

EC569 Economic Growth Government (Lecture 11)

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Overview

- Defining the proper role of the government
- How government affects growth
- Why poor countries have bad governments
- Challenges for economic growth

Defining the Proper Role of the Government

The Case of Government Intervention in the Economy:

Market failure:

- public goods
 - non-rivalry & non-excludable: national defense, public health, rule of law, infrastructure
- externalities
 - social net benefit \neq private net benefit
 - R&D subsidies
 - patents
 - education
- natural monopoly
 - high sunk cost: public utilities (electricities, natural gas, water, public transportation)
- coordination failure
 - industrial policy: supply chain, infant industry

Defining the Proper Role of the Government

The Case Against Government Intervention in the Economy:

Government failure:

- lack of incentives/information for the government to operate properly
 - inefficient state enterprises/government-owned banks
 - industrial policies lead to rent-seeking
- government failure $>$ market failure ?
 - privatization and deregulation

Equity-efficiency trade-off in redistribution:

- benefit of redistribution: higher equity
- cost of redistribution: lower efficiency, bureaucratic cost

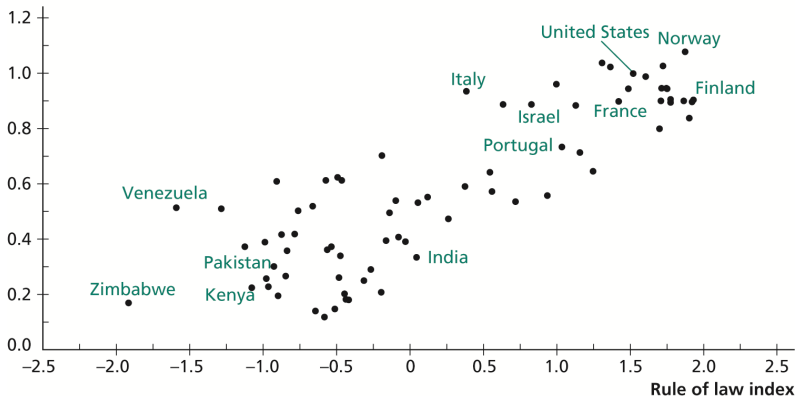
How Governments Affect Growth

Rule of law:

- a reliable legal system should lead to high factor accumulation
 - without property rights no one would save/invest
- a reliable legal system should lead to high productivity
 - without contract enforcement no one would trade: no division of labor

Rule of Law and Factor Accumulation, 2009

Factors of production relative to the United States

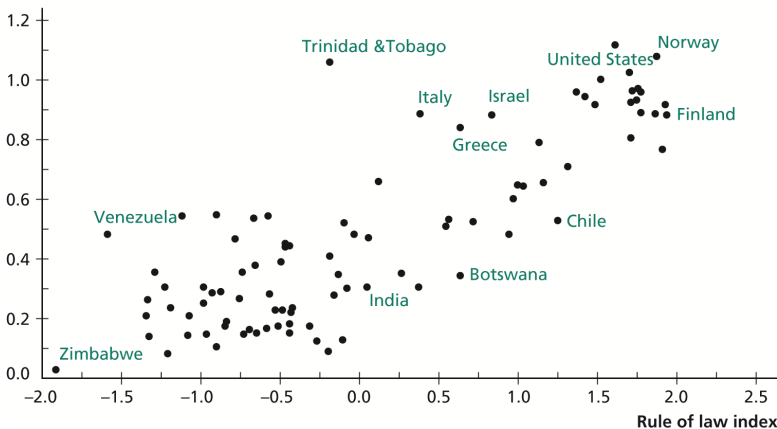


Source: Kaufmann, Kray, and Mastruzzi (2010). Data are scaled to have a standard deviation of 1.

Graphic from: Weil (2013)

Rule of Law and Productivity

Productivity relative to the United States



Source: Kaufmann, Kray, and Mastruzzi (2010). Data are scaled to have a standard deviation of 1.

Graphic from: Weil (2013)

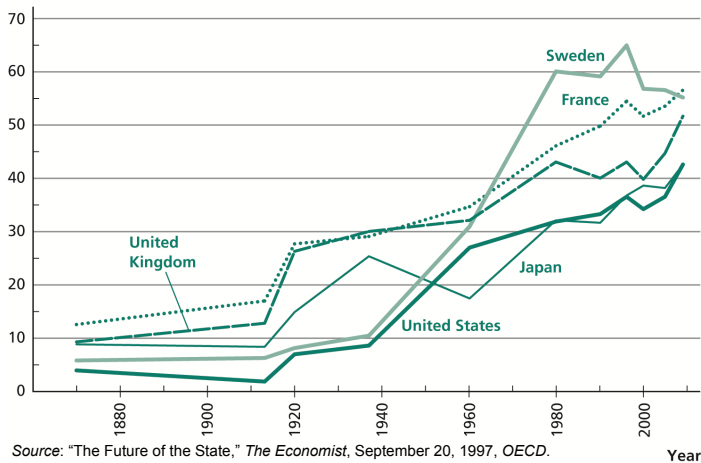
How Government Affects Growth

Taxation, Efficiency, and the Size of Government

- Wagner's law
 - the size of a government will increase as countries become richer due to more complex regulations and advanced public goods provision
 - increase in expenditure requires increase in taxes
- Taxes and output
 - increase in tax rates leads to lower efficiency
 - distortionary taxes discourage economic activities
 - dead weight loss represents the efficiency loss

Growth of Government Spending, 1870–2009

Government spending as a percentage of GDP



Graphic from: Weil (2013)

How Government Affects Growth

Planning and Other Industrial Policies

- State enterprises
- Government-owned banks
 - China: 98% of bank assets (2006)
 - India: 75%
 - Egypt: 65%
 - Israel: 46%
 - Germany: 42%
- Marketing boards
- Protection of infant industries with tariffs

Planning is not always a failure

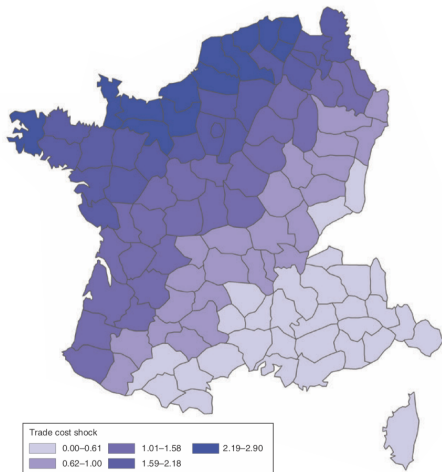
- South Korea
 - public enterprises in steel and petro-chemicals
 - directed investment into selected industries
 - tariffs to protect infant industries
 - public enterprises operated as autonomous, profit-seeking entities
- Taiwan
 - foreign firms were able to sell products in Taiwan only with technology transfer
- weaned infant industries from protection
 - Korea: protection conditional on growing export
 - Taiwan: protection conditional on meeting productivity targets
- Planning works when administered by an efficient, honest bureaucracy

Temporary Protection and Technology Adoption: Evidence from the Napoleonic Blockade[†]

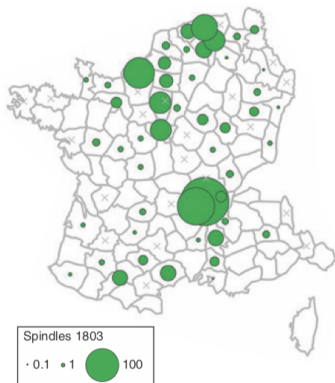
By RÉKA JUHÁSZ*

This paper uses a natural experiment to estimate the causal effect of temporary trade protection on long-term economic development. I find that regions in the French Empire which became better protected from trade with the British for exogenous reasons during the Napoleonic Wars (1803–1815) increased capacity in mechanized cotton spinning to a larger extent than regions which remained more exposed to trade. In the long run, regions with exogenously higher spinning capacity had higher activity in mechanized cotton spinning. They also had higher value added per capita in industry up to the second half of the nineteenth century, but not later. (JEL F13, L67, N43, N63, N73)

Juhász, R. (2018). Temporary protection and technology adoption: Evidence from the napoleonic blockade. *American Economic Review*, 108(11), 3339-76.

FIGURE 2. TRADE COST SHOCK (*log Change in Effective Distance to London*)

Panel A. Spindles per '000 inhabitants, 1803



Panel B. Spindles per '000 inhabitants, 1812

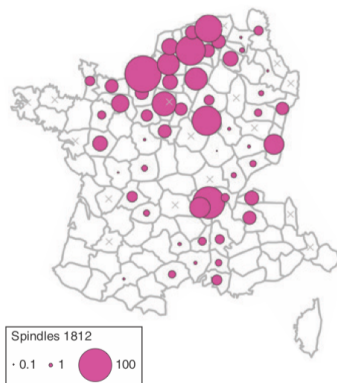
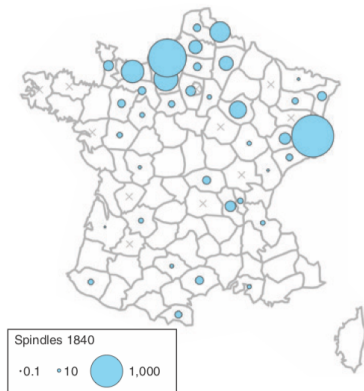


FIGURE 3. VARIATION USED: SHORT-RUN REGRESSIONS

Notes: Missing or dropped observations denoted by X. Departments observed for only one time period not shown to ensure comparability of the graphs across the two time periods. Scale not comparable across time periods.

Juhasz, R. (2018).

Panel A. Spindles per '000 inhabitants, 1840



Panel B. Spindles per '000 inhabitants, 1887

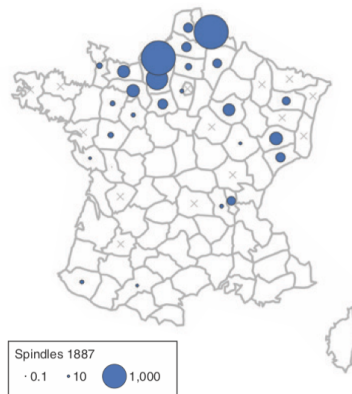


FIGURE 4. VARIATION USED: LONG-RUN PERSISTENCE REGRESSIONS

Notes: Missing or dropped observations are denoted by X. Departments not observed in 1812 not shown as these are missing from the regressions as the regressor of interest is not observed. Haut-Rhin and Bas-Rhin were ceded to Germany 1871–1918. Data for 1887 is not available for these latter departments. Scale not comparable across time periods.

How Government Affects Growth

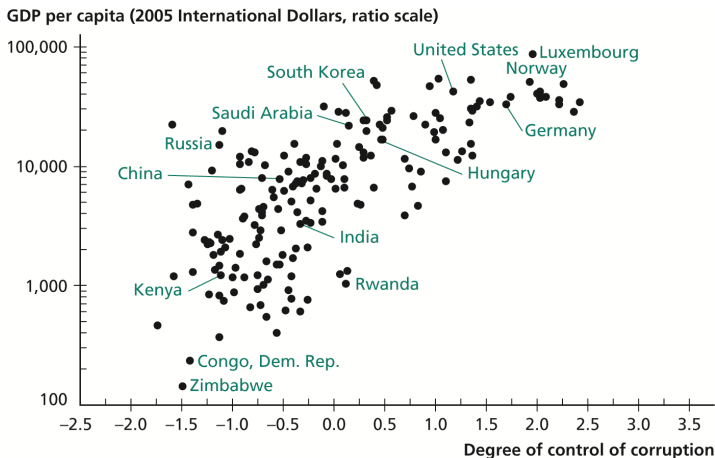
Civil conflicts

- looting
- flight of refugees
- destruction of capital
- restriction of commerce
- weakening of social capital
- diminished supply of public goods
- humanitarian costs

Why Governments Do Things That are Bad for Growth

- Some other goals
 - national defense, the arts, foreign aid
 - anti-pollution regulations
- Corruption
 - waste of government revenue
 - lower efficiency of production
 - undertake policies solely to generate more opportunities for bribery
 - undermine rule of law
- Self-preservation
 - new technologies can redistribute economic power
 - rising education may introduce destabilizing new ideas
 - movement of population from farms to cities may lead to revolutionary class
 - trade carries dangerous ideas

Government Corruption versus GDP per Capita, 2009



Source: Kaufmann, Kray, and Mastruzzi (2010).

Graph from: Weil (2013)

Government Regulation: Helping Hand or Grabbing Hand

Djankov et al. (2002)

- Bolivia: follow 20 procedures, wait 82 days, pay \$2,696 to establish a business
- Canada: 2 procedures, 2 days, \$280
- Helping hand
 - regulate entry of new firms to protect consumers from low-quality products
 - limit negative externalities such as pollution
- Grabbing hand
 - benefit government bureaucrats
 - benefit people with good connections to government

Government Regulation: Helping Hand or Grabbing Hand, cont'd

Djankov et al. (2002)

- Data supports grabbing hand
- Countries with more regulations did not have less pollution, higher-quality consumer products, or better health
- More democratic countries tend to have fewer regulations

Why Poor Countries Have Bad Governments

- Poor countries tend to have bad governments
- Are these countries poor because of their bad governments?
- Is bad government a symptom of poverty?

Causation Running from Income to Government Quality

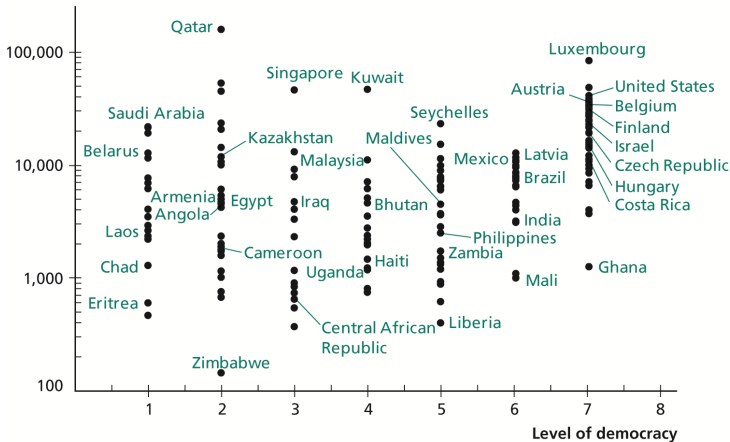
- Until 1871, British army officers were appointed and promoted by purchasing of their positions
- History of New York City, *a cesspool of corruption*
- Yet, these countries and cities are now advanced economies with better governments
- Rich countries can afford to pay their civil servants reasonable wages
- larger pie to split, less of the destructive competition

Causation Running from Government Quality to Income

- South Korea vs North Korea
- Some countries have bad government that have nothing to do with their income, (e.g. former colonies)

Democracy and GDP per Capita

GDP per capita, 2009 (2005 International Dollars, ratio scale)



Source: Freedom House (2011).

Graph from: Weil (2013)

Democracy and Economic Growth

- Political rights are greater in rich countries
- Democracy may not always good for economic growth
- positives
 - limits on the powers of rulers, avoid corruption
- negatives
 - prone to political instability
 - policies favoring short-run gains rather than long-run growth

Democracy Does Cause Growth*

Daron Acemoglu
MIT

Suresh Naidu
Columbia

Pascual Restrepo
BU

James A. Robinson
Chicago

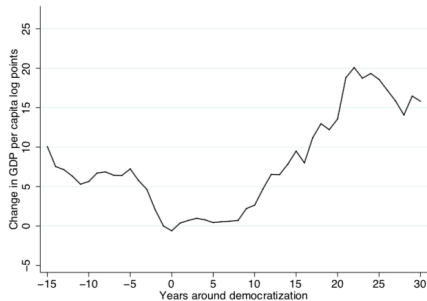
April 2017

Abstract

We provide evidence that democracy has a significant and robust positive effect on GDP per capita. Our empirical strategy controls for country fixed effects and the rich dynamics of GDP, which otherwise confound the effect of democracy on economic growth. To reduce measurement error, we introduce a new dichotomous measure of democracy that consolidates the information from several sources. Our baseline results use a dynamic panel model for GDP, and show that democratizations increase GDP per capita by about 20% in the long run. We find similar effects of democratizations on annual GDP when we control for the estimated propensity of a country to democratize based on past GDP dynamics. We obtain comparable estimates when we instrument democracy using regional waves of democratizations and reversals. Our results suggest that democracy increases GDP by encouraging investment, increasing schooling, inducing economic reforms, improving the provision of public goods, and reducing social unrest. We find little support for the view that democracy is a constraint on economic growth for less developed economies.

Acemoglu, D., Naidu, S., Restrepo, P., & Robinson, J. A. (2019). Democracy does cause growth. *Journal of Political Economy*, 127(1).

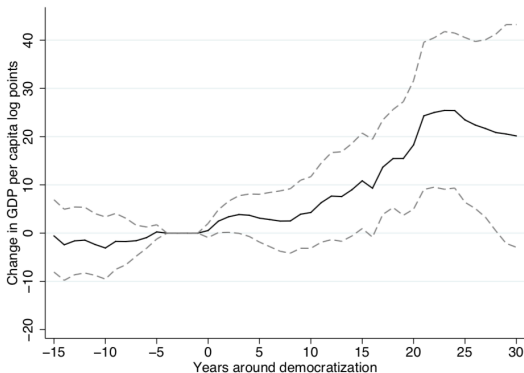
FIGURE 1: GDP PER CAPITA BEFORE AND AFTER A DEMOCRATIZATION.



Notes: This figure plots GDP per capita in log points around a democratic transition. We normalize log GDP per capita to zero in the year preceding the democratization. Time (in years) relative to the year of democratization runs on the horizontal axis.

Acemoglu et al. (2019).

FIGURE 5: SEMI-PARAMETRIC ESTIMATES OF THE OVER-TIME EFFECTS OF DEMOCRACY ON THE LOG OF GDP. DOUBLY-ROBUST ESTIMATES.



Notes: This figure plots semi-parametric estimates of the effect of democratizations on GDP per capita in log points. The solid line plots the estimated average effect on GDP per capita on countries that democratized (in log points), together with a 95% confidence interval in dashed lines. Time (in years) relative to the year of democratization runs on the horizontal axis. The estimates are obtained by assuming and estimating a probit model for democratizations based on GDP lags, which we use to estimate the propensity score and reweight the data. In addition, we partial out lags of GDP linearly, making our approach doubly robust. Section 4 explains our approach in full detail.

Challenges for Economic Growth

What have we learned?

- Many things are related to growth
 - causation tends to run in both directions
- We can construct models to explain causalities
 - selection of the model is up to the researcher
 - are the assumptions reasonable?
 - does the model pass empirical tests?

Challenges for Economic Growth

What remains to be studied?

- Policy tools are multi-dimensional
 - trade-offs due to resource constraints: R&D and production etc.
 - spill-overs through externality: human capital and technology growth etc.
- Policy goals are multi-dimensional
 - economic growth
 - business cycles
 - income inequality
 - national defense
 - environment
 - culture

Challenges for Economic Growth

What remains to be studied?

Policy implications should be drawn carefully

- policy tools/goals are multi-dimensional
- the situation of each country is different
 - what are the institutions in each economy?
 - what is the social preference in each economy?

Conclusion

- rule of law is unambiguously good for economic growth
- complete government direction of the economy does not work
- government planning and the protection of infant industries with tariffs have often but not always failed
- no consensus on optimal size of government or the optimal degree of income redistribution