

**Discussion of
Clayton, Maggiori, Schreger (2024)
“A Theory of Economic Coercion and
Fragmentation”**

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This paper

- Trade-policy used to influence other countries' policy choices
 - E.g. US sanctions on Russia
 - China with Lithuania over Taiwan
- Framework to study how much “hegemon” can extract and anti-coercion policy by other countries
- Hegemon subsidizes globalization to increase concession
- Anti-coercion policy can lead to doom-loom and inefficient fragmentation
- Application to role of US financial sector

My discussion

- Review simpler version of the model
- Comments:
 - What are the transfers the hegemon can extract?
 - Firms vs. governments
- Suggestion:
 - Competition among hegemons

Simple economy

- $n = 1, \dots, N$ country and the hegemon (denoted with $*$)
- Two sectors:
 - Final good sector with continuum of firms i in each country
 - Intermediate good (financial services)
 - Countries endowed with labor L_n
- Stand-in household in country n has preferences

$$\left[\sum_{k=1}^N \int c_{nki}^{1-1/\psi} di \right]^{\psi/(\psi-1)} \rightarrow \sum_{k=1}^N \int c_{nki} di$$

Simple economy, cont.

- Final good firm i production technology

$$y_{ni} = \left(l_{ni}^\alpha f(x_{ni}, x_{ni}^*)^{1-\alpha} \right)^\beta$$

$$f(x_{ni}, x_{ni}^*) = (A_n x_{ni}^\sigma + A^* x_{ni}^{*\sigma})^{1/\sigma}$$

- Intermediate good firm in country n

$$x_n = l_{xn}$$

- Resource constraint

$$\int l_{ni} di + l_{nx} = L_n, \quad \int x_{ni} di = x_n$$
$$\sum_n \int x_{ni}^* di + \int x_i^* di = x^*, \quad \sum_k c_{kni} = y_{ni}$$

Simple economy, cont.

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- Externality

$$A_n = h(x_n), \quad A^* = h(x^*)$$

Tax distorted competitive equilibria (TDCE)

Policy $\pi = \{\pi_n, \pi^*\}$ where

$$\pi_n = \{\tau_n, \tau_n^*, \tau_{wn}\}, \quad \pi^* = \{\tau_n^*, \tau_n^{**}, \tau_{wn}^*, T_n\}$$

- A TDCE is all n , prices $q = \{p_n, p^*, w_n\}$, policies such that
- Stand-in household's optimality
- Final-good firms' optimality

$$V(q, \pi_n, \pi_n^*) = \max_{x, x^*, l} \left(l^\alpha f(x, x^*)^{1-\alpha} \right)^\beta - (1 + \tau_{wn} + \tau_{wn}^*) w_n l \\ - (1 + \tau_n + \tau_n^*) p_n x - (1 + \tau_n^* + \tau_n^{**}) p^* x^*$$

- Intermediate good firms' optimality
- Gov't budget feasibility
- Market clearing

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TDCE maps $\pi \mapsto$ allocations and prices

$$\{C_n(\pi), Q(\pi)\}$$

Policy game

- Country n chooses π_n
- Hegemon chooses π^*
- Firm i accepts/reject whether to comply with π_n^*
 - Firm i is competitive: accept/reject does not affect prices
- Competitive equilibrium outcome and prices
 $\{C_n(\{\pi_n\}, \pi^*), Q(\{\pi_n\}, \pi^*)\}$

Policy game, cont.

- $\forall \{\pi_n\}$ hegemon chooses

$$a(\{\pi_n\}) = \arg \max_{\pi^*} C^*(\{\pi_n\}, \pi^*)$$

subject to

$$V(Q(\{\pi_n, \pi_n^*\}), \pi_n, \pi_n^*) - T_n \geq V^o(Q(\{\pi_n, \pi_n^*\}), \pi_n, \emptyset)$$

where

$$V(q, \pi_n, \pi_n^*) = \max_{x, x^*, l} \left(l^\alpha f(x, x^*)^{1-\alpha} \right)^\beta - (1 + \tau_{wn} + \tau_{wn}^*) w_n l \\ - (1 + \tau_n + \tau_n^*) p_n x - (1 + \tau_n^* + \tau_n^{**}) p^* x^*$$

$$V^o(q, \pi_n, \emptyset) = \max_{x, x^*, l} \left(l^\alpha f(x, x^*)^{1-\alpha} \right)^\beta - (1 + \tau_{wn}) w_n l \\ - (1 + \tau_n) p_n x$$

- Country n chooses

$$\pi_n = \arg \max_{\pi_n} C_n(\{\pi_{-n}, \pi_n\}, a(\{\pi_{-n}, \pi_n\}))$$

Results

- Without anti-coercion ($\pi_n = 0$)
 - Hegemon subsidizes its intermediate input
 - Goal: make outside option worse
 - Hyper-globalization

- With anti-coercion policy
 - Minimize hegemon influence by taxing hegemon's intermediate
 - Example: tax goes to infinity \rightarrow full fragmentation

- Fragmentation doom-loop
 - Strategic complementarities in anti-coercion policies

- Role for supranational organizations

What are the transfers the hegemon can extract?

- Monopoly pricing?
- Influencing policies in other areas, g_n
 - Military alliances, climate policies, etc.
- Country n government's value is

$$c_n - T_n = c_n - \lambda (g_n - g_n^*)$$

where $g_n - g_n^*$ is distance from n 's ideal policy g_n^*

- Push country n away from ideal policy by threatening to cut off firms' supply
- Hegemon pushes for integration, so it is costlier not to follow policy recommendation
- Different valuation of social welfare ($\neq \lambda$'s) b/w dictatorship and democracy

Firms vs. governments

- If hegemon wants to influence other policy stances
→ deal w/ gov't not firms
 - Firms may make sense for environmental policies
- Prices are going to be different on-off equilibrium path
- Participation constraint if offer to firms (small)

$$V(Q(\{\pi_n, \pi_n^*\}), \pi_n, \pi_n^*) - T_n \geq V^o(Q(\{\pi_n, \pi_n^*\}), \pi_n, \emptyset)$$

- Participation constraint if offer to gov't (big)

$$C(\{\pi_n, \pi_n^*\}) - T_n \geq C(\{\pi_n, \emptyset\})$$

- $Q(\{\pi_n, \emptyset\}) \neq Q(\{\pi_n, \pi_n^*\})$
- If do not accept → use more labor to produce intermediate good
→ local wage goes up

Firms vs. governments, cont.

- Example: Spse $A_n \ll A^*$ and $\sigma \rightarrow 1$

$$f(x, x^*) = (A_n x^\sigma + A^* x^{*\sigma})^{1/\sigma} \rightarrow A_n x + A^* x$$

- If hegemon deals w/ firms:
 - n subsidize local intermediate so that $p_n(1 - \tau_n)p_n/A_n \approx p^*/A^*$
 - Not used on path
 - But $V^o \approx V \Rightarrow T = 0$
- If hegemon deals with gov't:
 - If country n rejects hegemon's offer then must use inefficient domestic intermediate

Firms vs. governments, cont.

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Is paper characterizing a lower bound for T?

Two hegemones

- Suppose we have two hegemons

$$f(x, x^*, \tilde{x}) = \left(A_n x^\sigma + A^* x^{*\sigma} + \tilde{A} \tilde{x}^\sigma \right)^{1/\sigma}$$

- Does hegemons competition increase country n 's welfare?
- Equilibrium configuration: two blocks or fragmentation?
- Trade-off between
 - Hegemon's competition
 - Lack of economies of scale/coordination

Conclusion

- Important paper on a very topical issue
- Hegemon subsidizes globalization to increase concession
- Anti-coercion policy can lead to doom-loom and inefficient fragmentation
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