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Interest Group Politics in a Federation

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Motivation

- Policies conducted by governments of autonomous jurisdictions impose externalities on other jurisdictions
  - Sovereign states and sub-national regions within federations
    - Inter-regional trade barriers in Argentina, Brazil, China, Russia, Canada
  - Trade policies but also investment in public infrastructure, migration regulations, etc.

- Externalities are argued to be an important reason for:
  - creating global governance in the context of sovereign states (e.g., de Scitovszky, 1942)
  - centralization in the context of regions within federations (e.g., Musgrave, 1969)

- There is little empirical research on the determinants and the magnitude of these externalities

Research question and preview of results

- Test whether inter-jurisdictional spillovers depend on the multi-jurisdictional vs. single-jurisdictional scope of politically-powerful industrial lobbyists

  - Setting: regional (R) vs. multi-regional (MR) interests of industrial lobbies in Russian regions affecting firms in neighboring regions

- Result – significant difference in spillovers:

  - An increase in the number of neighboring regions with governments under influence of MR industrial groups (compared to R industrial groups) has a positive effect on performance of firms

    - in industries "related" to industries of the captors of the neighboring regions

Why Russia is a unique testing ground

- Russia in 1996-2003: peripherilized federalism
    - Substantial autonomy of the regions
- High degree of capture
- Variation in capture: both regional (R) vs. multi-regional (MR) interests
- Variation of group structure over time
- Exogenous drivers of the R vs. MR scope of lobbies
    - Soviet legacies
    - Privatization
    - Post-privatization consolidation of ownership

Related literature

1. Political economy of international trade
   - Theory: Hillman and Ursprung (1993) and Endoh (2005)
   - Empirics: Gawande et al. (2006) and Kee et al. (2004)
     - use cross-industry structural form equations (as in Goldberg and Maggi 1999) to show that trade barriers in the US industries are negatively correlated with foreign lobbying

2. Political economy of fiscal federalism
   - Debate on relative importance of the costs and benefits of decentralization (e.g., Tanzi 1995 vs. Weingast 1995)
   - Our analysis $\Rightarrow$ effect of decentralization depends on the nature of local capture: multi-state vs. local business groups

Building blocks

1. A toy model as a framework for testable predictions
2. Case study evidence on trade policy
3. Empirical estimation on outcomes of spillovers from all policies
4. Additional evidence
   - Evidence on trade barriers in alcohol industry
   - IV evidence

A simple model

- A partial equilibrium model of trade between regions within one country
- One region ("Home") imports a tradeable good from the rest of the country's regions ("Abroad")
- Home government sets an import tariff τ to maximize the weighted average of consumer surplus of home consumers CS, tariff revenues TR, and producer surplus PS
  - TR and CS enter with the weight 1,
  - PS enters with the weight $\gamma \geq 1$:
    - $\gamma - 1$ is the extent of capture by domestic producers;
    - If $\gamma = 1$, there is no "state capture" and the Home government maximizes social welfare.
- Home industrial lobby owns $\mu \in [0, 1)$ share of firms Abroad
- Home government's objective is to maximize:

$$TR + CS + \gamma \left(PS + \mu PS^* \right)$$

Comparative statics for τ

Proposition

The optimal tariff τ is:

1. *weakly decreasing in the weight of multi-regional interests μ for a given level of local capture γ*

2. *weakly increasing in γ for a given level of μ if μ is sufficiently small*

Intuition:

- Given γ, a larger out-of-region component in group interests $\Rightarrow$ higher benefit from tariff reduction
- Given μ, the effect of γ on policy depends on two countervailing forces: lobbies want to (a) restrain competition to increase PS; (b) promote trade to raise producer surplus Abroad PS^*
    - Small $\mu \Rightarrow$ effect (a) dominates

Testable hypotheses

1. Regional captors set higher tariffs compared to multi-regional captors (an increase in μ)

2. Regional captors set higher tariffs than non-captured governments (an increase in γ when $\mu = 0$)

3. No prediction for comparison between non-captured governments and multi-regional capture (depends on μ)

- The model generalizes to any regional policy (not just trade policy) that affects business interests and imposes externalities

- We estimate a reduced-form relationship: type of capture on outcomes of spillovers from all policies

Uralelektromed

- The largest copper refinery in Russia and the only in Sverdlovsk Oblast (Urals); employs 12,000 people; is politically very powerful in the region
- In 1996, it lobbied for a regional export tariff on precious metals (its main input)
  - Tariff made refineries of the neighboring Cheliabinsk Oblast unprofitable and Uralelectromed became the only profitable refinery of copper extracted in Sverdlovsk Oblast
  - Iskander Makhmudov, the controlling owner of Uralelectromed, did not own other assets at that time
- Later on, Makhmudov built a vertically-integrated copper group which had become one of the largest Russian business groups UGMK
- Once UGMK grew beyond Sverdlovsk Oblast, the export tariff was abolished

Russia's Beer Industry in 1996-2003

- Russia's beer industry in 1996-2003 consisted of the two market leaders, Baltic Beverages Holding (BBH) and Sun Interbrew and *hundreds* of small regional breweries

    - BBH was present in 7 regions, Sun in 9 regions

- Many regions erected non-tariff barriers for out-of-region produces of beer (licensing and accreditation laws)

Regions*years	MR plants	R plants
No barriers	78	457
Barriers	0	65
Total:	78	522

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Reverse Causality?

- An alternative explanation: Sun and BBH could only enter the less protectionist regions?
- Consider the barriers introduced *after* Sun and BBH have entered
- And after the 1998 *Federal* Law on Accreditation
  - The 1998 Federal Law forced all regions to introduce or change their own laws
- Compare 10 regions with MR presense in 1999 vs. others
  - MR regions: *no* restrictions introduced 1998-2002
  - Others: 16% regions introduced restrictions in 1998-2002

Data and measures

- For each region & year b/w 1996 and 2003: measure whether the region was captured by a regional industrial group (285 region*years), captured by a multiregional industrial group (103), or non-captured (200)

  1. Local capture and the names of captor firms from dataset on preferential treatment of large firms by regional legislation

     - PTs: Tax breaks, investment credits, subsidies, subsidized loans, loans with the regional budget guarantee, official tax delays

  2. For each captor-firm each year establish the identity of ultimate controlling owner

  3. Trace whether this controlling owner has productive assets in other regions

Data and measures, cont-d

- A region in a particular year is captured by a regional (multiregional) interest group whenever:

  1. the number of preferential treatments given out to firms > 0
  2. at least 50% of all preferential treatments go to firms controlled by regional (multiregional) groups

- A region in a particular year is not captured if there were no preferential treatments

- Spillovers from neighboring regions (gravity model):

  - construct variables measuring the numbers of neighboring regions that are (i) captured by regional groups, (ii) captured by multiregional groups, or (iii) non-captured

Fixed effects specification

- On a representative (close-to-population) sample of about 25,000 large and medium-size registered firms:

$$Y_{ft} = \phi_f + \rho_t + \alpha_1 C_{rt}^{MR} + \alpha_2 U_{ft} C_{rt}^{MR} + \alpha_3 C_{rt}^{NO}$$

$$+\alpha_4 U_{ft} C_{rt}^{NO} + \alpha_5 U_{ft} + \alpha_6' \mathbf{X}_{rt} + \alpha_7' \mathbf{Z}_{ft} + \varepsilon_{ft}$$

f – firms, r – regions, t – years

- Y_{ft} – logs of sales, productivity, employment, fixed assets, and return on sales
- C_{rt}^{MR} – number of neighbors captured by MR groups
- C_{rt}^{NO} – number of non-captured neighbors
- U_{ft} – dummy indicating whether firm f is in unrelated industry to neighbors' captors

Between effects specification

- A lot of variation is between regions rather than over time within regions
- Take over-time averages between 1996 to 2003 of the residuals from linear regressions of all variables on time dummies, estimate

$$\bar{Y}_f = \alpha + \alpha_0 Y_{f_{t=1995}} + \alpha_1 \bar{C}_r^{MR} + \alpha_2 U_f \bar{C}_r^{MR} + \alpha_3 \bar{C}_r^{NO} +$$

$$+ \alpha_4 U_f \bar{C}_r^{NO} + \alpha_5 U_f + \alpha_6' \tilde{\mathbf{X}}_r + \alpha_7' \tilde{\mathbf{Z}}_f + \varepsilon_f$$

Controls

- *Fixed effects*
    - Industry-specific trends, industrial structure of own and neighboring regions, the extent of local capture in the own and neighboring regions, multiregional vs. regional type of own region capture
- *Between effects*
    - Number of neighboring regions, average exposure of the region to trade, dummy for state ownership of the firm, the initial share of people with higher education, initial gross-regional product per capita, "ethnic republic" status in the federation, 3-digit industry dummies
- Cluster error terms at the regional level

Fixed-effects regressions

	(1) Productivity	(2) Sales	(3) Fixed assets	(4) Employment	(5) Return on sales
C_{rt}^{MR}	**0.0128**	**0.0192**	**0.0159**	**0.0142**	**-0.0030**
	[0.007]*	**[0.010]***	**[0.007]****	**[0.007]****	**[0.002]**
$C_{rt}^{MR} * U_{ft}$	-0.0349	-0.0412	-0.0032	-0.0077	0.0006
	[0.009]***	[0.011]***	[0.008]	[0.008]	[0.002]
C_{rt}^{NO}	0.0104	0.0107	0.0025	-0.0049	0.0024
	[0.010]	[0.013]	[0.008]	[0.005]	[0.002]
$C_{rt}^{NO} * U_{ft}$	-0.0201	-0.0202	0.0032	0.0024	-0.0038
	[0.006]***	[0.008]**	[0.005]	[0.003]	[0.003]*
U_{ft}	0.0008	0.0019	-0.0004	0.0029	-0.0027
	[0.011]	[0.011]	[0.009]	[0.007]	[0.003]
Controls	Yes	Yes	Yes	Yes	Yes
Observations	102,028	110,253	104,573	111,723	81,656
R-squared	0.10	0.09	0.09	0.73	0.04

- An increase in the number of MR-captured neighbors → boost in performance of firms in industries related to industries of captors
- No effect on firms in unrelated industries
- Non-captured are insignificantly better than R-captured

Between-effects regressions

	(1) Productivity	(2) Sales	(3) Investment	(4) Employment	(5) Return on sales
$\bar{C}_r^{MR}$	**0.155** **[0.057]*****	**0.268** **[0.065]*****	**0.144** **[0.035]*****	**0.130** **[0.045]*****	**0.052** **[0.014]*****
$\bar{C}_r^{MR} * U_{ft}$	-0.043 [0.052]	-0.111 [0.068]	-0.089 [0.033]***	-0.112 [0.044]**	-0.023 [0.012]*
$\bar{C}_r^{NO}$	0.220 [0.147]	0.271 [0.116]**	0.265 [0.063]***	0.109 [0.080]	0.076 [0.028]***
$\bar{C}_r^{NO} * U_{ft}$	-0.020 [0.065]	0.017 [0.075]	-0.064 [0.043]	-0.085 [0.060]	-0.031 [0.018]*
U_{ft}	-0.007 [0.018]	0.031 [0.016]*	-0.026 [0.010]**	0.016 [0.011]	0.015 [0.004]***
Controls	Yes	Yes	Yes	Yes	Yes
Observations	25,181	26,748	24,685	26,717	23,445
R-squared	0.31	0.08	0.66	0.07	0.34

- Again, results consistent with hypotheses
- Both MR-captured and non-captured regions have better spillover effects that R-captured

Additional evidence: Trade policy channel

- We do not have data on the *policy channels* of the effect
- Except in the case of the trade barriers in alcohol market
- Trade barriers in 22 regions and 65 region-year observations (11% of the sample):
    - require local retailers to sell more than a certain proportion of locally-produced alcohol (23% of barriers)
    - sales tax levied on alcohol beverages produced outside the region (18%);
    - sales tax breaks for local alcohol (18%);
    - tax breaks given to local producers (9%);
    - additional regulations for retailers selling alcohol from outside the region (8%);
    - prohibition of retail sales of out-of-region alcohol (3%);
    - other preferential treatments of local producers (20%).

Trade barriers in alcohol: Results

- The presence of MR alcohol lobby significantly reduces the probability of having import restrictions on alcohol in the region by 12 percentage points.

- In addition, the probability of import restriction is 7 percentage points higher for captured regions than for non-captured regions.

- Firm performance in alcohol industry depends on the import restrictions in the neighboring regions.

- Alcohol producers have 12, 13 and 7 percent higher productivity, sales, and fixed assets in times when their region is surrounded by neighbors with no trade restrictions compared to the times when all neighboring regions introduce import restrictions.

Additional evidence: Instrumental variables

- Instrument capture (vs. non-capture) by industrial concentration in the region (Slinko et al, 2005)

- Instrument MR vs. R by share of firms privatized after 1993
  - Early privatization was in favor of insiders
  - Imperfect capital markets slowed down reallocation of assets in favor of MR groups
  - Indeed,
    - firms privatized after 1993 are more likely to be in MR groups
    - and regions with higher share of firms privatized after 1993 are more likely to be MR-captured

- The instruments do not vary over time
  - Can only run between-effects rather than fixed-effects regressions

Instrumental variables: Results

- The coefficients are significant (Table 6) if clustered by firms
  - Not significant if clustered by regions
- The effect is stronger by an order of magnitude than in OLS
- Privatization instrument is weak
  - Data on privatization are available for only 7500 firms

Robustness

- Endogeneity: reverse causality is not an issue, but omitted variables (which drive both type of capture and spillovers) may be
- Policy driven by ideology: control for governor fixed effects (a lot of evidence that regional politics is purely of opportunistic nature)
- Agglomeration: control for industry growth in the own region and neighboring regions
- No evidence that the level of capture differs b/w R and MR
- Industrial structure: we control for it
- PTs may have direct effect on other members of the groups or their competitors (not through policy):
    - we exclude them from the sample
- Own region capture and other controls may be endogeneous to firm performance
    - Excluding them does not change the results

Conclusions

- Main finding: in a federation, local public policy with inter-jurisdictional spillovers depends on whether business interests of local lobbies span over many regions or are concentrated in a single region
  - Multi-jurisdictional lobbies internalize spillovers between jurisdictions to a larger extent than the local lobbies
  - The effect is economically significant

- Implications:
  - Political influence of large (multi-regional) businesses may help alleviating one of the main costs of decentralization, i.e., inter-jurisdictional spillovers
  - Countries where trade policy is shaped by multinationals are more likely to internalize international externalities and be less protectionist