Courting the Median: Strategic President and the Distribution of Temporary Protection in U.S. Free Trade Agreements

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Abstract

How do US presidents liberalize trade in the shadow of congressional politics? Conventional wisdom suggests that a strategic president would maintain the pro-trade coalition in Congress by limiting tariff cuts on important goods. What happens when all dutiable import tariffs must be cut per WTO rules on preferential trade agreements? I argue that the president should strategically phase out specific tariffs in free trade agreements, as opposed to eliminating tariffs immediately, to buy Congressional support. Specifically, I argue that the executive targets phaseout to the median legislator as they are cost-efficient and credible in ratification promises. Controlling for districts' economic needs, I find that a greater share of a district's workforce is covered by tariff phaseout the closer the representative is to the median on trade issues. However, more tariff phaseouts do not necessarily translate to a higher likelihood for ratification, suggesting that it is one empirically testable part of a bundle of demands fulfilled to buy median legislators' ratification votes.

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1 Introduction

How do US presidents liberalize trade in the shadow of congressional politics? Conventional wisdom suggests that post-war gradual trade liberalization did not happen without side payments and pockets of protectionism to maintain a pro-trade coalition in Congress (Evans 2004; Goldstein and Gulotty 2014). However, trade liberalization over the past two decades has been neither gradual nor easily bought with side-payments and selective protectionism. Since the Uruguay Round, trade liberalization has primarily been driven by bilateral or plurilateral preferential or free trade agreements (FTAs). Beyond the constraints of the GATT Article XXIV, which allows for preferential arrangements only if substantially all trade barriers are eliminated, US executives are also strategically constrained from overusing exclusion, a form of protection by maintaining existing tariff rates. This is coupled with the end of earmarks starting with the 2010 bipartisan moratorium,[2] which are side payments often used to buy legislative votes (Evans 2004). Under these contexts, how did US presidents liberalize trade without extensive usage of selective protectionism and side-payments?

This paper focuses on tariff phaseouts as an overlooked and under-theorized instrument available to the president to cushion the pain of trade liberalization. Phasing out

[2]See here for more background on earmarks.

tariffs, as opposed to eliminating tariffs immediately, is used often in most agreements and is highly tailored to specific products. The principle of reciprocity governs trade negotiation; hence, using phaseout or exclusion allows trade partners to reciprocate in kind, i.e., slowing down access or blocking access altogether, respectively.

Executives, assumed to be universalist due to a national constituency (Nzelibe 2006),[3] aim to maximize the aggregate welfare by pursuing free trade; this policy goal, however, is contingent on ratification of the trade agreement. Negotiating under the shadow of congressional ratification requires that the executive uses tariff phaseouts strategically and in cost-effective ways. Meaning, they must strategically distribute or negotiate for phaseouts to specific products and, hence, industries to swing the vote of legislators representing districts composed of those industries. Concurrently, executives are also disincentivized from overusing tariff phaseouts to maximize the speed of welfare gains to constituents and market access for exporters.

I argue that the median legislator is the ideal recipient of tariff phaseouts for two reasons. Under trade promotion, or fast track authority, the executive is delegated the power to negotiate non-amendable trade agreements that are voted on by both chambers with a simple majority. This contrasts with the constitutionally mandated two-thirds majority in the Senate requirement for other treaties. First, the median legislator is a natural target for temporary protection because they are relatively more credible in their promise to ratify compared to protectionist legislators. Second, targeting the median legislator is more cost-efficient than if negotiators try to swing the vote of a protectionist legislator; as such, in efforts to minimize welfare losses for consumers from phaseout and for exporters from reciprocated phaseouts, the executive minimizes the use of tariff phaseouts by pursuing the less costly option to buy votes.

I test my argument using an original and highly disaggregated tariff line dataset on tariff treatment for all 14 negotiated US free trade agreements (FTAs) since the North American Free Trade Agreement (NAFTA). Additionally, I present a new trade ideology measure, constructed from the W-NOMINATE procedure with over 700 trade-related roll call votes from 1934 to 2013 (Poole et al. 2011; Lewis et al. 2023). First, I demonstrate that phaseout coverage peaks near the median trade representative, but the pattern is not replicated with the traditional DW-NOMINATE score, suggesting that it is distinct despite being highly correlated.

Second, I find that although the executive largely caters to import-sensitive districts,

[3]Although there are some studies that suggest that the President is rather particularistic (Kriner and Reeves 2015*b*,*a*; McCarty 2000; Wood 2009; Lowande, Jenkins, and Clarke 2018).

median legislators play a modest, but significant, role in attracting — whether intentionally through inter-branch lobbying or in anticipation by the executive — more phaseout coverage to their districts' industries. This suggests that the political calculation of the executive to achieve ratification is salient among the need to ease the pain of trade liberalization.

Third, I show that liberalization exclusion, a pure form of protectionism in free trade agreements, can only be explained by import-sensitivity and union membership. This finding suggests the limits of median legislators' influence in extracting concessions; whereas exclusion is costly, the executive is more amenable to buying time for median legislators' industries.

Finally, while median legislators receive greater phaseout coverage for their district, this does not necessarily translate into a higher likelihood of voting for ratification. This may suggest that tariff phaseouts may just be one among a bundle of demands legislators may need to ratify the agreement. So while analyzing tariff phaseouts is not enough to infer how legislators vote, doing so accomplished a task that would otherwise not be possible with other provisions in the agreement to empirically evaluate strategic targeting by the executive.

This study makes several contributions. Firstly, it speaks to the broader literature on the political economy of trade by introducing the median legislator as a target for protection. Whereas previous literature has emphasized geographic and political concentration (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) in explaining variations in protection, no study has empirically evaluate the ability for the median legislator to attract trade concessions.

Secondly, this paper demonstrates that the president's political objective in ratifying FTAs plays a role in distributing carve-outs beyond responding to legislative and interest groups' demand for protection and softening the blow of globalization. While free trade agreements are distinct from the gradual trade liberalization context in which Goldstein and Gulotty (2014) have operated under, this study echoes their findings by demonstrating that despite the binding commitment to free trade, the executive can employ granular and targeted levers to build and maintain a pro-trade coalition for ratification.

Thirdly, although the scope of this project is rather narrow, the unique data opportunity provided by the incredibly rich variation in tariff treatment in FTAs allows for one of the first empirical analyses on how treaties are designed to target the median legislator. It

validates the heretofore assumed significance of the median legislator in the negotiation of international treaties (Putnam 1988; Mansfield, Milner, and Pevehouse 2007; Milner and Rosendorff 1996; Rector 2001; Buzard 2017; Milner and Rosendorff 1997). On that front, this paper introduces one of the first highly detailed codings of tariff treatment in US free trade agreements; beyond its use in this paper, the PTARIFF database also contains information on the various means of tariff reduction and duration of phaseout.[4]

Finally, while the executive is assumed to be more free-trading than Congress in making trade policies (Bailey, Goldstein, and Weingast 1997), I show how the executive may dip his feet into temporary protectionism to promote free trade. That is, in the aggregate, the executive is incentivized to design agreements that maximize the aggregate welfare; however, the executive must cater specific concessions in anticipation of the median legislator to achieve ratification and actualize the benefits of FTAs.

2 Background

How does the President pursue free trade under the shadow of parochialistic Congress? Prior to delegating trade policy-making authority to the President with the Reciprocal Trade Agreement Act (RTAA) in 1934, US tariff levels fluctuated with the changing winds of the Congressional majority (Hansen and Prusa 1997). Beholden to the particularistic, parochial interests of each member's district, US trade policies were nothing short of protectionist (Bailey, Goldstein, and Weingast 1997).

Freer trade was possible when trade policymaking was delegated to the President with the condition of reciprocal tariff reduction (Bailey, Goldstein, and Weingast 1997). This not only empowers the universalist president to pursue welfare-maximizing trade policies, but also emboldens exporting interests as market access abroad is reciprocated with tariff reduction at home (Gilligan 1997).

Congress kept a tight leash on the President with such authority by requiring frequent renewal of tariff-setting authority and consultation with domestic stakeholders and congressional members during negotiation. The executive would strategically pursue trade agreements between 1934 and 1945 with specific trade partners, liberalizing tariffs on specific products so as not to ruffle protectionists' feathers (Goldstein and Gulotty 2014). These bilateral trade agreements formed the basis for the United States' most favored nation tariff rates — rates that are applicable to every GATT member in accordance with the non-discrimination principle (Bagwell and Staiger 1999) — when the General Agreement

[4] PTARIFF is in collaboration with Elizabeth Van Lieshout, OECD.

on Trade and Tariffs (GATT) entered into force in 1945.

Across nine GATT rounds, the US reduced its average tariffs by 28%, averaging at 5% by the end of the Uruguay Round's phaseout in 2000. While the success of liberalization stems mostly from the gradual reduction that slowly phased out protectionist interests (see Staiger (1994) for a discussion on how gradualism displaces protectionist interests), it would not have been possible without selective protectionism and side payments.

In some contexts, side payments[5] have been shown to be used as a way to build legislative coalition and to convince fence-sitting legislator to vote in favor of liberalization (Naoi 2015; Evans 2004). It is important to note that the use of side-payments in the US context, i.e., "earmarks," was paused between 2010 and 2021.[6] More broadly, however, the conventional wisdom holds that industries with political clout remained protected by a strategic president targeting tariff cut exclusion to limit protectionist mobilization in Congress (see Goldstein and Gulotty (2014) for extensive analysis of US trade liberalization effort pre- and post-delegation.)

How, then, is protection distributed during the GATT era? The canonical Protection for Sale model pits industries against consumers. Grossman and Helpman (1994) stipulate that the government distributes protection in patterns that maximize the optimal payoff between campaign contributions from organized industries and votes from voters. Indeed, the ability for industry groups to organize more effectively underlies their competitive advantage relative to consumers (Olson 1965; Alt and Gilligan 1994).

More importantly, however, political institutions in which industry groups' interests filter through are an important component in explaining policy outcomes (Lake 2009). For instance, Busch and Reinhardt (1999) demonstrated that protection is distributed to industries that are concentrated geographically; subsequent papers demonstrated that concentrated industries can mobilize both lobbying effort and the votes of workers, amplifying their voice (Busch and Reinhardt 2000, 2005). On the other hand, broad political representation of an industry across multiple electoral districts has been shown to correlate with greater protection (Busch and Reinhardt 1999; McGillivray 2004).

Where industries concentrate also matters in the context of American majoritarian electoral rule for presidential elections. Given the "winner takes all" of a state's electoral college votes, industries that concentrate in "swing" states have been found to receive greater levels of protection from the President in GATT tariff schedules (Ma and McLaren

[5] In the form of "subsidies, public work projects, personnel appointments, and broader compensation policies" (Naoi 2015, p.9).

[6] Learn more here.

2018) and in unilateral tariff hikes (Lowande, Jenkins, and Clarke 2018; Kriner and Reeves 2015*a*)

Sometimes, an industry's ability to achieve its preferred policy outcomes may be dependent on legislators' characteristics, such as their seniority status (McGillivray 2004), committee membership (McGillivray 2004; Hansen 1990), and their party's majority status (Fredriksson, Matschke, and Minier 2011; Hansen and Prusa 1997).

This paper contributes to the broader discussion of selective protectionism in a new context that represents the relatively recent reality of international trade; that is, the proliferation of free trade agreements (Baccini 2019; Manger 2009; Chase 2005). I argue that under the constraints placed on the executive to eliminate substantially all trade barriers, they utilize tariff staging, or phaseout, for specific products to act as protection by delaying free trade. This protection, I argue, follows patterns that not only benefit industries in need but also benefit districts of median legislators to buy ratification.

3 Free Trade Agreements and Tariff Phaseouts

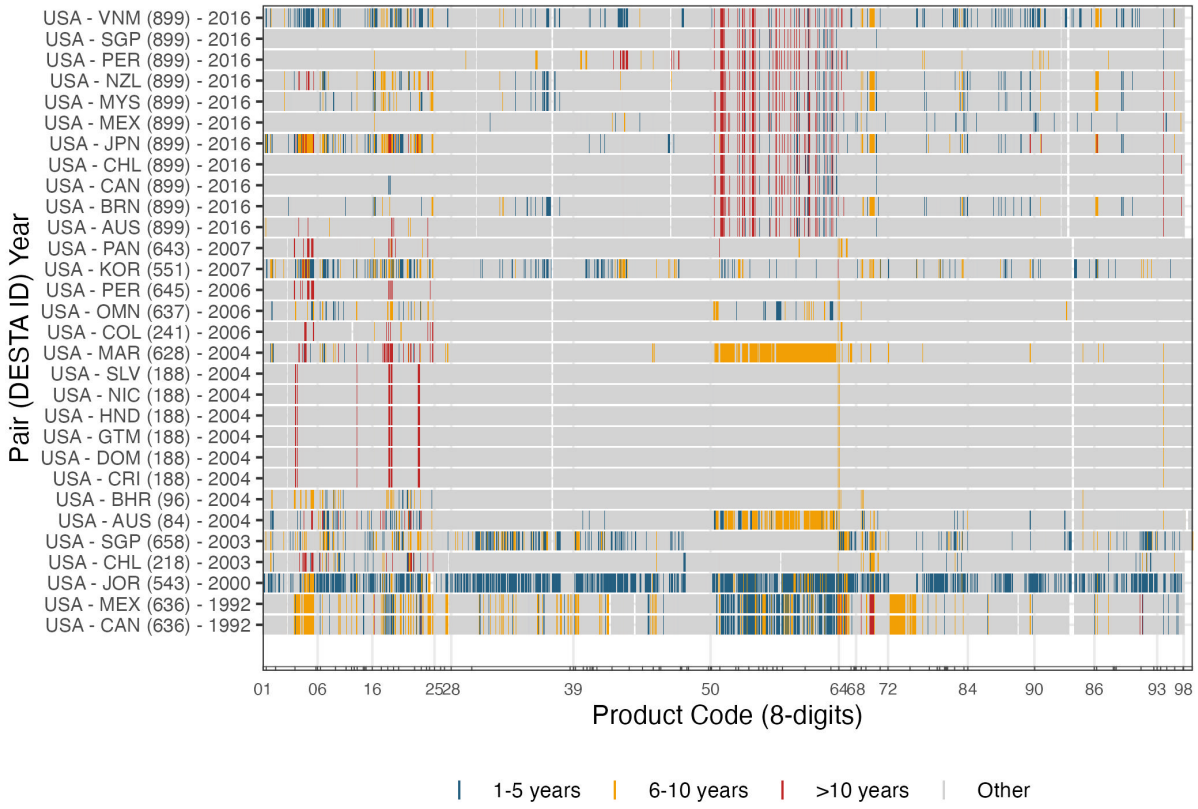
Since the conclusion of the GATT Uruguay Round, bilateral and regional *free trade agreements* (FTAs) have replaced multilateralism as the de facto mode of liberalization (Baccini 2019). Distinct from the gradual tariff cuts of the GATT era, free trade agreements aim to eliminate "substantially all trade barriers," as required by GATT Article XXIV. This means that instead of variable cuts in tariff rates across products, all dutiable good tariffs are bound for elimination. Of course, there are a few exceptional cases in which product tariffs are excluded from liberalization; however, exclusion is only used 0.02% of the time. How did the president ever get any FTA ratified through Congress, especially when they were negotiated under divided government, such as the case for the North American Free Trade Agreement (NAFTA), US-Korea (KORUS), and US-Jordan FTA?

Between pure protection with exclusion and immediate tariff elimination, the executive phases out 25% of all dutiable product tariffs across 14 FTAs with an average and median duration of 7.8 and 9 years, respectively. As demonstrated by Figure 1, which illustrates the duration of all phased out tariff lines (indicated by individual vertical line) for all 14 FTAs, the distribution of tariff phaseouts, both usage and duration, vary across agreements within sector and even across trade partners within the same agreement.

[Figure 1 about here]

Tariff phaseouts have been shown to buy political support from interest groups. For

Figure 1: Distribution of Tariff Phaseout Duration from USA FTAs Across 8-digit Product Codes



Note: Each tick 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 tick 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.

example, the UAW specifically cited the newly negotiated lengthy phaseout of automobile products from South Korea in their 2011 endorsement of KORUS (the language of the endorsement can be seen in Figure A5). The UAW endorsement stands in contrast with other labor unions that opposed the treaty on labor, investment, and environmental grounds.[7] More specifically, only 10 products — all of which are automobiles — had their phaseout duration increased between the 2007 version under the Bush administration and the 2011 version under the Obama administration. Of course, the 2011 version of KORUS was ultimately ratified; while other concessions were extracted from South Korea, this case clearly demonstrates the economic and political significance of tariff phaseouts to interest groups.

[7]The UAW's endorsement deviated from the position of other large unions such as the AFL-CIO, United Steel Workers, and the Communications Workers of America.

Phasing out tariffs confers two benefits to domestic producers. First, delaying the elimination of tariffs emulates protection, however temporary it may be, by maintaining the prices of foreign goods relatively high compared to domestic goods. While imported goods may enter the US market early in the staged reduction process (Besedes, Kohl, and Lake 2020; Dong and Jestrab 2022), it does not necessarily mean that domestic producers are immediately less competitive. The branding and reputation of existing domestic companies may mitigate consumer flocking to imported foreign brands, at least in the early stages. Therefore, the longer the price of imported goods is maintained relatively higher than domestic-made goods, the better insulated domestic producers are from foreign competition. Indeed, economists have argued and found that phasing out tariffs can ease industry adjustments and resource reallocation (Riker 2021; Mussa 1984; Leamer 1980).

Second, the maintenance of some level of tariffs early in the phase-out period can dampen firms' immediate incentives to offshore jobs to the trade partners. Firms only offshore if the cost of producing abroad is lower than the cost of domestic production; labor and transportation costs, as well as tariffs, contribute to the firm's cost calculation for offshoring. One may intuitively conclude that the longer it takes for tariffs to be reduced to a critical threshold, one that would make offshoring profitable relative to domestic production, the longer the delay on firms' decision to offshore.

Given the reciprocal nature of trade negotiation, item-by-item negotiation on tariff cuts with reciprocal value from the GATT era (Bagwell, Staiger, and Yurukoglu 2020) is replaced with item-by-item negotiation on the reduction timeline. While the executive is constrained by the GATT/WTO, they are also strategically constrained from overusing tariff cut exclusions and tariff phaseouts; that is, reciprocated exclusions and tariff phaseouts from trade partners would impose realized and diminishing opportunity costs on exporters, respectively. A former trade negotiator attested that the "principle [in negotiation] was no exclusion" because "the things that our partners wanted to exclude were things that mattered to us" (Interview 2 7:37, 7:56).

This logic similarly applies to tariff phaseouts, meaning that phaseouts are similarly stingily distributed. While phasing out tariffs eventually leads to free trade between the partners, there are costs associated with phaseouts. Consumers and exporters both face opportunity costs from tariff phaseouts. Consumers are more directly affected by the tariff phaseouts the executive negotiated; exporters, on the other hand, are hit with reciprocated phaseouts and face temporary and declining opportunity costs from not having full market access.

If the executive cannot distribute selective protection by means of tariff cut exclusion, how does the executive allocate phaseouts to maximize ratification chances? I argue that the executive strategically targets the limited bargaining resource to the *median legislator* to maximize ratification chances. Not only are they credible ratifiers, but the costs associated with buying their votes are relatively low.

4 Median Legislators

A universalist president's ability to improve aggregate welfare through free trade agreements is contingent on ratification. While previous literature assumed that the executive negotiates international treaties under the shadow of the veto player (Putnam 1988; Milner 1997; Buzard 2017; Rector 2001; Milner and Rosendorff 1996; Mansfield, Milner, and Pevehouse 2007), few have actually examined how the President negotiates trade agreements under the shadow of congressional ratification. The closest anyone has come to examining this question was Goldstein and Gulotty (2014), in which they examine the politics of Congressional reauthorization of tariff-setting authority. While one may proxy for ratification with authorization, they did not specifically analyze how the executive negotiates international trade agreements in anticipation of ratification, especially under divided government.

This paper hone in on the role of the median legislator in attracting protection from the executive in free trade agreements. The median legislator is equivalent to the veto player in the context of international trade treaties due to the institution that delegates trade policymaking authority to the Executive. While any treaties up for ratification are required to have a two-thirds majority consent of the Senate, trade treaties only need a simple majority consent in both chambers. This rule has been a consistent element in Congress's subsequent delegation of trade-policymaking authority to the Executive since the RTAA in 1934.[8]

While the logic of targeting protection to the median legislator is intuitive, it is important to reason why they are both credible ratifiers and cost-efficient options for tariff phaseouts. First, assuming both median and protectionist legislators can be convinced with enough tariff phaseouts, the median legislator would require less than the protectionist to be convinced to ratify the treaty. [9] As a result, less phaseouts are needed and,

[8]These authorization are often referred to as "trade promotion authority" or "fast track authority" in more recent Congresses.

[9]Naoi (2015, p.20) similarly argues that on-the-fence legislators require less pork and side-payments distributed to swing their vote toward trade liberalization.

thus, lower cost is imposed on consumers and exporters.

Secondly, even if the executive does indeed decide to grant the levels of protection demanded by both median and protectionist legislators, the latter cannot credibly promise to ratify a treaty that would seriously injure their political survival. Hence, the median would be relatively more credible in their ratification promise; therefore, the executive is more likely to target tariff phaseouts to industries important to the median legislator in anticipation of the credible promise.

All in all, median legislators should receive longer phaseouts compared to both free-trading and protectionist legislators. In receiving more phaseouts, median legislators are expected to be more likely to ratify trade agreements compared to those who did not receive much phaseout. Hence, the first and second hypotheses:

> **Hypothesis 1 (H1):** All else equal, more workers in districts of legislators closer to the median on trade ideology should be covered by tariff phaseouts compared to legislators further from the median.
>
> **Hypothesis 2 (H2):** All else equal, median legislators who received more tariff phaseouts for their districts are more likely to vote in favor of ratification compared to those who received less.

5 Data and Research Design

5.1 Phaseout Coverage

To test my theory on whether median legislators receive more tariff phaseouts for their district, I collected new data on US 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 8 digits US harmonized tariff system (HTS) level.[10]

The data collection process is as follows: First, I collect PDF tariff schedules from the US Trade Representative website. These tariff schedules primarily consist of tables with over 8000 unique tariff lines (rows), the description of the HTS codes, their base rates, and their unique staging category.[11] Figure A1 provides an example of the US tariff schedule

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

[11] 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) so that Tabula could work correctly. The author manually coded approximately

toward imports from Australia. Second, I extract the tables from the PDF using Tabula, a Python software that "liberates data tables trapped inside PDF files."[12] Third, I manually code each unique staging category by hand, referring ro 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).[13] 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 A2 provides an example of the language on staging categories that is common between the USA and Australia, and Figure A3 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 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 traded-sector 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 import tariffs*, 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 products P within industry k.[14] 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_d is the total employed workers. Employment numbers are averaged over 5 years prior to the agreement's signature date.[15]

Individually, the product of the two terms should give an estimate of the proportion of

1100 products with more than one tariff treatment, which were previously not coded by Besedes, Kohl, and Lake (2020).

[12]Click here for more information on Tabula.

[13]Figure A4 illustrates the difference between tariff phaseouts that is "linear" and "backloaded."

[14]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).

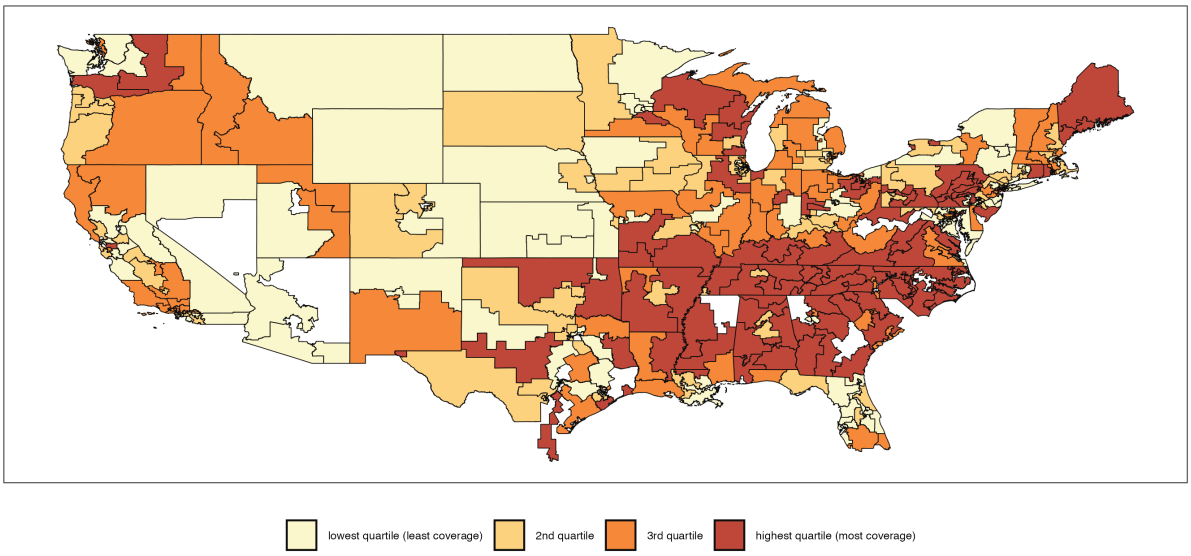
[15]Industry employment data is from Eckert et al.'s 2020 version of the County Business Pattern data, where they harmonized industry codes to the 2012 revision of the NAICS. I used the Missouri Census Data Center's county-district crosswalk files to map employment from the county to the district level.

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 2 shows the phaseout coverage from NAFTA, grouped into quartiles. Phaseout coverage concentrates most in the districts of the Sun Belt states, and some in the Rust Belt.

[Figure 2 about here]

Figure 2: Map of NAFTA's Phaseout Coverage



Note: Phaseout coverage is grouped into quartiles. I used the 114th congressional district borders for convenience. See link for the phaseout coverage map for all FTAs. Created by Author 5/27/25.

5.2 Trade Ideal Points and Median Legislator

The main explanatory variable is the degree to which a legislator is the median legislator on trade issues. First order of business 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 on 736 trade-related roll call votes (1934-2013) extracted from the VoteView database (Poole et al. 2011; Lewis et al. 2023).[16] I exclude ratification roll call votes to limit any endogeneity.

[16]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.

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 US 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.[17] 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 most free-trading legislator receives -1.

Figure 3 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.

[Figure 3 about here]

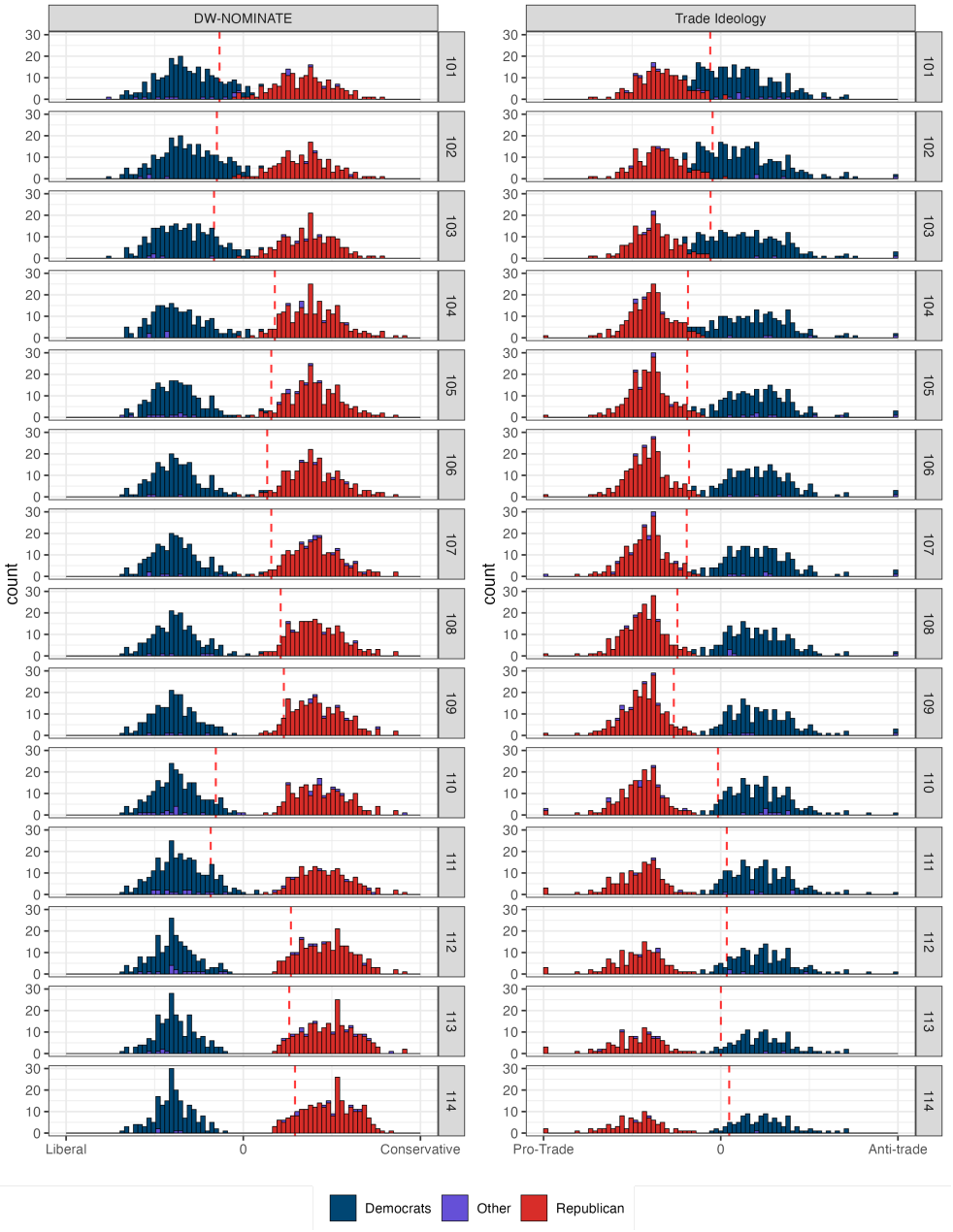
There are three immediate observations. First, party affiliation explains the bimodality of both scores. Democrats are more liberal and protectionist, while Republicans are more conservative and free-trading. Second, polarization occurs for both scores across time. Third, there seems to be almost a perfect correlation between the two measures. While on the aggregate, the correlation coefficient is indeed -0.94, there are variations in the correlation across Congresses. Figure 4 plots the correlation coefficient between the two scores across Congresses, indicating that the two become more similar over time. This is in contrast with the fact that the proportion of legislators with a *Trade Ideology* score declines over time as newer legislators have fewer votes or opportunities to vote on trade issues for the W-NOMINATE procedure to operate. Figure 5 shows that starting from the 110th Congress, the proportion of legislators with a *Trade Ideology* score declines from 100% in the 109th Congress to as low as 43% in the 114th Congress.

[Figure 4 about here]

Moreover, the rising trend in the correlation between the two scores may be a result of polarization and increasing party discipline (Canen, Kendall, and Trebbi 2020). Given each unique legislator has one *DW-NOMINATE* and *Trade Ideology* score, the polarization shown is a result of legislative turnover where new legislators, with more extreme ideology scores, unseat the incumbents (Canen, Kendall, and Trebbi 2020). Whether or not the polarization of the *Trade Ideology* scores is independent from the broader trend of partisan

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

Figure 3: Distribution of DW-NOMINATE and Trade Ideology Across Time

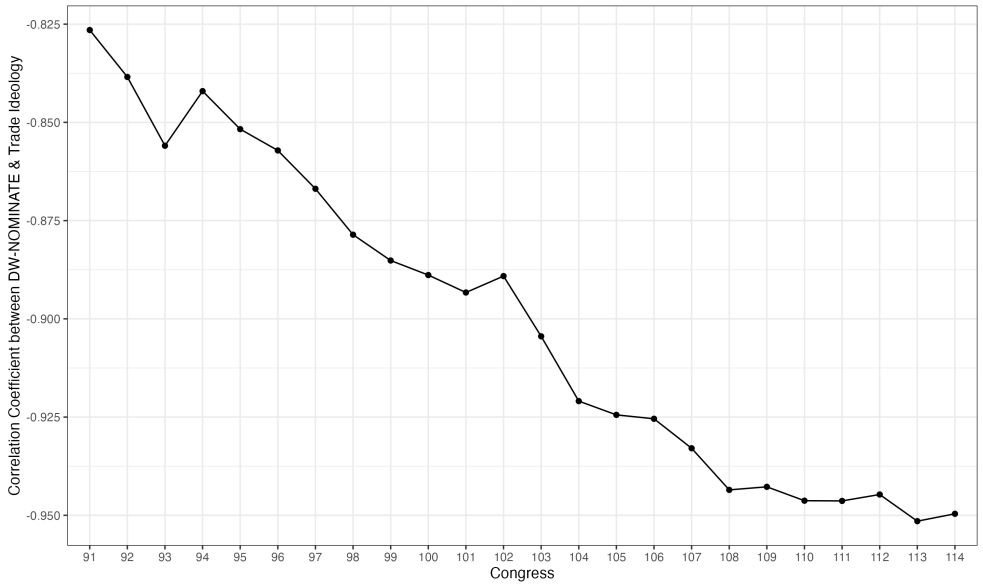


Note: Red dashed lines indicate the ideal point score of the median legislator for each Congress. Created by Author 5/18/25.

polarization is indeterminate; however, given the increasing party discipline in Congress (Canen, Kendall, and Trebbi 2020), one may conclude that such independence is not the case between the two scores.

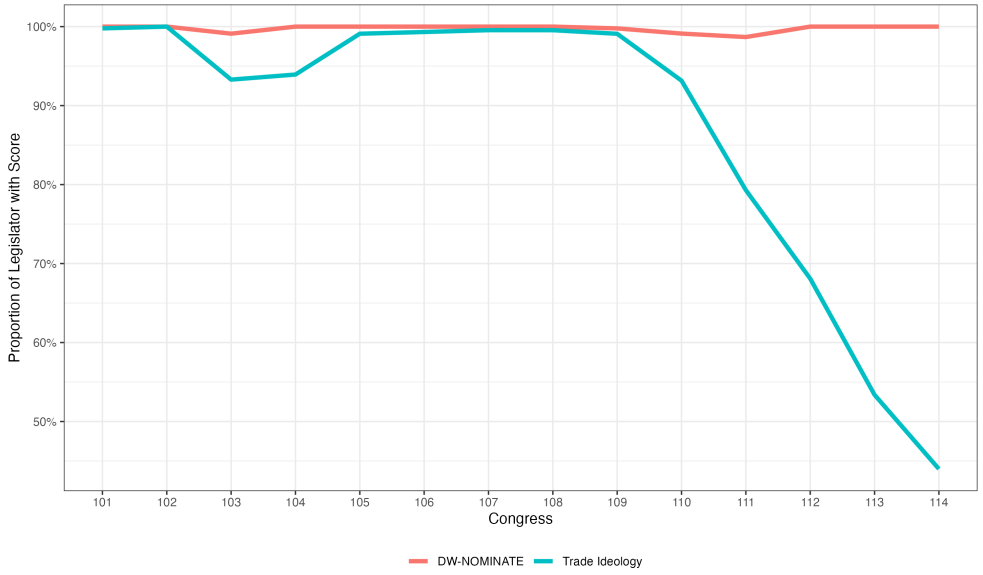
[Figure 5 about here]

Figure 4: Correlation Coefficient Between DW-NOMINATE and Trade Ideology Across Congressional Sessions



Note: Created by Author 5/18/25.

Figure 5: Proportion of Legislator with Score

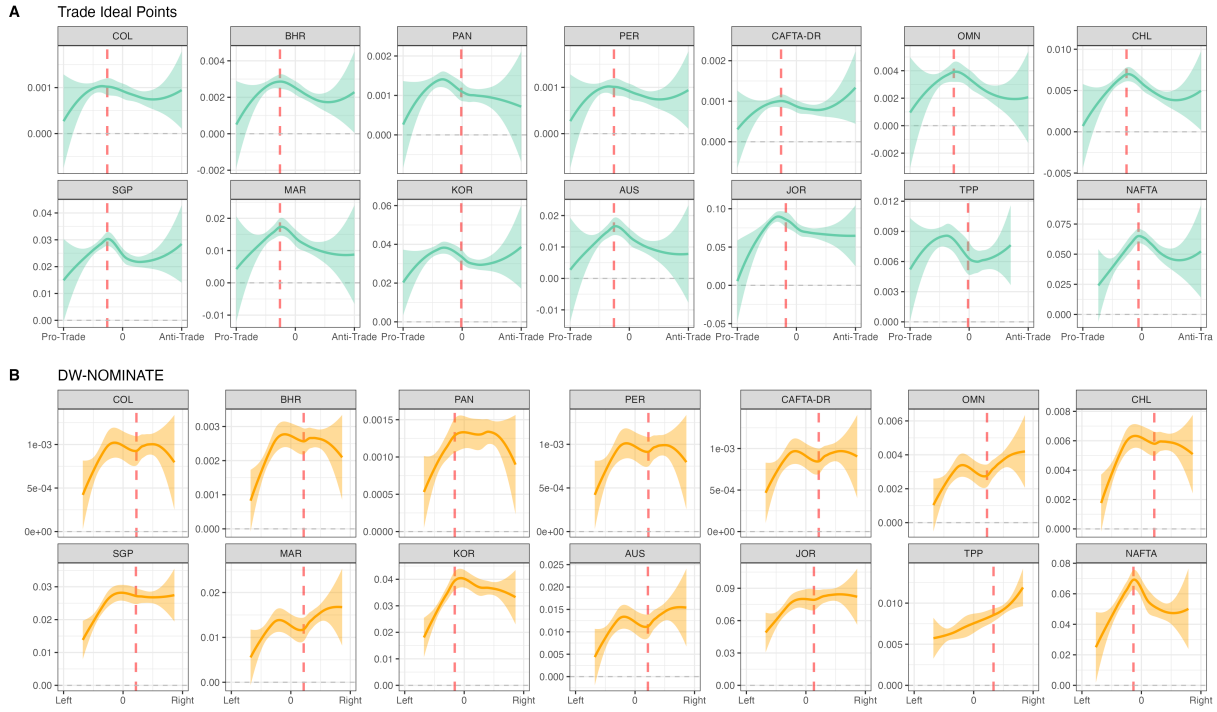


Note: Legislators' *Trade Ideology* score is created using Poole et al. (2011)'s *W-NOMINATE* procedure in R. Trade-related roll call votes were extracted from *VoteView* using the issue codes provided. Roll call votes data from *VoteView* ended in the 115th Congress, and issue codes stopped after October 2013. Created by Author 5/18/25.

While the two scores are highly correlated with one another, their relationship with *Phaseout Coverage* could not be more different. Figure 6 plots LOESS graphs correlating *Phaseout Coverage* with *Trade Ideology* (subplot A) or *DW-NOMINATE* (subplot B) for all 14 FTAs. For most agreements, *Phaseout Coverage* peaks either near or on the median legislator on the *Trade Ideology* score, indicated by the red dashed line. Even as the scores are highly correlated, the LOESS plots with *DW-NOMINATE* do not consistently showcase a peak near the median, with the exception being NAFTA, nor a consistent relationship. This demonstrates the distinct nature of the two measures, despite how closely they correlate.

[Figure 6 about here]

Figure 6: LOESS graph of Workers Covered by Tariff Phaseout on Legislators' (Trade) Ideal Points



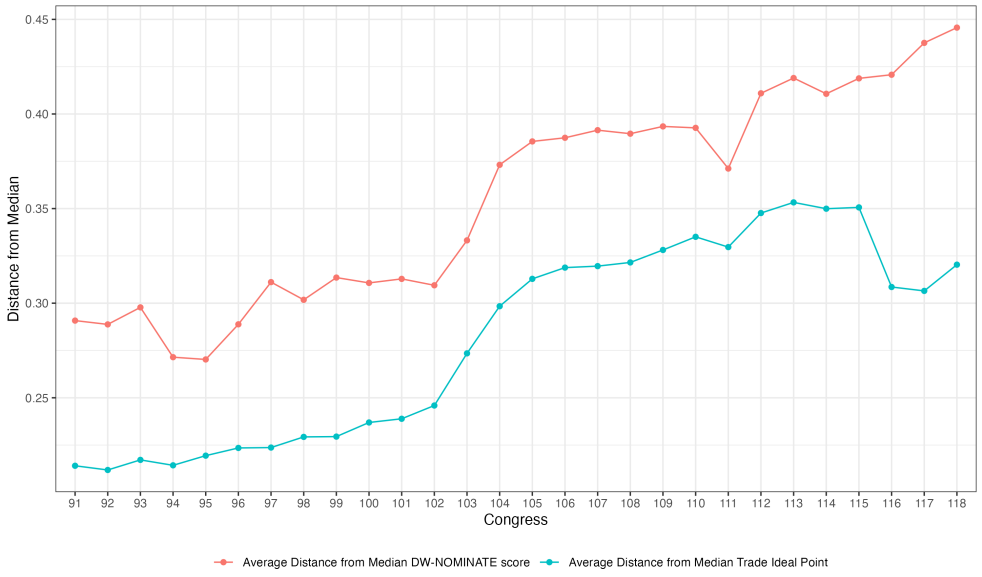
Note: Locally Estimated Scatterplot Smoothing (LOESS) graphs of district-level tariff phaseout coverage with legislators' Trade Ideology score (A) and the liberal-conservative DW-NOMINATE score (B). Red dashed line indicates the ideal point of the median House member. Created by Author 5/15/25.

Using the *Trade Ideology* score, I measure the inverse ideological distance from the median to capture the degree to which a legislator is the median legislator. *Median Trade Rep* ranges from 0, indicating a legislator is furthest away from the median, to 1, in which the legislator is the median. Figure 7 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 7 about here]

Figure 7: Average Distance from the Median Across Time



Note: Created by Author 5/18/25.

5.3 Controls

5.3.1 District-Level Controls

The first set of controls focuses on district characteristics, such as exposure to import threat, congressional competitiveness, poverty rates, industry concentration, and the export activity of the district.

First, *District's Exposure to Import Threat* takes **??** but replaces $Prop.Phaseout_{jkt}$ with *Import Threat*. Import threat is measured as the ability of the specific trade partner to fulfill changes in import demand when tariffs are eliminated. The construction of *Import Threat* is specified in the Appendix A.1.3.

Second, *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%

Third, *Poverty rate* is the proportion of a district that lives below the poverty line. Data on poverty rate is taken from the Census Bureau Small Area Income and Poverty Estimates (SAIPE) database. I used the Missouri Census Data Center's county-district crosswalk files to map employment from the county to the district level.

Fourth, industry concentration in a certain political geography has been argued to facilitate collective action and thus "political clout" (Goldstein and Gulotty 2014, p.286). I capture the degree to which industries concentrate in a given district by constructing a Herfindahl-Hirschman Index *(HHI)*:

$$HHI_d = \sum_{k=1}^{K \in d} \left(\frac{E_{dk}}{E_d} \right)^2 \tag{2}$$

where I take the share of district-industry employment over the total industry employment before taking the sum of squares of each share.

Finally, 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*.

5.3.2 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). I hand-coded the committee membership of legislators for the 102nd Congress (for NAFTA) due to missing data from Stewart III and Woon (2024). Third, *Seniority* counts the number of terms the legislator has served. McGillivray (2004) demonstrated that senior members receive greater levels of protection. The House Member data is from Stewart III and Woon (2024).

5.3.3 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 from the MIT Election Data And Science Lab (2017*b*). Second, *Electoral College Vote* counts the number of electoral college votes held by a state. Finally, *Union Membership Rate* is the proportion of workers who are part of a union; union membership data is from Unionstats (Hirsch, MacPherson, and Even 2024).

Table 1 provides the summary statistics of all variables discussed so far. Figure A6 provides a simple correlation matrix heatmap, displaying the correlation among the covariates.

Table 1: Summary Statistics

Statistic	N	Mean	St. Dev.	Min	Max
Phaseout Coverage	6,273	0.017	0.028	0.00002	0.253
District's Exposure to Import Threat	6,273	1.791	1.194	0.105	10.216
Trade Ideology	5,868	−0.115	0.359	−1.000	1.000
Median Trade Rep.	5,868	0.680	0.198	−0.265	1.000
DW-NOMINATE	6,216	0.037	0.421	−0.766	0.863
Median Rep (DW-NOMINATE)	6,216	0.616	0.234	−0.018	1.000
Poverty rate	6,173	0.130	0.049	0.038	2.028
HHI	6,273	292.895	588.693	1.670	8,169.891
Net Export	6,273	−0.880	1.627	−33.981	15.532
Corp PAC (ln)	6,233	12.047	1.507	0.000	15.936
House Ways and Means	6,496	0.091	0.288	0	1
Seniority	6,162	5.598	4.120	−5	27
Pres. Election Competitiveness	6,693	0.441	0.041	0.265	0.499
District Election Competitiveness	6,623	0.294	0.109	0.000	0.500
Electoral college Vote	6,693	20.595	14.831	3	55
Union Membership	6,693	0.128	0.063	0.016	0.287
Co-Partisans	6,216	0.496	0.500	0	1
Democrats	6,204	0.481	0.500	0	1
MC Majority	6,216	0.542	0.498	0	1
Divided Gov't	6,693	0.291	0.454	0	1

6 Distribution of Tariff Phaseouts

I estimate a simple OLS model with trade agreement fixed effect 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. All variables that are not binary are standardized for ease of interpretation. Equation 3 specifies the model:

$$POCoverage_{dj} = \beta_1 MedianRep_{idc} + \beta_2 \mathbf{X}_d + \beta_3 \mathbf{X}_i + \beta_4 \mathbf{X}_s + \varepsilon \tag{3}$$

where $POCoverage_{dj}$ is the proportion of workers in district d that is covered by tariff phaseout in agreement j. $MedianRep_{id}$ is the inverse distance to the median legislator in Congressional session c. Table 2 presents seven models. Model 1 is a simple bivariate regression between median legislators and *Phaseout Coverage*; the second model introduces district characteristics controls $\beta_2 \mathbf{X}_d$, third — legislator characteristics $\beta_3 \mathbf{X}_i$, fourth — state characteristics $\beta_4 \mathbf{X}_s$.

To preview the findings, the first hypothesis is supported. On average, legislators closer to the median receive statistically significantly more tariff phaseout coverage for their districts' industries. This effect is stronger under divided government and when the median legislator is not co-partisan with the president.

The closer the legislator is to the median on trade ideology, the more of their district's workforce is covered by tariff phaseouts. This effect is robust across various sets of controls. While *Trade Ideology* (where higher values capture more protectionist representatives) is positive, as expected, it is not consistently statistically significant. Only in Model 4, where state-level controls are included, does *Trade Ideology* become statistically significant.

Phaseout Coverage is higher for legislators (1) with higher import-sensitive districts, (2) representing district with higher poverty rate, (3) representing net-importing districts, (4) that has served fewer terms, and in states that (5) is less electorally competitive and (6) has lower union membership.

(1) to (3) suggest that the president's allocation of tariff phaseouts is responsive to the economic needs of the district. Whether it is in anticipation of these specific needs or whether it is a function of legislative lobbying during the negotiation phase is indeterminate.[18] Regardless of the mechanism, these district-level results highlight the role of

[18]While there is a dearth of research on legislators lobbying trade negotiators during negotiation, Ritchie

Table 2: Correlates of Tariff Phaseout Coverage

Dependent Variables:	Phaseout Coverage					Exclusion Coverage	
Model:	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Variables							
Median Trade Rep.	0.059***	0.016**	0.019**	0.019**		0.007	
	(0.011)	(0.008)	(0.008)	(0.008)		(0.012)	
Trade Ideology		0.003	0.007	0.020**		-0.0009	
		(0.008)	(0.009)	(0.010)		(0.016)	
Median Rep (DW-NOMINATE)					0.018		0.069
					(0.033)		(0.054)
DW-NOMINATE					-0.035		0.013
					(0.024)		(0.033)
District's Exposure to Import Threat		0.466***	0.473***	0.472***	0.467***	0.137***	0.141***
		(0.020)	(0.021)	(0.021)	(0.020)	(0.023)	(0.024)
District Election Competitiveness		-0.008	-0.013	-0.008	-0.007	0.018	0.017
		(0.008)	(0.008)	(0.008)	(0.008)	(0.013)	(0.012)
Poverty rate		0.715***	0.829***	0.514***	0.447**	-0.041	0.011
		(0.204)	(0.158)	(0.189)	(0.180)	(0.349)	(0.393)
HHI		-0.007	-0.008	-0.010	-0.012	0.029	0.030
		(0.008)	(0.009)	(0.011)	(0.010)	(0.021)	(0.021)
Net Export		-0.122***	-0.118***	-0.123***	-0.122***	0.016	0.015
		(0.013)	(0.013)	(0.013)	(0.013)	(0.011)	(0.011)
Corp PAC (ln)			0.009	0.009	0.010*	0.015	0.014
			(0.007)	(0.006)	(0.006)	(0.010)	(0.010)
House Ways & Means			-0.029	-0.021	-0.024	-0.005	-0.006
			(0.021)	(0.021)	(0.020)	(0.035)	(0.036)
Seniority			-0.027***	-0.020**	-0.017**	-0.010	-0.014
			(0.009)	(0.009)	(0.008)	(0.015)	(0.015)
Pres. Election Competitiveness				-0.017**	-0.014*	0.002	0.003
				(0.008)	(0.007)	(0.014)	(0.014)
Electoral College Vote				0.003	0.003	-0.0001	-0.002
				(0.007)	(0.007)	(0.017)	(0.017)
Union membership Pct				-0.839***	-0.822***	1.03***	1.22***
				(0.180)	(0.177)	(0.256)	(0.358)
Fixed-effects							
FTA	✓	✓	✓	✓	✓	✓	✓
Fit statistics							
Observations	5,842	5,752	5,628	5,628	5,959	5,628	5,959
R^2	0.644	0.791	0.791	0.793	0.793	0.518	0.513
Within R^2	0.009	0.418	0.417	0.422	0.421	0.032	0.038
Dependent variable mean	0.017	0.019	0.009	0.009	-0.005	-0.008	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.

the president in addressing the economic needs of specific districts while also pursuing welfare-improving trade agreements. This is one of the first evidence to suggest that a president can be universalist by being particularistic in bringing about the ratification of welfare-improving trade agreements.

(4) suggests that younger House Representatives may need more phaseout coverage to insulate them politically, which goes against conventional wisdom (McGillivray 2004). (5) is actually counterintuitive in that we should expect the president to be particularistic and phase out tariffs for *more* competitive states (Lowande, Jenkins, and Clarke 2018; Kriner and Reeves 2015*a*; Ma and McLaren 2018). (6) goes against conventional wisdom in that we should expect states with a higher union membership rate to receive more protection, not less.

Some legislator and state characteristics are statistically insignificant in explaining tariff phaseout coverage of the district workforce. Contrasting with some literature's findings, I find no positive and significant relationship between phaseout coverage with (1) corporate PAC donation (Grossman and Helpman 1994; Gawande and Bandyopadhyay 2000), (2) industry concentration (Goldstein and Gulotty 2014; Busch and Reinhardt 1999), and (4) electorally competitive districts.

Model 5 uses *DW-NOMINATE* instead of the *Trade Ideology* score. Both the *DW-NOMINATE* and *Median Rep (DW-NOMINATE)* coefficients are statistically insignificant in explaining *Phaseout Coverage*. One may interpret this result to demonstrate the validity of the *Trade Ideology* score as a distinct measure from *DW-NOMINATE* despite their high correlation coefficient.

Models 6 and 7 use *Exclusion Coverage* as the dependent variable to demonstrate the limits of what median legislators can extract.[19] Long story short: the median legislator's effect stops at tariff phaseout. Consistent with conventional expectations, exclusions are granted to legislators (1) with an import-sensitive district and (2) in states with higher union membership.

It is important to note the large effect size of union membership. A one standard deviation increase in a state's union membership rate is correlated with a one to 1.22 standard deviation increase in exclusion coverage. This outsized coefficient may be a result of the union membership variable being at the state level. Additionally, this result contrasts

and You (2019) provides evidence of such inter-branch lobbying regarding the Department of Labor and Trade Assistance Adjustment. Interview evidence also suggests that members of Congress are consulted during negotiations and lobby for their industries to be protected.

[19] Exclusion Coverage is constructed similarly to Phaseout Coverage.

with case evidence of the UAW being convinced to endorse KORUS when awarded with tariff phaseouts and interview evidence suggesting that unions may be satisfied with tariff phaseouts as the second-best outcome, recognizing the difficulty of extracting exclusion. However, it does seem that industries in states with stronger union presence can mobilize more powerfully to extract a prized concession in FTAs, contributing some evidence to suggest how interest groups can mobilize favorable policy design during the negotiation stage.

All in all, these results suggest that, perhaps, tariff phaseouts are not identical to the traditional protection; rather, they act as a second alternative to exclusion that reacts differently to interest groups' pressure and is more responsive to the political objectives of the executive.

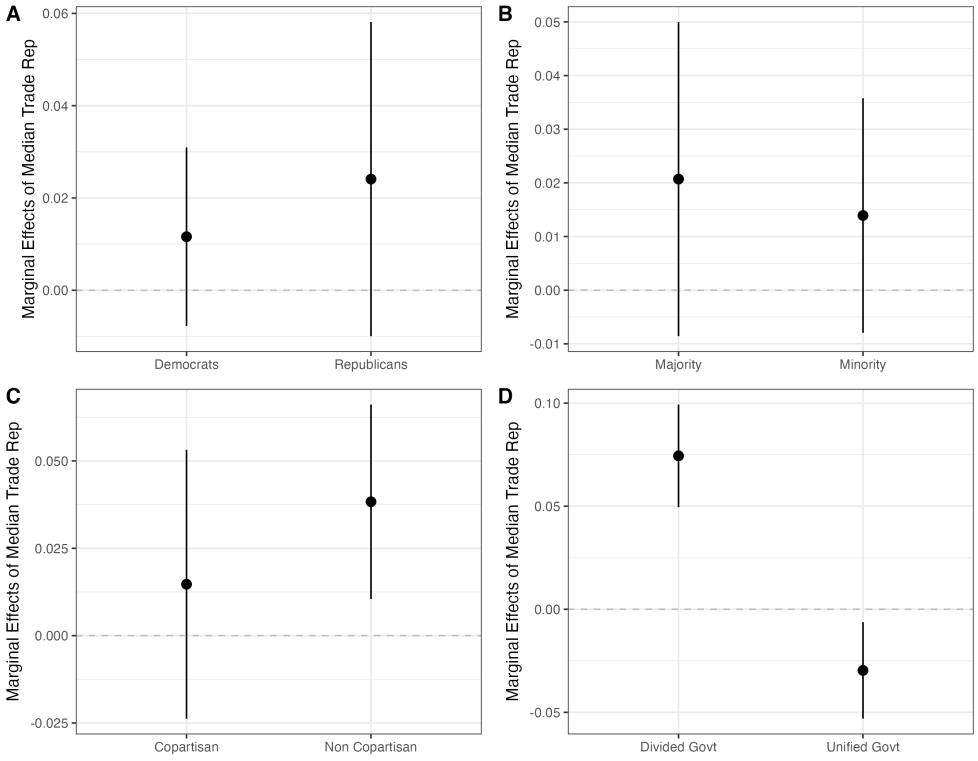
The effect of the median legislator varies depending on the characteristics of the legislature. Figure 8 plots the marginal effects of median trade representatives conditional on (A) their party, (2) whether they are a part of the majority or minority in the House, (C) whether or not they are co-partisans with the President, and (D) whether or not the agreement concluded under a divided government (between the House and Executive). The confidence intervals are set at the 95% level.

First, median *Republican* representatives do not receive statistically significantly more than median *Democratic* representatives. Second, median representatives in which their party holds a *majority* in the House do not receive significantly more phaseout coverage for their districts compared to when the median is in the *minority* party. Third, median representatives that are not co-partisans with the President receive statistically significantly more phaseout coverage than median co-partisans. This is not surprising when the party is disciplined enough that the allocation of phaseout coverage is then efficiently allocated to flip the votes of the nearest non-copartisan. Finally, median representatives receive significantly more phaseout coverage when the agreement concludes under a divided government compared to a unified government. This result echoes findings from Lohmann and O'Halloran (1994), who argue and find that divided government constraints executive trade policy making, forcing the executive to accommodate protectionist pressures.

[Figure 8 about here]

To elucidate the pattern of the data, I run a triple interaction (Model 5 in Table A1) and plot the marginal effects of the median representative in Figure 9. As expected from intuition, non-copartisan median representatives receive significantly more phaseout coverage under divided government because they are part of the majority. This means that

Figure 8: Marginal Effects of Median Trade Representative

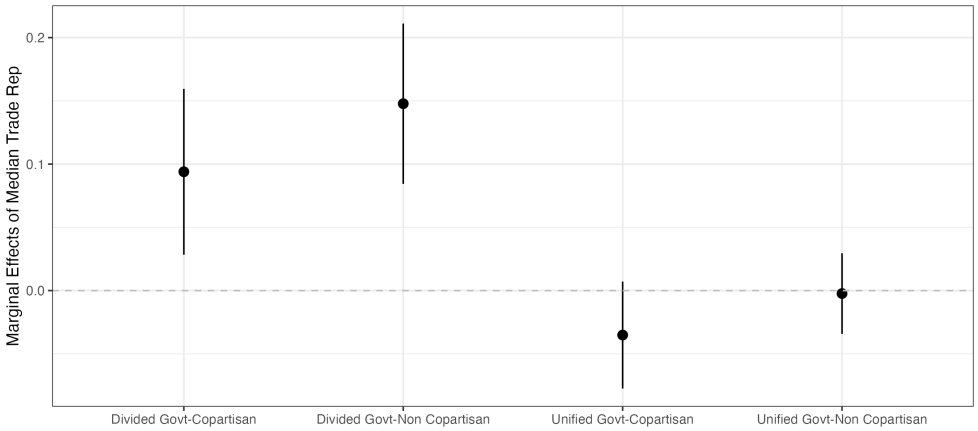


Note: Marginal effects of median trade representative conditional on (A) their party, (2) whether they are a part of the majority or minority in the House, (C) whether or not they are co-partisans with the President, and (D) whether or not the agreement concluded under a divided government (between the House and Executive). See Table A1 for the full regression table. *Trade Ideology* is omitted from sub-plot A and C due to high correlation with Party and Co-partisanship variables, respectively. Created by Author 5/21/25.

under a divided government, the executive targets the benefits to non-copartisans in anticipation that they will need the median representative's vote to ratify the agreement. On the other hand, while median copartisans do receive statistically significantly more phaseout under divided government, the coefficient is smaller than that of median non-copartisans. However, the two effects are statistically indistinguishable, suggesting that phaseouts generally are given to median legislators under divided government without differentiation on whether the representative is copartisan or not with the president.

[Figure 9 about here]

Figure 9: Marginal Effects of Median Trade Representative



Note: Marginal effects of median trade representative conditional on combinations of co-partisanship and divided government. *Trade Ideology* is omitted due to high correlation with Partisanship variable. See Model 5 of A1 for the full regression table. Created by Author 5/21/25.

7 Ratification

Next, I regress legislators' ratification votes, taken from *VoteView* (Lewis et al. 2023), on various covariates. I subset the sample to only the legislators who were present in both the negotiation and ratification stages. Only 12 FTAs were ratified with a roll call vote, US-Jordan was ratified with a voice vote, and the US withdrew its signature from the Trans-Pacific Partnership (TPP) in 2017. I run a logistic regression, specified as:

$$ln\left(\frac{P(Y_{idj})}{1-P(Y_{idj})}\right) = \gamma_j + \beta_1 PhaseoutCoverage_{dj} + \beta_2 Median_{id} + \beta_3(PhaseoutCoverage_{dj} \times Median_{id}) + \beta_4 \mathbf{X}_d + \beta_5 \mathbf{X}_i \tag{4}$$

where $P(Y_{idj})$ is the probability that a legislator i in district d vote yes on agreement j. I include FTA fixed effects, denoted by γ_j. The specification hone in on the interaction term β_3 between $PhaseoutCoverage_{dj}$ and $Median_{id}$ while holding district and legislator characteristics constant, denoted by $\mathbf{X}_d$ and $\mathbf{X}_i$, respectively. I used the same district and legislator control variables from the previous analysis.

Table 3 presents the result in step-wise fashion, where Model 1 runs a bivariate regression, while Model 2 adds in district-level controls. Model 3 adds in legislator controls with *District's Exposure to Import Threat* while Model 4 replaces *Import Threat* with *Phaseout Coverage* due to high collinearity. Model 5 uses DW-NOMINATE scores, while Model 6 runs an interaction between *Median Trade Rep* and *Phaseout Coverage*. Finally, Model 7 replaces *Trade Ideology* with partisan variables, as they are highly collinear. All covariates that are not binary are standardized for ease of interpretation.

Across the board, legislators closer to the median on *Trade Ideology* are significantly more likely to ratify trade agreements. However, having more of a district's workforce covered by tariff phaseouts does not increase the likelihood that a median representative would vote in favor of ratification. Quite opposite, having more *Phaseout Coverage* is correlated with a decreased likelihood for ratification. This may be a result of endogeneity in that phaseouts are targeted toward legislators with a lower likelihood of ratification. As a result, the second hypothesis is not supported.

While tariff phaseouts do not increase the likelihood of the median representative, it does not mean that the Executive did not target other kinds of benefits or agreement provisions to cater to their demands. After all, the available data on ratification presents a selection bias where the executive would only put an agreement up for ratification once they are confident enough that it would be ratified. Tariff phaseouts are just one among an arsenal of provisions within trade agreements that confer political benefits to the representatives. Provisions such as labor, environment, and investment all play a role in shaping legislative votes, depending on the individual legislators' political needs. However, due to the broad application of the agreement-wide provisions, it is not possible to directly infer which provision benefited whom. Tariff phaseouts, on the other hand, provide some insight into how benefits are targeted. But it does not provide enough information to infer whether a greater share of agreement benefits would indeed steer a legislator toward ratifying the treaty. While it is not tested, it can be presumed that legislators closer to the median are more likely to vote in favor of the agreement because negotiators did their due diligence and addressed their concerns.

Table 3: Correlates of Ratification Vote

Dependent Variable:	Pr(Vote Yes = 1)						
Model:	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Variables							
Median Trade Rep	1.28***	0.398***	0.410***	0.404***		0.388***	0.889***
	(0.099)	(0.132)	(0.139)	(0.139)		(0.142)	(0.115)
Median Trade Rep × Phaseout Coverage						-0.121	
						(0.122)	
Trade Ideology		-2.04***	-2.02***	-1.95***		-1.93***	
		(0.129)	(0.137)	(0.135)		(0.133)	
DW-NOMINATE					1.46***		
					(0.128)		
Median Rep (DW-NOMINATE)					0.449***		
					(0.098)		
District Election Competitiveness		-0.084	-0.114	-0.149	-0.052	-0.154*	-0.027
		(0.081)	(0.092)	(0.091)	(0.098)	(0.092)	(0.090)
Poverty rate		0.036	-0.009	0.003	-0.007	0.001	0.031
		(0.086)	(0.087)	(0.087)	(0.100)	(0.087)	(0.087)
HHI		-0.209**	-0.225*	-0.283**	-0.181*	-0.286**	-0.160*
		(0.106)	(0.115)	(0.133)	(0.096)	(0.134)	(0.086)
Net Export		-0.021	-0.033	-0.037	0.013	-0.042	0.057
		(0.070)	(0.073)	(0.080)	(0.082)	(0.079)	(0.078)
Exclusion Coverage		-0.195*	-0.211**	-0.248**	-0.196**	-0.250**	-0.206**
		(0.103)	(0.105)	(0.107)	(0.076)	(0.106)	(0.085)
District's Exposure to Import Threat		-0.459***	-0.470***		-0.470***		-0.370***
		(0.123)	(0.133)		(0.137)		(0.137)
Corp PAC (ln)			0.292**	0.314***	0.352***	0.311***	0.432***
			(0.117)	(0.118)	(0.119)	(0.118)	(0.114)
Ways and Means			1.05***	1.06***	1.46***	1.06***	1.06***
			(0.230)	(0.220)	(0.268)	(0.220)	(0.226)
Seniority			-0.148*	-0.176**	-0.170*	-0.177**	-0.281***
			(0.078)	(0.076)	(0.089)	(0.077)	(0.080)
Phaseout Coverage				-0.502**	-0.047	-0.435**	-0.043
				(0.208)	(0.185)	(0.199)	(0.186)
Democrats							-2.45***
							(0.226)
Fixed-effects							
FTA	✓	✓	✓	✓	✓	✓	✓
Fit statistics							
Observations	4,310	4,155	4,047	4,047	4,050	4,047	4,047
Squared Correlation	0.304	0.540	0.559	0.555	0.451	0.555	0.500
Pseudo R^2	0.233	0.456	0.478	0.473	0.378	0.473	0.400
BIC	4,422.6	3,123.9	2,950.4	2,974.6	3,488.4	2,981.5	3,368.1
Dependent variable mean	0.642	0.639	0.641	0.641	0.641	0.641	0.641

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

Note: Unit of observation is House of Representative district-FTA for all 12 FTA ratified. Standard errors are corrected for clustering at the legislator level. All explanatory variables are standardized.

8 Conclusion

Presidents liberalize trade by pandering to the median legislator in Congress. While the literature has heretofore emphasized the importance of veto players in international agreements (Putnam 1988; Mansfield, Milner, and Pevehouse 2007; Milner and Rosendorff 1996; Rector 2001; Buzard 2017; Milner and Rosendorff 1997), no scholarship has been able to demonstrate the allocation of benefits from international treaties toward the swing voter in ratification. This paper uses tariff phaseouts, an under-studied but ubiquitous instrument in free trade agreements, to empirically test whether or not the President strategically allocates more protection to districts of the median representative as a way to promote treaty ratification. I find that Presidents do indeed pay special attention to where to allocate a limited bargaining resource, and they do so to maximize tariff phaseouts' mileage.

The one limitation of this study is its inability to empirically link greater receipt of tariff phaseouts with a higher likelihood to vote for ratification. Given the fact that representatives have diverse sets of demands during negotiation, tariff phaseouts may be one in a bundle of demands that legislators may need to ratify the agreement. However, given that most agreement provisions are broadly applicable to many interest groups and legislators, they cannot be empirically analyzed to benefit any one particular legislator. So while analyzing tariff phaseouts is not enough to infer how legislators vote, doing so accomplished a task that is otherwise impossible with other agreement provisions.

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A.1 Appendix

A.1.1 Tariff Schedule and Staging Categories

Figure A1: 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:

Figure A2: 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.1.2 UAW Endorsement Statement

Figure A3: 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

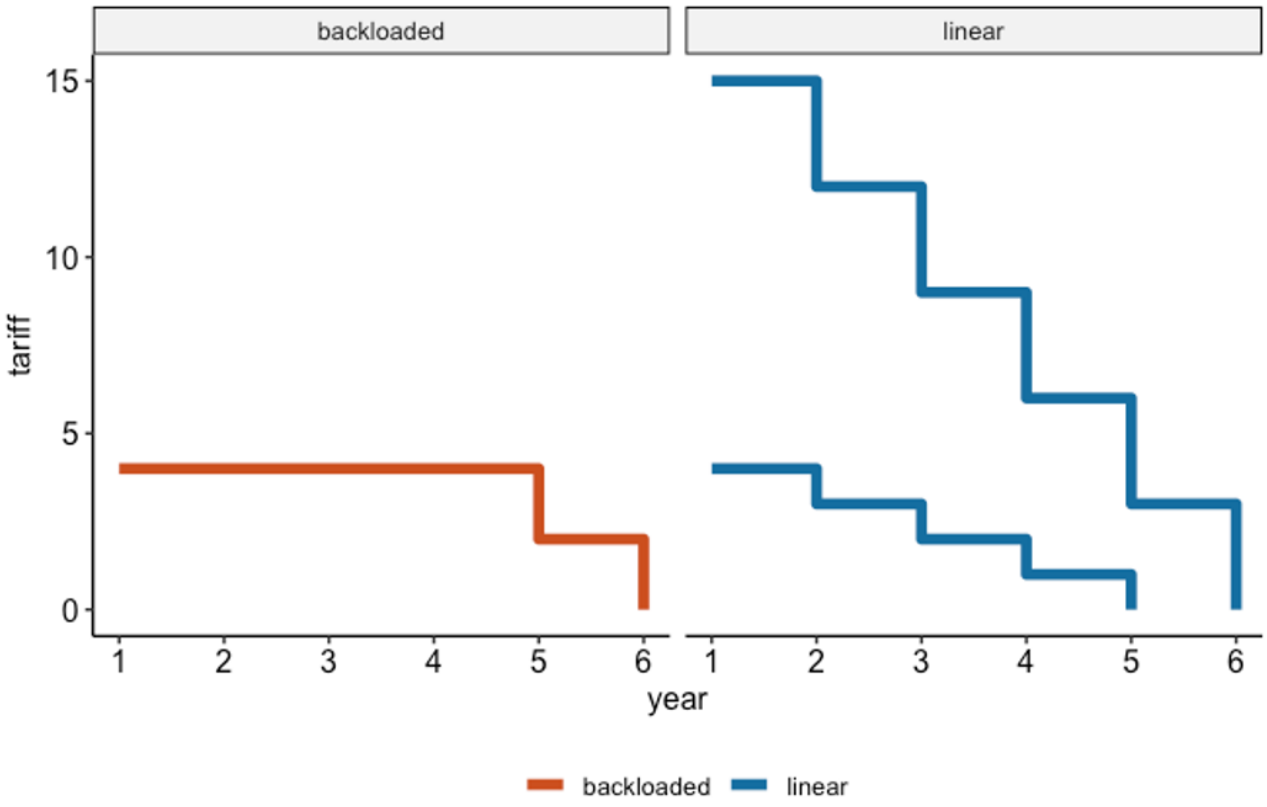
Annex 2B-US-Notes-1

Note:

A.1.3 Import Threat

Equation 5 outlines how *Import Threat* is constructed as a function of demand change when the tariff is eliminated $(1-(1+BaseRate)^{-\sigma})$ and the FTA partner's capability of exporting product to the world except for the United States in the three years leading up to the agreement $Export_{jip\tau,i\neq USA}$. I specify the partner's export number to exclude their export into the United States to avoid any endogeneity because existing barriers disincentivize trade. Here, τ specifies that the export numbers are rolling averages of

Figure A4: Example of Linear and Backloaded Phaseout "Shape"



Note:

three years prior to the agreement's signing.[20] Export data is aggregated to the 4-digits to minimize missing data at the 6-digits from 16% to 5%.

$$ImportThreat_{jpt} = log(Export_{jip\tau,i\neq USA} \times (1 - (1 + BaseRate_{ipt})^{-\sigma_{ip}})) \tag{5}$$

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 reduction in demand levels.

[20]There are some inconsistencies in the number of years used as rolling averages in this paper. Three years is used due to differing product codes available from UNComTrade for earlier agreements. For example, the export data from Mexico and Canada prior to 1992 at the 6-digit HS rev.0 only go back to 1990.

Figure A5: 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

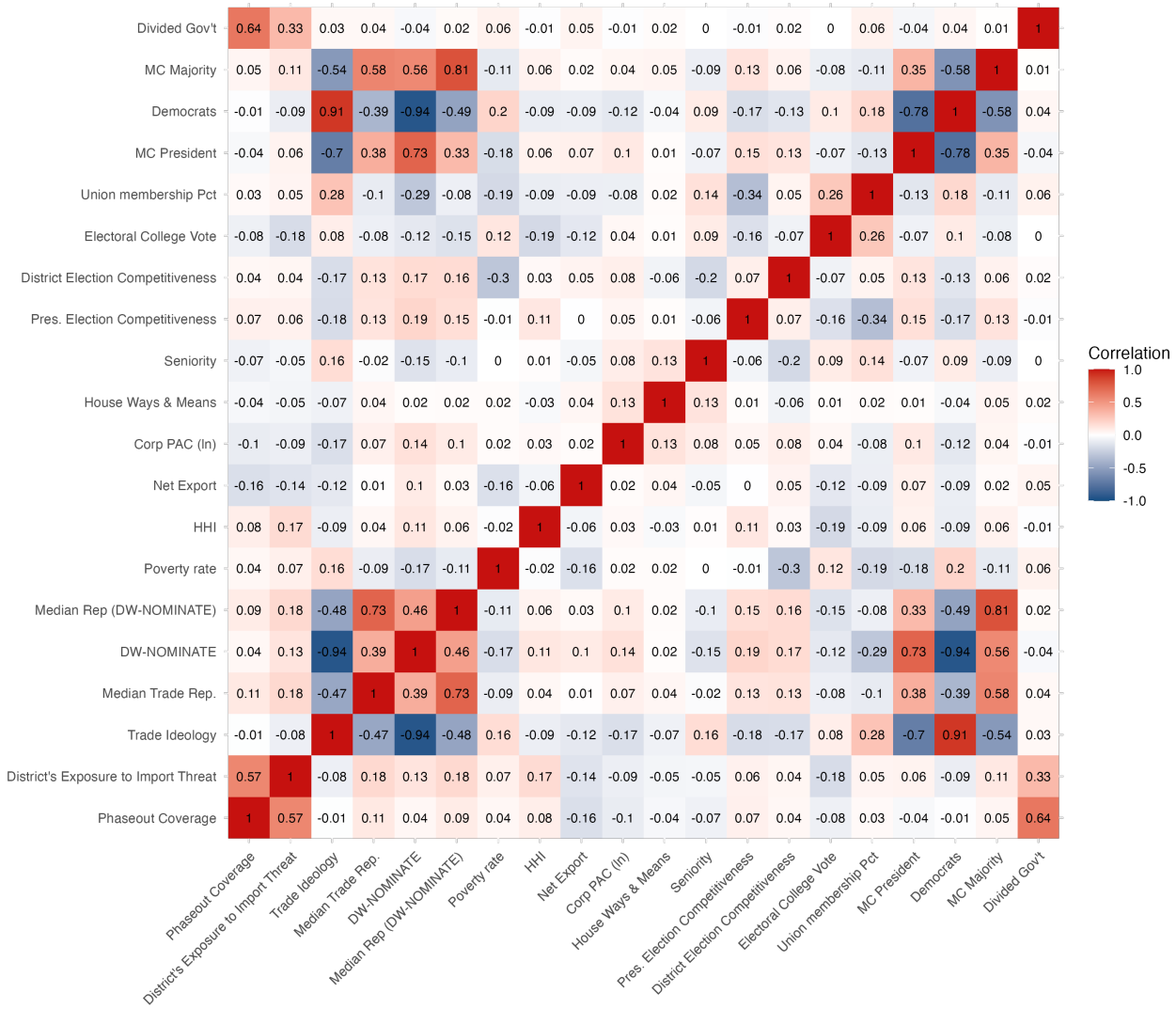
For example, the demand for imported light trucks with 25% tariff would be 41% with an elasticity of 4 (high) versus 80% with an elasticity of 1 (low), compared to the baseline of 100% when there's no tariff.[21] If demand for light trucks is highly elastic, the elimination of tariffs would increase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

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.

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

A.1.4 Summary Statistics

Figure A6: Correlation Heatmap



Note: Created by author on 5/27/25

A.1.5 Regression Results

Table A1: Interaction: Majority, Copartisanship, Party, and Divided Government

Dependent Variable:	Phaseout Coverage				
Model:	(1)	(2)	(3)	(4)	(5)
Variables					
Median Trade Rep.	0.012	0.014	0.038***	-0.030**	-0.002
	(0.010)	(0.011)	(0.014)	(0.012)	(0.016)
Median Trade Rep. × Republican	0.013				
	(0.023)				
Median Trade Rep. × Majority		0.007			
		(0.019)			
Median Trade Rep. × Co-partisan			-0.024		-0.033
			(0.029)		(0.031)
Median Trade Rep. × Divided Gov't				0.167***	0.150***
				(0.030)	(0.038)
Median Trade Rep. × Divided Gov't × Co-partisan					-0.021
					(0.054)
Trade Ideology		0.021**		-0.006	
		(0.010)		(0.010)	
Republican	-0.037*				
	(0.019)				
District's Exposure to Import Threat	0.472***	0.472***	0.475***	0.472***	0.475***
	(0.021)	(0.020)	(0.021)	(0.020)	(0.021)
District Election Competitiveness	-0.008	-0.008	-0.009	-0.009	-0.009
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Poverty rate	0.516***	0.518***	0.399**	0.485***	0.387**
	(0.190)	(0.188)	(0.197)	(0.186)	(0.193)
HHI	-0.010	-0.010	-0.010	-0.010	-0.009
	(0.010)	(0.011)	(0.011)	(0.010)	(0.011)
Net Export	-0.122***	-0.123***	-0.122***	-0.122***	-0.121***
	(0.013)	(0.013)	(0.014)	(0.013)	(0.013)
Corp PAC (ln)	0.009	0.009	0.009	0.010	0.011*
	(0.006)	(0.006)	(0.006)	(0.007)	(0.006)
House Ways & Means	-0.022	-0.021	-0.027	-0.024	-0.027
	(0.021)	(0.021)	(0.021)	(0.020)	(0.020)
Seniority	-0.019**	-0.020**	-0.019**	-0.020**	-0.019**
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
Pres. Election Competitiveness	-0.016**	-0.017**	-0.014*	-0.014*	-0.012
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Electoral College Vote	0.003	0.003	0.002	0.002	0.002
	(0.007)	(0.008)	(0.008)	(0.007)	(0.007)
Union membership Pct	-0.812***	-0.846***	-0.795***	-0.796***	-0.792***
	(0.178)	(0.182)	(0.167)	(0.177)	(0.170)
Majority		0.007			
		(0.017)			
Co-partisan			-0.104***		-0.042
			(0.026)		(0.027)
Divided Gov't × Co-partisan					-0.049
					(0.039)
Fixed-effects					
FTA	✓	✓	✓	✓	✓
Fit statistics					
Observations	5,627	5,628	5,628	5,628	5,628
R^2	0.793	0.793	0.795	0.796	0.797
Within R^2	0.422	0.422	0.427	0.432	0.435
Dependent variable mean	0.008	0.009	0.009	0.009	0.009

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