14325](#)

### 3. Mexico “Border” Tariffs (IEEPA)

*March 4<sup>th</sup> 2025 - Mexico “Border” tariffs begin*

**Country:** Mexico

**Products:** All products

**Action:** Additional 25% duty on all goods

**Source:** [Executive Order 14198](#)

*March 7<sup>th</sup> 2025*

- **Country:** Mexico
- **Products:** All
- **Action:** All USMCA compliant goods enter duty-free
- **Source:** [Executive Order 14232](#)

### 4. Brazil Tariffs (IEEPA)

*August 7<sup>th</sup> 2025 - Tariffs on Brazil begin*

**Country:** Brazil

**Products:** Nearly all products

**Action:** Additional 40% duty on all goods

**Exemption:** Section 232 products and products listed in Annex I of Executive Order 14323

**Source:** [Executive Order 14323](#)

*November 13<sup>th</sup> 2025 - Agricultural product tariff exemption*

**Country:** Brazil

**Products:** Agricultural products

**Action:** Agricultural products are exempt from the additional tariffs on Brazil

**Source:** [Executive Order 14361](#)

## 5. India Tariffs (IEEPA)

*August 27<sup>th</sup> 2025 - Tariffs on India begin*

**Country:** India

**Products:** Nearly all products

**Action:** Additional 25% duty on all goods

**Exemption:** Section 232 products and products listed in Annex II of Executive Order 14257 (see [reciprocal tariffs](#))

**Source:** [Executive Order 14323](#)

## 6. Reciprocal Tariffs (IEEPA)

*April 5<sup>th</sup> 2025 - Start of baseline 10% additional duty*

**Country:** All countries excluding Canada, Mexico, and countries subject to column 2 duty rates

**Products:** Nearly all products

**Action:** Additional 10% duty

**Exemption:** All products listed in Annex II of Executive Order 14257 and Section 232 products.

**Source:** [Executive Order 14257](#)

*April 5<sup>th</sup> 2025 - Semi-conductor and phones exemptions*

**Country:** All countries excluding Canada, Mexico, and countries subject to column 2 duty rates

**Products:** Electronics, smartphones, semi-conductors

**Action:** Exempt from reciprocal tariffs

**Source:** [Presidential Memoranda](#)

*April 9<sup>th</sup> 2025 - Country-specific tariff rates begin*

**Country:** All countries excluding Canada, Mexico, and countries subject to column 2 duty rates

**Products:** Nearly all products

**Action:** Country-specific tariff rates begin

**Exemption:** All products listed in Annex II of Executive Order 14257 and Section 232 products.

**Source:** [Executive Order 14257](#)

*April 9<sup>th</sup> 2025 - First counter-retaliation to China*

**Country:** China

**Products:** Nearly all products

**Action:** Additional duty increases from 34% to 84%

**Exemption:** All products listed in Annex II of Executive Order 14257 and Section 232 products.

**Source:** [Executive Order 14259](#)

*April 9<sup>th</sup> 2025 - 90 day pause except for China*

**Country:** All countries except China

**Products:** Nearly all products

**Action:** Reciprocal tariff rate reduced to 10%

**Exemption:** All products listed in Annex II of Executive Order 14257 and Section 232 products.

**Source:** [Executive Order 14266](#)

*April 10<sup>th</sup> 2025 - Second counter-retaliation to China*

**Country:** China

**Products:** Nearly all products

**Action:** Additional duty increases from 84% to 125%

**Exemption:** All products listed in Annex II of Executive Order 14257 and Section 232 products.

**Source:** [Executive Order 14266](#)

*May 14<sup>th</sup> 2025 - Lowering tariffs on China*

**Country:** China

**Products:** Nearly all products

**Action:** Reduction in additional duty from 125% to 10%

**Exemption:** All products listed in Annex II of Executive Order 14257 and Section 232 products.

**Source:** [Executive Order 14298](#)

*August 7<sup>th</sup> 2025 - Updated reciprocal tariff rates*

**Country:** Nearly all countries

**Products:** Nearly all products

**Action:** Additional country-specific duty rates (countries not listed face the baseline 10%)

**Exemption:** All products listed in Annex II of Executive Order 14257 and Section 232 products.

**Source:** [Executive Order 14326](#)

*September 1<sup>st</sup> 2025 - Implementation of US-EU framework of additional exemptions*

**Country:** EU countries

**Products:** Natural resources, aircraft and aircraft parts, pharmaceuticals etc. (see announcement for full list)

**Action:** No additional duty

**Source:** [ITC announcement](#)

*September 4<sup>th</sup> 2025 - Agreement with Japan*

**Country:** Japan

**Products:** Nearly all products

**Action:** If the column 1 duty rate is less than 15%, the additional duty is equal to 15% minus the column 1 duty rate. Otherwise, there is no additional tariff.

**Exemption:** All products listed in Annex II of Executive Order 14257 and Section 232 products.

**Source:**

**Source:** [Executive Order 14345](#)

*September 8<sup>th</sup> 2025 - Amendment to product exemption list*

**Country:** All

**Products:** Specific product list

**Action:** 39 products added to the exemption list and 8 product removed from the exemption list

**Source:** [Executive Order 14346](#)

*October 26<sup>th</sup> 2025 - Agreement with Thailand*

**Country:** Thailand

**Action:** Trade agreement with Thailand

**Source:** [Joint statement with Thailand](#)

*October 26<sup>th</sup> 2025 - Agreement with Cambodia*

**Country:** Cambodia

**Action:** Trade agreement with Cambodia

**Source:** [Joint statement with Cambodia](#)

*October 26<sup>th</sup> 2025 - Agreement with Malaysia*

**Country:** Malaysia

**Action:** Trade agreement with Malaysia

**Source:** [Joint statement with Malaysia](#)

*October 26<sup>th</sup> 2025 - Agreement with Vietnam*

**Country:** Vietnam

**Action:** Trade agreement with Vietnam

**Source:** [Joint statement with Vietnam](#)

*November 1<sup>st</sup> 2025 - US and South Korea trade deal*

**Country:** South Korea

**Action:** Trade agreement with South Korea

**Products:** Products subject to reciprocal tariffs

**Action:** If the US-South Korea FTA/MFN duty rate is less than 15%, the additional duty is equal to 15% minus the US-South Korea FTA/MFN duty rate. Otherwise, there is no additional tariff.

**Source:** [US and South Korea fact sheet](#)

*November 13<sup>th</sup> 2025 - Agreement with Argentina*

**Country:** Argentina

**Action:** Agreement with Argentina

**Source:** [Joint statement with Argentina](#)

*November 13<sup>th</sup> 2025 - Agreement with Ecuador*

**Country:** Ecuador

**Action:** Agreement with Ecuador

**Source:** [Joint statement with Ecuador](#)

*November 13<sup>th</sup> 2025 - Agreement with El Salvador*

**Country:** El Salvador

**Action:** Agreement with El Salvador

**Source:** [Joint statement with El Salvador](#)

*November 13<sup>th</sup> 2025 - Agreement with Guatemala*

**Country:** Guatemala

**Action:** Agreement with Guatemala

**Source:** [Joint statement with Guatemala](#)

*November 13<sup>th</sup> 2025 - Agricultural products exemption*

**Country:** Nearly all countries

**Products:** Agricultural products

**Action:** Exempt from reciprocal tariffs

**Source:** [Executive Order 14360](#)

*November 14<sup>th</sup> 2025 - US - Switzerland and Liechtenstein trade agreement*

**Country:** Switzerland and Liechtenstein

**Products:** All products subject to reciprocal tariffs

**Action:** If the MFN duty rate is less than 15%, the additional duty is equal to 15% minus the MFN duty rate. Otherwise, there is no additional tariff.

**Exemption:** All products listed in Annex II of Executive Order 14257 and Section 232 products.

**Source:** [US - Switzerland and Liechtenstein fact sheet](#)

## 7. Steel Tariffs (Section 232)

### March 12<sup>th</sup> 2025 - Tariffs on steel products begin

**Country:** All

**Products:** Steel products

**Action:** Additional 25% duty

**Source:** [Proclamation 10896](#)

### June 4<sup>th</sup> 2025 - Increase in the tariff rate

**Country:** All

**Products:** Steel products

**Action:** Increase in additional duty from 25% to 50%

**Exemption:** Additional duty for UK steel remains at 25%

**Source:** [Proclamation 10947](#)

### June 23<sup>rd</sup> 2025 - Expanding steel tariffs to steel derivatives

**Country:** All

**Products:** Steel derivatives (e.g. refrigerators, freezers etc.)

**Action:** Additional duty of 50% (25% for the UK)

**Source:** [Proclamation 10896](#)

### August 18<sup>th</sup> 2025 - Expanding steel tariffs to more steel derivatives

**Country:** All

**Products:** Steel derivatives

**Action:** Additional duty of 50% (25% for the UK)

Source: [BIS announcement](#)

## 8. Aluminium Tariffs (Section 232)

### March 12<sup>th</sup> 2025 - Tariffs on aluminium products begin

Country: All

Products: Aluminium products and derivatives of aluminium

Action: Additional 25% duty

Source: [Proclamation 10895](#)

### June 4<sup>th</sup> 2025 - Increase in the tariff rate

Country: All

Products: Aluminium products and derivatives of aluminium

Action: Increase in additional duty from 25% to 50%

Exemption: Additional duty for UK steel remains at 25%

Source: [Proclamation 10947](#)

### August 18<sup>th</sup> 2025 - Expanding aluminium tariffs to more aluminium derivatives

Country: All

Products: Aluminium derivatives

Action: Additional duty of 50% (25% for the UK)

Source: [BIS announcement](#)

## 9. Auto Tariffs (Section 232)

### April 3<sup>rd</sup> 2025 - Tariffs on automobiles begin

Country: All

Products: Automobiles

Action: Additional 25% duty

Source: [Proclamation 10908](#)

### May 3<sup>rd</sup> 2025 - Tariffs on auto parts begin

Country: All

Products: Auto parts

Action: Additional 25% duty

Source: [Proclamation 10908](#)

*June 30<sup>th</sup> 2025 - Tariff reduction on UK autos*

Country: United Kingdom

Products: Autos

Action: Additional duty reduced from 25% to 7.5% for automobiles. Auto parts face a tariff level of 10%

Source: [Executive Order 14309](#)

*September 4<sup>th</sup> 2025 - Agreement with Japan*

Country: Japan

Products: Autos

Action: If the column 1 duty rate is less than 15%, the additional duty is equal to 15% minus the column 1 duty rate. Otherwise, there is no additional tariff.

Source: [Executive Order 14345](#)

*September 4<sup>th</sup> 2025 - Implementation of US-EU framework*

Country: EU countries

Products: Autos

Action: If the column 1 duty rate is less than 15%, the additional duty is equal to 15% minus the column 1 duty rate. Otherwise, there is no additional tariff.

Source: [ITC announcement](#)

*November 1<sup>st</sup> 2025 - US-South Korea trade deal*

Country: South Korea

Products: Autos

Action: If the US-South Korea FTA/MFN duty rate is less than 15%, the additional duty is equal to 15% minus the US-South Korea FTA/MFN duty rate. Otherwise, there is no additional tariff.

Source: [US - South Korea fact sheet](#)

## 10. Copper Tariffs (Section 232)

*August 1<sup>st</sup> 2025 - Tariffs on copper products begin*

Country: All

**Products:** Copper

**Action:** Additional 50% duty

**Source:** [Proclamation 10962](#)

## 11. Lumber and Wood Tariffs (Section 232)

### October 14<sup>th</sup> 2025 - Tariffs on lumber and wood products begin

**Country:** All

**Products:** Lumber and wood

**Action:** Additional 10 - 50% duty (depending on the product)

**Exemption:** UK faces an additional 10% tariff on wood products. EU and Japan face a 15% tariff level on wood products.

**Source:** [Proclamation 10967](#)

### November 1<sup>st</sup> 2025 - US and South Korea trade deal

**Country:** South Korea

**Products:** Lumber and wood

**Action:** If the US-South Korea FTA/MFN duty rate is less than 15%, the additional duty is equal to 15% minus the US-South Korea FTA/MFN duty rate. Otherwise, there is no additional tariff.

**Source:** [US - South Korea fact sheet](#)

## 12. Medium and Heavy-Duty (MHD) Vehicles, Parts and Buses Tariffs (Section 232)

### November 1<sup>st</sup> 2025 - Tariffs on MHD Vehicles, Parts and Buses products begin

**Country:** All

**Products:** MHD Vehicles, Parts and Buses

**Action:** Additional 25% duty on trucks and truck parts. Additional 10% on buses.

**Source:** [Fact sheet](#)

## 13. Aerospace Tariffs (Section 232)

### June 30<sup>th</sup> 2025 - Eliminating duties on UK aerospace products

**Country:** United Kingdom

**Products:** Aerospace

**Action:** Tariff free

**Source:** [Executive Order 14309](#)

**September 1<sup>st</sup> 2025 - Implementation of US-EU framework**

**Country:** EU countries

**Products:** Civil aircraft and parts

**Action:** Products are now exempt from Section 232 tariffs

**Source:** [ITC announcement](#)

**September 4<sup>th</sup> 2025 - Agreement with Japan**

**Country:** Japan

**Products:** Aerospace

**Action:** Products are now exempt from reciprocal tariffs and Section 232 tariffs

**Source:** [Executive Order 14345](#)