14.773 Political Economy of Institutions and Development.
Lecture 9. Persistence and Dysfunctional Democracies

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Introduction

- The baseline model of democratization we have seen suggests that once democracy emerges (and particularly after it consolidates), it should lead to more redistributive economic institutions.
- But does democracy really lead to greater redistribution and lower inequality?
- The answers in the literature are mixed.
- Recent paper: Acemoglu, Naidu, Restrepo and Robinson (2013):
  - Democracies lead to higher taxes and government revenues.
  - But their effects on inequality seems much smaller or nonexistent.
- What's going on?

Why Inequality Might Persist

- There are some obvious reasons why inequality may not decline after a transition to democracy.

  1. Democratization can cause "Inequality-Increasing Market Opportunities". In particular, many nondemocracies exclude a large fraction of the population from productive occupations and entrepreneurship (e.g., blacks being excluded from skilled occupations, managerial positions and businesses in apartheid South Africa). Democracy may lift these restrictions, but this will then increase inequality within the excluded group.

  2. Stigler's "Director's Law," which says that democracy is always controlled by the middle class. Then democracy will redistribute to as the middle class, which may or may not reduce inequality.

  3. "Institutional persistence".

  4. Clientelism: the distribution of state benefits targeted to individuals or groups in exchange for political support.

Problem of Institutional Persistence

- But there is another set of possible explanations.
- Perhaps some — potentially dysfunctional — dimensions of institutions persist after major shocks.
- Prime example: persistence of repression of blacks and low-wage, low education black labor in the US South after emancipation and enfranchisement of blacks at the end of the Civil War.
- Another example: End of colonial system, persistence of economic relations in Latin America
- In both cases, a specific type of persistence: a repressive, or elite-controlled regime is followed by a more democratic-looking regime, but democracy appears to be dysfunctional, not performing, or degenerating into chaos.
  - Some instances of this make some commentators conclude that the society did not have "a culture of democracy"; is that the right way to think about things?.
- More generally: Robert Michels's *Iron Law of Oligarchy.*

Why Persistence?

- Why do institutions persist?
- Related to persistence of power.
- Multifaceted, here focus on persistence of elites
- Also related to: will democracy cater to the needs of the citizens?
  - in many instances, not clear.

Model of De Facto Power: Environment

- Here consider a model based on the Acemoglu and Robinson (2008).
- Mass 1 of citizens and M traditional landed elites, each owning L/M units of land.
  - Below results with finite number of citizens.
- All factors of production supplied inelastically.
- All agents infinitely-lived indiscreet time with discount factor β.
- Two economic institutions: competitive markets, rent per unit of land R^c and labor oppression, rent per unit of land $R^r > R^c$.

Model: Political Power

- Traditional elites can invest in de facto power and will do so since there is a finite number of them.
- Elite i invests $\theta_t^i \geq 0$ in the group's de facto power:

$$P_t^E = \phi \sum_{i \in \mathcal{E}} \theta_t^i. \tag{1}$$

- Political power of the citizens (from sheer numbers and political institutions):

$$P_t^C = \omega_t + \eta I \left(s_t = D \right), \tag{2}$$

where $I \left(s_t = D \right)$ is an indicator function for $s_t = D$, i.e., for democracy.
- ω_t is a random variable drawn independently and identically over time from a given distribution $F \left(\cdot \right)$.
- When $P_t^E \geq P_t^C$, we have $\pi_t = 0$ and the elite have more political power and will make the key decisions; economic institutions today, τ_t, and political regime tomorrow, $s_{t+1} = D$ or $s_{t+1} = N$.

Model: Timing of Events

- At each date t, society starts with a state variable $s_t \in \{D, N\}$. Given this, the following sequence of events take place:

  1. Each elite i simultaneously chooses how much to spend to acquire de facto political power for their group, $\theta_t^i \geq 0$, and P_t^E is determined according to (1).
  2. The random variable ω_t is drawn from the distribution F, and P_t^C is determined according to (2).
  3. If $P_t^E \geq P_t^C$ (i.e., $\pi_t = 0$), a representative elite agent chooses (τ_t, s_{t+1}), and if $P_t^E < P_t^C$ (i.e., $\pi_t = 1$), a representative citizen chooses (τ_t, s_{t+1}).
  4. Given τ_t, transactions in the land and labor market take place, R_t and w_t are paid to elites and workers respectively, and consumption takes place.
  5. The following date, $t + 1$, starts with state s_{t+1}.

Model: Equilibrium Concept

- Let us focus on Markov Perfect Equilibria (MPE), so that no punishment strategies within the elite.
- Also let's start with symmetric MPE.
- Later look at non–symmetric MPE and subgame perfect equilibria.

Model: Value Functions

- Consider nondemocracy and suppose that all other elite agents, except i, have chosen $\theta(N)$ and agent i chooses θ^i.
- Then, the elite will have political power with probability

$$p\left(\theta^i, \theta(N) \mid N\right) = F\left(\phi\left((M-1)\theta(N) + \theta^i\right)\right). \quad (3)$$

- The net present discounted value of agent i is

$$
\begin{aligned}
V(N) = \max_{\theta^i \geq 0} &\left\{-\theta^i + p\left(\theta^i, \theta(N) \mid N\right)\left(\frac{R^r L}{M} + \beta V(N)\right)\right. \\
&\left. + \left(1 - p\left(\theta^i, \theta(N) \mid N\right)\right)\left(\frac{R^c L}{M} + \beta V(D)\right)\right\}, \quad (4)
\end{aligned}
$$

Model: Value Functions (continued)

- Similarly in democracy,

$$p\left(\theta^i, \theta\left(D\right) \mid D\right) = F\left(\phi\left(\left(M-1\right)\theta\left(D\right) + \theta^i\right) - \eta\right), \quad (5)$$

$$V\left(D\right) = \max_{\theta^i \geq 0}\left\{-\theta^i + p\left(\theta^i, \theta\left(D\right) \mid D\right)\left(\frac{R^r L}{M} + \beta V\left(N\right)\right)\right.$$

$$\left. + \left(1 - p\left(\theta^i, \theta\left(D\right) \mid D\right)\right)\left(\frac{R^c L}{M} + \beta V\left(D\right)\right)\right\} \quad (6)$$

Equilibrium Conditions

- Suppose we have an interior equilibrium.
- Then the first-order conditions of the above value functions are

$$\phi f\left(\phi M\theta\left(N\right)\right)\left(\frac{\Delta RL}{M}+\beta V\left(N\right)-\beta V\left(D\right)\right)=1, \qquad (7)$$

$$\phi f\left(\phi M\theta\left(D\right)-\eta\right)\left(\frac{\Delta RL}{M}+\beta V\left(N\right)-\beta V\left(D\right)\right)=1. \qquad (8)$$

- These two equations imply:

$$\theta\left(D\right)=\theta\left(N\right)+\frac{\eta}{\phi M}. \qquad (9)$$

and

$$p\left(D\right)\equiv p\left(\theta\left(D\right),\theta\left(D\right)\mid D\right)=p\left(\theta\left(N\right),\theta\left(N\right)\mid N\right)\equiv p\left(N\right),$$
$$(10)$$

Assumptions

- Let us assume the following regularity and boundary conditions (for a unique and interior equilibrium):

    Assumption F is defined over $(\underline{\omega}, \infty)$ for some $\underline{\omega} < 0$, is everywhere strictly increasing and twice continuously differentiable (so that its density f and the derivative of the density, f', exist everywhere). Moreover, $f(\omega)$ is single peaked (in the sense that there exists ω^* such that $f'(\omega) > 0$ for all $\omega < \omega^*$ and $f'(\omega) < 0$ for all $\omega > \omega^*$) and satisfies $\lim_{\omega \to \infty} f(\omega) = 0$.

- and

    Assumption

$$\min \left\{ \phi f(0) \frac{\Delta RL}{M}, \phi f(-\eta) \frac{\Delta RL}{M} \right\} > 1.$$

Model: Main Result

- Main result is:
  Proposition (Invariance): There exists a unique symmetric MPE. This equilibrium involves $p(D) = p(N) \in (0, 1)$, so that the probability distribution over economic institutions is non-degenerate and independent of whether the society is democratic or nondemocratic.
- Therefore, even if de jure power changes, overall power does not change.
- The equilibrium distribution of economic institutions invariant to political institutions— invariance.
- Intuition:
  - technology of de facto power the same for the elite in democracy and nondemocracy;
  - marginal cost of contribution must equal the marginal benefit for each agent, which equalizes probabilities of different economic institutions in the two regimes.

Model: Main Result—Extension

- Does it matter that there is a continuum of citizens?
- Suppose that there are $K < \infty$ citizens and $M < \infty$ elites.
  Proposition (Extended Invariance): Supposed that there are $K < \infty$ citizens and $M << K$ elites. Then there exists a unique symmetric MPE that is identical to that in the above proposition.
- Intuition: first-order conditions for investing in lobbying can only hold for one of the two groups, and they will do so for the group that has "fewer" members.

Basic Model: Comparative Statics

Proposition: The following comparative static results hold:

1. *Economic rents:*

$$\frac{\partial \theta^*(N)}{\partial \Delta R} > 0, \ \frac{\partial \theta^*(D)}{\partial \Delta R} > 0 \ and \ \frac{\partial p^*}{\partial \Delta R} > 0.$$

2. *Discount factor:*

$$\frac{\partial \theta^*(N)}{\partial \beta} > 0, \ \frac{\partial \theta^*(D)}{\partial \beta} > 0 \ and \ \frac{\partial p^*}{\partial \beta} > 0.$$

3. *Number (cohesion) of the elite:*

$$\frac{\partial \theta^*(N)}{\partial M} < 0, \ \frac{\partial \theta^*(D)}{\partial M} < 0, \ and \ \frac{\partial p^*}{\partial M} < 0.$$

4. *Democratic advantage of the citizens:*

$$\frac{\partial \theta^*(N)}{\partial \eta} > 0, \ \frac{\partial \theta^*(D)}{\partial \eta} > 0, \ and \ \frac{\partial p^*}{\partial \eta} > 0.$$

5. *Technology of de facto power:*

Democracy As an Absorbing State

- Let us relax the above boundary conditions. Then we have
  Corollary: Suppose there exists $\bar{\theta}(N) > 0$ such that

$$\phi f(\phi M \bar{\theta}(N)) \left(\frac{\Delta RL/M - \beta \bar{\theta}(N)}{1 - \beta F(\phi M \bar{\theta}(N))} \right) = 1, \tag{11}$$

  and that

$$\eta > -\underline{\omega} \tag{12}$$

  Then in the baseline model, there exists a symmetric MPE in which
  $p(N) \in (0,1)$ and $p(D) = 0$.
- Therefore, an equilibrium with permanent democracy. But, the
  equilibrium characterized above might still exist.
- Finally, note that the above boundary condition can be relaxed to:
  Assumption A There exists $\bar{\theta}(N) > 0$ satisfying (11), and

$$\phi f(-\eta) \left(\frac{\Delta RL/M - \beta \bar{\theta}(N)}{1 - \beta F(\phi M \bar{\theta}(N))} \right) > 1.$$

Model: Non-Symmetric MPE and SPE

- Same results without symmetry:
  Proposition(Non-Symmetric MPE and Invariance):   Any MPE
  involves $p(D) = p(N) \in (0, 1)$.

- Define Pareto optimal SPE as those in which no elite can be made
  better off without some other elite agent be made worse off.
  Proposition (Subgame Perfect Equilibrium and Invariance):
  There exists $\bar{\beta} \in [0, 1)$ such that that for all $\beta \geq \bar{\beta} \in [0, 1)$, the
  symmetric Pareto optimal SPE induces equilibrium probabilities of
  labor repressive institutions $p(D) = p(N) \in (0, 1)$. Moreover, as
  $\beta \to 1$, any Pareto optimal SPE involves $p(D) = p(N) \in (0, 1)$.

Markov Regime-Switching Model of State Dependence

- Above model: invariance, but democracy as likely to follow democracy as to follow nondemocracy.
- Let us now generalize the above model to get a richer form of persistence.
- In particular, so far probability of different economic institutions and different future political institutions independent of current political institutions.
- Two alternative models:
  - Limits on the de facto political power of the elite
  - Sluggish economic institutions

Limits on the De Facto Political Power of the Elite

- Suppose that there are limits on the de facto political power of the elite in democracy. In particular ϕ replaced by $\phi_D \in (0, \phi)$ in democracy.

- Then:
  Proposition(Limits on De Facto Power): Any symmetric MPE of the modified model with limits on the elite's de facto power in democracy leads to a Markov regime switching structure where the society fluctuates between democracy with associated competitive economic institutions ($\tau = 1$) and nondemocracy with associated labor repressive economic institutions ($\tau = 0$), with switching probabilities $p(N) \in (0, 1)$ and $1 - p(D) \in (0, 1)$ where $p(D) < p(N)$.

Limits on the De Facto Political Power of the Elite: Comparative Statics

- Now we have:

  Proposition: The following comparative static results hold:

  1. *Economic rents:*
  $$\frac{\partial \theta^* (N)}{\partial \Delta R} > 0, \ \frac{\partial \theta^* (D)}{\partial \Delta R} > 0, \ \frac{\partial p^* (N)}{\partial \Delta R} > 0 \ \text{and} \ \frac{\partial p^* (D)}{\partial \Delta R} > 0.$$

  2. *Discount factor:*
  $$\frac{\partial \theta^* (N)}{\partial \beta} > 0, \ \frac{\partial \theta^* (D)}{\partial \beta} > 0 \ \frac{\partial p^* (N)}{\partial \beta} > 0 \ \text{and} \ \frac{\partial p^* (D)}{\partial \beta} > 0.$$

  3. *Number (cohesion) of elites:*
  $$\frac{\partial \theta^* (N)}{\partial M} < 0, \ \frac{\partial \theta^* (D)}{\partial M} < 0, \ \frac{\partial p^* (N)}{\partial M} < 0 \ \text{and} \ \frac{\partial p^* (D)}{\partial M} < 0.$$

- Weaker than before, because the regularity conditions are now stronger, and also comparative statics with respect to ϕ and η ambiguous.

Sluggish Economic Institutions

- Suppose that it is costly for the elite to immediately change economic institutions.
- They receive rent equal to look $R^p < R^r$ when they take control.
- Define

$$\lambda \equiv \frac{R^p - R^c}{\Delta R},$$

  Proposition (Sluggish Economic Institutions): The symmetric MPE of the model with sluggish economic institutions leads to a Markov regime switching structure where the society fluctuates between democracy with associated competitive economic institutions ($\tau = 1$) and nondemocracy with associated labor repressive economic institutions ($\tau = 0$), with switching probabilities $p(N) \in (0,1)$ and $1 - p(D) \in (0,1)$ where $p(D) < p(N)$.

- Similar comparative static results.
- But also, lower λ increases $p(N)$ because democracy more costly.

Durable Political Institutions and Captured Democracy

- All the models until now, perfect correlation between economic and political institutions.
- In practice, political institutions change, while economic institutions persist.
- Assume that influencing economic institutions easier than changing political institutions (natural given the durability of the institutions).

Captured Democracy: Setup

- Let us model durable political institutions as follows:
- When $P_t^C + \xi > P_t^E \geq P_t^C$, where $\xi > 0$, the elite can choose economic institutions but cannot change the political system.
- If $P_t^E \geq P_t^C + \xi$, the elite can choose both economic institutions and the future political system.
- Symmetrically when $P_t^E + \xi > P_t^C \geq P_t^E$, the citizens have political power, and they can choose economic institutions, but cannot change the political system.
- Denote the probabilities of regime change towards nondemocracy by $\hat{p}(N)$ and $\hat{p}(D)$, and the probabilities of labor repressing economic institutions by $p(N)$ and $p(D)$.

Captured Democracy: Assumptions

- Let us also strengthen the assumption on the distribution of ω.

  Assumption F is defined over $(\underline{\omega}, \infty)$ for some $\underline{\omega} < 0$, is everywhere strictly increasing and twice continuously differentiable (so that its density f and the derivative of the density, f', exist everywhere), and moreover we have $f'(\omega) < 0$ for all ω and $\lim_{\omega \to \infty} f(\omega) = 0$.

- Also, modify preferences so that citizens derive direct utility from democracy, so they are happy to choose democracy even if their income is lower under democratic political institutions.

Captured Democracy: Main Result

- Now we have:
  Proposition (Captured Democracy): The modified model with durable political institutions leads to a Markov-switching process for political change, with $1 > \hat{p}(N) > \hat{p}(D) > 0$. Moreover, democracy is captured in the sense that $0 < p(N) < p(D) < 1$, i.e., democracy will survive but choose economic institutions in line with the elite's interests with even a higher probability than does nondemocracy.

- Striking result: economic institutions even worse under democracy than nondemocracy.

- Intuition: elites more willing to invest in their de facto political power in democracy because of the added benefit of potential switch to nondemocracy.

  - This indirect effect strong enough that $p(N) < p(D)$.

But History Is Not Destiny

- The view that crude or qualified determinism widespread and social sciences.
- Determinism very different from persistence.
- Above examples show that change is ubiquitous, even though there are clear mechanisms of persistence at work.
- Some of this change is toward equilibria that lead to better economic performance.

Ending Persistence: Effective Reform

- The model suggests that very significant or simultaneous reforms necessary to end dysfunctional persistence.
- Examples:
  - Reform in formal institutions, switching from nondemocracy to democracy, but at the same time limiting the exercise of de facto political power by the elite.
  - Simultaneous reform in politics and economic institutions that are irreversible or hard to reverse, so that the economic rents the elite will gain by reversing the reforms are lower.
- Example of successful radical reform: Glorious Revolution of 1688 in England; simultaneous change in the distribution of de jure and de facto political power.

Emergence of Constitutional Monarchy in England

- 17th Century saw a struggle between Parliament and the Stuart Kings, with the Civil War 1642-1651 and the Glorious Revolution of 1688 when after a brief struggle Parliament ejected James II and made William of Orange King.
- Political Reforms: Regular Parliaments for the first time, Parliament given power over fiscal policy.
- Economic Reforms: removal of ability of Crown to predate on society, abolition of Crown granted monopolies, creation of Bank of England.
- Development of state institutions of taxation (the fiscal-military state).

End of Southern Equilibrium

- Starting in the 1940s rapid convergence of the Southern economy to US average takes place.
- End of isolation of the labor market.
- Abolition of institutionalized racial discrimination in labor markets and social life and re-enfranchisement of blacks culminating in the Voting Rights Act of 1965.

Conclusions

- Coherent framework for thinking about coexistence of institutional change and persistence.
- De jure power and constitutions are not everything.
- We need to take de facto political power seriously.
- Interaction of de jure and de facto political power useful in thinking about persistence of institutions in the US South, in Central America, Colombia, Liberia.
- But this theory not sufficient understand persistence of bad rulers in Congo or Ethiopia, or why inequality re-created itself in Bolivia.
- Future work...

Clientelism and Patronage Politics

- Another reason why democracy may not reduce inequality is clientelism and patronage politics.
- In particular, with clientelism, democratic competition leads to each party catering to the needs of a narrow group through inefficient transfers or policies.
- Particularly common in Africa after independence:

  "African leaders typically used state resources to co-opt different ethnic elites to maintain political stability. The clientelism that resulted was not redistributive and generally benefited only a relatively small proportion of the citizenry" (van de Walle, 2003).

Ideas on Clientelism

- Clientelism may result from "repeated game interactions": if the particular village doesn't vote for a particular politician, they won't get transfers in the future.
- But in practice, clientelism seems to be related to political middlemen and networks (e.g., Finan and Schechter, 2012).
- Clientelism is most straightforward when it takes the form of "vote buying" or even "vote coercion" (e.g., Baland and Robinson, 2008).
- But even with secret ballots, "reciprocity"-type concerns me support clientelism (e.g., Finan and Schechter, 2012).
- Why is clientelism different than usual electoral politics? Why is it inefficient? Here let us focus on a simple model based on a paper by Lizzeri and Persico (though much simplified).

Modeling Clientelism

- Let us use a version of probabilistic voting.
- Suppose that parties A and B which aim to maximize their vote share.
- Citizens divided into groups $i \in \{0, 1, .., N\}$. Each group i is of size n_i, normalize for simplicity to $1/N$.
- Each individual has utility given by

$$(1 - \tau) y_i + g_i + \alpha \Gamma (G),$$

where τ is a tax rate, y_i is the income of group i, g_i is the group-specific public good or transfer directed to this group, and G is a general public good (α parameterizing its efficiency).

- We assume that Γ is strictly concave and satisfies the Inada conditions.

Utilitarian Benchmark

- The government budget constraint is

$$G + \frac{1}{N} \sum_{i=0}^{N} g_i \leq \frac{1}{N} \left(\tau - C\left(\tau\right) \right) \sum_{i=0}^{N} y_i,$$

where $C\left(\tau\right)$, which is increasing and concave, captures the costs of taxation.

Utilitarian Benchmark

- Let us start with utilitarian benchmark (with equal weight from all groups).
- This is a solution to maximizing

$$\frac{1}{N} \sum_{i=0}^{N} \left((1 - \tau) y_i + g_i \right) + \alpha \Gamma(G)$$

  subject to the government budget constraint.
- Denoting the Lagrange multiplier on the government resources by λ, the complementary slackness conditions are:

$$\begin{aligned} \alpha \Gamma'(G) &= \lambda \\ 1 &\leq \lambda \\ \bar{y} &= \lambda \bar{y} \left(1 - C(\tau) \right). \end{aligned}$$

- Inspection shows that if α is greater than some α^*, then the conditions for group specific transfers will be all slack, and all redistribution will be through the public good.

Political Game

- Individuals vote for party A if it provides them a utility benefit greater than x, where x is drawn from the distribution H_i with density h_i.
- Parties simultaneously choose platforms $(\tau, G, g_1, ..., g_N)$ that satisfy the government budget constraint to maximize their vote shares.
- Assuming no corner solution, the vote share of party A can be written as:

$$S_A = \sum_{i=0}^{N} H_i \left[\left(1 - \tau^A \right) y_i + g_i^A + \alpha \Gamma \left(G^A \right) - \left(\left(1 - \tau^B \right) y_i + g_i^B + \alpha \Gamma \right. \right.$$

Political Equilibrium

- Under usual conditions, a symmetric political equilibrium will exist and will satisfy the first-order conditions

$$
\begin{aligned}
\alpha \Gamma'(G) &= \frac{\lambda'}{\sum_{i=0}^{N} h_i(0)} \\
h_i(0) &\leq \lambda' \\
\bar{y} &= \frac{\lambda'}{\sum_{i=0}^{N} h_i(0)} \bar{y} \left(1 - C(\tau)\right).
\end{aligned}
$$

- Now suppose that $h_i(0)$ is very high for some group (i.e., they are very responsive transfers). Then relative to the utilitarian benchmark, this will lead to equality for the group-specific transfer for that group.
- This will also increase λ' above λ, which will have two implications:
  1. There will be underinvestment in the general public good.
  2. Taxes will increase (because government resources are now more valuable to the party seeking to increase its vote share).

More Generally

- More generally, if the utility function is also concave in group-specific transfers, several groups will receive such transfers, and even more underinvestment in the general public good will result.

- Interpretation : vote seeking will bias policies away from general public goods to those that can be targeted to the most responsive groups, even if this is inefficient.

Clientelism and Democracy

- What's the relationship between clientelism and democracy?
  - Clearly, it is democratic competition of sorts that is at the root of the type of clientelism outlined here.
  - But Lizzeri and Persico (2004) show that an extension of the franchise can reduce clientelism— because it increases the importance of the general-purpose public goods rather than group-specific public goods. This is in fact the basis of their alternative theory of democratization in 19th century Britain.
  - If so, the solution to clientelism might be to strengthen rather than rein in democracy.

When Is Clientelism More Likely?

- When policy can be targeted (for example, if policies are implemented by a strong and well developed bureaucracy, this will be harder).
- When there are more divisions to exploit (e.g., ethnicity, regional preferences).
- When there are major differences in responsiveness to group-specific transfers (when all h_i's are equal, there will be none).
- When some groups are less likely to vote or participate.
- Also beyond the model:
  - When some groups or areas are particularly beholden to political handouts (this one requires extension along the lines of Baland and Robinson, 2008).
  - When monitoring of votes is easier.

Clientelism Networks in Mexico

- Larreguy (2013): the role of clientelistic networks in Mexico.
- In Mexico, such networks seem to have been important for the last 70 years for the support for PRI.
  - Particularly important in *ejidos* and *comunidades agrarias* controlled by the PRI.
- These networks will be particularly powerful when:
  - they have the resources and the power to fund political brokers and reward voters, and
  - they have the ability to monitor vote behavior and particularly, the performance of political brokers.

Empirical Strategy

- Suppose that PRI uses electoral data to monitor the performance of the brokers that control their networks.
- Exploit the fact that parties face a mismatch between
  - the level at which brokers operates their networks, and
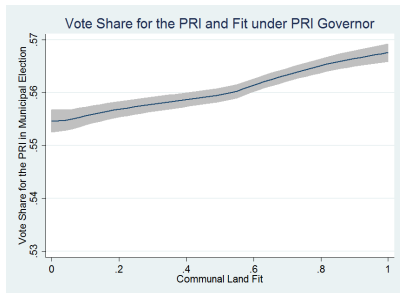 - the level at which electoral data they can use to monitor brokers is disclosed.

Location of Clientelistic Network

Geographical Area in Which Electoral Results are Disclosed
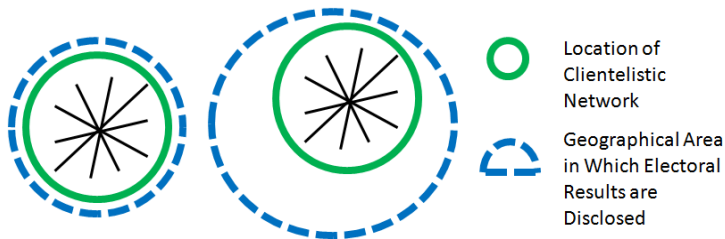
Empirical Model

$$y_{emst} = \beta_0 + \beta_1 \cdot I_{st}^{PRI} + \beta_2 \cdot fit_{ems} + \beta_3 \cdot I_{st}^{PRI} \cdot fit_{ems} + \varepsilon_{emst}$$

- y_{mst} : vote share for the PRI in communal land c municipality m in state s in year t.
- I_{st}^{PRI} : dummy variable that indicates whether the PRI controls the state government at the time of the election—*resource effect*
- fit_{ems} : *fit* of communal land to the electoral district, measuring mismatch—*monitoring effect.*
- ε_{emst} : error term.

Results

Under PRI Control

Vote Share for the PRI and Fit under PRI Governor
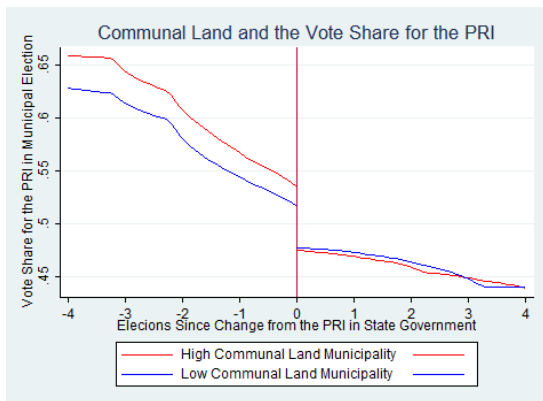
Under Non PRI Control

Vote Share for the PRI and Fit under Non-PRI Governor
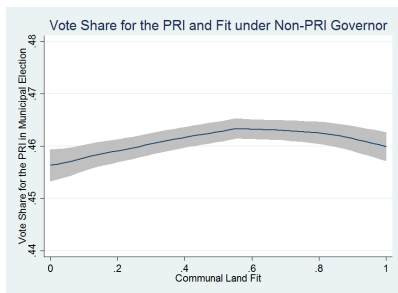
Preview of Results on Election Outcomes

- Vote Share for the PRI (y axis) and Election Since Change from the PRI in State Government (x axis).

Outcome Results

- Greater power of PRI networks associated with more success for PRI in controlled by PRI governors.
- But also worse public good outcomes.

Strategic Inefficiencies

- Clientelism can also emerge strategically (Acemoglu, Ticchi and Vindigni, 2010).

- Those opposed to redistribution can keep the state/bureaucracy inefficient.

- This generates the need to pay even higher wages to bureaucrats and might also lead to an oversized, inefficient bureaucracy.

- Because the bureaucracies inefficient, redistribution is limited (especially through general public goods).

- But it also endogenously generate support for party limiting redistribution because current bureaucrats realize that if power shifts to the party in favor of redistribution, it will reform the state, and many will have to lose their jobs (another form of endogenous patronage).

When Do Governments Redistribute?
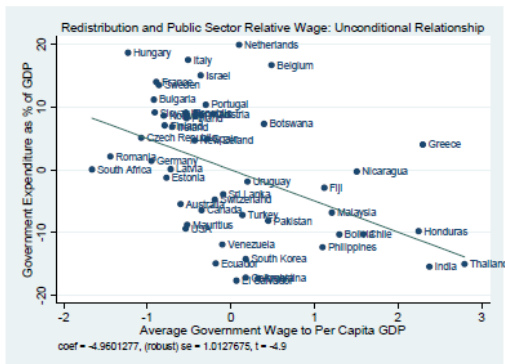
Legacies of Extractive States

- Other complementary mechanisms:
  - State apparatus set up for extracting resources from part of the population will create incentives for new politicians/rulers to do likewise.
  - Prolonged elite control of the state might undermine trust in state institutions, so democracy would be harder to maintain and also people less likely to trust the state to regulate, invest in public goods and redistribute (this would require a model of endogenous beliefs, which we will start discussing in the next lecture).