Endogenous Politics and the Design of Trade Institutions

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Overview



Preview

The Questions

1. Can trade agreements (TAs) be used to manipulate domestic lobbying incentives?



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 - ► Government objective function



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 - ► Government objective function
- 2. What is the optimal design of various trade agreement properties?
 - ► Exogenous vs. endogenous politics



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Political Economy of Trade Institutions



Political Economy of Trade Institutions



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



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 - ▶ use this to examine gov't objective



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 - ▶ base case with tariff caps
 - ► tariff caps with escape clause
- ▶ examine escape clause design when both exogenous and endogenous forces are present



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Results

► TAs may be used to manipulate domestic political actors (even with no long-run distortions)



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- ▶ 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



Economic and Political Structure

Economy



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Economy

Two countries: home and foreign (*)

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 - $P = Q_X(P_X) = \frac{P_X}{2}; Q_Y(P_Y) = P_Y$
 - ▶ Home net importer of X, net exporter of Y



Economic and Political Structure

Policy and Politics



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Policy and Politics

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



Model

Policy and Politics

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Non-tradable specific factors motivate political activity



Economic and Political Structure

Timeline



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Each period:

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 - i. Exogenous shocks are realized AND/OR
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- 3. Tariffs are Applied
 - Given political pressure, governments choose applied tariff levels



Applied Tariff Decision



Applied Tariff Decision



Model ○○○ •○○

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



Applied Tariff Decision

Model ○○○ ●○○

Baldwin-style government objective function:

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▶ Standard *except* weight on import-competing profits:



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- \triangleright Assume γ , γ^* is private info of each government



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- 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

$$e^{L} = \max_{e} \pi(\tau(\gamma(e))) - e$$



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





Role and Design of TAs

Design of Trade Agreements

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Role of Trade Agreements: TOT Externality



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 - ► Now take into account impact on foreign welfare
 - ► Internalize TOT externality ⇒ free trade



Role of Trade Agreements: TOT Externality



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Grossman and Helpman (1995)

► Add endogenous politics



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- ▶ Now in "Trade War": two reasons for positive tariff
 - ► TOT externality + pressure from import competing lobby
- ► Trade agreement: only internalizes TOT externality





Role of Trade Agreements: Domestic Commitment

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 - ▶ Here distortion is wasted resources in lobby formation



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- ▶ With standard Baldwin-style objective function, welfare always increases with γ

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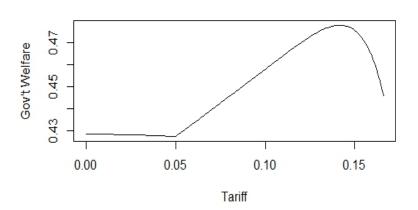
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- ▶ If lobbying effort subtracted as cost from W, welfare no longer monotonic in γ
 - ▶ If weights must sum to 1, welfare also not monotonic in γ







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- ▶ Achieve same results with simpler model
- ► Endogenous politics in a wider range of questions



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- ▶ Achieve same results with simpler model
- ► Endogenous politics in a wider range of questions
- ► Can have both endogenous / exogenous at the same time
 - \Rightarrow unify the exogenous and endogenous politics literatures



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Must set tariff at or below specified level (aka weak binding)

 $ightharpoonup \gamma(s)$, i.e. exogenous: Negotiated weak bindings (a) are higher than those gov'ts would choose if they instead negotiated strong bindings and (b) imply that governments with low realizations of γ set their applied tariffs strictly below the bound level.



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- $ightharpoonup \gamma(e)$, i.e. endogenous: Governments will not set applied tariffs strictly below the bound level. They may use the weak tariff binding either to encourage and/or restrain endogenous political pressure.



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Tariff Caps with Self Enforcement

▶ γ exogenous (Bagwell & Staiger 2005): if governments patient enough (discount factor δ high enough), optimal externally-enforced weak binding can be self-enforced



- $ightharpoonup \gamma$ exogenous (Bagwell & Staiger 2005): if governments patient enough (discount factor δ high enough), optimal externally-enforced weak binding can be self-enforced
- γ endogenous: optimal externally-enforced weak binding may not be self-enforcing



- $ightharpoonup \gamma$ exogenous (Bagwell & Staiger 2005): if governments patient enough (discount factor δ high enough), optimal externally-enforced weak binding can be self-enforced
- $ightharpoonup \gamma$ endogenous: optimal externally-enforced weak binding may not be self-enforcing
 - ▶ Problem: lobby is an additional repeated-game player



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 - ▶ Problem: lobby is an additional repeated-game player
 - Lobby's incentive constraint is harder to satisfy as δ increases



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Executives: set lowest τ^a that makes paying \overline{e}_b unprofitable and satisfies legislature's condition



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Executives: set lowest τ^a that makes paying \overline{e}_b unprofitable and satisfies legislature's condition

 $\Rightarrow e_h = 0$, agreement remains in force



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Lobby: solve for lowest effort (\overline{e}_b) that breaks this constraint

▶ pay \overline{e}_b if it's less than gain from T periods of trade-war profits

Executives: set lowest τ^a that makes paying \overline{e}_b unprofitable and satisfies legislature's condition

- $\Rightarrow e_b = 0$, agreement remains in force
- ▶ High tariffs, no lobbying, no trade disruptions



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- ► Can happen if gov't mis-judges lobby's incentives
- In general, gov't prefers cap because lobby will 'fill in' for low shock up to gov's optimal level of γ



Escape Clause with Exogenous Politics



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

► Simple escape clause: add a second (higher) negotiated weak binding



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Escape Clause

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- \triangleright γ is private information
- ► We want truthful revelation, but truth-telling must be in the best interest of each gov't
- Gov't can exploit TOT externality by reporting high γ even when γ is low
 - ► Only way to prevent this is with some cost of using escape clause



Escape Clause with Endogenous Politics



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



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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



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 - ▶ Need signal of shock that is not influenced by endogenous pressure



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 - ▶ Need signal of shock that is not influenced by endogenous pressure
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 - ► This seems to be what the WTO actually does



An Escape Clause for a Complicated World



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



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May explain why escape clause has fallen out of use





Taking into account endogenous political forces alongside exogenous ones in this simplified modeling framework

► demonstrates that TAs can be used to discourage lobbing activity in general



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- can answer questions about optimal design of trading institutions more fully
 - provides additional general explanation for tariff caps
 - ► helps explain the structure and enforcement of the WTO Safeguards measure



Future Work



▶ Application of framework to other design questions



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- ▶ Interactions between $\gamma(s)$ and $\gamma(e)$



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

