Exclusions for Sale?
Tariff Exclusions in the US-China Trade War*

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Abstract

In 2018-2019, the US imposed a swathe of Section 301 tariffs that affected around two-thirds of its imports from China. Less well-known is the fact that companies could seek exclusions from these tariffs under an administrative process managed by the Office of the US Trade Representative. Using data on all applications, we document the extent of these exclusions (they were non-trivial), and explore what explains successful requests (importantly, proxies of the applicant's ability to convey information about the material impact of the tariffs). We assess the welfare implications of this policy design for the Section 301 tariffs, by developing and calibrating a "protection for sale" model in which firms reveal information about their dependence on imports from China as grounds for seeking an exclusion. Quantitatively, the higher tariff rates announced under a policy of "tariffs with exclusions" exacerbate the overall welfare cost to the US substantially compared to a counterfactual policy of "tariffs without exclusions"; this is even though (conditional on given tariff rates) the exclusions improve the targeting of the tariffs across heterogeneous firms within product codes.

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Key words: *US-China trade war, Section 301 tariffs, tariff exclusions, lobbying.*

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1 Introduction

Between July 2018 and September 2019, the United States under the Trump administration enacted unilateral tariffs against a broad swathe of its imports from China, invoking Section 301 of the Trade Act of 1974 to address the Chinese government's "acts, policies, and practices related to technology transfer, intellectual property, and innovation" (Federal Register, 2018a). The additional tariffs were extensive: They covered over two-thirds of the US' imports from China, and touched over 90% of HS 6-digit product codes in whole or part; by the end of 2019, the average tariff increase on these imports was around 20 percentage points. With the announcement of these tariffs, the US government concurrently introduced an exclusions process, allowing importers to petition to exempt specific goods brought in from China from the additional duties. These exclusions have been largely treated as a sidenote in evaluations of the impact of the US-China tariff war in academic research, even though it was the focus of substantial government and corporate effort: Firms and their representatives submitted 52,746 exclusion requests, stretching the administrative capacity of the Office of the US Trade Representative (USTR). In all, 426 Federal Register notices related to exclusions were issued.

We ask and address three questions in this paper. How extensive were these exclusions, as measured by the value or share of imports from China eventually granted relief from the Section 301 tariffs? Why did the US government use these exclusions, in tandem with the increase in tariffs? And perhaps most importantly, how did the exclusions alter the impact of the Section 301 tariffs, in terms of the welfare of US consumers and producers respectively (as opposed to that of policymakers)? This last question is (by its nature) integral to the ongoing efforts to size up the economic consequences of the US-China tariffs. At the same time, it connects to a broader issue relevant in policy domains beyond trade policy: Does having multiple policy instruments available to address a distortion necessarily deliver better outcomes, even when each of the instruments would individually support the policy objective?

On the first question we investigate, the exclusions were a quantitatively larger phenomenon than has been widely recognized. We infer this using detailed US customs data at the monthly frequency for each Harmonized Tariff Schedule (HTS) 10-digit product code, from the changes in duties paid recorded around the implementation date of the Section 301 tariffs; here, we take care to use an updated version of the customs data that nets out duties initially paid that were then rebated retroactively after the exclusion decisions were announced. Aggregating over all codes, we find that a meaningful fraction – around 15.8% – of imports (by value) from China originally slated for additional tariffs were ultimately granted an exclusion. This amounts to around $12.6 billion of potential tariff revenue foregone (annually, based on 2017 import values), which is of a similar order of magnitude to total US tariff revenues prior to the trade war ($33.6 billion in 2017, across all origin countries). Given this scope of the accompanying exclusions, an evaluation of the impact of the Section 301 tariffs would be incomplete without taking into account the exclusions that were granted.[1]

Turning to why the US government adopted this system with exclusions, the short answer is that this was intended to make the Section 301 tariffs more efficient as a redistributive instrument, in the face of

[1] Fajgelbaum and Khandelwal (2022) point to this as an open question for further research in their survey of the literature on the repercussions of the US-China tariff war.

imperfect information on the effect of the additional tariffs on individual firms. We arrive at this from our reading of the institutional details of the exclusions program and our empirical investigation of the application outcomes. For this purpose, we have assembled a dataset covering the universe of exclusion applications, which includes details on: the applicant firm; the requested good; process variables; and the eventual outcome (whether the request was granted, and if unsuccessful, the reason for denial).

In setting up the exclusions process, the USTR stipulated that the system was intended for affected US entities to seek tariff relief for specific goods that met a list of eligibility criteria (see Section 2.1). Of these, the two that proved to be most relevant in practice were whether the good was available only from China, and whether the additional duties would result in severe economic harm to US interests. Crucially, the exclusions were meant to cover "particular products classified within a HTSUS subheading" (Federal Register, 2018b). In line with this, our calculations show that the granted exclusions typically covered a fraction of the import value *within* detailed HTS 10-digit product codes; there was substantial variation in this "exclusion share" across codes, but blanket exemptions were exceedingly rare.

These stylized findings point to heterogeneity across US-based importers in their dependence on goods sourced from China, and in the extent of the economic harm they would suffer, both across and within detailed product codes. While the USTR was cognizant of this heterogeneity, it did not have the ability and capacity to directly observe the operations and activities of each firm. The exclusions process therefore served an informational role, in enabling the USTR to elicit this information about specific firms and goods (rather than rely on data aggregated across many goods at the level of even the finest trade classifications). As we will see, the USTR went so far as to spell out specific details – on whether comparable goods might be available from the US or third-countries; the percentage of the firm's total gross sales that would be impacted by the tariff on the good; etc. – that applicants were required to provide in their submissions. With this information, the USTR could then decide on which goods to grant an exclusion to – in principle, this would be goods for which the Section 301 tariffs created a disproportionate deadweight loss relative to their political benefits – thus making the policy more efficient from the US government's perspective.

Using our dataset on applications, we uncover evidence that supports this view that the exclusions process served as a conduit for firms to transmit private information to the USTR. We find that application features that plausibly speak to a firm's effectiveness in conveying information are positively correlated with the likelihood of approval. These include: whether the application was submitted by a representative (e.g., a legal or consulting firm with expertise on trade issues); whether the USTR received a letter of comment supporting the exclusion request (e.g., from an industry association or politician); and whether the firm engaged contemporaneously in lobbying activities (as recorded in the LobbyView dataset). We show that the USTR took significantly more time to determine the outcome of applications with these features, suggesting that these allowed the firm to call more attention to an application, and perhaps even enhance the informational content of its submission (hence, the longer processing time). While the overall success rate of exclusion requests was low (just 12.9%), submission by a representative, receiving a positive comment letter, and engaging in lobbying were associated with a 3.4%-9.1% higher likelihood of approval (depending on the regression specification and the measure considered). When unsuccessful, applications with these features were also less likely to be denied for failing to provide sufficient information to show availability only from China or to demonstrate severe economic harm. This set of findings holds even when

controlling for a host of other firm and product characteristics, that speak in particular to other political economy forces (such as campaign contributions, or whether the firm was located in a swing district). As a natural starting point, we thus set out to assess the exclusions program on the basis of its stated objective to allow the USTR to more finely target the Section 301 tariffs; as we will see, this analysis will point to potential welfare costs even without bringing in considerations related to inefficiencies or distortions in the US political process.

Our final contribution is then to model and quantify the impact of this trade policy design of "tariffs with exclusions", taking to heart this informational role of the exclusions process. This will enable us to furnish an answer to the third research question, to more fully evaluate the welfare impact of the Section 301 tariffs by comparing the implemented policy of "tariffs with exclusions" against a counterfactual policy of "tariffs without exclusions" (i.e., where the government sets a uniform tariff for each product code, and commits not to grant exclusions). At first blush, one might intuit that the exclusions necessarily improved welfare, as this gave the US government an additional degree of policy freedom to gather more information and improve the efficiency of the Section 301 tariffs. However, the policy as currently designed can have ambiguous welfare effects, since at the time the tariffs were set, the government anticipates the future exclusions process and so would be inclined to (optimally) announce a higher initial average level of the tariff (e.g., by applying the tariff to more product codes). This is why a quantitative model calibrated to the setting of the Section 301 tariffs is needed, in order to assess whether this increased distortion from a higher initial tariff would outweigh the reduced distortion from granting exclusions on the specific goods that most merit it.

Our model and calibration is built on conventional economic and political frameworks. We examine a setting as in Grant (2024) in which tariffs are defined at the level of a detailed product code, but there are nevertheless many different ("hidden") goods falling within each code.[2] Trade follows Armington (1969): There are three "countries" – the US, China, and the rest of the world – with each country producing a different variety of each good competitively under a constant elasticity of supply, while being subject to CES utility on the demand side. Tariffs act to manipulate the terms of trade. They also serve to redistribute surplus from consumers (i.e., US importers) to domestic producers, in accord with the differing political weights the government attaches to each of these groups, following Baldwin (1987) and Grossman and Helpman (1994, 1995a). However, as in Grossman and Helpman (1995b) and Bagwell and Staiger (1999), international agreements lead governments to internalize the effects of policies on foreign welfare and thus dampen the motivation for governments to exercise terms-of-trade power. In our setting, the US further chooses to impose the Section 301 tariffs on China due to a political shock (i.e., Trump's election in 2016), which leads the US government to place a lower weight on the surplus (producer profits) accruing to China.

To these building blocks, we add imperfect information on the part of the government. US users have different consumption shares over varieties made in China across the many goods within each product code; as will be made clear in Section 4, this arises in our model from heterogeneity in the supply and demand shifters across the different goods by country-of-origin (e.g., China may provide an especially high-

[2]This builds upon ideas and techniques from a literature on aggregation bias and classification in trade, including Imbs and Mejean (2015, 2017).

quality or low-cost version of a particular good). For goods where the relative consumption of Chinese varieties is high, tariffs are less efficient at redistributing surplus to US producers and reducing profits accruing to China. The tariff exclusions process thus permits the government to elicit information about precisely which goods it most wishes to exempt. Furthermore, we assume that there is a continuum of true goods within every code, and that the distribution of the relative consumption of Chinese goods within each code is known by the US government. Thus, when the US government picks the initial level of Section 301 tariffs, it is able to fully anticipate the distributional characteristics of the goods which will subsequently be granted an exclusion; however, neither the government nor us as researchers can directly observe which specific firms are importing each of these goods, unless a firm chooses to reveal this by applying for an exclusion. We calibrate the model (code-by-code) with trade elasticities estimated using the Feenstra (1994) methodology, as extended in Grant (2024) to accommodate within-code heterogeneity. We moreover pin down the political weight parameters and dispersion parameters by matching key data moments at the code level, namely: observed aggregate import shares, the share of excluded goods, and the Section 301, MFN, and Column 2 tariff rates.[3]

With our calibrated model, we are able to evaluate welfare under the current policy regime of "tariffs with exclusions", and compare this against the counterfactual policy scenario of "tariffs without exclusions". Our simulations point to the average level of the initial tariff being close to a full percentage point higher (21.6% versus 20.6%) under the system that allows for exclusions, confirming the intuition that the government would endogenously choose to set a higher initial rate for the additional discretionary tariffs when it anticipates granting exclusions. While this difference in tariff rates may appear small, the resulting extra distortion in welfare terms turns out to be quite sizeable; this is due to the fact that the 21.6% tariff rate is much elevated compared to the optimal tariff of 7.7% (over prevailing MFN tariffs) that would be set by a government pursuing pure terms-of-trade manipulation sans political weights. More specifically, we obtain that the policy of "tariffs with exclusions" results in a 30% greater social welfare loss (relative to the MFN world), compared to the counterfactual policy of "tariffs without exclusions". The government's inclination to set a higher initial tariff thus represents a hidden welfare cost of this system of "tariffs with exclusions", even in the absence of further distortions that could arise from inefficient bargaining or rent-seeking among the stakeholders.

Our paper builds on a recent but already extensive literature on the consequences of the US-China tariff war for international trade flows and domestic economic outcomes (e.g., Amiti et al., 2019; Fajgelbaum et al., 2020, 2024; Chor and Li, 2024; Flaaen and Pierce, 2024). While the tariff exclusions have generally not been a point of emphasis in these studies, there is a growing appreciation of their relevance for welfare assessments of the tariffs' impact (Feenstra and Hong, 2024). From a modeling perspective, our work is closely related to prior quantitative models of trade policy (in particular, Ossa, 2014, 2016). It also contributes to a smaller literature on policies that grant discretionary tariff relief. For example, Ludema et al. (2018) study exclusions to US tariffs granted by congressional Tariff Exemption Bills, while Grant (2020) studies exemptions for Special Economic Zones; that said, neither of these papers quantifies how

[3]The use of code-level data moments is a matter of necessity, since we do not observe the goods that reside within detailed product codes directly. While the USTR required applicants for exclusions to disclose items of information related (for example) to the share of the good imported from China, this was not disclosed in the records viewable to the public.

the existence of exemptions affects the underlying level of tariffs. We should highlight too that the setup of the exclusions application process was not unique to the Section 301 tariffs on China: Cox (2024) has utilized information disclosed in applications for exclusions from the 2000 Bush Steel Tariffs to learn about firm uses of inputs.

Our modeling work is related to a strand in the trade policy literature, that has studied the efficacy of having both production subsidies and import tariff instruments at the government's disposal (e.g., Rodrik, 1986; Staiger and Tabellini, 1987; Wilson, 1990; Grossman and Helpman, 1994). Our quantitative findings echo in particular an earlier (theoretical) result from Rodrik (1986), that a government with access to production subsidies can, in equilibrium, deliver a worse welfare outcome than one with only access to import tariffs; this is because subsidies induce a higher level of redistribution, which can outweigh the direct effect of their being more efficient instruments than tariffs.[4] Related to our policy setting of "tariffs with exclusions", countries have been known to set less generous MFN tariff rates on products on which they then grant preferential tariff treatment to developing economies under such schemes as the Generalized System of Preferences (see Section 4.5 of Ornelas, 2016, and the references therein). At a broader level, our analysis connects with studies in other policy spheres, notably environmental economics, where the joint use of multiple policy instruments (e.g., carbon taxes, cap-and-trade markets, green subsidies) is commonplace, due to the presence of multiple distortions in a second-best world (Bennear and Stavins, 2007), or the desire to offset subtle policy externalities (e.g., Kotchen and Maggi, 2024) or uncertain outcomes (e.g., Borenstein et al., 2019) that arise when only a single instrument is used.

Our results also have importance for a broader literature on lobbying, as surveyed in Bombardini and Trebbi (2020). First, our study provides another example of informational lobbying; notably, the applications and lobbying statements in our setting permit us to observe some of the information which is transmitted between firms and the government, similar to Bertrand et al. (2021). Second, we relate to prior studies which have considered the welfare implications of informational lobbying, such as Bertrand et al. (2014). On the Section 301 exclusions more specifically, several studies have highlighted the relevance of political variables, including potential quid pro quo lobbying, for explaining the likelihood of approvals (Fotak et al., 2024; Lopatin et al., 2024). We should emphasize that the nature of our exercise – in placing the focus on the informational role of lobbying activities – is not an attempt to rule out the presence of quid pro quo considerations; rather, our goal is to highlight how the exclusions process bears a hidden welfare cost even under this more benign interpretation of the lobbying process.

The paper proceeds as follows. Section 2 provides background on the Section 301 tariff exclusions process and on our key data sources. Section 3 presents our main empirical findings. We then develop our model in Section 4, and use it to perform a quantitative evaluation of the policy of "tariffs with exclusions" in Section 5. Section 6 concludes. Additional analysis and derivations are reported in the appendix.

[4] This provides a potential explanation for why political actors might want to limit the government to use tariffs and not subsidies. By way of contrast, note that in Staiger and Tabellini (1987), it is the government that would choose to tie its own hands because it is hurt by the greater dynamic distortion associated with production subsidies.

2 Institutional Background and Data Sources

Our study is grounded in the institutional context of the US-China trade tensions, specifically the Section 301 tariffs and the accompanying exclusions process that were rolled out in 2018-2019. In this section, we describe the procedures put in place to administer the exclusions, while presenting summary statistics on the applications received. We emphasize in particular how the application process served a key informational role, providing a channel for affected firms or business associations to convey to the authorities whether a good was available only from China and how severely the additional tariff on the good would impact them. This background will in turn guide our empirical analysis and modeling.

2.1 Section 301 China Tariffs and the Exclusions Process

In early 2018, the Trump administration initiated a series of unilateral tariff actions, with the Section 201 tariffs on imported washing machines and solar panels (in February), and the Section 232 tariffs on aluminum and steel (in March). While these first two sets of tariffs targeted specific goods rather than any individual country, the tariffs that were subsequently introduced under Section 301 of the Trade Act of 1974 were levied exclusively on China on the grounds of redressing unfair trade practices.[5]

Over four rounds of tariff lists, the Section 301 tariffs substantially ramped up US trade barriers on goods from China. The first two rounds (Lists 1 and 2) in July and August 2018 covered $50 billion in total of US imports. This escalated sharply in late September 2018, with the List 3 tariffs impacting $200 billion of imports from China with a 10% duty, a rate which was then raised to 25% in June 2019. The final round (List 4) in early September 2019 imposed an additional 15% tariff on a range of Chinese products worth $112 billion.[6] By the end of 2019, with this "tariff war" at its height, US tariffs on China had surged by 19.9 percentage points on average; these increases covered 88.2% of all Harmonized Tariff Schedule (HTS) 10-digit codes, accounting for 62.0% of the 2017 value of US imports from China (or equivalently, covering 13.2% of US total imports).[7] Each of the Section 301 Lists triggered a corresponding round of retaliatory tariffs from China, although these will not be a focus of this paper.

Recognizing that some US firms could be adversely hit by the Section 301 tariffs, and in line with the provisions of the Trade Act of 1974, the Office of the US Trade Representative (USTR) put in place a formal process for impacted companies or stakeholders to submit a request for an exclusion. That such a process would be convened was made known in the initial "Notice of Action" on tariffs for each List; a Federal Register notice was then posted detailing the application procedure. Taking List 1 as an example, a formal proposal of these tariffs was first posted on 6 April 2018; the initial "Notice of Action" with the list of products to be targeted was published on 20 June 2018; these tariffs then came in force on 6 July 2018; and the Federal Register with the notice of action for tariff exclusions was released thereafter on 11 July 2018 (see Table 1 for the timeline for each of the four Lists). Exclusion requests had to be filed

[5] For a study of earlier invocations of the Section 301 clause under previous US administrations and how these disputes were resolved, see Elliott and Richardson (1997).

[6] The Phase 1 trade deal signed between the US and China in January 2020 brought a pause to the tariff escalation. As part of this agreement, the US reduced its Section 301 List 4 tariffs by a half in mid-February 2020. For more details on the full sequence of tariff actions, see Bown and Kolb (2021).

[7] The sharp rise in tariffs on China under the Trump administration was overwhelmingly driven by the Section 301 tariffs, rather than by the Section 201 or 232 tariffs, as documented for example in Table A.1 of Chor and Li (2024).

within three months of the notice of action. After each request was submitted and posted on the USTR's exclusions portal, interested parties had a 14-day window to submit public comments; these could either support the exclusion request (e.g., a local politician echoing concern about the economic harm that the applicant would suffer) or express opposition (e.g., domestic producer interests calling for the tariff to be maintained to protect against imports from China).

The outcomes of the applications were released in tranches, over 38 separate Federal Register issues spread out from 28 Dec 2018 to 5 Aug 2020. Across applications, the time taken to arrive at a decision could vary from several months to more than 1 year, pointing to the drawn out nature of the review process. If granted, the exclusions were retroactively applied to the date the tariff was imposed, and the applicant was refunded for tariffs paid. The exclusion would in principle also apply to any good that could be shown to meet the description of the excluded item, regardless of whether the importer was the original requester. For unsuccessful applications, the USTR's decision was *de facto* absolute and final, as no official appeal process was put in place. While the exclusions had an initial expiration date of 31 Dec 2020, a significant number were extended or reinstated at the discretion of the ruling administration; of the 1,155 HTS 10-digit codes in which a Section 301 exclusion was granted, exclusions are in place in 164 of these codes till 31 May 2025.[8] This approach of "tariffs with exclusions" is poised to remain a fixture of the US trade policy landscape, given the likelihood of further unilateral tariff actions during the second Trump presidential term.[9]

Table 1: Key Dates of Section 301 Tariff Actions and Exclusions

Tariff List	Notive of Proposed Tariffs	Notice of Action for Tariff List	Tariff Enactment	Notice of Action for Tariff Exclusion	Notice of Exclusions Granted
List 1	06/Apr/2018	20/Jun/2018	06/Jul/2018	11/Jul/2018	Varies across 10 batches 28/Dec/2018 - 11/Feb/2020
List 2	20/Jun/2018	16/Aug/2018	23/Aug/2018	18/Sep/2018	Varies across 5 batches 31/Jul/2019 - 10/Jul/2020
List 3	107/Jul/2018	21/Sep/2018	24/Sep/2018	24/Jun/2019	Varies across 15 batches 07/Aug/2019 - 19/Jun/2020
List 4	17/May/2019	20/Aug/2019	01/Sep/2019	24/Oct/2019	Varies across 8 batches 10/Mar/2020 - 05/Aug/2020

Notes: Based on the US government Federal Register, various issues.

The USTR received close to 53,000 exclusion applications across all four Section 301 Lists. Applicants had to submit a separate request for each individual good, and most goods put forward for an exclusion had descriptions more specific than that of their corresponding HTS 10-digit category.[10] Hence, the USTR typically granted exclusions as carveouts rather than blanket exemptions for an entire 10-digit code. For example, within HTS 8473301180, three types of printed circuit assemblies were excluded through 31 May 2025: those "for rendering images onto computer screens", "to enhance the graphics performance of

[8] See Figure A.1 in the appendix for the count of unique HTS 10-digit codes with tariff exclusions from July 2018 to September 2024.

[9] See, for example, Times (2024) on how US-based companies are expected to continue to pursue avenues for exemptions from tariffs even as they anticipate more tariff actions following the commencement of Donald J. Trump's second term in January 2025.

[10] A number of applications even included copies of the corporate or technical brochures that described the good, highlighting the specific and narrow scope of the products for which exclusions were typically being sought.

automatic data processing machines", and "constituting unfinished logic boards".

Each exclusion request was evaluated by the USTR on five criteria (GAO, 2021). These were: (i) whether the good was available only from China; (ii) whether the additional tariff on the good would cause severe economic harm to the requester or other US interests; (iii) whether the good was strategically important to China, or related to the "Made in China 2025" or other Chinese industrial policies; (iv) whether the request would undermine the objective of the Section 301 investigation; and (v) whether the good was defined precisely enough for the exclusion to be administrable by customs authorities.[11] The Federal Register notices on the exclusions process made clear that applicants were expected to furnish information that addressed these criteria (see for example Federal Register, 2018b). According to several sources – including independent reports by the Congressional Research Service (CRS, 2021) and the Government Accountability Office (GAO, 2021) – the USTR's review process for the Section 301 exclusions largely adhered to these evaluation criteria. This seems to have been, in part, a response to stakeholders' criticisms of the exclusions process for the preceding Section 232 tariffs on aluminum and steel products, which were widely seen as lacking in transparency and clarity (Axios, 2019; CRS, 2021).[12]

Across all four Section 301 Lists, the success rate in securing an exclusion was just 12.9%, indicating that the evaluation criteria were applied fairly stringently. As we will see below from the data, criteria (i) and (ii) were in practice the most consequential, as the vast majority of unsuccessful applications were turned down on these grounds. Importantly, the burden was on the requester to demonstrate why the specific good was available only from China and how the additional tariffs would cause it severe economic harm, which underscores the key role of the exclusions process in providing a platform to convey such information to the USTR. While data on the share of imports from China at the HTS 10-digit level is publicly available, heterogeneity across firms importing within a 10-digit code – reflected in the detailed nature of the items for which exclusions were sought – ultimately meant that each individual firm's degree of reliance on China as a source country and how adversely it would be hurt by the tariffs were matters of private information unless this was disclosed through the exclusions process.

It should be noted, however, that the USTR's administrative capacities came under severe strain as it scrambled to formulate internal procedures in realtime to manage the large volume of exclusion requests. Even as the first Federal Register posting on the Section 301 exclusions on 11 July 2018 appeared to establish the USTR's evaluation criteria (Federal Register, 2018c), it found it necessary to issue a follow-up notice on 18 September 2018 to expand on several specific details related to criteria (i)-(ii) that applicants needed to provide. These mandatory items of information included: the annual quantity and value of the good imported by the requester from China over the past three years; details on whether the good (or a comparable product) could be available from sources in the US or in third countries; for a good sold as a final product, the percentage of the requester's total gross sales in 2017 that the good accounted for; and for a good used as an input, the percentage of total costs attributable to it, as well

[11] Note that criteria (iii) and (iv) would be grounds for denying the exclusion request.

[12] The Section 232 exclusions process was managed by the US Commerce Department. Following an internal audit, the Department's Inspector General reported at least one case of "improper influence in decision-making" (Axios, 2019). Several Members of Congress were also on record questioning the Section 232 exclusions process for its ability "to pick winners and losers through granting or denying exclusion requests"; by contrast, the Section 301 exclusions process did not draw as much attention or criticism (CRS, 2021, pp.22-23).

as the total gross sales in 2017 accounted for by final products that used the good as an input (Federal Register, 2018b). (Note though that these details were not released in the application documents made accessible to the public, presumably due to their confidential nature.)

The USTR moreover faced staffing constraints, with the average processing time for each application coming up to 230 days. For Lists 1 and 2, the more than 14,000 exclusion requests were reviewed by 5-6 attorneys in the Office of the General Counsel within the USTR. For Lists 3 and 4, the USTR hired more staff (including trained contractors), restructured the review process to delegate its initial stages, and created a dedicated exclusions submission portal, in order to handle what was rightly anticipated to be a surge in their caseload.[13] Even so, there were still instances where consistency checks were not performed on companies that submitted multiple applications, and a number of internal procedures and the rationale for some exclusion decisions were not full documented (GAO, 2021). Given these circumstances, it should come as no surprise that companies with the experience or resources to do so would undertake various actions – such as engaging a representative (e.g., trade consultants or lawyers) to prepare and submit the application, procuring supportive public comment letters, and formally lobbying the USTR – in order to draw attention to and amplify the information contained in their exclusion requests.

2.2 Data Sources

With this institutional background on the Section 301 tariff exclusions in mind, we turn now to briefly describe the main data sources in our analysis. (Further details are documented in Appendix A.)

Exclusion Applications: We collected the full set of tariff exclusion requests from Regulations.gov (for Lists 1 and 2) and the USTR's exclusions portal (for Lists 3 and 4). For each request, we have information on: the requester's name; the 10-digit HTS code for the good under request; the filing date; whether the request was filed by a representative; as well as all public comments received (both those supporting and opposing). In addition, we have: the decision date from the USTR; the outcome of each request ("granted" or "denied"); and the reason for denial (if the request was unsuccesful).

Table 2 presents summary statistics on this data. In all, there were 52,746 tariff exclusion requests filed by 4,771 firms, so it is fairly common to observe multiple requests being made by the same firm.[14] The goods for which an exclusion was sought fell under 4,475 unique 10-digit HTS codes, from 2,082 6-digit categories. Notably, across these 4,475 10-digit HTS codes, imports from China accounted for 26.1% of total US imports; this is higher than the overall Chinese share in US imports of around 22% in 2017, confirming that the exclusions were generally sought for goods that were sourced relatively more intensively from China. Among the 1,155 unique 10-digit HTS codes containing goods that eventually received an exclusion, the average import share from China was even higher at 30.2%. The majority of the applications (79.5%) self-reported that there was no comparable good available from the US or third countries. Additionally, 32.7% of the applications were submitted by a representative. Regarding public

[13] Each List 3 or 4 exclusion application was first read by two initial reviewers and up to three tariff classification experts, before a recommendation was brought up to the Office of the General Counsel; the final approval for a decision was then in the hands of the USTR.

[14] One particular firm, AEP Holdings Inc., a manufacturing parts and supplies wholesaler, alone accounted for 10,221 requests. We will verify that our regression findings in Section 3 are robust to dropping the firms that submitted the most requests (see Table B.5 in the appendix).

comments, on average, each request received 0.2 comments, with 0.13 in support of the application and 0.07 opposing it. The overall success rate of just 12.9% indicates that it was not straightforward or easy for firms to secure a tariff exclusion. This success rate was noticeably much higher for Lists 1 and 2 (34.7%), but tailed off for Lists 3 and 4 (5.3%), suggesting that the evaluation process became more stringent as the administrative capacity of the USTR expanded in these later rounds; we will thus include List fixed effects in the regression analysis to follow, when we explore what explains success in an exclusion request.

Table 2: Summary Statistics

	All	List 1	List 2	List 3	List 4
Num. of Applications	52746	10814	2869	30283	8780
Num. of Firms	4771	1215	458	2611	1271
Unique 10-digit HTS codes	4475	806	209	2243	1226
Among which: Share of Imports from China	0.261 (0.234)	0.112 (0.113)	0.131 (0.129)	0.342 (0.259)	0.364 (0.214)
Unique 6-digit categories	2082	382	124	1132	531
Granted	0.129 (0.335)	0.338 (0.473)	0.379 (0.485)	0.049 (0.217)	0.065 (0.247)
Unique 10-digit HTS codes with Granted Exclusion	1155	362	99	570	128
Among which: Share of Imports from China	0.302 (0.240)	0.162 (0.115)	0.152 (0.137)	0.390 (0.257)	0.399 (0.233)
Self-report: no US or third country alternatives	0.795 (0.404)	0.784 (0.411)	0.823 (0.382)	0.820 (0.385)	0.716 (0.451)
Submission by a Representative	0.327 (0.469)	0.494 (0.500)	0.570 (0.495)	0.225 (0.418)	0.394 (0.489)
Num. of Comments	0.204 (1.941)	0.116 (0.596)	0.052 (0.436)	0.155 (0.707)	0.529 (4.503)
Support	0.132 (1.851)	0.088 (0.555)	0.050 (0.433)	0.102 (0.646)	0.314 (4.320)
Oppose	0.072 (0.319)	0.027 (0.168)	0.002 (0.049)	0.053 (0.267)	0.215 (0.553)
Num. of Lobbying Firms	415	146	78	218	119
Share of Applications by Lobbying Firms	0.115 (0.319)	0.178 (0.383)	0.233 (0.423)	0.077 (0.267)	0.125 (0.331)
Share of Granted Exclusions to Lobbying Firms	0.196 (0.397)	0.176 (0.381)	0.227 (0.419)	0.226 (0.419)	0.183 (0.387)
Granted: Requests by Lobbying Firms	0.221 (0.415)	0.334 (0.472)	0.369 (0.483)	0.145 (0.352)	0.096 (0.294)
Granted: Requests by Non-Lobbying Firms	0.117 (0.322)	0.339 (0.473)	0.382 (0.486)	0.041 (0.199)	0.061 (0.240)

Notes: We define firms with positive lobbying expenditure over 2018Q1-2020Q2 as lobbying firms. The average share of imports from China across 10-digit HTS codes is calculated using the 2017 value of US imports in each code as weights, based on the 2017 MITD data. Standard deviations are reported in parentheses.

To complement the above, we put together data at the 10-digit HTS level on: (i) monthly import flows and duties collected, from the US Census Bureau's Monthly International Trade Datasets (MITD); (ii) Most Favored Nation (MFN) rates from the USITC's tariff schedules (converted to ad valorem equivalents where necessary using Census Bureau trade data); (iii) Section 301 tariff rates, sourced from Bown (2021); and (iv) the publication and expiration dates of each tariff exclusion, from the Federal Register notices.[15] In Appendix B.1, we demonstrate through an event-study analysis that exclusion approvals are indeed followed by increases in monthly US imports from China, while expirations of tariff exclusions are followed by comparable declines in import flows.

Firm Lobbying Records: The Lobbying Disclosure Act of 1995 requires lobbyists and lobbying firms to file quarterly reports disclosing their lobbying activities. We link these records, which have been extracted and made available by Kim (2018) on LobbyView.org, to the set of firms that submitted tariff exclusion requests. The lobbying records are available at the quarterly frequency, and include information

[15] If there are multiple goods within a specific HTS 10-digit code receiving an exclusion, we consider the earliest date across goods as the start date for that code. Analogously, if the expiration dates vary across goods within a HTS 10-digit code, we consider the latest date across goods to be the expiration date for that code.

on: the firm paying for the lobbying; the firm's total lobbying expenditure in the quarter; a list of lobbyied issues (e.g., trade, banking, immigration); and a textual description of the lobbying activities on each issue.

The bottom rows of Table 2 show that among the firms that applied for a Section 301 tariff exclusion, 415 of them engaged in lobbying activities in at least one quarter between Q1/2018 and Q2/2020. The total lobbying expenditures incurred by these firms during this period was $592 million, or an annual average of $0.57 million per lobbying firm.[16] These lobbying firms accounted for 11.5% of the exclusions applications. Notably though, lobbying *per se* was neither necessary nor sufficient to secure an exclusion from the Section 301 tariffs: Non-lobbying firms did receive exclusions (at a success rate of 11.7%). While engaging in lobbying was associated with a higher success rate (22.1%), a favorable outcome was by no means guaranteed. We will describe in Section 3 below several key patterns related to how the timing of lobbying, particularly on trade issues, coincided with the US tariff actions.

Other Data Sources: We will make use of additional measures and controls at the firm, industry, and region levels when exploring what explains the granting of tariff exclusions. These are drawn from the following sources: (i) the 2017 Input-Output (IO) Tables, from the US Bureau of Economic Analysis, which we utilize to calculate the import share in US domestic absorption (for 6-digit IO codes); (ii) the Bureau van Dijk Orbis data, for information on firms' industry affiliation (at the 4-digit NAICS level), county of location, and firm size categories (small, medium, large, and very large); (iii) County Business Patterns (CBP) data, published by the US Census Bureau, for computing employment in each county-by-industry cell; (iv) David Leip's US Election Atlas, from which we calculate the 2016 Republican presidential two-party vote share in each county; and (v) OpenSecrets.org, by the Center for Responsive Politics, from which we obtain records on the campaign contributions made by firm employees.[17]

3 Empirical Findings

We now use the above data to present several empirical facts on the Section 301 exclusions, starting with our estimates of the scope of the granted tariff exclusions. We also explore the full set of applications with an eye toward understanding what explains success in these requests: Did the application outcomes broadly adhere to the stated assessment criterion? And did channels that speak to a firm's ability to convey information to the USTR – including lobbying – matter for securing an exclusion?

3.1 Scope of the Section 301 Tariff Exclusions

How extensive were the Section 301 exclusions? We provide estimates below of the share by value of goods granted an exclusion within each 10-digit HTS code (the "exclusion share"); this will then allow us to infer the aggregate scope of the exclusions in terms of potential tariff revenue foregone.

Recall that the typical exclusion request submitted to the USTR described a good at the sub-10-digit level. Hence, the exclusions granted would often apply only to a specific subset of goods within a 10-digit code; the USTR's decisions could moreover vary across requests that fell under the same code. To the best of our knowledge, firm-level data on duties paid on imported goods at the sub-10-digit level is not readily

[16] This aligns closely with the annual average expenditures of lobbying firms reported elsewhere in the literature, respectively: $0.55 million in (Bombardini et al., 2021, Table 1) and $0.48 million in (Kerr et al., 2014, Table 1).

[17] The county-level voting outcomes in (iv) are drawn from the dataset assembled by Blanchard et al. (2024).

available even in US administrative data sources. Instead, we infer the coverage ratio of the exclusions from public product-level trade flows data in the MITD, by exploiting changes in effective duty rates recorded around the date of tariff enactment, drawing on the approach in Bown (2021). This leverages institutional details related to how the exclusions were implemented and captured in the trade data. After the announcement of each granted request, firms that imported the good could seek refunds for Section 301 duties paid since the original tariff enactment date. As the US Census Bureau updates the data in the MITD periodically for three years after its initial release, the revised version of this data after three years would then fully reflect these retroactive tariff refunds.[18]

More specifically, let $\Delta DutyRate_{kt}^{CHN}$ denote the change in effective duty rate applied on imports from China in a particular 10-digit HTS code k. This can be expressed as:

$$\Delta DutyRate_{kt}^{CHN} = \frac{1}{S}\sum_{s=1}^{S} DutyRate_{k,t+s}^{CHN} - Tariff_{k}^{MFN} = (1-\pi_k) \times Tariff_{k}^{CHN}. \quad (1)$$

Here, $DutyRate_{k,t+s}^{CHN}$ is the duty rate imposed on these product-level imports from China in the s-th full month following the tariff enactment date t, as obtained from the MITD.[19] In (1), we are thus estimating the post-enactment effective duty rate by averaging $DutyRate_{k,t+s}^{CHN}$ over the S months immediately after the Section 301 tariff on product k came into force; we take a five-month average as a baseline (i.e., $S = 5$), though we have verified similar results using either a three- or seven-month window (available on request). In the absence of exclusions, the difference between this effective duty rate and the 2018 MFN tariff rate, $Tariff_{k}^{MFN}$, should be equal to the additional statutory tariff rate imposed by the US on imports from China, $Tariff_{k}^{CHN}$(i.e., the announced Section 301 tariff rate). Equation (1) therefore infers the exclusions coverage ratio – or more simply, the exclusion share, π_k – for this 10-digit HTS code from the extent to which this effective duty rate change falls short of the full extent of $Tariff_{k}^{CHN}$.[20] Note that this approach assumes that between the tariff enactment date and the exclusion announcement date, importers did not endogenously increase their purchases of goods within a code k that received an exclusion *ex post* relative to those that did not. We regard this as plausible, given that the Section 301 tariffs were imposed *ex ante* on all goods within the 10-digit code, and there was a protracted review process lasting several months during which the outcome of the exclusion request was uncertain and could not be fully anticipated.

Panel A of Figure 1 plots the raw distribution of π_k across the 10-digit HTS codes that received some tariff exclusions, while Panel B illustrates this distribution weighting by the 2017 value of product-level imports from China ($Imp_{k,2017}^{CHN}$). The unweighted mean of the exclusions coverage ratio (0.269) is lower than the weighted mean (0.343), which indicates that products with higher initial imports from China

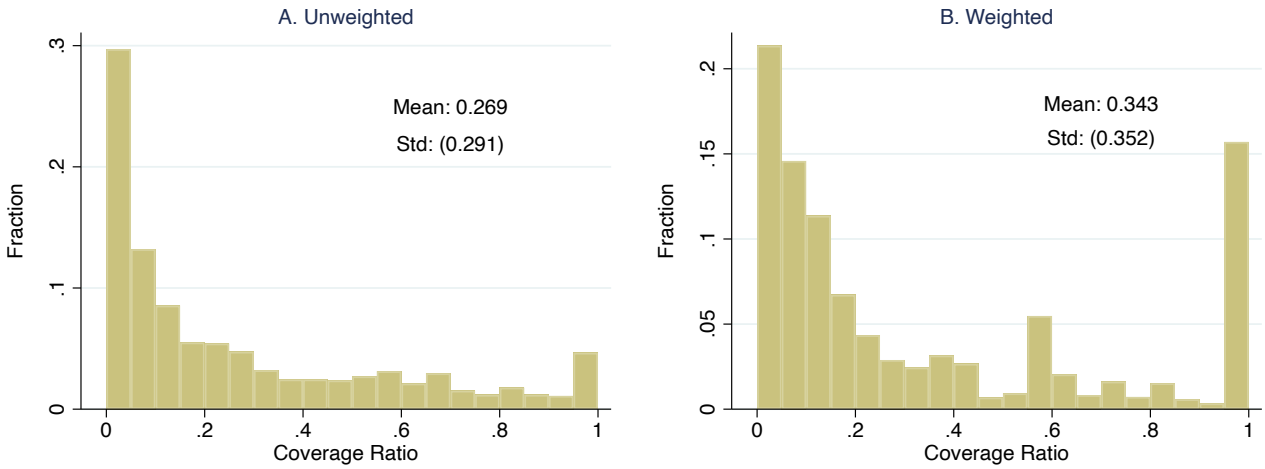
[18] We use the monthly US product-level trade data downloaded on 25 Oct 2023; this is the finalized version for flows that occured up until August 2020, the last month in which a tariff exclusion was announced. The estimates in Bown (2021), on the other hand, are based on earlier vintages of this data.

[19] The dates of tariff enactment for the four lists are: 6 Jul 2018, 23 Aug 2018, 24 Sep 2018, and 1 Sep 2019. We designate t to be the nearest full month to the actual event date, using the middle of the month as the cutoff.

[20] As an example, consider the first batch of exclusions for List 1 that were announced on 28 December 2018. Importers of these excluded goods could receive a refund for the 25% Section 301 duties paid on transactions dating back to 6 July 2018 (when List 1 was first implemented). For an associated product code k, the change in the effective duty rate averaged over the five months from July to November 2018, $\Delta DutyRate_{kt}^{CHN}$, should be smaller than the Section 301 tariff on imports from China, $Tariff_{k}^{CHN}$. The larger is this gap to $Tariff_{k}^{CHN}$, the larger is the exclusion share π_k. For a small number of cases, π_k calculated this way is larger than one (or negative); for such scenarios, we replace π_k by 1 (respectively, by 0).

tended to be granted a greater share of exclusions. The dispersion in π_k across product codes is also evident from these panels; the distributions are bimodal, with a cluster with near-zero exclusion shares ($\pi_k \approx 0$) and a second cluster that are close to fully exempt ($\pi_k \approx 1$).

Figure 1: Distribution of the Exclusion Share, π_k, across Products



Notes: Panel A displays the distribution of the exclusion shares, π_k, for those 10-digit HTS product codes with $\pi_k > 0$ (i.e., codes with at least one successful exclusion request). In Panel B, the observations are weighted by their 2017 import value from China.

The volume of imports from China that received an exclusion can be expressed as: $\sum_k \pi_k \times Imp^{CHN}_{k,2017}$, where we evaluate this at pre-tariff war import values in 2017. Based on this calculation, \$52.95 billion of US imports from China were ultimately covered by an exclusion; this constitutes 15.8% of the imports originally targeted for Section 301 tariff actions. We can further estimate the tariff revenue foregone due to these exclusions by: $\sum_k \pi_k \times Imp^{CHN}_{k,2017} \times Tariff^{CHN}_k$, which sums up to \$12.62 billion. This is sizeable when considering that total US import duties collected in 2017 were \$34.8 billion (CBP, 2018). Moreover, the scope of the Section 301 exclusions is comparable to that of several other tariff relief programs, including: (i) the \$3.42 billion in duties forgone or deferred annually in special economic zones in the US (Grant, 2020); (ii) the \$1.6 billion in tariff revenue forgone by the US tariff suspensions associated with Miscellaneous Tariff Bills introduced over 1999-2006 (Ludema et al., 2018); and (iii) the \$7.8 billion in duties exempted for *de minimis* shipments – individual shipments with less than \$800 of declared value – arriving in the US in 2021 (Fajgelbaum and Khandelwal, 2024).

3.2 The Informational Role of the Exclusions Process

Evidence from Application Outcomes. We next use the full set of applications, to uncover features that help explain success in securing an exclusion. We do so with the following regression specification:

$$Granted_{ifk} = \beta_0 + \beta'_X \boldsymbol{X}_{ifk} + D_K + D_\ell + \varepsilon_{ifk}. \tag{2}$$

The dependent variable $Granted_{ifk}$ is an indicator variable equal to 1 if application i submitted by firm f for a good that falls in HTS 10-digit code k was granted an exclusion from the Section 301 tariffs. We

regress this on a vector $\boldsymbol{X}_{ifk}$ of explanatory variables, these being potentially relevant product, firm, or application characteristics. In line with the administrative criterion laid out as grounds for an exclusion, we include in $\boldsymbol{X}_{ifk}$: (i) imports in code k obtained from China in 2017, expressed as a share of US domestic absorption; and (ii) the analogous share of imports from the rest of the world.[21] The former reflects the degree of dependence on imports from China, at the most disaggregate level at which we can observe this in the public MITD dataset; the latter in turn helps to capture the potential availability of alternative foreign sources for the good i in question.

Given our interest in the informational role of the application process, $\boldsymbol{X}_{ifk}$ contains several variables that can speak to firm f's effectiveness in conveying information to the USTR to help advance its case for an exclusion for good i. These are indicator variables for: whether or not the application was submitted on the firm's behalf by a representative (typically, a legal or consulting company that specializes in trade issues); whether the application received at least one letter of support (such as from a trade association or politician) during the public comments window; conversely, whether the application drew at least one letter of objection; and whether firm f undertook lobbying activities on trade issues $LobbyTRD_{f,18Q1-20Q2}$ during the 2018Q1 to 2020Q2 time window (bearing in mind that application outcomes continued to be announced through August 2020). The D_K's in equation (2) are a set of fixed effects for 6-digit product codes, while the D_ℓ's are fixed effects for the four Section 301 tariff lists.[22] We estimate (2) via OLS, with standard errors clustered two-ways by firm and HTS 2-digit codes.

Table 3 reports our baseline findings. Column 1 confirms that an exclusion was more likely to be granted to goods in product codes with a higher China import share. This is prima facie consistent with one of the objectives of the exclusions program, namely to allow firms to seek tariff relief for goods that could only feasibly be procured from China. On the other hand, we do not find a significant effect for our proxy for the availability of goods from third-countries (the ROW). (These preceding findings could in principle be sharpened if one had the direct firm-level information on the China and ROW import shares of the specific goods for which the exclusions were sought; however, these details are not disclosed in the publicly-viewable application records.)

Of note, Column 1 shows that exclusions were more likely to be granted if the application was submitted with the help of a representative, if it received supporting comment letters, or if it was accompanied by firm lobbying efforts on trade issues. Each of these three covariates is statistically significant (at the 1% level); the implied effects – respectively, a 3.9%, 4.4%, and 3.8% increase in the likelihood of approval – are also meaningful and sizeable, when compared against the overall success rate for applications of only 12.9% (Table 2). Conversely, opposing comment letters tend (as one might expect) to hurt an application, although this effect is not statistically significant. We view submission by a representative as a means through which firms could improve the effectiveness of their exclusion applications: a lawyer or consultant with experience on trade issues would have expert knowledge on how to "hit the right notes", in ensuring

[21] We use the 2017 US Input-Output (IO) Tables from the Bureau of Economic Analysis to compute the US domestic absorption share for each 6-digit IO code. We then adjust the share of imports from China (respectively, the ROW) in total imports at the HTS 10-digit level, by using the domestic absorption share of the 6-digit IO code that the HTS 10-digit code maps to; this yields an estimate of the share of imports from China (respectively, the ROW) in US domestic absorption.

[22] We have also run separate regressions using the exclusion requests respectively for the Lists 1 & 2 tariffs and for the Lists 3 & 4 tariffs, since these two sets of applications were put through a different administrative review process. Our results are broadly similar across these two subsamples; see Table B.5 in the appendix.

Table 3: Tariff Exclusion, Lobbying Status and Information Provision: Baseline Results

Dep. Var.: Granted$_{ifk}$	(1)	(2)	(3)
Submission by a Representative$_{if}$	0.039***	0.037***	0.054***
	(0.007)	(0.007)	(0.012)
Num. Comments: Support$_{if} > 0$	0.044***	0.040***	0.034***
	(0.014)	(0.015)	(0.012)
Num. Comments: Oppose$_{if} > 0$	-0.015	-0.018	0.013
	(0.012)	(0.011)	(0.024)
LobbyTRD$_{f,18Q1-20Q2}$	0.038***	0.040***	0.091***
	(0.014)	(0.015)	(0.013)
Share Imp from CHN$_{k,17}$	0.206**	0.186**	0.096*
	(0.081)	(0.075)	(0.049)
Share Imp from ROW$_{k,17}$	0.038	0.034	-0.035
	(0.094)	(0.092)	(0.102)
Additional Controls:			
ln(Imp from CHN)$_{k,17}$		0.008	0.008
		(0.006)	(0.008)
ln(Total Num. of Application)$_{f}$		-0.003	-0.004
		(0.003)	(0.004)
Requested Before$_{if}$		0.006	0.023*
		(0.006)	(0.013)
ln(Empl)$_{c(f)j(f),16}$			0.003
			(0.005)
47%≤GOP Vote Share$_{c(f)}$ ≤53%			0.094***
			(0.033)
GOP Vote Share$_{c(f)}$ >53%			-0.034***
			(0.010)
6-digit HS FEs	Y	Y	Y
List FEs	Y	Y	Y
4-digit NAICS FEs	N	N	Y
Size Group FEs	N	N	Y
Observations	50,454	50,454	41,252
R^2	0.446	0.446	0.529

Notes: Robust standard errors are two-way clustered at the firm and the HTS 2-digit level. *** p<0.01, ** p<0.05, * p<0.1

that relevant information was included in the application to address each of the stated administrative criteria. The letters of support likely played a similar role: a letter from an industry association could underscore the severity of the economic impact of the additional tariffs from a broader industry perspective, while a letter from a local politician could attest to how constituents employed by the firm might be affected. As for the lobbying variable, the work of lobbyists on behalf of the firm could certainly serve an informational role, by calling the USTR's attention to the particular application(s) submitted by the firm and by opening up an additional channel of communication. This would be advantageous given the large number of applications received, and what we now know of the USTR's staffing and time constraints. There are other possible interpretations of the lobbying effect – principally, that this could reflect quid pro quo lobbying (Fotak et al., 2024) – and our goal here is not to rule these out in their entirety; as we will see, the government objective function we adopt in the model in Section 4 will be consistent too with the presence of quid pro quo lobbying forces, as long as there are no bargaining frictions among stakeholders. That being said, we will shortly provide supplementary evidence in Table 5 below showing that firms engaged in lobbying did appear to submit more informative applications.

These preceding findings – on the effects of the China import share and the three "informational" variables – are strong empirical regularities. They continue to hold in the rest of Table 3, where we incorporate more product and firm controls. Conditioning on the application characteristics from Column 1, we find that it is not the volume of imports of product k from China per se – but rather the import share – that matters for whether an exclusion is ultimately granted. Submitting more applications in total does not raise a firm's chances of success, although we do find a modest positive effect of prior experience with the exclusions process ("Requested Before$_{if}$"). Our core results are unaffected in Column 3 where we use further sets of fixed effects for the applicant firm's NAICS 4-digit industry j as well as for firm size categories (drawn from Orbis); these help in particular to account for possible variation in the propensity to engage a representative, to solicit letters of support, or to undertake lobbying, across firms in different industries or by larger firms.[23]

We also include several variables in Column 3 that speak to potential political economy considerations. These include: the number of jobs that could be exposed to the tariffs (the log of industry-j employment in county c), and indicators for how closely contested county c was in the 2016 presidential election. We corroborate here the result in Lopatin et al. (2024) that the USTR was more likely to grant exclusions to firms located in swing counties, defined as those with a 2016 Trump vote share between 47-53%, which could reflect a desire to bolster electoral support in these keenly-contested areas. Separately, we find that campaign contributions by firm employees to Republican candidates over the 2017-18 and 2019-20 election cycles are positively associated with approval likelihood, whereas contributions to Democratic candidates have the opposite effect (see Table B.4 in Appendix B.4), in line with Fotak et al. (2024). Importantly though, the estimated effects of the three variables that speak to informational channels – submission by a representative, supportive comment letters, and lobbying – are largely unchanged and highly relevant, after accounting for such political spending.

In Appendix B.4, we show that our results are still stable when considering other measures and

[23]We are able to link firms in Orbis to approximately 83% of the exclusion applications; this explains the decrease in sample size in Column 3.

specifications. These include: (i) using either coarser or finer product-level fixed effects; (ii) measuring lobbying activities in a narrower time window around the Federal Register "Notices of Action" on tariff exclusions; (iii) focusing on lobbying efforts specific to the Section 301 tariffs; (iv) switching to a more continuous measure of lobbying activities based on lobbying expenditures; and (v) excluding firms that were outliers in terms of the large number of applications they submitted.

Additional Evidence. We provide further evidence that submission through a representative, supporting letters, and lobbying on trade issues appeared to raise the efficacy of an application, by calling more attention to and raising the informativeness of the firm's formal submissions. At a basic level, it is useful to know whether the USTR did make use of the information conveyed in the applications (or the lack thereof) to determine if a request met the stated eligibility criteria for an exclusion. With each application that was turned down, the USTR cited a reason – which of the five criteria the application fell short on – for the negative outcome; Table 4 below presents summary statistics on these reasons for denial. The vast majority of unsuccessful applications were denied on grounds that can be viewed (at least in part) as reflecting deficiencies in the information conveyed, these being a failure to demonstrate that the Section 301 tariffs would inflict severe economic harm (69% of the denials) or to establish that the good was available only from China (23%).

Table 4: Distribution of Reasons for Request Denials

	All	List 1	List 2	List 3	List 4
(i) Fail to show availability only from China	0.230	0.255	0.162	0.219	0.264
(ii) Fail to show economic harm caused by additional tariffs to the US	0.691	0.428	0.491	0.760	0.717
(iii) Product subject to strategic importance to China	0.043	0.196	0.201	0.003	0.012
(iv) Exclusion would undermine the objective of the Section 301 investigation	0.040	0.145	0.150	0.016	0.007
(v) Non-Administrability	0.004	0.011	0.030	0.001	0.000

Notes: The USTR reply letters are not available for 21 denied requests in List 1 and 12 denied requests in List 3.

We build on this observation in Column 1 of Table 5. There, we focus on the subset of unsuccessful applications, and consider a dependent variable equal to 1 if a request was denied due either to: (i) failure to show availability only from China; or (ii) failure to show that the additional tariffs would cause severe economic harm to the applicant or to other US interests.[24] Using a regression akin to (2), we find that applications submitted by a representative or that were from firms that lobbied on trade issues were less likely to be turned down for these reasons; the effect of having a letter of support has a similar negative sign, but is not statistically significant. While hiring a representative or engaging in lobbying do not fully guarantee the success of an exclusion application, they nevertheless appear to help the firm avoid a denial that stems from insufficient information being furnished on these two main eligibility criteria.

We also examine the number of days taken by the USTR to process each exclusion request.[25] In Column 2 of Table 5, we find that the use of a representative, receiving either positive or negative

[24]This dummy variable is otherwise set to 0 if the request was denied due to: the product being deemed strategically important to China; the tariff exclusion being seen as undermining the objective of the Section 301 investigation; and the exclusion being non-administrable by customs authorities.

[25]We calculate the length of this processing time using the date when the application was received by the USTR and the date of the USTR's response. Table B.6 presents the summary statistics of this processing time.

comment letters, and lobbying on trade issues by the firm are all associated with a longer processing time on the USTR's end. This pattern is not an artefact per se of the USTR requiring more time to review and process requests that were ultimately successful ("Granted" coefficient, Column 3). Overall, these three application features appear to prompt the USTR to pay more attention and spend more time in deliberation, possibly because of the larger volume of information contained in the submissions filed by a representative, in the public comment letters, or in communications with lobbyists.

Table 5: Supporting Evidence on Informational Channels

	(1)	(2)	(3)
Dep. Var.:	Denied: Availability or Severe economic harm$_{if\ell}$	Processing Time$_{if\ell}$	Processing Time$_{if\ell}$
Sample:	Granted$_{ifk}$=0	All	All
Submission by a Representative$_{if}$	-0.027***	10.355***	7.176***
	(0.005)	(2.435)	(2.426)
Num. Comments: Support$_{if} > 0$	-0.009	13.370***	11.407***
	(0.009)	(3.664)	(3.282)
Num. Comments: Oppose$_{if} > 0$	0.004	9.084***	8.338***
	(0.022)	(2.640)	(2.912)
LobbyTRD$_{f,18Q1-20Q2}$	-0.031***	11.161**	5.849*
	(0.010)	(4.537)	(3.354)
Share Shipment from CHN$_{k,17}$	-0.160**	10.077	4.563
	(0.061)	(21.830)	(19.558)
Share Shipment from ROW$_{k,17}$	-0.089	-4.778	-2.506
	(0.068)	(17.386)	(17.259)
Granted$_{ifk}$			59.669***
			(8.038)
6-digit HS FEs	Y	Y	Y
List FEs	Y	Y	Y
4-digit NAICS FEs	Y	Y	Y
Size Group FEs	Y	Y	Y
Additional Controls	Y	Y	Y
Observations	36,042	41,202	41,202
R^2	0.630	0.459	0.506

Notes: The additional controls used are as in Column 3 of Table 3, namely: the logarithm of imports from China for product k in 2017, the logarithm of the total requests filed by firm f, whether the firm had previously submitted a request, the logarithm of employment in the affiliated industry j and county c, and dummy variables reflecting various bins of the GOP presidential vote share in county c. Robust standard errors are clustered at the 2-digit HS level. *** p<0.01, ** p<0.05, * p<0.1.

On the Lobbying Effect. We briefly present several additional results related to lobbying activities, which will exploit the fact that their timing is drawn from a separate data source (LobbyView.org) distinct from the exclusion application records. (On the other hand, the timing of the "submission by representative" and "comment letter" variables is less interesting, since these are dated to a tight window around each application submission.) We document in Appendix B.2 that lobbying for trade-related issues surged during the US-China trade war from Q1/2018 to Q4/2019, whereas there was no observable uptick in lobbying for non-trade issues. Using more specifically the timing of applicant firms' exposure to the Section 301 tariffs, Figure B.6 in the appendix shows that firms were more likely to engage in lobbying on

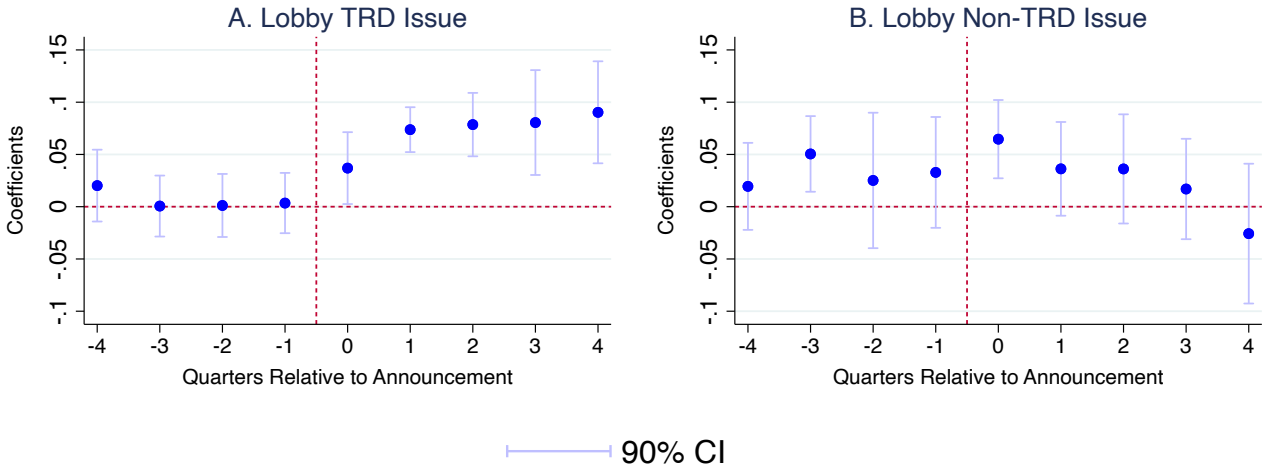
trade-related issues following the first tariff announcement relevant to them (i.e., for which they submitted their first exclusion request); by contrast, there was no discernible change in their lobbying activities on non-trade issues.[26]

As a further exercise, we investigate whether this timing of the lobbying activities is associated with success in exclusion applications. We follow closely the earlier specification in (2) to estimate:

$$Granted_{ifk} = \beta_0 + \beta_1 LobbyTRD_{f,\tau} + \beta_X' \boldsymbol{X}_{ifk} + D_K + D_\ell + \nu_{fi\ell}, \tag{3}$$

where $LobbyTRD_{f,\tau}$ indicates whether firm f lobbied for trade-related issues in period τ. We work with quarters of the year as our time periods for this analysis, with τ denoting quarters relative to the date of announcement of the tariff action that first affects firm f. We estimate (3) separately for each value of τ, and the estimated coefficients for $LobbyTRD_{f,\tau}$ are illustrated in Figure 2. Panel A shows that the effect of lobbying reveals itself only for $\tau \geq 0$; a Granger test rules out the possibility that the detected effect is driven by an underlying correlation between lobbying and pre-determined firm characteristics (such as prior political connections) which might independently raise the likelihood of approval. As a placebo test, in Panel B, we conduct an analogous analysis for lobbying activities related to non-trade issues. This yields noisier and largely insignificant coefficient estimates, with no discernible differences in the effects before and after the initiation of the exclusions process.

Figure 2: Lobbying Activities and Tariff Exclusion: Timing of the Lobbying Effects



Notes: Panel A plots the estimated coefficients for $LobbyTRD_{f,\tau}$ in equation (3). Panel B plots the corresponding coefficients for $LobbyNonTRD_{f,\tau}$. For each firm, we identify the Tariff List of its first tariff exclusion request, and the x-axis indicates the quarters relative to the date of the announcement of tariff actions specific to this List. Standard errors are clustered at the 2-digit HS level. Error bars show 90% confidence intervals.

On a separate note, a natural concern is that the lobbying coefficient estimated in (2) via OLS could suffer from endogeneity bias. For example, firms may be more likely to undertake lobbying if they perceive a low ex-ante probability that their exclusion request will be granted. While pinning down a causal effect

[26] In practice, we consider quarters as our time periods for this analysis, and associate each tariff announcement date to the quarter in which it lies.

is not the main focus of our investigation, we nevertheless offer an instrumental variables approach in Appendix B.3 that helps allay this concern. We propose two IVs for $LobbyTRD_{f,18Q1-20Q2}$. The first is an indicator variable for whether the firm had previously lobbied on *non*-trade issues, which could pick up firms' prior experience with incurring the necessary fixed costs to start engaging with lobbyists (Kerr et al., 2014). The second is an indicator for whether there are other firms seeking tariff exclusions within the same HTS 6-digit heading that have lobbied on trade issues; this could pick up possible free-rider effects and thus be negatively correlated with firm f's own propensity to lobby . We show in Table B.2 that our baseline lobbying effect is robust with the use of these IVs; the IVs are jointly relevant, have significant and oppositely-signed effects (as hypothesized) on the likelihood of firm f lobbying on trade issues, and moreover pass an overidentification test.

3.3 Taking Stock

To sum up our empirical exploration, we draw out several salient features of the exclusions process that will be particularly important in guiding how we proceed with the modeling in the next section.

First, it bears repeating that the Trump administration's intention to set up an exclusions process was made known at the time of the announcement of each Section 301 tariff list. One can infer from this that the Trump administration preferred exclusions as a route for granting firms relief from the tariffs if necessary, instead of directly lowering any announced Section 301 tariff rates themselves. In our model, we will therefore set up the government's decision over tariff rates – over which products and at what level to set them – as one that fully anticipates that it will want to grant selective exclusions ex post.

Second, the exclusions granted were typically limited to highly specific goods within HTS 10-digit product codes. Based on the exclusions shares we calculated, among the 1,155 10-digit codes that saw at least one exclusion, only 0.04% of these were fully excluded (i.e., with $\pi_k = 1$); for the vast majority of codes, any exclusions were instead applied to some fraction of their initial import value from China. This prompts us toward a model setup that features heterogeneity across goods within each product code; the exclusions thus allowed the government to more finely target which goods to exempt from the tariffs, rather than choosing a different tariff rate to apply to all products in a HTS 10-digit code.

Third, the exclusions process collected information from firms on the degree of their dependence on imported goods from China. The USTR required that key details related to the good's use in firm-level operations be disclosed, in order to ascertain that the good could only be feasibly obtained from China, and to demonstrate the severity of the harm that the additional tariffs would cause the firm or US commercial interests. That the USTR set up an official application process (instead of granting blanket exclusions without formal requests) is indicative of how it saw the need to collect what would otherwise be private, firm-level information before deciding on the merits of each case. We have moreover reported on an array of variables – filing through a representative, public comment letters, and lobbying on trade issues – which appear to have helped firms amplify their ability to convey information to the USTR. While these features in an application did raise the likelihood of a granted exclusion, it is notable that these did not ensure success; for example, the success rate among applications put in by lobbying firms was still just 22.1%, which suggests that the lobbying effect was not purely driven by political favoritism. In the model to follow, we will focus on this informational role of the exclusions process.

Fourth, the USTR broadly adhered to the stated objectives of the exclusions program when deciding the outcome of applications. For each unsuccessful request, the USTR provided reason(s) for denial that were based on the five eligibility criteria (e.g., failure to demonstrate severe economic failure was the most commonly cited reason); overall, this resulted in less contentiousness over the Section 301 exclusions program, compared to the preceding Section 232 exclusions which had drawn congressional complaints. The empirical findings also support this interpretation, as exclusions were more likely to be granted in HTS 10-digit codes with a higher Chinese import share, the latter being a plausible indication of a greater dependence on China for goods within such product codes. The eligibility criteria in principle sought to balance off several priorities of the US government, both to assist US-based importers (consumers of the affected good) who would be hurt by the additional tariffs, while at the same time mounting a response against Chinese policies seen to be benefiting Chinese firms "unfairly" (at the expense of US producers and other domestic interest groups). This is akin to the tradeoffs that political decision-makers face when determining tariffs in a "protection for sale" framework. The exclusions program can thus be viewed as being in service of a similar set of political objectives as the tariff setting itself.

4 A Model of "Exclusions for Sale"

Building on the above, we turn now to develop a model in the "protection for sale" framework of Grossman and Helpman (1994), but adapted to the institutional setting of the Section 301 tariffs and the accompanying exclusions process. Toward this end, the model incorporates heterogeneity across detailed goods in the quality or unit costs of varieties produced by China; this gives rise to differences across firms in their initial dependence on imports from China, which is private information the firm can disclose to the authorities should it apply for an exclusion. The model is set up with an eye toward calibration and quantification with public data, which (as we will see) requires that we impose some structure on the underlying distribution that governs heterogeneity across goods. Our key goal will then be to perform a normative policy evaluation, to compare the prevailing system of discriminatory tariffs with potential exclusions versus alternative policy designs (principally, tariffs without exclusions).

4.1 Model Setup: Preliminaries

We consider a three-country setting, with countries subscripted by: h for the home country (the US), c for China, and f for all other foreign countries. By including this latter rest of the world composite country, we build in trade diversion effects; this allows for firms to respond to the Section 301 tariffs by seeking out alternative country sources for inputs previously obtained from China. Each country supplies a unique variety of every good g, following the Armington (1969) assumption. Moreover, each country can face different (ad valorem) tariffs for access to the home market, which we denote by τ_{gc} and τ_{gf} for good g from China and the rest of the world respectively.

Demand: We spell out the demand for goods in the US. Given that exclusions are typically granted to highly specific goods, we will assume the existence of a continuum of subvarieties – what we refer to as goods (indexed by g) – within each product code (indexed by χ); this follows the setup in Grant (2024). In our context, consumers are firms that use goods as inputs, in line with the fact that most of the earlier

Section 301 tariff rounds disproportionately targeted intermediates rather than final goods (Bown and Kolb, 2021; Grossman et al., 2024).

We specify the utility of the representative consumer in the US to be quasilinear cum CES:

$$U = X_0 + \sum_{\chi} \sum_{g \in \chi} E_g \ln X_g, \tag{4}$$

where: X_0 denotes consumption or use of the numeraire good, E_g is expenditure on good g, while X_g is a constant-elasticity of substitution (CES) aggregator over consumption of good g over the three source countries. More explicitly, this is given by: $X_g^{\frac{\sigma_\chi - 1}{\sigma_\chi}} = b_{gh}^{\frac{1}{\sigma_\chi}} x_{gh}^{\frac{\sigma_\chi - 1}{\sigma_\chi}} + b_{gc}^{\frac{1}{\sigma_\chi}} x_{gc}^{\frac{\sigma_\chi - 1}{\sigma_\chi}} + b_{gf}^{\frac{1}{\sigma_\chi}} x_{gf}^{\frac{\sigma_\chi - 1}{\sigma_\chi}}$, where σ_χ is the elasticity of substitution, and the b_{gi}'s are exogenous demand shifters that differ across goods g and source countries $i \in \{h, c, f\}$. Note that while demand, expenditures, and (as we shall see below) supply are all defined at the good level, the key elasticity parameters are shared by all goods within a code; this reflects how in practice, the researcher (and even the government too) is only able to observe data and thus infer these key parameters at the level of the product code or tariff line.

It is straightforward to show that the utility system in (4) yields a demand function over goods from each source country with a constant demand elasticity σ_χ. The corresponding share of good-g expenditures on source country $i \in \{h, c, f\}$ is then given by:

$$s_{gi} = b_{gi}(1 + \tau_{gi})^{-\sigma_\chi} \left(\frac{p_{gi}}{P_g} \right)^{1-\sigma_\chi}, \tag{5}$$

where $(1 + \tau_{gi})p_{gi}$ is the tariff-inclusive price (with $\tau_{gh} = 0$ for all domestic varieties), and P_g is the ideal price index for good g over the three source countries. In particular, the expenditure share that is directed toward the Chinese subvariety of the good is increasing in the demand shifter b_{gc}, where the latter can be interpreted in our context as capturing the quality of this subvariety or its innate suitability for the needs of the US firm that is purchasing it. A higher tariff τ_{gc} will (not surprisingly) reduce the share of expenditures on goods of Chinese origin (all else equal).

Supply: There are three potential origin countries $i \in \{h, c, f\}$ for each good. The supply curve that the US faces from source country i is subject to a cost shifter a_{gi}, while being governed by a constant supply elasticity $1/\omega_\chi$ (that is common to all goods $g \in \chi$). With this supply-side setup, we have a second expression for the expenditure share on good g from country i:

$$s_{gi} = a_{gi}^{-1/\omega_\chi} \left(\frac{p_{gi}}{1 + \tau_{gi}} \right)^{1/\omega_\chi} \frac{1}{E_g}, \tag{6}$$

where note that a positive Chinese productivity shock would lower the cost shifter a_{gc}, which would in turn raise the expenditure share from China. This supply structure emerges naturally with a Cobb-Douglas production function, in which the two inputs used are labor (with the wage pinned down in an outside sector) and destination-specific capital (that is in exogenous supply in the origin country).

Of note, the demand and supply relationships spelled out in (5) and (6) map readily into the Feenstra (1994) framework, from which we will draw our elasticity estimates for σ_χ and ω_χ when we turn to the quantification.

4.2 Government's Tariff Policy Design Problem

Government Objective Function: The home-country government's (political) objective function is given by:

$$\Omega = Y_0 + \sum_{\chi} \sum_{g \in \chi} \left(\lambda_\chi \pi_g + \beta_\chi CS_g + \sum_{i \in \{c,f\}} (\tau_{gi} p_{gi} q_{gi} + \gamma_{\chi i} \pi_{gi}) \right). \tag{7}$$

This is quasilinear with respect to output Y_0 generated and consumed from the outside sector; in turn, the subutility accruing from each good g in code χ comprises terms in domestic producer profits π_g,consumer surplus CS_g,and tariff revenue $\tau_{gi} p_{gi} q_{gi}$,that are familiar from the "protection for sale" trade policy literature. In particular, $\lambda_\chi - 1$ is equal to the extra weight placed by the government on home-country producer profits relative to tariff revenue (c.f., Baldwin, 1987; Hillman, 1982; Grossman and Helpman, 1994). We view this political preference weight as an exogenous parameter, where differences across χ could reflect for example the fact that some products tend to be concentrated in politically-important swing states in their production locations.[27] On the other hand, $\beta_\chi - 1$ is the extra weight the government places on domestic consumer interests. In our setting, this could reflect counter-lobbying by US-based firms who use the imported goods as intermediate inputs, and helps to rationalize why the Home government might wish to grant exclusions (albeit selectively) to the announced code-level tariffs. The $\gamma_{\chi c}$ and $\gamma_{\chi f}$ are respectively the weights placed by the Home government on the corresponding producer profits that accrue in China and in the rest of the world. These capture in a reduced-form way how the home country might be internalizing industrial outcomes in the foreign country in trade negotiations or trade agreements ($\gamma_{\chi i} > 0$, as in Grossman and Helpman, 1995a; Adão et al., 2024), or conversely, its perceptions of the threat of foreign retaliation or desire to hinder foreign industries ($\gamma_{\chi i} < 0$, as in Sturm Becko, 2024). We assume that the λ and γ weights vary at the code level (rather than at the good level), as the former is the level of disaggregation at which there is data to pin down these parameters credibly.[28]

Using the specifications for demand and supply from Section 4.1, the producer and consumer surplus terms are given explicitly by: $\pi_{gi} = \frac{\omega_\chi}{1+\omega_\chi} \frac{E_g}{1+\tau_{gi}}$ (for $i \in \{c, f\}$), and $CS_g = E_g \left(\ln(E_g/P_g) - 1 \right)$. With these last expressions and some further algebraic work, the government objective function in (7) can be rewritten as:

$$\Omega = Y_o + \sum_{\chi} \left(\Omega_\chi + \sum_{g \in \chi} E_g \Omega_g \right), \tag{8}$$

where:

$$\Omega_g \equiv \frac{\omega_\chi}{1+\omega_\chi} \lambda_\chi s_{gh} - \frac{\omega_\chi \sigma_\chi + 1}{(\omega_\chi + 1)(\sigma_\chi - 1)} \beta_\chi \ln s_{gh} + \sum_{i \in \{f,c\}} \frac{\tau_{gi} + \frac{\omega_\chi}{1+\omega_\chi} \gamma_{\chi i}}{1+\tau_{gi}} s_{gi}, \tag{9}$$

[27] In line with this, exclusions were more likely to be granted if the applicant firm was located in a swing county, where the Trump vote share in 2016 was between 47-53% (see Column 3, Table 3, and also Lopatin et al., 2024).

[28] As is well-known from Grossman and Helpman (1994), the political objective function in (7) can be microfounded within a model with campaign contributions, in which producer-special interests pledge to support the political party of the incumbent government with contributions in exchange for a set of desired tariff policies. We do not explicitly adopt this particular foundation for the political objective function, given that we focus on the informational (rather than quid-pro-quo) nature of the the exclusions application process and any accompanying interactions between firms and government institutions.

and Ω_χ collects terms that are invariant to tariff policy (in particular, expenditures E_g are treated as given).[29] Thus, home-country tariffs on imports of good g – i.e., τ_{gc} and τ_{gf} – affect domestic welfare only through their impact on the subutility terms spelled out in Ω_g. These tariffs appear directly in (9), specifically in the terms associated with tariff revenues, and they also influence the shares of good-g expenditures, s_{gh}, s_{gc}, and s_{gf}, on the subvarieties from the US, China, and the rest of the world respectively. To see the latter, equate (5) and (6), so that demand meets supply for each subvariety in the US market; one can then show that these expenditure shares are implicit functions of τ_{gc} and τ_{gf} given by:

$$s_{gc}/s_{gh} = r_{gc}\left(1+\tau_{gc}\right)^{-\frac{\sigma_\chi - 1}{\omega_\chi \sigma_\chi + 1}}, \tag{10}$$

$$s_{gf}/s_{gh} = r_{gf}\left(1+\tau_{gf}\right)^{-\frac{\sigma_\chi - 1}{\omega_\chi \sigma_\chi + 1}}, \text{and} \tag{11}$$

$$1 = s_{gh} + s_{gc} + s_{gf}, \tag{12}$$

where r_{gc} and r_{gf} are defined as:

$$r_{gc} \equiv \left(a_{gc}/a_{gh}\right)^{-\frac{\sigma_\chi - 1}{\omega_\chi \sigma_\chi + 1}} \left(b_{gc}/b_{gh}\right)^{\frac{\omega_\chi + 1}{\omega_\chi \sigma_\chi + 1}}, \text{and} \tag{13}$$

$$r_{gf} \equiv \left(a_{gf}/a_{gh}\right)^{-\frac{\sigma_\chi - 1}{\omega_\chi \sigma_\chi + 1}} \left(b_{gf}/b_{gh}\right)^{\frac{\omega_\chi + 1}{\omega_\chi \sigma_\chi + 1}}. \tag{14}$$

Recall that the a_{gi}'s and b_{gi}'s are respectively supply and demand shifters for the goods g that originate from each of the source countries ($i \in \{h, f, c\}$). This heterogeneity is summarized in the above expressions for r_{gc} and r_{gf}; in turn, knowledge of r_{gc} and r_{gf} is sufficient for pinning down optimal tariff policy (without need for further details on the underlying good-specific supply and demand shifters). This is because the expenditure shares s_{gh}, s_{gc}, and s_{gf} can be uniquely recovered using (10)-(12) from r_{gc} and r_{gf}, for any given set of tariff rates τ_{gc} and τ_{gf}.

With the above objective function in mind, we can now describe the decision problem that the home-country government solves when it determines its discretionary tariff policies, including the Section 301 tariff rate on products from China (i.e., τ_{gc}). We will consider optimal policies under two scenarios:

(i) Uniform tariffs without exclusions: The home government sets tariff rates that vary by country-of-origin ($i \in \{f, c\}$) and code (χ), which we denote by $\tau_{\chi i}$, and this is applied uniformly to all goods within the code (so that $\tau_{gi} = \tau_{\chi i}$ for all $g \in \chi$); moreover, no allowance is made for firms to seek an exclusion. In this case, it is straightforward to see that the government's decision problem boils down to choosing $\tau_{\chi c}$ and $\tau_{\chi f}$to maximize Ω_g in (9). The tariff setting here follows a standard "protection for sale" model: the optimal tariffs are pinned down by the relevant first-order conditions, and will depend on code-level parameters (specifically, the elasticities, σ_χ and $1/\omega_\chi$, and the political weights, λ_χ, β_χ and $\gamma_{\chi i}$'s), as well as the (known) distributions of the good-level demand and supply shifters across goods g within code χ.

(ii) Tariffs with exclusions: The timing of the government's tariff policy problem proceeds in three stages. In the first stage, the government announces tariff rates at the code level, anticipating the process that it will open up to allow firms to apply for exclusions. When choosing the tariff rates $\tau_{\chi c}$

[29] Specifically, $\Omega_\chi \equiv \sum_{g\in\chi} E_g \left(\frac{1}{\omega_\chi + 1} \ln E_g - \ln \left(a_{gh}^{\frac{1}{\omega_\chi + 1}} b_{gh}^{-\frac{1}{\sigma_\chi - 1}} \right) - 1 \right)$.

and $\tau_{\chi f}$ to announce, the government takes into account the impact these tariffs will have on importers and recognizes that it will potentially grant exclusions to a subset of these importers (as described in the third stage below). The government also has knowledge of the underlying distributions of the demand and supply shifters, but not the actual good-level realizations of a_{gi} and b_{gi}; due to this latter informational constraint, the government cannot decide in advance which exact goods to grant an exclusion to.

In the second stage (following the announcement of the tariff rates), importers can apply for exclusions. Importers naturally have private information on the underlying characteristics associated with the goods they import, specifically, of the good-level demand and supply shifters, and hence the share of the good they import from China, s_{gc}. Importers are also cognizant of the government's objective function and anticipate correctly that the government will choose to grant an exclusion to goods that are revealed to have a sufficiently high Chinese import share. From equations (10) and (13), such dependence on China could stem from a strong underlying demand for the Chinese good (a high b_{gc}/b_{gh}, that renders the Chinese subvariety particularly suitable for the US importer's needs); alternatively, this could be due to the Chinese producer holding a large cost advantage (a low a_{gc}/a_{gh}). Importers with a sufficiently high Chinese import share thus opt to formally apply for an exclusion, and in so doing, convey this information about s_{gc} to the USTR. (Bear in mind though that this is a confidential disclosure between the firm and the USTR; this information on s_{gc} for applicant firms is not revealed to the public, nor is the USTR feasibly able to observe s_{gc} for firms that do not apply for an exclusion.)

In the third stage, the government takes on board this new information and decides on which goods g to exempt from the tariff. Specifically, it excludes goods g from the discretionary tariffs if granting the exclusion raises the government's objective function in (7) relative to maintaining the tariff. In practice, this means the government excludes goods for which the Chinese import share is above a cutoff. The cutoff and the optimal tariff rates set in the first stage are determined by solving the government's problem by backward induction.

To reiterate the key intuition, the home-country government will be inclined to set a higher $\tau_{\chi c}$ in the first stage, if it anticipates granting exclusions for some goods, once the relevant information on the goods' Chinese import share is revealed to it by the importing firms. From a welfare perspective, the exclusions on selected goods tend to remove distortions to consumer surplus. This needs to be weighed though against the higher tariff rate that would be set, as well as the foregone tariff revenue from excluded goods. The net effect on welfare is thus in principle indeterminate, hence the need for a quantitative evaluation which we turn to next.

5 Quantification and Welfare Implications

In Section 5.1, we describe the steps we take to implement a quantitative version of our model in order to assess the impact of the Section 301 tariffs and the exclusions program. We then discuss the findings from this analysis in Section 5.2.

5.1 Implementation

In order to pin down optimal tariff policy, we will take a stance on the distributions of the good-specific supply and demand shifters (the a_{gi}'s and b_{gi}'s), or more parsimoniously, on the distributions of r_{gc} and r_{gf} (as defined in equations (13)-(14)). This approach imposes some structure on the nature of the supply and demand shifters, but it is a necessary modeling cost given that we cannot feasibly observe outcomes directly for specific goods at the sub-product code level. Recall from equations (10)-(12) that given a set of prevailing tariff rates, one can exactly recover the expenditure shares s_{gh}, s_{gc}, and s_{gf} with knowledge of the realizations of r_{gc} and r_{gf}; conversely, one can recover the values of r_{gc} and r_{gf} from equations (13)-(14) that will rationalize any observed set of expenditures shares s_{gh}, s_{gc}, and s_{gf}. With this mapping in mind, it will turn out to be more convenient to implement the model quantitatively by simulating draws of the expenditure shares.

Specifically, we assume that s_{gh}, s_{gc}, and s_{gf} under MFN tariffs are distributed Dirichlet with the following joint probability distribution function (pdf):

$$g\left(s_{gh}, s_{gc}, s_{gf}\right) = \frac{\Gamma\left(\alpha_{\chi 0}\right) s_{gh}^{\alpha_{\chi h}-1} s_{gc}^{\alpha_{\chi c}-1} s_{gf}^{\alpha_{\chi f}-1}}{\Gamma\left(\alpha_{\chi h}\right)\Gamma\left(\alpha_{\chi c}\right)\Gamma\left(\alpha_{\chi f}\right)}, \tag{15}$$

where: $\alpha_{\chi 0} \equiv \alpha_{\chi h} + \alpha_{\chi c} + \alpha_{\chi f}$; this is therefore a three parameter distribution, with the key parameters specified at the product code level. The Dirichlet distribution has some useful properties that make it a natural choice in our setting. The code-level average shares are given analytically by: $s_{\chi i} = \alpha_{\chi i}/\alpha_{\chi 0}$ for $i \in \{h, c, f\}$, which means that this distribution is well-suited to help us match those source-country shares by codes. Note also that (15) is reasonably flexible, in that it accommodates many familiar distributuons – including the Bernoulli, uniform, and point mass distributions – as special cases.

We calibrate the model to the data code-by-code, as follows:

- Step 1: The supply and demand elasticities, ω_χ and σ_χ, are obtained by applying the procedure in Grant (2024) to data aggregated at the code level. This estimates the elasticities based on the Feenstra (1994) method, but allowing for within-code heterogeneity across goods.

- Step 2: For each value of $\alpha_{\chi 0}$ on a pre-defined search grid, we pick $\alpha_{\chi h}$ and $\alpha_{\chi c}$ to match the observed code-level import shares. (For this purpose, we draw information on the US absorption share of domestically-produced goods from the US Input-Output Tables and use this to infer s_{gh}.)

- Step 3: For each $\alpha_{\chi 0}$ from Step 2, we jointly pin down two political parameters using two published tariff rates as target moments. We determine the political weight on domestic producer surplus, λ_χ, by matching the Column 2 tariffs which would prevail under a trade war scenario (when setting $\gamma_{\chi c} = \gamma_{\chi f} = 0$ in our model); this follows Ossa (2014). At the same time, we pin down the $\beta_{\chi c}$ weight on domestic consumer surplus, by matching the MFN tariff rate under a cooperative trading scenario (when setting $\gamma_{\chi c} = \gamma_{\chi f} = 1$ in our model).

- Step 4: We then jointly pick $\gamma_{\chi c}$ and $\alpha_{\chi 0}$ to match the Section 301 tariff announced at the code level, as well as the share of goods granted an exclusion within code χ. In particular, we view the additional tariffs to be levied against (non-excluded) Chinese goods as being informative of the

$\gamma_{\chi c}$ weight on Chinese producer profits, as these reflect the US government's goal to circumscribe Chinese firms.

We perform the above calibration procedure using the 229 tradable industries in the 2017 US Input-Output Tables as the codes χ. This strikes a compromise between working with more granular HTS product-level data (with which there would be more codes that would be sparse in terms of exclusion shares) and on the other hand, working with coarser industry classification systems (which would blur interesting variation within industries). For our baseline, we will assume that $\gamma_{\chi f} = 0$, namely that the home country does not place weight on surplus that accrues to the third country; that said, we have found that our quantitative results are not particularly sensitive to placing a small positive weight on producer surplus in the rest of the world, such as $\gamma_{\chi f} = 0.81$ as estimated by Adão et al. (2024).

Table 6 summarizes the calibrated parameter values. The mean demand elasticity of 4.26 and inverse supply elasticity of 0.11 fall within conventional ranges, though there is substantial heterogeneity in these key parameters across codes χ. Through the lens of our model, the US government appears to place extra weight on domestic producer interests, with the λ_χ political weight being positive and sizeable across the vast majority of codes. Note that these are political weights attached to domestic producer profits; when suitably rescaled by our model-implied profit share ($\omega_\chi/(1+\omega_\chi)$), this yields weights on domestic firm sales – with a mean weight of 29.7 – comparable to those estimated by Ossa (2014). At the same time, we find too that the US government appears to place positive weight on domestic consumer interests: β_χ is positive across virtually all codes with a mean value of 15.5, although there is notably quite a bit less dispersion in these weights than in the λ_χ's for domestic producer interests. On the flip side, the weight on Chinese producer surplus that we infer is decidedly negative in sign with a lot of left skew, which aligns with the stated goal of the Section 301 tariffs to address unfair trade and industrial practices within China that favor their domestic producers in particular industries.

Table 6: Calibrated Parameters

Parameter	Informative moment	Mean	SD	5th pctile	Median	95th pctile
$\alpha_{\chi 0}$	Variance in shares	1.11e5	9.02e5	0.659	335	1.11e5
$\alpha_{\chi c}$	Average Chinese share	6,250	44,600	0.0229	13.2	12,300
$\alpha_{\chi f}$	Average ROW share	30,000	2.67e5	0.100	56.5	18,400
σ_χ	Elasticity of substitution	4.26	3.34	1.01	2.53	9.55
ω_χ	Inverse elasticity supply	0.110	0.139	8.6e-5	0.0355	0.394
λ_χ	Pol. weight home profits	2.79e5	3.09e6	1.05	259	50,500
β_χ	Pol. weight home CS	15.5	45.2	0.972	5.34	57.7
$\gamma_{\chi c}$	Pol. weight Chinese profits	-9,430	80,500	-2,490	-3.52	0.570
$\frac{\lambda_\chi \omega_\chi}{1+\omega_\chi}$	Pol. weight home sales	29.7	102	0.09	2.83	127
$-\beta_\chi \frac{1+\omega_\chi \sigma_\chi}{(1+\omega_\chi)(\sigma_\chi - 1)}$	Pol. weight ln(home sales)	-33.2	-76.6	-0.389	-4.29	-110
$\frac{\gamma_{\chi c} \omega_\chi}{1+\omega_\chi}$	Pol. weight Chinese sales	-0.0842	0.120	-0.242	-0.110	0.133

Notes: Alphas are only summarized for the 68.6

Table 7 confirms that these estimated parameter values help us to achieve a good fit between the model and key data moments. The model reproduces almost exactly the average code-level import share from China and the rest of the world. Likewise the political weights we back out help us to fit well the code-level Column 1 (i.e., MFN), Column 2 and Section 301 tariff rates. Notice that the model slightly

under-predicts the share of imports from China granted an exclusion, due largely to the fact that there are many codes χ in the data for which the excluded share is zero.

Table 7: Model Fit

Measure	Data mean	Model mean
Chinese share	0.0731	0.731
Row share	0.186	0.186
Column 1 tariff	0.0219	0.0219
Column 2 tariff	0.303	0.304
Trump Tariff (addt'l)	0.214	0.216
Exempted Share	0.0558	0.0552

Notes: Means across codes χ are reported.

5.2 Results: Tariffs with vs without Exclusions

We now use the calibrated model to perform a series of exercises, to compare tariff rates and welfare under different trade policy setting scenarios. We first compute the model-implied tariff rates, code-by-code; Table 8 summarizes the results from this exercise. The first row considers the prevailing tariff policy regime, namely one in which tariff rates are announced at the code level, and a process through which firms can apply for an exclusion is also put in place. The mean tariff rate across codes we obtain is 21.6% (which we report throughout this table as the additional tariff above the MFN rate). This 21.6% is essentially the observed average Section 301 tariff rate that the US announced on imports from China, which we have targeted as part of our calibration procedure.

Table 8: Tariff Effect of Exclusions

Measure	Statutory average	Applied average	Statutory SD
Addt'l exclusion tariff	0.216	0.213	0.0692
Addt'l uniform tariff	0.206	0.206	0.0594
Welfare max. uniform tariff (addt'l)	0.0771	0.0771	0.110

Notes: All tariffs are in addition to MFN tariffs.

The second row of Table 8 reports on the key counterfactual policy scenario of interest, namely where a uniform tariff is set across all goods within a code, without any provisions for exclusions. The results here confirm that the average tariff would be slightly lower at 20.6%: the home-country government introduces a smaller tariff distortion under this case where it has committed not to consider any requests from domestic importers for exclusions. Put otherwise, under the factual policy of tariffs with exclusions, the higher tariff rate of 21.6% implies a larger distortion on non-excluded goods. By way of comparison, the final row reports the mean additional tariff (above MFN) that would be set under a social welfare-maximizing planner. When summed with the underlying MFN tariff rate, this would yield the tariff rate set under the classical optimal tariff formula, in which the planner maximizes an unweighted sum of domestic producer surplus, consumer surplus, and tariff revenue. When optimizing an objective function that is not politically-weighted, the mean additional tariff rate is much lower at 7.7%, underscoring the

substantial welfare distortion that is created by the Section 301 tariffs on China (regardless of whether or not the government makes provisions for exclusions).

What are the ensuing implications for welfare from adopting a policy of tariffs with exclusions? In what follows, we will evaluate welfare from the perspective of a dispassionate social planner who does not place extra weight on domestic producer or consumer interests; in other words, we will compute welfare using (7) sans political weights (i.e., setting $\lambda_\chi = \beta_\chi = 1$ and $\gamma_{\chi c} = 0$ for all codes). Recall that exclusions are relevant in this setting due to heterogeneity across goods within a code, specifically in the extent of importers' reliance on goods from China; this is private information that the importer would reveal to the government if it chooses to submit an application for an exclusion. The first column in Table 9 reports our model-based welfare evaluation of this policy of tariffs with exclusions, compared to a baseline world with just MFN tariffs in place. The additional welfare cost of a policy setup of tariffs with exclusions amounts to \$2.18 billion. On the other hand, a uniform tariff policy without scope for exclusions (second column) yields a welfare cost relative to MFN of \$1.68 billion. The system with exclusions thus raises the welfare loss of the additional tariffs by about 30%. Even though excluded goods are spared from the additional tariff burden, we find that this effect is quantitatively dominated by the higher tariff distortion on non-excluded goods and the tariff revenue foregone on excluded goods. This then represents a "hidden" welfare cost of a system of tariffs with exclusions. While it might initially appear that having an additional policy instrument (i.e., exclusions) that lowers tariff distortions would be welfare-improving, this turns out not to be true in the context of the US' Section 301 tariffs on China once one takes into account that the tariffs announced by a strategic home government would be endogenously higher (or would be applied to more HTS 10-digit product codes). There is thus ample room to be concerned about the welfare effects of tariffs with exclusions from a pure policy design perspective, even without appealing to other considerations related to the potential for rent-seeking or institutionalized favoritism.

Table 9: Welfare with vs without Exclusions

Measure	MFN - w/ Exclusions (\$bn)	MFN - Uniform (\$bn)	(MFN-Exclusions) /(MFN-Uniform)
Welfare cost	2.18	1.68	1.30
Fall in π_c	10.1	9.66	1.074

Notes: Based on the social welfare function without political weights, i.e., equation (7) with $\lambda_\chi = 1$ and $\gamma_{\chi c} = \gamma_{\chi f} = 0$.

A caveat to the above analysis is that it does not consider possible adjustments on China's end in its retaliatory tariff actions. It is possible, for example, that the exclusions might soften the impact on Chinese firms and hence on China's retaliatory response to the Section 301 tariffs. Toward this end, Table 9 further evaluates the impact that the two tariff policy regimes have on aggregate Chinese producer profits, $\pi_c = \sum_\chi \sum_{g \in \chi} \pi_{gc}$ (see second row). The hit to these Chinese producer profits is cushioned slightly when the US government permits some Chinese goods to be excluded from the Section 301 tariffs (π_c falls by \$10.1 billion), compared to the counterfactual policy with no exclusions (π_c falls \$9.66 billion). However, this difference is relatively small – the policy with exclusions mitigates just 7.4% of the loss in Chinese profits (relative to the MFN world) – which suggests that any changes in China's retaliatory tariff

actions are likely too to be muted.

Table 10 simulates a series of counterfactuals that shed light on the role played by the political weights in the government's objective function in shaping the average tariff that would be announced and the subsequent welfare costs incurred. The first row reproduces the baseline policy scenario of tariffs with exclusions, using the political weights that have been calibrated code-by-code as reported earlier in Table 6. (Note that the average tariff of 23.8% reported here now includes the underlying MFN tariff.) The second row then considers a scenario in which we take out any extra political motivation to favor the interests of domestic users and consumers (setting $\beta_\chi = 1$ for all codes). Not surprisingly, the Section 301 tariffs against China would now be set at a much higher rate, which significantly magnifies the associated welfare costs relative to a world with just MFN tariffs. Absent considerations related to the welfare accruing to domestic consumers, the incentive to protect domestic producers while curtailing Chinese firms is so strong that it would result in a much higher tariff distortion and welfare loss. When we further remove the extra weight placed on domestic producer interests (third row) and on Chinese firms' profits (fourth row), this brings down the announced tariff and in fact improves welfare outcomes compared to the baseline scenario (first row). These confirm how the desire to redistribute in favor of domestic producers, as well as geoeconomic considerations related to China, albeit captured via reduced-form political weights, are pivotal in driving the welfare effects of the Section 301 tariffs.

Table 10: Counterfactual welfare effect of exclusions

Counterfactual	Changed Parameters	Average tariff w/exclusions	Welfare cost vs MFN ($bn)	Welfare cost vs Baseline ($bn)
Baseline tariffs w/exclusions	-	0.238	2.18	-
No counter lobbying tariffs w/exclusions	$\beta_\chi = 1$	0.820	55.9	53.7
No lobbying tariffs w/exclusions	$\beta_\chi = 1$, $\lambda_\chi = 1$	0.182	-1.00	-3.18
Welfare maximizing tariffs w/exclusions	$\beta_\chi = 1$, $\lambda_\chi = 1$, $\gamma_{\chi c} = 0$	0.112	-6.36	-8.55

Notes: These counterfactuals do not account for possible retaliatory tariffs.

6 Conclusions

[TO BE ADDED]

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Appendix

A Exclusions to the Trump Tariffs

A.1 Additional Details of USTR Tariff Exclusion Data

USTR accepted exclusion requests for Lists 1 and 2 through Regulations.gov. As officials noted that using Regulations.gov posed challenges since staff had to manually post each exclusion request and enter the submitter's data into USTR's internal platform, an online portal is later developed to accept and process exclusion requests electronically for Lists 3 and 4. The online portal contained an electronic filing system to receive exclusion requests and public comments, and automated the posting of requests to an internal database. GAO (2021) We webscrape data on tariff exclusion requests from these two sources.

For Lists 3 and 4, on USTR online portal, several pieces of information are readily available: (i) requester's name, (ii) the date when the USTR received the application, (iii) 10 digit HTSUS code and product description for the product under request, (iv) request outcome; (v) type of product (final product or input); (vi) whether the product or a comparable product is available from sources in the US; (vii) whether the product or a comparable product is available from third countries; (viii) whether the request is filed by a representative; and (ix) public comments related to different exclusion requests, as well as commenter position (support or oppose) and commenter relationship (such as state or local official). For Lists 1 and 2, there is no digitized data for items (v)-(viii). We therefore downloaded all application files and public comments (either in PDF or in text format) from Regulations.gov. From these files, we first scraped the information (v)-(viii) by a computer, which is then manually cross-checked by a research assistant.[30] For information (ix), two research assistants read the text of each comment and inferred whether the commenter support or oppose the request, and whether the comment is another firm, or a Member of Congress, or a state/local official. For all lists, we exclude the applicants' own comments.[31]

In the USTR dataset, there are firms that submit a large number of requests for tariff exclusions. The top five firms are *AEP Holdings, Inc.* (10,221 requests), *Milwaukee Electric Tool Corporation* (1,400 requests) *Prime-Line Products, LLC* (1,397 requests), *Romaine Electric Corp* (1,042 requests), and *ECM Industries LLC* (654 requests). Our findings remain robust to the exclusion of these firms from the sample.

We also downloaded the reply letter (in PDF) from the USTR for each application.[32] For the application for which the tariff exclusion request was denied, we scraped the information of reasons for request denials, which include: (i) request failed to show that the particular product is available only from China; (ii) the request failed to show that the imposition of additional duties on the particular product would cause severe economic harm to the requester or other US interests; (iii) the request concerns a product

[30] Occasionally, for some requesters, there is no application form posted on Regulations.gov. For these cases, we read through other application materials and extract the relevant information whenever possible. Most application forms for List 1 contains no information on (v) type of product (final product or input). We therefore don't include this variable for the baseline analysis. In the end, we extract the relevant information for 99.2 percent of requests in Lists 1 and 2.

[31] Applicants submit own comments usually for the purpose of furnishing additional information in support of the request or rebutting the comments made by other parties.

[32] The USTR reply letters are unavailable for 63 applications, comprising 48 for List 1, 2 for List 2, and 13 for List 3.

strategically important or related to "Made in China 2025" or other Chinese industrial program; (iv) the request would undermine the objective of the Section 301 investigation, and (v) the request did not contain a sufficient product identification or was determined to be non-administrable. These reasons of denial are not mutually exclusive. Table 4 reports the share of requests that are denied due to different reasons. The most common reason is (ii), followed by (i). We also gather information on the date of rely from the letters. Alongside the information regarding the date of application received by the USTR, we compute the length of processing time for each request. As shown in Table B.6, for an average request, the USTR took 230 days to reach a tariff exclusion decision. Additionally, granted requests had a longer processing time than denied ones (287 days versus 222 days).

A.2 Linking Data from LobbyView.org, OpenSecrets.org, and Orbis

We link lobbying records (from LobbyView.org) to firms that submitted requests to USTR. Since there is no common firm ID codes that link firms across datasets, we conducted fuzzy merges based on firm names based on the following procedure. (a) We conduct fuzzy merge between USTR and LobbyView datasets based on firm names. This is done by two different Stata commands *reclink* and *matchit*. For each matching method, we pick two potential matches with the highest matching scores. For each firm in USTR dataset, there are up to 4 potential matches. (b) One author and two research assistants separately scan through the potential matches for each firm and flag the correct matches. The matches done manually are then cross-checked to ensure the matching quality. Around 10% of the firms in USTR dataset have a least one lobbying record, which is consistent with the findings in the literature. For example, Huneeus and Kim (2021) show that 766 of 7,646 US public firms engaged in lobbying in 2017. We identify a firm engaging in lobbying for trade-related issues during given period if any of its lobbying records are associated with issue codes TRD (i.e., Trade - Domestic & Foreign) or TAR (i.e., Miscellaneous Tariff Bills).

We then match contribution records of the 2017-18 and 2019-20 election cycles (from OpenSecrets.org) to firms in our dataset. Each contribution record at the individual level details the donation date, donor name, type, amount, recipient (candidates or PACs), donor's address, employer, and occupation. We aggregate the individual donations to the firm level based on the donor's disclosed employer from electronic filing.[33] For each election cycle, we then construct a crosswalk across firms in USTR and campaign contribution data based on the same matching procedure described above. The crosswalks later allow us to link various measures of political donations (such as total campaign contributions, campaign contributions to Democrats, and campaign contributions to Republicans) to firms in the USTR dataset.[34] For the purpose of analysis, the campaign contribution data is aggregated to the quarterly level.

Over the period of Q1/2018-Q2/2020, the total expenditure on lobbying by the firms in our sample is

[33]The contribution records of the retired, self-employed, unemployed, and students are therefore excluded from the data.

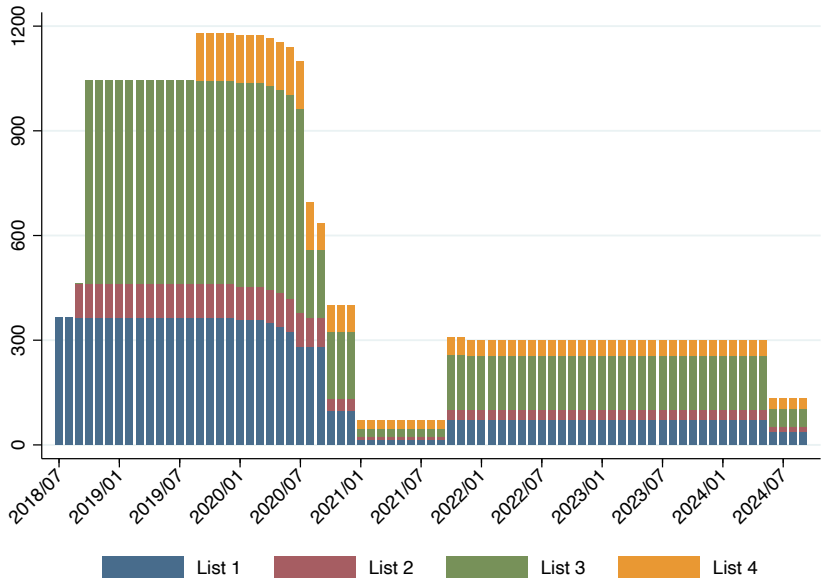
[34]Specifically, we trace the donations by an individual to different parties based on the information of recipient. It is straightforward to identify the party of recipient if the donation is directly to a candidate. For the donations given to PACs, we count them as given to Democrats (respectively, Republicans) if the PAC has a positive donation to Democratic (respectively, Republican) candidates during the election cycle.

$592 millions. On average, the expenditure per firm is around $124,000.[35] For campaign contributions, employees/owners of the firms in our sample gave $24.9 million over the period Q1/2018-Q2/2020. On average, each firm donated $5,300. Consistent with the findings in the extant literature, the campaign contribution is dwarfed by the lobbying expenditure. (See Bombardini and Trebbi (2020).)

A.3 A Surge in Lobbying for Trade Issues During the US-China Trade War

As is revealed by the blue line in Panel A, starting in the early 2018, the number of reports related to the trade issues rises steadily. This is not simply driven by the growth of the lobbying activities across the board. Specifically, the number of trade-related lobbying reports surged by 436 over 2018:Q1 to 2019:Q4, which contributes to 93% of the increase in the total number of reports over the same period. The blue line in Panel B shows the number of firms and associations lobbying for trade related issues over time. It indicates that there are more firms engaging in lobbying activities during the trade war.

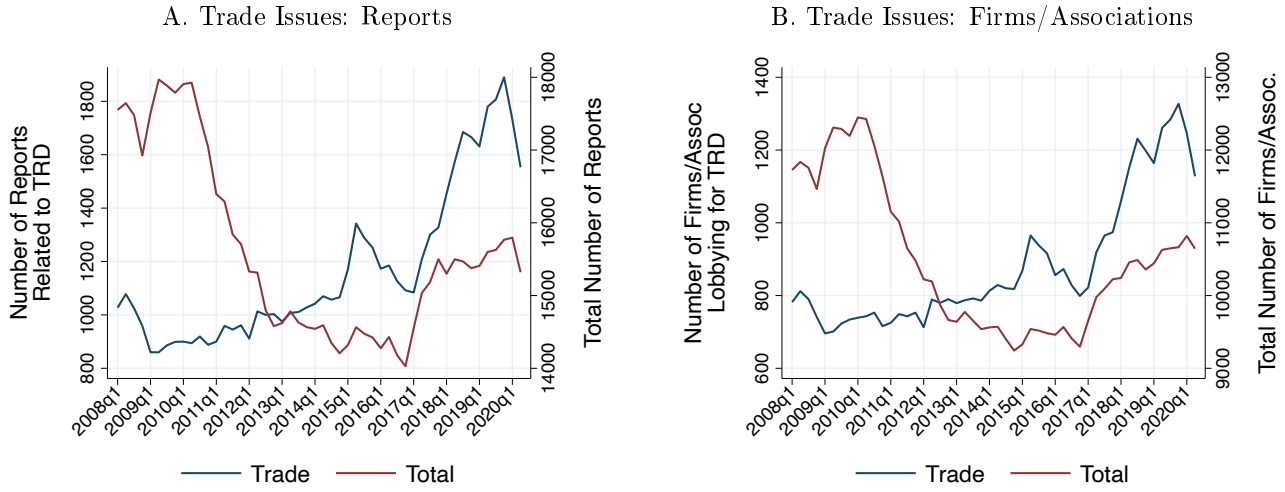
Figure A.1: Count of HS10 Codes with Tariff Exclusion



Notes: For each exclusion, we identify the starting month as the nearest full month to the actual exclusion date, using the 15th of the month as the cutoff. If there are varying starting months for different products within a specific HS10 code, we consider the earliest month as the starting month for the HS10 code. Analogously, for each exclusion, we identify the expiration month as the nearest full month to the actual exclusion date, using the 15th of the month as the cutoff. In the case of varying expiration months for different products within a specific HS10 code, we consider the latest month as the expiration month for the HS10 code. This figure illustrates the monthly count of HS10 codes with tariff exclusions.

[35]The total federal lobbying spending is $3.42, $3.47, and $3.53 billion in 2018, 2019 and 2020, respectively.

Figure A.2: Trends of Lobbying Activities Over Time



B Additional Empirical Results

B.1 Effects of Tariff Exclusion on Imports

Using the Monthly International Trade Datasets (MITD) published in the US Census, we visualize the effects of the tariff exclusion based on an event-study at the HS 10-digit level. The exclusion granted and the extension status at the product level are publicized in the Federal Register available from USTR.gov. More specifically, we compare the trends of excluded HS 10-digit products with the products in the same HS 6-digit categories (i.e., control group) that are not exempted by estimating the following specification:

$$\ln(1 + Imp_{kt}^{CHN}) = \sum_{\tau=-4}^{\tau=4} \alpha_\tau \mathbf{1}(event_{kt} = \tau) + \sum_{\tau=-4}^{\tau=4} \beta_\tau \mathbf{1}(event_{kt} = \tau) \times excl_k + D_k + D_{Kt} + \varepsilon_{kt}, \quad \text{(B.1)}$$

where Imp_{kt}^{CHN} measures imports of product k from China in month t. This specification includes HS 10-digit product fixed effects (D_k) and HS section-time fixed effects (D_{Kt}). As the exclusions granted are often more specific than the corresponding HS 10-digit code, we define the dummy variable $excl_k$ equalling to one if the 10-digit product receives at least a partial exclusion and zero otherwise.

We conduct two event studies. The time windows of the first event study center around the publication dates of the notice of tariff exclusions for different products. Hence, the event date of excluded products is the nearest full month following the corresponding publication date of the notice.[36] For all other non-excluded products, we assign the event date to be the earliest event date of an excluded product within the same HS 8-digit code. If an non-excluded product does not share the same HS 8-digit code as any excluded products, we sequentially use HS 6-digit codes. So the control group consists of the non-excluded products in the same HS 6-digit categories with the excluded products. Note that the tariff exclusion if granted is retroactively applied—importers may seek refunds for tariffs paid on imports that entered the

[36] We use the mid of the month as the cutoff date.

country after the date when the punitive tariff was imposed. The detected effects on imports reflect the extent to which the tariff exclusions are expected. If importers foresee the request outcomes, imports of the treated products should increase before the exclusion is granted.

For the second event study, we focus on the responses around the expiration date of tariff exclusion. For the excluded products, the event date is the nearest month of the corresponding expiration date. For all other non-excluded products, we assign the event date to be the lastet event date of an excluded product within the same HS 8-digit code. If an non-excluded product does not share the same HS 8-digit code as any excluded products, we sequentially use HS 6-digit codes. The effective duty rate should immediately reverts to the pre-exclusion level when the tariff exclusion expire, and imports would respond accordingly.

Figure B.1 reports the results for the two event studies. The analysis is conducted around a 9-month window surrounding the event. As is shown in Panel A, imports from China surged after the tariff exclusion is granted, and there is no discernible anticipatory effect. As is revealed by Panels B, the reaction of imports after the expiration of tariff exclusion is in the opposite direction. It is also notable the responses to the two events are of similar magnitude.

Table B.1 reports the estimation results for the more concise specification:

$$\ln(1 + Imp_{kt}^{CHN}) = \alpha PostEvent_{kt} + \beta PostEvent_{kt} \times excl_k + D_k + D_{Kt} + \varepsilon_{kt},$$

where $PostEvent_{kt}$ is an indicator variable equalling to 1 if t is larger or equal to the event date of product k. We find that the imports from China increased by 17.9% on average after the product receiving tariff exclusion (column 1), while declines by 13.4% after the exclusion is expired (column 3). The even columns in the table confirms the robustness of the findings when the dependent variable is replaced by the inverse hyperbolic sine transformation of Imp_{kt}^{CHN}.

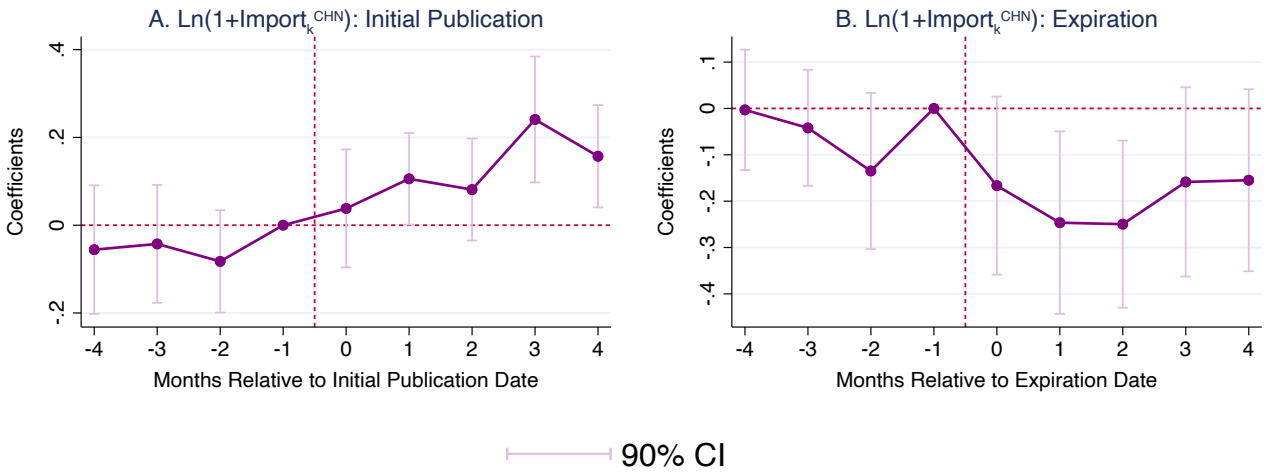
B.2 Event Study: Lobbying Activities around the Announcement of Tariff Actions

Using an event study framework, we explore whether the firms that request for tariff exclusion are more likely to engage in lobbying when tariff actions against China are announced by the Trump administration. Specifically, we use the lobbying data at the quarterly level and estimate the following equation:

$$y_{ft} = \sum_{\tau=-5}^{\tau=5} \delta_\tau FirstTariffExposure_{f,t-\tau} + D_f + D_t + \varepsilon_{it}, \tag{B.2}$$

where y_{ft} denotes different measures of firm i's lobbying activities in quarter t. For each firm f, we identify the timing of its first exposure to the US tariff actions. Specifically, we have information on the Tariff List (i.e., List 1, List 2, List 3, or List 4) that covers the particular product of a firm's first tariff exclusion request. $FirstTariffExposure_{i,t-\tau}$ is an indicator variable equals to 1 if firm f in time t is τ quarters away from the announcement date of proposed tariff actions corresponding to this Tariff

Figure B.1: Event Study: Effective Duty and Imports from China



Notes: The figure plots the estimated coefficients $\hat{\beta}_\tau$ in equation (B.1). The time window of the event studies in Panel A centers around the publication dates of the notice of production exclusions. The time window of the event studies in Panel B is around the expiration dates of production exclusions. Standard errors are clustered at the 2-digit HS level. Error bars show 90% confidence intervals.

Table B.1: The Impacts of Tariff Exclusion on Imports from China

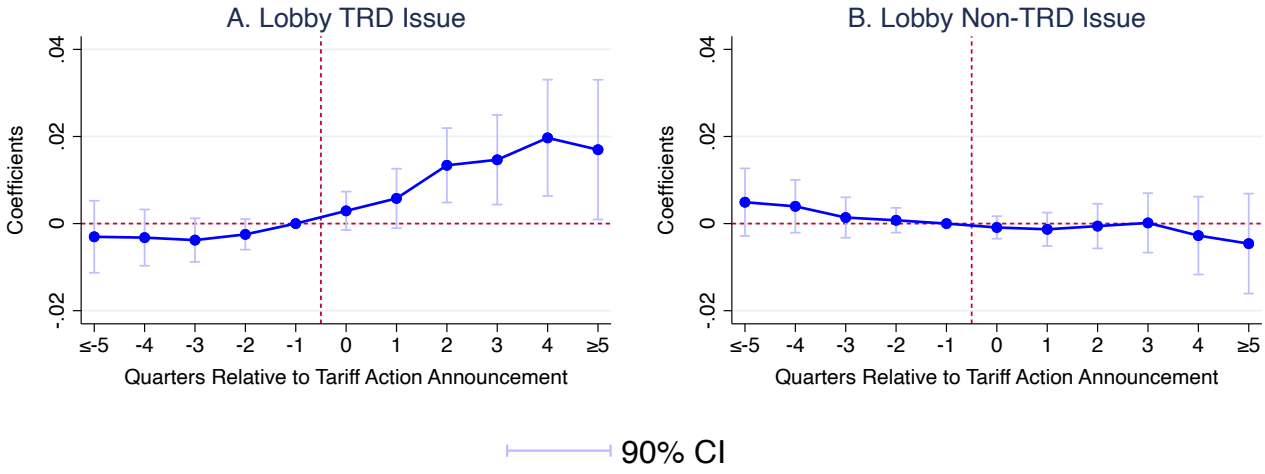
	(1) OLS	(2) OLS	(3) OLS	(4) OLS
During Exclusion$_{kt}$	-0.0066	-0.0106		
	(0.0588)	(0.0620)		
During Exclusion$_{kt}$×Excl$_k$	0.1790***	0.1873***		
	(0.0479)	(0.0506)		
After Expiration$_{kt}$			-0.0229	-0.0223
			(0.0593)	(0.0624)
After Expiration$_{kt}$×Excl$_k$			-0.1338*	-0.1373*
			(0.0698)	(0.0728)
Event	int. pub.	int. pub.	expiration	expiration
Time window	[-4,4]	[-4,4]	[-4,4]	[-4,4]
HS 10-digit dummies	Y	Y	Y	Y
HS Section×Time dummies	Y	Y	Y	Y
Observations	31,488	31,488	31,108	31,108
R^2	0.8409	0.8351	0.8479	0.8421

Notes: The dependent variable in the odd columns is $\ln(1 + Imp_{kt}^{CHN})$, and that in the even columns is the inverse hyperbolic sine transformation of Imp_{kt}^{CHN}. Robust standard errors are clustered at the 2-digit HS level. *** p<0.01, ** p<0.05, * p<0.1

List.[37] The specification also includes firm fixed effects D_i and year-quarter fixed effects D_t. The latter controls for the common factors that influence lobbying participation, such as the time distance to the 2018 midterm election. Standard errors are clustered at the firm level.

Figure B.2 reports the event time coefficients for lobbying activities. The coefficient β_{-1} is normalized to be zero, so that δ_τ captures the change in lobbying intensity in quarter τ relative to the quarter just before the firms' first exposure to the US tariff actions. We find significant increases in lobbying activities for trade-related issues (Panel A) after firms learning their exposure. The response gets more pronounced during the first four quarters after the tariff announcement, and becomes stable afterwards. The coefficients for periods $\tau < -1$ are economically and statistically insignificant, which lends support to causal interpretation of our findings. As a placebo test, Panel B shows that there is no discernible response for lobbying activities on issues unrelated to trade.

Figure B.2: Event Study: Tariff Exclusion Request and Lobbying Activities



Notes: The figure plots the coefficients in equation (B.2), with the dependent variable being $\ln(1 + LobbyingExpense)$ in Panel A, a dummy variable indicating whether the firm lobby for trade issues in Panel B, and a dummy variable indicating whether the firm lobby for other issues in Panel C. Standard errors are clustered at the firm level. For each firm, we identify the Product List of its first tariff exclusion request, and the X-axis variable is the number of quarters away from the quarter corresponding to the announcement date of tariff actions specific to this Product List. Event periods ≤ -5 are binned, and event periods ≥ 5 are binned. Error bars show 90% confidence intervals. Sample period is 2017:Q1 to 2020:Q2.

B.3 IV for Lobbying

The OLS estimates of the lobbying effects may be biased in specification (2) due to the various endogeneity problems. For example, firms might be more likely to participate in lobbying if the ex-ante probability of the tariff exclusion request being granted is low. This issue of reversed causality leads to a downward

[37] The announcement dates of proposed tariff actions made by USTR for List 1, List 2, List 3 and List 4 are, respectively, 3/Apr/2018, 3/Apr/2018, 10/Jul/2018 and 17/May/2019. (https://www.china-briefing.com/news/the-us-china-trade-war-a-timeline/) We assign the event date of the announcements to be the nearest full quarter to the actual event date, using the mid of the quarter as the cutoff date.

bias in the estimation of the lobbying coefficient β_1. To address the concern, we adopt an instrumental variables (IV) strategy. Specifically, we propose two distinct IVs with variations deriving from different exogenous factors.

The first instrument $LobbyOtherFirms_f$ is constructed as follows:

$$LobbyOtherFirms_f = \frac{1}{N_f} \sum_{i \in \Omega_f} \sum_{\kappa} \mathbf{1}(k(i) \in \kappa) ShareLobbyTRD_{\kappa,-f},$$

where Ω_f denotes the set of requests submitted by firm f, and N_f is total number of requests from the firm; $\mathbf{1}(k(i) \in \kappa)$ is an indicator variable if the product involved in request i, $k(i)$ belongs to the 6-digit HS product κ; $ShareLobbyTRD_{\kappa,-f}$ is the share of other requests (i.e., excluding ones submitted by f) associated with κ that are filed by firms lobbying for trade related issues over the period 2018/Q1-2020/Q2. $LobbyOtherFirms_f$ takes a larger value if the firm's requests involve more products that are the potential lobbying targets of other firms.

The idea underlying the instrument is that firms may free ride other firms' lobbying efforts on tariff exclusions of similar products. Therefore, it is expected that a larger value of LobbyOtherFirms_f is associated with a lower probability of lobbying for trade related issues. One potential concern is that lobbying efforts from other firms seeking tariff exclusions of products within the same 6-digit HS code κ may provide information on tariff distortions that are also relevant for the particular product $k(i) \in \kappa$. In such a scenario, the instrument could directly influence the request outcome for $k(i)$, thereby violating the exclusion restriction. It is important to note, however, that our baseline specification incorporates 6-digit HS fixed effects, which effectively account for the information provision from lobbying activities specific to κ. Therefore, the residual variation of $LobbyOtherFirms_f$ for each request ifk arises from the lobbying intensities of other firms linked to products outside the scope of κ.[38] Our identification assumption is that lobbying activities by other firms on unrelated products only affect the approval probability for $k(i)$ through the channel of lobbying that provides ifk-specific information on tariff distortions.

The second instrument $Lobbied\ NonTRD_f$ is a dummy variable equals to 1 if the firm ever engaged in lobbying for non-trade issues in the pre-trade war period, i.e., 1999-2017. As is shown in Kerr et al. (2014), the existence of fixed cost of entry to lobbying affects how firms respond to policy changes in a political environment. It is arguable that pre-determined lobbying experiences on non-trade issues may reduce the upfront costs such as initial costs of hiring a lobbyist which makes firms more likely to participate in lobbying during the USTR tariff exclusion process, while it may not have a direct effect on the request outcome.

In the data, the correlation between $LobbyOtherFirms_f$ and $Lobbied\ NonTRD_f$ is only 0.035. Given that the two instruments leverage different sources of variation, one would expect that if the exclusion restrictions do not hold, these two IV strategies would produce different estimates. This intuition can also

[38] For example, consider a firm that seeks tariff exclusions for products that belong to κ_1 and κ_2. The lobbying intensity of other firms regarding κ_2 is high, while it is zero for κ_1. If κ_2 takes large weight in the firm's product portfolio, the firm is less likely to engage lobbying itself due to the free-riding incentive. From the perspective of requests pertaining to κ_1, this could be an exogenous factor influencing lobbying and information transmission.

be formalized by performing a standard Hansen-J overidentification test.

Panel A of Table B.2 presents the IV estimates. In Column (1), we employ $LobbyOtherFirms_f$ as an instrument for $LobbyTRD_{f,18Q1-20Q2}$ and find that lobbying for trade-related matters during the USTR tariff exclusion process enhances the approval probability by 16%. In Column (2), we replace the instrumental variable with $Lobbied\ NonTRD_f$ and obtain a statistically similar estimate of 14.1%. Compared to the corresponding specification in Column (4) of Table 3, the IV estimates are larger in magnitude than their OLS counterparts, although the differences are statistically insignificant. Panel B reports the corresponding first-stage estimation results. In line with our hypotheses, $LobbyTRD_{f,18Q1-20Q2}$ exhibits a negative impact on the likelihood of lobbying, whereas the effect of $Lobbied\ NonTRD_f$ is positive. The bottom panel of the table shows the overall strength of the first-stage as indicated by the Kleibergen-Paap F-statistics; these are in excess of the 10% Stock-Yogo critical value, confirming the relevance of both instruments. We instrument $LobbyTRD_{f,18Q1-20Q2}$ with both IVs. Unsurprisingly, given the similarity of in the estimates in Columns (1) and (2), the overidentification test passes easily, with a p-value of 0.812. This finding lends supports to the credibility of our IV strategy.

B.4 Robustness: Lobbying and Information Provision

B.4.1 Controlling for Campaign Contributions

Table B.4 augments the empirical model in Column (4) of Table 3 with controls of campaign contributions. In Column (1), $CampaignContribution_{f,17Q1-20Q2} > 0$ represents a binary variable that equals to 1 if firm f made any campaign contribution over the 2017-18 and 2019-20 election cycles. The estimate indicates that making to a campaign donation is negatively associated with the likelihood of approval. We further break down $CampaignContribution_{f,17Q1-20Q2} > 0$ into two components—whether the firm made any campaign contribution to Republican (respectively, Democratic) candidates, $CampaignContribution_{f,17Q1-20Q2} : GOP > 0$ (respectively, $CampaignContribution_{f,17Q1-20Q2} : DEM > 0$). As is revealed in Column (2), the negative coefficient for $CampaignContribution_{f,17Q1-20Q2} > 0$ detected in Column (1) is driven by donations to Democrats, whereas donations to Republicans exhibit a positive correlation with the likelihood of a request being granted. Columns (3) and (4) replace the binary measures of campaign contributions with the corresponding continuous measures: $\ln(1+CampaignContribution)_{f,17Q1-20Q2}$, $\ln(1+CampaignContribution)_{f,17Q1-20Q2} : GOP$ and $\ln(1+CampaignContribu$ DEM. Aligned with Column (2), Column (4) also finds contrasting effects of campaign contributions to the party in power (i.e., GOP) compared to contributions to the opposition party (i.e., DEM). More importantly, the estimated effects of informational variables remain stable after accounting for the quid pro quo aspects of political spending.

Table B.2: Tariff Exclusion, Lobbying Status and Information Provision: IV Results

Dep. Var.: Granted$_{ifk}$	(1)	(2)	(3)
Panel A: 2SLS estimates			
LobbyTRD$_{f,18Q1-20Q2}$	0.160**	0.141**	0.147**
	(0.078)	(0.070)	(0.062)
Share Shipment from CHN$_{k,17}$	0.084*	0.087	0.086
	(0.048)	(0.054)	(0.052)
Share Shipment from ROW$_{k,17}$	-0.051	-0.047	-0.048
	(0.115)	(0.115)	(0.115)
Submission by a Representative$_{if}$	0.051***	0.052***	0.051***
	(0.014)	(0.013)	(0.013)
Num. Comments: Support$_{if} > 0$	0.032**	0.032**	0.032**
	(0.013)	(0.014)	(0.014)
Num. Comments: Oppose$_{if} > 0$	0.014	0.014	0.014
	(0.025)	(0.025)	(0.025)
Panel B: First-stage estimates			
LobbyOtherFirms$_f$	-0.681***		-0.635***
	(0.071)		(0.076)
Lobbied Non-TRD$_f$		0.378***	0.367***
		(0.047)	(0.044)
Share Shipment from CHN$_{k,17}$	0.153	0.198*	0.173
	(0.128)	(0.119)	(0.116)
Share Shipment from ROW$_{k,17}$	0.215**	0.226**	0.211**
	(0.088)	(0.087)	(0.087)
Submission by a Representative$_{if}$	0.039***	0.031***	0.028**
	(0.014)	(0.011)	(0.012)
Num. Comments: Support$_{if} > 0$	0.025	0.017	0.019
	(0.027)	(0.027)	(0.026)
Num. Comments: Oppose$_{if} > 0$	-0.023	-0.015	-0.018
	(0.021)	(0.018)	(0.018)
6-digit HS FEs	Y	Y	Y
List FEs	Y	Y	Y
4-digit NAICS FEs	Y	Y	Y
Size Group FEs	Y	Y	Y
Additional Controls	Y	Y	Y
Kleibergen-Paap F statistic	92.75	64.98	92.70
Over-identification test p-value			0.812
Observations	41,252	41,252	41,252

Notes: Additional controls include those used in Column 4 of Table 3, namely: the logarithm of imports from China for product k in 2017, the logarithm of the total requests filed by firm f, whether the firm has previously submitted a request, the logarithm of employment in the affiliated industry j and county c, and dummy variables reflecting various ranges of the GOP presidential vote share in county c. Robust standard errors are clustered at the 2-digit HS level. *** p<0.01, ** p<0.05, * p<0.1

B.4.2 Alternative Specifications and Measurements

Table B.5 performs a series of robustness checks. In Columns (1) and (2), we explore alternative specifications by replacing the 6-digit HS fixed effects with 4-digit and 10-digit fixed effects, respectively. Despite leveraging different underlying data variations for identification purposes, the obtained estimates remain largely unchanged. In Column (3), fixed effects for each firm's state of location are included to account for state-specific factors simultaneously affecting lobbying returns and request outcomes. Again, the estimation results remain similar.

Our baseline analysis relates the request outcomes to firms' lobbying records from Q1/2018 to Q2/2022. There is a concern that this wide time window may contain lobbying activities that are not pertinent to a particular tariff exclusion request, despite being related to trade issues. To tackle this issue, we consider an alternative measure of lobbying activities that focuses on a narrower time frame around the tariff exclusion request action, which is constructed as follows. Firstly, for each application, we identify the Tariff List to which the product under request belongs and the date of the Federal Register notice of action for tariff exclusion specific to this list. [39] Secondly, we measure the lobbying activities within a four-quarter time window $q = -1, 0, 1, 2$, where q denotes the number of quarters from the date of the notice of action. Lastly, the measure $LobbyTRD_{f,q=-1,0,1,2}$ is a binary variable indicating whether firm f lobbied for trade related issues within this time window. As is shown in Column (4), this alternative measure has little bearing on our results. Column (5) employs a refined measure that captures the lobbying activities targeting issues related to the Section 301 tariffs, and finds a statistically similar effect of lobbying.[40]

Columns (6) and (7) conduct the analysis separately for the requests in Lists 1 and 2, and those in Lists 3 and 4. The estimated effects of the informational variables are larger in magnitude for the first two lists. For instance, lobbying for trade-related issue is associated with a 15.4% increase in the likelihood of approval for Lists 1 and 2, compared to a 7.5% increase for Lists 3 and 4. This finding aligns with the expansion of USTR staffing and the enhanced review process for Lists 3 and 4, potentially reducing its reliance on information channels such as lobbying for decision-making.[41] In Column (8), we exclude the top 5 firms with the highest number of tariff exclusion requests, and ensure that our baseline findings are not driven by these outliers.

B.4.3 Lobbying, Information Provision, Reasons of Denial, and Processing Time

For the denied requests, USTR provides information on the reasons of denial. (See Appendix A.1.) In Column (1) of Table 5, we investigate the reasons of denial and their correlations with variables linked to

[39] The dates of Federal Register notice of action for List 1, List 2, List 3 and List 4 are, respectively, 11/Jul/2018, 18/Sep/2018, 24/Jun/2019 and 24/Oct/2019.

[40] Specifically, we label a lobbying record as related to Section 301 tariffs, if there is any mention of them in the issue text of the lobbying report.

[41] For Lists 1 and 2, five or six attorneys from the Office of General Counsel conducted the substantive review of over 14,000 exclusion requests and provided the initial recommendation for each request's approval or denial. For Lists 3 and 4, USTR increased its staffing and further developed its review process which involved two initial reviewers who exam the case files, up to three tariff classification experts to draft a product carveout, and the the Office of General Counsel to review recommendations. ?

information provision. Specifically, we create a dummy variable indicating whether the request is denied for reasons due to insufficient information in support of the tariff exclusion, including: (i) the failure to show that the additional tariffs would cause severe economic harm to the requester or other U.S. interests, and (ii) the failure to show that the product was available only from China. We find that conditional on being denied, the denial is less likely due to the reasons related to insufficient information provision if the firm lobbies for trade-related issues or if the request is submitted by a representative. We take the finding as further suggestive evidence that lobbyists and representative agents may possess expertise or are more adept at communicating and conveying relevant information to policy-makers.

In Columns (2), we relate the length of processing time by the USTR for each request to the informational variables. Processing times are notably extended for requests from firms engaging in lobbying, employing representative agents, and those receiving either supportive or opposing public comments. Column (3) controls for the binary variable of whether request is granted. This is to address the concern regarding the potential spurious nature of the observed effect, given that the informational variables directly influence the probability of approval, and the average processing time for approved requests tends to be longer than for denied requests. Reassuringly, we find that even when conditioning on the request outcome, the effects of lobbying and public comments persist. One possible explanation for these findings is that it requires more time for the USTR to process the additional informational content from these communication channels, highlighting the informational roles of lobbying and public comments.

Table B.3: Tariff Exclusion, Lobbying Expenditure and Information Provision

Dep. Var.: Granted$_{ifk}$	(1)	(2)	(3)
Submission by a Representative$_{if}$	0.040***	0.038***	0.053***
	(0.007)	(0.008)	(0.012)
Num. Comments: Support$_{if} > 0$	0.042***	0.039**	0.032**
	(0.014)	(0.015)	(0.013)
Num. Comments: Oppose$_{if} > 0$	-0.017	-0.020*	0.008
	(0.012)	(0.012)	(0.024)
ln(1+LobbyExpense$_{f,18Q1-20Q2}$)	0.004***	0.004***	0.009***
	(0.001)	(0.001)	(0.001)
Share Shipment from CHN$_{k,17}$	0.217***	0.198**	0.120**
	(0.082)	(0.075)	(0.047)
Share Shipment from ROW$_{k,17}$	0.042	0.039	-0.018
	(0.091)	(0.089)	(0.098)
Additional Controls:			
ln(Imp from CHN)$_{k,17}$		0.008	0.009
		(0.006)	(0.008)
ln(Total Num. of Application)$_{f}$		-0.003	-0.002
		(0.003)	(0.004)
Requested Before$_{if}$		0.006	0.024*
		(0.006)	(0.013)
ln(Empl)$_{c(f)j(f),16}$			0.002
			(0.005)
47%≤Rep Share$_{c(f)}$ ≤53%			0.089**
			(0.034)
Rep Share$_{c(f)}$ >53%			-0.031***
			(0.010)
6-digit HS FEs	Y	Y	Y
List FEs	Y	Y	Y
4-digit NAICS FEs	N	N	Y
Size Group FEs	N	N	Y
Observations	50,454	50,454	41,252
R^2	0.446	0.447	0.530

Notes: Robust standard errors are clustered at the 2-digit HS level. *** p<0.01, ** p<0.05, * p<0.1

Table B.4: Tariff Exclusion, Lobbying Status and Information Provision: Controlling for Campaign Contributions

Dep. Var.: Granted$_{ifk}$	(1)	(2)	(3)	(4)
Submission by a Representative$_{if}$	0.054***	0.052***	0.054***	0.051***
	(0.013)	(0.013)	(0.012)	(0.013)
Num. Comments: Support$_{if} > 0$	0.034***	0.035***	0.034***	0.035***
	(0.012)	(0.013)	(0.012)	(0.013)
Num. Comments: Oppose$_{if} > 0$	0.013	0.014	0.013	0.014
	(0.024)	(0.024)	(0.024)	(0.024)
LobbyTRD$_{f,18Q1-20Q2}$	0.094***	0.090***	0.092***	0.088***
	(0.014)	(0.014)	(0.014)	(0.014)
Share Shipment from CHN$_{k,17}$	0.098**	0.100*	0.097**	0.099*
	(0.048)	(0.051)	(0.048)	(0.050)
Share Shipment from ROW$_{k,17}$	-0.033	-0.031	-0.035	-0.033
	(0.102)	(0.101)	(0.102)	(0.101)
CampaignContribution$_{f,17Q1-20Q2}$: > 0	-0.012*			
	(0.007)			
CampaignContribution$_{f,17Q1-20Q2}$: GOP> 0		0.030**		
		(0.015)		
CampaignContribution$_{f,17Q1-20Q2}$: DEM> 0		-0.024**		
		(0.010)		
ln(1+CampaignContribution)$_{f,17Q1-20Q2}$			-0.001	
			(0.001)	
ln(1+CampaignContribution)$_{f,17Q1-20Q2}$: GOP				0.005**
				(0.002)
ln(1+CampaignContribution)$_{f,17Q1-20Q2}$: DEM				-0.003**
				(0.001)
6-digit HS FEs	Y	Y	Y	Y
List FEs	Y	Y	Y	Y
4-digit NAICS FEs	Y	Y	Y	Y
Size Group FEs	Y	Y	Y	Y
Additional Controls	Y	Y	Y	Y
Observations	41,252	41,252	41,252	41,252
R^2	0.529	0.529	0.529	0.529

Notes: Additional controls include those used in Column 4 of Table 3, namely: the logarithm of imports from China for product k in 2017, the logarithm of the total requests filed by firm f, whether the firm has previously submitted a request, the logarithm of employment in the affiliated industry j and county c, and dummy variables reflecting various ranges of the GOP presidential vote share in county c. Robust standard errors are clustered at the 2-digit HS level. *** p<0.01, ** p<0.05, * p<0.1

Table B.5: Tariff Exclusion and Lobbying Status: Alternative Specifications and Measures

Sample:	All	All	All	All	All	Lists 1&2	Lists 3&4	Excl. Top 5
Dep. Var.: Granted_{ifk}	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$\text{Submission by a Representative}_{if}$	0.059***	0.061***	0.060***	0.053***	0.053***	0.068**	0.028***	0.062***
	(0.022)	(0.011)	(0.014)	(0.013)	(0.014)	(0.029)	(0.010)	(0.012)
Num. Comments: $\text{Support}_{if} > 0$	0.014	0.035***	0.041***	0.037**	0.036***	0.126*	0.005	0.039***
	(0.015)	(0.012)	(0.015)	(0.014)	(0.013)	(0.056)	(0.009)	(0.013)
Num. Comments: $\text{Oppose}_{if} > 0$	0.033	0.023	0.009	0.012	0.013	0.072	-0.003	0.012
	(0.038)	(0.027)	(0.020)	(0.025)	(0.025)	(0.040)	(0.021)	(0.026)
$\text{LobbyTRD}_{f,18Q1-20Q2}$	0.110***	0.102***	0.090***			0.154**	0.075***	0.084***
	(0.020)	(0.018)	(0.011)			(0.046)	(0.018)	(0.019)
$\text{LobbyTRD}_{f,q=-1,0,1,2}$				0.106***				
				(0.021)				
$\text{LobbySec301}_{f,18Q1-20Q2}$					0.107***			
					(0.019)			
Share Shipment from $\text{CHN}_{k,17}$	0.025		0.103**	0.106**	0.110**	0.688***	0.068	0.137**
	(0.054)		(0.046)	(0.048)	(0.049)	(0.145)	(0.045)	(0.068)
Share Shipment from $\text{ROW}_{k,17}$	-0.182**		-0.039	-0.030	-0.024	-0.343	0.038	-0.031
	(0.080)		(0.094)	(0.100)	(0.098)	(0.480)	(0.044)	(0.110)
4-digit HS FEs	Y	N	N	N	N	N	N	N
6-digit HS FEs	N	N	Y	Y	Y	Y	Y	Y
10-digit HS FEs	N	Y	N	N	N	N	N	N
List FEs	Y	Y	Y	Y	Y	Y	Y	Y
4-digit NAICS FEs	Y	Y	Y	Y	Y	Y	Y	Y
Size Group FEs	Y	Y	Y	Y	Y	Y	Y	Y
State FEs	N	N	Y	N	N	N	N	N
Additional Controls	Y	Y	Y	Y	Y	Y	Y	Y
Observations	41,606	40,329	41,251	41,252	41,252	10,344	30,873	26,591
R^2	0.403	0.629	0.547	0.529	0.529	0.537	0.380	0.496

Notes: Column (8) excludes the top 5 firms with the most exclusion requests. Additional controls include those used in Column 4 of Table 3, namely: the logarithm of imports from China for product k in 2017, the logarithm of the total requests filed by firm f, whether the firm has previously submitted a request, the logarithm of employment in the affiliated industry j and county c, and dummy variables reflecting various ranges of the GOP presidential vote share in county c. Robust standard errors are clustered at the 2-digit HS level. *** p<0.01, ** p<0.05, * p<0.1

Table B.6: Processing Time for Tariff Exclusion Request

	All	List 1	List 2	List 3	List 4
Application Outcome: All	230.302	255.050	299.992	210.771	244.532
	(67.356)	(94.883)	(63.169)	(55.414)	(20.993)
Application Outcome: Granted= 0	221.960	231.936	269.490	209.650	246.132
	(58.713)	(85.383)	(57.219)	(54.222)	(15.155)
Application Outcome: Granted= 1	286.708	300.489	350.088	232.325	221.703
	(90.851)	(96.209)	(33.606)	(71.399)	(53.846)

Notes: The USTR reply letters are unavailable for 63 applications, comprising 48 for List 1, 2 for List 2, and 13 for List 3.