

ECON 3510: Poverty and Economic Development

Lecture 4: Political Institutions

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Overview

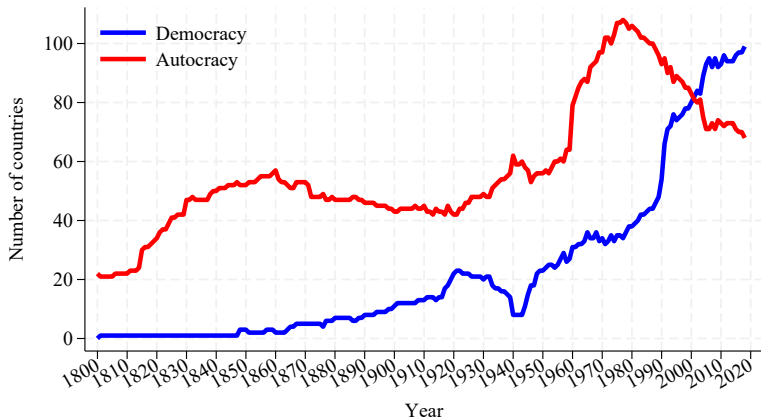
- ▶ We now turn to political institutions, which determine the distribution of political power.
- ▶ Some key questions:
 - How do political institutions vary across countries?
 - Do political institutions matter in economic development?

Political Regimes: Democracy and Autocracy

- ▶ A minimalist definition by Joseph A. Schumpeter (1942): Democracy means competition for political power through free elections.
 - Autocracies do not face such competition. Many modern autocracies hold elections, but they are neither competitive nor free (“electoral autocracy”).
- ▶ Democracies have a broader distribution of political power and more constraints on the government.
- ▶ Scholars often expand the minimalist definition by adding other criteria: scope of suffrage, rule of law, and civil liberties (Møller and Skaaning, 2013; Mukand and Rodrik, 2020).
 - Liberal democracy, electoral democracy, electoral autocracy, close autocracy, totalitarian regime, etc.
- ▶ Many international projects have experts to evaluate regime types worldwide: Varieties of Democracy (V-Dem), Polity Project, Freedom House, etc.

Regimes of the World (Polity V)

- Polity Project has ratings of regimes on a scale from -10 to 10. Typically, a score ≥ 6 is considered a **democracy**, otherwise an **autocracy**.



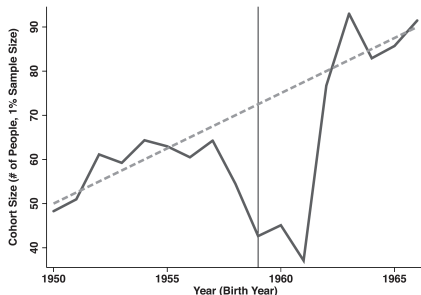
Source: Calculations based on Polity V data.

Why Should We Care?

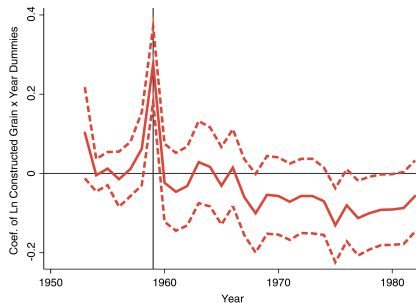
- ▶ Amartya Sen (1999): “development as freedom.”
 1. Political and civil rights *per se* are valuable. Democracy protects these rights.
 2. Democracy protects the poor by creating **political incentives** that hold the government responsive and accountable to people's needs.
 3. Democracy plays a constructive role. It gives citizens opportunities to learn from each other, and helps society form its values and priorities.

Protection of the Poor

- ▶ Sen (1999) famously argues that “no substantial famine has ever occurred in any independent and democratic country with a relatively free press.”
 - China (1959–1961), Soviet Union (1930–1933), North Korea (1995–2000).
- ▶ The Great Chinese Famine (1959–1961) killed at least 30 million people. A key cause is the failure of central planning policies: too many grains were procured by the government based on erroneous output data; these policies were not criticized and corrected because the autocratic system banned/discouraged doubts and criticisms.



(a) Cohort Sizes in the 1990 Chinese Census



(b) More grain outputs are associated with more deaths!

Source: Meng, Qian, and Yared (2015)

Why Should We Care?

- ▶ Besides the value of political and civil rights *per se*, we economists are also interested in **the role of democracy in economic growth**.
- ▶ Does democracy have a causal effect on growth?
- ▶ Or is it the opposite that economic growth causes democratization?
 - This is the so-called **modernization hypothesis** (Lipset, 1959; Barro, 1999).
 - There are seemingly consistent examples: South Korea and Taiwan. Also counter examples: Singapore and China.
- ▶ Next, we present evidence from Acemoglu et al. (2008) (“Income and Democracy,” *American Economic Review*).

- ▶ Cross-country regression can't convincingly estimate a causal effect:

$$\text{Democracy}_i = \alpha + \beta \text{Income}_i + \varepsilon_i.$$

$\text{Cov}(\text{Income}_i, \varepsilon_i) \neq 0$. Omitted variables: human capital, geography, health, etc.

- ▶ Acemoglu et al. (2008) use within-country variation: (a slightly simplified model)

$$\text{Democracy}_{it} = \alpha + \beta \text{Income}_{it} + \mu_t + \delta_i + \varepsilon_i.$$

μ_t is the time fixed effect, absorbing all time-specific shocks to all countries (e.g., global increase in incomes).

δ_i is the country fixed effects, controlling for all time-invariant country characteristics.

- ▶ First-difference specification (suppose two periods):

$$\Delta \text{Democracy}_i = \beta \Delta \text{Income}_i + \mu + \Delta \varepsilon_i.$$

Higher Income *Levels* Correlate With More Democratic Institutions

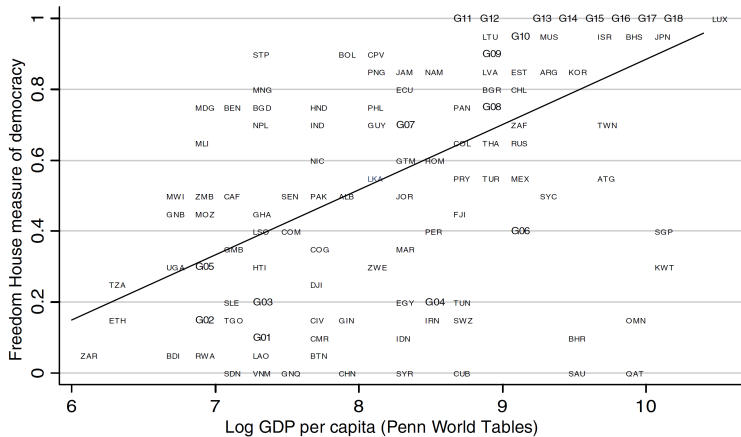


FIGURE 1. DEMOCRACY AND INCOME, 1990s

Changes in Income Are Not Associated with Changes in Democracy

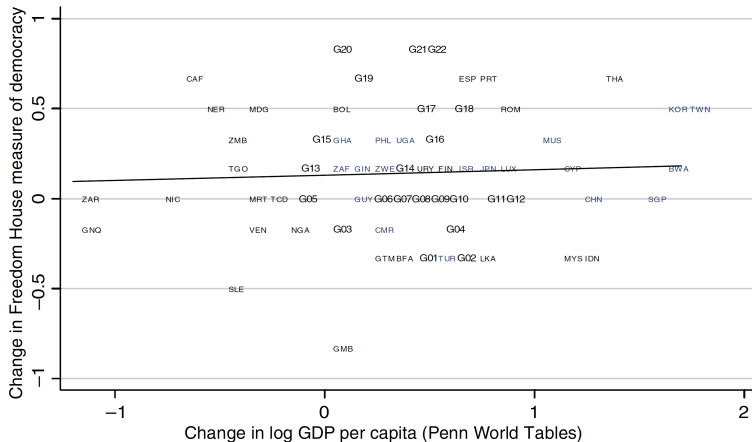


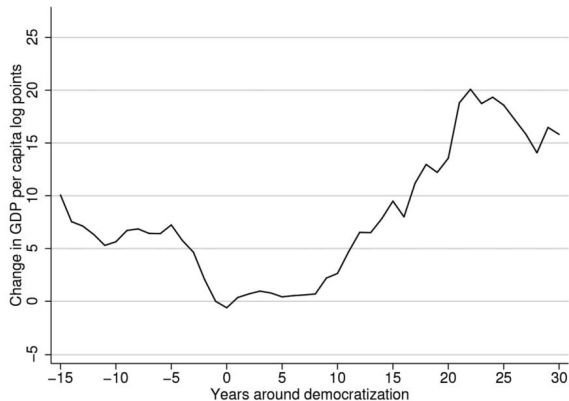
FIGURE 2. CHANGE IN DEMOCRACY AND INCOME, 1970–1995

- ▶ What is the threat to the fixed effects strategy? Time-varying factors.
- ▶ Acemoglu et al. (2008) additionally use two IVs for income:
 - Past saving rates;
 - Income growth of trading partners.
- ▶ IV estimates again show no strong impact of economic development on democracy.

Causal Effect of Democracy on Growth?

- ▶ Many scholars attempt to answer this question. The best attempt so far is Acemoglu et al. (2019) (“Democracy Does Cause Growth,” *Journal of Political Economy*).
 - Other work: Papaioannou and Siourounis (2008), Doucouliagos and Ulubaşoğlu (2008), Giavazzi and Tabellini (2005), and Persson and Tabellini (2006), ...
- ▶ Two major empirical challenges.
- ▶ **Measurement error in democracy.** They combine several democracy scores to define whether a country is democratic in a year. They create a binary democracy variable D_{ct} .
- ▶ **Unobserved differences between democracies and autocracies.** They control for: (i) country fixed effects, absorbing all time-invariant characteristics; (ii) lags of GDP, representing time-varying factors that may affect GDP and democratization.
 - They also use an IV strategy to address time-varying factors.

GDP Dynamics Around Democratization



- ▶ Democratizers experience sluggish growth before democratization; it took a decade for the economy to grow again after democratization.
- ▶ Need to model the GDP dynamics. They are time-varying, so country fixed effects are not adequate.

Acemoglu et al. (2019): Empirical Strategy

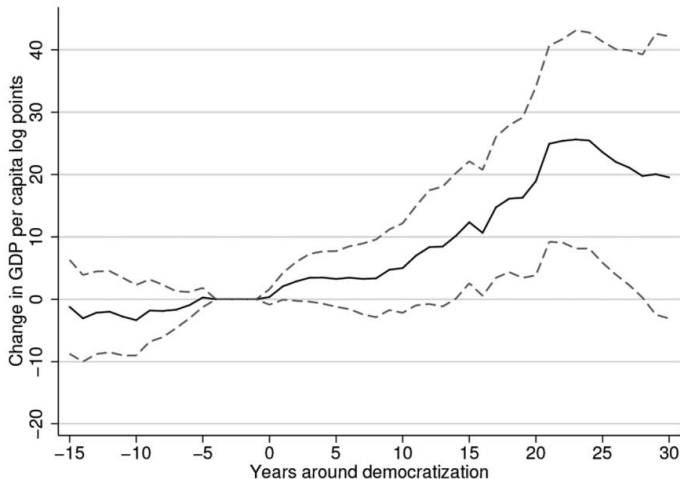
- Formally, they estimate the following linear regression, using data of 175 countries from 1960–2010:

$$y_{ct} = \beta D_{ct} + \sum_{j=1}^p \gamma_j y_{c,t-j} + \alpha_c + \delta_t + \varepsilon_{ct}.$$

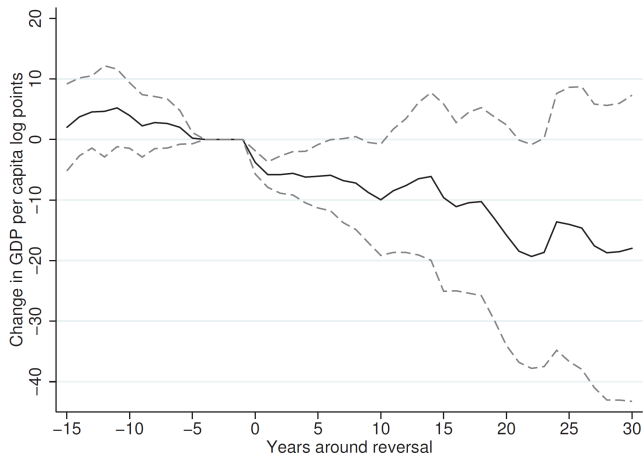
- y_{ct} : log GDP per capita of country c in year t .
- D_{ct} : democracy dummy variable.
- α_c and δ_t : country and year fixed effects.
- $\{y_{c,t-j}\}_{j=1}^p$: lags of log GDP per capita, used to control for the dip in GDP preceding democratization.
- This is a DiD design. A causal interpretation of $\hat{\beta}$ needs a **parallel trends assumption**: conditional on α_c , δ_t , and $\{y_{c,t-j}\}_{j=1}^p$, countries would have exhibited similar GDP trends in the absence of democratization.

Acemoglu et al. (2019): Effects of Democratization

- Democratization in the long run increases GDP per capita by 20%.



Acemoglu et al. (2019): Effects of Autocratization



Acemoglu et al. (2019): (Potential) Mechanisms

TABLE 7
EFFECTS OF DEMOCRACY ON POTENTIAL MECHANISMS

	DEPENDENT VARIABLE								
	Log of Investment Share in GDP (1)	Log of TFP (2)	Index of Economic Reforms (3)	Log of Trade Share in GDP (4)	Log of Tax Share in GDP (5)	Log of Primary School Enrollment (6)	Log of Secondary School Enrollment (7)	Log of Child Mortality (8)	Dummy for Unrest (9)
A. Within Estimates									
Democracy	2.391 (1.114)	-.205 (.276)	.687 (.348)	.689 (.676)	3.311 (1.409)	1.042 (.338)	1.345 (.610)	-.253 (.063)	-7.832 (2.185)
Long-run effect of democracy	9.112 (4.255)	-2.883 (3.858)	5.580 (2.883)	5.445 (5.253)	16.062 (6.650)	21.908 (7.624)	18.960 (8.622)	-34.264 (10.747)	-11.944 (3.329)
Effect of democracy after 25 years	9.089 (4.245)	-2.738 (3.648)	5.359 (2.753)	5.303 (5.126)	15.864 (6.574)	18.892 (6.321)	18.057 (8.146)	-21.400 (5.124)	-11.944 (3.329)
Persistence of outcome process	.738 (.020)	.929 (.012)	.877 (.012)	.873 (.011)	.794 (.016)	.952 (.008)	.929 (.013)	.993 (.001)	.344 (.030)
Observations	5,665	3,879	4,692	5,738	4,511	3,714	2,883	6,084	5,646
Countries in sample	169	107	150	172	131	166	158	173	171

- Why does democracy cause growth? Acemoglu et al. (2019) find that democracy increases investment, increases economic reforms (measured by deregulations), increases tax revenue and public goods provisions (schooling and healthcare), and reduces social unrest.
- They argue that these are consistent with the ideas that democracies have stronger political incentives/power to invest in broad-based public goods and enact reforms that would otherwise be resisted by the elites.

Abeberese et al. (2023): Indonesia's Democratization

- ▶ Suharto's regime fell in May 1998 after a 32-year rule. Indonesia started the transition to democracy. In 1999, democratic elections at the regional level were introduced across the country.
- ▶ However, mayors appointed by Suharto were allowed to finish their 5-year terms before the first democratic elections were held.
- ▶ Effectively, districts would have different timing of fully transitioning into democracy simply because Suharto-appointed mayors had different start dates.
 - District 1's mayor was appointed in 1995, then the district should have a democratically mayor no later than 2000.
 - District 2's mayor was appointed in 1997, then the district should have a democratically mayor no later than 2002.
- ▶ Abeberese et al. (2023) exploit the timing variation to estimate the impact of democratically elected mayors on firm productivity, a key factor in development.

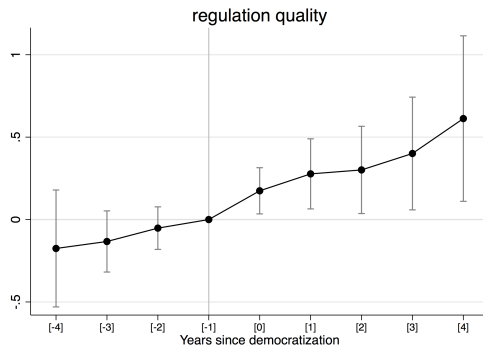
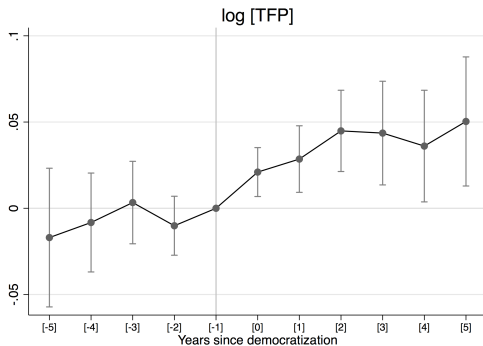
- ▶ Difference-in-Differences:

$$y_{ijdt} = \beta_0 + \sum_{\tau \neq -1} \beta_{\tau} \mathbb{1}\{\text{years since democracy}_{dt} = \tau\} + \lambda_i + \delta_{jt} + \varepsilon_{ijdt}.$$

- ▶ y_{ijdt} : outcome of firm i in industry j , district d , and year t .
- ▶ λ_i and δ_{jt} : firm FE and industry \times year FE.
- ▶ $\mathbb{1}\{\text{years since democracy}_{dt} = \tau\}$: indicators of time relative to local democratization that is *scheduled by last Suharto-appointed mayors' start dates*.
- ▶ Authors argue that variation in mayors' start dates is quasi-exogenous because predecessors ended terms earlier for idiosyncratic reasons (e.g., illness and death), thus variation in the timing of full democratic transition is also quasi-exogenous.
 - Their best evidence for this assumption is pretrends.
 - (In my opinion) Good to check correlations between start dates and local economic dynamics. Frequent turnovers can be endogenous: e.g., officials may compete for posts in rich districts.

Abeberese et al. (2023): Results

- ▶ They find that democratization increased the total factor productivity (TFP).
- ▶ They suggest one explanation: democratization has improved the quality of regulation (e.g., clarity of laws, consistency of laws, free flow of inputs and outputs, etc.). They argue that more oversight of politicians plays a role.

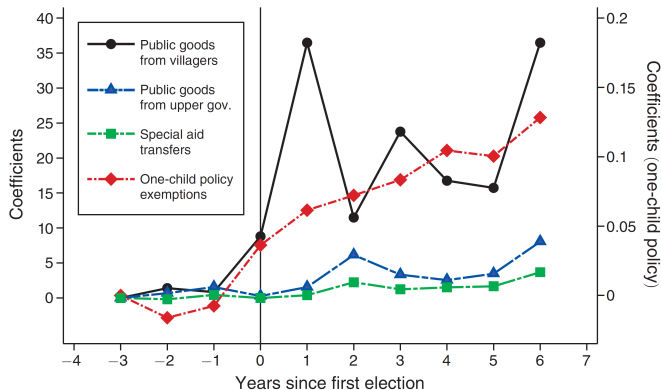


Martinez-Bravo et al. (2022): China's Rural Elections

- ▶ Despite the autocratic system, in the 1980s, China introduced elections to the village level, the lowest level of administration.
- ▶ Villagers can elect members of the governing body, the village committee (VC).
- ▶ VCs carry out key duties of village governance, such as public goods (e.g., roads, irrigation, and schools), management of village assets, and implementation of state policies (e.g., one-child policy, welfare programs, etc.).
- ▶ Though not comparable with true democratic elections, VC elections have been competitive. In recent years, however, these elections have faced increasing government control.

Martinez-Bravo et al. (2022): Results

- ▶ Elected VCs implemented more popular policies—public goods.
- ▶ They have weak incentives to implement unpopular policies—more one-child policy exemptions.

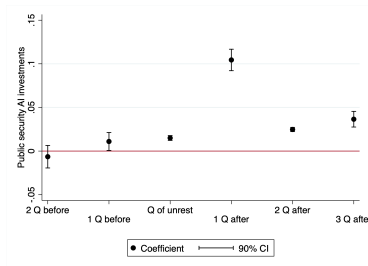


Policies in Democracies and Autocracies

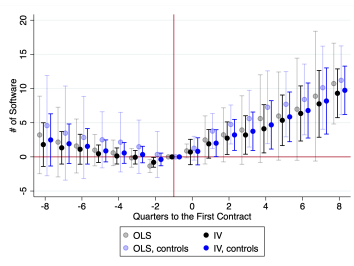
- ▶ Thus far, the evidence from democratization seems to suggest that at the margin, democracy is associated with broad-based policies, such as economic reforms and public goods provisions.
- ▶ This does not mean that autocracies do not implement reforms and provide public goods.
 - In 1889, the German Empire established the world's first pension system, in part to stave off calls for more radical socialist alternatives.
 - Mulligan, Gil, and Sala-i-Martin (2004) run cross-country regressions and find that autocracies and democracies do not significantly differ in social and economic policies, but autocracies maintain the monopoly of force and implement more policies that restrict political competition (captured by, e.g., high military and police spending and prosecutions).
- ▶ Policies can differ even within democracies and autocracies.
 - Persson and Tabellini (2006): parliamentary democracies have higher government spending than presidential democracies.
 - Olson (1993): two kinds of autocrats, roving bandits (short-horizon and extraction-focused) vs. stationary bandits (long-horizon and development-focused).
 - Some modern autocracies are mimicking democracies: they hold elections, tolerate protests, and allow for freer media.
- ▶ It may be more appropriate to interpret results through the lens of policymakers' **incentives**.

Why Does China Excel in AI?

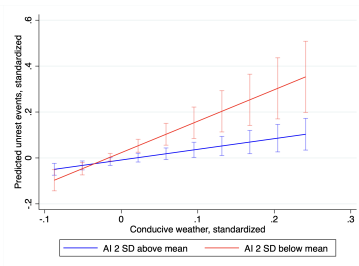
- ▶ Autocracies are often viewed as unfavorable for innovations: autocrats may worry about the loss of rents due to technological change, and innovators may fear expropriation.
- ▶ Beraja et al. (2023): The Chinese government is incentivized to promote the development of AI technologies, because AI, especially facial-recognition AI, can help maintain social stability.
 - a. Political unrest increases AI procurement.
 - b. AI firms innovate more software after receiving procurement contracts (and thus government data).
 - c. If more AI is deployed, unrest is less likely to occur (especially when weather conditions are favorable).



(a)



(b)



(c)

Conclusions

- ▶ Political institutions matter: they can shape policy choices and thus affect development outcomes.
- ▶ However, it is not possible to draw a clear-cut conclusion about a particular type of regime's policy choices. Rather, it is important and more useful to understand policymakers' incentives.
- ▶ The distribution of political power determines the sources of incentives.
 - Democracy: voters, interest groups, electoral rule, ...
 - Autocracy: elites, interest groups, social unrest, power-sharing rule, ...
- ▶ Political institutions can also affect “state capacity,” i.e., the government's ability to get things done.
 - E.g., checks and balances affect the level of corruption within the bureaucracy.
- ▶ The devil is in the details. Next, we'll discuss the inner workings of political institutions, with a focus on democracy.

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