Nobel Prize 2024: Acemoglu, Johnson and Robinson on Institutions and Prosperity

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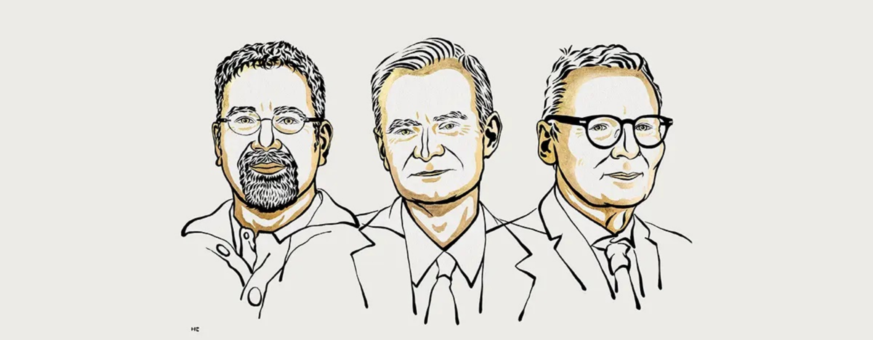

Daron Acemoglu, Simon Johnson and James A. Robinson,
Nobel Prize in Economics 2024, nobelprize.org

Do institutions have a causal effect on prosperity?
And why is it so hard to change institutions?
(And what needs to be done?)

GDP per capita and Democracy
(ourworldindata.org)

Road Map

- AJR in Historical Context
- Do Institutions cause Growth?
  - Colonization as quasi-experiment
- Why is it so hard to change Institutions?
  - Conceptual Framework
  - Extensions
  - Empirical Evidence
- Conclusion
- Trouble ahead (discussion!)

AJR in Historical Context

- Old idea that democracy and prosperity are positively related, e.g. proponents of "modernization theory" (Lipset 1959, 1960)
- Old idea that "institutions matter": D. North (1990) etc.
- Very old idea that institutions are the result of a struggle between self-interested groups (Marx 1867, Moore 1966, etc.)

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- Contributions by AJR (AER 2001, ff.)
  - "inclusive institutions" are causal for (sustained, intensive) economic growth
  - Institutional choice can be understood as the outcome of a struggle ("game") between groups of rational agents, characterised by social conflict, commitment problems and varying constraints (changing "windows of opportunity")

Do Institutions cause Growth?

- AJR (AER, 2001) argue against modernization theory that inclusive institutions (electoral democracy, free and fair markets) cause prosperity, while prosperity need not cause change towards such institutions (democracy)

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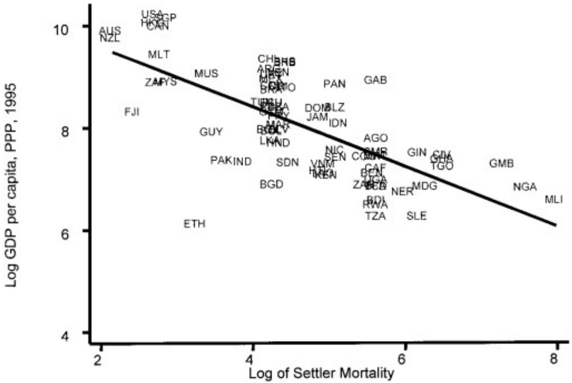
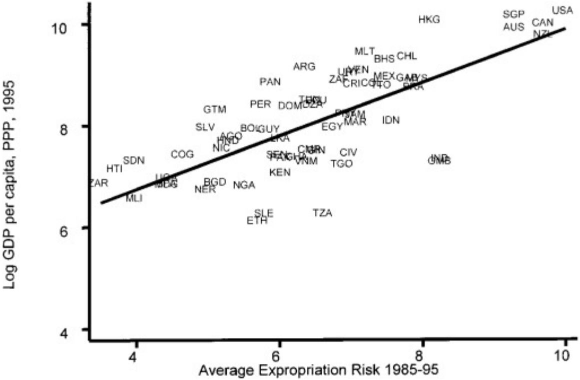
- To show this, they look at European colonies as a quasi-experiment:
  - Due to differences in disease environment at time of colonization, different types of colonies: extractive vs. settlement colonies
  - colonial institutions (extractive or inclusive) persisted over time and led to different economic growth

Settler mortality and 1995 GDP/cap



Source: AJR, AER (2001)

1985-95 Risk of Expropriation and 1995 GDP/cap



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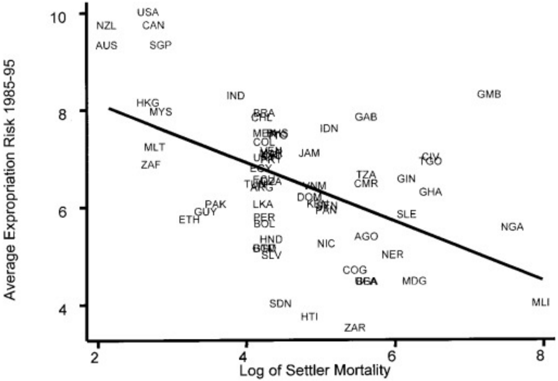
Settler mortality and 1985-95 Risk of Expropriation



Source: AJR, AER (2001)

Do Institutions cause Growth?

TABLE 4—IV REGRESSIONS OF LOG GDP PER CAPITA

	Base sample (1)	Base sample (2)	Base sample without Neo-Europes (3)	Base sample without Neo-Europes (4)	Base sample without Africa (5)	Base sample without Africa (6)	Base sample with continent dummies (7)	Base sample with continent dummies (8)	Base sample, dependent variable is log output per worker (9)
Panel A: Two-Stage Least Squares									
Average protection against expropriation risk 1985–1995	0.94	1.00	1.28	1.21	0.58	0.58	0.98	1.10	0.98
	(0.16)	(0.22)	(0.36)	(0.35)	(0.10)	(0.12)	(0.30)	(0.46)	(0.17)
Latitude		−0.65		0.94		0.04		−1.20	
		(1.34)		(1.46)		(0.84)		(1.8)	
Asia dummy							−0.92	−1.10	
							(0.40)	(0.52)	
Africa dummy							−0.46	−0.44	
							(0.36)	(0.42)	
"Other" continent dummy							−0.94	−0.99	
							(0.85)	(1.0)	
Panel B: First Stage for Average Protection Against Expropriation Risk in 1985–1995									
Log European settler mortality	−0.61	−0.51	−0.39	−0.39	−1.20	−1.10	−0.43	−0.34	−0.63
	(0.13)	(0.14)	(0.13)	(0.14)	(0.22)	(0.24)	(0.17)	(0.18)	(0.13)
Latitude		2.00		−0.11		0.99		2.00	
		(1.34)		(1.50)		(1.43)		(1.40)	
Asia dummy							0.33	0.47	
							(0.49)	(0.50)	
Africa dummy							−0.27	−0.26	
							(0.41)	(0.41)	
"Other" continent dummy							1.24	1.1	
							(0.84)	(0.84)	
R^2	0.27	0.30	0.13	0.13	0.47	0.47	0.30	0.33	0.28

Source: AJR, AER (2001)

Do Institutions cause Growth?

- Glaeser et al (JEG 2004) caution that the exclusion restriction might be violated: settler mortality did not only affect modern prosperity via persistent institutions, but also directly, via the settlers (and eg their knowledge, religious attitudes etc.)
- Albouy (AER 2012) questioned the quality of the data, especially the mortality data and argued that the results are not robust

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- Still, conceptually an important contribution, many papers followed this lead (eg Dell Ecta 2010, Michalopoulos and Papaioannou Ecta 2013)

Why is it so hard to change institutions?

- Hence, long-run growth in GDP pc is all about inclusive institutions:
  - “We will refer to political institutions that are sufficiently centralized and pluralistic as inclusive political institutions” (AR, Why Nations 2012, p. 81)
  - “Inclusive economic institutions (...) are those that allow and encourage participation by the great mass of people in economic activities that make best use of their talents and skills and that enable individuals to make the choices they wish.“ (AR 2012, p. 74)

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- So, why not simply change institutions everywhere to become "inclusive"? Is it just ignorance?

Conceptual Framework

- Two groups: masses and elite, each agent with some asset to be used in on of two sectors: formal and informal
- Formal sector with higher returns; proportional taxes that can only be raised on formal sector accruing to the masses
- Elite can hide all income, masses can hide fraction of income from informal sector
- Masses can overthrow elite at some cost
- All agents only care about consumption net of taxes (or transfers)

- In this set-up, key is distinction between commitment and no commitment

Conceptual Framework - No Commitment

- Timing of game
  1. Elite decides about democracy or no democracy
  2. Masses decide about revolution or no revolution
  3. Assets are allocated to sectors
  4. Group in power decides policy (taxes, transfers)
- Solving the game backwards shows that there will be some critical value (cv) for the cost of staging a revolution ("revolution constraint")
  - if cost of staging revolution are below cv, credible threat of revolution and transition to democracy; total income is high, as all assets go to formal sector
  - otherwise, elite maintains power, sets maximal tax rate, but masses invest all assets in informal sector; total income will be low

Conceptual Framework - Commitment

- Timing of game
  1. Elite decides about democracy or no democracy
  2. Either way, elite and masses enter a bargaining game about revolution or not, taxes, and transfers. With agreement, see 3, otherwise stage 2 above (case w/o commitment)
  3. Assets are allocated to sectors
  4. Decision on policy (taxes, transfers) according to agreement
  5. Transfers are made, consumption takes place
- Solving the game backwards shows that under commitment, there will never be a transition to democracy, because the elite is always better off than under democracy; moreover, commitment also allows to move towards an efficient allocation of assets without democracy

Conceptual Framework - Extensions

- If the cost of revolution are stochastic, but probability of revolution is high, this can work like a commitment device: promise of redistribution (instead of extension of the franchise) becomes credible; example: introduction of social insurance under Bismarck to fight the socialists in 1880s (AR, QJE 2000)
- (actually, this backfired: it caused the socialists to gain political influence, see Kersting CRC DP 2023)

Conceptual Framework - Extensions

- AR (Economic Origins, 2006) extend the model to include costly repression ("repression constraint")
- also, both the cost of revolution and the cost of repression are stochastic

- This leads to three possible equilibrium states:
  1. stable democracy
  2. unstable democracy
  3. stable dictatorship

Conceptual Framework - Extensions

- AR (AER 2008), and AJR (handbook, 2005) distinguish between *de jure* and *de facto* political power
- change in political institutions (*de jure* political power) can incentivize a group to invest in more *de facto* political power, which can partly offset the former
- in equilibrium, there might be "captured democracy", with formally inclusive political institutions, but extractive economic institutions
- their example is South of US after Civil War with formal enfranchisement of former slaves but continuation of many types of repression ("Jim Crow")

Conceptual Framework - General Insights

- AJR provide (micro-)economic explanations for
  1. why democracies tend to be richer and more dynamic than dictatorships
  2. why political institutions can change, and why this change is not always persistent
  3. why inefficient institutions are often sustained over long time periods

- They argue against modernization theory (eg Lipset) but also against any "general laws in economics" (eg Marx)

Empirical Evidence

- Aidt and Jensen (EER 2014) use data for 12 Western European countries, 1820 - 1939 to directly test AR (QJE, 2000, Economic Origins 2006): was there a causal effect of revolutionary threat on extension of the franchise?
- Using revolutionary events and episodes of franchise extension abroad, weighted by distance they estimate how this affects franchise extension at home

Empirical Evidence

Table 2
Baseline results for the panel model.
Dependent variable: ***Suffrage***.

	(1)	(2)	(3)	(4)	(5)	(6)
TR^u (unweighted)	1.89***			1.86***		
	[5.88]			[5.73]		
TR^g (geographical)		1.24***			1.19***	
		[6.75]			[6.44]	
TR^l (linguistic)			3.13**			3.33**
			[2.14]			[2.32]
Suffrage lagged	0.94***	0.94**	0.94**	0.93***	0.93***	0.93**
	[71.04]	[72.76]	[70.28]	[69.00]	[70.66]	[68.25]
Log GDP per capita				0.12	−0.22	0.34
				[0.05]	[−0.08]	[0.13]
Log population				3.92*	3.77*	3.98*
				[1.78]	[1.69]	[1.84]
Urbanization rate				0.003	0.003	0.003
				[0.38]	[0.34]	[0.35]
War				4.21***	4.08***	4.32***
				[3.97]	[3.87]	[4.08]
WWI				−2.00	−1.98	−2.00
				[−1.05]	[−1.07]	[−1.08]
Educational attainment				−0.81	−0.8	−0.84
				[−0.93]	[−0.93]	[−0.97]
Gold standard				0.24	0.2	0.26
				[0.31]	[0.26]	[0.34]
Observations	1069	1069	1069	1069	1069	1069
Number of countries	12	12	12	12	12	12
Estimation technique	OLS	OLS	OLS	OLS	OLS	OLS
Selection-ratio				3.7	5.9	2.5

Source: Aidt and Jensen, EER (2014)

Empirical Evidence

- With rise of China, failure of Arab spring etc. rising doubt that democracy really causes growth
- Acemoglu, Naidu, Restrepo, Robinson (JPE 2019) show hat (1) democratization is often preceded by economic crises. Next (2), they run panel regressions for 175 countries, 1960 - 2010, using several identification strategies all showing that causes GDP pc to increase by 20% in the long-run

Empirical Evidence

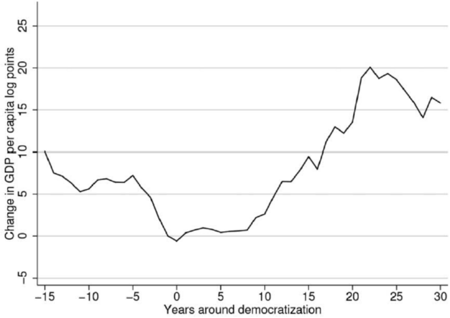

FIG. 1.—GDP per capita before and after a democratization. This figure plots GDP per capita in log points around a democratic transition relative to countries remaining non-democratic in the same year. We normalize log GDP per capita to 0 in the year preceding the democratization. Time (in years) relative to the year of democratization runs on the horizontal axis.

Source: ANRR, JPE (2019)

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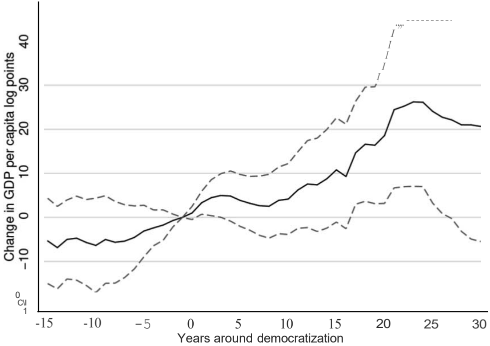

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- Mechanisms seem to include
  - higher investment
  - better education
  - better health
  - lower social unrest

Conclusion

- AJR established institutions as "fundamental" cause of economic growth
- Institutional change, persistence, and inefficiency can be understood, using insights form microeconomics
- there is empirical support for many of these mechanisms, but this is very challenging
  - scarcity of data, poor quality
  - complex settings
  - reverse causality, many other potential drivers (culture, technology, geography)

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- Institutional change, persistence, and inefficiency can be understood, using insights form microeconomics
- there is empirical support for many of these mechanisms, but this is very challenging
  - scarcity of data, poor quality
  - complex settings
  - reverse causality, many other potential drivers (culture, technology, geography)
- ..and neither historical evidence nor theory can really tell what the future holds

Trouble ahead (discussion!)

- Do democratic market economies have a future?

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- Do democratic market economies have a future?
- Challenge from abroad: China
- Challenges from within: AI and "captured democracy"
- Challenge from above: climate change