

# 14.773 Political Economy of Institutions and Development.

## Lecture 9. Persistence and Dysfunctional Democracies

Daron Acemoglu

MIT

March 7, 2019.

# 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  $\beta$ .
- 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:

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

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

$$P_t^C = \omega_t + \eta I(s_t = D), \quad (2)$$

where  $I(s_t = D)$  is an indicator function for  $s_t = D$ , i.e., for democracy.

- $\omega_t$  is a random variable drawn independently and identically over time from a given distribution  $F(\cdot)$ .
- 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,  $\tau_t$ , 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  $\omega_t$  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  $(\tau_t, s_{t+1})$ , and if  $P_t^E < P_t^C$  (i.e.,  $\pi_t = 1$ ), a representative citizen chooses  $(\tau_t, s_{t+1})$ .
  - ④ Given  $\tau_t$ , 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  $\theta^i$ .
- Then, the elite will have political power with probability

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

- The net present discounted value of agent  $i$  is

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

## Model: Value Functions (continued)

- Similarly in democracy,

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

$$V(D) = \max_{\theta^i \geq 0} \left\{ -\theta^i + p(\theta^i, \theta(D) | D) \left( \frac{R^r L}{M} + \beta V(N) \right) + \left( 1 - p(\theta^i, \theta(D) | D) \right) \left( \frac{R^c L}{M} + \beta V(D) \right) \right\} \quad (6)$$

## Equilibrium Conditions

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

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

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

- These two equations imply:

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

and

$$p(D) \equiv p(\theta(D), \theta(D) | D) = p(\theta(N), \theta(N) | N) \equiv p(N), \quad (10)$$

# 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  $\omega^*$  such that  $f'(\omega) > 0$  for all  $\omega < \omega^*$  and  $f'(\omega) < 0$  for all  $\omega > \omega^*$ ) and satisfies  $\lim_{\omega \rightarrow \infty} f(\omega) = 0$ .

- 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  $M \ll K$  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:*

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

② *Discount factor:*

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

③ *Number (cohesion) of the elite:*

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

④ *Democratic advantage of the citizens:*

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

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

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

and that

$$\eta > -\underline{\omega} \quad (12)$$

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 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  $\beta \rightarrow 1$ , 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  $\phi$  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:

- Economic rents:*

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

- Discount factor:*

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

- 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  $\phi$  and  $\eta$  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  $\lambda$  increases  $p(N)$  because democracy more costly.

# 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.

# Summary

- 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...

## Example of Captured Democracy?

- Anderson, François and Kotwal (2011) provides a possible example of captured democracy, rural governance institutions (Gram Panchayats) in Maharashtra India.
- Elections are free, with very limited fraud and coercion, and typically lead to high representation.
- Citizens also appear to believe that the democratic process works.
- However, land-owning elite from the leading caste, Marathas, dominate politics both directly and indirectly, and this often has the effect of undermining redistributive policies and also poverty alleviation programs.

## Example of Captured Democracy? (continued)

- Villagers are generally dissatisfied with the performance of rural governance institutions, and there is general recognition that power is in the hands of upper caste members and landowners.
- Empirical work by Anderson et al. shows that Maratha elites dominate politics in places where they are more numerous (in part because of block caste voting and the greater social cohesion) but also in places where they own more land.
- In such elite-dominated villages, wages are lower (even though productivity on agricultural lands and profits are higher).
- Anderson et al. suggest that this pattern reflects patron-client relations in Maharashtra villages, empowering the elite. We next turn to a brief discussion of clan to listen.