Protectionist Demands in Globalization*

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Abstract

We construct a game theoretic model that offers to explain the increase in trade protectionism as a rational reaction of the voters to their increased concern that the policy choices of their governments are being influenced by international actors. More specifically, we construct a small open economy in which the citizens declare their most preferred tariff rate on an import good to their government. While the government has incentive not to deviate too much from the publicly demanded tariff rate, its final decision is determined after bargaining with a foreign lobby which offers benefits to the government in return of lowered tariffs. We show that the expectation of such foreign influence affects the citizens' voting behavior. Namely, they tend to vote for more protectionist policies. Moreover, this behavior leads to an increase in benefits by the foreign lobby to the government.

Keywords: open economy, tariffs, bargaining, voting, manipulation, Bayesian game

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1 Introduction

We are living in an age of rapid technological advances creating a functionally integrated world. Interestingly though, amidst this fast-paced integration, economic protectionism and populist nationalism is on the rise, fuelled largely by discontent over globalization's distributional impacts and failure of conventional politics to deliver on their promises (Kyle and Gultchin, 2018; Dent, 2020).

For most of the past 50 years, there has been a general trend across the world towards economic liberalization. Trade integration reached a peak in the period 1990-2008, when total trade in goods and services increased from 39% to 61% of world GDP. Tariffs on goods have fallen steadily: the average global tariff rate fell from 8.5% in 1994 to 2.5% in 2017. Since then, however, world trade has slowed down while protectionism has been on the rise, driven by an increase in non-tariff and, more recently, tariff barriers. At the same time, public support for globalisation has declined on both sides of the Atlantic along with a rise in the perception that the collateral effects of openness outweighed its benefits. People became "concerned about whether openness is fair, whether it is safe and whether it is equitable" (Draghi, 2017).

Rodrik (1997) argued more than two decades ago that economic globalization risked a popular backlash unless governments took the necessary steps in terms of spreading the gains from globalization as widely as possible. He argued that, in a world where people are concerned about the fairness and equitability of openness, we should expect the revival of economic nationalism and thus, protectionism since it is a rather easy sell when broad segments of a society are experiencing anxieties linked to globalization.

Unfortunately, the political developments of the last two decades supported Rodrik's arguments. Two recent major events on the two sides of the Atlantic, the result of Britain's 2016 Brexit referendum and the election of Trump as US president, have become emblematic of contemporary populism, economic nationalism and associated resistance against forms of internationalism and globalization. While the rhetoric of the leading campaigners for Brexit was not explicitly protectionist, many underlying causes of Brexit connect with the worldwide rise of populist nationalism (Hopkin, 2017). Dent (2020) argues that "the Brexit campaign slogan of 'taking back control' resonated strongly with those discontented with the EU's regional-

internationalism especially on trade regulations and immigration". In the US, Donald Trump appealed to similar seams of populist discontent and fear regarding globalization. His inaugural Presidential speech mirrored these sentiments: "From this day forward, it's going to be only America first, America first. Every decision on trade, on taxes, on immigration, on foreign affairs will be made to benefit American workers and American families. We must protect our borders from the ravages of other countries making our products, stealing our companies and destroying our jobs" (White House, 2017). Later on, at his address to the United Nations Assembly in September 2018, Trump stated, "we reject the ideology of globalism and embrace the doctrine of patriotism".

With Trump in the presidential office, the benefits of free trade were openly called into question in the United States and trade barriers have escalated rapidly. The most significant of those newly erected barriers has been the higher tariffs on bilateral trade between the US and China. After an initial exemption, in June 2018 the tariffs on steel and aluminium were also applied to Canada, Mexico and the European Union, which resulted in a raft of retaliatory measures.[1] Similar protectionist measures have been taken by other major economic actors as well. According to data from the Global Trade Alert Database encompassing traditional and non-traditional trade measures, the number of new discriminatory actions announced by G20 economies has risen steadily since 2012 and surged further in 2018. Bank of England's (2019) recent monetary policy reports indicate that this increase in protectionism has significantly contributed to the slowdown in global growth, both via the direct effects on trade flows, supply chains and import costs, and via the wider indirect effects on business sentiment, uncertainty and investment around the world.

In this paper, we develop a political-economy model to explain these observations.

We start by arguing that the influence of international actors on domestic decisions increases with globalization. This is because globalization brings in an ever-increasing international interdependence accompanied by changes in international law, as well as an increase in the importance of

[1]The European Union imposed a 25% duty on a range of US products worth USD 3.2 billion, which came into force in the same month. The US Administration in turn initiated a new investigation of automobile and auto parts imports to determine their effects on national security, hinting at the possibility of a 20%-25% tariff increase.

international institutions in regulating that interdependence. International law no longer concerns itself with just states and official intergovernmental relations, but also binds private persons and entities as well as governments, and "deals with subjects that traditionally were treated as purely domestic matters" (Trimble, 1997). Similarly, international institutions have now much extended powers which allow them to take on tasks that increasingly intrude into hitherto domestic affairs. Institutions like the WTO and the IMF regularly exercise various degrees of sovereign power.[2] Similarly, in the last couple decades the WTO expanded its authority to issue legally binding decisions even in areas well beyond the scope of traditional trade law such as services, intellectual property, and non-tariff barriers that could include health, safety, labor, and environmental regulations. Technical domestic rules, such as those dealing with product label contents or pesticide levels, are "vulnerable to challenge in the WTO unless they meet international standards, thereby inducing domestic policymakers to defer to international institutions" (Trimble, 1997). While states are still free to remain outside of these institutions and/or pass legislation in violation of their regulations, the certainty of high costs associated with remaining outside and with violations inevitably induce governmental decision-makers to prefer membership in international organizations and compliance with international standards. As a result, the influence of international actors on domestic decisions increases.

As the influence of international actors on domestic decisions increases with globalization, implemented policies start to differ from what is ideal for the "median voter". Over time, voters come to realize that their government does not solely make decisions based on their (domestic) demands, but also through negotiation with international actors, at least much more so than before. To the extent that globalization affects their welfare, voters have an incentive to respond. To do so, they update their voting behavior systematically to offset globalization's distortionary effects on the mechanisms that transforms their preferences into implemented policies. The Brexit campaign slogan of "take back control" or the Trump campaign slogan of "America first" suggest to us that, by doing so, these voters feel like they are taking back (at least to a certain extent) the power to make decisions that directly affect their welfare.

[2] A dramatic example is the extent of sovereign power the IMF exercized when it declared in 1992 that Yugoslavia had ceased to exist and allocated the assets and obligations of the new states created by its dissolution (Franck, 1995).

To present a formal discussion of these points, we analyze a small open economy in which economic interaction among citizens determines their preferences on the tariff rate for an import good. The citizens use majority voting to declare their demanded tariff rate to their domestic government. The government then bargains with a foreign lobby on the implemented tariff rate as well as the amount of benefits that will be granted by the lobby. In our model, the foreign lobby is meant to represent any international actor with which the domestic government interacts to determine its implemented policy. The benefits offered by the lobby are modeled as a monetary transfer to the government, though they represent any type of benefit that might be offered by international actors in return of lowered tariffs.[3] We argue that when the citizens anticipate their government to make policy decisions based not only on the citizens' preferences but also on preferences of international actors, they respond by altering their voting behavior. Namely, they vote for more protectionist policies than they otherwise would. We also analyze the implications of this behavior on the amount of benefits the domestic government receives. In the main body of the paper, we study the details of this mechanism.

We analyze our model under three alternative assumptions regarding the information structure. As a benchmark, we first look at the case where the citizens are naive in the sense that they do not expect negotiations to take place between their government and the lobby. This case presents the extent to which the policy demanded by the voters is distorted by international negotiations. We then analyze a case where the voters are sophisticated but the government and the lobby are naive in the sense that they do not expect the voters to manipulate their voting behavior. This case presents a simple yet stark demonstration of how voters, when they expect international negotiations on their demanded policy to take place, update their voting behavior. Finally, we analyze a Bayesian game where, additional to the voters, the government and the lobby are also sophisticated. In equilibrium of this game, the median voter strategically inflates its most preferred tariff rate and the government benefits from acting naive, even though it is sophisticated. The lobby's equilibrium behavior depends on its type (soft or tough). It can (i) agree on a higher tariff rate, (ii) provide additional ben-

[3]For simplification, we assume that the benefits are not redistributed among voters. Yet, as discussed in the Conclusion, assuming otherwise does not qualitatively affect our results.

efits, or (*iii*) (in case of a tough lobby) insists on a lower tariff rate with no additional benefits. Overall, the equilibrium behavior is in line with the previous, simpler cases. Additionally however, the asymmetry of information in this case creates three types of inefficiency. First, there is disagreement with a positive probability. Second, the agreement might be delayed imposing intertemporal costs. Finally, an agreement might fail to satisfy Pareto optimality even though it is reached in the first period.

In the Bayesian game, we assume for simplicity that the median voter's most preferred tariff rate is either high or low. Depending on its preferences, the lobby either prefers to agree with both types by demanding a high tariff rate or only with the low type by demanding a low tariff rate. In the former (latter) case, the lobby is termed as soft (tough). We observe that the government representing a low-tariff median voter benefits more from misrepresentation when facing a soft lobby than a tough one. Similarly, a low-tariff median voter prefers a soft lobby to a tough one. The size of these effects depend on the uncertainty the lobby has regarding domestic preferences, as well as the tolerance of domestic actors to potential delays in reaching agreements.

In our model, the citizens' income levels are determined by a market mechanism (the Walrasian rule) which, as a resource allocation rule, has been shown to satisfy many desirable properties.[4] However, the market mechanism does not allocate gains from a lowered tariff rate to all the agents in the economy. Instead, while a comparatively capital-rich minority gains from a decreased tariff rate, a majority becomes worse-off. Hence, the optimal tariff rate becomes positive for this comparatively capital-poor majority. These political preferences produced by our model are consistent with empirical findings. For example, Mayda and Rodrik (2005) finds that in most industrialized countries a majority favors protectionism, that attitudes toward free-trade are closely linked to an individual's relative standing on the domestic income scale, individuals with incomes higher than national average tending to favor free-trade while those with lower-than-average incomes favoring protectionism. In line with these findings, Betz and Pond (2019) report empirical evidence showing that consumer interests do not account

[4]Additional to always choosing core allocations (and hence, satisfying Pareto optimality and individual rationality), the Walrasian rule satisfies a range of fairness axioms, including no-envy in trades, equal treatment of equals, and equal opportunities (Thomson, 2011).

for lower tariffs and that governments place higher tariffs on goods with higher consumption shares.

In our model, market interaction among citizens induces them to have single peaked preferences on the tariff rate. The citizens manipulate this information to improve welfare. Following the seminal works of Gibbard (1973) and Satterthwaite (1975), manipulation of social choice rules has been a central topic in social choice. And the literature has long established that, under single-peaked preferences, the Condorcet rule, which picks the ideal policy of the median voter (Black, 1948) is immune to strategic behavior. However, as our paper demonstrates, such immunity is not preserved in environments where this outcome is negotiated with a third party. Furthermore, our model shows that the extent to which this negotiation distorts the implemented policy away from the ideal policy of the domestic public determines the severity of the voters' reaction to such distortion.

With the exception of Section 3.4, we only restrict the bargaining process between the domestic government and the foreign lobby to satisfy Pareto optimality and individual rationality, hence allowing a large class of desirable bargaining processes ranging from the cooperative models of Nash (1950) and Kalai-Smorodinsky (1975) to the noncooperative model of Rubinstein (1982). In Section 3.4, we model bargaining as a two period ultimatum game for simplicity.

Our framework is similar to that of Mayer (1984) who presents and analyzes an open economy in which he shows that the agents' preferences on the tariff rate for an import good are single-peaked. Our work is also related to Grossman and Helpman (1994, 1995) who analyze games in which special interest groups make contributions to influence an incumbent government's choice of trade policy. This contest-type interaction has been the modeling choice of the following literature on lobbying. Since our focus is more on the political behavior of citizens rather than of interest groups, we follow an alternative modeling approach. We focus on bargaining between the government and the lobby, and we allow citizens to respond through voting behavior.[5]

Stasavage (2004) analyzes a case where a representative bargaining on behalf of its public with a counter-party might engage in excessive demands.

[5]We interpret voting as any form of communicating a person's response to a given policy proposal whether through the ballot, letters to political representatives, participation in political meetings, or public demonstrations.

In this model, with a certain probability the representative is "biased" in the sense that its preferences are aligned with the counter-party, instead of the public. Stasavage (2004) shows that, when reputation costs are sufficiently high, a biased representative might pool with the unbiased type and inflate demands to appear unbiased to the public.

The paper is organized as follows. In Section 2, we present the model. In Subsections 2.1 and 2.2, we present the economic and the political frameworks, respectively. In Subsection 2.3, we define the government and the foreign lobby. In Section 3, we present the analysis. Subsection 3.1 analyzes the bargaining process. Subsection 3.2 analyzes voting behavior when the voters are unsophisticated. Subsection 3.3 considers the case of sophisticated voters who expect bargaining and vote accordingly. In Subsection 3.4, we formulate and analyze the case where all agents are sophisticated as a Bayesian game. We conclude in Section 4.

2 Model

We analyze an economy in which the citizens have single-peaked preferences on the tariff rate for an import good. The citizens declare a policy choice, t_{decl} to an incumbent government who has discretion in the choice of the implemented tariff rate. While the government has incentive not to deviate much from the publicly declared tariff rate, its final choice is determined by bargaining with a foreign lobby. The model is specified as follows.

2.1 Economy

Similar to Mayer (1984), we consider a small open economy. Capital and labor are used to produce two commodities, X_1 and X_2. The factors are perfectly mobile between the two industries, all markets are competitive, and the firms' production functions are homogeneous of degree one. Let $\pi \in \mathbb{R}_+$ be the world relative price of the first good in terms of the second good.

We assume that the country imports $M \in \mathbb{R}_+$ units of the first good. The government imposes a tariff rate of $t \in \mathbb{R}$ on the imports and receives a tariff revenue of $T = t\pi M$. Given the tariff, the domestic relative price of the first good is $p = (1 + t)\pi$. Let $w, r \in \mathbb{R}_+$ denote the real wage rate and the real rental rate (in terms of the second good).

Let $I = \{1, ...I\}$ be the set of agents. Each $i \in I$ is endowed with $L^i = 1$ and $K^i \geq 0$ units of labor and capital, respectively. Let $L = \sum L^i$ and $K = \sum K^i$.

Given agent i's factors income share

$$\phi^i = \frac{w + rK^i}{wL + rK},$$

his tariff revenue is

$$T^i = \phi^i T.$$

Agent i's endowments and share of tariff revenues, T^i, determine his real income:

$$y^i = w + rK^i + T^i.$$

Let $Y = \sum y^i$. Note that we assume the redistribution of the tariff revenue to be independent of the tariff rate and neutral to the income distribution. Neutrality is obtained since

$$y^i = w + rK^i + \phi^i T = \phi^i Y.$$

Preferences of the agents are identical and homothetic, so that a redistribution of income will not affect the aggregate demand and the imports. The preferences of agent i are represented by the indirect utility function $U^i : \mathbb{R}^2_+ \to \mathbb{R}$ where $U^i(p, y^i)$ is the maximum utility attainable by agent i, given the prices p and income y^i. Note that both p and y^i depend on the tariff rate t. Therefore, let $V^i : \mathbb{R}_+ \to \mathbb{R}$, which is defined as

$$V^i(t) = U^i(p(t), y^i(t)),$$

be agent i's indirect utility function with respect to the tariff rate. Assume that V^i is strictly concave and note that V^i represents a single-peaked preference relation.[6]

Under these assumptions, Mayer (1984) shows that each agent i's optimal

[6] A preference relation on the tariff rate is single-peaked if there is an optimal or peak tariff rate $t^p \in [0, 1]$ so that for $t < t' < t^p$ or $t > t' > t^p$, t' is strictly preferred to t.

(*i.e.* most preferred) tariff rate t^i_{real} is determined by the equation[7]

$$t^i_{real} = -\frac{Y}{\pi \frac{\partial M}{\partial t}} \frac{\frac{\partial \phi^i}{\partial t}}{\phi^i}.$$

Since $\frac{\partial M}{\partial t} < 0$,

$$sign(t^i_{real}) = sign(\frac{\partial \phi^i}{\partial t}).$$

That is, whether agent i prefers a tariff or a subsidy on the first good depends on the effect of an increase in the tariff rate on his income share. Let $k^i = \frac{K^i}{L^i}$ be agent i's endowment ratio and let $k = \frac{K}{L}$ be the economy's average endowment ratio. Moreover, let $\widehat{w} = \frac{\partial w/\partial t}{w}$, $\widehat{r} = \frac{\partial r/\partial t}{r}$, and $\widehat{p} = \frac{\partial p/\partial t}{p}$. Then,

$$\frac{\partial \phi^i}{\partial t} = \frac{rwL}{(wL + rK)^2(1+t)}(k - k^i)\frac{\widehat{w} - \widehat{r}}{\widehat{p}}.$$

Assume that the import competing industry is labor intensive. Then,

$$\frac{\widehat{w} - \widehat{r}}{\widehat{p}} > 0$$

and

$$sign(t^i_{real}) = sign(\frac{\partial \phi^i}{\partial t}) = sign(k - k^i).$$

In light of this relationship, the optimal tariff rate is positive (negative) for people who are relatively poorly (well) endowed with capital. Moreover, the greater the difference between individual and national endowment ratios, the greater the deviation of individually optimal tariff rate from free-trade policy. Finally, the optimal tariff rate is zero for each person whose endowment ratio equals the national average endowment ratio.

2.2 Public preferences

Individual preferences on the tariff rate are aggregated to form public preferences. We assume that the majority rule is used for aggregation. Specifically, let $\mathcal{R}^{maj}$ be the majority preference relation. Then, for any couple of tariff rates t and t' in $\mathbb{R}$, $t\ \mathcal{R}^{maj}\ t'$ if and only if there is $I' \subseteq I$ such that $|I'| > \frac{|I|}{2}$ and for each $i \in I'$, $V^i(t) \geq V^i(t')$.

[7] We will later make a distinction on voters' preferences on the real tariff rate (that is, the implemented tariff rate) versus their preferences on the tariff rate that will be declared to the government. For the latter, the *decl* subscript will be used.

Given that the choice space is one-dimensional and the agents have single-peaked preferences, the median of the agents' most preferred tariff rates is majority preferred to any other alternative (Black, 1948). We refer to this tariff rate t^m_{real} as the **publicly most preferred tariff rate**.

For most nonsocialist countries there is strong evidence that capital-labor endowment distributions are skewed to the right. We assume this feature on the capital-labor endowment distribution of our model. Therefore, the median endowment ratio is lower than the mean and as a result, t^m_{real} is greater than the most preferred tariff rate for the agent with the mean endowment ratio:

$$t^m_{real} > 0.$$

The citizens vote on which tariff rate to declare to the government. In this sense, we interpret voting as any form of communicating a person's response to a given policy proposal whether through the ballot, letters to political representatives, participation in political meetings, or public demonstrations. If the agents expect the government to distort the publicly declared tariff rate, their **preferences on the public declaration** does not necessarily coincide with their *preferences on the tariff rate*. Rather, each agent's *preferences on the public declaration* is induced by his preferences on the tariff rate as well as the distortion he expects from the government.

For each $i \in I$, let W^i represent **agent i's preferences on the public declaration**. For now, assume that the preferences on the public declaration, when aggregated by the majority rule, form a social preference with a unique maximizer, t_{decl}. We refer to t_{decl} as the **public declaration**. In Subsections 3.2 and 3.3, we will derive each agent's *preferences on the public declaration* based on his preferences on the tariff rate and his anticipation of whether the government will bargain away the publicly declared tariff rate.

2.3 Government and the foreign lobby

There is an incumbent government that has discretion in choosing the implemented tariff rate. The public informs the government about its tariff choice, t_{decl}. The government's choice of the implemented tariff rate is affected by two motives.

The first motive is *public support*. The further the implemented tariff rate from the public declaration t_{decl}, the greater the social unrest and lower the probability of reelection. We assume that t_{decl} is the only information that

the government has regarding the public preferences. The second motive is *foreign support*. The government's decision is affected by a foreign lobby whose most preferred tariff rate, t^f_{real} is lower than that of the median voter:

$$t^f_{real} < t^m_{real}.$$

Since there is no sign limitation on t^f_{real}, it might refer to a lower tariff rate, to a subsidy, or to zero tariff/subsidy.

In return of a lower tariff rate, the lobby grants benefits to the government. We assume that these benefits can be summarized in monetary terms. Therefore, we model it as a transfer from the lobby to the government.

The government bargains with the lobby on the implemented tariff rate as well as on the amount of benefits. To simplify the analysis, we assume that both the government's and the lobby's payoffs are quasi-linear in the benefits. Specifically, letting B be the monetary benefits the government receives, the government's payoff function is

$$G(t, B; t_{decl}) = g(t - t_{decl}) + B.$$

Here g is a strictly concave C^2 function which attains its maximum at zero. The function g summarizes the public support motive of the government. Without loss of generality, assume that $g(0) = 0$.[8]

The foreign lobby's payoff function is[9]

$$F(t, B) = \begin{cases} f(t - t^f_{real}) - B & \text{if } t \geq t^f_{real} \\ -B & \text{otherwise.} \end{cases},$$

where f is a decreasing and strictly concave C^2 function which attains its maximum at zero. The function f summarizes the payoffs of the lobby as a function of the government's policy choice. Without loss of generality, assume that $f(0) = 0$. It is intuitively plausible to assume that tariff rates lower than t^f_{real} do not make the lobby worse-off. However, lower rates do not make the lobby better-off, since this would mean that the most

[8] A specific functional form such as $G(t, B; t_{decl}) = -(t_{decl} - t)^\gamma + B$, where $\gamma > 1$ would be an example. Also note that the functional form can be altered to $G(t, B; t_{decl}) = g(t - t_{decl}) + \alpha B$ for any $\alpha > 0$.

[9] Even though the foreign lobby's payoff is a function of t^f_{real}, for ease of exposition we use $F(t, B)$, even though a more appropriate notation would be $F(t, B; t^f_{real})$ as in the case of G.

preferred tariff rate of the lobby is lower than t^f_{real}.[10] The second term, $-B$ summarizes the monetary benefits the lobby grants to the government.

3 Results

The political process can be summarized by the following dynamic structure. First, the public informs the government of its policy choice, t_{decl}. Then, the government bargains with the lobby on the implemented tariff rate as well as the monetary benefits. In this section, we first analyze the bargaining process. Then we analyze the formation of the public choice under three different assumptions. First, we assume that bargaining between the government and the lobby is not anticipated by the (naive) public. Then, we analyze what happens when the (sophisticated) public anticipates bargaining to happen. In the last section, we analyze the interaction between a sophisticated public, a sophisticated government, and a sophisticated lobby.

3.1 Bargaining

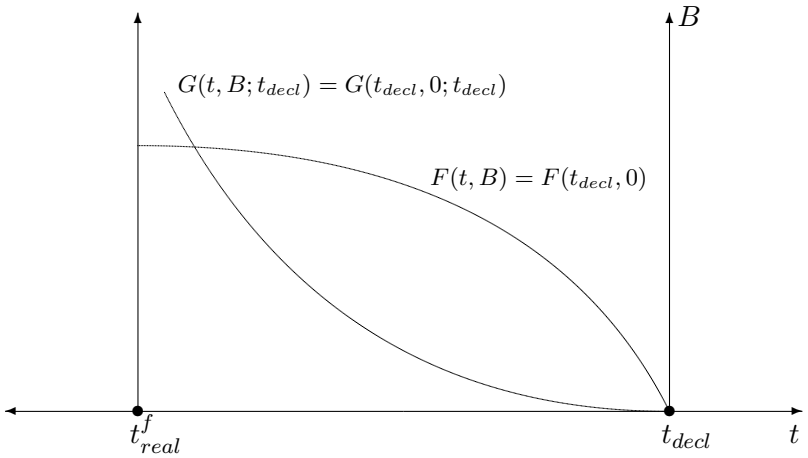
In this section we define the bargaining outcome. We assume that the bargaining process is such that the outcome is Pareto optimal and individually rational. Under this rather weak assumption, one can pinpoint the resulting tariff rate without any further specification. The analysis thus applies to any bargaining process whose outcomes satisfy these properties (including the cooperative models of Nash (1950) or Kalai-Smorodinsky (1975) as well as noncooperative models such as the alternating offers game of Rubinstein (1982).

First note that if the publicly declared tariff rate is not higher than the most preferred tariff rate of the foreign lobby (*i.e.* $t_{decl} \leq t^f_{real}$), the unique Pareto optimal tariff rate is t_{decl}. By individual rationality, there is zero benefits from the lobby to the government. The rest of the section is under the assumption that $t^f_{real} < t_{decl}$.

Let (t^*, B^*) be the tariff-benefit profile resulting from the bargaining process. Note that, in case of disagreement, the government implements t_{decl} and the lobby does not grant any benefits to the government. In this case the government receives the payoff $G(t_{decl}, 0; t_{decl}) = 0$ and the lobby

[10] A specific functional form such as $-(t-t^f_{real})^{\varphi} - B$, where $\varphi > 1$, would be an example for the first part of F.

receives the payoff $F(t_{decl}, 0) = f(t_{decl} - t^f_{real})$. By individual rationality, $G(t^*, B^*; t_{decl}) \geq G(t_{decl}, 0; t_{decl})$ and $F(t^*, B^*) \geq F(t_{decl}, 0)$ hold. Therefore, the bargaining outcome lies in the lens shaped region with the boundaries $G(t, B; t_{decl}) = G(t_{decl}, 0; t_{decl})$ and $F(t, B) = F(t_{decl}, 0)$.



From Pareto optimality, it follows that the resulting tariff rate, t^* will satisfy the tangency condition

$$\frac{\frac{\partial G(t,B;t_{decl})}{\partial t}}{\frac{\partial G(t,B;t_{decl})}{\partial B}} = \frac{\frac{\partial F(t,B)}{\partial t}}{\frac{\partial F(t,B)}{\partial B}}.$$

Define $Z(t; t_{decl}, t^f_{real}) = g'(t - t_{decl}) + f'(t - t^f_{real})$ and note that the above tangency condition can be written as

$$Z(t^*; t_{decl}, t^f_{real}) = 0.$$

Furthermore, note that

$$Z(t^f_{real}; t_{decl}, t^f_{real}) = g'(t^f_{real} - t_{decl}) > 0$$

and

$$Z(t_{decl}; t_{decl}, t^f_{real}) = f'(t_{decl} - t^f_{real}) < 0.$$

Moreover since both g' and f' are continuously decreasing on the interval $[t^f_{real}, t_{decl}]$, so is the function Z. Therefore, there is a unique t^* such that

$$t^f_{real} < t^* < t_{decl} \text{ and } Z(t^*; t_{decl}, t^f_{real}) = 0.$$

Given t^*, individual rationality implies that the maximum benefit, $B^{\max}$ is the one at which the lobby receives its disagreement payoff:

$$F(t^*, B^{\max}) = F(t_{decl}, 0) = f(t_{decl} - t^f_{real})$$

which implies

$$B^{\max} = f(t^* - t^f_{real}) - f(t_{decl} - t^f_{real}).$$

Similarly, the minimum individually rational benefit, $B^{\min}$ is the one at which the government receives its disagreement payoff:

$$G(t^*, B^{\min}; t_{decl}) = G(t_{decl}, 0; t_{decl}) = 0$$

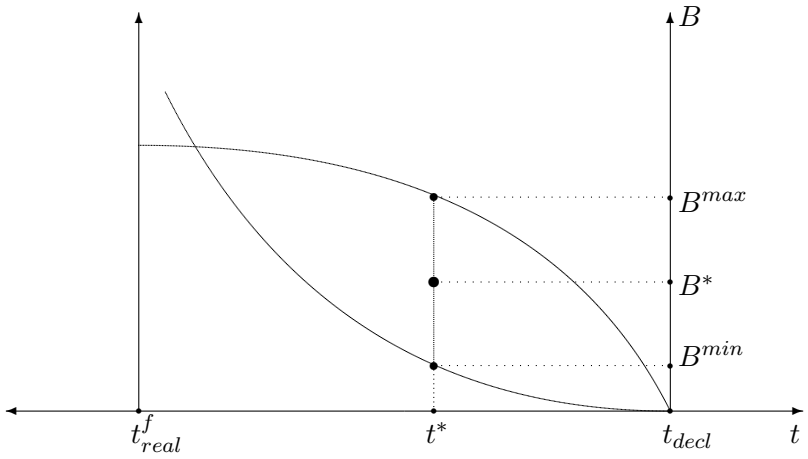
which implies

$$B^{\min} = -g(t^* - t_{decl}).$$

Note that $B^{\max} > B^{\min} > 0$. The resulting benefit B^* is a weighted average of $B^{\max}$ and $B^{\min}$ where the weights depend on the relative bargaining powers of the government and the lobby. Note that the relative bargaining powers do not affect the choice of the implemented tariff rate t^* and therefore, are not crucial for the analysis. Thus, assume that the bargaining process is symmetric. Many well-known bargaining rules such as that of Nash (1950) and Kalai-Smorodinsky (1975) satisfy this property.

Since the Pareto surface in the utility space is linear, any symmetric bargaining process leads to the benefit

$$B^* = \frac{B^{\max} + B^{\min}}{2} = \frac{f(t^* - t^f_{real}) - f(t_{decl} - t^f_{real}) - g(t^* - t_{decl})}{2} > 0.$$



Next, we analyze the effect of the bargaining process on the agents' voting behavior.

3.2 Unsophisticated voters, government, and lobby

This case, though quite unrealistic, is aimed to serve as a benchmark. Suppose the public does not anticipate that the publicly declared tariff rate is going to be bargained away by the government. That is, each agent expects the government to implement the tariff rate declared by the public. Then, each agent's preferences on the tariff rate coincides with his preferences on the public declaration, $V^i = W^i$. As a result, the public declaration coincides with the publicly most preferred tariff rate, $t_{decl} = t^m_{real}$.

If $t^m_{real} \leq t^f_{real}$, the bargaining process leads to the implemented tariff rate $t^* = t^m_{real}$ and to benefits $B^* = 0$. If $t^f_{real} < t^m_{real}$, the implemented tariff rate t^* satisfies

$$Z(t^*; t_{decl}, t^f_{real}) = 0$$

and is such that $t^f_{real} < t^* < t^m_{real}$. The resulting benefits are

$$B^* = \frac{f(t^* - t^f_{real}) - f(t^m_{real} - t^f_{real}) - g(t^* - t^m_{real})}{2}.$$

3.3 Sophisticated voters

In this section, we analyze how the information that the government bargains away the majority chosen t_{decl} affects the agents' voting behavior. We

assume that the public does not share the benefits the government receives from the lobby (or does not associate the benefits with the trade policy). However, assuming otherwise does not affect the results significantly.[11]

For any public declaration $t_{decl} > t^f_{real}$, the bargaining process between the government and the lobby leads to an implemented tariff rate t^* satisfying

$$Z(t^*; t_{decl}, t^f_{real}) = 0.$$

Note that Z is a C^1 function. Moreover,

$$\frac{\partial Z(t^*; t_{decl}, t^f_{real})}{\partial t} = g''(t^* - t_{decl}) + f''(t^* - t^f_{real}) \neq 0.$$

Therefore, there is a differentiable function z such that for each t_{decl}

$$Z(z(t_{decl}); t_{decl}, t^f_{real}) = 0.$$

Moreover, since f and g are strictly concave,

$$z'(t_{decl}) = -\frac{-g''(t - t_{decl})}{g''(t - t_{decl}) + f''(t - t^f_{real})} > 0.$$

For each agent i, the indirect utility function on the public declaration is induced by V^i and z. Specifically, agent i's utility function on the public declaration, W^i is as follows: for each $t \in \mathbb{R}$

$$W^i(t) = \begin{cases} V^i(t) & \text{if } t \leq t^f_{real} \\ V^i(z(t)) & \text{otherwise.} \end{cases},$$

The first part follows since for any public declaration $t_{decl} \leq t^f_{real}$, the bargaining outcome t^* is equal to t_{decl}. Since V^i is single-peaked and z is increasing, W^i is also single-peaked. Moreover, since $\lim_{t \to t^f_{real}} z(t) = t^f_{real}$, W^i is also continuous.[12] For each $i \in I$, let

$$t^i_{decl} = \begin{cases} t^i_{real} & \text{if } t^i_{real} \leq t^f_{real} \\ z^{-1}(t^i_{real}) & \text{otherwise,} \end{cases},$$

[11] We discuss this point further in the Conclusion. A key observation is that, the bargained benefits increase in the public declaration t_{dec}, as we state at the end of this section.

[12] Since, z is not necessarily concave, neither is W^i.

be agent $i's$ most preferred public declaration. The indirect utility function W^i is maximized at t^i_{decl} since

$$W^i(t^i_{decl}) = V^i(z(t^i_{decl})) = V^i(t^i_{real}) = \max\{V^i(t) \ \mid \ t \in \mathbb{R}\}.$$

Since z is an increasing function, the ordering of the agents with respect to their peaks at W^i and V^i are identical. Therefore, the agent with the median capital-labor endowment ratio remains the median voter and his most preferred public declaration, t^m_{decl} beats any other alternative under majority voting. Given the public declaration t^m_{decl}, the bargaining process leads to the tariff rate

$$t^{**} = z(t^m_{decl}) = t^m_{real}$$

and to benefits

$$\begin{aligned} B^{**} &= \frac{f(t^{**} - t^f_{real}) - f(t^m_{decl} - t^f_{real}) - g(t^{**} - t^m_{decl})}{2} \\ &= \frac{f(t^m_{real} - t^f_{real}) - f(t^m_{decl} - t^f_{real}) - g(t^m_{real} - t^m_{decl})}{2}. \end{aligned}$$

Since z is increasing, $t^* < t^{**}$. That is, the anticipation that the publicly declared tariff rate will be distorted through the bargaining process increases the declared tariff rate, and in turn, the tariff rate implemented after bargaining. Furthermore, the bargaining outcome changes in a way that the resulting tariff rate is equal to the median voter's most preferred tariff rate. Also note that, since $z'(t) < 1$ and $\left|f'(z(t) - t^f_{real})\right| < \left|f'(t - t^f_{real})\right|$,

$$\frac{\partial B}{\partial t} = \frac{f'(z(t) - t^f_{real})\ z'(t) - f'(t - t^f_{real}) - g'(z(t) - t)\ (z'(t) - 1)}{2} > 0$$

and therefore, $B^* < B^{**}$. That is, the increase in the declared tariff rate causes the benefits from the lobby to the government to increase.

3.4 Sophisticated voters, government, and lobby

Until now we assumed that the government and the foreign lobby are naive in the sense that both accept the public declaration t^m_{decl} as the actual t^m_{real} and continue bargaining from thereon. In this section, we drop this assumption.

First note that a sophisticated government benefits from accepting an "exaggerated" declaration t^m_{decl} as the actual t^m_{real}; that is, it imitates a

"naive" government. To see this note that, as seen in Subsection 3.3, $t^m_{decl} > t^m_{real}$. Furthermore, t^m_{decl} by definition maximizes g and since $\frac{\partial B}{\partial t} > 0$, increases the benefits the government receives.[13]

The lobby, unlike the government, looses as a result of the manipulation of votes. Therefore, a sophisticated lobby will behave much differently than a naive one. To analyze this interaction, we model bargaining between the government and the lobby as a two-period Bayesian game (*a la* Fudenberg and Tirole, 1983). Since, as discussed above, the objectives of the voters and the government are compatible, in this game we will aggregate both into a single player, the "government". The game is as follows.

The government can be of two types: type l with probability π and type h with probability $1 - \pi$. Type l government represents a median voter with a low most preferred tariff rate (i.e. $t^m_{real} = l$) and type h government represents a median voter with a high most preferred tariff rate (i.e. $t^m_{real} = h$). Let $l, h \in \mathbb{R}$ be such that $l < h$. The government's (equivalently, the median voter's) true type is not known by the lobby. Both types of government has the same discount factor δ_g. The lobby has the discount factor δ_f.

The **game** proceeds as follows: at the first period the lobby makes an offer to the government. If the government accepts this offer, the game ends. Otherwise, the game proceeds to the second period where the lobby makes a new offer and the government either accepts or rejects it.

To simplify notation, define $G^l := G(.; l)$ and $G^h := G(.; h)$. Let (t^l_{dis}, B^l_{dis}) be the Pareto optimal bundle which gives type l its disagreement payoff, that is, $G^l(t^l_{dis}, B^l_{dis}) = G^l(l, 0) = 0$. Similarly, let (t^h_{dis}, B^h_{dis}) be the Pareto optimal bundle which gives type h its disagreement payoff, that is, $G^h(t^h_{dis}, B^h_{dis}) = G^h(h, 0) = 0$. Note that without uncertainty, such an ultimatum game between the lobby and the government would end up in one of these bundles (depending on the government's type). Also note that the type h government prefers disagreement to (t^l_{dis}, B^l_{dis}) (i.e. $G^h(h, 0) > G^h(t^l_{dis}, B^l_{dis})$). Assume $h > l > t^h_{dis} > t^l_{dis}$ so that the low-tariff median voter will have an incentive to imitate the high-tariff one.[14]

[13] In fact, if a sophisticated government has the means to manipulate the declared tariff rate itself, it will choose an ever higher tariff rate than the one declared by the median voter. We will, however, not consider this possibility.

[14] Note that the high-tariff median voter never has an incentive to imitate the low-tariff one. The case where no type has an incentive to imitate the other is simple and out of the scope of this paper.

In a one-period ultimatum game with uncertainty, the lobby receives the expected payoff $F(t^h_{dis}, B^h_{dis})$ from offering (t^h_{dis}, B^h_{dis}) and $\pi F(t^l_{dis}, B^l_{dis})$ from offering (t^l_{dis}, B^l_{dis}) (since the type h government refuses the offer (t^l_{dis}, B^l_{dis})). Note that $F(t^h_{dis}, B^h_{dis}) < F(t^l_{dis}, B^l_{dis})$. We will say that the lobby is **soft** if $F(t^h_{dis}, B^h_{dis}) > \pi F(t^l_{dis}, B^l_{dis})$ and that it is **tough** if $F(t^h_{dis}, B^h_{dis}) < \pi F(t^l_{dis}, B^l_{dis})$. Note that the lobby's "type" is publicly known.

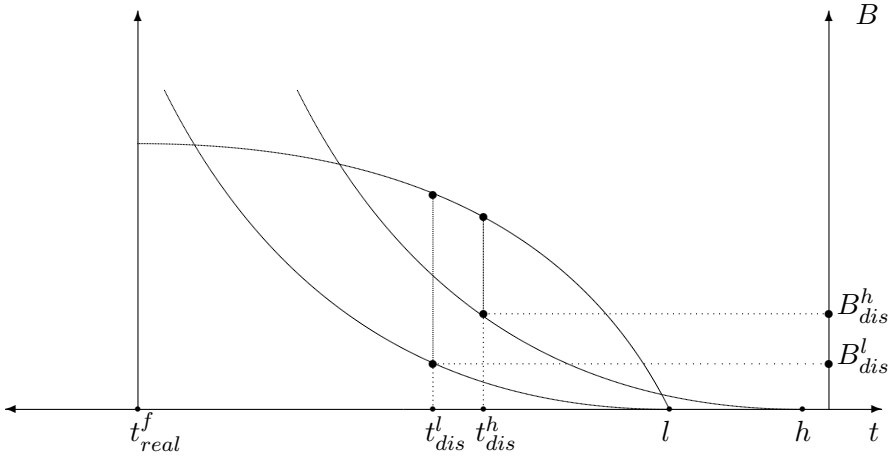
Now extend the game to two periods. If the lobby is soft, the lowest first period payoff that type l will accept is $\delta_g G^l(t^h_{dis}, B^h_{dis})$ (since it can get (t^h_{dis}, B^h_{dis}) next period). Let $\alpha \in \mathbb{R}_+$ be such that $G^l(t^l_{dis}, B^l_{dis} + \alpha) = \delta_g G^l(t^h_{dis}, B^h_{dis})$.

Our first result describes the perfect Bayesian equilibrium of this game when the lobby is soft. Let

$$F_1 := F(t^h_{dis}, B^h_{dis})$$

and

$$F_2 := \pi F(t^l_{dis}, B^l_{dis} + \alpha) + (1 - \pi)\delta_f F(t^h_{dis}, B^h_{dis}).$$



Proposition 1. *Assume that the lobby is soft. The game has a unique perfect Bayesian equilibrium at which the lobby offers* (t^h_{dis}, B^h_{dis}) *in the second period and both types accept it. Also, if* $F_1 > F_2$*, then the lobby offers* (t^h_{dis}, B^h_{dis}) *in the first period and both types accept this offer. Otherwise, the lobby offers* $(t^l_{dis}, B^l_{dis} + \alpha)$ *in the first period, type* l *accepts and type* h

rejects this offer.

Proof. Since it is soft, the lobby always offers (t^h_{dis}, B^h_{dis}) in the second period. Knowing this, l accepts any offer better than or equal to $(t^l_{dis}, B^l_{dis}+\alpha)$ in the first period. So the lobby either offers (t^h_{dis}, B^h_{dis}) in the first period and receives $F(t^h_{dis}, B^h_{dis})$ (since the offer gets accepted by both types) or it offers $(t^l_{dis}, B^l_{dis}+\alpha)$ in the first period and receives $\pi F(t^l_{dis}, B^l_{dis}+\alpha)+(1-\pi)\delta_f F(t^h_{dis}, B^h_{dis})$ (since type h refuses $(t^l_{dis}, B^l_{dis}+\alpha)$ in the first period and accepts (t^h_{dis}, B^h_{dis}) in the second). Among these two strategies, the lobby chooses the one that maximizes its expected payoff. □

Note that if the lobby is soft, the low-tariff median voter either receives h or l. That is, she is weakly better-off as a result of the uncertainty the lobby is facing (even though the lobby is sophisticated). Also note that, the government representing a low-tariff median voter is strictly better-off as a result of the uncertainty (since its benefits are higher in $(t^l_{dis}, B^l_{dis}+\alpha)$ than in (t^l_{dis}, B^l_{dis})).

We will next consider the tough-lobby case. Let $p(t, B)$ be the probability that type l will accept an offer (t, B) in the first period. Note that type l still accepts any first period offer (t, B) that is at least as good as $(t^l_{dis}, B^l_{dis}+\alpha)$; that is, $p(t, B) = 1$. For an offer (t, B) worse than $(t^l_{dis}, B^l_{dis}+\alpha)$ for type l however, $p(t, B) < 1$.

Let p^* be the value of $p(.)$ which makes the tough lobby indifferent between playing (t^l_{dis}, B^l_{dis}) and (t^h_{dis}, B^h_{dis}) in the second period. That is, given the lobby's updated belief $\frac{\pi(1-p^*)}{(1-p^*\pi)}$ that the government is type l:

$$F(t^h_{dis}, B^h_{dis}) = \frac{\pi(1-p^*)}{(1-p^*\pi)} F(t^l_{dis}, B^l_{dis})$$

which implies that

$$p^* = \frac{\pi F(t^l_{dis}, B^l_{dis}) - F(t^h_{dis}, B^h_{dis})}{\pi(F(t^l_{dis}, B^l_{dis}) - F(t^h_{dis}, B^h_{dis}))}.$$

Our next result describes the perfect Bayesian equilibrium of this game when the lobby is tough. Let

$$F_3 = \pi p^* F(t^l_{dis}, B^l_{dis}) + (1-p^*\pi)\delta_f F(t^h_{dis}, B^h_{dis}).$$

Proposition 2. *Assume that the lobby is tough. The game has a unique*

perfect Bayesian equilibrium at which the lobby offers (t^l_{dis}, B^l_{dis}) *in the second period and only type* l *accepts it. Also, if* $F_1 = \max\{F_1, F_2, F_3\}$ *then the lobby offers* (t^h_{dis}, B^h_{dis}) *in the first period and both types accept this offer. Else if* $F_2 = \max\{F_1, F_2, F_3\}$*, then the lobby offers* $(t^l_{dis}, B^l_{dis} + \alpha)$ *in the first period, type* l *accepts and type* h *rejects this offer. Otherwise the lobby offers* (t^l_{dis}, B^l_{dis}) *in the first period, type* l *accepts it with probability* p^* *and type* h *rejects this offer.*

Proof. It follows from Proposition 1 that the first two strategies, if they are optimal for the lobby too, are part of a perfect Bayesian equilibrium. We will next prove the same for the third strategy.

First note that if an offer (t, B) is such that $G^l(t, B) \geq G^l(t^l_{dis}, B^l_{dis} + \alpha)$, type l accepts it with probability one: $p(t, B) = 1$. Therefore, among these offers, the lobby will only consider $(t^l_{dis}, B^l_{dis} + \alpha)$.

Next note that, if an offer (t, B) is such that $G^l(t^l_{dis}, B^l_{dis}) \leq G^l(t, B) < G^l((t^l_{dis}, B^l_{dis} + \alpha))$, at an equilibrium type l accepts it with probability p^*. To see this, first suppose that there is an equilibrium at which such a first period offer (t, B) is accepted by type l with probability $p > p^*$. But then, the lobby prefers offering (t^h_{dis}, B^h_{dis}) to offering (t^l_{dis}, B^l_{dis}) in the second period. This however, implies that type l can increase its payoff by refusing (t, B) in the first period and receiving (t^h_{dis}, B^h_{dis}) in the second and therefore, setting $p = 0$, a contradiction. Alternatively suppose that there is an equilibrium at which such a first period offer (t, B) is accepted by type l with probability $p < p^*$. But then, the lobby prefers offering (t^l_{dis}, B^l_{dis}) to offering (t^h_{dis}, B^h_{dis}) in the second period. This however, implies that type l can increase its payoff by accepting (t, B) in the first period and therefore, setting $p = 1$, a contradiction.

Note that in order for the mixed strategy p^* to be a best response of type l to a first period offer (t, B) such that $G^l(t^l_{dis}, B^l_{dis}) \leq G^l(t, B) < G^l((t^l_{dis}, B^l_{dis} + \alpha))$, type l should be indifferent between accepting or rejecting it. This will only be the case if the lobby offers (t^h_{dis}, B^h_{dis}) in the second period with a probability $q(t, B)$ satisfying

$$G^l(t, B) = \delta_g \left(q(t, B) G^l(t^h_{dis}, B^h_{dis}) + (1 - q(t, B)) G^l(t^l_{dis}, B^l_{dis}) \right).$$

Note that $G^l(t^l_{dis}, B^l_{dis}) = G^l(l, 0 = 0$. Therefore, the equality simplifies to

$$G^l(t, B) = \delta_g q(t, B) G^l(t^h_{dis}, B^h_{dis})$$

from which we obtain

$$q(t,B) = \frac{G^l(t,B)}{\delta_g G^l(t^h_{dis}, B^h_{dis})}.$$

Now any offer (t,B) such that $G^l(t^l_{dis}, B^l_{dis}) \leq G^l(t,B) < G^l((t^l_{dis}, B^l_{dis} + \alpha))$ will be accepted by type l with probability p^* and will be rejected by type h. Therefore the lobby, if it makes such an offer, will choose $(t,B) = (t^l_{dis}, B^l_{dis})$ to maximize its payoff. For this offer to be part of an equilibrium, the probability of offering (t^h_{dis}, B^h_{dis}) in the second-period will be $q(t^l_{dis}, B^l_{dis}) = 0$. The lobby's expected payoff from this strategy is then

$$\begin{aligned} & \pi p^* F(t^l_{dis}, B^l_{dis}) + (1 - p^*\pi)\delta_f \left(\frac{\pi(1-p^*)}{(1-p^*\pi)} F(t^l_{dis}, B^l_{dis}) \right) \\ = \quad & \pi p^* F(t^l_{dis}, B^l_{dis}) + (1 - p^*\pi)\delta_f F(t^h_{dis}, B^h_{dis}). \end{aligned}$$

□

Note that if the lobby is tough, the low type median voter receives high tariff rate in only one out of the three cases. That is, while she is weakly better-off as a result of the uncertainty the lobby is facing (even though the lobby is sophisticated), she prefers a soft lobby to a tough one. Also note that a government representing a low type median voter against a tough lobby is only weakly-better off as a result of the uncertainty the lobby is facing (while it was strictly better-off against a soft lobby. when against a tough lobby). If the third kind of equilibrium is obtained, the benefit it receives is equal to what it would under perfect information.

As the probability π of facing a type l decreases, the lobby (whether it is soft or tough) is more likely to offer (t^h_{dis}, B^h_{dis}) in the first period. That is, a "less-likely" low-type median voter is "more-likely" to be better-off as a result of the uncertainty the lobby is facing.

A decrease in δ_g increases $F(t^l_{dis}, B^l_{dis} + \alpha)$ and thus, the expected payoff of the lobby from playing $(t^l_{dis}, B^l_{dis} + \alpha)$ in the first period and (t^h_{dis}, B^h_{dis}) in the second. This implies that, as the government gets more impatient, the range of parameters for which a soft lobby plays (t^h_{dis}, B^h_{dis}) in the first period will shrink. However, if the lobby is tough, such a change will also shrink the range of parameters for which the lobby plays (t^l_{dis}, B^l_{dis}) in the first period. Therefore, it might be beneficial for the government to be more

impatient against a tough lobby.

Pareto optimality requires that any offer worse than (t^h_{dis}, B^h_{dis}) that the lobby makes, since it can only be accepted by type l, should have the tariff rate t^l_{dis} (with of course a possibly different amount of benefits). However, the first kind of equilibrium which implies an agreement at (t^h_{dis}, B^h_{dis}) is not Pareto optimal if the government is of type l. Another source of inefficiency in the game is the positive probability of late agreements (*e.g.* h facing the offer $(t^l_{dis}, B^l_{dis} + \alpha)$ in the first period) or disagreement (*e.g.* h facing the offer (t^l_{dis}, B^l_{dis}) in the first period).

4 Conclusion

Our results suggest that increasing public support for more protectionist trade policies can be interpreted as a rational response of the citizens to foreign intervention in determination of these policies. Particularly, our analysis shows that as the voters become sophisticated, they come to expect their declared tariff rate to be curbed during bargaining between their government and the foreign actor. Consequently, they demand a higher tariff rate. As a result, sophisticated voters manage to secure a higher implemented tariff rate in comparison to the case of unsophisticated voters. We obtain a similar result for the case where the government and the foreign lobby are also sophisticated. In particular, we show that in certain cases, the bargaining process results in the higher implemented tariff rate t^h_{dis} even though the true type of the median voter is low.

In our model, except in Subsection 3.4, the foreign intervention is modeled as a general bargaining process which is only required to produce Pareto optimal and individually rational outcomes. In this sense, the analysis applies to any specific bargaining process which satisfies these properties. The bargaining game of Subsection 3.4, a two-period ultimatum game, is chosen for being the simplest noncooperative model of "Bayesian" bargaining that produces real-life phenomena such as possibility of disagreement or inefficiency of agreement. Even with this simple game though, we observe that a low-tariff median voter gains from creating uncertainty regarding its true type.

In our model, the citizens inform the government of their policy choice via direct voting. However, since the median-voter results extend to the case

of electoral competition between two political parties, our result also trivially generalize to a case where the agents vote between two political parties and the winner party later determines the tariff rate through bargaining with a lobby.

In our model an individual's preferences on the tariff rate are linked to her capital-labor ratio relative to the average in the economy. As discussed in Subsection 2.1, for a labor intensive import competing sector, individuals with lower (higher) than average capital-labor ratio prefer a positive (negative) tariff rate. Assuming for the sake of demonstration that the foreign lobby's ideal tariff rate is zero, our analysis of sophisticated voters in Subsection 3.3 implies that, every relatively capital-poor voter will prefer to declare a tariff rate to the government higher than their ideal, whereas this will not be the case for the relatively capital-rich voters. Due to our assumption that the ideal tariff rate of the foreign lobby is lower than that of the median voter (*i.e.* $t^f_{real} < t^m_{real}$), the median voter will also be relatively capital-poor. Hence when voters are sophisticated, the majority will declare to the government a tariff rate higher than when voters are unsophisticated. This will potentially result in a higher bargained tariff rate and higher benefits as well.

Note that, in our model the public does not receive benefits from the government, or does not associate received benefits with the trade policy. That is, the benefits B do not enter into the voters' payoff functions. Alternatively, however, if there was a group of voters (say a domestic lobby) whose utility was increasing in B, depending on the identity of this group's members, the mechanism discussed in the previous paragraph might or might not be further amplified. First note that, since benefits received are increasing in the publicly declared tariff rate, to the extent that they can affect the public declaration, the members of this group would now have an additional incentive to declare a higher tariff rate. However, if this group does not contain the median voter or change her identity through its higher declarations, the group's overall affect on the public declaration would be zero and the mechanism discussed in the previous paragraph would result in the same tariff rate and benefit level as in our model. For example, if this domestic lobby was made up of the bottom 10% in terms of capital-labor ratio, their increased declarations of preference for higher tariffs would have no affect on the median declaration. Alternatively if this group was the top 10% in

capital-labor ratio, their change in declaration would only have an effect if it was big enough to surpass the remaining 40% of the society and end up above the declaration of the median voter. In that case, there would be an increase in the publicly declared tariff rate, and potentially, the bargaining outcome.

Finally, unlike Grossman and Helpman (1994) we do not analyze the implications of domestic lobbying on the outcome. Therefore, an alternative approach (as mentioned by Baldwin, 1996) is to analyze bargaining between the government, the foreign interests, and the domestic interests simultaneously.

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