Courting the Median: Strategic Presidents and the Distribution of Tariff Phaseouts in U.S. Free Trade Agreements[1]

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Abstract

How do presidents design free trade agreements? Nuance has been overshadowed by the simplifying free-trading assumption of the president; indeed, the president can be selectively protectionist to promote free trade. I argue that the president uses tariff phaseouts, heretofore an understudied provision, as a form of targetable temporary protection to buy the median legislator's ratification vote and shield import-sensitive regions. I test these predictions using novel product-level tariff phaseout data from 14 U.S. free trade agreements (FTAs) signed between 1992 and 2015, linking these protections to specific districts. I find that presidents allocate more tariff phaseouts in import-sensitive regions and districts of legislators closer to the median, which increases the likelihood of them ratifying the FTA. Such targeting is limited to FTAs negotiated during divided government. This paper is the first to empirically test the median voter theorem in the context of inter-branch allocation of goods to achieve political ends.
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1 Introduction

Presidents have long been assumed to be more universalist by representing a national constituency than the parochial Congress with local constituencies (Nzelibe 2006); as a result, a welfare-maximizing president has been assumed to prefer free trade while Congress is largely protectionist (Bailey, Goldstein, and Weingast 1997; Gilligan 1997; Destler 1986). Beyond constituency motivation, presidents may prefer free trade to boost their electoral prospects (Mansfield, Milner, and Rosendorff 2002; Rogowski and Kayser 2002); alternatively, an office-seeking president may be particularistic by targeting protection to electorally valuable regions and states (Lowande, Jenkins, and Clarke 2018; Ma and McLaren 2018; Kriner and Reeves 2015). On average, however, presidents seek to liberalize trade;[3] but, they negotiate trade deals under the shadow of Congressional approval (Goldstein and Gulotty 2014). For a president to achieve their political ends, they must satisfy the median legislator in Congress. So, how do presidents design trade agreements to maximize domestic ratification of international trade agreements?

Few scholars took on the task of answering such a question. Goldstein and Gulotty (2014) provide a comprehensive examination of presidents' strategic behavior in negotiating trade agreements under the shadow of Congress. Their analysis was mainly re-

[3]This statement comes with a large exception to the current administration.

stricted to the early Reciprocal Trade Agreement Act (RTAA) era, which did not require congressional ratification. However, Congressional approval for subsequent trade deal negotiations acted as a constraint on the president's choice of partners and products to liberalize. While the insights from their study may be generalizable, modern bilateral and regional trade agreements are mandated by the WTO to eliminate all trade barriers, thereby constraining the degree of freedom the president has in liberalizing trade. With such constraints, the president relies on other cooperation-enhancing provisions in trade agreements, such as escape clauses (Rosendorff and Milner 2001; Kucik and Reinhardt 2008) and labor provisions to quell domestic opposition. While one may theorize that such provisions are meant to target the median legislator, none have empirically demonstrated this phenomenon, given that most treaty provisions are neither targetable (or observably so) nor divisible with clear beneficiaries. Furthermore, while Congress retains the right to approve trade deals, it barred itself from introducing amendments to signed trade agreements. Otherwise, it would be simple to observe clear beneficiaries of special carve-outs.

This paper focuses on tariff staging, or phaseouts, which are less well-known provisions despite being ubiquitous in all trade agreements. Every agreement specifies thousands of product codes, their base rates, and their staging category or reduction schedule. So, while the president and their negotiators are constrained to eliminate all trade barriers, they have immense flexibility in phasing out specific tariffs over several years. I argue that these tariff phaseouts serve as targetable goods to be distributed to domestic industries. While not akin to outright protection, which rarely occurs in US FTAs, tariff phaseouts provide a temporary period for industries to adjust where tariffs are continuously declining rather than being eliminated overnight. Because industries agglomerate in specific regions, where do presidents allocate these temporary protections, and does it make a difference in Congressional ratification?

I argue that presidents allocate tariff phaseouts to buy the votes of median legislators. Since extracting concessions on tariffs brings about reciprocated costs on exporters, the president is constrained from over-allocating tariff phaseouts. To achieve an efficient trade agreement that not only maximizes ratification chances while minimizing the opportunity costs imposed on U.S. exporters, the president allocates the finite resource of adjustment time to industries in districts of legislators close to the median, and more so if they are sensitive to imports; these median legislators, in turn, should be more likely to ratify the trade agreement.

To this end, I collected original data on tariff treatment in all 14 negotiated U.S. free trade agreements from the North American Free Trade Agreement (NAFTA) to the Trans-

Pacific Partnership (TPP). I use the highly disaggregated tariff treatment data to construct a district-level phaseout coverage measure capturing the share of workers insulated by tariff phaseout. I employ the W-NOMINATE procedure to estimate legislators' trade ideology using over 1800 roll call votes to measure legislators' proximity to the median (Poole et al. 2011).

Honing in on the variation across districts within agreements using fixed effects estimations, I find that districts represented by legislators closer to the median receive modestly more phaseout coverage, on average, across 14 FTAs; the effect is stronger for individual FTAs, such as NAFTA, US-Australia, US-Morocco, US-Chile, US-Oman, and US-Bahrain FTAs. The degree to which the median legislator's district is sensitive to imports matters heavily. I find that legislators proximate to the median receive significantly more tariff phaseout coverage for their districts when they are slated to experience higher levels of import threat. Next, holding legislator and agreement characteristics constant, I find that increased phaseout coverage for median legislators' districts is associated with a modest increase in the likelihood of voting for ratification among those representing districts with low to median exposure to import threat from the trade partner.

I examine the deviant case of the US-South Korea FTA (KORUS), where the median-legislator targeting is absent. Compared to NAFTA, KORUS was negotiated primarily under a unified government that lacked such an incentive to target the median legislator. I test this assertion and find that median legislator targeting is isolated to just FTAs negotiated under divided government, placing a scope condition on my argument. Even when the last four months of KORUS negotiations were conducted under a divided government, I argue that the absence of median targeting was due to time constraints imposed by the expiring Trade Promotion Authority and the new slew of legislators with no clearly defined trade preferences, which hindered negotiators' ability to target the median. The renegotiation of KORUS in 2011 targeted phaseouts for districts expected to face heavy import competition on autos from South Korea. Among these districts, those that had maintained their representative since the 2007 negotiation received significantly more phaseout coverage for every unit increase in import threat. This result suggests that the uncertainty of new legislators' trade position leads to a weaker focus and attempt to buy their votes from trade negotiators.

This paper makes several contributions to the political economy of trade literature. Firstly, I theorize and empirically demonstrate the political incentives of the executive branch in designing trade agreements. This is in contrast with previous research, which tends to focus on the bottom-up process of trade policy making, such as examining the geographic and political concentration of industries (Busch and Reinhardt 1999, 2000, 2005;

McGillivray 2004), domestic institutions (Rogowski and Kayser 2002; McGillivray 2004; Rogowski 2002), legislators' characteristics (Fredriksson, Matschke, and Minier 2011; McGillivray 2004; Hansen and Prusa 1997; Hansen 1990). While others have examined the electoral incentives of the executive in allocating protection to swing states (Lowande, Jenkins, and Clarke 2018; Ma and McLaren 2018; Kriner and Reeves 2015), this study specifically examines the allocation of protection to promote ratification of free trade agreements in Congress. As a result, this paper is distinct in that it takes into account the inter-branch interaction underlying international negotiation. While temporary protection stands in slight contrast to the free-trading executive assumption, I argue that protection is necessary to buy support for free trade in Congress.

Second, this paper empirically tests the median voter theorem in the context of inter-branch allocation of particularistic goods from international agreements. The IR literature, especially domestic politics of international negotiation, has operated on a two-level framework since Putnam (1988). Subsequent key literature that incorporate such two-level framework would treat Congress as a unitary actor represented by median legislator to simplify theoretical analyses (Milner and Rosendorff 1997, 1996);[4] the assumption is that the executive would negotiate a trade deal that satisfy the median for congressional approval. Yet, this has not been tested. Such a question has heretofore been difficult to answer, as most treaty provisions are neither observably targetable nor divisible with clear beneficiaries. The ability to target tariff phaseouts presents a unique opportunity to examine how provisions from international treaties can be designed to favor specific legislative constituencies, thereby facilitating ratification.

Finally, while this is not the first paper on tariff phaseouts,[5] very few have theorized on their political function beyond simply responding to interest groups lobbying. Additionally, scholars rarely theorize and emphasize the roles that private sector consultation and Congress play in shaping the priorities of trade negotiations, which is central to understanding how tariff phaseouts and other provisions are distributed.

2 Background: How Free Trade Proliferates

How do countries adopt free trade policies despite inherent distributional consequences and opposition? Since the conclusion of the GATT Uruguay Round in 1994, bilateral and

[4]Treating the median legislator as a representative of Congress is a widespread practice in American Politics as well, see Moe and Howell (1999) for example.

[5]See Baccini, Dür, and Elsig (2018); Besedes, Kohl, and Lake (2020); Dong and Jestrab (2022); Khan and Khederlarian (2021); Van Lieshout (2021*a*,*c*,*b*); Kowalczyk and Davis (1998); Chase (2003); Grossman and Helpman (1995); Choi (2011); Jestrab (2024); Clark (2007).

regional *free trade agreements* (FTAs) have quickly proliferated and replaced multilateralism as the primary mode of trade liberalization (Baccini 2019). Distinct from the gradual tariff cuts of the GATT era, FTAs aim to eliminate "substantially all trade barriers," as required by the GATT Article XXIV. This means that instead of variable cuts in tariff rates across products, which has facilitated trade cooperation in the past (Goldstein and Gulotty 2014),[6] all dutiable good tariffs are bound to be duty-free. While there are a few exceptional cases in which tariffs are excluded from liberalization, exclusion is rarely used, at only 0.5% of the time. Given the recent globalization backlash in the United States, how did prior administrations commit the United States to free trade with such latent opposition?

Existing literature points to four distinct instruments that can buy the support of Congress. Table 1 summarizes the literature. First, central to the embedded liberalism hypothesis (Ruggie 1982), free trade is achieved, in part, by compensating the opposition through redistributive programs. While programs like the trade adjustment assistance (TAA) may reduce legislators' hesitancy in voting to liberalize trade as their trade-affected constituents would have income support, retraining programs, and relocation assistance, there has not been any empirical work examining this connection. Moreover, redistributive programs like TAA are eligibility-based and are highly procedural and bureaucratic, preventing legislators from claiming credit to offset potential electoral consequences of voting for trade liberalization. Additionally, new evidence from Kim (2024) suggests that the party of the President determines the speed and approval rate of TAA investigations; therefore, a commitment problem exists between the two branches of government, weakening the credibility of redistributive program delivery.

Second, while subsidies are often distinctly separate from the trade policy at hand that needs ratification, Kim, Naoi, and Sasaki (2025) argue that trade liberalization and subsidies are inextricably linked as an inter-branch compensation contract to promote trade cooperation. Indeed, subsidies would require Congressional authorization and appropriation, allowing for legislators to claim credit; however, given that subsidies are separate from the trade deal, they also suffer from commitment problems, especially when there is a change in Congressional composition.

Third, trade remedies or escape clauses have been shown, both theoretically and empirically, to promote the likelihood and depth of trade cooperation (Rosendorff and Milner 2001; Kucik and Reinhardt 2008). While escape clauses are FTA provisions, they tend not to stipulate the target of the benefits as they are eligibility-based. Allowing for trade

[6] In the context of Goldstein and Gulotty (2014)'s study, trade cooperation here means continued delegation of trade policymaking authority to Congress.

Table 1: Instrument to Promote Ratification and Mitigate Political Backlash

Instruments	**Ratification**	**Note**
Redistribution	NA	Cannot claim credit (eligibility based)
Subsidies	Kim, Naoi, and Sasaki (2025)	Inter-branch contract, require Congressional authorization and appropriation, can claim credit
Trade Remedies	Kucik and Reinhardt (2008); Rosendorff and Milner (2001)	FTA provision (untargetable), Cannot claim credit (eligibility based)
Side Payments	Evans (2004); Naoi (2015)	Intra-branch contract, targetable, can claim credit
Exclusion	This Paper	FTA provision (targetable)
Tariff Phaseout	This Paper	FTA provision (targetable)

remedies means that domestic industries can apply for safeguards, anti-dumping, and countervailing duties. However, bureaucrats who review such petitions make determinations based on the validity of these claims. Otherwise, invalid trade remedies would subject the United States to costly WTO disputes. Given the highly bureaucratic nature of receiving benefits, it is often the case that legislators cannot claim credit to offset political consequences.

Finally, side payments, or earmarks, have been used to buy legislative support for free trade policies in the United States, such as NAFTA (Evans 2004, p.148), and in Japan (Naoi 2015). However, side payments are often characterized as an *intra-branch* contract among legislators to grease the legislative machine; thereby, the executive is largely absent in the negotiation and distribution of earmarks. Because district-specific projects are highly visible, legislators can claim credit, offsetting the potential consequences of voting for trade liberalization.

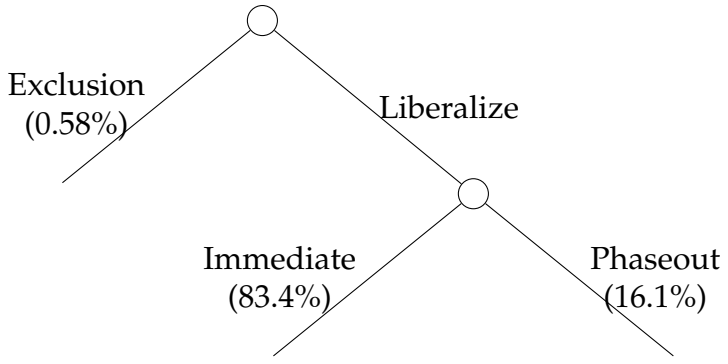
An often overlooked instrument that is ubiquitous in all FTAs is the staging of tariffs, which prescribe the means and duration of how product tariffs are being phased out. Since all tariffs are expected to be eliminated in free trade agreements, tariff phaseouts provide flexibility on the WTO rule. In rare cases, tariffs can be excluded from being reduced, which maintains the status quo, and this option is most preferable for domestic industries. What makes tariff phaseout and exclusion unique? They are highly targetable FTA provisions at the product level, allowing for inter-branch distribution of agreement benefits.

As argued in this paper, presidents strategically allocate phaseouts with the specific goal of making ratification less costly and more attractive for median legislators. While Grossman and Helpman (1995) have stipulated that exclusion and staging can help "diffuse opposition to an FTA" (p.687), they made no claim on the ability to improve ratification chances. By focusing on tariff phaseouts, this paper examines the executive's unilateral and strategic allocation of benefits to congressional members to achieve a political goal.

2.1 What Are Tariff Phaseouts?

Tariff phaseouts are situated between two polar opposites of tariff staging: immediate elimination or exclusion (i.e., the status quo). Exclusion is rare, not just because the GATT Article XXIV limits its use, but export-minded countries are wary of asking for exclusions to protect import-competing industries because reciprocated exclusions may restrict exporters' market access. Hence, if "substantially all trade barriers" must be eliminated — in which 99.5% of dutiable products are, the executive primarily has two choices in how tariffs are to be reduced. They can either eliminate it immediately upon implementing the FTA or phase it out over multiple years. The decision tree in Figure 1 outlines the choices, as well as the share of dutiable product codes and their tariff treatment across 14 FTAs.[7] Figure A1 visualizes the share of products and the tariff treatment categories they can fall under across various US FTA tariff schedules. The share of products that were phased out varies not only across different trade agreements but also across trade partners within the same agreement (see TPP [DESTA ID = 899]).

Figure 1: Free Trade Agreement Decision Tree



Trade negotiators bargain over the design of the tariff schedule as well as the rules of tariff stagings. The final agreement often contains a 500-page or longer Tariff Sched-

[7] I exclude products that were "already duty-free" or are reduced by "other" means, such as WTO commitments.

ule annex for each importing country, such as one presented in Figure A2. The schedule lists each unique tariff line, its description, base rate, and staging. The staging categories are defined in Annex 2-B of the Market Access chapter, as illustrated in Figure A3. For instance, tariffs on "olives that are pitted or stuffed" (0711.20.40) fall under the staging category "A," which indicates that these tariffs will be eliminated immediately. In contrast, tariffs on "mushrooms" (0711.59.10) are classified as category "D," meaning they will be reduced gradually in equal steps over a period of 10 years.

Negotiators are highly specific, if not strategic, about which products they ask to be phased out and for how long. This is best illustrated by Figure 2, which graphs *where* tariffs are phased out and with *what duration* across all 8-digit product codes in U.S. tariff schedules. Each line represents a product code that is phased out over (1) 1-5 years, (2) 6-10 years, or (3) over 10 years. Simply, we can ascertain that certain sectors are generally protected, such as the apparel and footwear sector (HTS Chapter 50-64), where products from those chapters are often phased out in various FTAs, with duration varying across and within trade agreements. This suggests that negotiators are stingy when it comes to using tariff phaseouts, similar to how exclusion is often a non-starter for negotiators (TN02-01), and strategic in the products they pick to receive tariff phaseouts.

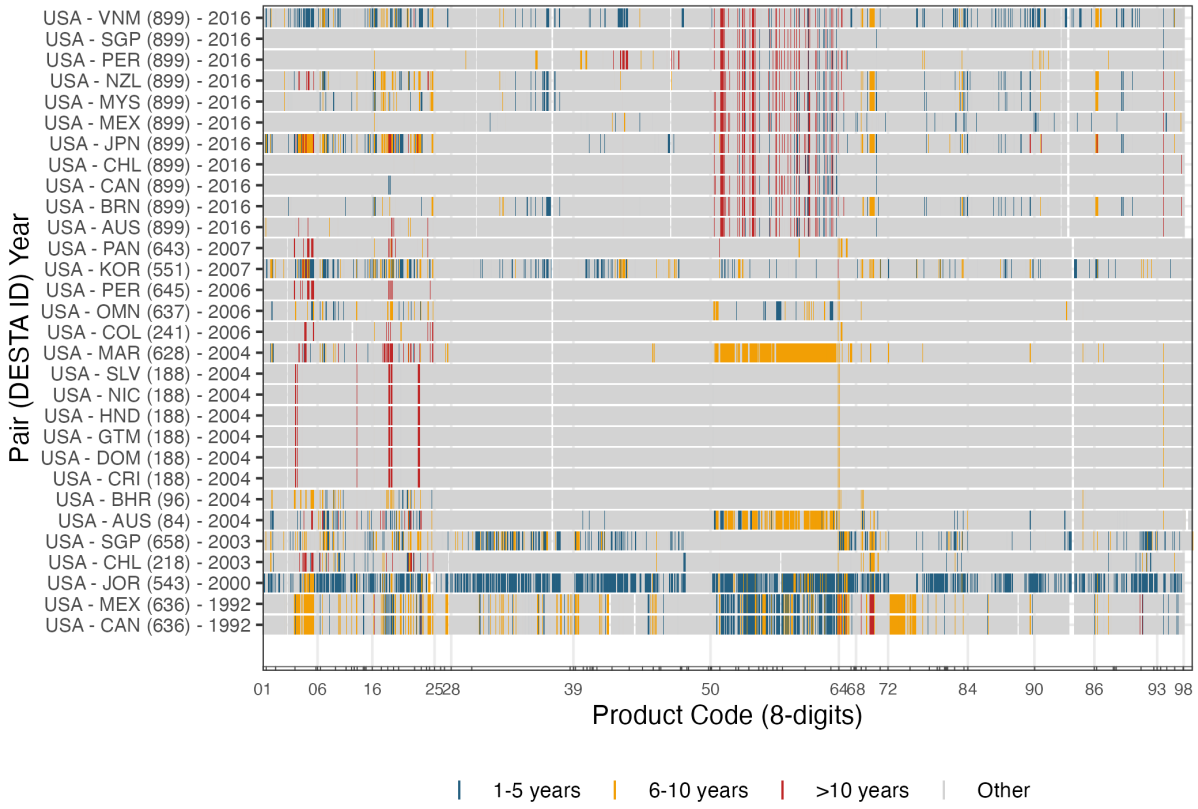
[Figure 2 about here]

2.2 Why Do Tariff Phaseouts Matter?

Tariff phaseouts serve as the best policy alternative to excluding products from liberalization. Negotiators typically avoid exclusions, as they can lead to reciprocal exclusions that might negatively impact exporters, limiting the scope and depth of trade cooperation. Additionally, exclusions can encourage other industry groups to seek their own exemptions, complicating the negotiation process. As one former trade negotiator noted, the guiding "principle [in negotiation] was no exclusion" because "the things that our partners wanted to exclude were things that mattered to us" (TN02-01).

Industry groups and labor unions recognize that exclusions are non-starters, leading them to request tariff phaseouts. In an interview, a former trade negotiator (TN02-01) said that "people who are more sophisticated, who have been through the process a number of times, will say things like, 'we would like to be excluded. But if that's not possible, we would want the longest staging available.'" While some industries require time to adjust to foreign competition, others view tariff phaseouts as an instrument to aid in their slow death (TN02-01). Interestingly, while unions are usually anti-trade, the United Auto Workers cited tariff phaseouts as one of the reasons for its endorsement of the KORUS

Figure 2: Distribution of Tariff Phaseout Duration from USA FTAs Across 8-digit Product Codes



Note: Each line represents one product code, and product codes that were already duty-free or treated with immediate elimination or exemption are grouped as "Other" to improve visibility. Each line on the x-axis demarcates a 2-digit chapter. Important 2-digit chapters are displayed. Refer to the USITC on the title of HS chapters. Created by Author 5/27/24.

agreement (See Figure A6). The demand for tariff phaseouts by both unions and industries indicates that, although U.S. tariffs are generally low (Ethier 1998), full elimination, especially if immediate, would significantly harm domestic industries.

Even though tariffs are set to be eliminated, the process of gradually phasing them out acts as a temporary form of protection. Hence, phasing out tariffs offers two key benefits to domestic producers. First, imported products will still enter the market with some existing tariffs, which helps maintain the competitiveness of domestic producers. However, as tariffs are reduced year by year, there may come a point when imported goods become more competitive than domestically produced goods. Therefore, producers generally prefer a longer phase-out period that allows tariffs to remain at their initial rates for several years before declining (refer to Figure A5 for a comparison between linear and

backloaded phaseout models).

While imports may start entering the U.S. market earlier in the phased reduction process (Besedes, Kohl, and Lake 2020; Dong and Jestrab 2022), this does not automatically mean that domestic producers lose their competitiveness right away. The established branding and reputation of domestic companies can help prevent consumers from quickly switching to foreign brands in the initial stages. Phasing in pressure from import competition may help motivate and provide breathing room for firms to adjust. Indeed, economists have argued that phasing out tariffs can facilitate adjustments within industries and assist in reallocating resources (Lehr and Restrepo 2023; Riker 2021; Mussa 1984; Leamer 1980).[8]

Second, maintaining some level of tariffs during the early phase-out period can reduce the immediate incentives for firms to offshore jobs to trade partners. Companies are likely to offshore only when the cost of producing goods abroad is lower than the cost of producing them domestically. Factors such as labor and transportation costs, along with tariffs, influence this cost assessment. Therefore, if tariffs take longer to decrease to a level that makes offshoring more profitable compared to domestic production, firms will likely delay their decision to move jobs overseas.

Tariff phaseouts are also important because they provide the executive and negotiators with immense flexibility in designing an FTA that builds a majority coalition in the legislature. Congressional members' vote on trade is responsive not only to the material interests of their constituency (Dür, Huber, and Stiller 2024; Conconi, Facchini, and Zanardi 2012; Choi 2015) but also from campaign donations from industry and labor groups (Baldwin and Magee 2000; Choi 2015).[9] As mandated by the requirements to qualify for the fast track procedure,[10] negotiators are in constant consultation with stakeholders and Congress; hence, preferences of private sector permeates into the negotiation process not only *directly* through varied consultation venues but also *indirectly* through Congress.[11] As theorized in the next section, while firms and industries may lobby for

[8]While Lehr and Restrepo (2023) did not directly address tariff phaseouts, their discussion of gradualism is relevant to this topic.

[9]One must also acknowledge the large role firms play in lobbying on trade policies (Kim 2017; Blanga-Gubbay, Conconi, and Parenti 2023; Zhang 2025; Osgood 2021). While firms tend to lobby more for free trade, as predicted by the New New Trade Theory, it is difficult to estimate the average effect lobbying has on vote patterns due to counter-lobbying and other unobserved factors (Bombardini and Trebbi 2020).

[10]The fast track procedures allows for any trade agreement negotiated under the trade promotion authority to be voted on by both chambers of Congress with just a simple majority to pass rather than a two-third majority in the Senate like any other treaties.

[11]See Bowen and Broz (2022) for a review of the three-tiered consultation system; however, the most significant is the Advisory Committee for Trade Policy and Negotiation and the Federal Register.

more tariff phaseouts, negotiators must balance the interests of exporters and the import-competing sector while maximizing the likelihood for ratification. Hence, negotiators prioritize phasing out tariffs that are important to legislators who are pivotal to ratification. Given that industries tend to agglomerate in specific regions (Krugman 1979), tariff phaseouts can confer clear benefits to specific Congressional districts. The next section develops the logic for how trade agreements' tariff schedules can be designed to facilitate ratification in Congress.

3 Theory

3.1 Premises

The theory is predicated on well-established assumptions and facts from the United States' trade policymaking process, as well as international trade negotiation dynamics. First, I assume that concessions are reciprocal in value; this is a fair assumption as reciprocity has been the cornerstone of international cooperation literature (Keohane 1986; Gilligan 1997; Axelrod 1984; Oye 1985), and has been documented in early GATT negotiation rounds (Bagwell, Staiger, and Yurukoglu 2020).

Second, I assume legislators are office-seeking; as a result, they are responsive to consumers, industry, and labor groups in their districts. In other words, their net utility from an FTA is aggregated by the expected payoffs from their constituents, who are assumed to hold their representatives accountable. Of course, the extent to which particular constituent interests constrain legislators' votes is subject to varying institutional features that may amplify certain voices over others, such as campaign contribution laws and industrial policies, like right-to-work laws, that systematically weaken labor voices. This assumption has broad empirical support, such as Stiller (2023); Choi (2015); Dür, Huber, and Stiller (2024).

Third, I assume that the president is assumed to be both policy- and office-seeking. While a universalist president prefer free(r) trade to increase the general welfare of his national constituents (Nzelibe 2006), some may use trade policies to boost their electoral prospects (Mansfield, Milner, and Rosendorff 2002; Rogowski and Kayser 2002). As a result, the president prefers to enact free trade policies. Since trade policies require Congressional ratification, the president would find that short-term protectionism (in the form of tariff phaseouts) is an acceptable tradeoff to promote long-term free trade.

Fourth, trade negotiators are assumed to be perfectly delegated agents of the president. Given the president's motivations, negotiators are given leeway and flexibility to

design trade agreements that achieve the president's objectives — i.e., ratification. As a result, negotiators consult with stakeholders and Congress to identify sensitive products, industries, or issue areas to prioritize in bargaining.

Finally, negotiators bargain under the shadow of Congress. While trade policymaking authority has been delegated to the executive since the Reciprocal Trade Agreement Act (RTAA), Congress has kept a tight leash on trade negotiators not only by having the final say in implementing the treaty but also through consultation and notification requirements for the agreements to be ratified with a simple majority in both chambers. These requirements are part of the Fast Track Procedure, codified in the Trade Act of 1974. As a result, to achieve the executive's objective of having a trade agreement ratified, negotiators must design the trade agreement in ways to build a majority coalition in Congress. To do so, I also assume that negotiators have priors about each legislator's position on trade based on their views and reservations, as expressed verbally (TN02-02) or through prior roll-call votes (TN01-01). From elite interviews, trade negotiators are most responsive to Ways and Means and Finance committee chairpersons, Congressional whips, or senior legislators with political influence (TN01-02, TN02-02). One may assume that the preferences of rank-and-file legislators are filtered through these channels.

3.2 The Logic of the Median

Consider a three-person legislature with a uniform distribution of preferences on trade that range from pro- to anti-trade, where the median legislator is unsure or is on the fence. These preferences are endogenous to a variety of factors; however, for simplicity, let us assume that these legislators would somehow derive net-positive, net-zero, and net-negative utility from implementing a free trade agreement, which ultimately shapes their preferences on trade.[12]

Let us also assume that legislators with a net-positive gain from a trade agreement will vote to ratify the treaty, while those with a net-negative gain will vote "no." The median and anti-trade legislators can be persuaded to vote "yes" if the trade agreement is structured to raise their net-negative outcome to at least a net-zero plus one. Achieving this requires trade negotiators to secure concessions that protect key industries in both districts, with more significant concessions needed to sway the anti-trade legislator.

These concessions must be reciprocal in value, meaning that the trade partner also has

[12]For instance, Conconi, Facchini, and Zanardi (2012) demonstrated that the export orientation of a district explains legislative votes to authorize fast-track authority, which delegates trade-making power to the president. This aligns with the second assumption that explicitly states that legislators are responsive to their constituents.

to extract concessions in trade protection, which may adversely affect exporters of the home country. The costs of these reciprocal concessions can either be spread across all legislators or fall primarily on the pro-trade legislator. If the costs are evenly distributed, trade cooperation is unlikely since all legislators' utilities would decrease linearly. However, if the cost falls mainly on the pro-trade legislator, it is still possible for the median or anti-trade legislator to be convinced to support ratification, provided that the pro-trade legislator's final utility remains net-positive.

Figure 3 illustrates this theoretical setup, alongside two possible deals, colored in red and blue. The first trade deal, in red, outlines the net utility from the baseline for each legislator if negotiators were to prioritize the anti-trade and median legislators. By providing protection to raise the utility of both legislators from a net-loss to a net-gain, the pro-trade legislator's net utility collapses. Now, a trade agreement that would have brought net gains to exporters, and hence the pro-trade legislator, is now bringing a net loss. This trade agreement would not necessarily improve the general welfare, as it is riddled with protection, nor does it increase exporters' market access. The president would not gain much in their utility function as a policy and office-seeking actor; furthermore, given that the president and his negotiators get to set the agenda on how a trade agreement is negotiated before being brought to a vote in Congress, it is unlikely that they would design such a trade deal to begin with.

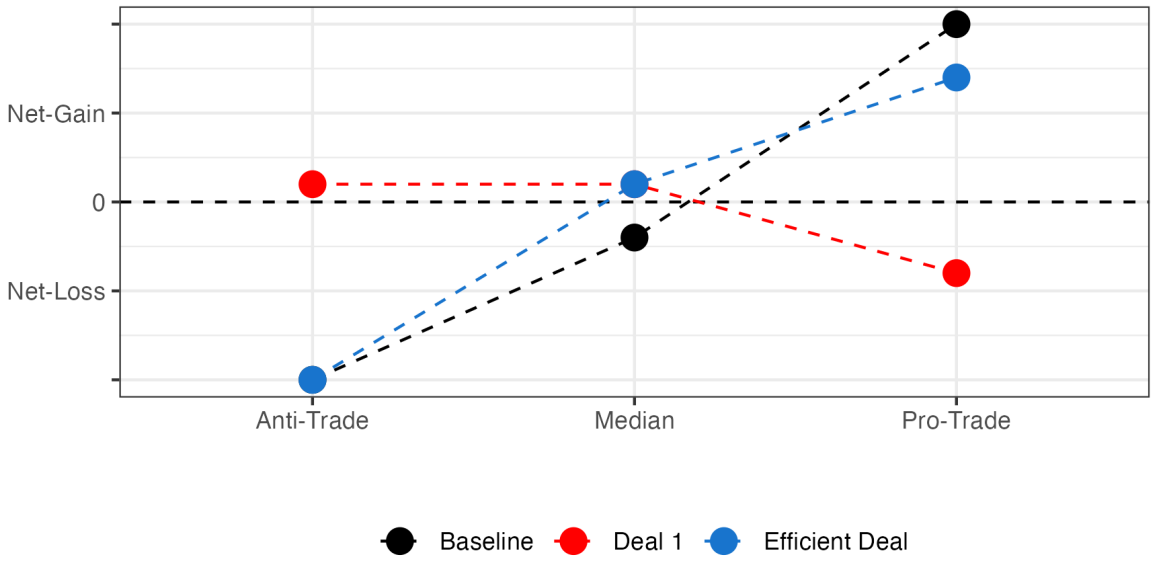
[Figure 3 about here]

Alternatively, negotiators can design a more efficient trade agreement that not only facilitates ratification but also maximizes welfare gains to consumers and exporters by targeting protection to the median legislator. The median legislator would require much less to be persuaded to vote "yes." As a result, less protection is needed, leading to higher utility for consumers and the president, and less reciprocated costs would fall on exporters. Here, a simple majority is reached with much fewer costs placed on stakeholders.

As discussed earlier, the president and negotiators prefer not to protect industries with exclusion because exporters would not have freer access to the trade partner's market. Therefore, protection in this case refer to tariff phaseouts, which mimics the effect of exclusion, but does not impose realized opportunity costs on exporters; instead, tariff phaseouts, and its reciprocant, imposes diminishing opportunity costs, which exporters can tolerate if the two alternatives is no trade agreement (status quo) or trade agreement with protection that does not improve their access to foreign markets. This yields two hypotheses on allocation and ratification.

Hypothesis 1 (H1): *Allocation:* The closer legislators are to the median, the

Figure 3: Theory Visualization



Note: The cost function is assumed to be disproportionately borned by exporters, hence the sum of value extracted for either anti-trade or median legislator is reciprocated onto the pro-trade legislator. Created by Author 9/4/24.

more their constituent industries would receive tariff phaseouts in free trade agreements.

Hypothesis 2 (H2): *Ratification:* Median legislators whose constituent industries received more tariff phaseouts are more likely to vote to ratify the free trade agreement.

3.3 The Role of Import Sensitivity

The political incentive to target the median legislator does not necessarily preclude the obvious need to protect vulnerable industries. Political backlash from trade liberalization serves as the primary reason for why redistribution, subsidies, and trade remedies are institutionalized to begin with. While prior literature explains variation in tariffs and non-tariff measures through lobbying (Grossman and Helpman 1994; Baldwin and Magee 2000), geographic and political concentration (Busch and Reinhardt 1999, 2000, 2005; McGillivray 2004), domestic institutions (Rogowski and Kayser 2002; McGillivray 2004; Rogowski 2002), and legislators' characteristics (Fredriksson, Matschke, and Minier 2011; McGillivray 2004; Hansen and Prusa 1997; Hansen 1990), these literature operated on the reality that liberalizing trade meant giving every GATT or WTO members most-

favored-nation (MFN) or normal trade relations (NTR) rates; therefore, trade liberalization puts uncompetitive industries at risk of import exposure from the rest of the world. However, in the context of FTAs where trade barriers are eliminated for specific trade partners with rules of origin preventing transhipment from excluded states (Zeng and Li 2021; Kim and Zhang 2024; Laaker 2024), industries' vulnerability to import varies by FTA trade partners.

Industries that are more vulnerable to imports from a trade partner would oppose the loudest. Given that industries' preferences are communicated to USTR directly and indirectly through Congress, such lobbying before and during negotiation, especially if industries have sufficient leverage over legislative ratification votes, is highly likely to be heeded by negotiators. Additionally, if legislators' districts are more exposed to imports from a trade partner, they are more likely to demand more and longer tariff phaseouts (if exclusion is not granted). Such demand, despite it being reciprocated in diminishing opportunity costs for exporters, would be fulfilled by negotiators to build a majority coalition in Congress. Hence, the following two hypotheses predict both an independent and amplification effect of import sensitivity.

> **Hypothesis 3 (H3):** *Independent:* The more the legislators' districts are more import sensitive to the trade partner, the more their constituent industries would receive tariff phaseouts in free trade agreements.

> **Hypothesis 4 (H4):** *Amplification:* The more import-sensitive the district and the closer the legislator is to the median, the more their constituent industries would receive tariff phaseouts in free trade agreements.

4 Data and Research Design

4.1 Phaseout Coverage

To test my theory of the allocation and consequences of tariff phaseouts, I collected original data on U.S. tariff treatment for all free trade agreements from NAFTA to TPP. The PTARIFF database contains information on the treatment of each tariff line code at the eight digits U.S. harmonized tariff system (HTS) level.[13]

The data collection process is as follows: First, I collect PDF tariff schedules from the U.S. Trade Representative website. These tariff schedules primarily consist of tables with

[13]PTARIFF is a broader data project in collaboration with Elisabeth Van Lieshout, who is a Stanford Political Science Ph.D. and currently a trade policy analyst at the OECD, that slated to code dyadic tariff treatment for over 120 bilateral trade agreements.

over 8000 unique tariff lines (rows), the description of the Harmonized Tariff Schedule (HTS) codes, their base rates, and their unique staging category (See A2 for an example).[14] Second, I extract the tables from the PDF using Tabula, a Python software that "liberates data tables trapped inside PDF files."[15] Third, I manually code each unique staging category by hand, referring to the FTA main text to make a determination on whether the item with the category is (1) reduced, (2) eliminated, and if so, whether it is (3) immediately eliminated. Next, I code the (4) duration of the phaseout in years, (5) means of reduction (whether it is linear or back-loaded).[16] If the category backloads the phaseout, meaning there is a momentary pause prior to reduction, I also code (6) the duration of the initial pause. Figure A3 provides an example of the language on staging categories that is common between the USA and Australia, and Figure A4 is an example of a head note staging categories specific to the United States. Fourth, I merge the schedule table with the coded categories.

While the data provide extremely rich information on each product's tariff treatment, I will be using a binary measure on whether a dutiable product tariff is phased out for the purpose of this paper. Given that the unit of analysis is at the district level, the simplest and most interpretable approach to using this data is by calculating the coverage of tariff phaseout among the workforce of a district. Mathematically, it looks like:

$$PhaseoutCoverage_{dj} = \sum_{k=1}^{K \in d} \left(\frac{E_{dkt}}{E_{dt}} \times \left(\frac{\sum_{p=1}^{P \in k} PO_{pj}}{P \in k} \right) \right) \tag{1}$$

where PO_{pj} is a binary measure of whether product p is phased out (1) or not (0) in agreement j. This is summed up among other *dutiable product codes* within the industry $\sum_{p=1}^{P \in k}$, which excludes products that were already duty-free prior to the agreement to provide an accurate proportion of the products that are protected — however temporary — prior to taking the share with the total number of dutiable products P within industry k.[17] With the share of products within industry k that is phased out, I take the product with industry employment share $\frac{E_{dkt}}{E_{dt}}$ in district d, where E_{dt} is the total employed workers in district d at time t. Employment numbers are averaged over 5 years prior to the

[14]The author thanks Besedes, Kohl, and Lake (2020) for providing digitized NAFTA tariff data from their replication package. The original NAFTA tariff schedule was scanned and was not fitted for optical character recognition (OCR). The author manually coded approximately 1100 products with more than one tariff treatment, which were previously not coded by Besedes, Kohl, and Lake (2020).

[15]Click here for more information on Tabula.

[16]Figure A5 illustrates the difference between tariff phaseouts that are "linear" and "backloaded."

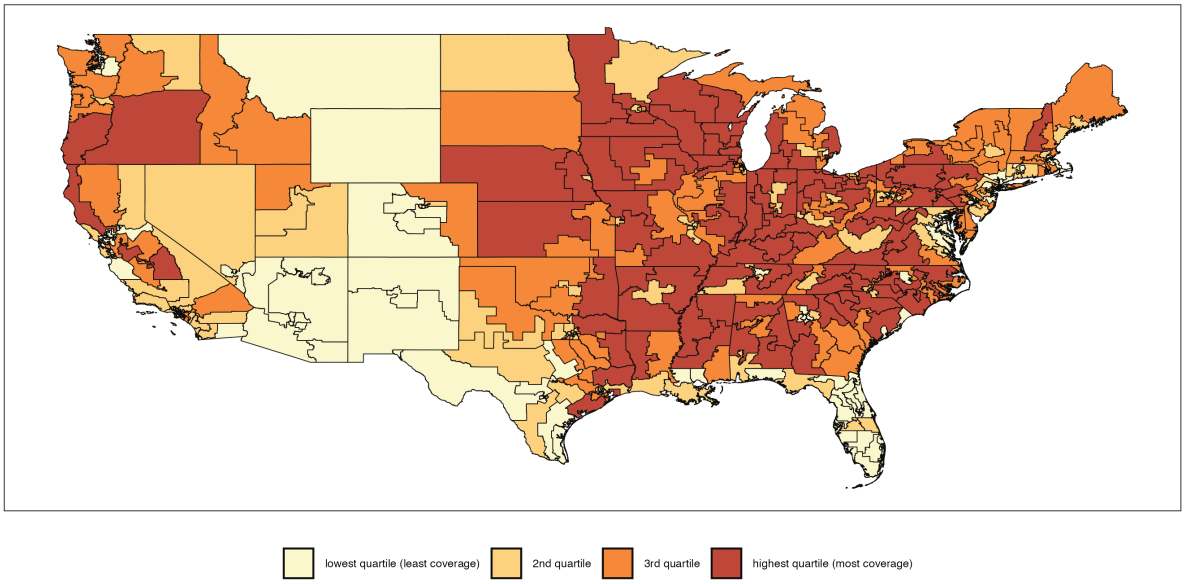
[17]I concord different HS revisions across agreements to HS rev. 2002, linking it with industry-level variables at NAICS rev. 2012. I used Liao et al.'s 2020 `Concordance` package to translate 6-digit HS codes (2002 revision) to 6-digit NAICS (2012 revision).

agreement's signature date.[18]

Individually, the product of the two terms should give an estimate of the proportion of industry k workers as a share of the total employed workforce in district d that is "covered" by tariff phaseouts. Finally, I take the sum across all industries within district d to arrive at the share of district d's workforce that is covered by tariff phaseouts. Figure 4 shows the phaseout coverage from 2011 version of KORUS, grouped into quartiles.

[Figure 4 about here]

Figure 4: Map of KORUS (2011 version) Phaseout Coverage Overlaid on 112nd Congressional Districts Boundaries



Note: Phaseout coverage is grouped into quartiles. Congressional District boundaries are drawn from Lewis et al. (2013). Created by Author 9/4/25.

4.2 Trade Ideal Points

The main explanatory variable to test the four hypotheses is the degree to which a legislator is the median legislator on trade. First order of business, however, is creating a trade ideal point estimate to calculate both the median ideal point and the inverse distance of each legislator to the median. To do so, I use the W-NOMINATE procedure from the `wnominate` R package to scale 1863 trade-related roll call votes (1900-2013) extracted

[18]Industry employment data is from Eckert et al.'s 2020 version of the County Business Pattern data, where they harmonized industry codes to the 2012 revision of the NAICS. I used the Missouri Census Data Center's county-district crosswalk files to map employment from the county to the district level.

from the VoteView database (Poole et al. 2011; Lewis et al. 2023).[19] I exclude FTA ratification roll call votes to limit any endogeneity.

To generate the ideal points of legislators, the algorithm requires a reference legislator, to whom I used Senator Bernie Sanders as a protectionist reference. Bernie Sanders has been historically critical of U.S. trade liberalization efforts. Not only did he oppose granting China permanent normal trade relations in 2000, but he also opposed the North American Free Trade Agreement (NAFTA) and, more recently, the USMCA.[20] While the selection of Senator Sanders as a reference legislator may look arbitrary, I arrived at this conclusion by categorizing all trade roll call votes on whether an affirmative vote was pro-trade or not, and calculating which legislator historically voted in favor of or against trade.

The algorithm generates *Trade Ideology* score for each legislator with a sufficient voting record, where the most protectionist legislator receives an ideal point of 1, while the most free-trading legislator receives -1. Figure 5 plots the *Trade Ideology* and *DW-NOMINATE* from the 101st to the 114th Congress. *Trade Ideology* ranges from pro-trade to anti-trade. On the other hand, *DW-NOMINATE* ranges from liberal to conservative. The histogram is colored by the legislator's party affiliation.

[Figure 5 about here]

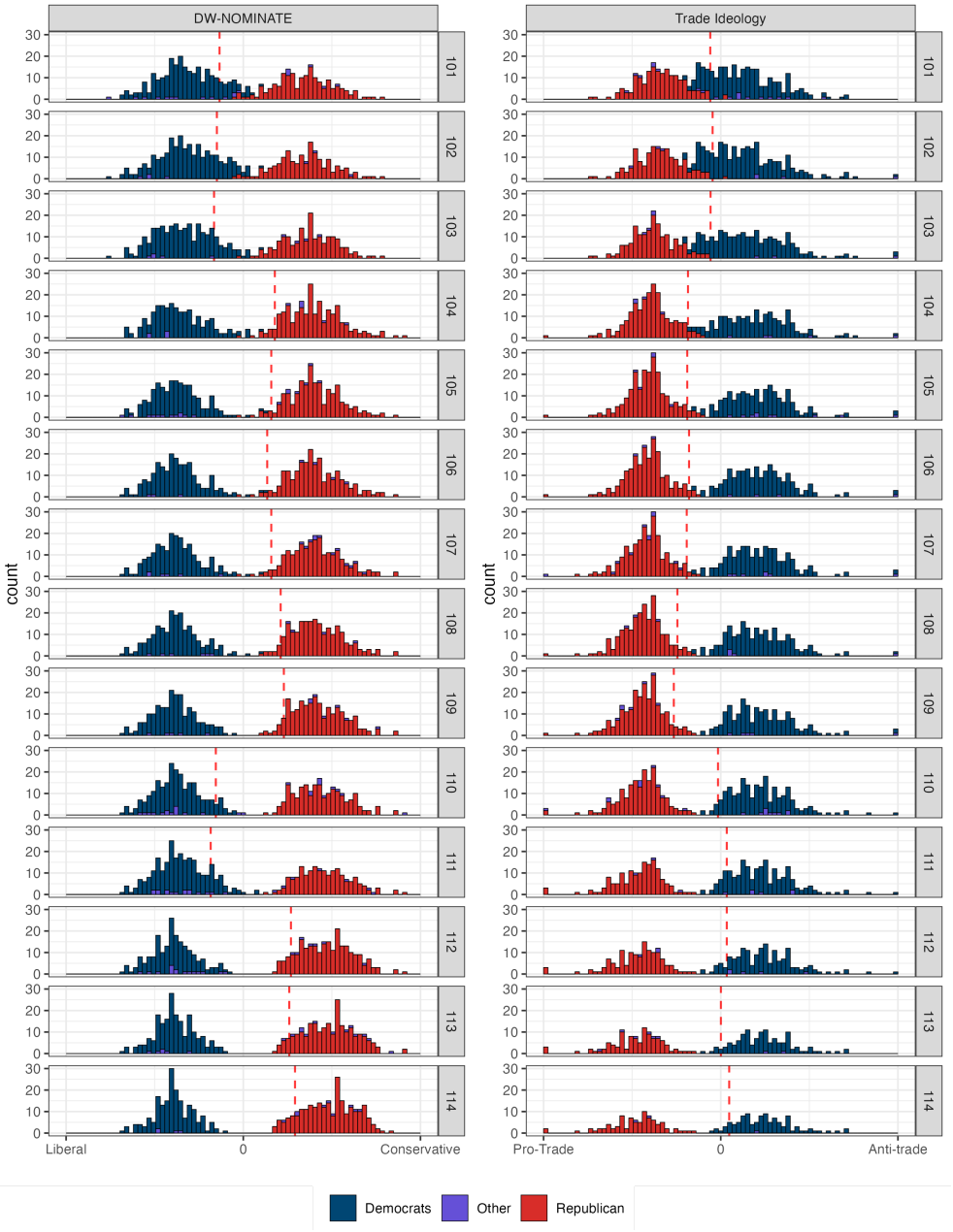
There are four immediate observations. First, party affiliation explains the bimodality of both scores. Democrats are more liberal and protectionist, while Republicans are more conservative and free-trading. Second, polarization occurs for both scores across time.

Finally, while there seems to be a strong correlation between the two measures, I demonstrate in Table A2 that the inverse distance to the median on the DW-NOMINATE scale is a much weaker predictor of *Phaseout Coverage*, although the main relationship is still statistically significant. This suggests that the use of a separate *Trade Ideology* score provides real value in more precise estimation. Moreover, because DW-NOMINATE score is estimated for all legislators, the robustness check with the score provides some assurance that the median legislator targeting is not a result of some missing data on *Trade Ideology*, which results from a lack of trade roll call votes for the W-NOMINATE algorithm to scale.

[19] VoteView ended the coding of roll call votes by issue areas in October 2013, and the roll call vote data has not been updated since the 115th Congress.

[20] Source. Last accessed 1/30/25.

Figure 5: Distribution of DW-NOMINATE and Trade Ideology Across Time



Note: Red dashed lines indicate the ideal point score of the median legislator for each Congress. Created by Author 5/18/25.

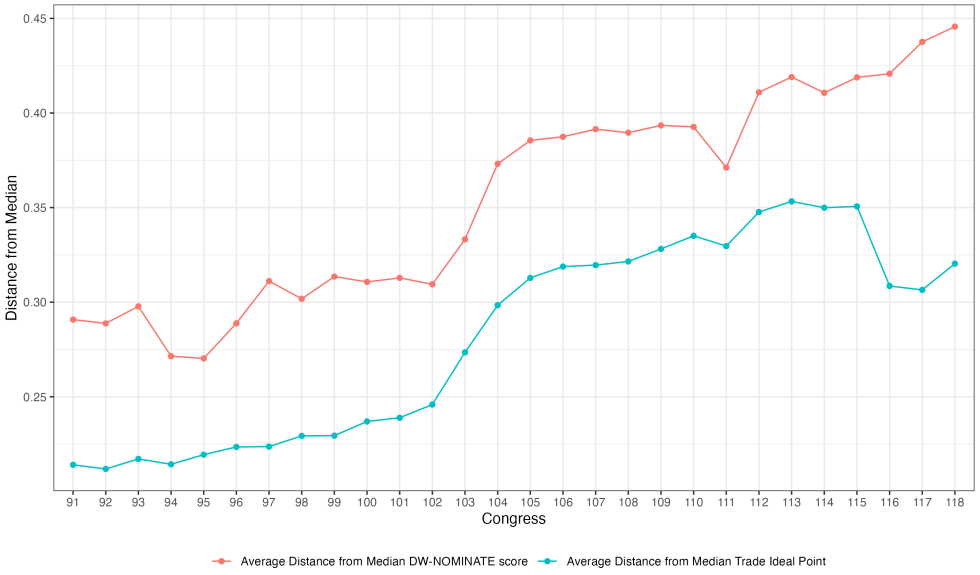
4.2.1 Proximity to the Median

Using the *Trade Ideology* score, I measure the inverse ideological distance from the median — calculated for each congress — to capture the degree to which a legislator is the median. *Proximity to Median* ranges from 0, indicating a legislator is furthest away from the

median, to 1, in which the legislator is the median. Figure 6 graphs the average distance from the median for both *DW-NOMINATE* and *Trade Ideology* scores. *DW-NOMINATE* presents a greater distance from the median across all Congresses compared to *Trade Ideology*. The distance between the scores increases over time, signaling polarization.

[Figure 6 about here]

Figure 6: Average Distance from the Median Across Time



Note: Created by Author 5/18/25.

4.3 Import Threat

Each FTA trade partner poses a different degree of threat to specific industries, and such threat is more painful to districts housing various import-competitive industries. Contrary to traditional import penetration measure, which uses pre-existing aggregated import data, I argue that such measures may be biased or attenuated toward zero due to existing tariffs that may bar certain imports from entering. A clear example is the 25% tariff on light trucks that the U.S. imposes on the rest of the world, which is so astronomically high that firms abroad have little reason to produce light trucks to be exported into the U.S. Instead, I propose that a partner poses more of an import threat when they can fulfill the changes in import demand when tariffs are eliminated.

Equation 2 outlines how *Import Threat* is constructed as a function of demand change when the tariff for product p at time t is eliminated in country i, i.e., the U.S., $(1 - (1 + BaseRate_{ipt})^{-\sigma_{ip}})$ and the FTA partner's j total export value of product p to the rest of

the world $Export_{jip\tau,i\neq USA}$. I specify the partner's export number to exclude their export into the United States to avoid any endogeneity because of the existing barriers that disincentivize trade. Here, τ specifies that the export numbers are rolling averages of three years prior to the agreement's signing. Export data is aggregated to the 4-digit level to minimize missing data at the 6-digit level from 16% to 5%.

$$ImportThreat_{jpt} = log(Export_{jip\tau,i\neq USA} \times (1 - (1 + BaseRate_{ipt})^{-\sigma_{ip}})) \tag{2}$$

The demand change is characterized as the inverse of the demand level when prices are higher due to tariffs. First, $(1 + BaseRate_{ipt})$ specifies the percentage change in price for imports when there are tariffs. For example, a 25% tariff on light trucks would increase the price of said goods by 1.25 times. σ_{ip} is the import demand elasticity. Put together $(1 + BaseRate_{ipt})^{-\sigma_{ip}}$ computes the demand level when there's a tariff in place; hence, with high import demand elasticity, a large price change (i.e., reduction in price when tariffs are eliminated) would lead to a greater changes in demand levels.

For example, the demand for imported light trucks with a 25% tariff would be 41% with an elasticity of 4 (high) versus 80% with an elasticity of 1 (low), compared to the baseline of 100% when there's no tariff.[21] If demand for light trucks is highly elastic, the elimination of tariffs would increase demand by 59%, as captured by the difference with 1, or 100%.

MFN base rates are taken from UNCTAD, and data on import demand elasticity is from Broda and Weinstein (2006), accessed from Liao et al. (2020)'s `concordance` package. Because the 6-digit estimates of import demand elasticity have extreme outliers, I take the median value of 6-digit HS products and aggregate it to the 2-digit HS.

I then aggregate the product-level *Import Threat* measure to the district level using the aggregation outlined in Equation 1 by replacing the phaseout component with *Import Threat*.

4.4 Controls

4.4.1 District-Level Controls

The first set of controls focuses on district characteristics, such as congressional electoral competitiveness, unemployment rate, and the export activity of the district.

[21] In which case, regardless of elasticity, the resulting demand level would be 100%. For example $1^{-4} = 1^{-1}$.

First, *District Election Competitiveness* measures the inverse vote share distance of the *top two congressional candidates* to 50%, averaged over three previous congressional elections. Data on congressional election returns is from the MIT Election Data and Science Lab (2017*a*). A higher value indicates that the district is more competitive, i.e., the average vote share is closer to 50%

Second, *Unemployment rate* is the share of a district's labor force that is unemployed. I took employment data from the Bureau of Labor Statistics' Labor Force Data. I used the Missouri Census Data Center's county-district crosswalk files to map employment from the county to the district level.

Third, I measure the degree to which a district's industries are net exporters. To do so, I first calculate the total export and import for each industry using UNComTrade data. Next, I take the difference between logged exports and logged imports. Then, I aggregate it up to the district level, using the same formula as *Phaseout Coverage*.

4.4.2 Legislator-Level Controls

The second set of controls focuses on legislators' characteristics. First, *Corp PAC (ln)* is the logged corporate PAC donation to the winning candidate in office, averaged over three previous cycles, wherever applicable. Contribution data is from Database on Ideology, Money in Politics, and Elections (DIME) (Bonica 2023). Second, *House Ways & Means* is an indicator for representatives who sit on the Ways and Means committee. Committee data is from Stewart III and Woon (2024). Additionally, I hand-coded the committee membership of legislators for the 102nd Congress (for NAFTA).

4.4.3 State-Level Controls

The final set of controls focuses on state-level characteristics. First, *Presidential Election Competitiveness* measures the inverse average *two-party* vote share distance to 50% over three previous presidential elections. Presidential election data is taken from the MIT Election Data And Science Lab (2017*b*). Second, I control for *Electoral College Vote* count the state has. Finally, *Union Membership Rate* is the share of workers who are union members; union membership data is from Unionstats (Hirsch, MacPherson, and Even 2024).

Table 2 provides the summary statistics of all variables discussed so far. Figure A9 provides a simple correlation matrix heatmap, displaying the correlation among the covariates.

Table 2: Summary Statistics

Statistic	N	Mean	St. Dev.	Min	Max
Phaseout Coverage	6,521	0.018	0.027	0.00002	0.253
Exclusion Coverage	6,521	0.0002	0.001	0.000	0.010
District's Exposure to Import Threat	6,521	1.782	1.175	0.105	10.216
Trade Ideology	6,117	−0.014	0.219	−0.496	1.000
Proximity to Median (Trade)	6,117	0.807	0.122	−0.101	1.000
DW-NOMINATE	6,523	0.038	0.423	−0.766	0.913
Proximity to Median (DW-NOMINATE)	6,523	0.612	0.236	−0.018	1.000
Unemployment Rate	6,343	0.056	0.018	0.016	0.190
Net Export	6,521	−0.041	0.050	−0.440	0.516
Corp PAC (ln)	6,450	12.151	1.149	0.000	15.936
House Ways and Means	6,733	0.090	0.287	0	1
Pres. Election Competitiveness	6,943	0.441	0.041	0.265	0.499
District Election Competitiveness	6,868	0.296	0.108	0.000	0.500
Electoral college Vote	6,943	20.827	14.903	3	55
Union Membership	6,943	0.128	0.063	0.016	0.287

5 Allocation of Tariff Phaseouts

I estimate a simple OLS model with trade agreement fixed effect δ_j to hone in on the within-agreement differences across legislators' inverse ideal point distance from the median and their correlation with *Phaseout Coverage*. The standard errors are corrected for heteroskedasticity and clustered at the district level. Equation 3 specifies the model for hypotheses 1 and 3, testing the independent effects of both distance to the median and import threat. Equation 4 tests the interaction between distance to the median and import threat.

$$\begin{aligned} PhaseoutCoverage_{djc} = \delta_j + \beta_1 ProximityMedian_{idc} + \beta_2 ImportThreat_{dj} + \\ \beta_3 \mathbf{X}_{dc} + \beta_4 \mathbf{X}_{ic} + \beta_5 \mathbf{X}_{sc} + \varepsilon \end{aligned} \tag{3}$$

$$\begin{aligned} PhaseoutCoverage_{djc} = \delta_j + \beta_1 ProximityMedian_{idc} + \beta_2 ImportThreat_{dj} + \\ \beta_3 (ProximityMedian_{idc} \times ImportThreat_{dj}) + \\ \beta_4 \mathbf{X}_{dc} + \beta_5 \mathbf{X}_{ic} + \beta_6 \mathbf{X}_{sc} + \varepsilon \end{aligned} \tag{4}$$

$PhaseoutCoverage_{djc}$ is the proportion of workers in district d that is covered by tariff phaseout in agreement j negotiated in congress c. $ProximityMedian_{idc}$ is legislator i in district d's inverse distance to the median legislator in Congressional session c. $ImportThreat_{dj}$ is a measure district d's sensitivity to imports from partner j. $\mathbf{X}_{dc}$ denotes the district characteristics controls, $\mathbf{X}_{ic}$ — legislator characteristics, $\mathbf{X}_{sc}$ — state characteristics; all of which vary across congress, or time, denoted by c.

Table 3 presents five models. All variables are standardized to ease interpretation. Model 1 is a simple bivariate regression between legislators' proximity to the median on trade ideology and *Phaseout Coverage*. This establishes a simple empirical relationship on the degree to which a median legislator district's workforce is temporarily insulated from import competition. Model 2 adds in all of the controls, including *Trade Ideology* to account for directionality (since the score ranges from pro-trade (-1) to anti-trade (1)) and *District's Exposure to Import Threat*. Here, *Proximity to Median* on trade issues remains significant at the 99% confidence level, although the magnitude is reduced. This result supports the *Allocation* hypothesis [H1]. *District's Exposure to Import Threat* is significant at 99% confidence level, where a one standard deviation increase in import sensitivity of the district is associated with a 0.476 standard deviation increase in phaseout coverage. This result supports the *Independent* effects of the import sensitivity hypothesis [H3].

Compared to *Import Threat*, *Proximity to Median* is relatively weak in magnitude, suggesting that import sensitivity plays a larger role in the allocation of tariff phaseouts. When the two terms are interacted together in Model 3, legislators closer to the median with more import-sensitive districts receive significantly more tariff phaseouts than those with less import-sensitive constituent industries, supporting the *Amplification* Hypothesis [H4].

This relationship is made more apparent with a marginal effects plot. Figure 7 plots the marginal effects of *Proximity to Median* on *Phaseout Coverage* conditional on *District's Exposure to Import Threat* using both binning and kernel methods introduced in Hainmueller, Mummolo, and Xu (2019). Median legislators receive statistically significantly more *Phaseout Coverage* when their districts experience a "typical" high import threat value. The conventional linear marginal effect plot suggests that starting at the average value in *Import Threat*, i.e., at zero since the variable is standardized, median legislators receive significantly longer phaseout.

The kernel estimator, which estimates a "series of local effects with a kernel reweighting scheme" (Hainmueller, Mummolo, and Xu 2019, p.173), allows for nonlinear marginal effects. The resulting graph provides estimates that are close to the true multiplicative in-

Table 3: Legislators' Proximity to the Median and District's Exposure to Import Threat on Tariff Phaseout Coverage

Dependent Variables:	Phaseout Coverage			Exclusion Coverage	
	Main Result			Placebo	
Model:	(1)	(2)	(3)	(4)	(5)
Variables					
Proximity to Median (Trade) × District's Exposure to Import Threat			0.091***		-0.007
			(0.016)		(0.014)
Proximity to Median (Trade)	0.071***	0.027***	0.029***	0.008	0.008
	(0.013)	(0.008)	(0.008)	(0.012)	(0.012)
Trade Ideology		0.043***	0.033***	-0.013	-0.012
		(0.011)	(0.009)	(0.017)	(0.018)
District's Exposure to Import Threat		0.476***	0.447***	0.133***	0.136***
		(0.023)	(0.021)	(0.021)	(0.022)
Controls		✓	✓	✓	✓
Fixed-effects					
FTA	✓	✓	✓	✓	✓
Fit statistics					
Observations	5,812	5,579	5,579	5,579	5,579
R^2	0.643	0.779	0.785	0.520	0.520
Within R^2	0.013	0.390	0.405	0.031	0.031
Dependent variable mean	0.014	0.015	0.015	-0.004	-0.004

Clustered (District) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

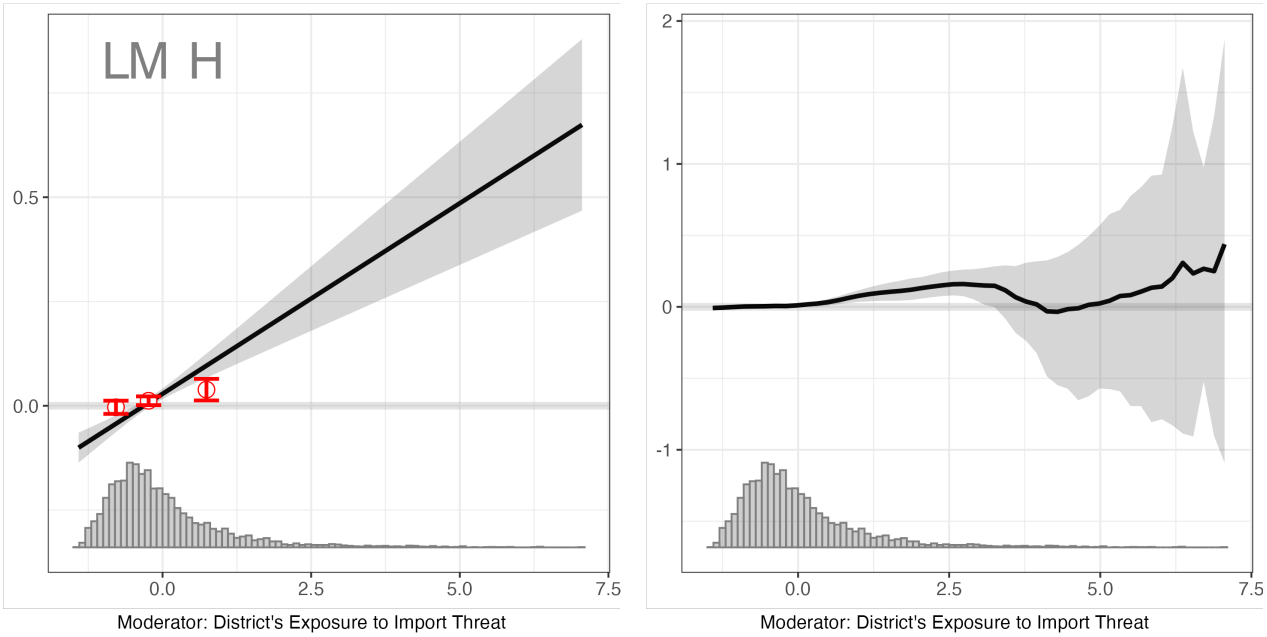
Note: Unit of observation is House of Representative district-FTA for all 14 FTAs negotiated. Standard errors are corrected for clustering at the district level. All covariates are standardized. See Table A1 for the full regression table.

teraction model, rather than retrofitting non-conventional marginal effects into a linear interaction model, where the marginal effects grow constantly and monotonically with *District's Exposure to Import Threat*. The kernel estimates suggest that starting at 0.5 standard deviations above the mean on *Import Threat*, median legislators begin to receive significantly longer tariff phaseout until about 3 standard deviations above the mean. The size of the marginal effect does not grow monotonically nor constantly.

Models 4 and 5 in Table 3 are placebo test that use *Exclusion Coverage* to establish how median-legislator targeting is primarily isolated to tariff phaseout.[22] Exclusion is quite rare in US FTAs because it is costly to consumers and exporters; hence, if used, exclusion would be reserved for truly exceptional cases where the threat of import competition is so great that it may derail the trade deal. Negotiators often guard against using exclusion simply because it would open the floodgates for other stakeholders to demand exclusion; hence, exclusion is not a tool to "buy" support from median legislators. Indeed, I find that a district's potential exposure to *Import Threat* is positive and significantly correlated with

[22] *Exclusion Coverage* is constructed in the same way as *Phaseout Coverage* but with share of products within an industry that are excluded from liberalization. See Figure A1 on the share of products within each FTA tariff schedule that were excluded from liberalization.

Figure 7: Marginal Effects of Proximity to Median on Phaseout Coverage, Conditional on District's Exposure to Import Threat



Note: Author uses the `Interflex` package (Hainmueller, Mummolo, and Xu 2019) to plot the marginal effects using binning (left) and kernel (right) estimators.

Exclusion Coverage, while all other primary covariates are statistically insignificant.

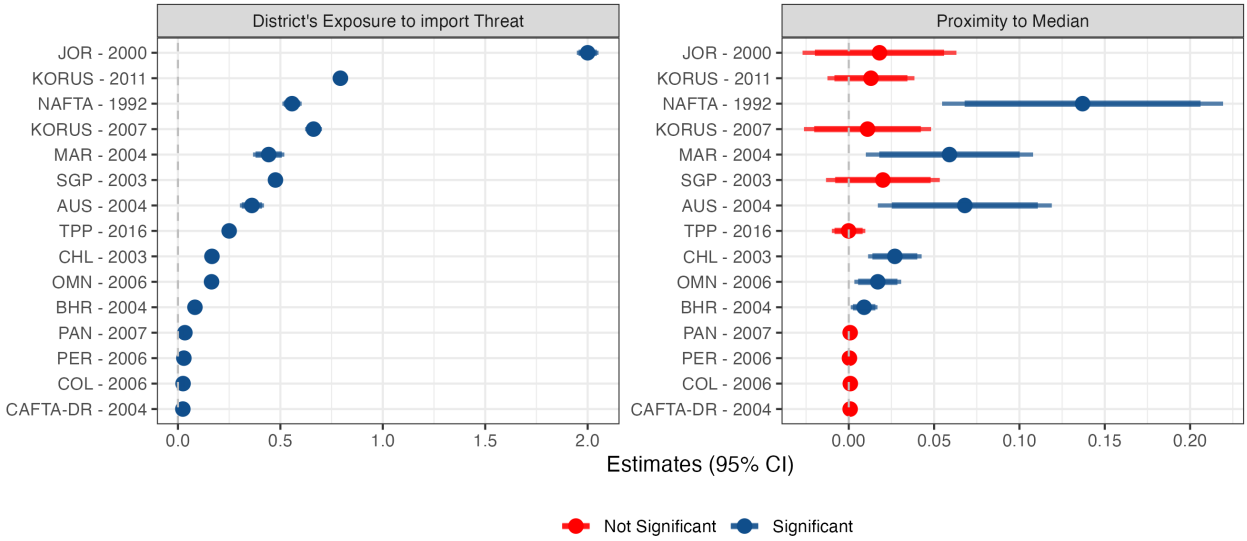
5.1 Variation Across FTAs

I run Equation 3 for each FTA and plot the estimates and 95% confidence intervals for *District's Exposure to Import Threat* and *Proximity to Median* in Figure 8 to examine the differential effects of the two main covariates across trade agreements. Import sensitivity is always statistically significantly correlated with more phaseout coverage, although the estimated size varies across FTAs. Surprisingly, the coefficient for *District's Exposure to Import Threat* is largest for US-Jordan; however, the majority — if not all — tariffs on Jordanian imports were phased out, which may explain the over-inflated coefficient.

[Figure 8 about here]

In alignment with expectations, NAFTA and KORUS are the top two FTAs in which the allocation of tariff phaseouts was most responsive to import threats. The coefficient for KORUS-2011 is slightly larger than KORUS-2007, suggesting that the small changes in the allocation of tariff phaseouts in the renegotiated version in 2011 were more responsive to the import threat than to the median legislator. For these two agreements, NAFTA's

Figure 8: Coefficients of Districts' Exposure to Import Threat and Proximity to Median Across FTAs



Note: See Table A3 for the full regression table. KORUS - 2011 is included to draw a comparison with KORUS - 2007. The main regression results in Table 3 only contain KORUS-2007 since the vast majority of the tariff schedule was negotiated with the 110th Congress.

phaseout allocation was much more responsive to legislators' proximity to the median compared to KORUS, where the coefficient is near zero and not statistically significant. In aggregate, legislators' proximity to the median on trade has statistically significant explanatory power for NAFTA, and bilateral FTAs with Morocco, Australia, Chile, Oman, and Bahrain.

5.2 Case Study: KORUS

The United States-Korea Free Trade Agreement (KORUS) presents a puzzling deviation from the North American Free Trade Agreement (NAFTA). Both agreements were economically consequential and politically salient, involving top U.S. trading partners, and both were negotiated under a Republican president but later ratified under a Democratic one. Given these parallels and the political rhetoric surrounding KORUS that often invoked job losses from NAFTA,[23] one would expect a similar negotiation strategy, specifically the need to target tariff phaseouts to win the votes of median legislators. However, unlike NAFTA, the 2007 and 2011 versions of KORUS show no evidence of such targeting in Figure 8. This raises a critical question: Why, despite the political and economic simi-

[23]Congressional speeches reflect such sentiment. Members of Congress would often use job losses from NAFTA and PNTR with China as a warning against ratifying KORUS.

larities to NAFTA, was there a clear absence of median legislator targeting in KORUS?

A first difference between NAFTA and KORUS is that the former was negotiated during George W. H. Bush's *first* term, while the latter is in the *second* term of George W. Bush. Given the literature on the incentive to strategically distribute domestic goods, like federal funding, is present whenever there is a political horizon (i.e., reelection) (Kang 2018), it may be safe to assume such a scope condition is held for benefits from international agreements. One may expect that a second-term president may not have much incentive to buy ratification votes, as he may not need the political capital of a ratified trade agreement to boost his election chances.

To test this hypothesis, I interact the main *Proximity to Median* variable with whether the agreement was negotiated and signed under George W. Bush's first or second term. I exclude NAFTA, US-Jordan, and TPP because each was negotiated by a separate president,[24] which provides no variation on the presidents' term in office. George W. Bush, on the other hand, negotiated 11 trade agreements during his tenure, five during his first and six during his second term.[25]

Figure 9 displays the marginal effects of *Proximity to Median* conditional on George W. Bush's term in office. Surprisingly, there is no absence of median legislator targeting incentive in Bush's second term, as both marginal effect coefficients are positive, significant at 95% level, and statistically indistinguishable from one another.

[Figure 9 about here]

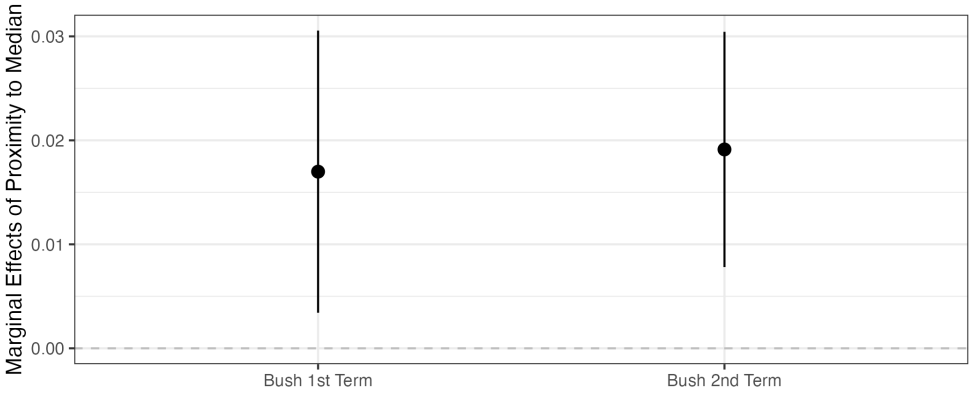
A second difference is that KORUS was mainly negotiated under a unified Republican government, while NAFTA was negotiated under a divided government with a Democratic majority in both chambers. It has been established that partisan conflict from divided government leads to generally more protectionist trade policies and institutions constraining executive trade policy-making authority (Lohmann and O'Halloran 1994); that is, in order to promote trade cooperation under divided government, Lohmann and O'Halloran (1994) argue that the executives accommodate the protectionist preferences of Congress to ratify trade deals. Does such logic apply to free trade agreements where selective protectionism is rare?

Figures 10 plot the marginal effects of *Proximity to Median* conditional on whether the

[24]NAFTA was negotiated by George H. W. Bush, US-Jordan was negotiated by Bill Clinton, and TPP was negotiated by Barack Obama.

[25]During his first term, George W. Bush concluded negotiations on US-Chile, US-Singapore, US-Australia, CAFTA-DR, and US-Bahrain. In his second term, he concluded trade deals with the US-Morocco, US-Oman, US-Peru, US-Colombia, US-Panama, and KORUS FTAs

Figure 9: Marginal Effects of *Proximity to Median* Conditional on Bush's Term

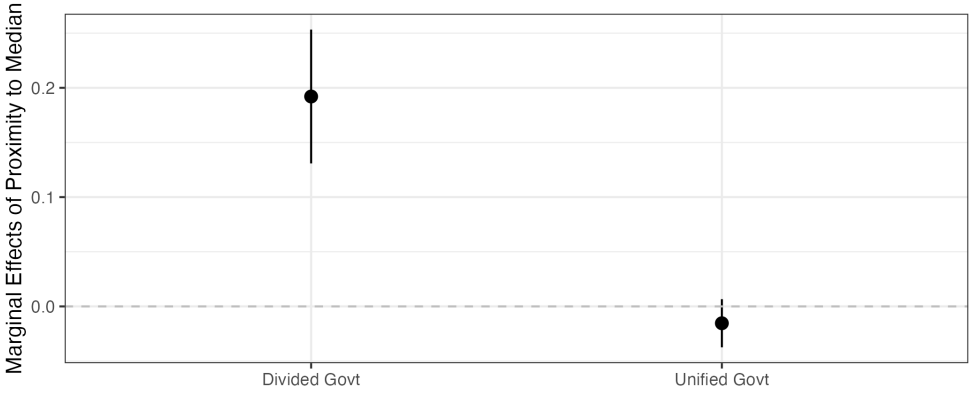


Note: Regression Table A4. Created by Author 9/1/25.

agreement was negotiated under divided or unified government. The three FTAs that were negotiated under divided governments are NAFTA, US-Jordan, and TPP. Under divided government, the strategic incentive to target the median legislator is significantly more pronounced than when trade negotiations occur under a unified government. Even though essentially all products were phased out in US-Jordan, which leads to an inflated coefficient size in Figure 8, dropping Jordan would not affect the result.[26]

[Figure 10 about here]

Figure 10: Marginal Effects of *Proximity to Median* Conditional on Divided Government



Note: Regression Table A4. Created by Author 9/1/25.

It is reasonable to conclude that under divided government, ratifying a trade agreement is much more difficult given partisan conflicts; as a result, the executive may cross

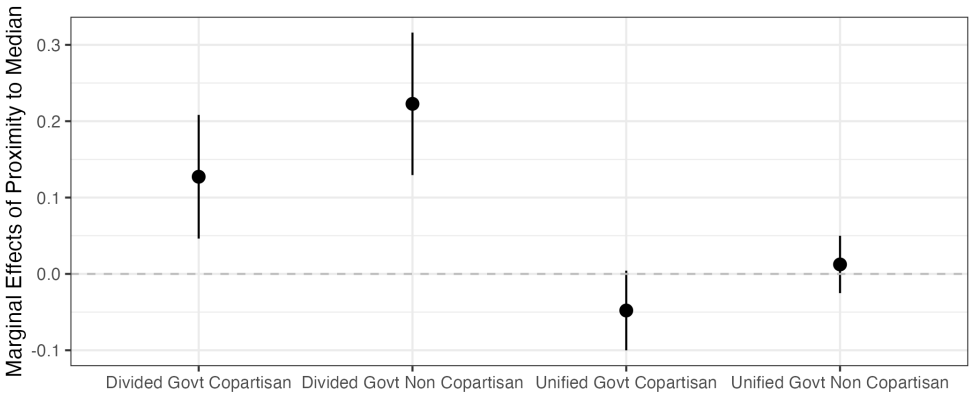
[26]See Table A4 for the "no Jordan" result.

the aisle and buy the votes of non-copartisan Members of Congress. Indeed, in Figure 11 I find that median legislator targeting is more geared toward non-copartisans under divided government; however, the marginal effect for non-copartisans is not statistically distinguishable from allocation toward copartisan representatives.

In sum, it seems as though negotiating under divided government presents a political need to target tariff phaseouts to median legislators, and that such strategic allocation is nonexistent under unified government. This presents an important scope condition to my argument, which, while resonating closely with Lohmann and O'Halloran (1994), is a bit more specific. Instead of divided government leading to more protectionist trade policies because all of Congress is assumed to be protectionist, I argue that under divided government, the executive strategically targets protectionist benefits in the form of non-immediate tariff reduction toward districts of legislators close to the median in order to buy their ratifying votes. As argued throughout this article, protectionism and delayed liberalization are not only costly to consumers, but their reciprocants pose a cost to exporters as well; hence, a utility-maximizing executive is selective in how much and where such protection is allocated. It is cheaper, on average, to buy the votes of median legislators, as they may be at best ambivalent about a trade deal or that their districts stand to lose minimally, which can be ameliorated with particularistic benefits.

[Figure 11 about here]

Figure 11: Marginal Effects of *Proximity to Median* Conditional on Divided Government and Copartisanship of Congress Member with the President



Note: Regression Table A4. Created by Author 9/3/25.

While the majority of the KORUS negotiations took place under a unified Republican government, the last four months leading up to its conclusion were negotiated under a divided government. So, why did the tariff schedule design not reflect the expected

median-legislator targeting under divided government? There are two reasons that make selective targeting difficult: time constraints and uncertainty of new legislators' position on trade.

First, the tight time frame imposed by Congress to end negotiations left negotiators little time to selectively target benefits. When the Democrats retook both the House and the Senate in the 110th Congress (2007-2009), they withheld the renewal of trade promotion authority (TPA), forcing an early conclusion to the KORUS agreement. TPA was set to expire on July 1st, 2007. So, negotiators ended the KORUS negotiation on April 1, 2007, providing Congress with the required 90-day notification on the executive's intent to sign in order sign the agreement by the July 1st deadline (Casey and Cimino-Isaacs 2024) (TN01-01).[27] Indeed, the agreement was signed on the last possible day on June 30th, 2007, in order to be "covered" under TPA, which allows for it to be voted on by both chambers of Congress.

Second, even if negotiators were able to selectively target tariff phaseouts, they would not be able to target the so-called median accurately, given that there were 76 newly elected Congressional representatives in the 110th Congress with no voting record on trade. Track record on authorizing trade promotion authority, or fast track, has been used to serve as a helpful predictor of legislators' ratification votes (Kim, Naoi, and Sasaki 2025, p.15). A former trade negotiator said: "What's complicated all this now is there's so many new members, and, members don't have the track records that they used to have. There's so few trade votes that ... it's hard to judge someone" (TN01-01). Without such a track record on trade, the negotiators' job of winning the favor of the median legislator is much more difficult. Hence, the allocation of tariff phaseouts in both KORUS versions was primarily determined by the potential import exposure South Korea would pose if the agreement were ratified.

The problem of uncertainty on Congressional trade preferences on trade negotiators is also present when KORUS was renegotiated in December 2010 under the 111th Congress, with 81 new House representatives. In the renegotiation, time constraint was not an issue; still, there was little to no trade voting record for new members. How does this uncertainty shape the gains in phaseout coverage?

To provide some context, KORUS-2007 was negotiated up until near the end of the Trade Promotion Authority (TPA) period during the Bush Administration. However, given the unpopularity of the trade deal at the time, ratifying KORUS was postponed. As recounted by a former trade negotiator, "the original KORUS was ... dead on arrival"

[27] An interviewee attested that "[they] rushed to do the deal to make that TPA deadline" (TN01-01).

(TN01-01).

The Obama administration then renegotiated the agreement in 2010, with the changes summarized in the side letter between the two trade ministers.[28] KORUS-2011, alongside other issues such as safety and safeguards, made changes to the tariff reduction schedule of 54 auto tariff lines. Figure A7 presents an excerpt of the side letter between South Korea's Trade Minister Jeong-Hoon Kim and United States Trade Representative Ron Kirk, outlining U.S. tariff commitments. It specifies that duties for products under the "8703" heading that were subject to staging category "A" (immediate elimination) or "C" (three-year linear phaseout in the 2007 KORUS version) "shall remain at the base rate during years one through four" where it shall be "duty-free, effective January of year five." Figure A8 visualizes the changes in phaseout duration for 54 10-digit HTS tariff lines, where products with either zero or three years of tariff phaseouts in 2007 correspond with staging category "A" or "C," respectively. All 54 products, except for one, were given what trade negotiators have termed a "backloaded" phaseout treatment. Effectively, when tariffs "remain at the base rate" for a period of time, it provides protection similar to exclusion. The last product, with the subheading "870390, "shall be reduced in five equal annual stages."

Figure 12 displays the share of products within the three industries that were phased out in the two versions of KORUS. For Motor Home Manufacturing and Automobile Manufacturing, the share of phased-out products climbed from 66% and 47%, respectively, to 100%. On the other hand, Travel Trailer and Camper Manufacturing went from 0% to 43%. These changes in the tariff reduction schedule specifically contributed to why the United Auto Workers union endorsed the trade deal (See the endorsement letter in Figure A6).

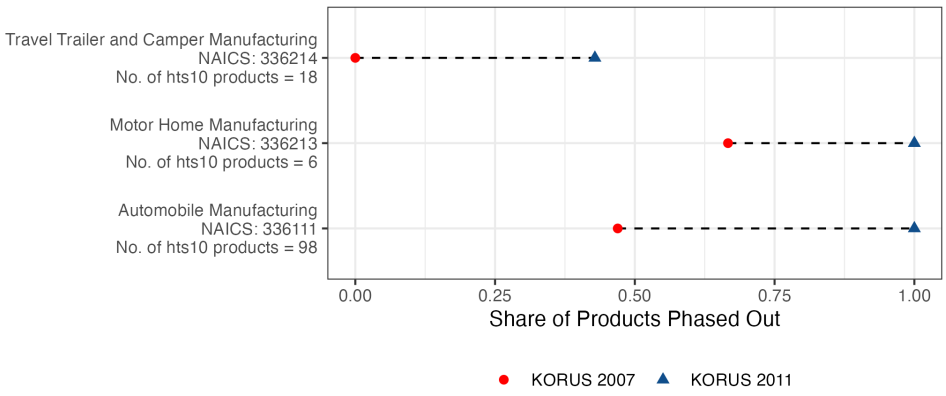
[Figure 12 about here]

So, which legislator received more tariff phaseouts for their district? I find that the sensitivity to auto imports played a major role where tariff phaseouts for automobile products concentrated. Figure 13 displays the top 30 districts with the highest *Phaseout Coverage* for the affected auto-products in KORUS-2011, ranked ordered on *District's Exposure to Import Threat*. Increases in phaseout duration are much larger for more import-sensitive districts; as a result, the level of phaseout coverage also tends to be larger. This stands in contrast with Figure A12, where it is rank ordered by legislator's proximity to the median in the 112th Congress,[29] which shows no clear relationship.

[28] See here for the 2011 KORUS side letter.

[29] Some districts would be missing legislators' *Trade Ideology* scores due to not having enough trade votes

Figure 12: Change in Share of Industry's Phased out Products (KORUS 2007 vs KORUS 2011)



Note: Created by Author 7/28/25.

This evidence echoes the findings in Figure 8, where import-sensitivity of the district played a larger role than legislators' proximity to the median in explaining the variation in phaseout coverage for KORUS. Given the wide-ranging uncertainty of legislators' preferences on trade that made it difficult to target the median strategically, phaseouts were targeted to industries and, thus, areas that were bound to experience import competition from South Korea.

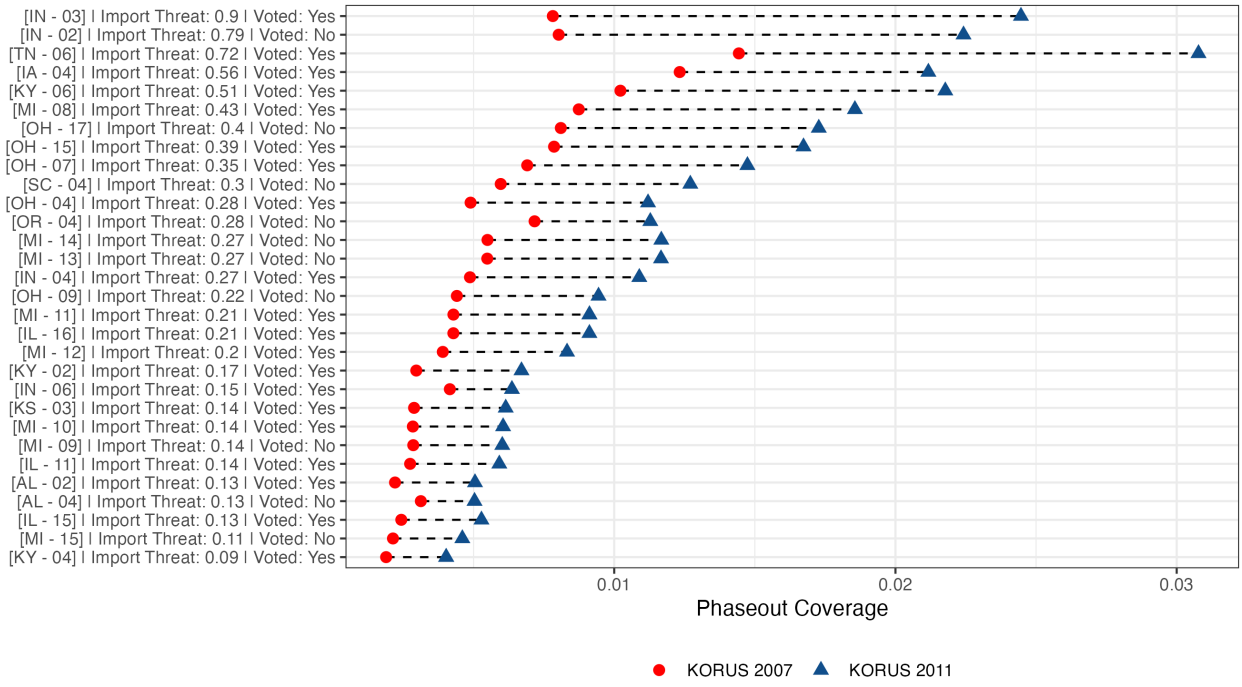
[Figure 13 about here]

Does the uncertainty of new members' trade preferences strengthen or dampen the degree to which tariff phaseouts were allocated based on import sensitivity? Uncertainty over the trade preferences of new legislators may increase the need to "cover all the bases" for negotiators; hence, newly elected representatives could be seen as blank slates that can be convinced to support a trade agreement if given enough particularistic benefits. On the other hand, uncertainty can dampen phase-out targeting because negotiators may not want to increase the costs on consumers and exporters with costly concessions to extract that may not satisfy an unknown threshold for a legislator to ratify. New legislators have fewer opportunities to establish their promise-keeping credibility; as a result, a utility, but also ratification-maximizing negotiator may focus their attention on experienced legislators whom they have dealt with in prior trade deals to sway their votes.

To test whether import-sensitive districts of new members receive more tariff phaseouts, I regress the changes in phaseout coverage among the three auto industries affected

for the W-NOMINATE procedure to work. For these cases, fill in the legislator in the 112th Congress with Trade Ideology score from the 110th Congress when KORUS-2007 was signed.

Figure 13: Change in District-level Phaseout Coverage, ranked order by Import Threat (KORUS 2007 vs KORUS 2011)

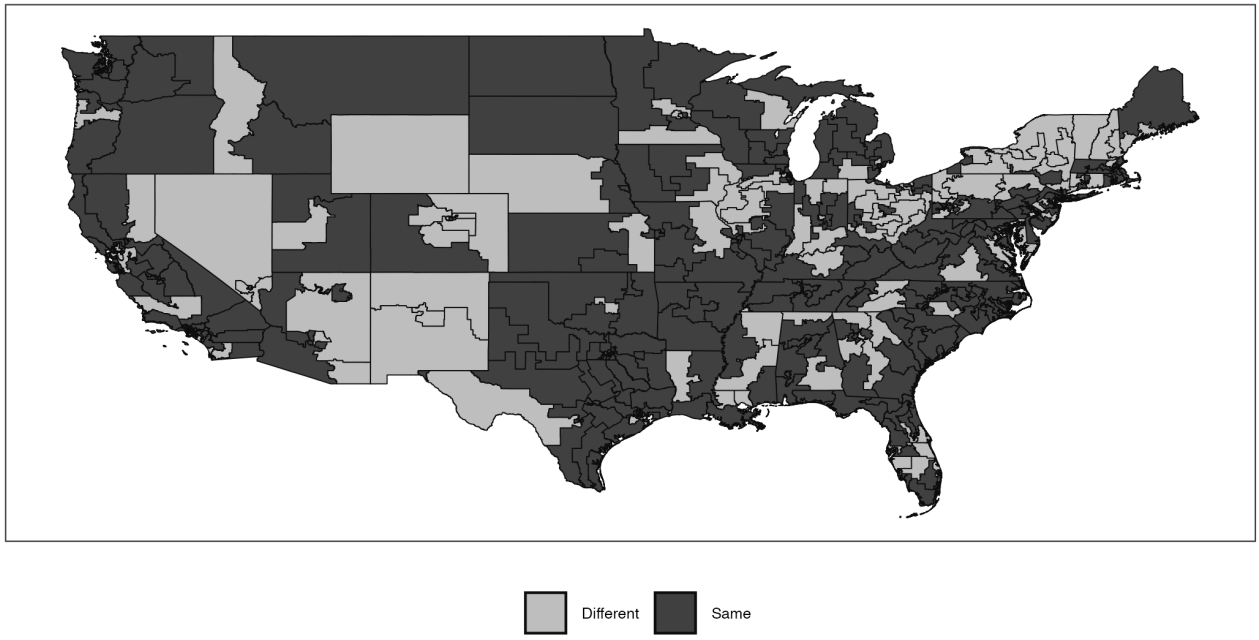


Note: This figure features 30 districts with highest *Phaseout Coverage* in KORUS-2011 to compare changes with the KORUS-2007 version. Phaseout coverage is constructed with the 2007 employment share numbers $\frac{E_{dkt_{2007}}}{E_{dt_{2007}}}$ to hone in on the changes in phaseout coverage. District is rank ordered by degree of import competition South Korea would pose on the three auto industries with changed tariff treatment. Created by Author 7/28/25.

by tariff phaseout change in KORUS-2011 with an interaction between the *District's Exposure to Import Threat* and an indicator whether the district has kept the same legislator between the two periods. Between the 109th and the 111th Congress, 129 new members were elected, while 306 members kept their seats —— Figure 14 maps which districts experienced such legislative turnover.

[Figure 14 about here]

Figure 14: Map on Congressional District That Changed Representative Between 109th and 111th Congress



Note: Created by Author 9/3/25.

Table 4 presents three columns. All variables are standardized. Model 1 suggests that legislators who kept their seats from the 109th to the 111th Congress did not see a statistically significant increase in the phaseout coverage. Plus, the model was poorly fit with a very small R^2. However, when interacted with import-sensitivity, the interaction coefficient is positive and significant, so too is the coefficient for Import Threat exposure. While Model 3 lost about 70 observations due to missing data on Trade Ideology, districts with the same legislator from the 109th Congress are positively correlated with greater increases in phaseout coverage, holding the district's exposure to import threat at the mean.

Table 4: Changes in Phaseout Coverage on Autos (KORUS 2007 vs 2011)

Dependent Variable:	Δ Phaseout Coverage		
Model:	(1)	(2)	(3)
Variables			
Same Legislator × District's Exposure to Import Threat		0.396***	0.641***
		(0.040)	(0.042)
Same Legislator	0.015	0.064	0.135**
	(0.111)	(0.044)	(0.055)
District's Exposure to Import Threat		0.682***	0.437***
		(0.027)	(0.032)
Trade Ideology			0.036
			(0.098)
Proximity to Median (Trade)			0.186
			(0.170)
Constant	-0.010	-0.048	-0.268*
	(0.091)	(0.036)	(0.143)
Fit statistics			
Observations	374	374	304
R^2	4.79×10^{-5}	0.841	0.859
Adjusted R^2	-0.003	0.840	0.857
Dependent variable mean	-1.63×10^{-18}	-1.63×10^{-18}	-0.009

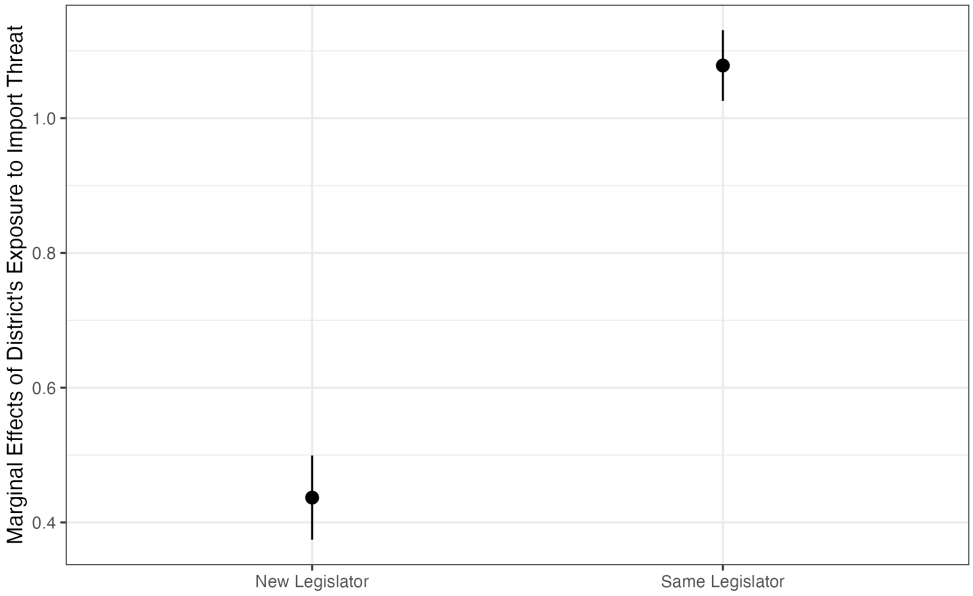
IID standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Note: Unit of observation is House of Representative district for KORUS. All variables are standardized. District's Exposure to Import Threat and Δ Phaseout Coverage are constructed with just the three auto industries impacted by the change in tariff phaseout.

Figure 15 plots the marginal effects of import sensitivity conditional on whether the district kept the same legislator based on model 3 that controls for *Trade Ideology* and *Proximity to Median*. The marginal effect for both groups of districts is positive and statistically significant; however, for every one standard deviation increase in potential exposure to import threat in districts with the *same* legislator from the 109th Congress, the change in tariff phaseout coverage on auto products in KORUS-2011 is increased by 1.07 standard deviations. This marginal effect is statistically *distinguishable* from that in districts where their representatives were replaced, in which the marginal effect is only 0.437 standard deviations. These results suggest that new house representatives with import-sensitive districts are less prioritized in phaseout allocation compared to more senior representatives.

[Figure 15 about here]

Figure 15: Marginal Effects of District's Exposure to Import Threat on Changes in Phaseout Coverage, Conditional on Legislative Turnover Between 109th and 111th Congress



Note: See Table 4 for the Regression table. Created by Author 9/3/25.

6 Ratification

To examine the average effect of constituent industries receiving more tariff phaseout from free trade agreements on the legislators' votes on implementing FTAs, I estimate a within-legislator model, exploiting variations across FTAs. The extent to which tariff

phaseouts may influence a legislator's vote depends not only on the degree of import threat the trade agreement poses to the legislator's district but also on their relative position on trade. To that end, I run a triple interaction Logistic regression, in which the model is specified in Equation 5:

$$\begin{aligned}\ln\left(\frac{P(Y_{idjc})}{1-P(Y_{idjc})}\right) = \gamma_i &+ \beta_1 PhaseoutCoverage_{dj} + \beta_2 TradePosition_{idc} + \beta_3 ImportThreat_{dj} \\ &+ \beta_4(PhaseoutCoverage_{dj} \times TradePosition_{idc}) \\ &+ \beta_5(PhaseoutCoverage_{dj} \times ImportThreat_{dj}) \\ &+ \beta_6(TradePosition_{idc} \times ImportThreat_{dj}) \\ &+ \beta_7(PhaseoutCoverage_{dj} \times TradePosition_{idc} \times ImportThreat_{dj}) \\ &+ \beta_8 \mathbf{X}_{dc} + \beta_9 \mathbf{X}_{ic}\end{aligned} \tag{5}$$

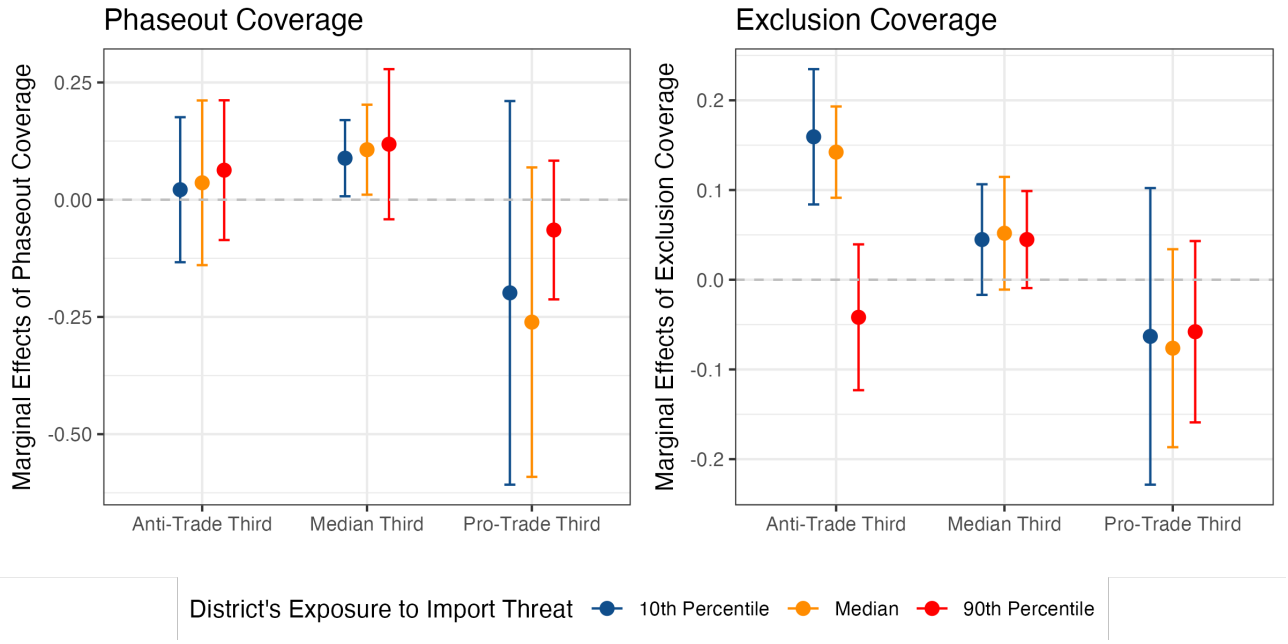
where $P(Y_{idjc})$ is the probability that a legislator i in district d vote yes on agreement j in congress c. I include legislator fixed effects, denoted by γ_i. The specification hone in on the interaction term β_7 between $PhaseoutCoverage_{dj}$, $TradePosition_{idc}$, and $ImportThreat_{dj}$ while holding district and legislator characteristics constant, denoted by $\mathbf{X}_{dc}$ and $\mathbf{X}_{ic}$, respectively. $TradePosition_{idc}$ is a categorical variable on legislators' i relative position on trade for each Congress c. That is, for each FTA up for ratification in Congress c, the House of Representatives is split into three equal groups based on their *Trade Ideology* score at the time; they can either be pro-trade, median, or anti-trade.[30] I used the same district and legislator control variables from the previous analysis while also controlling for *Exclusion Coverage*, which is the share of workforce in district d protected from the trade agreement.

Figure 16 displays the changes in predicted probabilities of a legislator voting to ratify a trade agreement for every standard deviation increase in phaseout coverage, conditional on legislators' relative trade position and the degree to which their districts are exposed to import threat at the 10th, median, and 90th percentile. I also estimate the effect *Exclusion Coverage* has on ratification probabilities to highlight the differences in the effects of the two types of protection in FTAs.[31] Table A5 presents the regression results, in both OLS and Logistic Regression, and Figure A13 displays the marginal effect estimates obtained from the OLS model.

[30] Because the W-NOMINATE procedure only generates one Trade Ideology score per legislator, a time-varying measurement is needed for a within-legislator model specification.

[31] *Exclusion Coverage* is constructed in the same way as *Phaseout Coverage*.

Figure 16: Marginal Effect of Phaseout Coverage on Ratification Vote, Conditional on Legislators' Position on Trade and District's Exposure to Import Threat. Logistic Regression



Note: Table A5 presents the regression results. Created by Author on 7/30/25

In general, *Phaseout Coverage* has a statistically insignificant correlation with how pro- and anti-trade legislators vote. Interestingly, pro-trade legislators are *less* likely to vote for ratification if more of their constituent industries are covered by tariff phaseouts. While statistically insignificant, it may indicate that pro-trade legislators are not supportive of using tariff phaseouts or exclusions, as the reciprocated costs fall upon exporters in their districts. However, for legislators in the median third, they are marginally more likely to vote for ratification for every standard deviation increase in phaseout coverage, conditional on the trade partner posing relatively minimal threat. If the district is at the 90th percentile on potential import exposure from the trade partner, they are no more likely to vote for ratification with more phaseout coverage. This result largely supports the *Ratification* hypothesis [H2].

Median legislators do not respond similarly when receiving actual protection. While exclusion coverage is positively associated with a higher likelihood for ratification for the median legislator, it is not statistically significant at the 95% level. In contrast, anti-trade legislators whose constituent industries are protected with exclusion are more likely to vote to ratify when their district faces low or median levels of potential import exposure from the trade partner; this is not the case for FTAs where the trade partners pose a high level of import threat. This result aligns with the intuition that anti-trade legislators gen-

erally vote in alignment with their district's interests; however, even if they are generally against trade, the differential threat a trade partner poses in import competition may provide opportunities in which protection can "buy" their votes.

This section provides not just evidence to support the *Ratification* hypothesis but also a comparison between the two types of protection and the conditions under which they have bought Congressional support for FTAs. While the analysis is primarily correlational, I was able to hold constant legislators' characteristics and control for differences across FTAs to hone in on the variation of interest.

7 Conclusion

This article argues that US presidents use non-immediate tariff elimination, i.e., tariff phaseouts, to garner congressional support. I demonstrate that the allocation of temporary protection is targeted toward districts of legislators proximate to the median, more so if their district is more import-sensitive. These median legislators, in turn, are marginally more likely to vote to ratify the trade agreement, except for when the trade partner poses an exceptionally high threat to the district. To my knowledge, this is the first paper to demonstrate how specific benefits from international agreements can be targeted to specific legislators, and whether receiving more benefits shapes legislators' support for ratification.

My findings have broader implications for studies on domestic politics and international agreements. Firstly, this is the first study to demonstrate that the position of a legislator as the pivotal voter on ratification can elevate their preferences and attract concessions. Second, I demonstrate that agreement provisions, like tariff phaseouts, can buy the votes of on-the-fence legislators. This contributes to a growing literature on buying support for trade liberalization (Naoi and Kume 2015; Kim, Naoi, and Sasaki 2025); a key distinction of this study is that the provisions are negotiated by the executive and are baked into the agreement itself.

While I provide such evidence using just tariff phaseout, it is conceivable that other provisions that are not observably targetable can indeed be targeted to specific legislators. Interview evidence from former trade negotiators often emphasizes the importance of extracting specific concessions for specific influential legislators. Of course, when it comes to broader provisions like labor, investment, and environment, their vote-buying potential is diffused to all potential beneficiaries, making it difficult to observe the intended recipient.

Of course, it would be remiss not to discuss how insights from this article are relevant to the current protectionist atmosphere. The conclusion gained from this article is primarily restricted to free trade agreements negotiated under trade promotion authority; particularly, such an incentive seems to have only existed under divided government. Hence, the incentive to target the median legislator only exists when there is Congressional approval as an institutional feature. The current protectionist policy from the Trump administration primarily uses national security to impose broad-ranging tariffs on imports. Because the rule that enabled presidents to use national security justification to impose tariffs does not need Congressional approval, the expected outcome is that the president would not need to be strategic in tariff allocation. Given that Donald Trump lacks an electoral horizon, has a unified government, and views tariffs as a strategic negotiation tool, setting the agenda with "Liberation Day" tariffs may have been strategic in a bargaining sense.

Beyond protection, history suggests that the pendulum will swing back in favor of free trade. This time, both consumers and producers who have previously engaged in the global supply chain are likely to build a political coalition pushing for freer trade. How future presidents approach free trade will require delicate political maneuvering if trade agreements are indeed to be ratified by Congress. The findings from this study suggest that future presidents would strategically target provisions to key members of Congress to achieve ratification.

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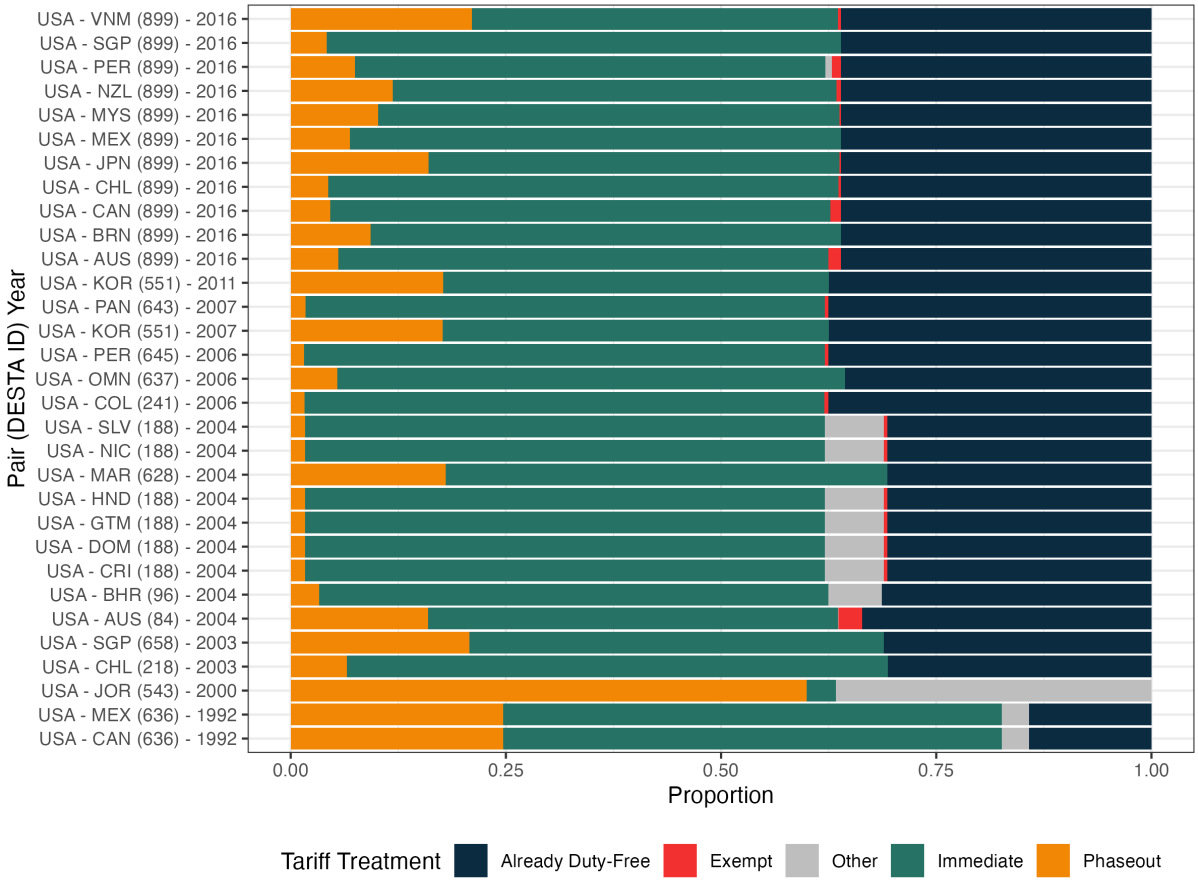
A.1 Appendix

A.1.1 Tariff Phaseouts

[Figure A1 about here]

Figure A1: Proportion of Products Phased Out in US Tariff Schedules



Note: Country pair is formatted as home-partner, where the home country sets tariff treatment toward the partner country. "Other" indicates that the product's tariff reduction is governed by other means, such as the WTO commitment. Created by Author 5/27/24.

Figure A2: Tariff Schedule Example from US-Australia FTA

HTSUS (2004)	DESCRIPTION	BASE RATE	STAGING CATEGORY
0711.20	-Olives:		
	--Not pitted:		
	---Green in color, in a saline solution, in containers each holding more than 8 kg, drained weight, certified by the importer to be used for repacking or sale as green olives:		
0711.20.18	----Described in additional U.S. note 5 to this chapter and entered pursuant to its provisions	3.7 cents/kg on drained weight	A
0711.20.28	----Other	5.9 cents/kg on drained weight	A
0711.20.38	---Other	5.9 cents/kg on drained weight	A
0711.20.40	--Pitted or stuffed	8.6 cents/kg on drained weight	A
0711.30.00	-Capers	8%	B
0711.40.00	-Cucumbers including gherkins	7.7%	B
	-Mushrooms and truffles:		
0711.51.00	--Mushrooms of the genus Agaricus	5.7 cents/kg on drained weight + 8%	D
0711.59	--Other:		
0711.59.10	---Mushrooms	5.7 cents/kg on drained weight + 8%	D
0711.59.90	---Other	7.7%	B
0711.90	-Other vegetables; mixtures of vegetables:		
0711.90.20	--Leguminous vegetables	Free	E
0711.90.50	--Onions	5.1%	B
0711.90.65	--Other vegetables; mixtures of vegetables	7.7%	B
0712	Dried vegetables, whole, cut, sliced, broken or in powder, but not further prepared:		
0712.20	-Onions:		
0712.20.20	--Powder or flour	29.8%	F
0712.20.40	--Other	21.3%	F
	-Mushrooms, wood ears (Auricularia spp.), jelly fungi (Tremella spp.) and truffles:		
0712.31	--Mushrooms of the genus Agaricus:		
0712.31.10	---Air dried or sun dried	1.3 cents/kg + 1.8%	A
0712.31.20	---Other	1.9 cents/kg + 2.6%	A

Note:

A.1.2 KORUS

[Figure A6 about here]

[Figure A7 about here]

[Figure A8 about here]

Figure A3: Description of Staging Categories from US-Australia FTA

ANNEX 2-B
TARIFF ELIMINATION

1. Base Rates of Customs Duty. Except as otherwise indicated, the base rates of customs duty set forth in this schedule reflect the HTSUS Column 1 General rates of duty in effect January 1, 2004, for the United States and the general rates of duty in Schedule 3 to the Australian Customs Tariff Act 1995, in effect January 1, 2004, for Australia.

2. Staging. Except as otherwise provided in a Party's Schedule attached to this Annex, the following staging categories apply to the elimination of duties by each Party pursuant to Article 2.3:

(a) duties on goods provided for in the items in staging category A shall be eliminated entirely and such goods shall be duty-free on the date this Agreement enters into force;

(b) duties on goods provided for in the items in staging category B shall be removed in equal annual stages beginning on the date this Agreement enters into force, and such goods shall be duty-free, effective January 1 of year four;

(c) duties on goods provided for in the items in staging category C shall be removed in equal annual stages beginning on the date this Agreement enters into force, and such goods shall be duty-free, effective January 1 of year eight;

(d) duties on goods provided for in the items in staging category D shall be removed in equal annual stages beginning on the date this Agreement enters into force, and such goods shall be duty-free, effective January 1 of year ten; and

(e) goods provided for in staging category E shall continue to receive duty-free treatment.

Note:

A.1.3 Descriptive Statistics

Figure A4: Description of US-Specific Staging Categories from the Head Note of US-Australia FTA

4. Staging. The following staging categories apply to the elimination of customs duties by the United States pursuant to Article 2.3 (Elimination of Duties):

(a) Duties on goods provided for in subheadings 2918.90.20, 8111.00.47 and 8111.00.49 shall be removed in equal annual stages beginning on the date this Agreement enters into force, and such goods shall be duty free, effective January 1, 2010;

(b) Duties on goods provided for in the items in staging category F shall be removed in eighteen equal annual stages beginning on the date this Agreement enters into force, and such goods shall be duty-free, effective January 1 of year eighteen.

(c) Duties on goods provided for in the items in staging category G shall remain at base rates during years one through six. Duties on these goods shall be reduced by 5.6 percent of the base rate on January 1 of year seven and by an additional 5.6 percent of the base rate on January 1 of each year thereafter through year twelve. Beginning January 1 of year thirteen, duties on these goods shall be reduced by an additional 11.1 percent of the base rate annually through year eighteen and shall be duty-free effective January 1 of year eighteen.

(d) Duties on goods provided for in the items in staging category H shall remain at base rates during years one through eight. Duties on these goods shall be reduced by 6.7 percent of the base rate on January 1 of year nine and by an

Annex 2B-US-Notes-1

Note:

A.1.4 Regression

[Figure A10 about here]

[Figure A11 about here]

[Figure A12 about here]

Table A1: Legislators' Proximity to the Median and District's Exposure to Import Threat on Tariff Phaseout Coverage (Full Model)

Dependent Variables:	Phaseout Coverage			Exclusion Coverage	
	Main Result			Placebo	
Model:	(1)	(2)	(3)	(4)	(5)
Variables					
Proximity to Median (Trade) × District's Exposure to Import Threat			0.091***		-0.007
			(0.016)		(0.014)
Proximity to Median (Trade)	0.071***	0.027***	0.029***	0.008	0.008
	(0.013)	(0.008)	(0.008)	(0.012)	(0.012)
Trade Ideology		0.043***	0.033***	-0.013	-0.012
		(0.011)	(0.009)	(0.017)	(0.018)
District's Exposure to Import Threat		0.476***	0.447***	0.133***	0.136***
		(0.023)	(0.021)	(0.021)	(0.022)
District Election Competitiveness		-0.014*	-0.006	0.024**	0.024*
		(0.008)	(0.008)	(0.012)	(0.012)
Net Export		-0.047***	-0.042**	0.004	0.004
		(0.017)	(0.016)	(0.016)	(0.016)
Unemployment %		-0.008	-0.003	0.016	0.016
		(0.013)	(0.013)	(0.026)	(0.026)
Corp PAC (ln)		0.011	0.015*	0.005	0.005
		(0.008)	(0.008)	(0.013)	(0.013)
House Ways & Means		-0.029	-0.034*	-0.008	-0.007
		(0.021)	(0.020)	(0.036)	(0.036)
Pres. Election Competitiveness		-0.019**	-0.012	-0.003	-0.004
		(0.008)	(0.008)	(0.014)	(0.014)
Electoral College Vote		0.023***	0.022***	-0.015	-0.015
		(0.007)	(0.006)	(0.014)	(0.014)
Union membership Pct		-0.056***	-0.054***	0.065***	0.065***
		(0.011)	(0.011)	(0.015)	(0.015)
Controls		✓	✓	✓	✓
Fixed-effects					
FTA	✓	✓	✓	✓	✓
Fit statistics					
Observations	5,812	5,579	5,579	5,579	5,579
R^2	0.643	0.779	0.785	0.520	0.520
Within R^2	0.013	0.390	0.405	0.031	0.031
Dependent variable mean	0.014	0.015	0.015	-0.004	-0.004

Clustered (District) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Note: Unit of observation is House of Representative district-FTA for all 14 FTAs negotiated. Standard errors are corrected for clustering at the district level. All covariates are standardized.

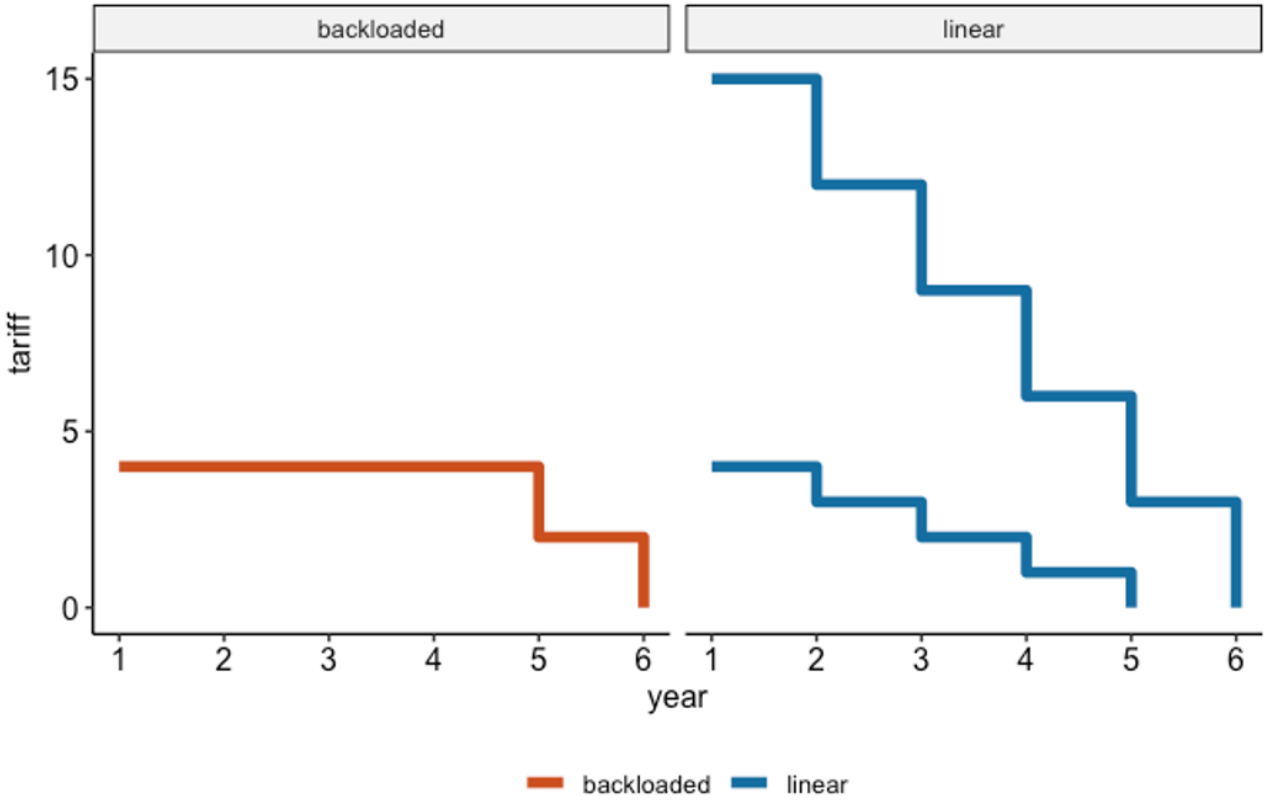
Table A2: Legislators' Proximity to the Median and District's Exposure to Import Threat on Tariff Phaseout Coverage

Dependent Variable:	Phaseout Coverage		
Model:	(1)	(2)	(3)
Variables			
Proximity to Median (DW-NOMINATE)	0.065***	0.018**	0.015*
	(0.010)	(0.008)	(0.008)
Proximity to Median (DW-NOMINATE) × District's Exposure to Import Threat			0.053***
			(0.018)
DW-NOMINATE		-0.039***	-0.023**
		(0.011)	(0.010)
District's Exposure to Import Threat		0.472***	0.452***
		(0.023)	(0.021)
District Election Competitiveness		-0.015*	-0.009
		(0.008)	(0.008)
Net Export		-0.049***	-0.049***
		(0.018)	(0.017)
Unemployment %		-0.009	-0.007
		(0.013)	(0.013)
Corp PAC (ln)		0.009	0.011
		(0.007)	(0.007)
House Ways & Means		-0.034*	-0.037*
		(0.019)	(0.019)
Pres. Election Competitiveness		-0.017**	-0.014*
		(0.008)	(0.008)
Electoral College Vote		0.024***	0.023***
		(0.007)	(0.006)
Union membership Pct		-0.056***	-0.056***
		(0.011)	(0.011)
Fixed-effects			
FTA	✓	✓	✓
Fit statistics			
Observations	6,086	5,838	5,838
R^2	0.643	0.779	0.781
Within R^2	0.011	0.388	0.394
Dependent variable mean	2.44×10^{-15}	0.001	0.001

Clustered (District) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Note: Unit of observation is House of Representative district-FTA for all 14 FTAs negotiated. Standard errors are corrected for clustering at the district level. All covariates are standardized.

Figure A5: Example of Linear and Backloaded Phaseout "Shape"



Note:

A.1.5 Import Threat Effect on Tariff Phaseout at The Product Level and Across Geographical Aggregation

While I specifically theorize the allocation of tariff phaseouts to be explained by congressional district's exposure to import threat, the pattern of allocation does not necessarily constrained within such geographical bound. Instead, products that would pose an import threat generally are phased out with longer duration. Table A6 provide estimates for *Import Threat*, as described in the measurement section prior to the geographic aggregation process, and the likelihood for the product to phased out (models 1-4), and for how long (models 5-8).[32] I controlled for the product's existing base rate, whether it is an intermediate, agricultural, or capital good, the degree to which the product is upstream and differentiated,[33] and the industry's size and capital mobility. In all model specifications with various fixed effects specifications, I find that products that would pose a greater

[32]Phaseout Duration includes product tariffs that are eliminated immediately.
[33]Data is taken from Liao et al. (2020)'s `concordance` package

Figure A6: UAW Statement

UAW backs Korea trade agreement

The full text of the op-ed by UAW President Bob King is printed below. The piece, published today, can be read online here.

UAW backs Korea trade agreement
By Bob King

> President Barack Obama and U.S. Rep. Sander Levin, a Royal Oak Democrat, should be commended for their effective efforts to substantially revise the U.S.-Korea Free Trade Agreement, which Congress overwhelmingly approved Wednesday night. The UAW fully supports this trade agreement because the automotive provisions, which are very different from those negotiated by President George W. Bush in 2007, will create significantly greater market access for American auto exports and include strong, auto-specific safeguards to protect our domestic markets from potentially harmful surges of Korean automotive imports.
>
> Unlike the 2007 negotiations with South Korea, the labor movement, and particularly the UAW, had an opportunity to be part of the 2010 discussions on strengthening the trade deal. Working with U.S. Trade Representative Ron Kirk and other members of the Obama administration, then-Ways and Means Committee Chairman Levin and top management from the auto companies, the UAW believes the new agreement will help protect current American auto jobs, contains meaningful trade law enforcement and makes stronger labor and environmental commitments.
>
> Under the 2007 proposed agreement, almost 90% of Korea's auto exports to the U.S. would have received immediate duty-free access. Under the agreement passed this week, the 2.5% U.S. tariff on automobiles will stay in place until the fifth year after implementation of the agreement, and the 25% tariff on light trucks remains until the eighth year, when it starts to be phased out. Moreover, South Korea will immediately reduce its electric car tariffs from 8% to 4%, and will phase out the tariff by the fifth year of the agreement. The delay in tariff reductions will allow the domestic automakers time to strengthen their global competitive positions in both traditional and advanced energy efficient auto markets.

Note: Full statement can be accessed here: https://ustr.gov/about-us/policy-offices/press-office/blog/2011/october/uaw-backs-korea-trade-agreement

import threat from a particular trade partner is both likely to be phased out and phased out for longer.

Import Threat's effect on *Phaseout Coverage* is also robust across various geographical aggregation. Table A7 displays the results in four distinct geographical aggregation: county, state, commuter zone, and district. In all models, *Region's Exposure to Import Threat* is positive and highly significant.

Figure A7: KORUS 2011 Side Letter Changes to US Tariffs

February 10, 2011

The Honorable Jong-Hoon Kim
Minister for Trade
Seoul, Republic of Korea

Dear Minister Kim:

I have the honor to confirm the following understanding reached between the representatives of the Government of the Republic of Korea and the Government of the United States of America ("the Parties") during the course of discussions regarding issues related to the *United States – Korea Free Trade Agreement* (KORUS):

Section A: Tariffs

1. Notwithstanding paragraph 2 of Article 2.3 and the United States Schedule to Annex 2-B of the KORUS, the United States shall eliminate duties on certain goods as follows:

(a) For originating goods of heading 8703 subject to staging category "A" or "C", duties shall remain at the base rate during years one through four. Such goods shall be duty-free, effective January 1 of year five; and

(b) For originating goods of subheading 870390, duties shall be reduced in five equal annual stages, and such goods shall be duty-free, effective January 1 of year five.

Note: Accessed by Author 7/28/25.

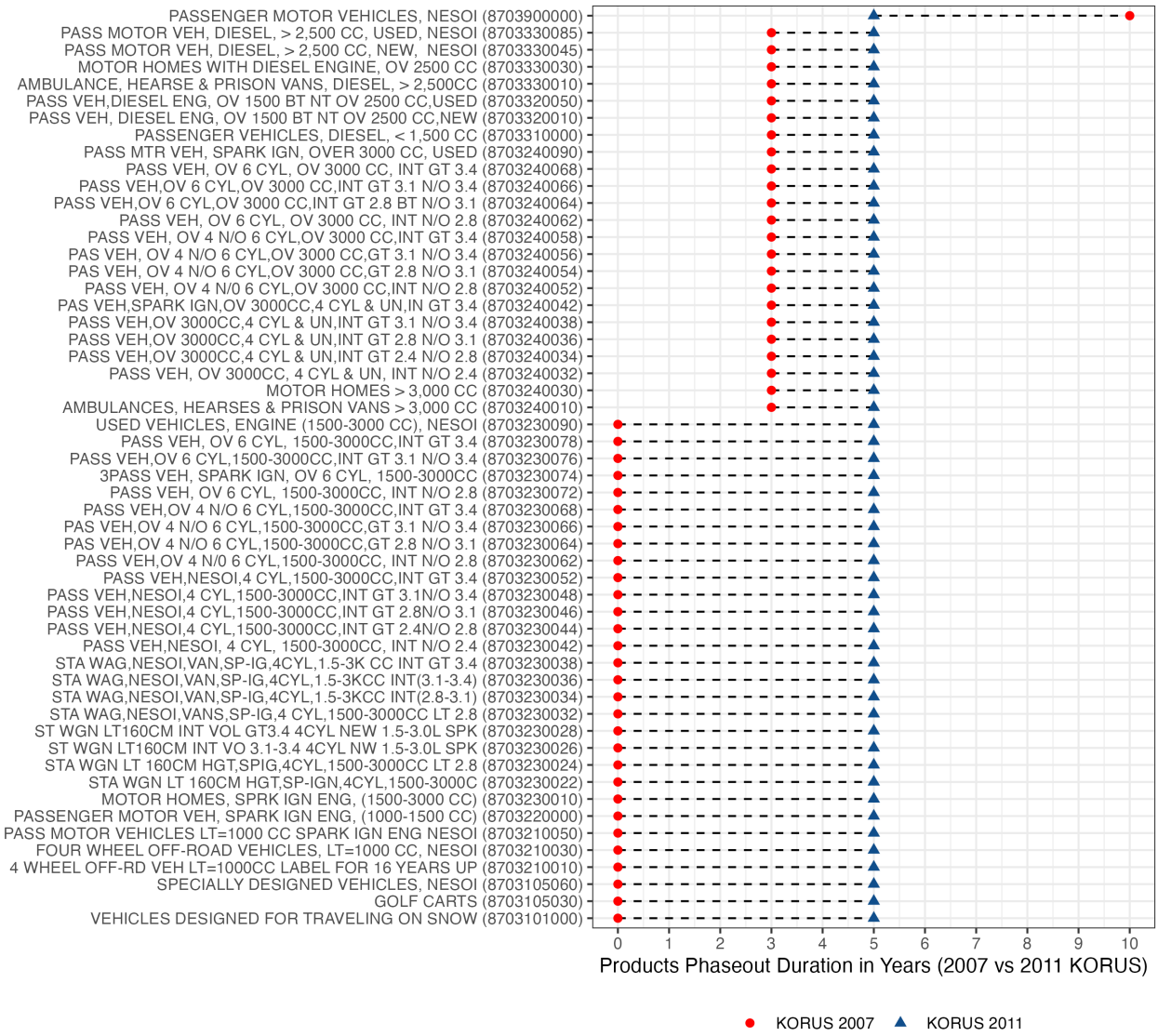
Table A3: Determinants of Phaseout Coverage Across FTAs

Dependent Variable:	Phaseout Coverage														
partner_year	AUS - 2004	BHR - 2004	CAFTA-DR - 2004	CHL - 2003	COL - 2006	JOR - 2000	KORUS - 2007	KORUS - 2011	MAR - 2004	NAFTA - 1992	OMN - 2006	PAN - 2007	PER - 2006	SGP - 2003	TPP - 2016
Model:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Variables															
Proximity to Median (Trade)	0.068***	0.009**	0.0008	0.027***	0.0009	0.018	0.011	0.013	0.059**	0.137***	0.017**	0.0008	0.0004	0.020	-0.0001
	(0.026)	(0.004)	(0.002)	(0.008)	(0.002)	(0.023)	(0.019)	(0.013)	(0.025)	(0.042)	(0.007)	(0.002)	(0.002)	(0.017)	(0.005)
Trade Ideology	0.077***	0.0004	-0.0003	0.016**	0.0002	0.024	0.014	0.008	0.067***	0.057	0.022***	-0.0003	0.0002	0.006	0.005
	(0.026)	(0.004)	(0.002)	(0.008)	(0.002)	(0.021)	(0.021)	(0.014)	(0.025)	(0.045)	(0.008)	(0.002)	(0.002)	(0.017)	(0.005)
Constant	-0.239***	-0.526***	-0.618***	-0.445***	-0.617***	2.35***	0.554***	0.494***	-0.069***	0.382***	-0.463***	-0.602***	-0.614***	0.124***	-0.258***
	(0.022)	(0.005)	(0.002)	(0.007)	(0.002)	(0.032)	(0.020)	(0.030)	(0.026)	(0.088)	(0.009)	(0.003)	(0.002)	(0.014)	(0.010)
District's Exposure to Import Threat	0.361***	0.083***	0.024***	0.166***	0.025***	2.00***	0.662***	0.793***	0.443***	0.557***	0.164***	0.034***	0.029***	0.476***	0.250***
	(0.030)	(0.007)	(0.003)	(0.010)	(0.003)	(0.027)	(0.021)	(0.019)	(0.039)	(0.024)	(0.013)	(0.004)	(0.003)	(0.018)	(0.008)
District Election Competitiveness	-0.025	0.001	-0.0007	0.001	0.0007	-0.005	0.022	0.017	-0.032*	-0.012	-0.005	-0.0003	0.0006	-0.008	-0.004
	(0.019)	(0.003)	(0.001)	(0.006)	(0.002)	(0.017)	(0.015)	(0.015)	(0.018)	(0.034)	(0.005)	(0.002)	(0.002)	(0.012)	(0.005)
Net Export	-0.019	0.022***	0.003	0.039***	0.002	-0.097***	-0.020	0.083***	-0.070***	-0.269***	0.010	-0.003	0.003	0.026	-0.041***
	(0.026)	(0.004)	(0.002)	(0.008)	(0.002)	(0.023)	(0.023)	(0.022)	(0.026)	(0.020)	(0.008)	(0.003)	(0.002)	(0.017)	(0.010)
Unemployment %	0.049	0.016***	0.002	0.034***	0.0007	0.095***	0.042	0.021*	0.012	0.111***	0.002	-0.001	-0.0004	0.063***	0.002
	(0.033)	(0.005)	(0.002)	(0.009)	(0.003)	(0.029)	(0.027)	(0.012)	(0.031)	(0.035)	(0.009)	(0.003)	(0.003)	(0.019)	(0.006)
Corp PAC (ln)	0.026	0.003	0.001	0.005	0.0009	0.008	0.012	0.038*	0.031	0.021	0.011*	0.002	0.001	0.017	-0.002
	(0.020)	(0.003)	(0.001)	(0.006)	(0.002)	(0.017)	(0.015)	(0.021)	(0.019)	(0.034)	(0.006)	(0.002)	(0.002)	(0.013)	(0.007)
House Ways & Means	-0.067	-0.009	-0.006	-0.016	-0.0009	-0.033	0.024	-0.002	-0.070	-0.108	-0.013	-0.002	-0.0007	-0.024	0.005
	(0.065)	(0.011)	(0.004)	(0.019)	(0.005)	(0.060)	(0.046)	(0.042)	(0.062)	(0.125)	(0.017)	(0.006)	(0.005)	(0.042)	(0.012)
Pres. Election Competitiveness	-0.075***	-0.007*	-0.003	-0.013*	-0.002	-0.009	0.013	-0.010	-0.080***	0.165***	-0.011**	-0.002	-0.002	-0.030**	0.013***
	(0.023)	(0.004)	(0.002)	(0.007)	(0.001)	(0.025)	(0.014)	(0.014)	(0.022)	(0.043)	(0.005)	(0.002)	(0.001)	(0.015)	(0.005)
Electoral College Vote	0.051**	0.003	-9.62×10^{-5}	0.008	0.0008	-0.010	-0.041***	-0.024*	0.062***	-0.040	0.013**	0.002	0.0006	-0.010	-0.006
	(0.020)	(0.003)	(0.001)	(0.006)	(0.001)	(0.019)	(0.015)	(0.014)	(0.019)	(0.042)	(0.005)	(0.002)	(0.001)	(0.014)	(0.004)
Union membership Pct	-0.190***	-0.009**	-0.0009	-0.035***	-0.0001	-0.066***	-0.016	-0.011	-0.192***	-0.336***	-0.027***	-0.003	0.0002	-0.048***	0.015***
	(0.023)	(0.004)	(0.002)	(0.007)	(0.002)	(0.019)	(0.016)	(0.015)	(0.022)	(0.042)	(0.006)	(0.002)	(0.002)	(0.015)	(0.005)
Fit statistics															
Observations	419	419	419	419	414	415	416	296	419	407	414	399	414	419	186
R^2	0.461	0.341	0.226	0.524	0.221	0.949	0.824	0.877	0.501	0.748	0.416	0.288	0.243	0.748	0.917
Adjusted R^2	0.447	0.324	0.205	0.512	0.200	0.948	0.819	0.872	0.487	0.741	0.400	0.268	0.223	0.741	0.912
Dependent variable mean	-0.194	-0.567	-0.624	-0.457	-0.623	2.15	0.597	0.460	-0.166	1.31	-0.540	-0.614	-0.623	0.265	-0.376

IID standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Note: Unit of observation is House of Representative district-FTA for all 14 FTAs negotiated. All covariates are standardized.

Figure A8: Changes in Tariff Treatment at 10-digits HTS code (KORUS 2007 vs 2011)



Note: Created by Author 7/28/25.

Table A4: Legislators' Proximity to the Median and District's Exposure to Import Threat on Tariff Phaseout Coverage, heterogeneous Effects

Dependent Variable:	Phaseout Coverage					
	Divided vs Unified			Divided vs Unified (no Jordan)	First vs Second Term	
Model:	(1)	(2)	(3)	(4)	(5)	(6)
Variables						
Proximity to Median (Trade)	0.192***	0.127***	0.126***	0.173***	0.017**	0.022***
	(0.031)	(0.041)	(0.023)	(0.026)	(0.007)	(0.007)
Proximity to Median (Trade) × Unified Government	-0.207***		-0.106***	-0.170***		
	(0.038)		(0.024)	(0.029)		
Proximity to Median (Trade) × Divided Govt - Non Copartisan		0.096				
		(0.069)				
Proximity to Median (Trade) × Unified Govt - Copartisan		-0.175***				
		(0.047)				
Proximity to Median (Trade) × Unified Govt - Non Copartisan		-0.115**				
		(0.052)				
Proximity to Median (Trade) × District's Exposure to Import Threat			0.032			0.044**
			(0.025)			(0.017)
Proximity to Median (Trade) × Unified Government × District's Exposure to Import Threat			0.001			
			(0.026)			
Proximity to Median (Trade) × Bush's 2nd Term					0.002	0.006
					(0.004)	(0.006)
Proximity to Median (Trade) × Bush's 2nd Term × District's Exposure to Import Threat						-0.002
						(0.013)
Trade Ideology	0.021**	0.028	0.017**	0.025***	0.024***	0.024***
	(0.010)	(0.026)	(0.009)	(0.010)	(0.007)	(0.007)
District's Exposure to Import Threat	0.475***	0.479***	0.816***	0.364***	0.303***	0.277***
	(0.023)	(0.023)	(0.034)	(0.021)	(0.018)	(0.020)
District Election Competitiveness	-0.015*	-0.017**	-0.002	-0.022***	-0.006	-0.002
	(0.008)	(0.008)	(0.007)	(0.008)	(0.005)	(0.005)
Net Export	-0.049***	-0.051***	-0.098***	-0.056***	0.027*	0.029**
	(0.017)	(0.018)	(0.017)	(0.018)	(0.015)	(0.014)
Unemployment %	-0.009	-0.012	0.028***	0.004	0.008	0.007
	(0.013)	(0.013)	(0.011)	(0.012)	(0.010)	(0.010)
Corp PAC (ln)	0.011	0.012	0.005	0.018**	0.015***	0.018***
	(0.008)	(0.008)	(0.007)	(0.007)	(0.006)	(0.006)
House Ways & Means	-0.034*	-0.039*	-0.024	-0.026	-0.021	-0.022
	(0.020)	(0.020)	(0.017)	(0.021)	(0.015)	(0.016)
Pres. Election Competitiveness	-0.015*	-0.012	-0.013**	-0.019**	-0.013***	-0.012***
	(0.008)	(0.008)	(0.006)	(0.008)	(0.005)	(0.005)
Electoral College Vote	0.023***	0.023***	0.002	0.021***	0.018***	0.019***
	(0.007)	(0.007)	(0.005)	(0.006)	(0.005)	(0.005)
Union membership Pct	-0.053***	-0.050***	-0.055***	-0.058***	-0.045***	-0.046***
	(0.011)	(0.011)	(0.010)	(0.010)	(0.007)	(0.007)
Divided Govt - Non Copartisan		0.219***				
		(0.053)				
Unified Govt - Copartisan		-0.012				
		(0.054)				
Unified Government × District's Exposure to Import Threat			-0.624***			
			(0.032)			
Bush's 2nd Term × District's Exposure to Import Threat						0.037***
						(0.010)
Fixed-effects						
FTA	✓	✓	✓	✓	✓	✓
Fit statistics						
Observations	5,579	5,503	5,579	5,164	4,571	4,571
R^2	0.784	0.787	0.832	0.758	0.737	0.740
Within R^2	0.403	0.412	0.536	0.424	0.357	0.365
Dependent variable mean	0.015	0.018	0.015	-0.157	-0.281	-0.281

Clustered (District) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Note: Unit of observation is House of Representative district-FTA for all 14 FTAs negotiated. Standard errors are corrected for clustering at the district level. All covariates are standardized.

Table A5: Ratification Vote

Dependent Variable:	Pr(Vote Yes = 1)			
Model:	(1) OLS	(2) OLS	(3) Logit	(4) Logit
Variables				
Phaseout Coverage	0.012	0.024*	0.183	0.321*
	(0.030)	(0.014)	(0.395)	(0.172)
Median Third	0.097	0.067	0.741*	0.463
	(0.074)	(0.069)	(0.447)	(0.390)
Pro-Trade Third	-0.007	0.002	-0.343	-0.650
	(0.095)	(0.091)	(1.29)	(1.40)
District's Exposure to Import Threat	-0.051*	-0.064***	-0.738*	-0.917***
	(0.029)	(0.022)	(0.397)	(0.297)
Exclusion Coverage	0.012*	0.063***	0.139*	0.546***
	(0.006)	(0.011)	(0.079)	(0.100)
District Election Competitiveness	-0.001	-0.0006	0.079	0.050
	(0.014)	(0.015)	(0.193)	(0.201)
Net Export	-0.007	-0.008	-0.186	-0.178
	(0.013)	(0.012)	(0.177)	(0.162)
Unemployment %	0.025**	0.025*	0.335**	0.334**
	(0.013)	(0.013)	(0.141)	(0.148)
Corp PAC (ln)	-0.002	-0.002	0.029	0.040
	(0.011)	(0.012)	(0.122)	(0.126)
Ways and Means	0.040	0.046	0.741	0.740
	(0.036)	(0.036)	(0.469)	(0.469)
Phaseout Coverage × Median Third	0.063		0.457	
	(0.040)		(0.460)	
Phaseout Coverage × Pro-Trade Third	-0.049		-1.30**	
	(0.036)		(0.532)	
Phaseout Coverage × District's Exposure to Import Threat	0.006		0.063	
	(0.011)		(0.122)	
Median Third × District's Exposure to Import Threat	-0.023	-0.005	0.036	0.182
	(0.044)	(0.029)	(0.430)	(0.273)
Pro-Trade Third × District's Exposure to Import Threat	-0.003	0.005	-0.536	-0.052
	(0.033)	(0.022)	(0.532)	(0.408)
Phaseout Coverage × Median Third × District's Exposure to Import Threat	-0.022		-0.185	
	(0.019)		(0.183)	
Phaseout Coverage × Pro-Trade Third × District's Exposure to Import Threat	0.013		0.578***	
	(0.013)		(0.219)	
Exclusion Coverage × Median Third		-0.040**		-0.257
		(0.016)		(0.182)
Exclusion Coverage × Pro-Trade Third		-0.078***		-0.857***
		(0.016)		(0.204)
Exclusion Coverage × District's Exposure to Import Threat		-0.053***		-0.607***
		(0.013)		(0.177)
Exclusion Coverage × Median Third × District's Exposure to Import Threat		0.045***		0.517**
		(0.016)		(0.214)
Exclusion Coverage × Pro-Trade Third × District's Exposure to Import Threat		0.049***		0.601**
		(0.018)		(0.262)
Fixed-effects				
Legislator	✓	✓	✓	✓
Fit statistics				
Observations	4,481	4,481	2,089	2,089
Squared Correlation	0.666	0.669	0.344	0.352
Pseudo R^2	0.797	0.804	0.283	0.290
BIC	7,398.7	7,354.6	3,920.2	3,899.2
Dependent variable mean	0.636	0.636	0.549	0.549

Clustered (Legislator) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Note: Unit of observation is House of Representative legislator-FTA for all 12 FTAs with ratification vote data. Standard errors are corrected for clustering at the legislator level. All covariates are standardized.

Table A6: Import Threat's Effect on Phaseout Duration (Product Level Analysis)

Dependent Variables:	Phaseout Usage				Phaseout Duration			
Model:	(1) Logit	(2) Logit	(3) Logit	(4) Logit	(5) OLS	(6) OLS	(7) OLS	(8) OLS
Industry Concentrated in ...								
Import Threat	0.505***	0.442***	0.447***	0.340***	0.575***	0.420***	0.298***	0.299***
	(0.024)	(0.039)	(0.044)	(0.057)	(0.043)	(0.060)	(0.039)	(0.051)
Controls		✓	✓	✓		✓	✓	✓
Fixed-effects								
FTA		✓	✓			✓	✓	
NAICS			✓				✓	
FTA-NAICS				✓				✓
Fit statistics								
Observations	195,261	195,261	194,721	104,712	195,261	195,261	195,261	195,261
Squared Correlation	0.081	0.335	0.369	0.329	0.116	0.172	0.211	0.343
Pseudo R^2	0.080	0.325	0.361	0.291	0.023	0.036	0.045	0.079
BIC	175,393.6	128,820.0	125,046.8	103,509.7	1,007,665.1	995,060.3	989,103.3	995,166.0
Dependent variable mean	0.191	0.191	0.192	0.294	1.37	1.37	1.37	1.37
R	0.217	0.217	0.217	0.217	0.217	0.217	0.217	0.217

Clustered (NAICS) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Note: Standard errors are corrected for clustering at the industry level. All covariates are standardized.

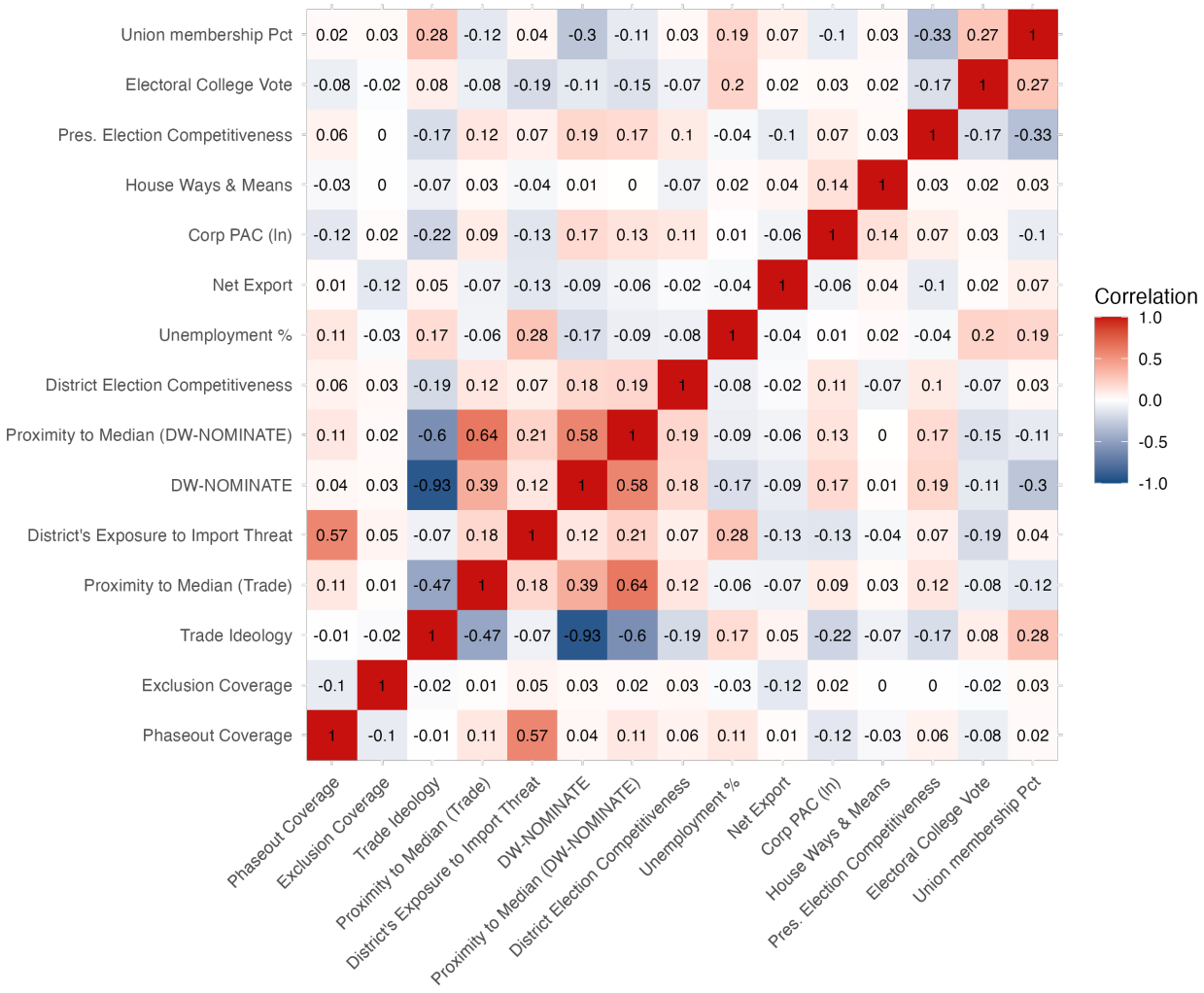
Table A7: Import Threat's Effect on Phaseout Coverage Across Four Different Geographies

Dependent Variable:	Phaseout Coverage			
	County	State	Commuter Zone	District
Model:	(1)	(2)	(3)	(4)
Variables				
Region's Exposure to Import Threat	0.461***	0.469***	0.485***	0.481***
	(0.010)	(0.045)	(0.020)	(0.022)
Fixed-effects				
FTA	✓	✓	✓	✓
Fit statistics				
Observations	43,877	700	10,338	6,086
R^2	0.522	0.852	0.619	0.773
Within R^2	0.269	0.393	0.334	0.371
Dependent variable mean	-0.028	-0.028	-0.034	2.44×10^{-15}

*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

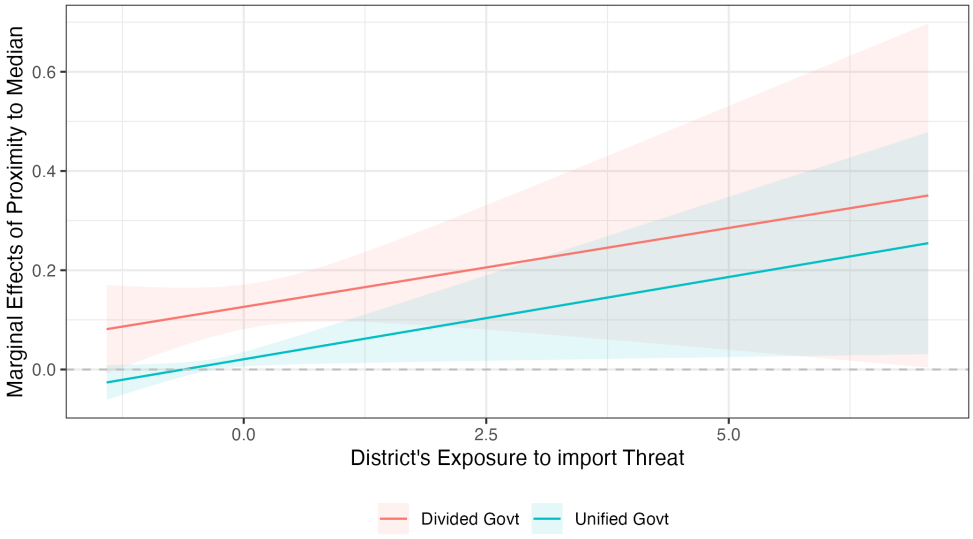
Note: Standard errors are corrected for clustering at the geography unit of analysis. All covariates are standardized.

Figure A9: Correlation Heatmap



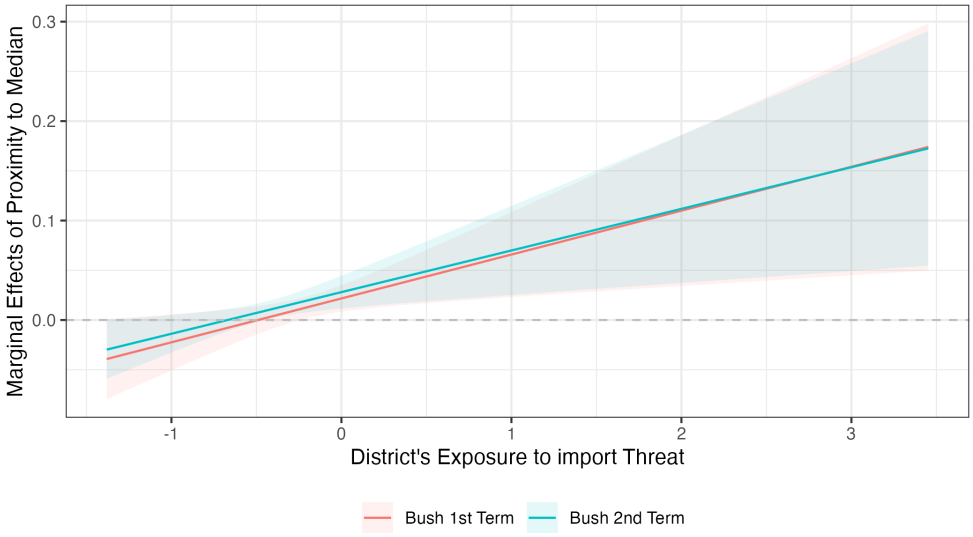
Note: Created by author on 9/3/25

Figure A10: Marginal Effects of *Proximity to Median* Conditional on Divided Government and District's Exposure to Import Threat



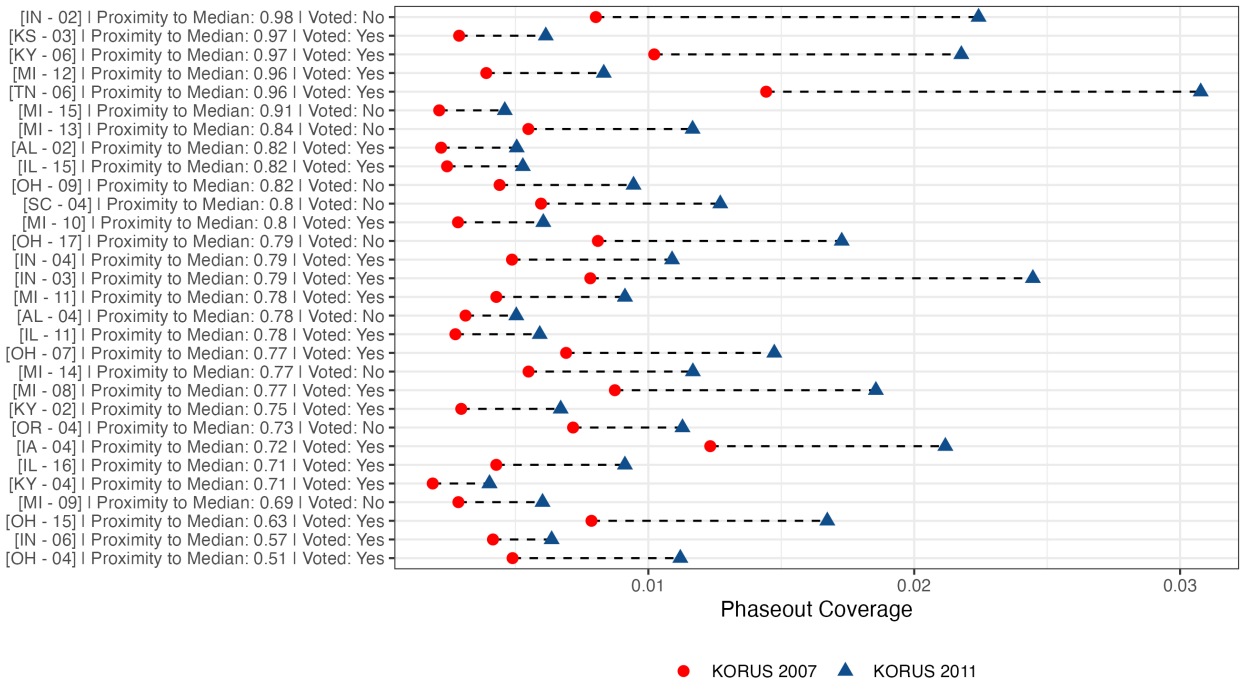
Note: Regression Table A4. Created by Author 9/1/25.

Figure A11: Marginal Effects of *Proximity to Median* Conditional on Bush's Term and District's Exposure to Import Threat



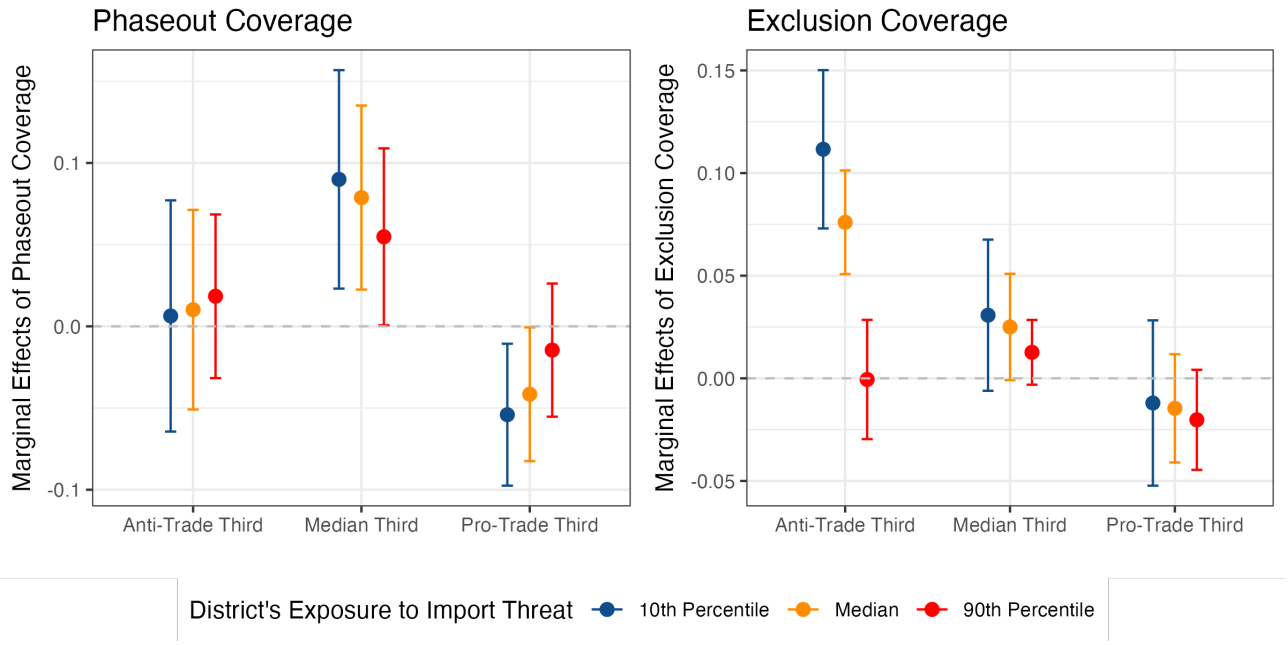
Note: Regression Table A4. Created by Author 9/1/25.

Figure A12: Change in District-level Phaseout Coverage, ranked order by Proximity to Median (KORUS 2007 vs KORUS 2011)



Note: This figure features 30 districts with highest *Phaseout Coverage* in KORUS-2011 to compare changes with the KORUS-2007 version. Phaseout coverage is constructed with the 2007 employment share numbers $\frac{E_{dkt_{2007}}}{E_{dt_{2007}}}$ to hone in on the changes in phaseout coverage. District is rank ordered by the legislator's proximity to the median in the 112th Congress. Created by Author 7/28/25.

Figure A13: Marginal Effect of Phaseout Coverage on Ratification Vote, Conditional on Legislators' Position on Trade and District's Exposure to Import Threat. OLS



Note: Table A5 presents the regression results. Created by Author on 7/30/25