

Explaining Gradualism in Trade Liberalization: A Political Economy Approach

Kristy Buzard
Syracuse University
kbuzard@syr.edu

May 17, 2017

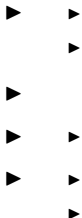
The Questions

1.

2. T



Institutional Detail



Preview of Results

The

- ▶ I
- ▶ D
- ▶ I

Related Literature

Protection for Sale: Grossman & Helpman (1994)

- ▶ Empirics: Goldberg & Maggi (1999), Gawande & Bandyopadhyay (2000), Mitra, Thomakos, & Ulubasoglu (2002)
- ▶ Mitra, Thomakos, & Ulubasoglu (2006), Bombardini (2008)
- ▶ Trade Wars and Trade Talks: Grossman & Helpman (1995)

Timeline

Taking trade agreement tariff and anti-dumping duties as given,

1. Import-competing firms lobby DOC/ITC to renew AD duties
2. Uncertainty is resolved
3. DOC/ITC decide whether to renew duties
4. Private actors make production, consumption decisions

Economy

- ▶ Two countries: home and foreign (*)
- ▶ Separable in three goods: X and Y (traded) and numeraire
- ▶ Demand identical for both goods in both countries
- ▶ Supply: $Q_X^*(P_X) > Q_X(P_X) \forall P_X$; symmetric for Y
 - ▶ Home net importer of X, net exporter of Y

Home levies τ on X, Foreign levies τ^* on Y

- ▶ $P_X = P_X^W + \tau$ and $\pi_X(P_X)$ increasing in τ

Non-tradable specific factors motivates political activity

Political Structure

In Home country (foreign is passive):

- ▶ Dept. of Commerce
 - ▶ Can
 - ▶ Susceptible
 - ▶ Modeled
- ▶ A Single Lobby
 - ▶ Represents import-competing sector, X

“Government”

Decision determined by complex process. Reduced form:

$$W_G = CS_X(\tau) + \gamma(e, \theta)\pi_X(\tau) + CS_Y(\tau^*) + \pi_Y(\tau^*) + TR(\tau)$$

- ▶ $CS_i(\cdot)$: consumer surplus
- ▶ $\pi_X(\tau)$: profits of import-competing industry
- ▶ $\pi_Y(\tau^*)$: profits of exporting industry
- ▶ $TR(\tau)$: tariff revenue

“Government”

$$W_G = CS_X(\tau) + \gamma(e, \theta)\pi_X(\tau) + CS_Y(\tau^*) + \pi_Y(\tau^*) + TR(\tau)$$

- ▶ $\gamma(e, \theta)$: weight on import-competing industry profits
 - ▶ e : lobbying effort
 - ▶ θ : uncertain element in G 's preferences

Assumption 1

1. $\gamma(e, \theta)$ is increasing and concave in e for all $\theta \in \Theta$.

Lobby

Lobby chooses effort to maximize:

$$\{1 - \Pr [\text{AD Renewal}]\} \pi(\tau^a) + \Pr [\text{AD Renewal}] \pi(\tau^{ad}) - e$$

- ▶ e : Lobbying effort
- ▶ τ^a : home import tariff under trade agreement
- ▶ τ^{ad} : home import tariff equivalent under anti-dumping duties

Timeline

1. Import-competing firms lobby ...
2. Uncertainty is resolved
3. **Government ...**
4. Private actors make production, consumption decisions

Why uncertainty?

Government

- ▶ Renews AD duties if G prefers τ^{ad} to τ^a

Lobby

- ▶ Given (τ^a, τ^{*a}) and τ^{ad} , lobby knows what e is required to induce renewal
- ▶ Lobby pays this e if: $\pi(\tau^{ad}) - e > \pi(\tau^a)$

In Equilibrium

- ▶ Firms only put forth effort when they know renewal will be granted

What's this uncertainty about?

Lobby

- ▶ But
- ▶ But

So what's the uncertainty about?

- ▶ Probability foreign will retaliate or initiate dispute (indirect)
- ▶ G's valuation of harm to industry, e.g. how politically important is industry?

Timeline

1. Import-competing firms lobby DOC/ITC to renew AD duties
2. Uncertainty is resolved
3. DOC/ITC decide whether to renew duties
4. Private actors make production, consumption decisions

Government

G renews AD duties if its utility is higher under AD duties than trade agreement tariff

- ▶ Preferences are ex-ante uncertain through θ
- ▶ When does G renew AD duties?

$b(e, \tau^a, \tau^{ad})$: probability G prefers τ^{ad} to τ^a for a given effort level e

Lemma 1

The probability that G renews AD duties is increasing and concave in lobbying effort e (i.e. $\frac{\partial b}{\partial e} \geq 0$, $\frac{\partial^2 b}{\partial e^2} \leq 0$).

Home's Trade Agreement Tariff

Result 1

The total probability that G renews AD duties is decreasing in the home trade agreement tariff τ^a .

There's both a direct effect and an indirect effect through lobby's incentives, and both are negative:

$$\frac{\partial b}{\partial e} \frac{\partial e}{\partial \tau^a} + \frac{\partial b}{\partial \tau^a}$$

Foreign's Trade Agreement Tariff

Assuming trading partner does not retaliate

- ▶ No difference in foreign tariff under AD duty and τ^a . So no effect on G's incentives (either direct or indirect)

Result 2

The total probability that G renews AD duties is unaffected by foreign's trade agreement tariff τ^a .

Profitability of Import-Competing Sector

NOTE: this is not quite right, but some version of it will be
Assume $\pi(\cdot)$ shifts up uniformly for all τ .

- ▶ Convexity of profits \Rightarrow G's marginal benefit of providing protection goes up
- ▶ Convexity of profits \Rightarrow return from lobbying increases

Result 3

The total probability that G renews AD duties is increasing in the profitability of the import-competing sector.

Exogenous Shifts in $\gamma(e, \theta)$

Assume $\gamma(\cdot, \cdot)$ shifts up uniformly for all (e, θ) pairs.

- ▶ G gives more weight to firms' benefit
- ▶ Lobbying incentives are unchanged

Result 3

The total probability that G renews AD duties increases when the weighting function shifts up exogenously and uniformly.

Protection from AD Duties

When τ^{ad} increases, two effects on G's incentives:

- ▶ Social welfare decreases, pushes for decrease in renewal probability
- ▶ (Over-weighted) import-competing profits increase, pushes for increase in renewal probability

Indirect effect is of same sign as direct effect

- ▶ When τ^{ad} (i.e. close to social optimum), second effect dominates \Rightarrow increase in renewal probability
- ▶ Effect may be concave

Future Work

- ▶ Comparative static
- ▶ Empirical
- ▶ Extend model