

14.773 Political Economy of Institutions and
Development.
Lectures 9 and 10. Persistence and Dysfunctional
Democracies

Daron Acemoglu

MIT

March 7 and 12, 2013.

Persistence and Change

- Institutional persistence, essential for empirical and theoretical work in political economy.
- But persistence and change coexist.
- End of colonial system, persistence of economic relations in Latin America
- End of slavery and enfranchisement of blacks in the South, persistence of practices.
- A specific type of persistence particularly interesting: 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 (making some conclude that the society did not have “a culture of democracy”; is that the right way to think about things?).

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

- 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:

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

- 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.

- ω_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, 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

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

- 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 ω^* 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 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 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:

- 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 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 $P_t^C + \zeta > P_t^E \geq P_t^C$, where $\zeta > 0$, the elite can choose economic institutions but cannot change the political system.
- If $P_t^E \geq P_t^C + \zeta$, the elite can choose both economic institutions and the future political system.
- Symmetrically when $P_t^E + \zeta > P_t^C \geq P_t^E$, 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 $\lim_{\omega \rightarrow \infty} f(\omega) = 0$.

- 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

- One type of democratic failure is “clientelism”: democratic competition leads to each party catering to the needs of a narrow group through inefficient transfers or policies.
- Let us first understand how clientelism might work (more historical context and detail in recitation).
- 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 $i \in \{0, 1, \dots, N\}$. 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

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

where $C(\tau)$, 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

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

subject to the government budget constraint.

- Denoting the Lagrange multiplier on the government resources by λ , the complementary slackness conditions are:

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

- 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 $(\tau, G, g_1, \dots, g_N)$ 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:

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

Political Equilibrium

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

$$\alpha \Gamma'(G) = \frac{\lambda'}{\sum_{i=0}^N h_i(0)}$$

$$h_i(0) \leq \lambda'$$

$$\bar{y} = \frac{\lambda'}{\sum_{i=0}^N h_i(0)} \bar{y} (1 - C(\tau)).$$

- 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:
 - There will be underinvestment in the general public good.
 - 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.

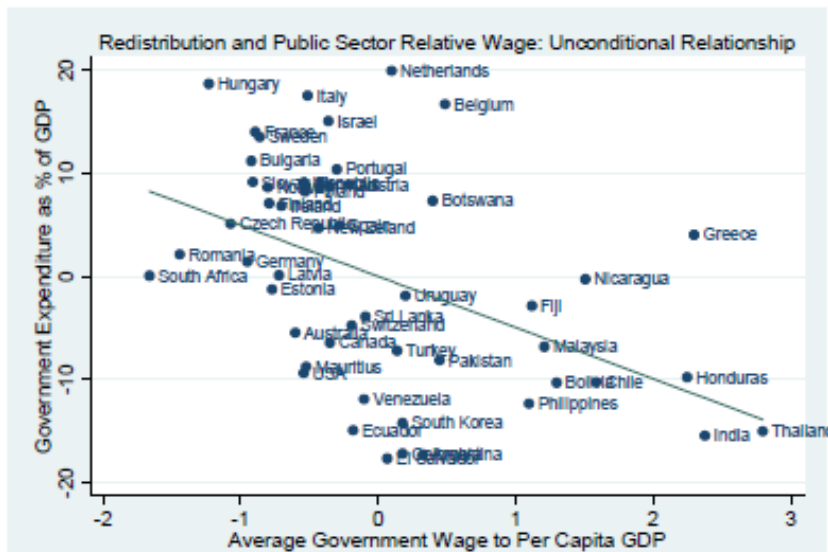
When Is Clientelism More Likely?

- 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.
- When some groups or areas are particularly beholden to political handouts (this one requires extension).

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).

What Is the State?

- A related mechanism: the state may endogenously be kept as weak, not just inefficient.
- Max Weber defined a state as “a human community that (successfully) claims the *monopoly of the legitimate use of physical force* within a given territory.”
- Many states do not have such a monopoly and without it have little hope of enforcing rules, regulations, and laws, providing property rights and public goods.
- Presumption in the existing literature: this is because of the weakness of the state and ‘modernization’ will ultimately strengthen the state and ensure monopoly of violence.

But

- In many polities, the central state exists side-by-side, and in fact in a '*symbiotic*' relationship with non-state armed actors.
- Examples:
 - Waziristan in Pakistan;
 - Kurdish areas in Iraq;
 - the Mafia in the south of Italy;
 - Southern United States after the Hayes-Tilden agreement of 1877;
 - Colombia.
- Weak states or *symbiotic* relationship between central state and periphery?

Weak vs. Strong States in Colombia

- Imagine there is an incumbent politician/party facing an election.
- The country is divided into regions some of which are controlled by non-state armed actors.
- The incumbent decides which regions to 'take back' (in the limit establishing a monopoly of violence) and chooses a policy vector in the election.
- Non-state armed actors have preferences over policies and can coerce voters to support one candidate over another.
- This creates an electoral advantage for incumbent politicians they favor and reduces the incentives to eliminate these non-state actors.

Implications

- This would imply that paramilitaries will tend to persist to the extent that they deliver votes to the incumbent executive and that this effect is larger in areas where the President would otherwise not do well.
- Thus non-state armed actors can persist because they can be in a *symbiotic relationship* with the executive.
 - On the one hand, paramilitaries deliver votes to the President and in addition elect legislators who support the executive.
 - On the other, the executive delivers laws and the policies that the paramilitaries prefer.
- In addition, policies chosen to appease paramilitaries rather than provide public goods and services to the population.

Some Colombian Background

- In recent years Colombia has been dominated by two main non-state armed actors:
 - the 'left-wing' Fuerzas Armadas Revolucionarias de Colombia (FARC—The Revolutionary Armed Forces of Colombia) and
 - the 'right-wing' paramilitary forces which in 1997 coalesced into the Autodefensas Unidas de Colombia (AUC—United Self-Defense Organization of Colombia).
- After the foundation of the AUC in 1997 a strategic decision was taken to influence national politics (possibly taken at Santa Fé de Ralito in 2001 where members of the AUC, politicians and members of congress signed a document calling for the 'refounding of the country.')

The Involvement of Paramilitaries in Politics

- In 2005 accusations of involvement of the AUC in the elections of 2002. Scandal with the demobilization of Jorge 40 and his 2,000 strong block on March 10, 2006 in La Mesa, César.
- Jorge 40's computer fell into the hands of government officials and it contained emails ordering his men to recruit peasants to pretend to be paramilitaries during demobilization ceremonies and also listed over 500 murders, and many links between politicians and paramilitaries.
- So far around 30,000 paramilitaries have “demobilized” in this process.
- As of April 22, 2008, 62 members of Congress and the Senate were official suspects, 33 lawmakers, including Mario Uribe, President Uribe's cousin, were in jail awaiting trial for links with paramilitaries.

Who Are the Representatives?

Table 1: Top 20 Senators by Vote Share in Paramilitary Presence Areas

Senator	Third Parties	Votes Param. Zones	Reelection	Just. & Peace Law	Investigated/Arrested
GNECCO	Yes	61.88	Yes	Yes	No/No
PIMIENTO	Yes	54.6	Yes	Yes	No/Yes
MALOOF	Yes	49.5	Yes	Yes	No/Yes
CLAVIJO	Yes	44.76			No/Yes
SAADE	Yes	42.51	Yes		Yes/No
MARTINEZ	Yes	41.8	Yes		Yes/No
GARCIA	Yes	38.01			No/Yes
PUELLO	No	30.64	Yes		No/No
MERLANO	Yes	28.73	Yes	Yes	No/Yes
VIVES	Yes	27.52	Yes	Yes	No/Yes
MONTES	Yes	26.9	Yes	Yes	No/No
ZUCCARDI	Yes	25.09	Yes	Yes	No/No
ARAUJO	Yes	24.44		Yes	No/Yes
SERRANO	No	23.12	No		No/No
QUINTERO	Yes	23.06			No/Yes
DE LA ESPRIELLA	Yes	22.55	Yes	Yes	No/Yes
ACOSTA	Yes	22.4			No/No
BLEL	Yes	21.59	Yes	Yes	No/Yes
GIL	Yes	21.21	Yes		No/Yes
CORDOBA	No	20.14	No	No	No/No

Impact of Paramilitaries on Elections

- Acemoglu, Robinson and Santos (2013) show that after the decision of the AUC to enter politics (i.e., after 2001), the presence of paramilitaries in a municipality is robustly correlated with greater vote shares of 'third parties,' typically connected with paramilitaries and supporting right-wing positions.
- Also paramilitary presence correlated with 'electoral concentration' for Senate and Congress elections in 2002 and the vote share of Presidential Uribe, in 2002 and more so in 2006.
- No robust effects of guerilla presence on voting patterns.
- Generally, the data support the idea that paramilitaries have a large impact on elections. Consistent with the case study literature.

Further Evidence

- Consider the vote in 2005 in the senate to re-introduce two clauses of the Justice and Peace Law which had been vetoed in Congress. These two clauses were to stop former paramilitaries being charged with sedition (avoiding possible extradition), and a limit of the length of prison services they could serve.
- Evidence that the presence of paramilitaries in areas where senate lists received a high proportion of their votes helps to predict the way Senators on the list vote.
- This variable also predicts which Senators were subsequently arrested for connections with paramilitaries.
- See Table 1.

Table 1 Again

Table 1: Top 20 Senators by Vote Share in Paramilitary Presence Areas

Senator	Third Parties	Votes Param. Zones	Reelection	Just. & Peace Law	Investigated/Arrested
GNECCO	Yes	61.88	Yes	Yes	No/No
PIMIENTO	Yes	54.6	Yes	Yes	No/Yes
MALOOF	Yes	49.5	Yes	Yes	No/Yes
CLAVIJO	Yes	44.76			No/Yes
SAADE	Yes	42.51	Yes		Yes/No
MARTINEZ	Yes	41.8	Yes		Yes/No
GARCIA	Yes	38.01			No/Yes
PUELLO	No	30.64	Yes		No/No
MERLANO	Yes	28.73	Yes	Yes	No/Yes
VIVES	Yes	27.52	Yes	Yes	No/Yes
MONTES	Yes	26.9	Yes	Yes	No/No
ZUCCARDI	Yes	25.09	Yes	Yes	No/No
ARAUJO	Yes	24.44		Yes	No/Yes
SERRANO	No	23.12	No		No/No
QUINTERO	Yes	23.06			No/Yes
DE LA ESPRIELLA	Yes	22.55	Yes	Yes	No/Yes
ACOSTA	Yes	22.4			No/No
BLEL	Yes	21.59	Yes	Yes	No/Yes
GIL	Yes	21.21	Yes		No/Yes
CORDOBA	No	20.14	No	No	No/No

Main Result: Persistence of the Paramilitaries

- Consider now whether or not the persistence of paramilitaries after the 2002 election is related to voting patterns in 2002.
- In line with the predictions discussed above, paramilitaries tend to persist more in a municipality, the greater the vote share of President Uribe in 2002. This effect is smaller, the greater was the historical extent of conservative support in the municipality.
- The intuition for this last finding is that in places with strong historical support for conservatives Uribe was confident of winning and therefore needs the support of paramilitaries less.

The Symbiotic Relationship

- Large case study literature suggests that Uribe has delivered to paramilitaries (lenient Justice and Peace Law, refusal to support suspension of alternates in the legislature for arrested politicians).
- One can look at the roll call vote in 2004 to change the constitution to allow for Presidential re-election.
- Result: the greater the proportion of votes a Senate list received in paramilitary areas, the greater the proportion of Senators on the list that voted for re-election.

Persistence of Civil Wars

- Related idea in Acemoglu, Ticchi and Vindigni: civil wars, and thus the lack of power of the central state in many parts of the territory, persist in many African countries because the elites are afraid of increasing the power of the military.
 - Extreme example: Sierra Leone.
- The elite (often the politicians controlling the coffers) have a choice:
 - Increase the power of the military. This will end the civil war, but then will unleash a series of further political changes, either necessitating greater power sharing with the military, or other political reforms.
 - Keep the military weak. This will lead to the persistence of civil wars, but the elite can still grab a little rents.