

Trading Interests: Domestic Institutions, International Negotiations, and the Politics of Trade

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To explain trade policies, a large literature draws on domestic institutions. Institutions that are more responsive to narrow-interest groups are expected to succumb to protectionist demands, resulting in higher average tariffs. This literature has largely ignored the role of reciprocal trade agreements and of exporter interests. This joint omission results in a biased view of trade politics. Exporters benefit from expanding market access abroad. With reciprocity, they lobby for domestic tariff cuts in exchange for liberalization abroad, which alters the link between domestic institutions and trade policies. Institutions favoring narrow interests should privilege both protectionist groups and exporters and hence have an indeterminate effect on average tariff levels. Instead, more interest group influence should result in more dispersed tariff rates across products. This article provides empirical evidence for this proposition, helps reconcile existing findings in the literature, and offers a specific example of how international institutions affect domestic politics.

Trade policies are a central topic in the political economy literature and have broad ramifications for other policy choices. What explains differences in trade policies across countries? A large literature points to domestic institutions (e.g., Kono 2006; Mansfield, Milner, and Rosendorff 2000; McGillivray 2004; Milner and Kubota 2005; Rogowski 1987). The literature shares some common lines of argument: trade politics is about the conflict between narrow-interest groups, which favor protectionist policies, and voters as consumers, who favor free trade; institutions that privilege narrow interests relative to voters—narrow-interest institutions—therefore produce more protectionist trade policies and higher average tariffs.

Despite this straightforward link, the literature has produced mixed evidence. Perhaps most prominently, plurality rule is expected to advance the interests of protectionist groups, resulting in higher tariffs. Yet, while some indeed find a protectionist bias in trade policies, others find a free trade bias or document the absence of systematic differences (Evans 2009; Hatfield and Hauk 2014; Mansfield and Busch 1995; Rickard 2015; Rogowski 1987; Rogowski and Kayser 2002). The lack of a systematic relationship is also evident in figure 1, which compares average tariff protection under plurality rule and under proportional representation. Beyond trade, these inconclusive findings touch upon

fundamental issues in political science: the balance between public interests and interest group influence and how political institutions translate this balance into policy outcomes.

This article proposes an explanation of these inconclusive findings by integrating international institutions into the literature on domestic institutions and trade. It has long been noted that reciprocal trade agreements encourage exporting firms to lobby for domestic tariff cuts in exchange for market access abroad, thereby helping to offset protectionist demands by import-competing firms (Bailey, Goldstein, and Weingast 1997; Gilligan 1997; Hiscox 1999; Pahre 2008). The article highlights how this exporter lobbying, encouraged by the norm of reciprocity, breaks the link between domestic institutions and average tariff levels. Because most countries are members to trade agreements, their tariff schedules have been subject to trade negotiations. Trade negotiations proceed product by product; tariff cuts on a product by a partner country are reciprocated with tariff cuts on another product in the own country. This negotiation structure creates concentrated benefits and costs for the producers of each good. Because most goods are exported only by a small number of firms within industries, as is highlighted in the literature on firm heterogeneity in trade (Bernard and Jensen 1999; Melitz 2003), the resulting conflict over trade policies fragments sectoral coalitions. This concentration of benefits and

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Data and supporting materials necessary to reproduce the numerical results in this article are available in the *JOP* Dataverse (<https://dataverse.harvard.edu/dataverse/jop>). An online appendix with supplementary material is available at <http://dx.doi.org/10.1086/692476>.

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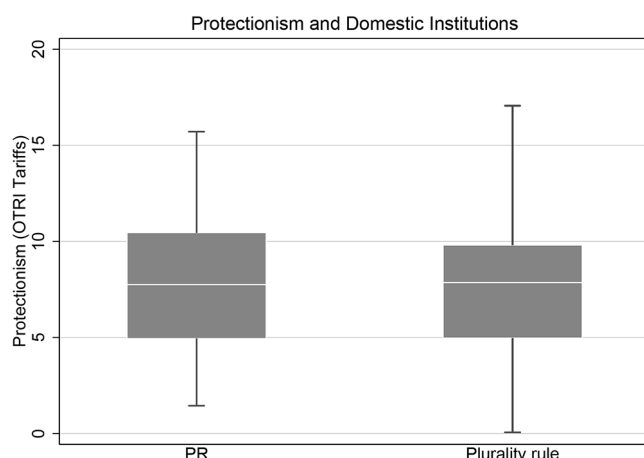


Figure 1. The figure shows applied tariffs, Overall Trade Restrictiveness Index (Kee, Nicita, and Olarreaga 2009), for proportional representation and plurality rule. The figure displays the mean (as the bright horizontal line within boxes), upper and lower quartile (as the limits of the box), and upper and lower adjacent values (as the whiskers) for each group. The p -value equality of means = .282.

costs on small groups of firms, and sometimes even individual firms within sectors, plays into the particularistic tendencies of narrow-interest institutions. Trade agreements encourage political involvement by exporters most effectively under the same institutions that favor political involvement by protectionist groups, offsetting the perceived protectionist bias of narrow-interest institutions: the same institutions that privilege protectionist groups should also privilege interest groups in support of free trade.

Hence, domestic institutions cannot explain differences in average levels of trade openness based on differences in interest group influence. Instead, given the heightened incentives to raise tariffs on some products and to lower them on others, narrow-interest institutions should result in more dispersed tariff rates across products, reflecting the incentives to appeal to protectionist groups and exporters simultaneously.

Empirical evidence supports this proposition: plurality rule is associated with an increase in tariff dispersion of about 30%. This result is robust to several estimation techniques, alternative measures of narrow-interest institutions, the inclusion of various control variables, and attempts to rule out alternative explanations. Additional results show that the protectionist bias of plurality rule disappears, and turns into a free trade bias, as participation in trade agreements and the number of exporters increases; and that the dual incentives to appeal to exporter and protectionist interests are also reflected in electoral campaigns.

While the seemingly straightforward link between institutions and protectionism has made trade policies popular

for evaluating the effects of domestic institutions on redistributive policies, this link is tenuous. A unilateral account of trade politics that ignores exporting firms results in biased expectations about the effects of domestic institutions. Given the redistributive character of trade policies and considering that questions of distributive politics are at the center of much of political science, this article provides an important illustration of the effects of international institutions on domestic politics. These are the more relevant when considering the implications of trade reform for social stability and welfare policies (Ruggie 1982), growth (Wacziarg and Welch 2007), capital account policies (Brooks and Kurtz 2007), and the respective links to domestic political institutions.

Finally, by highlighting the interaction between domestic and international institutions, the article adds to the literature on the domestic effects of international institutions and international economic integration (Baccini and Urpelainen 2014; Davis 2005; Simmons 2009). Parts of this literature emphasize that international agreements can inform and activate constituencies in favor of policy change (Chaudoin 2014; Dai 2007). This article points to a complementary implication: international institutions and economic integration can affect domestic politics by modifying how domestic institutions translate societal demands into policies. International institutions may have the best prospects at inducing policy change through domestic actors in those settings where domestic institutions make governments beholden to interest groups. The same domestic institutions that favor anti-cooperation constituencies also favor pro-cooperation constituencies, resulting in more domestic contestation over policies and potentially washing out any aggregate effects of domestic institutions on policy outcomes in the presence of international institutions.

RECIPROCITY AND THE DOMESTIC POLITICS OF TRADE

International trade agreements, such as the General Agreement on Tariffs and Trade (GATT) and the World Trade Organization (WTO) have the explicit goal of “negotiating the reduction or elimination of obstacles to trade.”¹ With currently 161 members, the WTO encompasses most countries in the world. It is supplemented by a dense network of preferential trade agreements (PTAs); around 600 trade agreements have been notified to the GATT/WTO between 1948 and 2014. For most countries, the vast majority—more than 90%—of tariff lines are negotiated in interna-

1. The mission statement is available at <http://www.wto.org>.

tional agreements, with only a small number of tariffs based on the norm of unilateral policy making.²

In the negotiation of tariff cuts, trade agreements rely on the norm of reciprocity: to gain tariff concessions for some of its products abroad, a government has to liberalize some of its own tariffs. Typically, governments demand tariff reductions on select goods from negotiating partners, and they offer concessions on select goods in turn. These demands may cover only a few goods—during the Torquay Round of the GATT in 1950 and 1951, Canada asked Haiti for concessions on seven product lines—or several hundred, as in many preferential trade agreements.³

Two additional aspects of reciprocal trade negotiations are relevant in the following. First, the exchange of offers typically occurs across sectors. Partly this negotiation structure accommodates differences in comparative advantage. Intersectoral reciprocity is considered the standard negotiation procedure now (Freund 2003), but it was common in earlier trade negotiations as well. In negotiations between Germany and Switzerland in 1891, for instance, “it was known that Switzerland would accept a trade agreement [to lower tariffs on German machinery] only if it would achieve advantages for its cheese exports” (Weitowitz 1978, 93). Second, tariff concessions are reciprocated in value. A country receives better market access the more concessions it makes at home. These tariff concessions of equivalent value, but not to equivalent levels, have been dubbed first-difference reciprocity (Bhagwati 1988). In addition to being the guiding principle in negotiations at the GATT and the WTO (Stern 2007), most current preferential trade agreements are based on reciprocity (Mansfield and Milner 2012).

Exporting firms benefit from tariff concessions of other countries in several ways. Lowering tariffs increases sales and creates new export markets. Even where exporters do not yet exist for a specific market, improved foreign market access can create new export opportunities. This is especially the case for firms that have experience in other export markets and can transfer infrastructure and knowledge from existing markets to new ones (Albornoz et al. 2012). Exporters also benefit from the policy certainty of legally binding and formally negotiated tariff rates (Handley 2014). And exporters may seek improved market access to avoid a loss of competitiveness in response to trade agreements negotiated by competitors (Dür 2010).

The norm of conducting trade negotiations through reciprocity creates incentives for exporters to get involved in

the domestic politics of trade, seeking reciprocal tariff cuts in the context of trade agreements (Bailey et al. 1997; Gilligan 1997; Hiscox 1999; Pahre 2008). Given that membership in the GATT/WTO is so widespread that selection effects in membership become almost negligible (Pelc 2011), exporters are plausibly aware of this norm of reciprocity. The international norm of negotiating tariffs through reciprocity, then, makes exporters relevant interest groups in the domestic politics of trade: exporters support tariff cuts if those come in the context of trade agreements and gain them market access abroad. Conversely, anticipating that domestic tariff cuts without reciprocity imply losing bargaining leverage in future negotiations, exporters oppose unilateral tariff cuts.

Many exporters clearly recognize and articulate this relationship between domestic and foreign tariffs, lobbying for domestic tariff cuts through reciprocal trade agreements. In 1907, D. M. Perry, vice president of the Manufacturers Bureau of Indiana, pointed out that protectionist trade policies in the United States and the refusal to lower tariffs reciprocally are “barring us out of Canada and building up the industries of that country. Many factories have been established there in late years to supply a trade that could just as well have been supplied by our own factories. This is an example in which the tariff serves to protect the foreign producer instead of the home producer” (Perry 1907, 465). Another lobbyist, recognizing that “reciprocity is the game of give and take,” was explicit in specifying demands for domestic trade liberalization, noting about reciprocal trade negotiations between the United States and European countries in the early twentieth century that, “If arrangements for the entry of many farm and factory products to these great continental markets can be made on the basis of conceding up to twenty per cent of the Dingley duties, the bargain is a good one. . . . We maintain that four-fifths of the existing duties, plus 3,000 miles of transportation, is protection enough for any domestic industry” (Sanders 1907, 452–53). Similar demands for domestic concessions in exchange for market access abroad were made by the semi-conductor and aviation industries in the United States in the 1980s (Milner and Yoffie 1989). Conversely, instances of unilateral trade policy making are viewed unfavorably by exporting firms. In a presentation at the European Commission in January 2012, a Ford representative lamented that recent unilateral reforms provided “insufficient opportunities for exports.”⁴

As emphasized in the theoretical and empirical literature on firm heterogeneity in trade (Bernard and Jensen 1999; Melitz 2003), on each good, few firms within industries are

2. Calculations are based on data from the WTO.

3. Negotiation protocols from the 1950–51 Torquay Round are available on the WTO website.

4. http://trade.ec.europa.eu/doclib/docs/2012/february/ttradoc_149058.pdf (accessed January 25, 2015).

usually able to take advantage of export opportunities. The demands by exporting firms for domestic tariff cuts through reciprocal trade negotiations, and the concentration of the gains from exporting on few firms, have several implications for the domestic politics of trade, which, in turn, affect the link between domestic institutions and trade. Arguments relating domestic institutions to trade policies are commonly based on two assumptions: interest groups in support of protectionism are small relative to those favoring free trade; interest groups in support of protectionism enjoy collective action—and therefore lobbying—advantages relative to those favoring free trade. The literature concludes that institutions that increase the influence of interest groups relative to consumers (who prefer free trade) should result in more protectionist trade policies; institutions that create a larger concern for consumers should result in lower tariff rates. Exporter lobbying for domestic tariff cuts challenges both assumptions and therefore changes the relationship between domestic institutions and trade policies.

First, reciprocal trade negotiations fragment interest group coalitions. Getting involved in international trade comes with sizable start-up costs for firms. For instance, firms need to establish distribution networks and need to acquire the legal and technical expertise to export to foreign markets. Thus, only the most competitive firms are able to take advantage of improved export opportunities. Even within generally competitive industries, few—and only the most productive—firms are able to reap the gains from exporting. In a sample of 38 countries, the median number of exporting firms per product is less than three in the majority of the cases and less than seven in three-quarters of the cases (Cebeci et al. 2012). Indeed, US trade agreements contributed to uneven gains from trade, favoring large, productive firms (Baccini, Pinto, and Weymouth 2017). Moreover, trade negotiations proceed on a product-by-product basis. Tariffs are negotiated individually for each good (Freund 2003). The gains from increased export opportunities for any specific good are therefore concentrated on a small number of firms. This creates, for each product, a narrow set of winners. It also creates two narrow sets of losers: less productive firms, which now face higher prices for inputs and wages (Melitz 2003), and firms in the previously protected industry, which after a tariff reduction face increased competition from abroad.⁵

5. This effect is different from intra-industry trade and product differentiation, which has been credited with reducing protectionist forces. Intra-industry trade may erode protectionist demands if there are fewer displacement effects. However, intra-industry trade, without reciprocal tariff cuts, does not create new support for domestic trade liberalization.

Were there no reciprocal trade agreements, a small number of protectionist firms within a sector would suffice to drive the sector's overall stance toward protectionism, because other firms in the sector do not lose from protecting the own industry. This changes with reciprocity. Previously protectionist sectors may change their stance and become divided or turn into supporters of tariff cuts; sectors that were previously indifferent to trade liberalization may turn into supporters of free trade for select goods. By creating political conflict within industries, the concentration of potential gains and losses from exporting undermines the sectoral organization of interest groups emphasized in the endogenous protection literature. For instance, the apparel industry in a country may have an industry association representing its interests, and firms within the apparel industry plausibly share the same comparative advantages based on factor endowments. Yet, standard tariff schedules list distinct tariff rates for men's suits and for women's suits, and likewise list distinct tariff rates for jackets, shirts, and trousers, even when made of the same materials. Plausibly, each of these products is associated with a different set of firms producing and exporting them, and therefore with differences among these firms in their stance toward trade policies. Thus, while differences in comparative advantage create conflict across sectors, reciprocal trade agreements heighten the relevance of individual firms and small groups of firms. By driving a wedge between firms in the same industries, this fragmentation plays into the particularistic tendencies of narrow-interest institutions, which privilege small, heterogeneous interest groups. While some of these interest groups are indeed protectionist, others support domestic tariff cuts.

Second, exporting firms tend to be characterized by features that typically are associated with political influence. Exporting firms tend to be larger, to have more employees, to be more profitable, and to pay higher wages than firms that are producing for the domestic market (Bernard and Jensen 1999; Bernard et al. 2007). These attributes should translate into political influence. Their profits allow exporting firms to engage in lobbying, for instance through campaign contributions, and the associated employees can be an important political asset, which counters some of the advantages of import-competing firms. Moreover, and similar to import-competing firms, which have a credible exit threat if unshielded from international competition—they are unable to stay in business, thereby providing them with bargaining leverage (Goodhart 2014)—exporting firms have a credible exit threat as well. They have the option of leaving the home market and relocating production to the target market through tariff jumping, circumventing trade barriers by substituting foreign direct investment for exports. Thus, even if

their employees are not mobilized immediately as voters, the government's concern of losing these jobs provides exporting firms with substantial political leverage to back up campaign contributions.

Consequently, similar collective action considerations that under unilateral policy making privilege import-competing firms, which lobby for tariff increases, under reciprocity apply to exporting firms, which lobby for tariff reductions. While the benefits of tariff increases tend to be concentrated on a relatively small number of import-competing firms, the benefits of foreign tariff concessions are concentrated on a small number of exporting firms. The benefits of exporting might be concentrated on such a small number of firms (as suggested, e.g., by Baccini et al. [2017] and Bernard et al. [2007]) that exporting firms face fewer collective action problems than protectionist firms—contrary to a key assumption in the literature.

Nonetheless, import-competing firms do enjoy some advantages over exporting firms, which may help them maintain influence. Import-competing firms generally enjoy a status quo bias, and they are therefore easy to target (Goodhart 2014). Interest groups appear to be mobilized more effectively by attempts to protect against losses than attempts to increase gains, which further advantages import-competing firms (Dür 2010). Moreover, because foreign exporters will seek market access on goods where they expect large gains, demands for tariff cuts fall on goods where domestic firms successfully lobbied for protection in the past; that is, attempts to liberalize trade domestically will be concentrated on goods produced by import-competing firms of above-average political influence. Commitment problems might further reduce the incentives of import-competing firms to accept alternative forms of compensation (Davis 2015), causing them to fight more adamantly to maintain protection (Hiscox 1999).

In sum, with trade agreements, governments face two sets of trading interests: import-competing firms asking for higher tariffs on select products and exporting firms asking for lower tariffs on select products. There is no reason to assume, *a priori*, that one type of demand systematically outperforms the other. Thus, narrow-interest institutions increase the incentives for governments to accommodate both import-competing and exporting interests—the same set of institutions that is typically associated with unambiguously more protectionist trade policies.

7With more than 5,000 tariff lines in modern tariff schedules, governments have the opportunity to accommodate some exporting and some protectionist groups at the same time. Governments can maintain high tariff rates on some goods, thereby providing support to select protectionist firms, and liberalize tariffs on goods where concessions can be turned

into valuable market access abroad and where political pressure from protectionist groups is outweighed by exporters. Often governments exempt select products from tariff cuts or drop them during the negotiations, while sacrificing others. For instance, in bilateral negotiations between the United States and Italy during the GATT's Annecy Round in 1949, US negotiators agreed to tariff cuts demanded by their Italian counterparts on candied orange peel—from \$.08 a pound to \$.04 a pound—but refused to grant any concessions on floor coverings, for which the Italian negotiators had sought tariff cuts to 30%.⁶ The incentives of governments to maintain protection on select goods, and their ability to do so, are also well documented in the literature on tariff peaks and tariff escalation (see, e.g., Hoekman, Ng, and Olarreaga 2002).

First-difference reciprocity ensures that stronger demands for the liberalization of export markets translate into stronger demands for domestic tariff cuts and, where exporters prevail over import-competing firms, lower tariffs on those goods. This consequence of first-difference reciprocity offsets protectionist demands. It ensures that exporting firms demand larger tariff cuts in order to expand their access to export markets, mirroring demands by protectionist firms. This mechanism should be especially effective where interest groups have more influence. An import-competing group may be more likely to influence policy and secure higher tariffs under narrow-interest institutions. But where an exporting group wins the political contest, narrow-interest institutions will be associated with a steeper reduction in tariffs, because this will secure better market access abroad. Moreover, if narrow-interest institutions have lower barriers for political involvement, more interest groups are able to affect trade policies, producing more tariff lines that deviate from what would be the optimal tariff from the perspective of voters. Narrow-interest institutions allow more exporting firms to lobby, increasing their ability to offset the protectionist bias of narrow-interest institutions that exists under unilateral policy making. By contrast, under broad-based institutions, interest groups have less influence, resulting in fewer upward or downward deviations in tariff rates due to interest group influence: institutions that reduce the influence of interest groups reduce the influence both of protectionist groups and of groups in support of tariff cuts.

In sum, narrow-interest institutions drive tariff rates further apart than broad-based institutions, and they result

6. Negotiation protocols from the 1949 Annecy Round are available on the WTO website.

in spotty liberalization under reciprocity: the most politically savvy firms in particular may well be able to maintain protectionist policies in their favor, while others face lower tariffs. These larger deviations in tariff rates on any given product produce more dispersed tariff rates under narrow-interest institutions.

Proposition 1. In the presence of trade agreements, narrow-interest institutions should be associated with more dispersion in tariff rates across products than broad-based institutions.

This dispersion-enhancing effect of narrow-interest institutions, relative to broad-based institutions, should increase as countries join trade agreements for the first time and move from unilateral policy making to reciprocally negotiated tariff rates. The argument makes no prediction about whether the difference in tariff dispersion between narrow-interest institutions and broad-based institutions should increase as the number of trade agreements increases.

Two implications for tariff levels follow from the argument. First, if some tariff rates are pushed down and some up, the effect of domestic institutions on the average across products becomes ambiguous, depending on the number and strength of exporting interests in a country. In the presence of interest groups in support of tariff cuts, higher average tariffs are a poor indicator of interest group influence. Second, while the average effect of narrow-interest institutions on tariff levels is ambiguous, the effect should be conditional on the number of exporting firms pushing for lower tariffs and the number of trade negotiations in which a country participated. As the opportunities for reciprocal trade liberalization increase and more exporters push for trade liberalization of the domestic market, the protectionist bias of narrow-interest institutions should be offset more effectively; if demands for domestic tariff cuts are sufficiently large, they even have the potential of creating a free trade bias of narrow-interest institutions.

This argument offers a two-pronged explanation for an empirically inconclusive relationship between domestic institutions and trade policies. Within countries, some firms succeed in gaining protection, while others lose out to exporting firms that push for domestic trade liberalization. Additionally, across countries, narrow-interest institutions can result in a protectionist bias in some countries, but in a free trade bias in others, depending on the balance of interest groups that support and oppose protection. If narrow-interest institutions produce higher average tariffs in some countries and lower averages in others, the results on average are ambiguous and depend on the sample.

EMPIRICAL EVIDENCE

This section provides empirical evidence to assess the above proposition: narrow-interest institutions should be associated with more dispersed tariff rates. To obtain a measure of the dispersion in tariff rates, I draw on tariff data from the Trade Analysis Information System (TRAINS) of the UN Conference on Trade and Development, which provides tariff data for a cross section of countries from 1988 to 2010, and, after accounting for data limitations on other variables, a sample of up to 126 developed and developing countries that are either members of the GATT/WTO or of preferential trade agreements,⁷ and, as a minimum threshold of a competitive electoral process, have at least two parties winning seats in legislative elections. This corresponds to a score of at least 5.5 on the legislative index of electoral competitiveness (Beck et al. 2001). The following results are robust to including all countries for which data are available or using Polity scores to define democracies. I obtain data at the Harmonised System's four-digit level (HS4 in the following), which provides tariffs on up to 1,248 products for each country-year, from the World Bank's World Integrated Trade Solution database. For instance, the data provide separate tariffs for "Wrist-watches, pocket-watches and other watches, including stop-watches, with case of precious metal or of metal clad with precious metal," depending on whether they feature a "case of precious metal or of metal clad with precious metal" (code 91.01) or whether they do not (code 91.02). For each country-year, I then compute the standard deviation in tariff rates across products as a measure of dispersion for the regression models reported below.⁸

To define narrow-interest institutions, I follow Rogowski (1987) and the literature on trade politics since and equate narrow-interest institutions with plurality rule. While Rogowski (1987), as well as Grossman and Helpman (2005), emphasized that plurality rule should favor interest groups, others argue that proportional representation systems, due to lower seat-vote elasticities, privilege interest groups (e.g., Rogowski and Kayser 2002). An important distinction between these arguments is the underlying assumption about interest group preferences: whereas arguments about seat-vote elasticities assume that all interest groups share the same preferences—for, say, higher prices—arguments that suggest

7. Members of the European Communities/European Union are omitted.

8. The number of tariff lines reported for each country varies, which in turn influences the accuracy of the estimate of the standard deviation. The results are robust to accounting for this using weighted least squares. Where tariff data were missing for a year but identical rates were reported for earlier and later years, those tariffs are used.

that plurality rule privileges interest groups are based on an underlying assumption of preference heterogeneity.

The discussion in the previous section and the underlying model of trade (Melitz 2003) suggest substantial heterogeneity among interest groups concerned with trade policies, both over the size of tariff barriers and over the products on which tariff barriers are applied. Some interest groups, and because of that electoral districts, prefer free trade, while others prefer protection. The fragmentation of interest groups further suggests that industry-wide associations or class-based coalitions should be less relevant for trade policies than individual firms. Hence, narrow-interest institutions like plurality rule, and not broad-interest institutions like proportional representation, should privilege interest groups with a stake in trade policies. Plurality systems tend to have a smaller population size per district and weaker parties, which enable interest groups to exert disproportionate influence (Grossman and Helpman 2005). Moreover, the single-member districts typical under plurality rule create incentives for legislators to provide policies that benefit the local constituency. Small single-member districts also imply a congruence between firm and voter interests, reinforcing the incentives for legislators to benefit firms in their constituency—especially when the fortunes of voters are tied to local economic conditions (Scheve and Slaughter 2001).

Data on electoral institutions are available from Beck et al. (2001). Plurality is coded 0 for countries that use proportional representation for the majority of seats in the lower house and 1 for countries that use plurality rule. While an indicator for plurality rule is a simplification, it has the advantage of being unambiguous, therefore being available for a large number of countries, and it is the variable used in the seminal literature. I consider alternative variables for narrow-interest institutions—such as the distinction between democracies and autocracies, the number of electoral districts, or the distinction between parliamentary and presidential systems—in the appendix, available online.

Because all countries in the sample are members to trade agreements, the difference between plurality rule and proportional representation is conditional on the presence of reciprocal trade agreements. Thus, and according to proposition 1, the data allow evaluating whether, under reciprocity, plurality rule is associated with a higher dispersion in tariff rates than proportional representation. Additional results consider whether the effect of plurality rule increases as countries join the WTO and as they join preferential trade agreements.

Country size is associated with electoral institutions and trade openness and also with the ability to engage with other countries in international negotiations. I therefore include the log of gross domestic product (GDP) and gross domestic

product per capita (GDP per capita). The variables are obtained from the World Development Indicators and are lagged by one period. Additional control variables are considered below and in the appendix.

The data feature strong temporal dependence, with a coefficient on the lagged residual of above .7. The main results reported in the following therefore are based on generalized linear models that allow for serial correlation in the error term through a first-order autocorrelation structure and for heteroskedasticity across panels. Alternative estimators are discussed below and in the appendix.

Table 1 reports the results from models relating the standard deviation in tariff rates to political institutions. Proposition 1 implies that the coefficient on plurality should be positive. The first column omits any control variables, while the second column includes two control variables, GDP and GDP per capita. The results are consistent with the first proposition: plurality rule is associated with more dispersed tariff rates than proportional representation. The effect increases noticeably after controlling for GDP and GDP per capita; the coefficient reported in column 2 corresponds to an increase in the tariff dispersion of almost 30% compared to the sample average. Plurality rule is associated with substantially more unequal tariff rates across products than proportional representation.

Some sectors and industries, such as agriculture, are prone to be more protected, which would drive up the standard deviation in tariff rates. Column 3 accounts for such systematic, industry-specific effects by first regressing tariff rates on industry fixed effects (defined by two-digit categories) in order to obtain tariff rates net of industry-specific effects and then calculating the standard deviation from the residuals. The coefficient decreases in size but remains positive and statistically significant.

The remaining columns allow for country-specific effects. Column 4 shows that the results are robust to estimating a system GMM (generalized method of moments) model, which allows for country-specific effects and includes a lagged dependent variable; lagged variables are used as instruments for current variables. The appendix shows that the positive and significant coefficient remains also when estimating a maximum likelihood model when including only countries with no change in the electoral rule and estimating the appropriate GMM estimator for time-invariant covariates, or when relying on the Driscoll-Kraay estimator. Columns 5 and 6 account for country-specific effects by estimating random effects and fixed effects models, respectively, with standard errors clustered by country. While the coefficient decreases in size, especially in the case of fixed effects, it remains positive and statistically significant.

Table 1. Dispersion in Tariff Rates

| | FGLS (1) | FGLS (2) | FGLS (3) | GMM (4) | RE (5) | FE (6) |
|----------------------------------|-------------------|-------------------|-------------------|-------------------|------------------|------------------|
| Plurality rule | 1.18*** (.155) | 3.00*** (.118) | 2.17*** (.179) | 3.63*** (1.11) | 2.53** (1.22) | 1.33** (.664) |
| GDP | | .318*** (.043) | .018 (.061) | .339** (.135) | .424 (.677) | -.130 (1.17) |
| GDP per capita | | .012 (.024) | .123*** (.025) | .093*** (.011) | .231* (.121) | .349** (.137) |
| Lagged standard deviation tariff | | | | .486*** (.005) | | |
| Constant | 9.11*** (.092) | .035 (.923) | 5.27*** (1.37) | -4.95* (2.91) | -2.2 (15.4) | 11.1 (27.7) |
| AR(1) lag | .747 | .718 | .743 | | | |
| No. of observations | 1,513 | 1,504 | 1,504 | 1,377 | 1,505 | 1,505 |
| No. of countries | 126 | 125 | 125 | 125 | 126 | 126 |

Note. The table displays coefficients and standard errors (in parentheses). The dependent variable is standard deviation in tariff rates, at the country-year level, across HS4 tariff categories. FGLS = feasible generalized least squares; GMM = generalized method of moments; RE = random effects; FE = fixed effects; GDP = gross national product. Columns 1–3: generalized least squares, AR(1) error process. Column 3 uses tariff rates net of industry fixed effects for calculating the standard deviation. Column 4: system GMM. Column 5: random-effects linear model, standard errors clustered by country. Column 6: fixed effects linear model, standard errors clustered by country.

* Significant at the 10% level.

** Significant at the 5% level.

*** Significant at the 1% level.

The appendix discusses results when including additional controls and when considering alternative estimation techniques, such as models that account for spatial interdependence or that allow for correlation within time periods and within countries simultaneously. The following presents several robustness checks and attempts to rule out alternative explanations. Unless noted otherwise, results are reported in table 2.

Standard deviation and average tariffs

To ensure that a higher dispersion is not the consequence of higher protection for select products (but not lower tariffs on others), column 1 of table 2 includes the average tariff rate. If the dispersion-enhancing effect of plurality rule were to work only through higher tariffs on some products, the coefficient on plurality rule should become insignificant once controlling for average tariffs. The results in column 1 underscore that the higher dispersion is not driven by more protectionist trade policies under plurality rule. The standard deviation might also increase as a consequence of tariff cuts if tariff cuts are not applied uniformly. Column 2 therefore includes the first difference in average tariffs (multiplied by -1). Tariff cuts are associated with more dispersed tariff rates, but not significantly so. Plurality rule is

also associated with a higher share of tariff rates that are pushed to the zero bound. This result (reported in the appendix) is inconsistent with standard accounts that associate plurality rule with more protected, but not with more liberalized products.

Alternatives to the standard deviation

An alternative to relying on the standard deviation that is robust to outliers and skewed distributions is to compare the entire distribution of tariff rates. I implement the test statistic suggested by Brown and Forsythe (1974), which is based on absolute deviations from the median (specific to each country and electoral rule). To account for the nonindependence of observations within countries, following Iachine, Petersen, and Kyvik (2010), I use a sandwich estimator. Plurality rule is associated with significantly more dispersed tariff rates than proportional representation (reported in the appendix).

Another option is to compare the entire distribution of tariff rates at different quantiles. If plurality rule results in an increase in tariff dispersion, then the coefficient estimate on the electoral rule should increase when moving from lower quantiles to higher quantiles (detailed in the appendix). Figure 2 plots the coefficient on plurality rule at different quantiles of the data and shows that this is indeed the

Table 2. Dispersion in Tariff Rates: Robustness Checks

| | Average Tariff (1) | Tariff Cut (2) | Median (3) | Consumer Interests (4) | Inputs (5) | SD Trade (6) | Sector Trade (7) | Sector SD Trade (8) |
|----------------------------|--------------------------|----------------------|-------------------|------------------------------|--------------------|--------------------|------------------------|---------------------------|
| Plurality rule | 3.2*** (.123) | 2.88*** (.12) | 2.46*** (.761) | 2.9*** (.124) | 2.88*** (.262) | 3.51*** (.148) | 1.53*** (.040) | 1.65*** (.031) |
| X elasticity | | | | −.384 (.265) | | | | |
| X intermediates | | | | | −1.2*** (.279) | | | |
| GDP | .335*** (.043) | .257*** (.048) | .004 (.257) | .070 (.048) | .36*** (.041) | .462*** (.073) | .175*** (.021) | −.078*** (.014) |
| GDP per capita | −.006 (.022) | .000 (.029) | .080 (.093) | −.011 (.019) | .012 (.016) | .020 (.029) | −.034*** (.003) | −.035*** (.003) |
| Average tariff | −.006 (.012) | | | | | | | |
| Tariff cut | | .016 (.018) | | | | | | |
| Elasticity | | | | 1.26*** (.224) | | | | |
| Intermediates | | | | | −2.24*** (.211) | | | |
| Trade dispersion | | | | | | −.245*** (.077) | | |
| Sector imports | | | | | | | −.267*** (.014) | |
| Sector exports | | | | | | | −.037*** (.007) | |
| Sector trade dispersion | | | | | | | | −.316*** (.055) |
| Constant | −.232 (.935) | 1.35 (1.01) | 6.5 (6.07) | 5.09*** (1.07) | .18 (.928) | −3.59** (1.63) | 7.74*** (.364) | 8.12*** (.318) |
| No. of observations | 1,504 | 1,373 | 1,505 | 2,873 | 3,003 | 1,329 | 19,788 | 19,623 |
| No. of countries | 125 | 120 | 126 | 108 | 125 | 117 | 118 | 117 |

Note. The table displays coefficient estimates and standard errors. Columns 1–6: the dependent variable is the standard deviation in tariff rates at the country-year level. Column 4 calculates standard deviation separately for products with high and low demand elasticity. Column 5 calculates standard deviation separately for intermediate goods/inputs and all other goods. Columns 7 and 8: the dependent variable is the standard deviation in tariff rates at the country-year-sector level. Column 3 is a quantile median regression, with standard errors clustered by country; all others are generalized least squares with AR(1) error process.

* Significant at the 10% level.

** Significant at the 5% level.

*** Significant at the 1% level.

case.⁹ Plurality rule is associated with lower tariff rates than proportional representation at lower quantiles and with higher tariff rates at higher quantiles. Notably, the effect at the me-

dian is close to zero, reinforcing the mixed results in the literature.

Outliers and extreme values

Some tariffs assume extreme values. Outliers may skew results in linear regression models, and they may skew the de-

9. Standard errors are clustered by country-product. The models include GDP and GDP per capita. Tariff rates are net of country fixed effects.

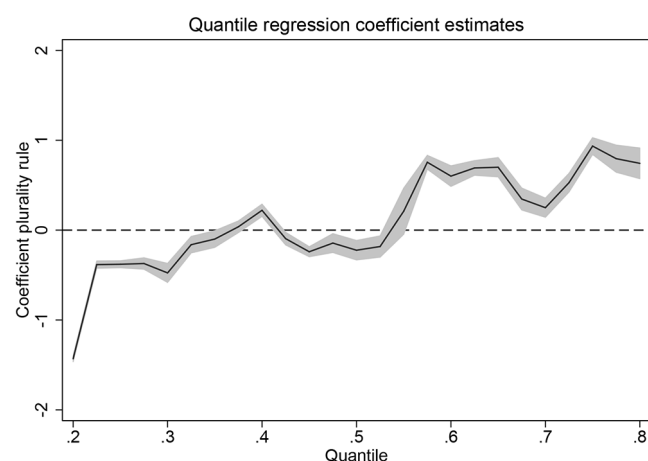


Figure 2. The figure shows coefficient estimates of plurality rule at different quantiles of the data (along horizontal axis). The shaded area represents the 95% confidence interval. Dependent variable = tariff rates, net of country fixed effects. At lower quantiles, plurality has a negative effect on tariffs; at higher quantiles, plurality rule has a positive effect on tariffs. At the median, the effect is close to zero.

pendent variable itself, the standard deviation in tariff rates. A related problem can arise because tariff rates are bounded from below, which may cause clustering at the lower bound and consequently low values on the standard deviation. To alleviate the effect of outliers in the standard deviation, column 3 of table 2 presents the results from a quantile regression at the median, which is less sensitive to outliers than mean-based estimators. Standard errors are clustered by country to account for arbitrary within-country, in particular serial, correlation (Parente and Santos Silva 2016). The results are also robust to dropping tariff rates above or below specific cut-offs from the calculation of the standard deviation, as well as to dropping observations where the standard deviation remains above or below specific cut-offs (reported in the appendix). The appendix further shows that the results are not explained by the difference between observations with positive standard deviation and observations with zero or small values on the standard deviation.

Consumer interests

Consumer interests are affected by tariffs on different products to varying degrees. Where the elasticity of demand is high, tariffs are most distortionary, which might reduce the incentives for all governments, regardless of the electoral system, to impose tariffs. If that is the case, the effect of plurality rule would be concentrated in products with low demand elasticity. I define products with a demand elasticity above the median, using elasticity data specific to countries and products from Kee et al. (2009). I then calculate the standard deviation separately for products below and for

products above the median elasticity and interact the dummy variable with the electoral rule. Column 4 of table 2 shows that the effect of the electoral rule is reduced in size for products with high demand elasticity but that the effect of plurality rule is not statistically significantly smaller. The effect of plurality rule remains positive and statistically significant for both product categories.

Intermediate inputs

Interest groups aside from exporters have incentives to support domestic trade liberalization. Most notably, these are firms that use imported intermediate goods for production (Gawande, Krishna, and Olarreaga 2012). If narrow-interest institutions are more susceptible to these demands, they would have an indeterminate effect on average tariff levels and create more dispersed tariff rates. To distinguish this explanation from the argument in this article, I leverage that, if the dispersion is due to downstream producers pushing for lower tariffs on intermediate goods, the lobbying should be concentrated on intermediate goods and inputs. I calculate the dispersion in tariff rates separately for goods classified as intermediate goods, using the Broad Economic Categories (BEC) classification and the concordances from BEC to the four-digit Harmonized System, and all other goods. I then interact the dichotomous variable for intermediate goods with the electoral rule. Column 5 of table 2 shows that plurality rule is associated with higher tariff dispersion for goods other than intermediate goods and that the effect is stronger for those than for intermediate goods. The marginal effect of plurality rule is positive and statistically significant for both intermediate goods and other goods.

Market and industry structure

Differences in tariff rates might mirror differences in trade exposure across industries. Column 6 of table 2 includes a control variable for the standard deviation in trade flows across products as a measure of heterogeneity in trade exposure (calculated from six-digit trade flow data from UN Comtrade). The appendix shows that similar results obtain when including the standard deviation in imports or exports; when including the Herfindahl-Hirschman index (HHI) for the concentration of trade, imports, or exports across products; or when including control variables for the intensive margin of trade, the extensive margin of trade, or export diversification.

To further account for differences between sectors, I disaggregate the data by defining 15 sectors. I then calculate the standard deviation across tariff rates for each country-year within sectors and include control variables for each

sector's log imports and log exports (col. 7).¹⁰ Because these results leverage the standard deviation in tariff rates within sectors, they also account for differences in comparative advantage across sectors that are reinforced by narrow-interest institutions: According to an explanation based on comparative advantage, dispersion should arise across sectors, whereas tariff rates should be level within sectors.

While theories of comparative advantage suggest relatively level tariffs within sectors, this need not be the case with heterogeneous firms: if only select firms gain protection on (narrowly defined) products, more dispersed tariffs within sectors would arise even without the pressure to liberalize. In that case, the higher dispersion would be driven by the increase in the average tariff rate. The appendix shows that the coefficient on plurality rule remains positive when including a control variable for the average tariff rate within sectors. To additionally account for the heterogeneity of trade interests across products within sectors, column 8 of table 2 includes the standard deviation in trade flows across products within country-year-sectors. As with the country-level results, the appendix shows that the results are also robust to including the standard deviation in imports or exports; including the HHI in trade, imports, or exports; and accounting for the multi-level structure by estimating hierarchical linear models.

Level of development

Countries could reduce tariffs in exchange for market access abroad but implement nontariff barriers that have not (yet) been subject to reciprocal negotiations. Wealthy countries might be better able to devise and implement nontariff barriers, allowing them to lower tariffs. If that is the case, the effect of plurality rule on tariff dispersion should be conditional on the level of development. When interacting plurality rule with GDP per capita as a measure of wealth, this does not appear to be the case (reported in the appendix).

Intra-industry trade

Protectionist firms may be able to lobby for protectionist policies more effectively, resulting in more dispersed tariff rates, with high levels of intra-industry trade, which makes lobbying for protection attractive to individual firms (Kono 2009). The selective provision of protectionism with intra-industry trade is an alternative explanation for a higher dispersion under plurality rule if countries with plurality rule engage in more intra-industry trade than countries with

proportional representation. Yet there is little evidence that this is the case. Relying on the standard Grubel-Lloyd index of intra-industry trade at the two-digit level, plurality rule is not associated with significantly more intra-industry trade. The difference is less than 1 percentage point, with a *p*-value of .945.¹¹ Similarly, including intra-industry trade in the empirical model does not alter the results (reported in the appendix).

Number of exporters and exported products

If plurality rule results in more dispersed tariff rates because exporting firms lobby for domestic tariff reductions, the effect of plurality rule should be most pronounced where exporters are numerous and represent narrow interests. I rely on three measures of the number of export interests. First, the number of product categories that are exported (from WITS), which gives an indication of the number of exporters in the economy. Second, the number of markets to which any products are exported (from WITS). Because many exporting firms learn from experience in existing markets (Albornoz et al. 2012), the variable provides a measure of potential export interests in trade negotiations: the larger is the number of markets to which a country exports, the larger should be the number of exporters in any given multilateral trade negotiation that have incentives to lobby for domestic tariff cuts in exchange for access to that market. Third, the economic complexity index (from Hausmann et al. 2014), which gives an indication of the number and sophistication of goods that a country produces and exports and hence reflects the diversity of export interests. As is shown in the appendix, domestic institutions systematically interact with the prevalence of export interests: the effect of plurality rule increases in the number of exported products, in the number of export market destinations, and in economic complexity.

Participation in trade agreements

The effect of plurality rule should be larger for countries that participate in trade agreements than for countries where the tariff schedule has not been subject to trade negotiations. Extending the sample and interacting a variable for countries that are not members to any trade agreements, the appendix shows that this is the case: the effect of plurality rule is larger for countries that are members to trade agreements; moreover, plurality rule has no statistically significant effect on tariff dispersion for countries that are not members to any trade agreements. However, participation in trade agreements

10. While the coefficient estimate decreases in size, so does the scale of the dependent variable.

11. The model controls for industry fixed effects, log GDP, and GDP per capita. Similar results obtain when omitting these variables or when estimating the model at the sector level.

is nearly universal. The sample includes only two countries (with three years each, for a total of six observations) that are not coded as members to any trade agreements during the sample period, which makes it difficult to draw generalizable inferences.

The sample displays more variation on the types of trade agreements in which countries participated. Several countries joined the WTO during the sample period, and several countries participated in preferential trade agreements during the sample period for the first time. The appendix shows that the effect of plurality rule on tariff dispersion increases both with WTO membership and with membership to preferential trade agreements. Moreover, WTO membership has no (statistically significant) effect on tariff dispersion under proportional representation, suggesting relatively even tariff cuts across products under broad-based institutions but a positive effect on tariff dispersion under plurality rule. While not providing a full contrast between unilaterally determined and reciprocally negotiated trade policies, these results provide some support for the notion that plurality rule results in more dispersed tariff rates due to participation in reciprocal trade agreements.

Finally, the main estimation samples covered countries that were members to at least one trade agreement. The appendix shows that restricting the sample further to consider only plurilateral trade agreements, regional trade agreements, or trade agreements between approximately equal countries does not alter the main results. Similarly, restricting the sample to countries that participated in the WTO during the entire sample period (and dropping countries that newly joined the WTO) does not alter the main results.

TARIFF LEVELS AND THE CONDITIONAL EFFECT OF PLURALITY RULE

If narrow-interest institutions result in more dispersed tariff rates because exporting firms successfully push for tariff reductions, the effect of plurality rule on tariff levels should decline in the number of trade negotiations in which a country has participated (regardless of its total effect). As the number of trade negotiations increases, more exporters push for trade liberalization of the domestic market. If the number and political strength of exporters far outweighs that of import-competing firms, this effect even has the potential to create a free trade bias under narrow-interest institutions. By contrast, electoral institutions that are less responsive to narrow interests are less affected by the logic of trade negotiations. Where the government receives larger benefits from liberalization because free trade benefits the public, and interest groups have less influence, tariff reductions do not depend as much on receiving concessions from trading partners in turn.

The left panel of figure 3 displays the average tariff rate for plurality rule and proportional representation from 1990 to 2010, together with the average number of trade agreements for the two groups (calculated from the DESTA database; Dür, Baccini, and Elsig 2014). Average tariffs differed substantially across electoral systems in the early 1990s. Concomitant with the increase in trade negotiations, the difference between electoral systems in terms of the average tariff rate is successively declining, especially after the conclusion of the Uruguay Round in 1994. The figure shows no noticeable difference in the propensity to join trade agreements between the two types of electoral rule.

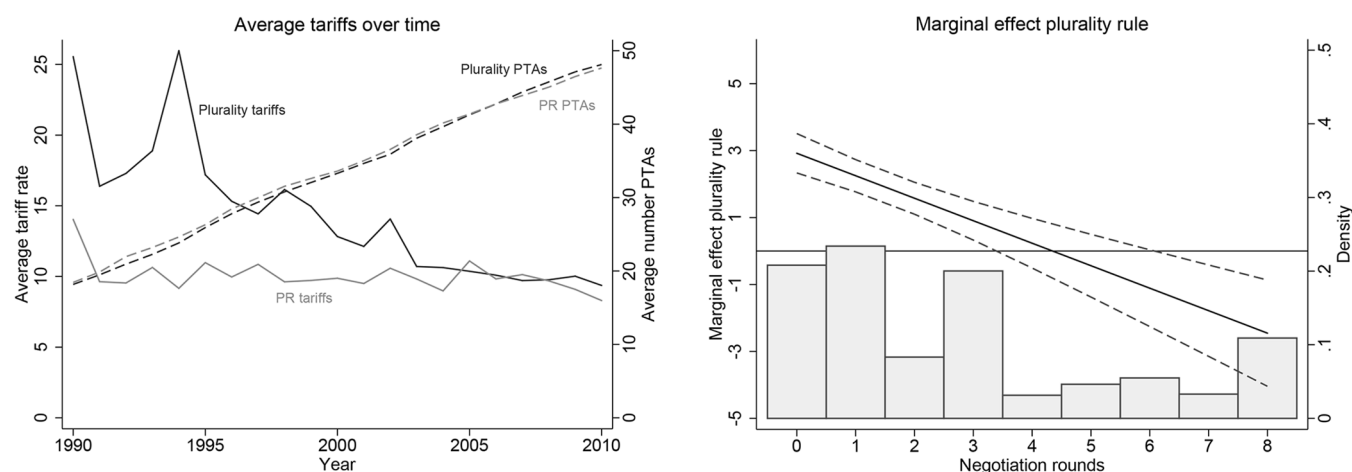


Figure 3. *Left panel:* average tariff rates, 1990–2010, solid lines, and average number of preferential trade agreements, dashed lines, for plurality rule (dark gray) and proportional representation (light gray). *Right panel:* marginal effect of electoral rule on tariff levels (solid line) and 95% confidence intervals (dashed line), as a function of GATT/WTO rounds. The histogram in the background shows the distribution of the data in the sample.

To evaluate more rigorously whether the effect of plurality rule on tariff levels decreases with participation in trade agreements, I interact the variable for plurality rule with the number of GATT/WTO negotiation rounds in which a country has participated. In contrast to preferential trade agreements, the timing of these rounds is largely exogenous for most countries in the sample, which alleviates concerns about endogeneity. The dependent variable is the average most-favored-nation tariff rate, obtained from the World Bank database. The model specifications are otherwise identical to previous models and include a year polynomial of degree three to account for common time trends; full estimates are reported in the appendix.

The dampening effect of trade negotiations on the protectionist bias of plurality rule is displayed in the right panel of figure 3, which reports the marginal effect of plurality rule on the average tariff as a function of the number of GATT/WTO negotiation rounds in which a country participated. The background shows the distribution of the data on GATT/WTO negotiation rounds. The effect of plurality rule on average tariff rates decreases in the number of trade negotiations in which a country has participated. At the lower end of the distribution, plurality rule has a protectionist bias, as a unilateral account of trade politics would suggest: plurality rule is associated with about 3 percentage points higher tariff rates. At the upper end of the distribution—those countries that participated in the WTO the longest—the effect of plurality rule on tariff levels turns negative, producing a free trade bias. For countries that participated in at least one negotiation round, the average marginal effect of plurality rule is close to zero and fails to reach statistical significance at the 5% level, reinforcing some of the inconclusive findings in the literature. And for nearly a third of the observations in the sample, the average effect of the electoral rule is either insignificant or negative, such that plurality rule is associated with lower tariff rates. Notably, many of these countries are high-income countries, suggesting that the association between plurality rule and average tariff levels differs depending on the sample choice.

The appendix shows that these results are robust to the inclusion of country fixed effects and to accounting for differences in WTO rounds by weighting them by (i) the number of negotiating parties, (ii) the share of world-wide trade covered by the negotiating parties, or (iii) the share of world-wide exports covered by the negotiating parties. Similar results obtain when interacting the variable for plurality rule with a dummy for WTO membership, with a dummy for membership in trade agreements, or with the number of a country's trade agreements.

An analogous implication is that the effect of plurality rule on tariff levels should decline in the number of export

interests: the more interest groups support domestic trade liberalization relative to protectionism, the less pronounced the protectionist bias of plurality rule should be. To obtain a measure of the number of exporting firms, I again rely on the number of exported product categories, the number of export market destinations, and the index of economic complexity, and interact these variables with the electoral rule. As expected, the coefficient on the interaction term is negative and statistically significant for the number of exported products and the number of export markets; for the index of economic complexity, the interaction term is negative, but it is close to zero and statistically not significant (reported in the appendix). These results indicate that plurality has indeed a protectionist bias, as implied by a unilateral view of trade politics, but that this protectionist bias wears down as export interests offset protectionist demands. While narrow-interest institutions are plausibly geared toward privileging narrow-interest groups, these groups need not be protectionist.

ELECTORAL CAMPAIGNS

The incentives to appeal to both protectionist and exporter interests should also be evident in political campaigns. If exporters and protectionist groups are relevant narrow-interest groups, plurality rule should be associated with more references to both free trade and protectionism in political campaigns. This proposition contrasts with the existing literature, which stipulates that institutions that create more incentives to appeal to the broad public should create more incentives to appeal to free trade (which benefits consumers) and fewer incentives to appeal to protectionism (which benefits protectionist firms).

I leverage data from the Comparative Manifestos Project (Volkens et al. 2011), which codes the proportion of sentences in electoral platforms of political parties devoted to specific topics.¹² I create three variables, aggregating data across parties for each election-year. To avoid that the positions of extreme but politically irrelevant parties bias the results, positions are weighted by vote shares. The first variable is the proportion of positive references to protectionism, which reflects the electoral appeal of protectionist trade policies. The second variable measures positive references to free trade. The third variable is the difference between the first two and represents the net appeal of free trade. The data set contains observations on 48 developed and developing countries from 1975 to 2010. The first two variables are proportions. In about 13% of the observations, no party made any references to protectionism or free trade. Due to the pres-

12. For a related use of the manifesto data on trade, see Kono (2006).

ence of zeros, I estimate a generalized linear model with logit link (Papke and Wooldridge 1996); the appendix provides the results from alternative models. The third variable may take on positive or negative values, and I estimate a linear regression model. Results are provided in the appendix.

Moving from proportional representation to plurality rule doubles positive references to protectionism. However, plurality rule is also associated with more support for free trade. Plurality rule yields about three times as many references in favor of free trade as proportional representation. Thus, the simultaneous incentives to appeal to interest groups in support of free trade and protectionism appear to be evident in political campaigns as well. Notably, plurality rule is not biased in favor of protectionism in terms of net references, mirroring the inconclusive results in the literature when using average tariffs as the dependent variable.

CONCLUSION

While both exporting firms and international trade agreements are the subject of substantial literatures, the literature on the domestic institutional roots of trade policies has largely ignored the role of exporters as narrow-interest groups. This omission results in a biased view of trade politics. Trade agreements, and the resulting lobbying by exporting firms, mute the protectionist bias of narrow-interest institutions, which instead are associated with more dispersed tariff rates, reflecting the conflicting demands on policy makers by exporters and import-competing firms. Considering both international and domestic factors is necessary to account for the political dynamics in trade politics, reinforcing recent warnings that domestic political economy accounts cannot ignore international politics (Oatley 2011).

This article has several broader implications. First, by emphasizing the role of domestic tariff reductions in exchange for tariff cuts abroad as a way to accommodate exporting firms, this study provides a step toward resolving the anti-trade puzzle: the question of why trade policies are biased systematically toward protectionist interest groups, which is echoed in a literature that largely equates trade policy with protectionist trade policy (see, e.g., Alt et al. 1996; Rodrik 1997). Domestic tariff reductions, by effecting a reciprocal lowering of foreign tariffs, are also trade policy. Pro-trade behavior need not take the form of pro-trade policies, but may be evident in the removal of anti-trade policies. Hence, the absence of obvious trade-expanding policies does not imply that trade policy making is biased toward protectionist interest groups. If reciprocal tariff reductions are a response to exporter interests that obviate other measures, governments may not even need to turn to alternative pro-trade policies, creating the mere appearance of a lack of pro-trade policies.

Second, an important role ascribed to international institutions is to provide solutions to commitment and information problems. In particular, trade agreements may work as signals to voters that a government is free of interest group influence and abstains from extracting rents from them (e.g., Mansfield and Milner 2012). Yet, tariff reductions in the context of trade agreements can be rent-seeking, too, except that the rents are coming from groups that prefer tariff reductions on specific goods and at a specific time. Rather than signaling a government's independence from interest groups, trade agreements demonstrate the government's support for a specific set of interest groups, some of them protectionist and some of them exporters.

Finally, the article points to the complicated relationship between domestic institutions and international cooperation. On the one hand, parts of the literature emphasize how the insulation of domestic policy makers from interest groups influence supports policy reform and compliance with international agreements. This has been the basis for the argument that delegation of trade policy making to the president ensured free trade policies in the United States, for instance (e.g., Gilligan 1997). Similar arguments are present in the literature on intergovernmental cooperation (e.g., Moravcsik 1994). On the other hand, parts of the literature emphasize the importance of domestic interest groups for the long-term viability of international cooperation. For instance, in international environmental and human rights agreements, domestic interest groups can be crucial for monitoring and enforcing compliance with international norms (Dai 2007; Simmons 2009). This article underscores the contrast between these accounts. Institutions that insulate policy makers from interest groups not only reduce the influence of interest groups opposing reform and compliance but also reduce the influence of supportive interest groups. Hence, by undercutting the influence of such groups, delegation may reduce the prospects for the long-term success of international agreements—an argument that echoes the concerns voiced by Hiscox (1999) about the explanatory power of institutional reforms in the context of US policy making. Consideration of such implications for domestic politics is necessary to gain a better understanding of the negotiation, functions, and effects of international institutions.

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