

# UC Berkeley

## UC Berkeley Previously Published Works

### Title

The politics of rejection: Explaining Chinese import refusals

### Permalink

<https://escholarship.org/uc/item/1j1751bf>

### Authors

Kim, Sung Eun

Perlman, Rebecca L

Zeng, Grace

### Publication Date

2024

### DOI

10.1111/ajps.12883

### Copyright Information

This work is made available under the terms of a Creative Commons Attribution License, available at <https://creativecommons.org/licenses/by/4.0/>

Peer reviewed

# The Politics of Rejection: Explaining Chinese Import Refusals\*

Sung Eun Kim,<sup>†</sup>Rebecca L. Perlman,<sup>‡</sup>and Grace Zeng<sup>§</sup>

## Abstract

Health and safety standards offer a convenient means by which governments can credibly claim to be protecting the population, even while pursuing less publicly-oriented goals. In the realm of international trade, such regulatory standards have most often been studied as a method of veiled protectionism that can help nations privilege domestic industry while skirting World Trade Organization requirements of openness. Yet precisely because health and safety standards create ambiguity about their intent and are therefore difficult to punish, nations may be incentivized to use them for goals that extend well beyond protecting domestic industry. In particular, we theorize that governments will, at times, enforce regulations in ways intended to exact political retribution. In order to show this, we collect and translate original data on import refusals by Chinese border inspectors between 2011 and 2019. Though ostensibly intended to keep dangerous products out of the hands of Chinese consumers, we demonstrate that import refusals have systematically been used by the Chinese government as a way to punish states that act against China's interest.

The data and materials required to verify the computational reproducibility of the results, procedures and analyses in this article are available on the American Journal of Political Science Dataverse within the Harvard Dataverse Network, at: <https://doi.org/10.7910/DVN/8WGX9H>

---

\*For helpful comments the authors would like to thank Jack Zhang, Evgeny Postnikov, In Song Kim, Ryan Brutger, Stephen Chaudoin, Julia Morse, Anton Strezhnev, Richard Clark, Judy Goldstein, Zuhad Hai, Amanda Kennard, and Christina Toenshoff. We would also like to thank participants at UCCIC, GRIPE, the Browne Center Conference, UCSB's international relations workshop, Cornell's international relations workshop, and participants and audience members at the 2023 meetings of APSA, ISA, and IPES. We would additionally like to thank our three anonymous reviewers at AJPS for their constructive and thoughtful comments, as well as the fantastic editorial team. Sung Eun Kim was supported by the Ministry of Education of the Republic of Korea and the National Research Foundation of Korea (NRF-2022S1A5A8054721).

<sup>†</sup>Department of Political Science and International Relations, Korea University, Seoul, 02841, Korea.

<sup>‡</sup>University of California, Berkeley, Berkeley, CA 94720

<sup>§</sup>Department of Politics, Princeton University, Princeton, NJ 08540

# 1 Introduction

Health and safety standards are an important tool for governments seeking to protect the population from dangerous imports. Yet, these measures can also be abused, leveraged by policymakers to impede trade under the guise of protecting the public. The potential for regulatory barriers to act as a form of protectionism in disguise has long led scholars to pursue explanations for these barriers that focus on domestic industries, which stand to benefit from the reduced competition (Gulotty, 2020; Kono, 2006; Perlman, 2020, 2023). This paper investigates a less explored explanation for regulatory barriers, showing that governments may also use health and safety measures to punish or coerce their trading partners. We theorize that some of the same characteristics that make health and safety standards attractive to governments as a form of protectionism – particularly the ambiguity surrounding their intent – also make these measures attractive as a way to retaliate against foreign nations.

In order to evaluate our theory, we look at the case of Chinese import refusals. An import refusal is the rejection of an imported product ostensibly because it fails to comply with domestic rules. Although import refusals can serve a genuine public interest, we also expect them to act as a form of economic leverage. By selectively enforcing standards, countries can punish their trading partners in ways that serve broader foreign policy goals, while claiming they are merely protecting the population. Combining qualitative case studies with original data, we demonstrate that China has systematically increased import refusals in response to political tensions.

Our findings offer several important contributions to the literature. First, we introduce an under-explored driver of regulatory barriers to trade. As mentioned previously, scholars have focused their explanations on industry, typically viewing non-tariff barriers more generally as substitutes (Marvel and Ray, 1983; Bhagwati, 1988; Mansfield and Busch, 1995) or complements (Ray, 1981) to taxes at the border. We demonstrate that such barriers are also used in pursuit of non-economic goals, as a means of coercing or punishing foreign governments.

Second, we contribute to the substantial literature analyzing whether political tensions harm economic relations. Scholars investigating this question have arrived at divergent conclusions,

with some showing that political disputes do little to dampen trade (Davis and Meunier, 2011), while others find evidence to the contrary (Davis, Fuchs, and Johnson, 2019; Fuchs and Klann, 2013; Du et al., 2017; Heilmann, 2016; Pandya and Venkatesan, 2016). Our focus on import refusals allows us to approach this question from a new angle, looking at whether political tensions lead to a government-led trade-based response. This helps us separate out the government's reaction to political tensions from that of other actors. Whereas trade may respond to political tensions for any number of reasons, including consumer boycotts (Weiss et al., 2023), disrupted supply chains, or the redirecting of exports, our focus on import refusals helps us pinpoint one of the ways that governments, themselves, bring political tensions into the realm of trade relations.

Third, by showing that regulatory impediments increase in times of political tension, we can speak to the literature on when countries ease trade barriers. Understandably, this literature has largely evaluated barrier easing in the context of the World Trade Organization (WTO), asking, for example, the conditions under which the WTO dispute settlement system has proven effective (Peritz, 2020; Kucik and Peritz, 2021; Davey, 2005; Wilson, 2007; Busch and Reinhardt, 2006). By demonstrating that regulatory barriers may spike in the wake of political disputes, we can concomitantly understand why such barriers diminish, as these disputes are resolved.

Finally, through our focus on import refusals, we highlight the importance of looking not only at how regulations are written but also at how they are implemented. Although much of the writing on regulatory barriers has evaluated the letter of the law (Gulotty, 2020; Perlman, 2020, 2023; Kono, 2006), how the rules are enforced may be equally meaningful. Our paper demonstrates how a given set of standards can be differentially applied in ways that serve broader foreign policy goals.

## **2 Why Regulatory Barriers Might Respond to Political Tensions**

International trade agreements, spearheaded by the WTO, have proven remarkably successful at encouraging nations to reduce tariffs. Yet, this has not prevented nations from seeking other, more subtle means of impeding imports (Kim, 2016; Kono and Rickard, 2014; Kim, 2018). Among such barriers, regulatory impediments have proven to be some of the most challenging to address, due

to their significant potential to undermine trade and the ambiguity surrounding their intent. Such ambiguity can make regulations an attractive alternative to tariffs, allowing nations to protect local industry while feigning an open trading posture (Kono, 2006). We argue that in the same way that regulatory barriers can be used as a subtle means of protecting industry, so too can they be used as a subtle method of punishing or even coercing foreign nations with which a government is in tension. In the remainder of this section, we first lay out how and why governments might impose regulatory barriers as a punitive tool. We then theorize where we might be most likely to see governments engaging in such behavior.

It is well-understood that governments sometimes deploy economic tools in pursuit of geopolitical goals. A substantial literature has investigated how nations can take advantage of economic dependencies in order to coerce their partners (Drezner, 2021; Farrell and Newman, 2019; Drezner, 2009; Abdelal and Kirshner, 1999; Carnegie, 2014; Hirschman, 1980; Keohane and Nye Jr, 1973). The most commonly discussed coercive tool is sanctions, though scholars have also found that tariffs can be deployed as geopolitical weapons (Kim and Margalit, 2021). The use of sanctions or tariffs as a method of coercion has the obvious appeal of imposing substantial, unambiguous economic pain. At the same time, such measures have a drawback: because they may run afoul of international agreements, they could lead the target to respond in kind or sue under the WTO (Davis and Meunier, 2011).

By contrast, a more subtle regulatory response can accomplish the same geopolitical goals, while making it harder for the target to retaliate legally. In addition, by offering plausible deniability, regulatory barriers can encourage the target government to come to the negotiating table, while giving that government political cover to avoid nationalist backlash for doing so. These suppositions become more concrete if we consider a specific type of regulatory impediment that is the focus of this study: import refusals.

As mentioned in the introduction, an import refusal is when a country rejects an imported product at the border. Ostensibly, refusals result from the exporter's failure to abide by health, safety, or environmental requirements in the destination market. Such refusals are a regular oc-

currence across importing nations<sup>1</sup> making it challenging to say for any given refusal whether the product truly posed a problem or whether it was rejected for other reasons.<sup>2</sup> This gives the rejecting country cover under WTO law should they choose to use refusals for political ends. Not only can the government claim that an import was defective, a claim that may be hard for the exporter to refute, but through more rigorous enforcement of existing regulations, the importing government can increase the number of identified violations, allowing them to punish the exporting country without relying upon fabricated infractions.

To expand on this latter point, even a wealthy importer, such as the United States, only inspects 1 to 2 percent of imports (Ahn and Rhodes, 2021). Moreover, even when an inspector discovers a deficiency, she may decline to reject the good. For example, in the case of minor paperwork errors, the inspector may decide to overlook the problem or let the exporter correct it. By the same token, if an importing country wanted to increase the number of refusals, all they would need to do is increase the percentage of products subject to inspection or enforce the law more strictly against particular goods. By doing so they could increase the number of refused products while technically only rejecting imports that fall afoul of domestic regulations.<sup>3</sup>

At the same time, a sudden and dramatic increase in refusals is unlikely to go unnoticed by the affected industry, which is also likely to determine that the increase is unrelated to a change in quality. If the surge in refusals follows on the heels of a major political squabble between the two countries, the impacted producers are likely to reach the conclusion that their ill fortune is caused by the precipitating event. This should lead the harmed industry to lobby their home government to resolve the dispute, thereby giving the import-refusing country political leverage against its target. In addition, to the extent that the import-refusing country is seeking to win concessions while avoiding escalation, the lightly veiled ambiguity of refusals can help them walk

---

<sup>1</sup>In the United States, regulatory agencies refused nearly 13,000 food, livestock, and poultry shipments in 2021 (U.S. Department of Agriculture, 2023; U.S. Food and Drug Administration, 2023).

<sup>2</sup>Some scholars have suggested that refusals reflect hidden protectionism (Baylis, Martens, and Nogueira, 2009; Grundke and Moser, 2019).

<sup>3</sup>Notably, while a general increase in enforcement is permitted under WTO law, enforcing regulations in ways that create “arbitrary or unjustifiable discrimination between [WTO] Members where the same conditions prevail” (World Trade Organization, 1994: Preamble) is not.

an attractive line of showing resolve and generating economic pain – which ought to appeal to domestic nationalist sentiment – while allowing the target to keep its own nationalist sentiment to a simmer by claiming the refusals are purely a regulatory issue, thereby making concessions more palatable. Notably, none of this is to suggest that import refusals are, necessarily, the sole response to any given precipitating event. Rather, we view import refusals as just one tool at governments’ disposal. This tool may be used separately or in combination with less subtle measures, as a way to exert added pressure while reducing additional consequences.

So when might governments use this tool? Assuming that a central goal of refusals is to encourage the affected exporters to pressure their government, refusals should be more likely in the face of serious tensions, in which the link is fairly obvious to impacted producers. This suggests that the likelihood of refusals should increase as the severity of the incident increases. The supposition that import refusals should predominantly be employed for issues that have high salience also follows from the fact that these refusals, like any form of economic reprisals, have the potential to further damage relations and even alter bilateral trading patterns.<sup>4</sup> This implies that governments should reserve this strategy for defending core interests.

As to which countries are most likely to engage in such a strategy, anecdotal evidence suggests that numerous nations have used refusals or other, similar regulatory enforcement measures in pursuit of geopolitical ends.<sup>5</sup> Yet this does not mean all countries are using such a strategy regularly. Rather, in order to determine where we might be most likely to observe the systematic weaponization of import refusals, we posit three contextual conditions that, particularly when found in combination, could make a country more likely to rely upon a broad strategy of coer-

---

<sup>4</sup>Sun et al. (2021) found that a 1% increase in Chinese import refusals leads to a 4.51% decrease in import growth.

<sup>5</sup>For example, Saudi Arabia seemingly revoked export permits for Brazilian chicken manufacturers in retaliation for the Brazilian president’s decision to move the Israeli embassy to Jerusalem (Toi Staff and Agencies, 2019). India has allegedly delayed Chinese goods in customs during border tensions (Kalra and Shah, 2020). Japan increased inspections of South Korean seafood in 2019, citing health concerns (The Asahi Shimbun, 2019), while Korean media suggested this was in retaliation for court rulings against Japanese firms over wartime compensation (Nam, 2019). Sudan refused entry to Egyptian food products for “health reasons” in what others interpreted as a reaction to political tensions (Knecht and Abdelaziz, 2017). Finally, Russia rejected a large host of European and U.S. agricultural shipments for supposed sanitary reasons in the wake of E.U. and U.S.-led sanctions (Demirjian, 2014).

cive regulatory barriers. This helps us, in the following section, select a case with which we might probe our theory's ability to explain empirical patterns.

The first condition pertains to market size. If the goal of import refusals is to impose economic pain and thereby win concessions then consistent with the economic statecraft literature (Hirschman, 1980; Abdelal and Kirshner, 1999; Keohane and Nye Jr, 1973), this strategy will be more effective if it is utilized by an important destination market for the target country.

Second, we expect that WTO members may have increased incentives to dissemble about their coercive use of trade tools so as not to run afoul of the international regime. Much as the WTO has seemingly encouraged a transition from tariffs to non-tariff barriers, so too might it encourage less overt means of economic coercion.

Finally, while democracies are known to engage non-tariff barriers for protectionist reasons (Kono, 2006), and while democratic nations have utilized regulatory coercion in at least some cases,<sup>6</sup> to the extent that regulatory coercion leads to economic fallout, autocracies ought to be better positioned to insulate themselves from any resulting political repercussions. Autocracies may also offer an environment in which bureaucrats are particularly responsive to signals from the center encouraging reprisals against foreign nations. Indeed, previous research has shown that bureaucrats in autocracies are more likely to prioritize loyalty over competence (Egorov and Sonin, 2011), and bureaucrats who demonstrate their loyalty to the central government tend to be rewarded with better job prospects (Hollyer and Wantchekon, 2015). This suggests that bureaucrats in autocracies may be financially incentivized to reject imports from nations perceived to be at odds with their government in cases in which the government has signaled such actions would be viewed favorably.

Notably, none of this is to argue that these three conditions can comprehensively predict the likelihood that a state will or will not use import refusals coercively. Such a claim is beyond the scope of this paper. Our goal is much narrower. We simply seek to create some theoretical guidance on how to identify an initial country in which we might expect to see our theory play out. While testing a theory in only one country is not without its limitations, examining a single country

---

<sup>6</sup>See prior footnote.



case in which there is reason to believe a theory is particularly likely to hold has the advantage of allowing for high internal validity, while also making it possible to probe the mechanism more deeply (see e.g. Beach and Pedersen, 2018; Ragin, 2006; Schneider and Rohlfing, 2013). As we suggest in the Conclusion, this then provides a starting point upon which future work can build.

### **3 Evaluating Evidence of Regulatory Coercion**

In order to evaluate whether import refusals have indeed been weaponized for political ends, we focus on the case of China. China's prominence on the international stage makes it an important case in its own right. It also has the benefit of meeting all three of the conditions outlined above.

First, China is the second largest importer in the world, meaning it has an almost unsurpassed ability to throw around its economic might vis-à-vis nearly every one of its trading partners.

Second, China is a WTO member, suggesting it may have incentives to dissemble in its use of economic levers. Indeed, China has already experienced the WTO's bite in the past. Following a series of maritime disputes with Japan in 2010, China halted shipments of rare earths to its East Asian rival (Bradsher, 2010), leading Japan, together with the European Union and the United States, to file and win a WTO case against China. Some have suggested that experiences such as this have left their mark, encouraging China to respond in more subtle ways in the course of subsequent disputes with Japan (Harrell, Rosenberg, and Saravalle, 2018) and, presumably, others.

Finally, as an autocracy that also happens to have the highest percentage of state-owned enterprises in the world, China is particularly well-positioned to weaponize trade dependencies, while skirting domestic fall-out. Moreover, echoing our theoretical expectations regarding the enabling conditions of authoritarian systems, work by Miura (2019) has shown that local Chinese leaders have career incentives to demonstrate their nationalistic support for central government positions by engaging in economic harassment of foreign firms. Miura (2019) suggests that such behavior need not be in response to direct instruction from the center. Rather, local leaders may respond to "vague signals about the center's expectations" (p. 5). We similarly expect that when it comes to border inspectors, China's authoritarian structure should operate to encourage these actors to demonstrate their nationalistic bona fides by rejecting the imports of foreign countries with which

the Chinese government has signaled (either explicitly or implicitly) that such targeting would be appreciated.

We now turn to the question of whether China has in fact weaponized import refusals. In order to answer this, we begin with two case studies. The cases help illuminate what a strategy of leveraging import refusals might look like, while also shedding light on what China hopes to gain. This then sets the stage for the more systematic analysis which follows.

### **3.1 A Case of Bad Bananas?**

On March 25, 2016, China's state-affiliated newspaper, *People's Daily*, tweeted out images of individuals in hazmat suits alongside piles of bananas. The text of the tweet read, "35 tonnes of Philippine bananas worth \$33k are destroyed in S China's Shenzhen border Fri for high pesticide residue." The tweet is notable for several reasons. First, while the destruction of contaminated imports is not uncommon, publicizing that destruction is. Second, by publishing the tweet in English, the newspaper ensured it would be seen by a broader international audience. Third, the destruction of bananas occurred against the backdrop of an ongoing dispute between China and the Philippines in the South China Sea. Finally, the destruction seemed to be part of a pattern of China rejecting Philippine fruit, particularly bananas, during times of heightened territorial tensions.

The earliest notable instance of rejected bananas occurred in 2012, this time with accusations that the bananas contained pests. In the weeks and months that followed, banana rejections accelerated, joined by rejections of other valuable fruit shipments from the Philippines, all for supposed sanitary reasons. Despite Chinese claims that the rejections reflected quality issues, much of the news reporting at the time highlighted suspicions from Philippine fruit growers and others that there was more to the story. A *Washington Post* headline stated "In Philippines, banana growers feel effect of South China Sea dispute" (Higgins, 2012). Likewise, Australia Network News ran the headline "Banana crisis blamed on Philippines-China dispute" (West, 2012).

The dispute in question centered on a set of contested islands in the South China Sea known as Scarborough Shoal. The issue came to a head in April 2012, following a confrontation between

Chinese fishing boats and a Philippine warship. A few weeks prior, China had rejected a small shipment of Philippine bananas, an event that, itself, was unremarkable. Yet as tensions heated up, rejections skyrocketed. One newspaper quoted the executive director of the Philippine Banana Growers and Exporters Association saying, “We’re being harassed. We’re being bullied by Chinese authorities by imposing very strict quarantine on every shipment of Philippine bananas entering China ports.” The individual went on to note that “A newly-implemented procedure by Customs Immigration and Quarantine (CIQ) in the mainland, requires inspection of every container van in every banana shipment coming from the Philippines. . . If just a single pest or insect is found in a carton box, the whole container will be rejected, sent back to the Philippines, or dumped by the Chinese government into the sea” (Thai News Service, 2012).

At the time of these rejections, China represented the second largest export market for Philippine bananas, making China’s actions extremely costly for growers, who began to pressure their government for a resolution. With bananas representing the nation’s second largest export, this translated into the mobilization of an industry with substantial political heft. According to one news source, “Related [sic] industries complained the Philippine government [was] mishandling the territorial dispute with China, which has put [the government] in an awkward position” (Morning Whistle, 2012). Another contemporaneous report noted, “Philippine businesses are calling for a quick resolution to the month-long stand-off with Chinese ships in the South China Sea, warning that a prolonged political impasse could. . . cost thousands of export-related jobs” (Landing and Kwong, 2012). Other reporting was more critical. One story titled, “Filipino traders blame govt for banana dispute with China,” cited banana traders explicitly lambasting the Philippine government’s decision to treat the Scarborough Shoal dispute as a sovereignty issue in the first place (The Nation, 2012).

At the same time, not all agreed or chose to acknowledge that the rejections were political. As the *Washington Post* article cited previously observed, “The government in Manila, eager to end a tug of war with China that it has little chance of winning, has not publicly disputed Beijing’s assertion that the collapse of banana exports to China is due to health concerns, not politics” (Higgins, 2012). Other news sources cited a Philippine palace official claiming “that the earlier rejection

of the fruit shipments by China was not connected in anyway with the two-month old impasse over the Scarborough Shoal” (Daily Tribune, 2012). Rather, this official argued, concerns had been raised by Chinese officials about insect-infested banana imports even before the current standoff (The Nation, 2012). Indeed, because the first rejection occurred just prior to the naval confrontation, it muddied the waters, making it more conceivable that (as some claimed) the timing was coincidental. Thus China retained plausible deniability while scoring a political win: With banana growers convinced of a connection between their export woes and the dispute, they put pressure on their government to move towards a resolution. The Philippine government, meanwhile, was able to tamp down nationalist pressures to escalate (Landing and Kwong, 2012) by claiming the refusals were warranted.

Of course, this is just one anecdote. Has China behaved similarly against other nations as well? The next section suggests that the answer is yes.

### **3.2 Unqualified Cosmetics and THAAD**

In July 2016, South Korea deployed a US terminal high altitude area defense (THAAD) missile system in response to North Korean missile threats. With China perceiving Korea’s system as a threat to its own security, this brought the bilateral relationship to an unprecedented stalemate. While overall trade flows between the two countries remained largely unaffected, South Korean firms reported significant economic disruptions. Lim and Ferguson (2022) identify a series of economic measures taken by China against South Korea, including the closure of a Korean supermarket chain, the halt of group tourism to South Korea, and the denial of government subsidies to South Korean electric vehicle batteries.

At the same time, there was a marked increase in Chinese refusals of Korean cosmetics, for which China represented a sizeable market.<sup>7</sup> In January 2017 it was widely reported in the Korean media that China had refused imports of 19 Korean cosmetic products, including shampoo, body wash, and lotion (Yoon, 2017). Although China’s justifications for these rejections varied from changes in ingredients to labeling and packaging violations, the rejections were generally

---

<sup>7</sup>At the beginning of the dispute, China accounted for more than 40% of Korean cosmetics exports.

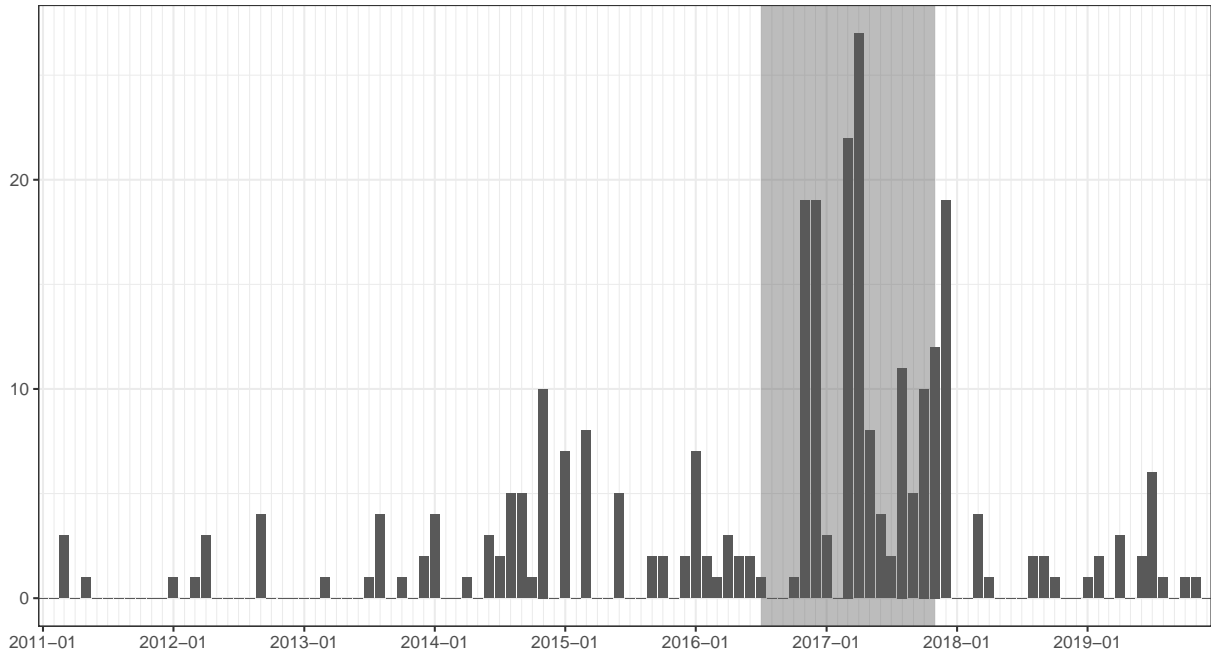
interpreted by the Korean media as “part of economic retaliation by China” amid tensions over Korea’s decision to deploy THAAD.

Adding to the general consternation, Korean agricultural and food producers also began experiencing a surge of refusals. The Ministry of Agriculture, Food and Rural Affairs and the Korea Agro-Fisheries and Food Trade Corporation published a report observing that the number of food refusals increased by 280% in March-April of 2017 compared to the same period of the previous year. The majority of rejected food products were cited for violating labelling and packaging rules, but there were also cases of supposed overly high pesticide residues and incorrect documentation. On paper, China’s food regulations remained unchanged. Yet, in a comment that hinted at a change in enforcement a local business source observed, “In the past, minor labeling issues only required slight changes before they were allowed through, which is not the case at present” (The Korea Herald, 2017).

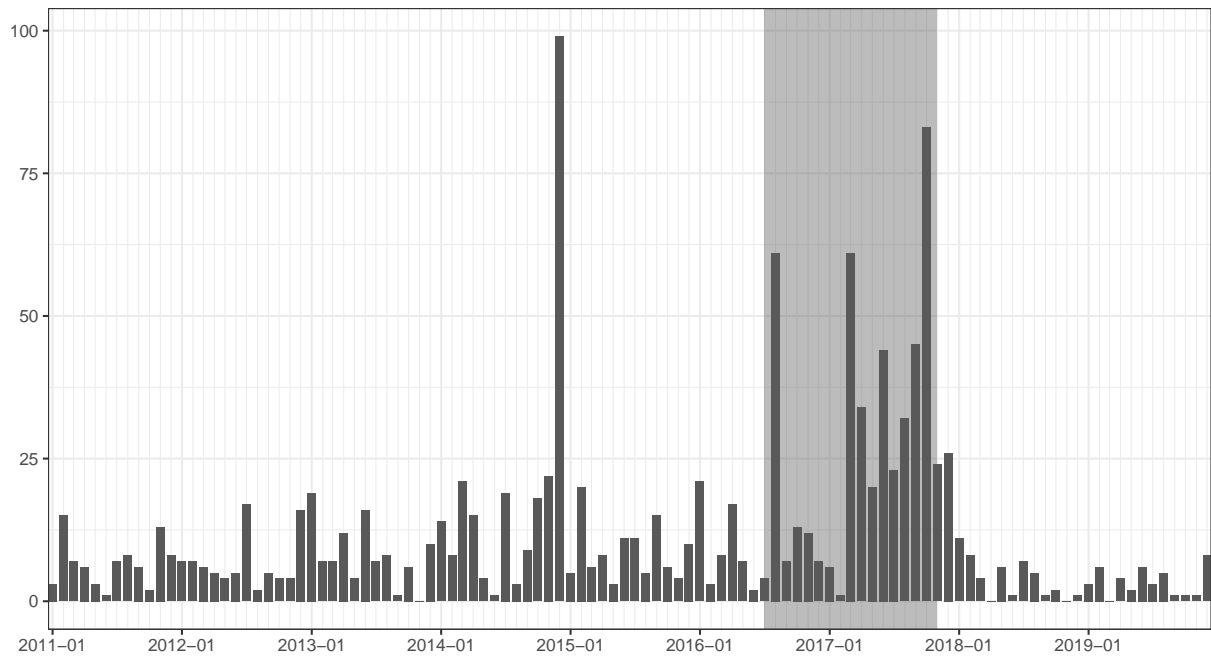
Our own data (which we elaborate below) confirm that South Korean products experienced a surge of Chinese refusals during the dispute. Figure 1 displays the monthly count of import refusals of cosmetics (upper panel) and food (lower panel) from 2011 to 2019. While China rejected South Korean products even before the THAAD dispute, the two panels seem to show an increase in rejections of both cosmetics and food during the height of the crisis.

Notably, at least some in the food and cosmetics industries began making the connection and expressing their desire for a resolution. For example, one business owner was quoted anonymously saying, “We are very concerned about his [the South Korean president’s] visit [to China] and hope for a better result for the two countries” (He, 2017). Other anonymous business leaders were cited rebuking the Korean government for its failure to protect businesses from Chinese retaliation (Kim, 2017). Yet unlike in the Philippines case, in which businesses directly criticized the government’s stance on Scarborough Shoal, impacted Korean firms did not overtly suggest the government reconsider its deployment of THAAD. A representative from the Federation of Korean Industries, who chose to remain anonymous, indicated that the organization abstained from issuing official statements or adopting a public position on THAAD because of its sensitive nature as a military and diplomatic issue (Kwak, 2016). Nevertheless, industries’ requests for com-

Figure 1: Monthly Cases of Korean Food and Cosmetics Import Refusals, 2011-2019.



(a) Refusals of Korean Cosmetics Imports, 2011-2019



(b) Refusals of Korean Food Imports, 2011-2019

Note: Shaded area indicates the period from July 2016 to October 2017 when China and South Korea experienced political tensions over Seoul's decision to deploy the THAAD system, announced in July 2016. While the dispute over THAAD has continued since then, the foreign ministries of the two countries called for normalization of ties in October 2017.

pensatory measures, combined with the concerns they did voice undeniably rendered the Korean government's actions more costly.

The Chinese government, for its part, opted to avoid any official response to accusations that they were leveraging import refusals. The *Global Times*, a government-controlled newspaper, even published an article suggesting that South Korean media outlets “might be too sensitive over trade issues with China by connecting a simple decision from China to deny entry for some unqualified South Korean cosmetics products to the deployment of a U.S. missile defense system in South Korea” (Yan, 2017). Nevertheless, there were a number of more subtle hints that the central government was not blameless. First, even while it suggested that Korea was being “too sensitive,” the *Global Times* published an op-ed early in the crisis proposing that “China should cut off economic ties with companies involved with the [THAAD] system and ban their products from entering the Chinese market” (Editorial, 2016). Second, there was gleeful reporting from the *People's Daily*, another government-controlled publication, on the potential for other sorts of economic repercussions to befall Korean firms (Boya and Hong, 2017). Finally, in a telling series of private exchanges, a Chinese foreign ministry official warned several Korean companies in January 2017 that their business interests in China might be harmed by their government's actions (Clover and Sung, 2017).

Although Korea did initially notify the WTO about China's perceived retaliatory actions in March 2017, it announced that it would not bring a case that September. Korea justified this decision by citing “the need for cooperation with Beijing (Lee, 2017: 1),” but it was also suggested that the lack of “specific evidence – such as official documents – that shows the Chinese government delivered such an instruction [for using trade restrictive measures]” would make the case an uphill battle (Yeo, 2017). Indeed, Beijing has consistently claimed that “it is not subject to a complaint, since there has been no ‘governmental action’ involved,” and “there exists no evidence pointing to the Chinese government's official involvement in retaliatory measures against the deployment of THAAD (Lee, 2017: 1).”

Taken together, the South Korea and Philippines cases offer several key takeaways. First, they demonstrate what a strategy of import refusals might look like, showing how, simply by in-

creasing enforcement or decreasing forbearance, China can ensure a rise in refusals. Second, they demonstrate how refusals can help China win concessions or, at the very least, increase costs for the target government, by leading impacted firms to criticize their political leaders and pressure them for a resolution. Finally, the cases highlight the benefits of using an ambiguous political lever. Not only can the ambiguity help avoid further escalation, while creating economic pain, as seen with the Philippines, but it can shield China from official repercussions, as seen with Korea.

Indeed, even while many suspect that these refusals reflect (un)diplomatic politics, and even as policy reports have attempted to gather accounts of Chinese economic coercion more generally (Harrell, Rosenberg, and Saravalle, 2018; Adachi, Brown, and Zenglein, 2022; Hanson, Currey, and Beattie, 2020), in the absence of data showing a consistent relationship between political tensions and import refusals, it is difficult to know whether the seeming relationship is partially due to increased media attention in the wake of disputes. Meanwhile, China can benefit from the ambiguity around any given set of refusals to claim they were legitimate. This paper is an attempt to break through that ambiguity and demonstrate that political tensions offer a *systematic* explanation for Chinese import refusals. The next section describes the data that we use to show this.

### 3.3 Refusals Data

In order to study the relationship between political tensions and import refusals, we compiled monthly refusal reports published by the General Administration of Customs (GAC) – formerly the Administration of Quality Supervision, Inspection, and Quarantine (AQSIQ) – between 2011 and 2019.<sup>8</sup> The reports contain 25,449 records of refused food shipments from 138 trading partners spanning the Harmonized System (HS) chapters 02 to 32.<sup>9</sup> While GAC (and formerly AQSIQ) is also responsible for inspecting cosmetics, our primary analysis is restricted to food refusals, which make up 92.66% of all refusals in our data. Unlike with food, only a small subset of countries ex-

---

<sup>8</sup>2011 was the first full year for which we could collect original data and coincides with the coming into force of a major revision to China’s food safety and inspection regulations. We end our analysis in 2019 due to the start of COVID-19 and its significant trade disruptions.

<sup>9</sup>This includes processed meat, fish, dairy, processed edible vegetable and fruit products, beverages, and more. Our dataset does not include bulk, unprocessed animal and plant products, which are subject to a different set of laws and published in a separate document, of which only an extremely limited subset was available.



port cosmetics to China in any appreciable quantities. Considering that cosmetics refusals may follow a substantially different pattern from food refusals, due to the fact that the types of safety concerns impacting cosmetics differ from those found in food, and given the small number of countries that export significant quantities of cosmetics to China, including cosmetics in our analyses has the potential to lead to noisy or biased estimates. Nevertheless, we show in the Appendix (pp. 9-11) that our results hold for all of our primary specifications when we include cosmetics refusals.

China's Bureau of Import and Export Food Safety (an agency within Customs) and its predecessor, AQSIQ, are tasked with inspecting food imports once they reach a port of entry. Non-compliant shipments are denied entry and returned or destroyed. Like in other major markets, China's Customs tracks import refusals and publishes monthly reports on their official website. As seen in Figure 2, every refusal record, each of which we translated from Chinese to English, contains detailed information about the refused product, including product name, exporting country, ten-digit Harmonised System (HS) code, and the reason(s) for rejection.

Figure 2: Original refusals report published by China's General Administration of Customs, June 2019

1) HS Code	2) Inspection number	3) Product name	4) Exporting country	5) Manufacturer	6) Importer	7) Importer record number	8) Weight (kg)	9) Reason(s) for rejection	10) Port of entry
2019年6月未准入境的食品信息									
HS 编码	检验检疫编号	产品名称	产地	生产企业信息	进口商信息	进口商备案号	重量 (千克)	未准入境的事实	进境口岸
0202200090	119000003852575-1	带骨冷冻牛肋排 (3肋)	澳大利亚	YOLARNO PTY LTD	青岛新协航国际物流有限公司	3701614323	651	货证不符	上海
0202300090	119000001202089-3	冻去骨牛后腱	阿根廷	COTO CENTRO INTEGRAL DE COMERCIALIZACION SOCIEDAD ANONIMA	天津港保税区隆鑫诚国际贸易有限公司	1212000048	700	货证不符	天津
0203290090	119000001568451-1	冻猪前腿肉, 去骨去皮	德国	Danish Crown A/S	上海瞻燃国际贸易有限公司	3116001822	23718.4	污秽腐败	上海
0203290090	119000003340998-1	冻猪小排	加拿大	Maple Leaf Foods Inc EST/7	上海其知国际贸易有限公司	3116001242	25000	货证不符	天津

Unfortunately, from a data collection perspective, China recently underwent a government reorganization lasting from late 2017 to early 2018. During this period, import control activities that used to be conducted by the AQSIQ were transferred to the GAC. This poses a challenge, because refusals reports published by AQSIQ prior to the reorganization are no longer accessible. In order to recover a larger swath of refusals, we first collected all reports published by the GAC since the reorganization in March 2018. We then recovered refusals prior to March 2018 by searching for each report individually. To do this, we took advantage of two patterns we uncovered: The first

was that each report was titled, in Chinese, “Information on unqualified imported food and cosmetics in MM YYYY.” The second was that reports published before December 2017 were in Excel, while those published after were PDFs. We thus searched the Chinese title of each report, focusing on results with an Excel (until December 2017) or PDF (since December 2017) attachment. Using these methods, we were able to track down reports for every missing month from January 2011 to February 2018 on various websites, including those of China’s state media, relevant government agencies, and private entities.<sup>10</sup>

According to the GAC, our data should include all refusals for food and cosmetics over the time period studied.<sup>11</sup> Nevertheless, there are obvious concerns about data reliability for authoritarian regimes, and China is no exception. We have therefore taken a number of steps to ensure data validity and comprehensiveness. First, for each month, we cross-verified the data against concurrent news reports on refusals published by public and private media sources inside China. We found no inconsistencies regarding the numbers or categories of refusals between the official reports and these news sources.

While Kim (2018) has shown that privately-owned newspapers in China are significantly less likely to exhibit the sort of bias expected in government-controlled sources, we still might be worried that private news sources in China are influenced by the government. Therefore, we also checked our data against cases of Chinese refusals reported by reputable international sources. One particular concern is that China might selectively eliminate politically motivated refusals from its records. To alleviate this concern, we checked our data against cases of (seemingly) punitive refusals publicized by the international media. We found that our data contains records corresponding to all relevant incidents we uncovered.

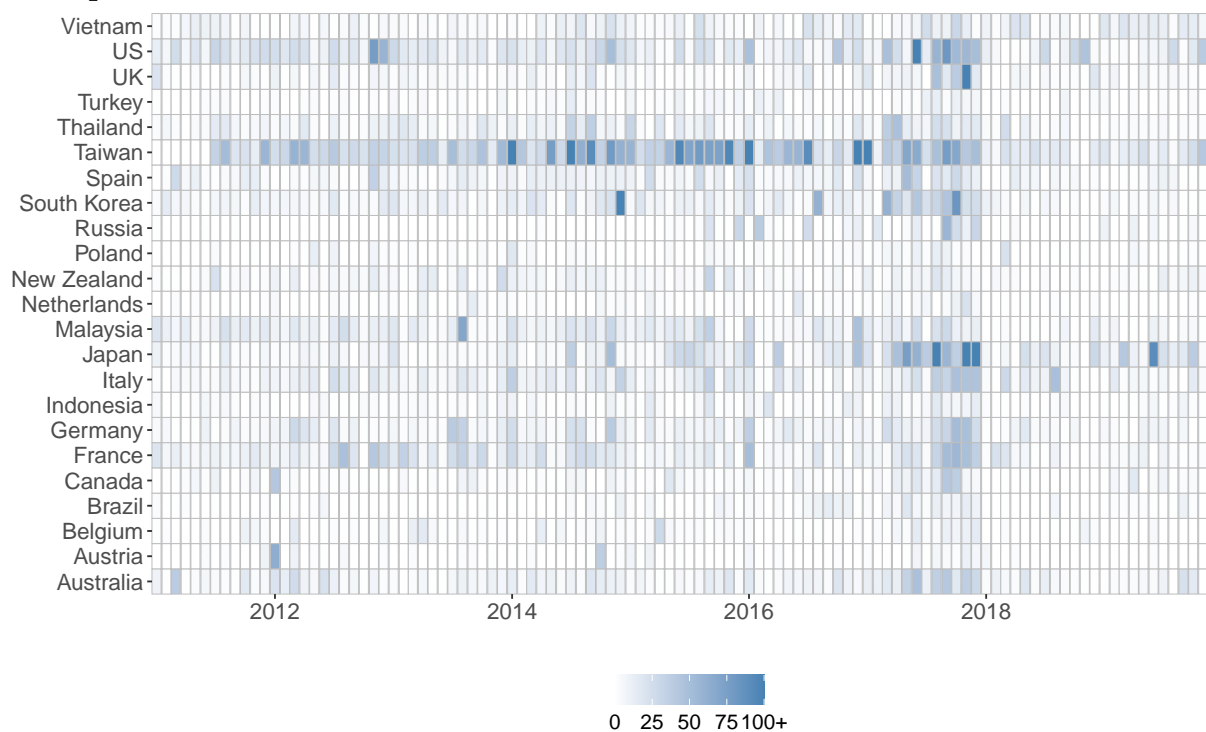
A final verification step concerned refusals issued prior to March 2018. Because these were recovered from a range of government and non-government websites, we were especially cognizant of reliability concerns. Therefore, for all of these earlier refusals we triangulated refusals data by comparing news articles from multiple sources in order to ensure the original source we

---

<sup>10</sup>See Appendix (p. 12) for a full list of sources.

<sup>11</sup>With the exception, as previously noted, of bulk, unprocessed animal and plant products.

Figure 3: Monthly counts of food import refusals of countries with the greatest number of food import refusals, 2011-2019.



had found was reliable. Whenever possible, we compared news articles from different types of sources as well. In August 2017, for example, three different sources – China’s state media, Xinhua; China Chamber of Commerce of Import & Export of Foodstuffs, Native Produce and Animal By-Products; and a private technology and news company, Sina – all reported that China refused 783 batches of food and 32 batches of cosmetics. Through these methods, we were able to confirm consistent reporting of refusals.

Figure 3 offers a visualization of monthly counts of refusals across those countries with the greatest number of refusals during the period under study.<sup>12</sup> The data demonstrates significant within-country and across time variation. While explaining these patterns is beyond the scope of this paper, as we discuss later, such variation allows us to estimate our models using both country and time fixed effects to control for country and time-specific trends.

<sup>12</sup>Summary statistics are provided in Table A1 in the Appendix (p. 2).

### 3.4 Political Tensions Data

Our main independent variable of interest is the level of political tensions between China and its trading partners. In order to capture this, we use the Global Data on Events, Location and Tone (GDELT) from Leetaru and Schrodtt (2013). Event data are obtained from machine-coded, automatically classified news articles. Due to its ability to continuously capture bilateral relations for a broad range of actors and event types, this data has been used by numerous scholars to study political tensions (King and Lowe, 2003; Christensen and Garfias, 2018; Armand et al., 2020; Davis, Fuchs, and Johnson, 2019). In addition to being a well-established means of measuring political tensions, GDELT also has several features that make it particularly attractive for our purposes. Specifically, it is highly granular, covers a comprehensive set of countries by including non-English and regional sources, and is available for our entire time period. By contrast, alternative datasets tend to omit relevant years or use a much smaller range of sources, thereby ignoring smaller-scale tensions among non-Western parties. Nevertheless, we are cognizant that because GDELT relies on machine coding, it can introduce undesirable noise. Because of this, we spent significant time looking through GDELT-identified events and evaluating the accuracy and coverage against a wide range of alternate sources. This exercise made clear that although GDELT does indeed introduce some noise, which, if anything, is likely to lead to an underestimation of our coefficients, there is also no other data source that we have identified that comes close to capturing a commensurately comprehensive swath of political events, as they relate to China. In fact, unlike GDELT, all other sources that we evaluated completely omitted many of the types of events that our theory predicts would be most likely to lead to import refusals.

The GDELT dataset contains information on a variety of politically relevant events. Each event is accompanied by key information, including the date and time that it took place, the identities of the actors, and the type of event that occurred, coded according to the Conflict and Mediation Event Observations (CAMEO) Codebook (Gerner, Schrodtt, and Yilmaz, 2008). Events are categorized as conflict or cooperation, with more disaggregated codes indicating more detailed categories. Each event is additionally weighted by a “Goldstein score,” which assigns intensity scores

between  $-10$  and  $10$ . Conflict events have negative Goldstein scores, and cooperation events have positive ones, with more severe conflict events having more negative scores.

Given that China highly values its economic performance, we expect that, consistent with the theory, China is most likely to use import refusals in cases in which it has a core interest at stake. Previous policy work on China has found that issues that typically act as “red lines” for China and which can encourage economic coercion more generally are sovereignty, national security, and territorial disputes (Adachi, Brown, and Zenglein, 2022). Indeed, these are precisely the sorts of core issues that would fall within the purview of the theory. The two case studies also support the expectation that China uses import refusals in response to political tensions involving sovereignty, national security, or territorial stakes. Because of this, we focused on conflict events involving military actors on either side.<sup>13</sup> It should be noted that because the definition of a “military actor” in the CAMEO Codebook includes a broad range of entities, from troops and soldiers to all state-military personnel and equipment, our focus on political conflicts involving military actors includes a wide variety of event types, including many episodes far short of war. While as expected, China’s maritime disputes with the Philippines in 2012 and its tension with Korea THAAD are included, other smaller-scale tiffs are also present, such as an incident in 2017 when Japan accused China of violating its airspace during a military drill, rising China-Canada tensions in 2018 when China was accused of harassing Canada’s air patrols off North Korea, and a case in 2019 when Australian navy pilots blamed China’s maritime militia for laser attacks in the South China Sea. Theoretically, these are the very types of events that we expect are most likely to lead to Chinese retaliation.

For each country-month, we constructed a measure of political tension, *Goldstein Conflict Score*, by summing the absolute values of Goldstein scores of conflict events. We exclude events related to trade, business, and economics to avoid endogeneity (Li et al., 2021).<sup>14</sup>

---

<sup>13</sup>This is not to suggest that China never resorts to import refusals in response to non-military tensions. They undoubtedly do. Rather, it is to say that events involving military actors are where we are most likely to see a systematic trend.

<sup>14</sup>See Figures A1 and A2 for illustrations of what these scores look like across time for countries with the highest political tensions (A1, pp. 4-5), as well as how these scores map onto refusals in the previously discussed case of Korea (A2, p. 6).

### 3.5 Estimation Strategy

Utilizing our import refusals data, we estimate the following linear regression model:

$$Y_{it} = \alpha + \beta \log(\text{Conflict Score})_{it-1} + \theta Z_{it-1} + \lambda_i + \gamma_t + \epsilon_{it} \quad (1)$$

where the dependent variable  $Y_{it}$  is the number of food import refusals from foreign country  $i$  in month  $t$ . Consistent with the literature (Grundke and Moser, 2019; Baylis et al., 2022), we use the number of refused shipments to measure the intensity of import inspection and refusal. Each refusal signifies an individual action taken by customs, and thus the number of refusals effectively captures the amount of effort exerted by officials to reject shipments. Additionally, it is often the number of refusals rather than the specific weight or value of the refused product that is reported in the media, suggesting that a surge in the number of refusals is what is most likely to draw attention and make a point. Finally, more refusals are more likely to impact multiple firms, which are then more likely to conclude that their combined ill fortune is not related to quality, leading them to pressure their government for a resolution.

We are primarily interested in  $\beta$ , the coefficient on *Conflict Score*, which we expect to be positive and statistically significant if China punishes a foreign country with which it has political tensions by increasing import refusals. To recall, our measure of *Conflict Score* is the absolute value of the monthly sum of Goldstein scores over all negative events involving military actors. As the distribution of this measure is highly skewed, we take the log to smooth the distribution. We lag this measure by one month to account for policy delay and to mitigate endogeneity concerns.

We also include a series of lagged controls, denoted by  $Z_{it-1}$ . First, we control for the logged count of susceptible animals in the wake of an animal disease outbreak in exporting country  $i$  in the prior semester. Since countries often block imports of diseased animal products, and given many of the products refused in our dataset are animal products, a plausible reason for any increase in refusals could be the existence of an animal disease outbreak in the exporting nation. We

control for a subset of diseases that tend to play a prominent role in trade restrictions.<sup>15</sup>

We additionally control for the volume of food imports from country  $i$ . Due to the sparseness of monthly product-level import data, we control for the logged volume of annual food imports from the previous year using annual data.<sup>16</sup> Finally, we include country ( $\lambda_i$ ) and time ( $\gamma_t$ ) fixed effects to account for geographic and temporal variation.

In addition to the linear regression model specified above, we also estimate fixed effects Poisson models and two-part models. For non-negative outcome variables with right-skewed distributions and a significant share of zeros, Mullahy and Norton (2022) demonstrate that linear regression models on the untransformed outcome variable, Poisson regression, and two-part models yield correct marginal effects. The fixed effects Poisson regression with robust standard errors gives the fully robust estimator of the conditional mean parameters (Wooldridge, 1999).<sup>17</sup> Two-part models allow separately estimating the extensive margin (zero versus non-zero outcomes) and the intensive margin (the variation among non-zero outcomes). We estimate the extensive margin via probit models and the intensive margin (the intensity of food import refusals) via linear regression models.<sup>18</sup>

## 4 Results

The main results, presented in Table 1, are consistent with our theoretical expectations. We present the results from the linear regression models with country fixed effects in Models (1)-(4). We begin with a simple linear regression with country fixed effects. We then add controls for animal disease outbreaks as well as trade levels (2), followed by fixed effects for year-quarter (3), or year-month (4) to account for any unobserved temporal factors that may drive variation in refusals. We present results from the fixed effects Poisson models in (5)-(8).

---

<sup>15</sup>See Appendix C2 (p. 12) for details.

<sup>16</sup>See Appendix C3 (p. 12).

<sup>17</sup>Despite a potential concern about overdispersion in the data, fixed effects Poisson estimators with robust standard errors are not vulnerable to overdispersion. Fixed effects negative binomial models, a possible alternative, may induce incidental parameters problems (Cameron and Trivedi, 2013; Wooldridge, 1999, 2010).

<sup>18</sup>In the Appendix, we additionally show results from linear regression models with a logged outcome variable (B1, p. 8). While these results are slightly weaker, we continue to see a positive effect of political tensions on refusals, with results significant at the  $p < 0.1$  level.

Table 1: Political Tensions and Food import refusals

<i>Dependent Variable:</i>								
Food Imports Refusal								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	OLS				Poisson			
Goldstein Conflict Score	0.309*	0.194*	0.164*	0.169*	0.058**	0.048**	0.042**	0.037*
	(0.152)	(0.076)	(0.069)	(0.069)	(0.011)	(0.019)	(0.015)	(0.017)
Animal Disease Outbreak		0.143*	0.108*	0.109*		0.048**	0.013	0.013
		(0.061)	(0.051)	(0.051)		(0.014)	(0.011)	(0.011)
Food Imports		0.027	0.012	0.012		0.229**	0.296**	0.295**
		(0.025)	(0.032)	(0.032)		(0.068)	(0.098)	(0.098)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	No	No	Yes	No	No	No	Yes	No
Monthly FE	No	No	No	Yes	No	No	No	Yes
Observations	14364	12744	12744	12744	13932	12528	12528	12528

Note: <sup>+</sup> $p < 0.10$ , \* $p < 0.05$ , \*\* $p < 0.01$ . Robust standard errors clustered on country.

Across the models, we consistently find that China is more likely to reject a country's products following an increase in political tensions with that country. As all models contain country fixed effects, our results capture within-country variation in refusals. Our results show that a 100% increase in the Goldstein conflict score is associated with an increase of food import refusals by 0.11-0.21 according to Models (1)-(4).<sup>19</sup> This accounts for a 6.5%-12.4% increase from the average of food import refusals, holding other variables constant. With monthly Goldstein scores ranging from 0 to 3327.4, this constitutes a substantial effect. By way of comparison, a 100% rise in the number of susceptible animals in the wake of an animal disease outbreak corresponds to an import refusals increase of 0.10-0.14, which translates to an increase of 4.3% to 5.7% from the average.

In addition, we estimate two-part models, which separately estimate the effects of the covariates on the extensive margin (zero versus non-zero outcomes) via probit models and on the intensive margin (the intensity of import refusals) via linear regression models (Belotti et al., 2015). This helps us determine whether political tensions contribute to import refusals relative to no import refusals (any versus none) or whether political tensions, instead, drive the number of import refusals. Results are presented in Table 2. The top half of the table shows the estimated effect of the covariates on the extensive margin, while the bottom half shows the estimated effect on the intensive margin.

Notably, we find that political tensions are not a statistically significant determinant of whether

<sup>19</sup>Calculated as  $\log(2) \times 0.164$  and  $\log(2) \times 0.309$ , respectively.



China refuses imports, such that we cannot reject the null that political tensions have no impact on the extensive margin. Rather, on the extensive margin, we find that the volume of food imports is the key determinant of refusals. We interpret this as suggesting that some baseline level of refusals is the result of random inspections. Given China is likely only inspecting a tiny fraction of all imports, in most country months refusals are zero. Therefore, it makes sense to see a higher likelihood of refusals when a country increases exports to China, since more shipments mean greater odds of inspection. This is also consistent with the fact that countries with the most exports to China generally experience the most refusals (see Table A2 in the Appendix, p. 3). Put simply, the more products that are imported, the more likely that some will be examined (and found to be problematic).<sup>20</sup>

Yet when it comes to the intensive margin – the number of products refused conditional on any products being refused – we find that political tensions are a statistically significant predictor. While levels of trade continue to be a central driver here as well, now political tensions also come into play, such that a change in the degree of political tensions is statistically significantly associated with the intensity of import refusals.

## 5 Discussion

Our results offer the first systematic evidence documenting China's use of import refusals in response to political tensions. As we have shown, China has consistently used import refusals as a veiled means of punishing its adversaries. This has helped China escape the material costs of openly violating WTO rules and helped China present itself as aligned with the liberal economic order, even while violating it. This is not to say that China has exclusively relied on ambiguous coercive tools. Particularly when China has found itself in a position to evade accusations of being a spoiler, it has embraced more aggressive protectionist measures.<sup>21</sup> Nevertheless, China has and

---

<sup>20</sup>The more cynical interpretation is that inspectors want to signal they are taking their jobs seriously and inspecting goods imported in larger quantities.

<sup>21</sup>For example, when US President, Donald Trump, moved first, placing extensive tariffs on Chinese goods, China reciprocated with its own tariff strategy.

Table 2: Food Refusals: Two-Part Model

	<i>Dependent Variable:</i> Food Imports Refusal			
	(1)	(2)	(3)	(4)
Goldstein Conflict Score	0.029 (0.024)	0.022 (0.023)	0.014 (0.022)	0.014 (0.022)
Animal Disease Outbreak		0.008 (0.007)	0.003 (0.007)	0.004 (0.008)
Food Imports		0.103** (0.038)	0.098* (0.046)	0.102* (0.048)
Goldstein Conflict Score	0.494** (0.171)	0.338** (0.126)	0.273* (0.119)	0.285* (0.131)
Animal Disease Outbreak		0.436** (0.158)	0.318** (0.120)	0.318** (0.122)
Food Imports		0.780* (0.317)	0.692 (0.512)	0.713 (0.522)
Country FE	Yes	Yes	Yes	Yes
Year-Quarter FE	No	No	Yes	No
Year-Month FE	No	No	No	Yes
Observations	13932	12528	12528	12528

*Notes:  $^+p < 0.10$ ,  $*p < 0.05$ ,  $**p < 0.01$ . Robust standard errors clustered on country. The top panel shows the effect of the independent variables on the extensive margin of import refusals (zero versus non-zero), while the bottom panel shows the estimated effect on the intensive margin (number of import refusals).*

seemingly continues to utilize regulatory measures as a frequent, less explicit political tool.<sup>22</sup>

At the same time, our findings raise some questions. First, it is worth asking whether import refusals are actually an effective political tool. On the one hand, it is certainly the case that Chinese import refusals can be extremely damaging to the sectors impacted (Sun et al., 2021), which translates into costs for the target government. In addition, the two case studies suggest that Chinese refusals can lead impacted industries to criticize their governments and urge them to resolve the dispute, offering China a political win. Additional instances of seemingly politically motivated refusals have similarly led vulnerable businesses to speak out against their governments.

For example, following the Australian prime minister’s call to have international investigators “akin to ‘weapons inspectors’” (Farr, 2020) look into the origins of COVID-19, China responded

<sup>22</sup>One recent incident involved a ban of Japanese seafood, allegedly due to the release of wastewater from the Fukushima nuclear plant, though some have connected it to political tensions stemming from Japan’s increased defense cooperation with the U.S. and South Korea (Colnaghi, 2023). Two other recent incidents, Chinese import refusals in response to Australia’s COVID-19 inquiry and those in response to Nancy Pelosi’s Taiwan visit, are discussed below.

with a range of trade restrictions, including the rejection of Australian beef for supposed labeling and health issues. These moves led to a direct reprimand of Australian leaders by some in the beef industry, with a *Reuters* article quoting one beef producer saying, “Some politicians in Australia say too much, they need to stop this rhetoric with China, especially criticism and speculation regarding the origin of the COVID 19 virus” (Needham and Packham, 2020). Even prior to the ban going into effect, some business leaders prominently expressed concerns that Australia’s COVID-19 inquiry could hurt economic relations and should be abandoned or postponed (Needham, 2020).

Likewise, after prior bans of Taiwanese pineapple that were viewed as politically motivated (China claimed it had discovered pests on the fruit), some Taiwanese business have gone so far as to hold protests against actions they worry might lead to similar repercussions, such as Nancy Pelosi’s 2022 visit to the island, which was viewed by China as a threat to its territorial goals and was accompanied by pointed Chinese military exercises (Qi and Yuwei, 2022).<sup>23</sup> Such reactions from businesses could be viewed as an effective outcome of the refusals. Not only do they create a public and potentially embarrassing political divide in the targeted nation, but through industry pressure, they could lead the foreign government to seek appeasement.

On the other hand, this does not tell us whether dispute outcomes have been more favorable to China than they would have been in the absence of refusals. In practice, some targeted businesses may decline to publicly scold or pressure their governments if they worry about optics or if nationalism trumps pocketbook calculations.<sup>24</sup> Furthermore, scholars have frequently questioned whether even particularly devastating economic measures, such as sanctions, are effective coercive tools (Pape, 1997, 1998; Jones, 2015; Drezner, 2011). Given our findings that China systematically uses import refusals in response to disputes involving military actors,<sup>25</sup> it is unlikely that

---

<sup>23</sup>The visit did indeed coincide with an uptick in rejected Taiwanese products.

<sup>24</sup>In the Australian COVID inquiry case, for example, it was reported that some disgruntled industry groups avoided criticizing the government out of concern “this could be used in Chinese propaganda” (Needham, 2020). Likewise, in the Korean THAAD case, business leaders avoided criticizing the government over THAAD itself, and those business leaders willing to voice displeasure the situation largely hid behind anonymity.

<sup>25</sup>Though other core concerns can clearly trigger such actions.

China is relying on refusals alone to win such disputes. Instead, refusals are likely just one tool in a larger arsenal. As such, refusals are perhaps best viewed as a way to broaden the coalition in the targeted country that supports resolution or acquiescence. In addition, refusals may be a way of reminding the targeted country of China's economic might, which could also be why, at least in the Korea and Philippines cases, China targeted industries that were important to the exporting country and for which it comprised a major market. Finally, refusals may help appeal to Chinese nationalists, while keeping calls for escalation from both sides to a simmer. Indeed, a 2017 *New York Times* article discussing China's retaliation against Korean products quoted a professor who studies Chinese nationalism as saying, "The [Chinese] government has been following the same policies – fostering nationalism and then using it, but also being wary of it getting out of hand" (Hernández, Guo, and Mcmorrow, 2017).

A second question our findings might raise relates to who is really behind the refusals. Do they reflect coordinated government action or, instead, the actions of individual bureaucrats? To a certain degree, we are agnostic on whether import refusals are explicitly initiated by the central government or instead reflect bureaucrats' responses to implicit indications that such moves would be well-received. As explicated previously, it would be entirely consistent with what we know about autocracies generally and China specifically if bureaucrats were refusing imports based on expectations that this was in accordance with the center's wishes. What seems less probable, at least in the Chinese case, is that these refusals would not only occur but also continue without the explicit or implicit approval of the central government. Indeed, even when it comes to events with far more potential than refusals to represent grassroots organization, such as anti-Japanese protests, empirical analysis suggests that the timing and location of such protests are at least partially responsive to signals or, at the very least, assent from the state (Wallace and Weiss, 2015).

Moreover, in the current case, refusals are being carried out by government officials with clear incentives to cater to local leaders who, themselves, have incentives to cater to the central government (Zeng and Yang, 2017; Miura, 2019). In addition, at least some of these refusals are receiving international news coverage and seem to be continuing for months. This suggests that the gov-

ernment is signaling such measures are welcome. This supposition is further bolstered by several additional pieces of evidence.

First, as noted in the Korean case, even when the government has denied involvement, high-placed officials have issued private threats about the potential for economic consequences, suggesting that such consequences are both anticipated and being used as leverage. Second, government controlled newspapers have been shown not only to publish op-eds encouraging trade bans (Editorial, 2016) but also to favorably report on the potential for independent citizens to “spontaneously” boycott firms from countries with which China is experiencing heightened tensions (Boya and Hong, 2017). This type of reporting likely represents not-so-subtle encouragement to both citizens and low-level officials to engage in punitive economic behavior. Third, according to our data, during the period of heightened tension between China and South Korea, refusals of Korean products took place across numerous ports, suggesting that the refusals cannot be explained by the decisions of one or two rogue bureaucrats in a specific region.<sup>26</sup> Fourth, in an unusually forthright opinion article in government controlled *China Daily*, in which the author advocated for sanctions against Japan, the author also noted, “China didn’t announce any sanctions against the Philippines in April, but it froze banana imports from that country in response to Manila’s aggressive attitude in the Huangyan Island dispute” (Baisong, 2012). Although this was published in the context of an opinion piece, giving the central government some cover, it is telling that such a statement was published in a venue that is government controlled. Finally, it is worth reiterating that refusals frequently lead impacted industries to pressure their home governments in ways that serve China’s foreign policy interests. Thus, whether the central government is explicitly requesting or implicitly encouraging politically motivated refusals is somewhat beside the point. In either case these refusals offer political benefits that the central government is actively exploiting.

---

<sup>26</sup>During the relevant period, there were 585 refusals of South Korean food products and cosmetics. Of these refusals, 27.5% occurred in the port in Shanghai, 21.4% in Shandong, 10.4% in Liaoning, 9.6% in Tianjin, 8.7% in Jiangsu, 7.0% in Guangdong. Other ports that refused Korean products during the period include those in Anhui, Beijing, Chongqing, Fujian, Guangxi, Hainan, Henan, Hunan, Ningbo, Shenzhen, Sichuan, Xiamen, and Zhejiang.

## 6 Conclusion

Taken together, our findings offer a new answer to a long-standing question: what drives non-tariff barriers to trade? Using China as a test case, we demonstrated how governments can manipulate the enforcement of regulatory measures to punish foreign countries with which they are at odds, all while avoiding many of the costs associated with more overt forms of economic reprisals. These findings not only add to the small but growing literature on how countries leverage trade barriers for broader political ends (Kim and Margalit, 2021; Fetzer and Schwarz, 2021), but they help shed light on one of the potential mechanisms behind previous findings that political tensions can lead to reduced trade (Davis, Fuchs, and Johnson, 2019; Fuchs and Klann, 2013; Du et al., 2017; Heilmann, 2016; Pandya and Venkatesan, 2016).

Future work could expand these findings in several ways. First, it would be valuable to explore the extent to which other countries engage in similar behavior and whether regulatory coercion looks measurably different across different regime types. While our findings demonstrate import refusals can and have been used for punitive purposes, more work is needed to establish the extent of our theory's explanatory power, beyond China. Second, more work could be done to understand how products are targeted for refusals and the conditions under which the coercive use of regulatory measures is more or less effective. Though we offer some preliminary observations on these fronts, more rigorous assessments are beyond the scope of the current work. Finally, future work could delve more broadly into the political roles played by border agents and inspectors. Despite growing interest in regulatory barriers to trade, the implementation of regulatory rules is an area that remains largely unexplored. Our work highlights the value and importance of taking into account the political motivations behind regulatory enforcement at the border.

## References

- Abdelal, Rawi, and Jonathan Kirshner. 1999. "Strategy, economic relations, and the definition of national interests." *Security Studies* 9 (1-2): 119–156.
- Adachi, Aya, Alexander Brown, and Max J. Zenglein. 2022. "Fasten Your Seatbelts: How to manage China's economic coercion." *Mercator Institute for China Studies* .  
URL: [https://www.merics.org/sites/default/files/2023-02/Merics\\_ChinaMonitor\\_EconomicCoercion\\_EN-4.pdf](https://www.merics.org/sites/default/files/2023-02/Merics_ChinaMonitor_EconomicCoercion_EN-4.pdf)
- Ahn, Jae-Wan, and M. Taylor Rhodes. 2021. Examining Pathogen-Based Import Refusals: Trends and Analysis From 2002 to 2019. Economic Research Report EIB-232 U.S. Department of Agriculture, Economic Research Service.
- Armand, Alex, Alexander Coutts, Pedro C Vicente, and Inês Vilela. 2020. "Does information break the political resource curse? Experimental evidence from Mozambique." *American Economic Review* 110 (11): 3431–53.
- Baisong, Jin. 2012. "Consider sanctions on Japan." *China Daily* .
- Baylis, Kathy, Andrea Martens, and Lia Nogueira. 2009. "What drives import refusals?" *American Journal of Agricultural Economics* 91 (5): 1477–1483.
- Baylis, Kathy, Lia Nogueira, Linlin Fan, and Kathryn Pace. 2022. "Something fishy in seafood trade? The relation between tariff and non-tariff barriers." *American Journal of Agricultural Economics* 104 (5): 1656–1678.
- Beach, Derek, and Rasmus Brun Pedersen. 2018. "Selecting appropriate cases when tracing causal mechanisms." *Sociological Methods & Research* 47 (4): 837–871.
- Belotti, Federico, Partha Deb, Willard G Manning, and Edward C Norton. 2015. "twopm: Two-part models." *The Stata Journal* 15 (1): 3–20.
- Bhagwati, Jagdish N. 1988. *Protectionism*. Vol. 1 MIT press.
- Boya, Qin, and Chang Hong. 2017. "It was revealed that Lotte Group will give up land to "THAAD", and South Korean groups protested in front of their stores [Translated]." *The Peoples Daily* .
- Bradsher, Keith. 2010. "Amid Tension, China Blocks Vital Exports to Japan." *The New York Times* .  
URL: <https://www.nytimes.com/2010/09/23/business/global/23rare.html>

- Busch, Marc L, and Eric Reinhardt. 2006. "Three's a crowd: third parties and WTO dispute settlement." *World Politics* 58 (3): 446–477.
- Cameron, A Colin, and Pravin K Trivedi. 2013. *Regression analysis of count data*. Vol. 53 Cambridge university press.
- Carnegie, Allison. 2014. "States held hostage: Political hold-up problems and the effects of international institutions." *American Political Science Review* 108 (1): 54–70.
- Christensen, Darin, and Francisco Garfias. 2018. "Can you hear me now? How communication technology affects protest and repression." *Quarterly journal of political science* 13 (1): 89.
- Clover, Charles, and Jung-a Sung. 2017. "China turns screw on corporate South Korea over US missile shield." *Financial Times* .
- Colnaghi, Walter Brenno. 2023. "Japanese seafood ban signals China's shady virtues." *Japanese seafood ban signals China's shady virtues* .
- Daily Tribune. 2012. "Philippines, China end row over bananas." *Daily Tribune* .
- Davey, William J. 2005. "The WTO dispute settlement system: the first ten years." *Journal of International Economic Law* 8 (1): 17–50.
- Davis, Christina L, Andreas Fuchs, and Kristina Johnson. 2019. "State control and the effects of foreign relations on bilateral trade." *Journal of Conflict Resolution* 63 (2): 405–438.
- Davis, Christina L, and Sophie Meunier. 2011. "Business as usual? Economic responses to political tensions." *American Journal of Political Science* 55 (3): 628–646.
- Demirjian, Karoun. 2014. "As the West steps up sanctions, Russia starts banning food." *Washington Post*. August 2, 2014.  
**URL:** [https://www.washingtonpost.com/world/as-the-west-steps-up-sanctions-russia-starts-banning-food/2014/08/02/d7648ea9-af5b-461a-b312-ee6057918cc8\\_story.html](https://www.washingtonpost.com/world/as-the-west-steps-up-sanctions-russia-starts-banning-food/2014/08/02/d7648ea9-af5b-461a-b312-ee6057918cc8_story.html)
- Drezner, Daniel W. 2009. "Bad debts: assessing China's financial influence in great power politics." *International Security* 34 (2): 7–45.
- Drezner, Daniel W. 2011. "Sanctions sometimes smart: Targeted sanctions in theory and practice." *International studies review* 13 (1): 96–108.
- Drezner, Daniel W. 2021. "Introduction." In *The Uses and Abuses of Weaponized Interdependence*, ed. Daniel W. Drezner, Henry Farrell, and Abraham L. Newman. Brookings Institution Press chapter 1, pp. 1–18.



- Du, Yingxin, Jiandong Ju, Carlos D. Ramirez, and Xi Yao. 2017. "Bilateral trade and shocks in political relations: Evidence from China and some of its major trading partners, 1990-2013." *Journal of International Economics* 108: 211–225.
- Editorial. 2016. "China can counter THAAD deployment." *Global Times* .
- Egorov, Georgy, and Konstantin Sonin. 2011. "Dictators and their viziers: Endogenizing the loyalty–competence trade-off." *Journal of the European Economic Association* 9 (5): 903–930.
- Farr, Malcolm. 2020. "Australian PM pushes for WHO overhaul including power to send in investigators." *The Guardian* .  
**URL:** <https://www.theguardian.com/australia-news/2020/apr/22/australian-pm-pushes-for-who-overhaul-including-power-to-send-in-investigators>
- Farrell, Henry, and Abraham L Newman. 2019. "Weaponized interdependence: How global economic networks shape state coercion." *International Security* 44 (1): 42–79.
- Fetzer, Thiemo, and Carlo Schwarz. 2021. "Tariffs and politics: evidence from Trump's trade wars." *The Economic Journal* 131 (636): 1717–1741.
- Fuchs, Andreas, and Nils-Hendrik Klann. 2013. "Paying a visit: The Dalai Lama effect on international trade." *Journal of International Economics* 91 (1): 164–177.
- Gerner, Deborah J, Philip A Schrod, and Ömür Yilmaz. 2008. "Conflict and Mediation Event Observations (CAMEO): an event data framework for a post-Cold War world." In *International conflict mediation: New approaches and findings*. Routledge Taylor & Francis Group pp. 287–304.
- Grundke, Robert, and Christoph Moser. 2019. "Hidden protectionism? Evidence from non-tariff barriers to trade in the United States." *Journal of International Economics* 117: 143–157.
- Gulotty, Robert. 2020. *Narrowing the Channel: The Politics of Regulatory Protection in International Trade*. University of Chicago Press.
- Hanson, Fergus, Emilia Currey, and Tracy Beattie. 2020. The Chinese Communist Party's coercive diplomacy. Australian strategic policy institute. Policy Brief Report No. 36/2020.  
**URL:** <https://www.aspi.org.au/report/chinese-communist-partys-coercive-diplomacy>
- Harrell, Peter, Elizabeth Rosenberg, and Edoardo Saravalle. 2018. China's Use of Coercive Economic Measures. . Center for a New American Security. June 2018.  
**URL:** <https://www.aspi.org.au/report/chinese-communist-partys-coercive-diplomacy>
- He, Keyao. 2017. "'Easy to break, hard to recover'." *Global Times* .

- Heilmann, Kilian. 2016. "Does political conflict hurt trade? Evidence from consumer boycotts." *Journal of International Economics* 99: 179–191.
- Hernández, Javier C., Owen Guo, and Ryan Mcmorrow. 2017. "South Korean Stores Feel China's Wrath as U.S. Missile System Is Deployed." *The New York Times* .  
 URL: <https://www.nytimes.com/2017/03/09/world/asia/china-lotte-thaad-south-korea.html>
- Higgins, Andrew. 2012. "In Philippines, banana growers feel effect of South China Sea dispute." *Washington Post* .  
 URL: [https://www.washingtonpost.com/world/asia\\_pacific/in-philippines-banana-growers-feel-effect-of-south-china-sea-dispute/2012/06/10/gJQA47WVTV\\_story.html](https://www.washingtonpost.com/world/asia_pacific/in-philippines-banana-growers-feel-effect-of-south-china-sea-dispute/2012/06/10/gJQA47WVTV_story.html)
- Hirschman, Albert O. 1980. *National power and the structure of foreign trade*. Vol. 105 Univ of California Press.
- Hollyer, James R, and Leonard Wantchekon. 2015. "Corruption and ideology in autocracies." *JL Econ. & Org.* 31: 499.
- Jones, Lee. 2015. *Societies under siege: Exploring how international economic sanctions (do not) work*. Oxford University Press, USA.
- Kalra, Aditya, and Aditi Shah. 2020. "Apple, other U.S. goods from China held up at Indian ports: sources." *Reuters* .
- Keohane, Robert O, and Joseph S Nye Jr. 1973. "Power and interdependence." *Survival* 15 (4): 158–165.
- Kim, Kyung-ho. 2017. "Korean firms' woes over THAAD deepen." *The Korea Herald* .
- Kim, Moonhawk. 2016. "Enduring trade disputes: Disguised protectionism and duration and recurrence of international trade disputes." *The Review of International Organizations* 11 (3): 283–310.
- Kim, Sung Eun. 2018. "Media bias against foreign firms as a veiled trade barrier: Evidence from Chinese newspapers." *American Political Science Review* 112 (4): 954–970.
- Kim, Sung Eun, and Yotam Margalit. 2021. "Tariffs as electoral weapons: the political geography of the US–China trade war." *International organization* 75 (1): 1–38.
- King, Gary, and Will Lowe. 2003. "An automated information extraction tool for international conflict data with performance as good as human coders: A rare events evaluation design." *International Organization* 57 (3): 617–642.

- Knecht, Eric, and Khalid Abdelaziz. 2017. "Egypt-Sudan trade held hostage as political tensions simmer." *Reuters* .
- Kono, Daniel Y. 2006. "Optimal obfuscation: Democracy and trade policy transparency." *American Political Science Review* 100 (3): 369–384.
- Kono, Daniel Yuichi, and Stephanie J Rickard. 2014. "Buying national: Democracy, public procurement, and international trade." *International Interactions* 40 (5): 657–682.
- Kucik, Jeffrey, and Lauren Peritz. 2021. "How do third parties affect compliance in the trade regime?" *The Journal of Politics* 83 (3): 1184–1189.
- Kwak, Jung-soo. 2016. "경제단체들, 사드 배치에 속앓이 (Economic organizations agonize over THAAD deployment)." *Hankyoreh* .  
**URL:** [https://www.hani.co.kr/arti/economy/economy\\_general/751980.html](https://www.hani.co.kr/arti/economy/economy_general/751980.html)
- Landing, Roel, and Robin Kwong. 2012. "Philippine business warns on China stand-off." *Financial Times* .  
**URL:** <https://www.ft.com/content/24d5edf2-9e80-11e1-a767-00144feabdc0>
- Lee, Hyo-Young. 2017. "China's Trade Retaliation in response to THAAD Deployment and Ways to Respond." *IFANS Focus IF2017-50E* .
- Leetaru, Kalev, and Philip A Schrodtt. 2013. Gdelt: Global data on events, location, and tone, 1979–2012. In *ISA annual convention*. Vol. 2 pp. 1–49.
- Li, Yuhua, Ze Jian, Wei Tian, and Laixun Zhao. 2021. "How political conflicts distort bilateral trade: Firm-level evidence from China." *Journal of Economic Behavior & Organization* 183: 233–249.
- Lim, Darren J, and Victor A Ferguson. 2022. "Informal economic sanctions: the political economy of Chinese coercion during the THAAD dispute." *Review of International Political Economy* 29 (5): 1525–1548.
- Mansfield, Edward D, and Marc L Busch. 1995. "The political economy of nontariff barriers: a cross-national analysis." *International Organization* 49 (4): 723–749.
- Marvel, Howard P, and Edward J Ray. 1983. "The Kennedy round: evidence on the regulation of international trade in the United States." *The American Economic Review* 73 (1): 190–197.
- Miura, Kacie. 2019. "'Economic Coercion in an Interdependent Era: China Responds to the THAAD Crisis'." *MIT Political Science Department Research Paper No. 2019-02* .

- Morning Whistle. 2012. "Philippines says China eases restrictions on banana imports." *Morning Whistle* .
- Mullahy, John, and Edward C Norton. 2022. Why Transform Y? A Critical Assessment of Dependent-Variable Transformations in Regression Models for Skewed and Sometimes-Zero Outcomes. Technical report National Bureau of Economic Research.
- Nam, Hyun-woo. 2019. "Farmers, fishermen fear Japan's expanding export curbs." *The Korea Times* .  
**URL:** <https://www.koreatimes.co.kr/www/tech/2023/10/129272410.html>
- Needham, Kirsty. 2020. "Australian PM's call for virus inquiry may harm long-term China trade - business leaders." *Reuters* .
- Needham, Kirsty, and Colin Packham. 2020. "China halts beef imports from four Australian firms as COVID-19 spat sours trade." *Reuters* .
- Pandya, Sonal S, and Rajkumar Venkatesan. 2016. "French roast: consumer response to international conflict—evidence from supermarket scanner data." *Review of Economics and Statistics* 98 (1): 42–56.
- Pape, Robert A. 1997. "Why economic sanctions do not work." *International security* 22 (2): 90–136.
- Pape, Robert A. 1998. "Why economic sanctions still do not work." *International Security* 23 (1): 66–77.
- Peritz, Lauren. 2020. "When are international institutions effective? The impact of domestic veto players on compliance with WTO rulings." *International Studies Quarterly* 64 (1): 220–234.
- Perlman, Rebecca L. 2020. "For safety or profit? How science serves the strategic interests of private actors." *American Journal of Political Science* 64 (2): 293–308.
- Perlman, Rebecca L. 2023. *Regulating Risk: How Private Information Shapes Global Safety Standards*. Cambridge University Press.
- Qi, Wang, and Hu Yuwei. 2022. "'Get out!' Civic groups, politicians, industry representatives in Taiwan protest Pelosi's visit." *Global Times* .
- Ragin, Charles C. 2006. "Set relations in social research: Evaluating their consistency and coverage." *Political analysis* 14 (3): 291–310.
- Ray, Edward John. 1981. "The determinants of tariff and nontariff trade restrictions in the United States." *Journal of Political Economy* 89 (1): 105–121.

- Schneider, Carsten Q, and Ingo Rohlfing. 2013. "Combining QCA and process tracing in set-theoretic multi-method research." *Sociological Methods & Research* 42 (4): 559–597.
- Sun, Dongsheng, Yifang Liu, Jason Grant, Yanyu Long, Xiaojuan Wang, and Chaoping Xie. 2021. "Impact of food safety regulations on agricultural trade: Evidence from China's import refusal data." *Food Policy* 105: 102185.
- Thai News Service. 2012. "China/Philippines: China rejects Philippines bananas, industry fears collapse (Feature)." *Thai News Service* .
- The Asahi Shimbun. 2019. "Japan to toughen screenings of seafood imports from S. Korea." *The Asahi Shimbun* .  
**URL:** <https://www.asahi.com/ajw/articles/13064187>
- The Korea Herald. 2017. "Korean foods rejected by Chinese customs surge 280% amid THAAD row." *The Korea Herald* .  
**URL:** <https://www.koreaherald.com/view.php?ud=20170625000092>
- The Nation. 2012. "Filipino traders blame govt for banana dispute with China." *The Nation (Thailand)* .
- Toi Staff and Agencies. 2019. "Saudis scale back chicken imports from Brazil amid Jerusalem tensions." *The Times of Israel* .
- U.S. Department of Agriculture. 2023. "Import and Export Data."
- U.S. Food and Drug Administration. 2023. "Import Refusals."
- Wallace, Jeremy L, and Jessica Chen Weiss. 2015. "The political geography of nationalist protest in China: Cities and the 2012 anti-Japanese protests." *The China Quarterly* 222: 403–429.
- Weiss, Jessica Chen, Panle Jia Barwick, Shanjun Li, and Jeremy L. Wallace. 2023. "Commercial Casualties: Political Boycotts and International Disputes." *Journal of East Asian Studies* 23 (3): 387–410.
- West, Kesha. 2012. "Banana crisis blamed on Philippines-China dispute." *Australia Network News* .
- Wilson, Bruce. 2007. "Compliance by WTO members with adverse WTO dispute settlement rulings: the record to date." *Journal of international economic law* 10 (2): 397–403.
- Wooldridge, Jeffrey M. 1999. "Distribution-free estimation of some nonlinear panel data models." *Journal of Econometrics* 90 (1): 77–97.

- Wooldridge, Jeffrey M. 2010. *Econometric analysis of cross section and panel data*. MIT press.
- World Trade Organization. 1994. "Agreement on the Application of Sanitary and Phytosanitary Measures."
- Yan, Li. 2017. "South Korea media 'oversensitive' amid controversy over THAAD, expert says." *Global Times* January 12, 2017.  
**URL:** <http://www.ecns.cn/business/2017/01-12/241259.shtml>
- Yeo, Jun-suk. 2017. "China's retaliation against THAAD may clash with WTO, FTA rules: foreign minister." *The Korea Herald* .  
**URL:** <https://www.koreaherald.com/view.php?ud=20170305000187>
- Yoon, Ja-young. 2017. "China Bans Imports of 19 Korean Cosmetics." *The Korea Times* .  
**URL:** <https://www.koreatimes.co.kr/www/news/biz/2017/01/48821794.html>
- Zeng, Qingjie, and Yujeong Yang. 2017. "Informal Networks as Safety Nets: The Role of Personal Ties in China's Anti-corruption Campaign." *China: An International Journal* 15 (3): 26–57.

# Supplementary Appendix

## Appendix

### Table of Contents

---

<b>A</b>	<b>Data Description</b>	<b>2</b>
<b>B</b>	<b>Robustness Tests</b>	<b>7</b>
<b>C</b>	<b>Additional Information on Data Collection</b>	<b>12</b>
C1	Verifying Refusals Data . . . . .	12
C2	Animal Disease Controls . . . . .	12
C3	Trade Data . . . . .	12

---

## A Data Description

- Table A1 shows the summary statistics.

Table A1: Summary Statistics

	count	mean	sd	min	max
Food Imports Refusals	14904	1.67	7.27	0.00	242.00
Food Imports Refusals (Logged)	14904	0.35	0.80	0.00	5.49
Food and Cosmetics Imports Refusals	14904	1.81	8.11	0.00	248.00
Food and Cosmetics Imports Refusals (Logged)	14904	0.36	0.82	0.00	5.52
Goldstein Conflict Score (Logged, t-1)	14364	0.50	1.30	0.00	8.11
Animal Disease Outbreak	13176	4.44	4.78	0.00	18.11
Food Imports	14784	16.62	3.80	0.00	24.20
Relevant Imports	14772	16.79	3.62	0.00	24.20
Observations	14904				



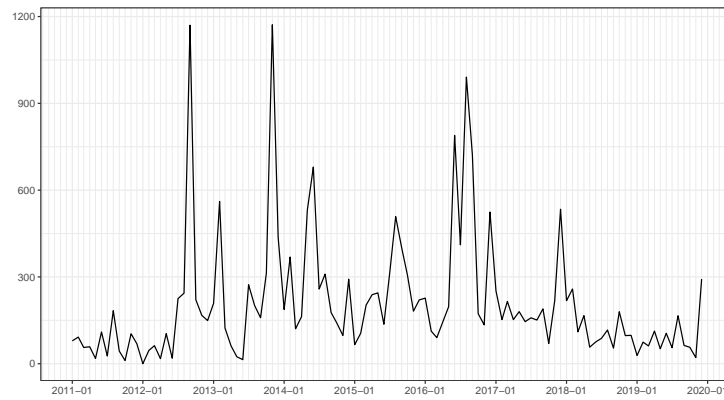
- Table A2 lists the countries with the greatest number of food refusals in the data.

Table A2: List of countries with the most food refusals, 2011-2019

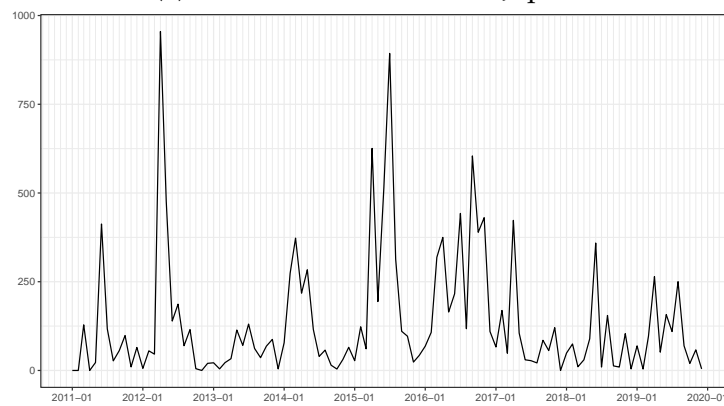
Country	Total food refusals
Taiwan	4252
United States	2088
Japan	1964
France	1391
Korea	1242
Italy	1168
Malaysia	1148
Australia	1011
Germany	1001
Thailand	900

- Figure A1 presents over-time variation of GDELT military conflict scores for four countries that had the worst political relations with China according to GDELT during this period.

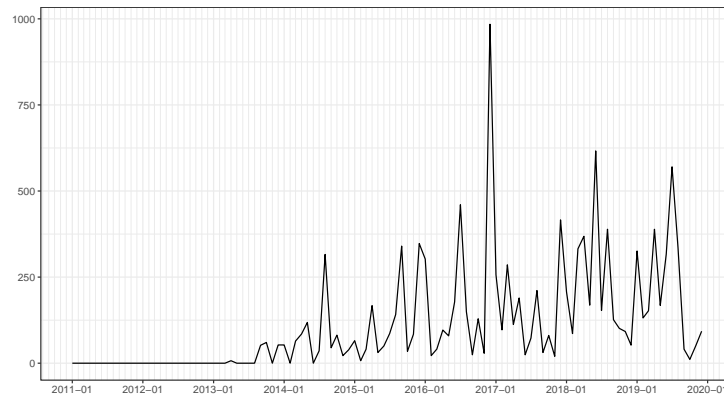
Figure A1: GDELT Conflict Scores Involving Military Actors, 2011-2019.



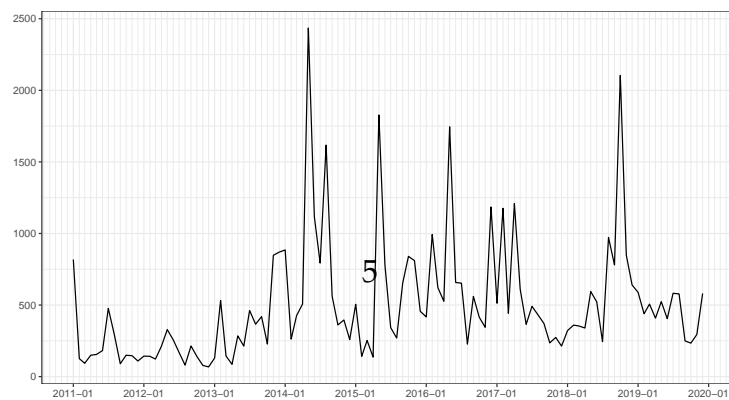
(a) GDELT Conflict Scores, Japan



(b) GDELT Conflict Score, Philippines



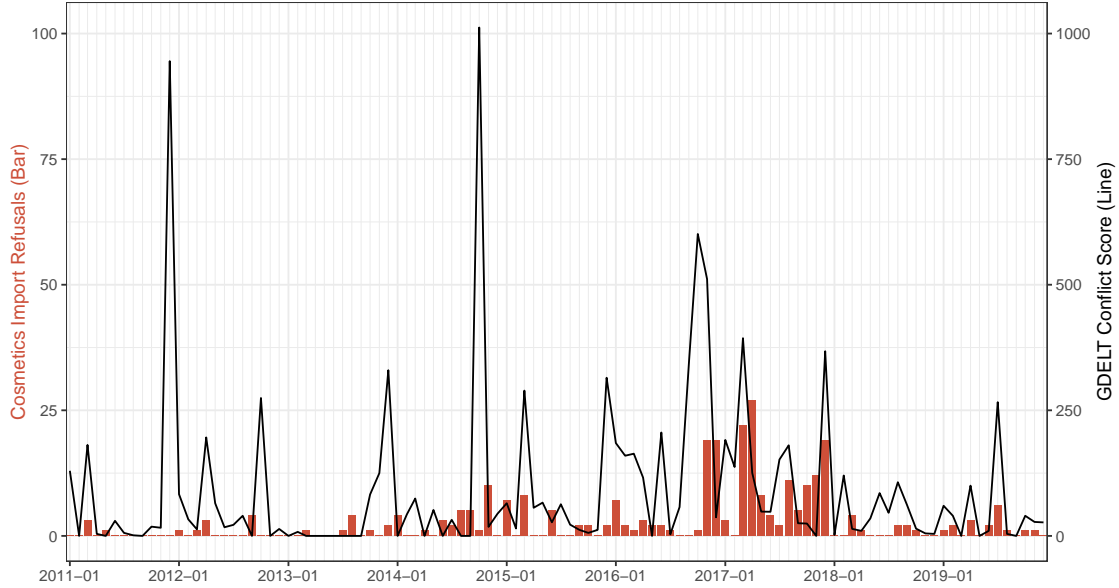
(c) GDELT Conflict Score, Taiwan



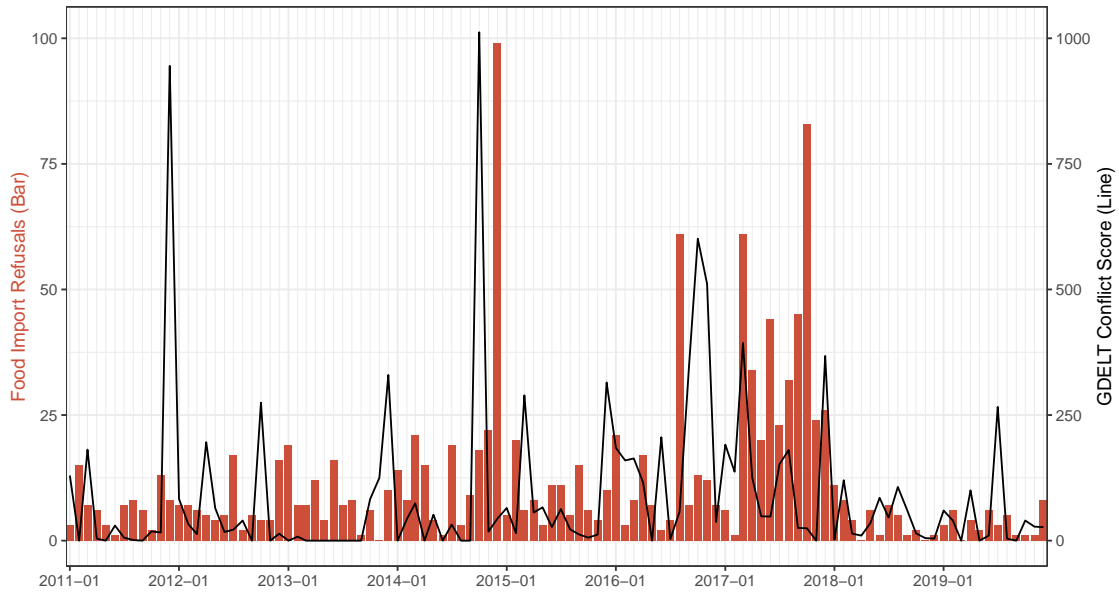
(d) GDELT Conflict Score, United States

- Figure A2 presents over-time variation of cosmetics and food import refusals overlaid with GDELT conflict scores for South Korea.

Figure A2: Import Refusals & GDELT Conflict Scores, South Korea



(a) Cosmetics Import Refusals & GDELT Conflict Scores



(b) Food Import Refusals & GDELT Conflict Scores

## **B Robustness Tests**

- Table B1 presents the results from the linear regression models with the logged counts of food import refusals as the dependent variable. The substantive findings are similar to the main results presented in Table 1.
- Tables B2, B3, and B4 present the results with the cases of food and cosmetics import refusals as the dependent variables. Our main analysis focuses on the cases of food import refusals alone, yet as seen in B2 and B3, our substantive findings from the main analyses hold when we examine refusals of food and cosmetics imports together. While we do see that the results become weaker or even insignificant in some models when we include both food and cosmetics and log the dependent variable (B4), Mullahy and Norton (2022) show that logging the dependent variable leads to unreliable estimates when the dependent variable has a substantial number of zeroes, as is the case here. These estimates are, therefore, less informative than those found in B2 and B3.

Table B1: Food Refusals: OLS with Log-Transformed Outcome Variable

	<i>Dependent Variable:</i>			
	Food Imports Refusal (Log)			
	(1)	(2)	(3)	(4)
Goldstein Conflict Score	0.019 <sup>+</sup> (0.010)	0.020 <sup>+</sup> (0.010)	0.016 <sup>+</sup> (0.009)	0.016 <sup>+</sup> (0.009)
Animal Disease Outbreak		0.010 <sup>**</sup> (0.004)	0.006 <sup>*</sup> (0.003)	0.006 <sup>*</sup> (0.003)
Food Imports		0.007 <sup>+</sup> (0.004)	0.006 (0.004)	0.006 (0.004)
Country FE	Yes	Yes	Yes	Yes
Year-Quarter FE	No	No	Yes	No
Year-Month FE	No	No	No	Yes
Observations	14364	12744	12744	12744

Note: <sup>+</sup> $p < 0.10$ , <sup>\*</sup> $p < 0.05$ , <sup>\*\*</sup> $p < 0.01$ . Robust standard errors clustered on country.

Table B2: Food & Cosmetics Refusals: OLS & Poisson

<i>Dependent Variable:</i>								
Food & Cosmetics Imports Refusal								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	OLS				Poisson			
Goldstein Conflict Score	0.338*	0.218*	0.184*	0.193*	0.059**	0.048*	0.046**	0.042*
	(0.164)	(0.094)	(0.087)	(0.087)	(0.012)	(0.019)	(0.016)	(0.017)
Animal Disease Outbreak		0.176*	0.134*	0.134*		0.052**	0.013	0.013
		(0.072)	(0.060)	(0.060)		(0.014)	(0.011)	(0.011)
Food Imports		0.029	0.007	0.007		0.239**	0.290**	0.288**
		(0.029)	(0.036)	(0.036)		(0.073)	(0.099)	(0.099)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	No	No	Yes	No	No	No	Yes	No
Monthly FE	No	No	No	Yes	No	No	No	Yes
Observations	14364	12744	12744	12744	13932	12528	12528	12528

Note: + $p < 0.10$ , \* $p < 0.05$ , \*\* $p < 0.01$ . Robust standard errors clustered on country.

Table B3: Food & Cosmetics Refusals: Two-Part Model

	<i>Dependent Variable:</i>			
	Food & Cosmetics Imports		Refusal	
	(1)	(2)	(3)	(4)
Goldstein Conflict Score	0.029 (0.024)	0.020 (0.024)	0.011 (0.023)	0.011 (0.023)
Animal Disease Outbreak		0.007 (0.007)	0.002 (0.007)	0.002 (0.008)
Relevant Imports		0.106** (0.040)	0.098* (0.050)	0.102* (0.051)
Goldstein Conflict Score	0.552** (0.191)	0.410** (0.154)	0.343* (0.150)	0.362* (0.161)
Animal Disease Outbreak		0.540** (0.183)	0.382** (0.142)	0.382** (0.144)
Relevant Imports		0.631+ (0.364)	0.555 (0.586)	0.604 (0.606)
Country FE	Yes	Yes	Yes	Yes
Year-Quarter FE	No	No	Yes	No
Year-Month FE	No	No	No	Yes
Observations	13932	12528	12528	12528

Note: + $p < 0.10$ , \* $p < 0.05$ , \*\* $p < 0.01$ . Robust standard errors clustered on country.



Table B4: Food & Cosmetics Refusals: OLS with Log-Transformed Outcome Variable

	<i>Dependent Variable:</i>			
	Food & Cosmetics Imports Refusal (Log)			
	(1)	(2)	(3)	(4)
Goldstein Conflict Score	0.019 <sup>+</sup> (0.011)	0.020 <sup>+</sup> (0.011)	0.015 (0.010)	0.015 (0.010)
Animal Disease Outbreak		0.010 <sup>**</sup> (0.004)	0.007* (0.003)	0.007* (0.003)
Relevant Imports		0.008 <sup>+</sup> (0.005)	0.005 (0.005)	0.005 (0.005)
Country FE	Yes	Yes	Yes	Yes
Year-Quarter FE	No	No	Yes	No
Year-Month FE	No	No	No	Yes
Observations	14364	12744	12744	12744

Note: <sup>+</sup> $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ . Robust standard errors clustered on country.

## C Additional Information on Data Collection

### C1 Verifying Refusals Data

- Below is a full list of sources we rely on to collect China's import refusals data.
  1. Government (or government-affiliated) entities: [customs.gov.cn/spj](http://customs.gov.cn/spj), [cqn.com.cn](http://cqn.com.cn)
  2. China's state media: [xinhuanet.com](http://xinhuanet.com), [jjckb.xinhuanet.com](http://jjckb.xinhuanet.com), [politics.people.com.cn](http://politics.people.com.cn), [news.cctv.com](http://news.cctv.com)
  3. Private entities: [cccfna.org.cn](http://cccfna.org.cn), [antion.net](http://antion.net), [reach24h.com](http://reach24h.com), [cirs-group.com](http://cirs-group.com), [m.shagarova.com](http://m.shagarova.com), [inews.ifeng.com](http://inews.ifeng.com), [hn.rednet.cn/c](http://hn.rednet.cn/c), [m.antpedia.com](http://m.antpedia.com), [m.thepaper.cn](http://m.thepaper.cn), [ppfocus.com](http://ppfocus.com), [kknews.cc](http://kknews.cc), [cocukyurdu.com](http://cocukyurdu.com), [thepaper.cn](http://thepaper.cn), [anytesting.com](http://anytesting.com), [finance.ce.cn](http://finance.ce.cn)

### C2 Animal Disease Controls

Animal diseases for which we control are African swine fever, classical swine fever, foot and mouth disease, high pathogenic avian influenza, American fowlbrood, and Bovine Spongiform Encephalopathy (BSE). These diseases are frequently used by a variety of nations to justify trade restrictions. We also deliberately selected diseases which China itself had mentioned to justify import refusals or bans, thereby giving China the benefit of the doubt and seeking, if anything, to over-control for the effect of animal diseases on refusals. Data on animal diseases was acquired from the World Organization for Animal Health (formerly OIE)<sup>27</sup>, which is charged with collecting and disseminating information on animal disease outbreaks around the world. As the animal disease measure is only available for each semester and is significantly skewed we use the logged count of susceptible animals from the previous semester.

### C3 Trade Data

Our trade volume data are from the UN Comtrade database.<sup>28</sup> In calculating the volume of annual food imports, we focus on products classified under specific HS-codes that have been identified in the import refusals records: 02, 03, 04, 05, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22. Similarly, for the volume of annual cosmetic imports, our focus is limited to HS-codes of 33 and 34, again specifically selecting those identified in the refusals records.

---

<sup>27</sup><http://wahis.woah.org/#/dashboards/qd-dashboard>

<sup>28</sup><https://comtradeplus.un.org>

