Endogenous Politics and the Design of Trade Institutions

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The Questions

1. When is endogenizing political pressure important for answering optimal design questions?
   - Exogenous vs. endogenous politics
2. When do governments want to use trade agreements to manipulate domestic lobbying incentives?
   - Government objective function

Political Economy of Trade Institutions

With a few exceptions, TA design literature has taken political economy forces to be exogenous. I:

- endogenize politics into a standard model for studying TA design questions
- carefully distinguish between dynamics induced by exogenous and endogenous politics for tariff caps with escape clause
- examine escape clause design when both exogenous and endogenous forces are present

Results

- Show that TAs may be used to manipulate domestic political actors (no long-run distortions)
- Escape clause outcomes are very different with endogenous politics
- Demonstrate that (standard, theoretical) escape clause can't work in the presence of endogenous political pressure
  - Points to real-world design of WTO Agreement on Safeguards
  - May explain why escape clause has fallen out of use

Economy

Two countries: home and foreign (*)

- Separable in two goods: X and Y
  - P_i: home price of good i
  - P_i^*: foreign price of good i
- Demand identical for both goods in both countries
  - $D(P_i) = 1 - P_i$
- Supply: $Q_X^*(P_X) > Q_X(P_X)\ \forall P_X$; symmetric for Y
  - $Q_X(P_X) = \frac{P_X}{2}$; $Q_Y(P_Y) = P_Y$
  - Home net importer of X, net exporter of Y

Policy and Politics

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

- $P_X = P_X^W + \tau$ increasing in τ
- $\pi_X(P_X)$ increasing in P_X, therefore also τ

Non-tradable specific factors motivate political activity

Timeline

Each period:

1. **Trade Agreement Formed**
   i. Governments set trade policy in international agreement
2. **Domestic Politics Played Out**
   i. Exogenous shocks are realized AND/OR
   ii. Import-competing industry lobbies government for protection
3. **Tariffs are Applied**
   i. Given political pressure, governments choose applied tariff levels

Applied Tariff Decision

Baldwin-style government objective function:

$$W = CS_X(\tau) + \gamma(s, e)\pi_X(\tau) + CS_Y(\tau^*) + \pi_Y(\tau^*) + TR(\tau) - e$$

- Standard *except* for s and e:
  - s: exogenous shock
  - e: lobbying effort
- Optimal applied tariff is a function of $\gamma(s, e)$
  - Ignores foreign welfare
  - Takes into account trade agreement enforcement

Domestic Political Pressure

Two potential sources

1. Exogenous shocks
   - Shock directly to γ as in Bagwell & Staiger (2005): γ, γ^* with CDF $H(\gamma)$ on support $\left[\underline{\gamma}, \overline{\gamma}\right]$; or
   - Can take γ as a function of s: $\gamma(s)$
2. Endogenous effort choice of lobby, e
   - Lobby chooses effort to maximize profits, $\pi(\cdot)$, net of lobbying effort, e
   - Call lobby's optimal effort choice e^L

$$e^L = \max_e \pi(\tau(\gamma(e))) - e$$

Trade Agreement Negotiation

Model as Nash bargain between the two countries' governments

- Maximize joint political welfare
- Disagreement point: non-cooperative outcome

Once agreement is set, cooperation enforced by repeated-game punishments conditioned on history, history + DSB signal

Restraining Political Pressure through TAs

- Will TA be used to discourage lobbying? Depends on how gov't welfare varies in γ
- With standard Baldwin-style objective function, welfare always increases with γ

$$W = CS_X(\tau) + \gamma\pi_X(\tau) + CS_Y(\tau^*) + \pi_Y(\tau^*) + TR(\tau)$$

  - Isomorphic to 'Protection for Sale' objective function
- When subtracting lobbying effort, welfare no longer monotonic in γ

Escape Clause with Exogenous Politics

When γ is *only* exogenous (Bagwell & Staiger 2005):

- Simple escape clause: add a second (higher) negotiated weak binding
  - Escape clause is designed to allow higher applied tariff when realization of γ is high
- Improves political efficiency
- Can improve self-enforcement

Escape Clause with Endogenous Politics

When γ is *only* endogenous:

- Benefit of escape clause from exogenous case is gone
- Assuming lower binding is set to maximize political welfare, escape clause encourages inefficiently high lobbying effort / protection

If γ is only endogenous, escape clause causes problems, provides no benefits

When the world is more complicated...

Now suppose political pressure is a result of both endogenous and exogenous forces (i.e. $\gamma(s, e)$):

- Want escape clause to deal with exogenous shock
- But endogenous part $\Rightarrow$ lobbying incentives make it hard to implement escape clause

Ineffectiveness of Political Criterion for Escape Clause

Assume $\gamma(s, e) = \gamma(s) + \gamma(e)$. If an escape clause conditions on $\gamma(s, e)$ and $\gamma(s^L) < \gamma(s^H) < \gamma(e^L)$, the lower "normal" tariff binding will never be applied.

When the world is more complicated... (con't)

- To make escape clause work, can't use γ
  - Need signal of shock that is not influenced by endogenous pressure
- Can condition directly on s
  - This seems to be what the WTO actually *does*

An Escape Clause for Endogenous Politics

Assume a WTO-like set up: gov't can choose between τ^a, 'escape' tariff $\tau(s)$, or politically-optimal τ matched to $\gamma(s, e)$

- Assume s verifiable, so no punishment for $\tau(s)$
- Punishment for $\tau(\gamma(s, e)) > \tau(s)$

Optimal τ^a may lead government to apply $\tau(\gamma(s, e))$

- When this happens, it leads to dispute, not valid escape
- Otherwise, no extra rent-seeking is encouraged

May explain why escape clause has fallen out of use

Conclusion

Taking into account endogenous political forces alongside exogenous ones...

- helps explain the structure and enforcement of the WTO Safeguards measure
- can help us think about optimal design of trading insitutions

Future Work

- Application of framework to other design questions
- Interactions between $\gamma(s)$ and $\gamma(e)$
- Choice between protective measures over time