

# Exporter Influence, Globalization Backlash, and Rules vs. Power-Based Trade Agreements\* (*preliminary*)

David R. DeRemer<sup>†</sup>

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## Abstract

This paper argues that the backlash against globalization and the U.S. pivot away from the rules-based trading system can be better understood by augmenting canonical trade agreement theory to consider exporter political influence. Exporter influence causes governments to overweight export rents and to negotiate excessive trade liberalization relative to the public interest, ultimately resulting in backlash against globalization. When a government under exporter influence transitions from a rules-based outcome to a power-based negotiation, benefits need not be manifested exclusively in terms-of-trade improvements, as the benefits can also be accrued instead in greater rents from import or export production that the state values more than the public. Power-based negotiations still benefit the public of the more powerful country, even if there is a misalignment of interests between the government and the public.

**JEL classification:** F12, F13, F15, P45

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<sup>†</sup>Graduate School of Business, Nazarbayev University, 53 Kabanbay Batyr Ave, Astana 010000, Kazakhstan, david.deremer@nu.edu.kz.

# 1 Introduction

Observation of U.S. trade policy’s consequences over the last 30 years suggests substantial misalignment between policymakers and the public interest. Survey evidence confirms that backlash against globalization dates back to the mid-1990s (Colantone et al. 2022). There are distributional consequences behind the backlash in the U.S., as labor markets are slow to adjust to trade deficits (Dix-Carneiro et al. 2023) and trade impacts were concentrated in particular local labor markets (Autor et al. 2013) following trade integration with China at the turn of the century. The trade war that the U.S. started with China in response to the backlash seems not much better in serving the public interest (Fajgelbaum and Khandelwal 2022). Though in theory, the U.S. could achieve immediate welfare gains by exploiting its bargaining power to improve the terms of its trade cooperation with China (Mattoo and Staiger 2020), evidence of improvement in the U.S. terms of trade such that “China is paying for the tariffs” as Donald Trump famously claimed has been elusive in the data (Fajgelbaum et al. 2019).

Why then has 21st century U.S. trade policy been so misaligned with the public interest? One explanation is that policymakers have not understood the consequences of their decisions. They did not anticipate U.S. labor markets would be slow to adjust relative to the extent of China’s growth and state involvement. Politicians’ behavior in the trade war is consistent with overestimating U.S. market power and disregarding downstream consequences of higher prices of imported inputs. Economists though have a history of attributing trade policy purely to economic ignorance (e.g. Krugman 1997, on trade negotiations), before a political economy theory of trade policy can be developed (Bagwell and Staiger 1999), so there should be caution in repeating that history here.

This paper explores theoretically how exporter influence on trade policy can lead to a misalignment between policy and the public interest in trade agreements. The possibility of exporter influence having negative effects on trade negotiation outcomes has largely been neglected. Direct evidence of exporters lobbying on trade negotiation outcomes has only

recently received substantial empirical attention (Blanga-Gubbay et al. 2023). Though exporter influence is now well-established as potentially harmful in regulatory cooperation, in negotiations involving trade barriers it is seen largely as a beneficial force that counter-lobbies import interests (Maggi and Ossa 2021). I explore whether exporter lobbying is always beneficial using canonical static models of trade agreements, in which governments and the public each have distinct rational preferences over allocations resulting from global trade policies.

One contribution of my paper is to show that exporter lobbying can lead to worse trade policy outcomes for the public, and I put this forward as an explanation for trade policies resulting in globalization backlash. The key intuition follows one model of Bagwell and Staiger (2016) such that when there are frictions in government transfers, negotiating trade liberalization is the primary way for the state to expand export sectors (as opposed to subsidies). But to achieve export promotion in a cooperative trade agreement requires abandoning protection for import-competing sectors. So we have a “shallow” agreement focused on reducing trade barriers where export lobbying leads to worse outcomes for the public. This finding contrasts with Maggi and Ossa (2021), who emphasize the role of only deep agreements in leading to bad outcomes for the public (motivated by backlash to U.S.-Europe trade negotiations in the early 2010s), whereas I find that expanding on shallow integration can also result in backlash.<sup>1</sup> A potential pathology, highlighted in the working paper of Maggi and Ossa (2020), is that shallow agreements with negative welfare agreements may imply an equilibrium of import subsidies that are rarely observed, but I find this pathology is avoided provided that the public has motives to protect import sectors. Such motives could include U.S. labor market frictions or the “social footprint of trade” as in the handbook chapter of (Colantone et al. 2022). My paper complements their survey by offering a positive theory of how initial policies leading to backlash would be realized, whereas

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1. Another reason for the distinct analysis is that the working paper of Maggi and Ossa (2020), which considers the issue, explores shallow integration in comparison to no agreement. Backlash could also result from expanded shallow integration starting from an existing agreement.

they focus only on the evolution of backlash once such policies have been implemented.

A second contribution of my paper is in elucidating consequences from a “rules-based” cooperative trade agreement outcome to a “power-based” outcome. Modeling the U.S.-China trade war as power-based cooperation rather than noncooperative outcomes is the approach taken by leading economists in trade policy (Mattoo and Staiger 2020; Bown 2021). But models of trade cooperation underlying the approach (Bagwell and Staiger 2016) have the feature that the only first-order gains from small changes in trade policy starting from a rules-based outcome (the “political optimum”) would be an improvement in the terms of trade, so a transition from a rules-based to power-based outcome for the more powerful country must result in a terms-of-trade improvement and welfare improvement, while all other impacts of local price changes balance out. Yet evidence of a terms-of-trade improvement from recent U.S.-China cooperation is scarce to date (Fajgelbaum and Khandelwal 2022). In contrast, my model of a rules-based trade outcome with export lobbying allows for first-order gains from either export promotion or import protection as the U.S. moves to a power-based outcome. The power-based outcome still involves a transfer of economic surplus. But the powerful country can be motivated by promoting export interests (e.g. soybeans) and import-competing interests (e.g. steel). I find that even the U.S. public and government interests are misaligned in the state caring about narrow export interests, the switch to the power-based negotiation is still beneficial according to the preferences of the U.S. public.

The paper proceeds as follows. Section 2 details the empirical setting that motivates my modeling choices. Section 3 explores the possibility of a shallow agreement leading to negative welfare effects in a two-country, three-industry partial equilibrium model following Bagwell and Staiger (2001, 2016). Section 4 explores the consequences of a transition to a power-based agreement. Section 5 concludes.

## 2 Background

This section discusses empirical and theoretical background necessary for the understanding of the paper. This discussion both motivates the modeling choices and clarifies why the topics here are relatively underexplored in the literature.

One restriction is that I focus only on negotiations over import tariffs following a wide body of work (Ossa 2011, 2014; Grant 2020; Maggi and Ossa 2020; Mrazova 2023). Though first-best approaches to policy would be to address any domestic market failure or income redistribution through subsidies or transfers following the targeting principle of Bhagwati and Ramaswami (1963), we in practice see plenty of shifting of economic rents through trade policy (Siyang Ding 2022). Export subsidies are then a “missing instrument” in words of Bagwell and Staiger (2012), and in our environment, the trade agreement effectively substitutes for this missing instrument in delivering optimal policy. Their paper and Grossman and Helpman (1995) consider both import and export policies in such an environment, and implications of trade agreement outcomes in the more restrictive environment have been relatively less explored.

A second key choice is how I model the “rules-based outcome” that would be a plausible model of cooperative trade outcomes prior to the U.S.-China trade war. I consider as this rules-based outcome the cooperative agreement in a two-country model where both countries are indifferent to small trade policy changes satisfying the principle of reciprocity. This property is satisfied by the cooperative equilibrium in all models of Bagwell and Staiger (2016), as I show in DeRemer (2016). But a difference in the missing instrument setting is that negotiating governments can have first-order gains other than terms-of-trade gains at the rules-based outcome. Any modeling requires some simplifications, and the restricted setting has some features more consistent with reality than negotiations over all instruments. The extent to which subsidies are discouraged by existing trade agreements also contributes to the outcome, as does financing of subsidies.

The “power-based outcome” I explore is a point along the Pareto efficiency frontier that

is marginally better for the more powerful government. This largely follows the modelling of power along the lines of Bagwell and Staiger (1999) and recently revisited by Mattoo and Staiger (2020) in interpreting the U.S.-China trade war.

I conclude the section with a discussion of why exporter influence has largely been absent from the trade agreement theory. A wide range of trade policy work considers either no distortions, or no frictions on policy instruments that could correct distortions following Bhagwati and Ramaswami (1963), so free trade is socially optimal. Since we observe import tariffs even in cooperative trade agreements, the logical conclusion is then that political influence leads to import tariffs against the public interest. We cannot infer export influence in excess of import influence in such settings since such politics would lead to an equilibrium of import subsidies, which we do not observe. As a result, the economics of trade policy has usually not considered the possibility of excessive export influence leading to globalization backlash. There is of course a large literature arguing for excessive trade liberalization at the turn of the century (e.g., Rodrik 1998), but the idea of excessive exporter influence has had limited impact on the political economic theory of trade agreements. Once we consider market failures and labor market frictions and frictions in domestic policies to address these failures, then the possibility of some second-best tariffs in line with the public interest and excessive export influence leading to globalization backlash then becomes apparent.

## 3 A Model of Exporter Influence

### 3.1 Setup

This subsection follows Bagwell and Staiger (2001, 2016). There is an economy with goods  $x$  and  $y$ , such that Home imports  $x$  and exports  $y$ , and there is a freely traded outside numeraire good that enters into welfare quasilinearly. The political economy objectives for Home and Foreign (\* superscript) are

$$\begin{aligned}
G(p_x, p_y^*, p_x^w, p_y^w) &= \int_{p_x}^{\bar{p}} D(p_x^1) dp_x^1 + \gamma_M^G \Pi_x(p_x) + (p_x - p_x^w) M_x(p_x) \\
&\quad + \int_{p_y^*}^{\bar{p}} D(p_y^1) dp_y^1 + \gamma_E^G \Pi_y(p_y^*) - (p_y^* - p_y^w) M_y(p_y^*), \text{ and} \\
G^*(p_x, p_y^*, p_x^w, p_y^w) &= \int_{p_x^*}^{\bar{p}} D(p_x^1) dp_x^1 + \gamma_E^{G*} \Pi_x^*(p_x^*) - (p_x^* - p_x^w) M_x(p_x^*) \\
&\quad + \int_{p_y^*}^{\bar{p}} D(p_y^1) dp_y^1 + \gamma_M^{G*} \Pi_y^*(p_y^*) + (p_y^* - p_y^w) M_y(p_y^*),
\end{aligned} \tag{1}$$

such that  $D$  is demand (a decreasing function),  $\Pi_x$  and  $\Pi_y$  are profits, and  $M_x$  and  $M_y$  are import demand functions. The objective includes standard political economy weights  $\gamma_M^G$ ,  $\gamma_E^G$ ,  $\gamma_M^{G*}$ , and  $\gamma_E^{G*}$  which are all greater than one reflecting influence of specific factor owners in the import and export sectors.

For the general public and broader welfare, the rents accruing to specific factor owners are less relevant for their objectives than the government. We still allow the possibility of some externalities in output for the import or export sector which could reflect in a reduced-form way positive externalities of strategic export industries or dynamic transition costs of import industries. We use W superscripts to denote the general welfare of the public, in contrast to the G superscripts for the government. All public export industry parameters are strictly less than those for the government, while we for now assume that import industry parameters are identical.

$$\begin{aligned}
W(p_x, p_y^*, p_x^w, p_y^w) &= \int_{p_x}^{\bar{p}} D(p_x^1) dp_x^1 + \gamma_M^W \Pi_x(p_x) + (p_x - p_x^w) M_x(p_x) \\
&\quad + \int_{p_y^*}^{\bar{p}} D(p_y^1) dp_y^1 + \gamma_E^W \Pi_y(p_y^*) - (p_y^* - p_y^w) M_y(p_y^*), \text{ and} \\
W^*(p_x, p_y^*, p_x^w, p_y^w) &= \int_{p_x^*}^{\bar{p}} D(p_x^1) dp_x^1 + \gamma_E^{W*} \Pi_x^*(p_x^*) - (p_x^* - p_x^w) M_x(p_x^*) \\
&\quad + \int_{p_y^*}^{\bar{p}} D(p_y^1) dp_y^1 + \gamma_M^{W*} \Pi_y^*(p_y^*) + (p_y^* - p_y^w) M_y(p_y^*),
\end{aligned} \tag{2}$$

For trade, we can right the balanced trade condition in vector notation. Define  $M = \{-M_x, M_y, Z\}$  where  $Z$  is Home imports of the outside good,  $p^l = p^{l*} = \{p_x, p_y^*, 1\}$ , and  $p^w = \{p_x^w, p_y^w, 1\}$ , and the balanced trade condition is still  $Mp^w = 0$ .

For policy, Home chooses import tariff  $\tau_x$  and Foreign chooses import tariff  $\tau_y^*$ , and these tariffs are chosen to be nonprohibitive. As discussed earlier, we exclude export policies. There are increasing supply functions  $Q_x(p) = Q_y^*(p) < Q_y(p) = Q_x^*(p)$ . Under profit maximization,  $\frac{d\Pi_x}{dp_x} = Q_x(p)$ , and similar derivatives hold for the other profit functions. To close the model we require the no-arbitrage conditions and market clearing conditions such that

$$\begin{aligned} p_x - \tau_x &= p_x^* = p_x^w, \\ p_y^* - \tau_y^* &= p_y = p_y^w, \text{ and} \\ Q_i(p_i) + Q_i^*(p_i^*) &= D(p_i) + D(p_i^*) \text{ for } i = x, y. \end{aligned} \tag{3}$$

Notice that under these conditions, specifying either of the prices or the tariff (e.g.  $p_x$ ,  $p_x^*$ ,  $p_x^w$ , or  $\tau_x$ ) fully determines the other variables for that good. Thus we can define  $W$  as a function of  $p_y(p_y^*)$  instead of  $p_y$ , and  $W^*$  as a function of  $p_x^*(p_x)$  instead of  $p_x^*$ .

We next discuss standard regularity conditions for the governments' behavior. The equations (3) ensure that higher import tariffs imply higher local prices in the import market and lower prices in the export and world markets, thus ruling out Metzler and Lerner paradoxes. And  $M_x$  and  $M_y$  are both decreasing in the local price of imports (since a higher price decreases demand  $D_i$  and increases supply  $Q_i$  for  $i = x, y$ ). Then from (1), the import tariffs must improve the terms of trade for the nation imposing them. The terms of trade effects satisfy  $\frac{dW}{dT} = 1$  and  $\frac{dW^*}{dT^*} = -1$  in the quasilinear setting. Without the export policies, there is a local price externality, because Home lacks an instrument to affect  $p_y^*$  and Foreign lacks



an instrument to affect  $p_x$ . We can verify

$$\frac{dG}{dp_y^*} = \frac{dp_y}{dp_y^*}(\gamma_E - 1)Q < 0, \quad (4)$$

because  $\gamma_E > 1$  and

$$\frac{dp_y}{dp_y^*} = \frac{M'_y}{Q'_y - D'_y} = \frac{p_y^* \mu_y}{p_y \xi_y} < 0,$$

for import demand elasticity  $\mu_y$  and export supply elasticity  $\xi_y$ . So a Foreign tariff decrease allows Home to benefit not only via a terms-of-trade gain, but also via a lower  $p_y^*$  and higher  $p_y$ , since there are higher weighted profits for Home's exporters of  $y$ . Home benefits even though there are higher consumer prices. Notice that this externality could be defined either as local price externality abroad, or as a domestic local price externality, because (3) implies one price pins down the other. The local price externality here amplifies the terms-of-trade externality, so  $\frac{dW}{d\tau_y} < 0$ . Similarly for Foreign,  $\frac{dW^*}{dp_x} < 0$  and  $\frac{dW}{d\tau_x} < 0$ .

We define policies satisfying reciprocity as those preserving the trade balance, valued at terms of trade, following Bagwell and Staiger (2016)

$$\frac{d\tau_y^*}{d\tau_x} = \frac{\frac{dM_x}{dp_x} \frac{dp_x}{d\tau_x} p_x^w}{\frac{dM_y}{dp_y^*} \frac{dp_y^*}{d\tau_y^*} p_y^w} = \frac{M_x \frac{dp_x^w}{d\tau_x}}{M_y \frac{dp_y^w}{d\tau_y^*}} > 0 \quad (5)$$

for reciprocal tariff decreases.

We assume the cooperative equilibrium that governments select on the efficiency frontier after trade negotiations is the one where either government is indifferent to reciprocal policy changes. This is in fact the same point that symmetric governments would choose if they one-for-one cut tariffs and stopped when it was no longer mutually beneficial according to their political preferences.

## 3.2 Results

The stable efficient point then consists of the policies  $(\hat{\tau}_x, \hat{\tau}_y^*)$  satisfying the following

$$\begin{aligned} \frac{dG}{dp_x} \frac{dp_x}{d\tau_x} + \frac{dG}{dp_y^*} \frac{dp_y^*}{d\tau_y^*} \frac{d\tau_y^*}{d\tau_x} &= 0, \text{ and} \\ \frac{dG^*}{dp_y^*} \frac{dp_y^*}{d\tau_y^*} \frac{d\tau_y^*}{d\tau_x} + \frac{dG^*}{dp_x} \frac{dp_x}{d\tau_y^*} &= 0. \end{aligned} \tag{6}$$

These policies are on the Pareto efficiency frontier for the two governments according to the arguments of DeRemer (2016). To recap the intuition, the reciprocity rule pins down the ratio between the first-order effects of each tariff on each government's objective, which is one way of writing the necessary condition to lie on the efficiency frontier, and this condition is sufficient due to the convexity of the problem.

Now if we evaluate the public welfare for the reciprocal policy change it reduces, since the difference of  $W - G$  is simply export rents, we have negative effects for the public welfare. Notice that the sign of the derivative is positive but the overall welfare effects becomes negative when considering that the reciprocal policy changes are tariff reductions.

$$\begin{aligned} S(p_x)(\gamma_E^W - \gamma_E^G) \frac{dp_x}{d\tau_x} d\tau_x &< 0, \text{ and} \\ S^*(p_y^*)(\gamma_E^{W*} - \gamma_E^{G*}) \frac{dp_x}{d\tau_x} d\tau_y^* &< 0 \end{aligned}$$

where the  $S$  are the supply curves (derivatives of the profit function), and we have included the  $d\tau_x$  and  $d\tau_y^*$  with negative sign.

Consequently, the preferred level of tariffs and path of reciprocity must involve greater protection for the general public than the government. The key point is that welfare is strictly decreasing in the reciprocal tariffs. This follows from the decreasing marginal utility of consumption and production as trade is liberalized. From the public's perspective, excessive

resources are devoted to the export sector relative to the import sector. We conclude the following:

**Remark 1.** *For the perfect-competition, partial-equilibrium trade model where exporters influence the government more than the general public, the government institutes more shallow trade liberalization than is desirable for public welfare.*

### 3.3 Specific Functional Forms

To illustrate further, we consider specific functional forms. Following Bagwell and Staiger (2001),  $CS(p) = .5(1 - p)^2$ , the profit functions for the export goods are  $p^2/2$ , and the profit functions for the import-competing sectors are  $p^2/4$ . Balanced trade implies world prices are  $p_x^w(\tau_x) = (4 - 3\tau_x)/7$  and  $p_y^w(\tau_y^*) = (4 - 3\tau_y^*)/7$ .

We can then solve for the equilibrium as a function of the political economy parameters. First we consider the case in which the political parameters are symmetric, so there is one parameter for export industries  $\gamma_E$  and one parameter for import-competing industries  $\gamma_M$ . In this case, the stable point is in fact the same as the symmetric efficient point in the limited-instrument setting. We can derive that the efficient import tariffs are

$$\tau_x^G = \tau_y^{G*} = \frac{4(2\gamma_M^G + 1 - 3\gamma_E^G)}{59 - 9\gamma_E^G - 8\gamma_M^G}. \quad (7)$$

The level of total trade barriers and local prices are the same as in the political optimum in Bagwell and Staiger (2001) when both import policies and export policies are available, so the same level of welfare is obtained even without the export policies. So here banning export policies has no inefficiency consequences.

The preferred reciprocal tariffs if the general public in each country could negotiate with each other follow the analogous expression

$$\tau_x^W = \tau_y^{W*} = \frac{4(2\gamma_M^W + 1 - 3\gamma_E^W)}{59 - 9\gamma_E^W - 8\gamma_M^W}$$

where again we note that  $\gamma_E^M < \gamma_E^G$ . Notice then that  $\tau_x^W > \tau_x^G$  because the preferred tariff increases as the exporter influence  $\gamma_E^W$  decreases. Then tariffs below this level are strictly worse for the public welfare.

We have been assuming until now that  $\gamma_M^W = \gamma_M^G$  but we can see from the above expressions that we could relax this restriction and allow both  $\gamma_M^G > \gamma_M^W$  and  $\gamma_E^G > \gamma_E^W$  and still have  $\tau_x^W > \tau_x^G$ . We just require that  $(\gamma_M^G - \gamma_M^W) < (3/2)(\gamma_E^G - \gamma_E^W)$  so the public's desire for import protection is not too much weaker than the government's. If the public's desire for import protection is too weak, then the government's export influence may coincidentally give the public the trade that it wants.

We depict the Nash and stable efficient equilibria graphically in Figure 1 for the case of  $\gamma_M = 1.2$  and  $\gamma_E = 1.1$ , which implies small positive tariffs at the efficient point. The curves here reflect iso-gains for the first-order welfare effects from differential reciprocal policy changes. The curves  $S$  and  $S^*$  indicate where in the policy space Home and Foreign are indifferent to reciprocal policy changes, as in equations (6). At the curves  $N$  and  $N^*$ , Home and Foreign get the same welfare from reciprocal policy changes as they do at the Nash policies. The liberalization path then involves the progression between these iso-gain curves until both Home and Foreign gain zero welfare from reciprocal policy changes. The curve  $EF$ , between  $S$  and  $S^*$ , is the Pareto efficiency frontier, and the stable outcome under reciprocity lies at the intersection of the three. The level of trade liberalization that the public prefers is labelled  $W$ , at higher levels of tariffs then the government imposes due to exporter influence.

## 4 From Rules-Based to Power-Based

This section considers impacts as an economy moves from a rules-based to power-based outcome. We consider a small increase in the bargaining power of the home country relative to the rules-based, power-neutral outcome.

To proceed, first notice that any point on the Pareto efficiency frontier can be defined in terms of the optimal allocation of a social welfare function with some weights on the government objectives. Let  $\lambda^R$  be a social welfare for Home (while the Foreign weight is normalized to 1) associated with the rules-based outcome of the previous section.

The first-order conditions for the social optimal are

$$\begin{aligned}\lambda^R \frac{dG}{d\tau_x} + \frac{dG^*}{d\tau_x} &= 0, \text{ and} \\ \lambda^R \frac{dG}{d\tau_y^*} + \frac{dG^*}{d\tau_y^*} &= 0\end{aligned}$$

Now if we consider a transition to power to be movement along the efficiency frontier that reflects a small increase in  $\lambda^R$ , so greater power for the home government. Using the implicit function theorem, we obtain the changes in the policies

$$\begin{aligned}\frac{d\tau_x}{d\lambda^R} &= \frac{\frac{dG}{d\tau_x}}{-\left(\frac{d^2G}{d\tau_x^2} + \frac{d^2G^*}{d\tau_x^2}\right)} > 0, \text{ and} \\ \frac{d\tau_y^*}{d\lambda^R} &= \frac{\frac{dG}{d\tau_y^*}}{-\left(\frac{d^2G}{d\tau_y^{*2}} + \frac{d^2G^*}{d\tau_y^{*2}}\right)} < 0.\end{aligned}$$

The higher bargaining power results in the more powerful country increasing the tariff for its import good and decreasing foreign's tariff for its export good.

What then are the implications for these policy changes? Notice that our model above has stark differences from models of reciprocity surveyed in Bagwell and Staiger (2016). There at the cooperative outcome (the political optimum), there are no first order effects of tariff changes due to changes in any local prices from the tariffs. All the gains then would be achieved from the terms-of-trade gain as home's tariff increases and foreign's tariff decreases.

Here we have a distinct outcome. We have shown in the previous section that there are always positive effects for home in decreasing the price of foreign's export tariff, apart from terms-of-trade gains, and there must always be positive effects for home in raising its import

tariff in order for the reciprocity conditions in (6) to be satisfied (in other words, in the reciprocal negotiation, home is sacrificing an import tariff it would otherwise prefer in order to achieve export promotion).

As a result, when transitioning from the reciprocity rules-based outcome to the power-based outcome, we do not observe only first-order terms-of-trade gains. We also observe the powerful nation gaining both import and export rents that are not offset on net by other domestic losses.

**Remark 2.** *Suppose nations start from the rules-based outcome, following reciprocity in import tariffs, and there is a small increase in the bargaining power from the Home nation. Then the Home nation will achieve a larger reduction in foreign's import tariff and a larger increase in its own import tariff in negotiations. As a result of these policies changes, Home achieves greater political rents from import production and rents from export production, in addition to terms-of-trade gains.*

This result raises the question, if we follow Mattoo and Staiger 2020 in interpreting the U.S. as moving from a rules-based to power-based regime in negotiating with China, can we use this result to help understand the U.S.-China cooperation (e.g, the Phase 1 agreement)? We have to first understand that the U.S.-China trade war cannot entirely fit into a rebalancing from rules to power, as the large retaliatory tariffs that the U.S. from China has tolerated are not consistent with the model here. They could though be interpreted as a mutual desire for less integration and a new Pareto efficiency frontier after 18 years of the trading relationship between 2000 and 2018. But we could interpret the US in the Phase 1 agreement as having achieved higher soybean exports, lower semiconductor tariffs, while keeping higher tariffs on steel following a power-based negotiation. The results here then would be consistent with pursuing export rents in the export industries and rents from import protection in the steel industry.

Is the transition from rules to power good for the general public if it does not align with the trade preferences of the powerful government? One could argue, for example, that

soybean exports and steel import protection are narrow political interests inflated by electoral considerations, while steel's use as an input in a variety of downstream industries causes tremendous harm to the broader public, both consumers facing higher prices and workers in downstream industries.(see, e.g., Bown et al. 2023, for such harmful consequences of antidumping duties).

Notice that the public in our model has some desire for more import protection but dislikes the export promotion which is excessive from its perspective. So the switch to the power-based system is a mixed bag. My preliminary findings are that in this model, the public will still gain on net regardless of the misalignment between preferences. Even if the government has strong desire to promote exports, the government will then negotiate so much liberalization to the rules-based outcome that by the time it then negotiates a power-based agreement, the amount of additional export promotion is relatively muted.

Still, this result would benefit from further extensions, such as the possibility of misaligned preferences within export and import sectors. For example, the government may care a lot about protecting the steel industry while the public interest cares more about industries downstream from steel. Nonetheless, the state could then pursue higher steel tariffs in a power-based negotiation given its interests.

## 5 Conclusion

This paper, albeit preliminary, explores an environment where exporter influence affects trade outcomes. We see this has important implications for policy debates. A model with exporter influence can help to explain why governments and the public can be misaligned in a way that results in globalization backlash. We can also better understand how a movement from a rules-based to power-based negotiation can seem more driven by influence by import or export industries rather than terms-of-trade gains. Further development of this paper will consider welfare impacts of the rules-to-power transition and extending results to

misalignment between the government and public, as well as other broader trade settings.

Beyond the scope of the current paper, the positive theory of trade protection and co-operation has been explored minimally in quantitative trade models. Some attempts like Ossa (2014) have estimated political economy trade parameters, but this is an intraindustry trade setting that offers little distinction between influence for import protection vs. export promotion. Future generations of models could better distinguish between the two.



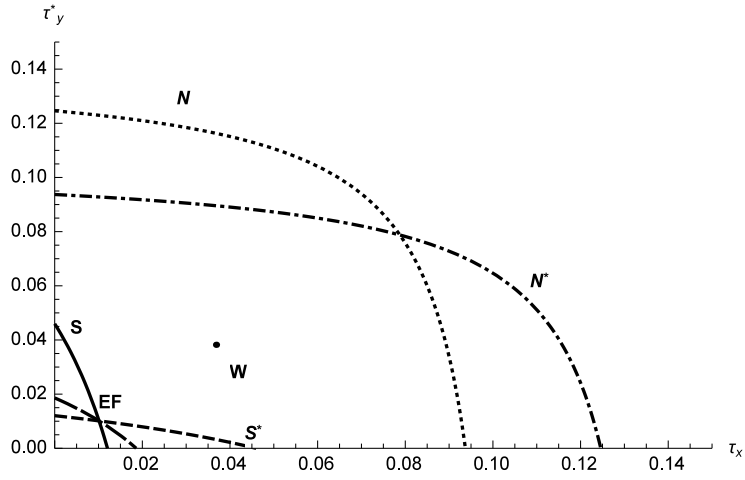


Figure 1: Model of excessive liberalization with symmetric countries.

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