

Do Democracies Trade More Freely?¹

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1 Introduction

Do democracies trade more freely? If so, what are the characteristics of the democratic polity that are relevant to trade-policy formation? This chapter surveys the empirical evidence with respect to the first question, and presents a simple model of trade and politics to address the second.

Within economics, the political origins of trade barriers has been thoroughly investigated. The approach usually follows a similar pattern: take a simplified Heckscher-Ohlin or Ricardo-Viner specific factors model to describe the economic environment, and overlay some political structure to explore the formation of barriers to free trade: direct democracy by Mayer (1984), political support from competing groups as in Hillman (1982) or Grossman and Helpman (1994), lobbying by Bhagwati (1982), Findlay and Wellisz (1982), Magee Brock and Young (1989). In so doing, the economic approach has been to focus on the pressures brought to bear on vote- or support-maximizing politicians to supply policy. Hence the political economy of trade literature focuses on the choice over the level of tariff (and occasionally on the choice of instrument) based on underlying redistributive incentives of policy-makers or on the ability of interest groups to influence the policy-makers.

These modifications of the policy-maker's objective function (policy-makers are modelled as politically responsive) and the trade barrier formation processes modelled in this literature are at best reduced forms of the political process. Institutional features of the polity are usually missing, and certainly cross-country variations in these institutions have not been considered. Rodrik (1995) observes the paucity of work on the cross-country variation in the levels of protection, and identifies that institutions matter in this context (p. 1484).

Scholars in international relations and comparative politics have, on the other hand, stressed the notion that arrangements regarding collective security must operate within a system that is both anarchic (in the sense of no authority to enforce contracts), and characterized by a complex system of self-enforcing agreements that limit unilateral improvements in domestic conditions or a states' power at the expense of another's'. This system, itself the outcome of bargaining and negotiation between countries, relies on the willingness of states to "cooperate" with each other. These scholars have noted the willingness of democracies to cooperate along a variety of dimensions: they fight fewer wars with each other, or with autocracies than do autocracies with each other (Russett 1993), or to recognize and enforce one another's laws¹. Explanations have hinged on institutional features (Bueno de Mesquita et al 1999), such as electoral competition.

Here we investigate whether the regime type of a state operating in an anarchic world-trading environment affects its willingness to abstain from beggar-thy-neighbor (or rent-shifting) policies that improve domestic conditions at the expense of its trading partners. The evidence suggests that the institutions of democracy work to enhance cooperation over trade policies.

This chapter is an attempt to synthesize some recent work on this topic; to present those and some new ideas within a single coherent model structure, and to summarize some of the recent empirical results. The central conclusions of this chapter are that

1. Democracies have a greater tendency to unilateral liberalization;

¹Political scientists, and to a lesser degree, and more recently economists, have been interested in the distinctive nature of democracies – do they grow faster (Barro 1986), do they fight fewer wars (Russett, 1993), have lower military expenditures (Garfinkel 1994), are they less corrupt or extractive (Lake and Baum 1998).

2. Democracies are more cooperative with respect to their willingness to join tariff-reducing PTAs, and
3. Democracies are more willing to offer concessions in the form of reduced tariffs when negotiating with another democracy.

Two characteristics of democracies - separation of powers and electoral accountability of its leaders - will be argued as being key to the trade-liberalizing tendencies of these regimes.

2 Democracy and Interstate Cooperation

Among political scientists, a variety of explanations have emerged as to the perceived cooperative nature of democracies. Democracies share similar values and norms that lead to non-violent solutions to conflict (Dixon 1994); they have a rule of law that protects property and does not permit rent seeking or expropriation (Olson 1993).

In slightly different formulation, a number of scholars have suggested that trade liberalization seems to be coincident with democratization (e.g. Haggard and Webb 1994). However Rodrik (1994) suggests that trade policy reforms are usually preceded by changes in the political regime, in any direction, democracy or otherwise. Geddes (1992) and Przeworski (1991) have suggested that fledgling democracies are susceptible to challenge, and are the least likely to reform. Verdier (1998) suggests that increased democracy means that similar sectors in each country are empowered politically, and the effect is likely to be more protection at least while trade is powered by comparative advantage.

These works provide little insight in to the effect of the institutional structure of democracies on policy; democracy empowers and restrains the use of that power to make policy. It delegates and separates power and authority across branches and agents. It is exactly these structural differences that are the focus of this chapter.

In the work most closely related to this, Kubota and Milner (1999) suggest that with democracy comes an expansion of the support base for a policy-maker (the “selectorate” increases in size). A tariff raises the price, lowering the support consumers might have for the policy-maker. A policy-maker can maintain consumer support by providing a transfer to those consumers who are members of the selectorate. As the selectorate increases in size, more transfers are required which becomes too expensive; alternatively, the policy-maker can lower the tariff, effectively improving the welfare of consumers at large. As the selectorate gets large, the optimal policy switches from a tariff to freer trade.

This work shares the foundation that changes in political institutions affect trade policy. While Kubota and Milner focus on the extension of the franchise, the institutions of interest here are legislatures (and the separation of powers) and elections (the accountability of the executive), both of which are characteristic of democracies.

2.0.1 On Trade and Peace and Growth

The link between trade and regime type is somewhat bound up with the question of the link between democracy and peace. If democracy supports trade, and trade supports peace, then there is another urgent reason to encourage democratization in unstable regions of the globe.

We build here on the proposition of the “democratic peace” (democracies are less likely to fight wars with each other)², and investigate the proposition that “democracies are less likely to fight trade wars with one another”.

Polacheck (1997) investigates closely the linkage between democracy, trade and peace, and provides support for the liberal view that democracy leads to more trade; more trade implies greater gains from economic interaction that would be put in jeopardy by conflict. Hence war is less likely when there are large gains from trade that would be lost in the event of hostilities. Trade creates security externalities and Mansfield (1994) shows that war is negatively related to trade.

These ideas are founded in Kant and Cobden: peace and democracy are closely tied via the desire to maintain good trading relations. Bliss and Russett (1998) quote President Clinton’s 1994 State of the Union address:

“Ultimately, the best strategy to ensure our security and build a durable peace is to support the advance of democracy elsewhere. Democracies don’t attack each other. They make better trading partners and partners in diplomacy.”

What then is it about democracy as a set of institutions designed to manage conflict in society, that leads such countries to be less belligerent, and more likely to be freer traders?

2.1 Legislatures and Elections

Two characteristics of the structure of democratic states are examined here: the responsiveness of the policy-makers to the interests of the broad electorate (the role of elections and consent), and the role of domestic legislatures in democracies (the effect of separation of powers). The key effects if these institutions are these. When voters have (some) control over political leaders via competitive elections, this increases the willingness to liberalize and reduces the desire to protect special interests at the expense of the broad electorate, especially when voters respond to pocket-book issues. Separated authority over trade policy means that if a country is endowed with a more protectionist legislature, this will increase the bargaining powers of the international trade negotiators at the international bargaining table. The negotiators will, under democracy, extract greater concessions from other countries (especially other democracies) than under alternative regime specifications.

The view that elections keep incumbents accountable is deeply ingrained in democratic culture (Manin, Przeworski and Stokes 1999). An election can sanction a poorly behaved incumbent, by eviction from office. The prospect of not being reelected leads incumbents to shirk less in representing the electorate - the retrospective voting approach (Barro 1973 , Ferejohn 1986).

In a broader sense, both elections and separation of powers are institutional mechanisms to induce governments to behave in a “representative manner”. Persson, Roland and Tabellini (1997) show that separation of powers (when appropriately designed) induces the revelation of the information necessary for voters to make informed decisions. If voters behave retrospectively, government behavior is constrained to be more representative.

²Doyle (1983) among many others.

3 The Underlying Economy³

Consider two countries that are identical, except for their regime type, and their endowments. Each country produces and consumes three goods labelled x and m and z . On the demand side, utility is assumed to be additively separable, $U(x, m) = u(x) + u(m) + z$, where z is the numeraire good, and the units are chosen such that the price of a unit of z is 1. On the supply side, home's endowment of x is given as $\beta > \frac{1}{2}$, while foreign's endowment of x is $1 - \beta$. World output is therefore fixed at unity. Similarly, home's endowment of m is $1 - \beta$ while foreign's endowment is β . Since preferences are identical, home will export good x and will import good m .

Home can apply the specific tariff t on the imports of good m . If the price abroad of good m is p_m , then the local price is $p_m + t$, where t is home's (non-prohibitive) tariff. Similarly, if the price of x at home is p_x , then the price of x abroad is $p_x + \tau$ where τ is the (non-prohibitive) tariff applied by foreign.

Utility maximization yields the demand functions: $x = u'^{-1}(p_x)$ and $x^* = u'^{-1}(p_x + \tau)$, $m = u'^{-1}(p_m + t)$ and $m^* = u'^{-1}(p_m)$, and market clearing implies that local and foreign demand must sum to unity for each good: $u'^{-1}(p_x) + u'^{-1}(p_x + \tau) = 1$ and $u'^{-1}(p_m + t) + u'^{-1}(p_m) = 1$. Solving for the equilibrium prices yields $p_x(\tau)$ and $p_m(t)$. It is evident that

$$\frac{\partial p_x(\tau)}{\partial \tau} < 0 \text{ and } \frac{\partial p_m(t)}{\partial t} < 0 \text{ while } \frac{\partial (p_x(\tau) + \tau)}{\partial \tau} > 0 \text{ and } \frac{\partial (p_m(t) + t)}{\partial t} > 0. \quad (1)$$

Home's equilibrium consumption of good x and m can be expressed as $x(\tau) = u'^{-1}(p_x(\tau))$ and $m(t) = u'^{-1}(p_m(t) + t)$, with

$$x' > 0 \text{ and } m' < 0. \quad (2)$$

To derive an expression for social welfare, notice that the indirect utility for this economy with income y is given by $y + C(x(\tau), m(t))$ where $C(x(\tau), m(t)) = u(x(\tau)) - p_x(\tau)x(\tau) + u(m(t)) - (p_m(t) + t)m(t)$ is the consumer surplus associated with the consumption of x and m . National income y is, of course, equal to the sum of profits and tariff revenue. Hence the social welfare is expressed as the sum of consumer surplus, profits and tariff revenue: $W(t, \tau) = C(x(\tau), m(t)) + \Pi^x(\tau) + \Pi^m(t) + T(t)$ where $\Pi^x(\tau) = \beta p_x(\tau)$, $\Pi^m(t) = (p_m(t) + t)(1 - \beta)$ and tariff revenue is given by $T(t) = t(m(t) - (1 - \beta))$. Similarly, for foreign, $W^*(t, \tau) = C^*(x(\tau), m(t)) + \Pi^{x^*}(\tau) + \Pi^{m^*}(t) + T^*(\tau)$ where $C^*(x(\tau), m(t)) = u(x(\tau)) - (p_x(\tau) + \tau)x^*(\tau) + u(m^*(t)) - p_m(t)m^*(t)$, $\Pi^{x^*}(\tau) = (p_x(\tau) + \tau)(1 - \beta)$ and $\Pi^{m^*}(t) = p_m(t)\beta$. Tariff revenue is given by $T^*(\tau) = \tau(x^*(\tau) - (1 - \beta))$.

3.1 The Welfare Optimizing Tariff

Assume for now that each government has only social welfare in mind (this assumption will be relaxed in the next section). The governments choose their tariffs simultaneously, and we investigate the Nash equilibrium in tariff levels. The separability of the payoffs leads to a reaction function for each player that is independent of the other player's tariffs – the Nash equilibrium

³The structural model of the underlying economy drawn from Mansfield, Milner and Rosendorff (1999).

is one of dominant strategies. Home government solves for $\arg \max_t W(t, \tau)$ which we label t^W ; similarly, foreign solves for $\arg \max_\tau W^*(t, \tau)$ which we label τ^{W^*} . It is well established that the optimal tariffs are positive as a small tariff generates a reduction in consumer surplus that is more than compensated for by an improvement in the terms of trade. This is the Johnsonian beggar-thy-neighbor tariff: in a two country world, both countries are “large”, and implement the optimal tariff.

Explicitly, setting $W_t = 0$ yields $t^W = (m(t) - (1 - \beta)) \frac{p'_m(t)}{m'(t)} > 0$ since imports are positive and both $p'_m(t)$ and $m'(t)$ are negative (from equations ?? and 2). Similarly, $\tau^{W^*} = (x^*(\tau) - (1 - \beta)) \frac{p'_x(\tau)}{x'^*(\tau)} > 0$, and by symmetry, $t^W = \tau^{W^*}$. Notice too that home has a preferred foreign tariff $\tau^W : W_\tau < 0$ from equations ?? and that exports are positive. This implies that home’s (and foreign’s) preferred foreign (home) tariff is $\tau^W = 0$ ($= t^{W^*}$).

4 Representation

Any policy-maker (in any regime) is assumed to experience benefits from two sources: in addition to the benefit associated with increasing social welfare, governments obtain a fraction of the rents that accrue to the import-competing sector (Bhagwati’s (1998) “takings”, government’s “grasping hand” of Olsen (1993)). These rents could take the form of political contributions to the government (as in democracies where lobbies organize and collectively contribute to a political candidate’s electoral campaign fund) or they can take the form of extraction or appropriation as might be the case in an autocratic society where individual property rights are not perfectly secure. This political support function is therefore rising both in the profits of the firms and in social welfare.

$$G(t, \tau, \Psi) = c\Pi^m(t) + \Psi W(t, \tau)$$

where c is a positive and exogenous constant, $c \in (0, 1)$ and Ψ measures the responsiveness of the representative to the concerns of the voters at large⁴. Variation across representatives and regimes will be captured by Ψ , an institutional parameter than measures the importance to the policy-maker of the interests of the broad society. The larger is Ψ , the more responsive is the policy maker to the interests of the electorate at large and the better is the “quality of democracy” (Bhagwati 1998). The smaller is Ψ , the more the policy-maker is captured by the special interests represented by the firms, and the less representative of broad societal interests the policy-maker is.

We will denote foreign’s regime type as Ψ^* , and foreign’s policy-maker maximizes

$$G^*(t, \tau, \Psi^*) = c\Pi^{x^*}(\tau) + \Psi^* W^*(t, \tau)$$

Once again, the two governments set their tariff policies simultaneously, and the Nash equilibrium in tariffs are dominant strategies. Each policy-maker of type Ψ (at home) solves for $\arg \max_t G(t, \tau, \Psi)$, which yields $t^G = \frac{-c(1-\beta)(p'_m(t)+1)}{\Psi m'(t)} + \frac{p'_m(t)}{m'(t)} (m(t) - (1 - \beta))$. The pair of Nash strategies are functions of each country’s regime type: $(t^G(\Psi), \tau^G(\Psi^*))$.

⁴This paper takes the contribution schedule as given and exogenous. Recent advances by Grossman and Helpman (1994) have endogenized the contribution schedule given the decision to organize. Our purpose here is to study features of democracy when political organization occurs, and we set up the simplest structure of a single lobby with an exogenous schedule.

5 Democracy and Liberalization

Our first result establishes that any representative that is more responsive to the interests of the electorate at large will adopt a lower domestic tariff either unilaterally, or within the non-cooperative tariff setting game. Since the optimal strategy is a dominant strategy, the policy-maker will always adopt a lower tariff as s/he become more responsive to social welfare relative to the special interests of the import-competing sector.

Proposition 1 $\frac{\partial t^G}{\partial \Psi} < 0$ and $\frac{\partial t^G}{\partial c} > 0$.

The proofs are in the appendix. This implies that the more responsive a policy-maker is to broader societal concerns, the lower is the non-cooperative Nash tariff. Democracy provides an incentive to unilaterally liberalize.⁵

Trade policy however is the outcome of negotiations between countries. Our interest is the effect of regime type on the prospects for international cooperation; in particular, when will the politically motivated policy-makers agree to forgo beggar-thy-neighbor tariffs and cooperate within a liberalized trading regime?

5.1 Elections and Cooperation

In this section we look at the role of elections, or more precisely, the effect of increasing a policy-maker's responsiveness or accountability to the electorate at large. In particular, does the policy-maker have more or less to gain from cooperating at free trade as his/her responsiveness to the electorate rises?

Consider the tariff game played an infinite number of times, and let us examine the properties of a cooperative equilibrium, where cooperation is supported by the threat of an infinite reversion to the Nash equilibrium - the grim trigger punishment.

There are two important components to a cooperative solution. What are the gains from cooperation? and secondly, can cooperation be sustained? Fearon (1998) addresses this issue of bargaining and enforcement, and suggests that sometimes they are at odds: the stronger are the enforcement provisions of any agreement, the tougher will be the bargaining of get to an agreement in the first place, given that the players will have to stick with it for a long time. Alternatively, the looser is the enforcement criterion, the more willing players may be to reach an agreement sooner.

The effects of increased democracy on bargaining and enforcement are interesting. More democracy at home leads to greater gains from cooperation; yet such cooperation becomes more difficult to enforce.

Consider the prisoners dilemma structure outlined above in the game with a single policy-maker in each country. The noncooperative tariff t^G , and define some cooperative tariff $t^C < t^G(\Psi)$ and $\tau^C < \tau^G(\Psi^*)$ for all (Ψ, Ψ^*) . The optimal defection here is also t^G (this follows from the separability of utility / the equilibrium in dominant strategies). Consider the equilibrium in which countries cooperate unless or until a defection is observed, in which case the grim trigger is pulled. The first result is that the gains from cooperation rise with the level of democracy at home.

⁵Levy (1999) investigates the change in the "most cooperative" tariff with a change in the weight put on social welfare in Grossman and Helpman (1994) economy with a single lobby. He finds a non-monotonic relationship.

The intertemporal gains from cooperation are $g_C(\Psi, \Psi^*) = \frac{1}{1-\delta} [G(t^C, \tau^C, \Psi) - G(t^G(\Psi), \tau^G(\Psi^*), \Psi)]$ where δ is the discount rate.

Proposition 2 *As a country becomes more democratic, ceteris paribus, its gains from cooperation increase. That is $\frac{\partial}{\partial \Psi} g_C(\Psi, \Psi^*) > 0$.*

The proof is in the appendix; the intuition here is straightforward. As home becomes more democratic, the policy-maker has more to gain from enhancing social welfare. Social welfare is always enhanced by cooperation, and hence the policy-maker does relatively better (at the margin).

What about the incentive to defect? The gains from defection are $g_D(\Psi) = G(t^G(\Psi), \tau^C, \Psi) - G(t^C, \tau^C, \Psi)$. Define $g(\Psi, \Psi^*) = g_C(\Psi, \Psi^*) - g_D(\Psi)$, the difference between sticking to the cooperative regime and defecting once, and being punished thereafter.

Proposition 3 *For any pair of cooperative tariffs, the difference between the gains (for the home executive) from cooperating and the gains from defecting grow with the degree of democracy at home; i.e. $\frac{\partial}{\partial \Psi} g(\Psi, \Psi^*) > 0$*

As the measure of democracy rises - in this instance, accountability to the will of the society at large - governments have more to gain from acceding to free trade agreements. There is an increased, unilateral willingness to be more cooperative in the international environment.⁶

We have focussed here on the accountability of the executive to the will of the electorate at large, and found a unilateral incentive to liberalize and a more accommodating position in the international negotiating environment. Do we find a similar sort of result when we shift our attention from the role of elections in a democracy to the effect of separating powers over policy to multiple branches of government? We find that democracies are more willing to provide concessions to other democracies when bargaining over mutual tariff reductions. This is the focus of the next section.

6 Institutions: Separation of Powers

An important aspect of democracy is the division of authority (or authority is jointly held) across branches of government. In the trade policy realm, the legislature usually delegates authority to the executive (a prime minister or president) to negotiate with other states over trade issues. This of course gives the executive some authority or discretion to negotiate over trade policy at the international bargaining table. Two possible roles for the legislature emerge. A legislature may be required to *ratify* any proposal before it can be implemented. Such a ratification process is characteristic of democracies, and occurs in both presidential and parliamentary systems.

⁶A similar result is established in Milner, Mansfield and Rosendorff (1999), where the executive is purely extractive, the election is modeled explicitly as a lottery, all in the context of periodic aggregate shocks. In that model, the regime is characterised by the sensitivity of the executive to the outcome of the lottery. In that model, the international agreement limits the extractive possibilities of the executive, but provides some insurance against being evicted from office in periods of bad aggregate economic conditions. Since democrats are more responsive to the electoral process, democrats are more willing to “buy” this insurance, and are hence more willing to cooperate internationally.

Ratification is often prior to the negotiation of the agreement in parliamentary systems – the prime minister may have to cobble together an acceptable policy with the legislative majority before taking office, and any incentive to defect from such an agreement is circumscribed by the parliaments’ ability to pass a motion of no-confidence in the government. In other instances, a trade agreement may require implementing legislation before it can be adopted; in others, a referendum or plebiscite may be necessary. In presidential systems, formal ratification procedures are required. Such a structure balances authority across institutions of government, and has an effect on the degree of liberalization that is feasible.

The second role for the legislature is that it takes responsibility for implementation of trade policy when international negotiations have *broken down*. In the US, the legislature is ultimately responsible for international agreements under the constitution; in parliamentary systems, an act of parliament can determine the level of trade barriers if necessary.

While these two roles of the legislature are somewhat related (after ratification failure, the legislature can request a renegotiation by the executive, or alternatively adopt a unilateral policy), we focus here on the effect of ultimate responsibility lying with a relatively protectionist legislature. The role of ratification has been studied in Mansfield et al (2000).

We establish in this section that democracies are more willing to offer “concessions” - offer to lower tariffs - when it is bargaining with another democracy.

For the purposes of our model, consider now a second player in any democracy, which we call the legislature, (L), in addition to the executive, labelled E . We assume, following Rogowski (1987) that since members of the legislature represent smaller constituencies than the executive (who is responsive to a national constituency), it is easier for special interests to influence preferences of their representatives. Representatives from smaller districts are unable to be insulated from the protectionist interests of groups well-represented in their districts. The effect is that for members of the legislature generally, and for the median member particularly, the $\Psi^E > \Psi^L$. The effect of this assumption is to make the legislature more protectionist than the executive.

For the purposes of the analysis, democracies at home and abroad are symmetric, with

$$\Psi^E = \Psi^{E^*} > \Psi^L = \Psi^{L^*}. \tag{3}$$

In an autocracy, there is no division of power. We do make a restriction about the nature of representation under autocracy: autocrats do not usually weight the interests of social welfare very highly - they are not very responsive to the interests of the average member of society since they are not reined in by elections or any other form of citizen control⁷. Hence we assume in what follows that the (foreign) autocrat is at least as protectionist as the most liberal player - that is an autocrat (A^*) is never more liberal than the executive: $\Psi^E \geq \Psi^{A^*}$. To bias the model against our intended result (that democrats concede more when negotiating with other democrats), we will prove the most difficult case where autocrats have preferences that are just as liberal as democratic executives. This way, the political institutions are shown to affect policies, and that the results are not driven by preferences. I.e. we examine the case where $\Psi^E = \Psi^{A^*}$.

We adopt a bargaining approach. Consider first the two democrats. The pair of democratic executives E and E^* must bargain to an agreement. Should E and E^* fail to agree, the Nash equilibrium pair of tariffs to the non-cooperative tariff setting game played by the two legislatures is

⁷Olsen (1993) argues that “dictators” are more likely to excessively extract “takings” from the productive assets within their domain than are Kantian republics.

implemented. That is, failure by the executives to negotiate successfully leads to the pair (t^L, τ^{L*}) being implemented, yielding threat point payoffs of $g^{EE^*} = (G^E(t^L, \tau^{L*}, \Psi^E), G^{E^*}(t^L, \tau^{L*}, \Psi^{E^*}))$. We are faced with a standard bargaining problem. Given the symmetry of the two countries ($\Psi^E = \Psi^{E^*}$), we apply the egalitarian solution (Mas-Colell et al. 1995 p841), and require that the gains from cooperation be split equally among the agents⁸. In figure 1 below, where the utility possibility frontier is indicated, the bargaining solution lies on the 45° line at EE^* .

FIGURE 1 (Two Democrats) about here.

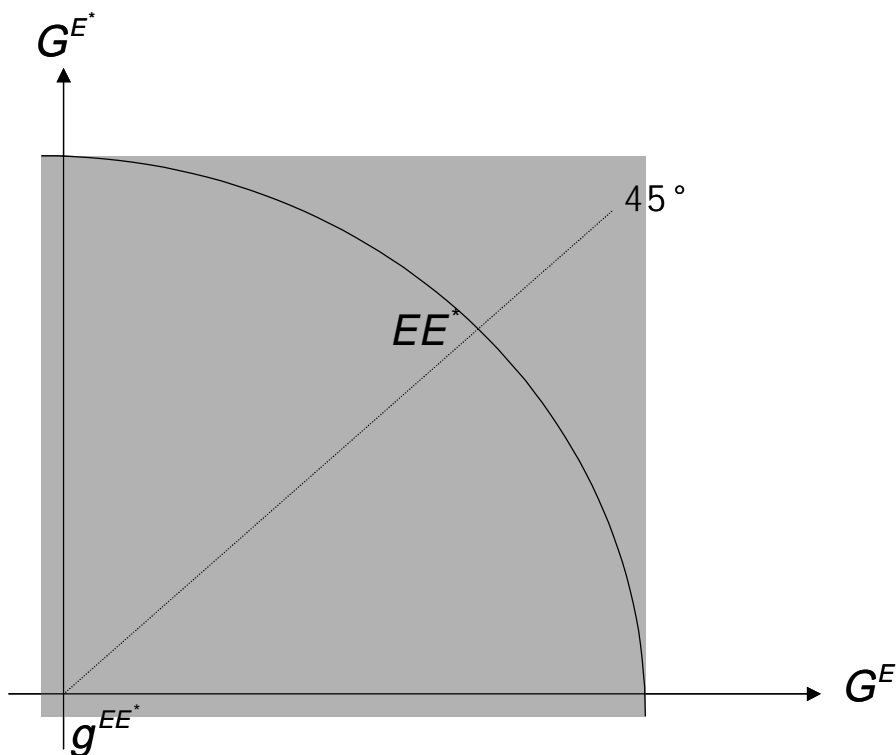


Figure 1: Figure 1: Two Democracies Bargain to EE^*

The mixed pair (one autocrat and one democrat) are aware that any failure to successfully negotiate a deal will mean that the democratic legislature and the autocrat set tariffs non-cooperatively. If negotiations breakdown, the foreign negotiator A^* will implement its dominant strategy τ^{A^*} in the non-cooperative game, while the home legislature behaves similarly, and adopts t^L . The threat point payoffs then would be $g^{EA^*} = (G^E(t^L, \tau^{A^*}, \Psi^E), G^{A^*}(t^L, \tau^{A^*}, \Psi^{A^*}))$. For the foreign autocrat, the breakdown outcome $G^{A^*}(t^L, \tau^{A^*}, \Psi^{A^*})$ is better than had it been a democracy and found itself having to accept the tariff set by its (more protectionist) legislature instead. That is $G^{E^*}(t^L, \tau^{L*}, \Psi^{E^*}) < G^{A^*}(t^L, \tau^{A^*}, \Psi^{A^*})$. Hence g^{EA^*} lies to the right of g^{EE^*} . The outcome now is at EA^* .

FIGURE 2 (the mixed case) about here.

⁸Mas-Colell et al. (1995) note that this solution to the bargaining problem fails to be independent of the utility units.

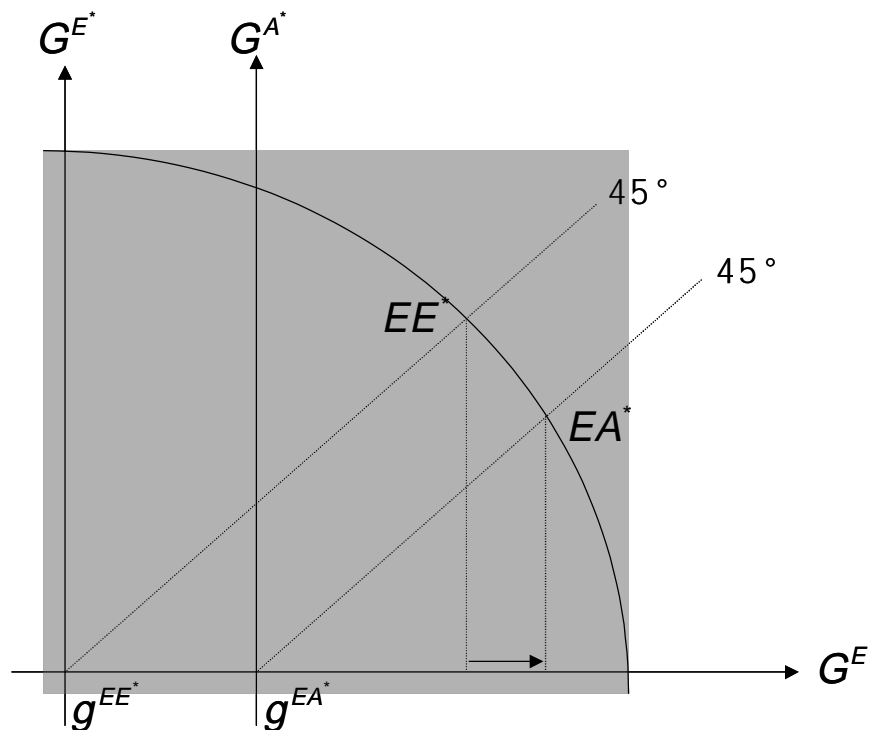


Figure 2: Figure 2: The mixed pair bargain to EA^* .

Let us now compare the two cases. Notice that relative to the jointly democratic case, the payoff to the democratic state is higher and the payoff to the foreign state is lower when foreign is autocratic. Either the democracy's tariffs have risen, the autocrat's have fallen or both. In either case, we can describe the democracy as becoming less willing to offer concessions during bargaining, and more able to extract greater concessions out of its (non-democratic) bargaining partners

The effect of adding a protectionist legislature to share tariff setting authority leads to a higher payoff level for the executive than if no legislature is present. Moreover, the harder line - the more protectionist - is the legislature (the larger is Ψ^L) the better is the deal that the democratic executive can extract.

The result here is consistent with a conjecture of Schelling's: a hard-line legislature can be used by the executive branch to extract an international agreement more in the home executive's interest⁹ (Schelling 1960, 28-29).

When each country has a protectionist legislature to satisfy, both bargainers are willing to compromise; when one is an autocrat, it has no hard-line legislature to point to use to extract a concession from the democracy. The autocrat has less bargaining power as a result.

Summarizing the finding of this section, we have

⁹The Schelling conjecture is investigated in some detail in Milner and Rosendorff (1997) in a spatial model of divided government and international negotiations. The conjecture is shown to hold only for a limited degree of difference in the underlying preferences of the legislature and the executive. Of course, this is the same bargaining strategy used by car dealers when the dealership manager must approve any deal struck by a showroom salesperson.

Proposition 4 *A democracy offers fewer concessions in trade barrier negotiations to an autocracy than to another democracy.*

7 Stylized Facts / Empirical Evidence

In the previous sections the democracies are shown to be more willing to offer concessions in trade barrier negotiations to other democracies than to non-democracies, and the role of the protectionist legislature was pivotal. In the section before, executives held more accountable to the will of the electorate were shown to be more likely to unilaterally liberalize and were more cooperative internationally, and role of the election was key. In both cases, the institutional structure of government decision-making has an influence over the trade barrier levels chosen, and the willingness to engage in cooperative trade policy.

In this section I report some empirical results drawn from Bliss and Russett (1998), Mansfield et al. (2000, 1999), and Remmer (1998), with the purpose of providing some evidence in support of the hypotheses ventured above.

The general empirical approach is to investigate the role of regime type after the standard explanatory variables for the volume of trade are controlled for. In this approach, a standard gravity model of trade is adopted to capture the effects of the “economic” variables. GDPs, populations and distance are usually included in the regressions: higher GDPs, larger populations and smaller distances are all expected to lead to higher trade volumes.¹⁰ Crucial to these analyses is that an appropriate measure of regime is used. In particular, it is crucial that the measures used capture to some degree at least the role of elections and separation of powers. The Polity III data do a relatively good job.

7.1 Polity III

The Polity III dataset of Jagers and Gurr (1995) on regime type combines data on 5 dimensions that address the institutional differences between democracies and autocracies. I have divided these 5 categories into two sets, one highlighting accountability to the electorate, and the other, institutions:

1. Accountability to the Electorate: Consent

- the competitiveness of the process for selecting a country’s chief executive
- the openness of the process
- the competitiveness of political participation within a country

2. Institutions and Restraint

- the extent to which institutional constraints limit the chief executive’s decision-making authority

¹⁰The gravity equation has been highly successful in explaining volumes of trade flows between countries; moreover, the model is consistent with a broad set of trade-theoretic models. See Deardorff (1984), for instance.

- the degree to which binding rules govern participation in the political process.

Jagers and Gurr score each country-year pair along each of these dimensions, and generate 2 aggregate scores - one estimates the level of democracy, the other, autocracy, each on a 0 to 10 point scale. Usually the difference between the democratic score and the autocratic score is taken to establish a continuous regime score on a 21 point scale, running from -10 to 10 . While it is clear that these measures do capture, to some degree, the institutional features of interest, they are far from being a complete measure of the complex condition known as “democracy”. For instance, they omit the “freedoms” we usually associate with democracy - press, association, speech etc. They also omit what might be a crucial determinant of commercial realtions, the role of the the rule of law, independent judicuairy, protection of private property, freedom from arbitrary expropriation etc. Nevertheless, the theoretical approach is to focus not on legal protections, but rather on instituional features of government in order to investigate their effects on trade policy. No doubt these other aspects of democracy may act to strengthen the willingness of policymakers to reduce trade barriers - this is a matter for better data and future research.

7.2 Bliss and Russet (1998): Democracy Matters.

Bliss and Russet (BR) (1998) consider 882 pairs of states for each year between 1962 and 1989. For each pair the (log of the) sum of exports and imports between them were regressed on a measure of the regime score of the least democratic state in the pair, among other variables. BR consider only the score of the least democratic of the pair, on the belief that it is the least democratic state that acts as the “weak link” – the least democratic partner would most influence relations between the states.

The other variables BR include are a measure of language differences, the existence of pre-existing militarized disputes, whether the countries were militarily allied and whether they country had an open trade stance, in addition to the gravity variables. In pooled time series estimations, BR find that democracy is significantly and positively related to trade volume.

7.3 Mansfield et al. (2000): Joint Democracy Matters

These results are confirmed by similar set of regressions undertaken by Mansfield et al. (2000), where the volume of trade, once again controlled for by the gravity variables, is significantly affected by the regime characteristics of both countries in the pair. Using the same measure of democracy for each state as BR, a country was labelled a democracy if its score was above 6, and autocracy if its score was below -6 . The volume of trade was regressed against two dummy variables (the first would take the value of 1 when the pair was mixed – one democracy and one autocracy, and the second would take on a value of 1 if the pair were jointly autocratic). The omitted category was then the democratic pair, and the coefficients for the two dummies would then be interpreted relative to the omitted category. The sample is all pairs of states listed as members of the interstate system by the Correlates of War Project (Singer and Small, 1994) for 1960, 1965, 1970, 1975, 1980, 1985 and 1990. Again pooled time series regressions were estimated.

The coefficient on the mixed case was negative and significant – mixed pairs are likely to have significantly less trade between them than are joint democracies. Mixed dyads were predicted to

engage roughly in 15% to 20% less trade than those composed of two democracies. The results for pairs of autocracies were not significant, however.

This result is shown to be robust to alternative specifications of the thresholds for democracy and autocracy.

7.4 Remmer (1998): Economic Cooperation

Instead of trade flows on the left hand side, consider the effects of regime type on the likelihood of a state signing an economic agreement with a trading partner. Such an agreement may be a tariff reduction agreement, or any other deal that facilitates freer trade. This sidesteps the problems of endogeneity in the regressions mentioned above: trade volumes are affected by GDP, and GDP is affected by the gains from trade. In order to avoid this simultaneity problem, consider instead the willingness of a state to sign an international trade agreement, or more precisely to join a preferential trading area (PTA). In order to be GATT-consistent, these PTAs pledge to substantially eliminate barriers to trade between the signatories.

Remmer investigates the countries of the Mercosur and finds that democracy did lead to more economic agreements, even before the Mercosur was founded. She runs logistic regressions, running the number of economic agreements signed between a pair of Mercosur countries in a given year, against measures of democracy. Her dichotomous regime variable is different from, but highly correlated with the Polity dataset used in the rest of the studies cited here. She finds some support from the proposition that democracy promotes cooperation – democratic pairs are several times more likely to enter into economic agreements with one another than other pairs of states.

7.5 Mansfield et al.(1999): Democracy and PTAs

In a similar investigation, Mansfield et al. (1999) study the effect of regime type on the willingness of a broad set of states to enter into common PTA¹¹. The unit of analysis is the dyad, and the dependent variable is a dummy that takes the value 1 when both members of the dyad are signatories to a common PTA. Again, the Jagers and Gurr (1995) regime scores are used, and as before the 21 point scale generated by the difference between the democracy score and the autocracy score for each state is used. The sum of the regime scores for each country in the dyad is then computed. This variable runs from -20 to 20 , with larger scores indicating that the pair of countries is more democratic. Again, we focus on post-World War II data, and all pairs of countries for which data is available for each 5 year period between 1960 and 1990 are examined. The data is pooled across time and country-pairs and a logistic regression is conducted, and the significance tests are based on Huber standard errors (appropriate for time-series cross section models with binary dependent variables). The estimate of the democratic score is positive and significant at the 0.1% level.

¹¹While willingness to sign a common PTA is evidence of interstate cooperation, it is not immediate that a PTA is welfare improving – PTAs are discriminatory (they remove barriers only for members), and appear often to be motivated, by trade-diversion rather than trade-creation (Bhagwati 1993). The empirical investigations here address trade within the dyad, and since the model that follows is one of a two-country world, the trade diversionary effects of the PTA are of lesser importance given the question at hand.

Mansfield et al. (1999) also establish that the result is robust to alternative specifications: in one case they replace the sum of the two regime scores with the individual regime scores, and the estimates are positive and significant; they also use an alternative dataset with fewer countries but annual data, and once again, democratic dyads are more likely to establish PTAs than mixed pairs, or pairs of autocracies.

Using the estimates of the regression, the authors predict the probability of a PTA forming in any year across the possible dyads. Two democracies are more than double as likely to sign a PTA as are a mixed pair, which in turn are more than double as likely to cooperate in a PTA as two autocracies.

8 Conclusion

Regime type affects the volume of trade between countries, and their willingness to enter into free(r) trading arrangements with its trading partners. There is also evidence to suggest that democracies cooperate more generally in the international economic arena. This increased willingness to cooperate suggests that increased democratization will lead to more cooperation and less conflict in the world (trading) system.

The particular aspects of democracy that appear to be important are two: the effect of dividing authority over trade policy across different arms of government, each with slightly different sources of electoral power and influence; the second is the role of elections in maintaining accountability of policy-makers to the society at large. Divided government actually increases the bargaining power of the executives at the international bargaining table; accountability lessens the policy-maker's incentive to divert wealth to special interests and to lower the deadweight costs of such redistribution.

Other aspects of democracy are no doubt important: the contestability of elections, the free flow of information, the freedom to associate and to lobby etc. These no doubt influence policy-making at some level. Similarly, aspects of autocracies are missing here – the role of the military and political oppression, for example. Moreover, there are some aspects of democracy that may appear to be undesirable with respect to well functioning markets: too much lobbying by interest groups can lead to much wasted, unproductive resources that are merely dissipated by the lobbying effort, and have almost no effect on the policymakers – demoscclerosis (Bhagwati 1982 , Lohmann 1996). Similarly, there may be benefits from autocracy: a benevolent dictator may be insulated from pressures to protect or redistribute.

Comparative advantage and factor specificity are important in determining the pattern of trade and protection. But institutions matter too. Comparative advantage, factor endowments and their specificity combine to determine who gains and loses from trade and barriers to trade. It is the nature of the political process that determines which of the affected sectors (the gainers or losers) are successful in the policy-making arena.¹²

This work is not intended to be a complete description of the effect of democracy on trade; rather it represents the first steps in theorizing the connections between regime type and redis-

¹²There is also likely to be interesting variation within the class of “democracies”. For instance, more majoritarian systems, with low costs of organizing will reward organized, mobile, import-competing factors, while less majoritarian systems with high costs of organizing will reward smaller groups engaged in active lobbying (Rogowski 1989 and Alt and Gilligan 1994).

tributational policy; the first steps in understanding the economic benefits of democracy.

9 Appendix

9.1 Proofs

Proof of Proposition 1. Totally differentiating the first order condition, $0 = \frac{\partial}{\partial t} G_t dt + \frac{\partial}{\partial \Psi} G_t d\Psi$ or $\frac{\partial t^G}{\partial \Psi} = -\frac{G_{t\Psi}}{G_{tt}}$. Now $G_{tt} < 0$ (the second order condition) and $G_{t\Psi} = W_t$. The Nash tariff to this game is larger than that which maximizes W (i.e. $t^G > t^W$); hence $W_t < 0$ when evaluated at (t^G, τ^G) . Then $\frac{\partial t^G}{\partial \Psi} < 0$. The proof is similar for $\frac{\partial t^G}{\partial \Psi} > 0$. ■

Proof of Proposition 2. $\frac{\partial}{\partial \Psi} g_C(\Psi, \Psi^*) = \frac{\partial}{\partial \Psi} [G(t^C, \tau^C, \Psi) - G(t^G(\Psi), \tau^G(\Psi^*), \Psi)] = W(t^C, \tau^C) - (G_t \frac{\partial t^G}{\partial \Psi} + W(t^G(\Psi), \tau^G(\Psi^*)))$. Now $G_t = 0$ when evaluated at $(t^G(\Psi), \tau^G(\Psi^*))$. Hence $\frac{\partial}{\partial \Psi} g(\Psi, \Psi^*) = W(t^C, \tau^C) - W(t^G(\Psi), \tau^G(\Psi^*))$. Now $W(t^C, \tau^C) - W(t^W, \tau^W) > 0$ since cooperation dominates the Nash equilibrium to the optimal tariff setting game (in this symmetric world). Now $t^W < t^G(\Psi)$ and $\tau^W < \tau^G(\Psi^*)$ for all values of Ψ, Ψ^* ; then home welfare declines as home tariff rises above the optimal tariff ($W_t < 0$ for all $t > t^W$) and home welfare declines as the foreign tariff rises ($W_\tau = p'_x(\tau)(\beta - x(\tau)) < 0$ for all $\tau > 0$). Hence $W(t^C, \tau^C) - W(t^G(\Psi), \tau^G(\Psi^*)) > W(t^C, \tau^C) - W(t^W, \tau^W) > 0$. ■

Proof of Proposition 3. $\frac{\partial}{\partial \Psi} g(\Psi, \Psi^*) = \frac{\partial}{\partial \Psi} g_C(\Psi, \Psi^*) - \frac{\partial}{\partial \Psi} g_D(\Psi)$. $\frac{\partial}{\partial \Psi} g_C(\Psi, \Psi^*) > 0$ from proposition 2 and $\frac{\partial}{\partial \Psi} g_D(\Psi) = \frac{\partial}{\partial \Psi} G(t^G(\Psi), \tau^C, \Psi) = W(t^G(\Psi), \tau^C) - W(t^C, \tau^C)$ from the proof of Lemma 1. Now $W(t^G(\Psi), \tau^C) - W(t^C, \tau^C) < 0$, since welfare is reduced by a rise in tariffs from the cooperative level - fix. Hence $\frac{\partial}{\partial \Psi} g(\Psi, \Psi^*) > 0$ ■

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