

# Democracy Does Cause Growth

## Presentation of the ANRR (2019) Paper

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Empirical Economics

# Introduction

## Publication:

- Journal of Political Economy (JPE)
- Working Paper (NBER): 03/2014
- Final Publication: 02/2019

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Figure 1: Cover of JPE

# Literature on Growth and Democracy

Table 1: Literature Examples

Authors	Relationship
Lipset (1959)	growth $\rightarrow$ democracy
Barro (1996)	democracy $\rightarrow$ $\downarrow$ growth
Giavazzi and Tabellini (2005)	democracy $\nrightarrow$ growth
Acemoglu et al. (2019)	democracy $\implies$ growth

# Data

## Democracy Measure

- constructed from different sources
- dichotomous
- 1960 - 2010, 184 Countries

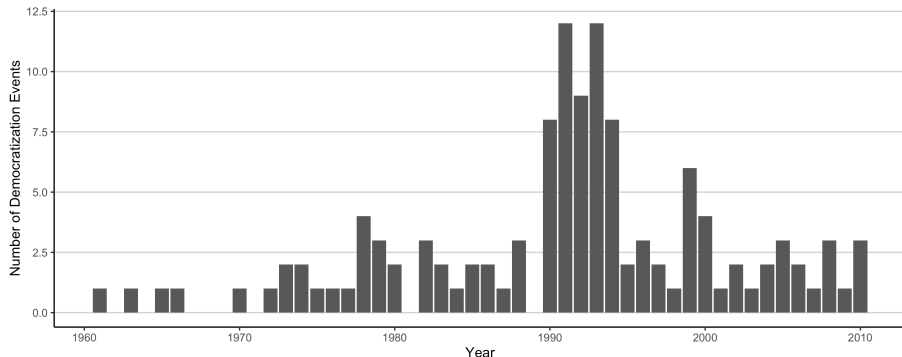


Figure 2: Democratization Events 1960-2010

## Problem: GDP Diversity and Dip

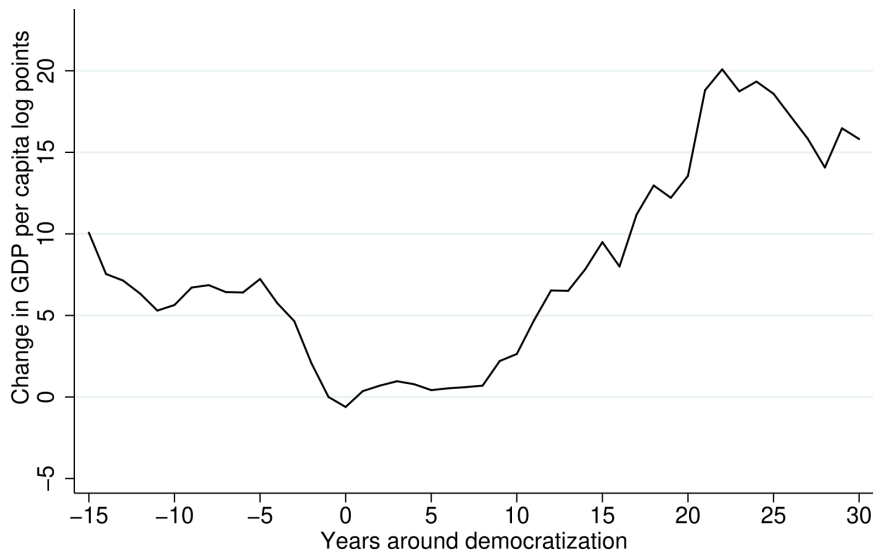


Figure 3: GDP Movement around Democratization

# Method

## 3 Approaches

- 1 **Dynamic Linear Panel Model** with *Within Estimator*
- 2 Semiparametric Estimation (*Appendix*)
- 3 Instrument Variable Regression (*Appendix*)

## Panel Formula

$$\mathbf{y}_{ct} = \beta \mathbf{D}_t + \sum_{j=1}^p \gamma_j y_{ct-j} + \alpha_c + \delta_t + \epsilon_{ct}$$

with  $p = \{1, 2, 4, 8\}$

# Fixed Effects Model

Table 2: Effect of Democracy on (Log) GDP per Capita

	<i>Dependent variable:</i>			
		Log GDP per Capita		
	(1)	(2)	(3)	(4)
Democracy	0.973*** (0.240)	0.651*** (0.229)	0.787*** (0.228)	0.887*** (0.239)
lag1	0.973*** (0.003)	1.266*** (0.012)	1.238*** (0.013)	1.233*** (0.013)
lag2		-0.300*** (0.012)	-0.207*** (0.020)	-0.214*** (0.021)
lag3			-0.026 (0.019)	-0.021 (0.021)
lag4			-0.043*** (0.012)	-0.039* (0.020)
lag5				-0.019 (0.020)
Persistence:	0.973	0.967	0.963	0.96
Long run effect:	35.587	19.599	21.24	22.008
Effect after 25 years:	17.791	13.8	16.895	17.715
Observations	6,790	6,642	6,336	5,688

Note:

Coefficient on democracy is multiplied by 100

# Trend Estimate

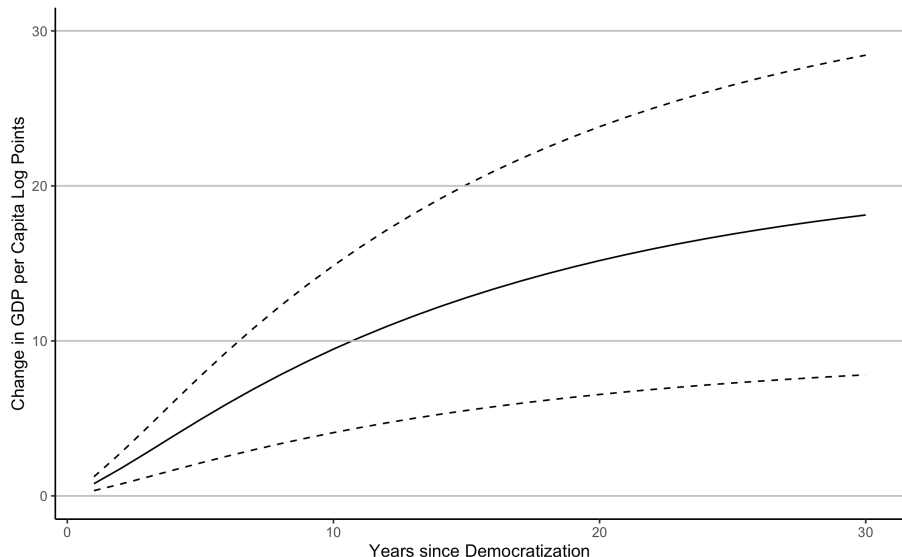


Figure 4: Over-Time Estimate of Democratization Effects



# Interlude: Replication in R

- Figure Democratizations
- Model Specification
- Results Table
- Trend Estimate
- Channels Table

Table 3: Effects of Democracy on Potential Mechanisms

	<i>Dependent variable:</i>								
	Log Investment	Log TFP	Index Economic Reforms	Log Trade Share	Log of Gov. Exp.	Log Primary Enrollment	Log Secondary Enrollment	Log Child Mortality	Dummy Unrest
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Democracy	2.391*** (0.928)	-0.205 (0.255)	0.687** (0.282)	0.689 (0.503)	3.311*** (1.078)	1.042*** (0.230)	1.345*** (0.393)	-0.253*** (0.051)	-7.832*** (1.764)
Long Run Effect	9.11	-2.88	5.58	5.45	16.06	21.91	18.96	-34.26	-11.94
Persistence	0.74	0.93	0.88	0.87	0.79	0.95	0.93	0.99	0.34
Observations	5,665	3,879	4,692	5,738	4,511	3,714	2,883	6,084	5,646

Democratization => **state capacity & human capital building**

# Critique

- Dichotomous Measure of Democracy ([Pelke 2023](#))
- Short Time Frame
- Sensitivity to Sample Selection ([Eberhardt 2019](#))

# References

- Acemoglu, Daron, Suresh Naidu, Pascual Restrepo, and James A. Robinson. 2019. "Democracy Does Cause Growth." *Journal of Political Economy* 127 (1): 47–100. <https://doi.org/10.1086/700936>.
- Barro, Robert J. 1996. "Democracy and Growth." *Journal of Economic Growth* 1 (1): 1–27. <https://doi.org/10.1007/BF00163340>.
- Colagrossi, Marco, Domenico Rossignoli, and Mario A. Maggioni. 2020. "Does Democracy Cause Growth? A Meta-Analysis (of 2000 Regressions)." *European Journal of Political Economy* 61 (January): 101824. <https://doi.org/10.1016/j.ejpoleco.2019.101824>.
- Croissant, Yves, Giovanni Millo, Kevin Tappe, Ott Toomet, Christian Kleiber, Achim Zeileis, Arne Henningsen, Liviu Andronic, and Nina Schoenfelder. 2023. "Plm: Linear Models for Panel Data." <https://cran.r-project.org/web/packages/plm/>.
- Eberhardt, Markus. 2019. "Democracy Does Cause Growth: Comment." {{SSRN Scholarly Paper}}. Rochester, NY. <https://papers.ssrn.com/abstract=3372858>.
- . 2022. "Democracy, Growth, Heterogeneity, and Robustness." *European Economic Review* 147 (August): 104173. <https://doi.org/10.1016/j.euroecorev.2022.104173>.
- Giavazzi, Francesco, and Guido Tabellini. 2005. "Economic and Political Liberalizations." *Journal of Monetary Economics* 52 (7): 1297–1330. <https://doi.org/10.1016/j.jmoneco.2005.05.002>.
- Hlavac, Marek. 2022. "Stargazer: Well-Formatted Regression and Summary Statistics Tables." <https://cran.r-project.org/web/packages/stargazer/index.html>.
- Lipset, Seymour Martin. 1959. "Some Social Requisites of Democracy: Economic Development and Political Legitimacy." *American Political Science Review* 53 (1): 69–105. <https://doi.org/10.2307/1951731>.
- Pelke, Lars. 2023. "Reanalysing the Link Between Democracy and Economic Development." *International Area Studies Review* 26 (4): 361–83. <https://doi.org/10.1177/22338659231194945>.

# Summary

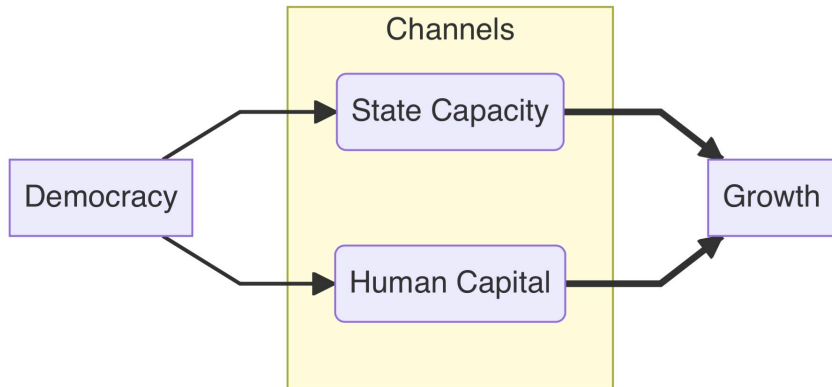


Figure 5: 2023-12-06\_17-17-36

# Discussion

- 1 Are there **alternative political frameworks** that could also facilitate these mechanisms (state capacity and education expansion) or is it easier in democracies?
- 2 What actionable **policy recommendations** can be drawn from the observed link between democracy and economic growth?

## Appendix: Semiparametric

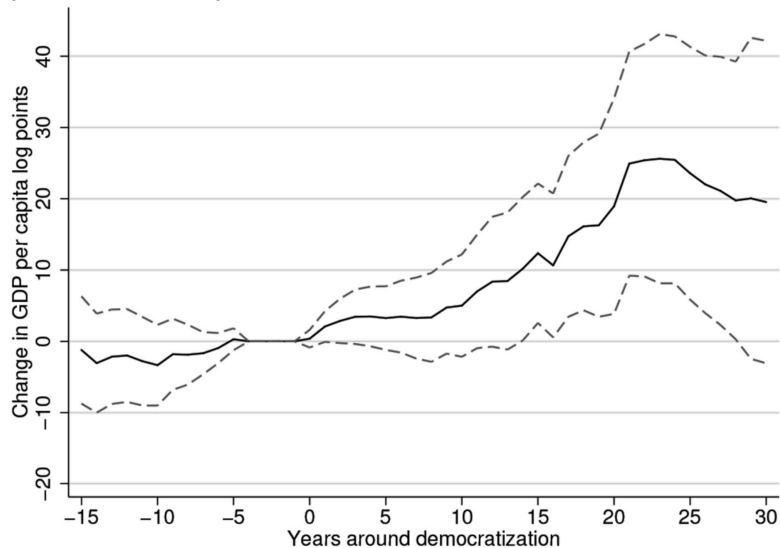


Figure 6: Semiparametric Estimates

## Appendix: IV

First Stage:

$$y_{ct} = \beta D_{ct} + \sum_{j=1}^p \gamma_j y_{ct-j} + \alpha_c + \delta_t + \epsilon_{ct}$$

Second Stage: with D as IV:

$$D_{ct} = \sum_{j=1}^p \pi_j Z_{ct-j} + \sum_{j=1}^p \phi y_{ct-j} + \Phi_c + \mu_t + v_{ct}$$

$Z$  = average of democracy in Region  $\times$  initial regime cell

Results see [Online Appendix](#)