

# **Political Institutions and Distributive Politics**

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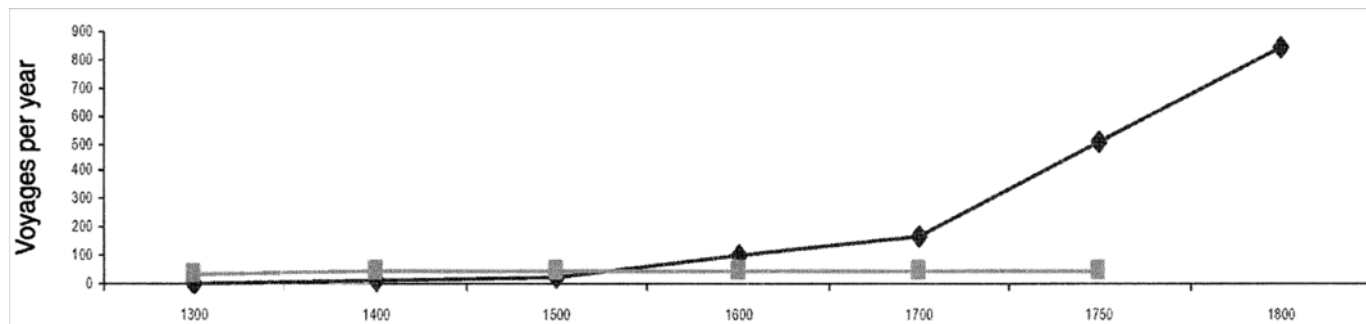
## A. Introduction

It is not until recent that economists have devoted effort toward understanding the role of institutions played in the process of economic development in a more systematical manner.

- **Institutional development:**
  - classic: North (1990), Rogoff (1990)
  - voting and political equilibrium: Glomm-Ravikumar (1992), Perotti (1993), Alesina-Spolaore (1997), Bolton-Roland (1997)
  - new literature: Acemoglu-Robinson (2000, 2008), *Acemoglu-Robinson* (2000, 2001, 2008), *Acemoglu-Johnson-Robinson* (2001, 2002, 2005), Galor-Moav-Vollrath (2009), Cheung-Palivos-Wang-Wang-Yip (2017)
- **The Importance of Institutions: institutional factors can**
  - affect laws and regulations under which households and firms function
  - shape the incentives individuals have for various decision-making
  - then, individuals' decisions can, in turn, affect the establishment of political and economic institutions
  - distortions created by bad institutions can cause resource misallocation
- **Institutions and growth: *Acemoglu-Naidu-Restrepo-Robinson* (2017), Acemoglu-Robinson-Verdier (2017), *Wang-Wong-Yip* (2017), Easterly (2019), Acemoglu, D., G. Egorov, and K. Sonin (2020), Coibion-Gorodnichenko-Weber (2020)**

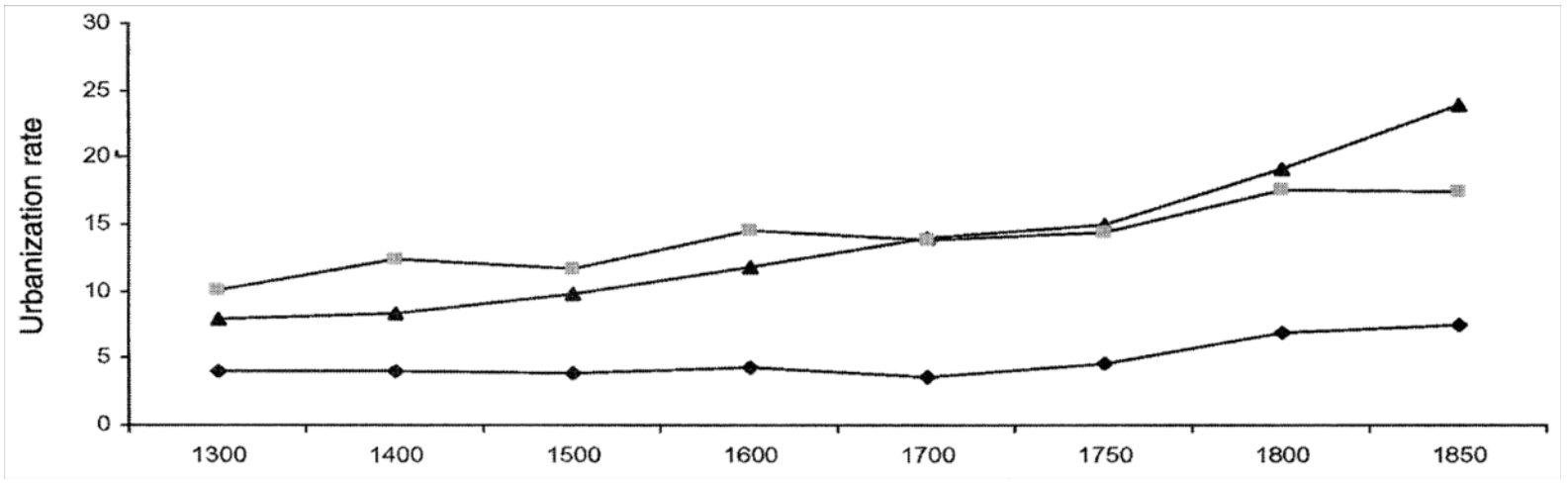
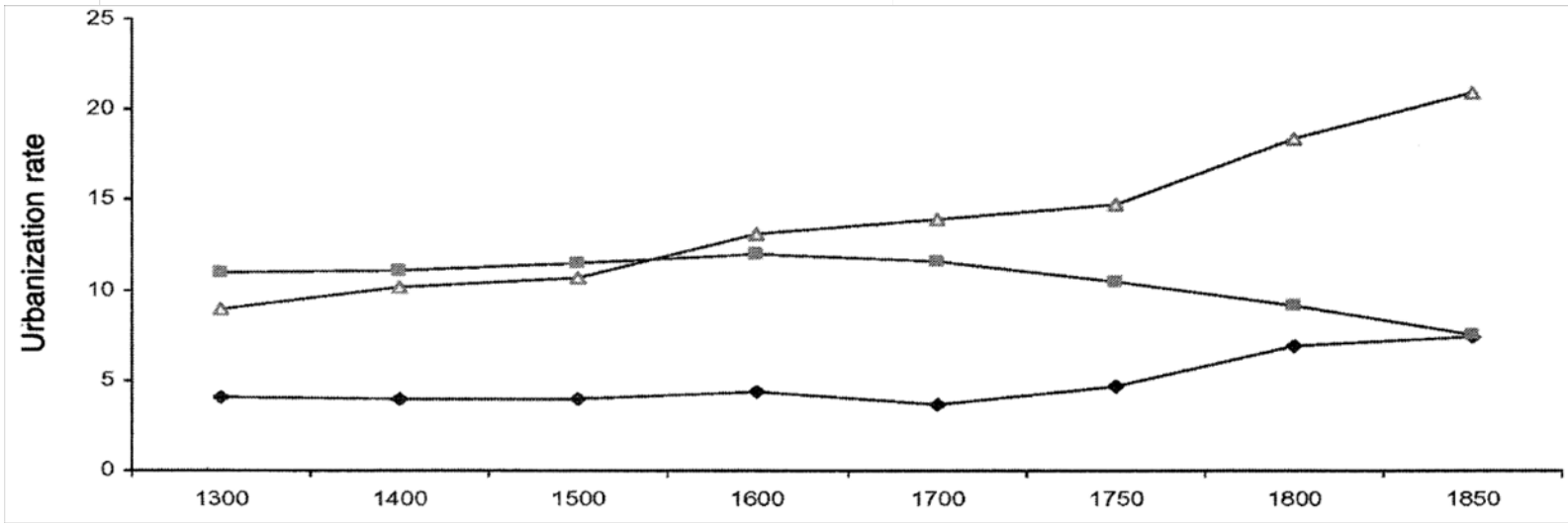
## B. Trade, Institutions and the Rise of Europe: Acemoglu, Johnson and Robinson (2005)

- The rise of Europe after 1500 is believed due largely to strong growth in countries involving cross: Atlantic trade with the New World, particularly over the period of 1500-1850



- Such substantial trade and associated colonialism changed institutions (in England and the Duchy of Burgundy), strengthening merchant groups by constraining the power of the monarchy and by protecting property rights
- Improved institutions led to faster and more sustained economic growth
- A notable phenomenon accompanying such development is rapid urbanization: Atlantic traders (UK, Netherlands, Portugal, Spain) were not as urbanized as non-Atlantic traders in Western Europe during 1300-1700, but become urbanized rapidly afterwards

● —△— Western Europe    —◆— Eastern Europe    —■— Asia    —▲— Atlantic traders    —◻— Western Europe not Atlantic traders



## 1. The Hypothesis

- **Four subhypotheses:**
  - **political institutions constraining state power are essential for the incentives for merchants to undertake investment**
  - **such institutions were not welcome by the monarchy earlier in Europe**
  - **institutions favored by economically and politically powerful groups are more likely to prevail**
  - **in countries with nonabsolutist initial political institutions, Atlantic trade and colonization strengthened commerce, including new groups without ties to the monarchy**
- **These subhypotheses imply that, in countries with easy access to the New World via Atlantic and without an absolutist monarchy,**
  - **Atlantic trade provided substantial profits and hence political power for commerce outside the monarchy circle**
  - **the rise of this merchant group demanded and obtained favorable political institutions protecting their property rights**
  - **with such newly gained power and favorable institutions, these Atlantic trading merchants had higher incentives to invest and continued growing, fueling the first *Great Divergence* of cross-country per capital real income**

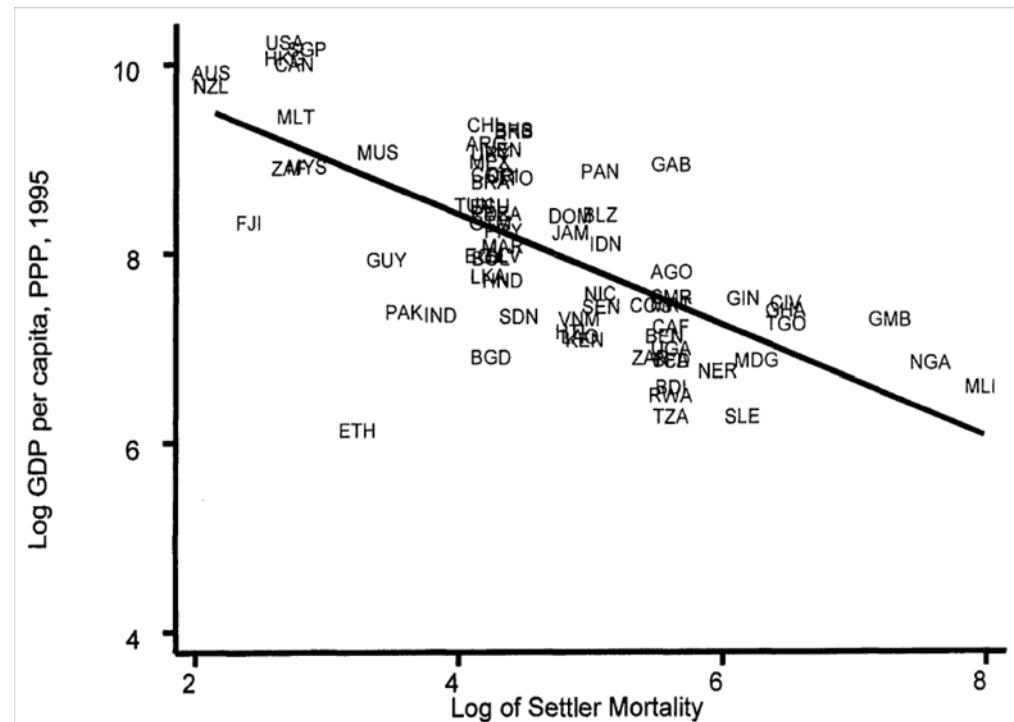
## 2. Empirical Findings

- **The difference in success between UK/Netherlands and Portugal/Spain: the former had political institutions placing sufficient checks on the monarchy**
  - **key institutional development in UK:**
    - **the Civil War of 1642-1649 with Parliamentarians defeating Charles I**
    - **the Glorious Revolution of 1688-1689 with James II deposed by Parliament since then a parliamentary regime was formed**
  - **key institutional development in the Netherlands:**
    - **the establishment of the independent Dutch Republic replacing the Habsburg monarchy, starting 1570 and ending 1648**
- **Significance of Atlantic trade in the UK and the Netherlands:**
  - **UK: mostly known the East India Company founded in 1600, since then Atlantic trade created large profits, about:**
    - **0.2m (pounds) per year, 1601-1650**
    - **0.5m per year, 1651-1675**
    - **0.9m per year, 1676-1700**
    - **1.7m per year, 1701-1750, growing to about 5.0m per year by 1800**
  - **Netherlands: mostly known the Dutch West India Company created by Philip III in 1609**

### C. Mortality and Colonial Institutions: Acemoglu, Johnson and Robinson (2001)

- **European settlements:**

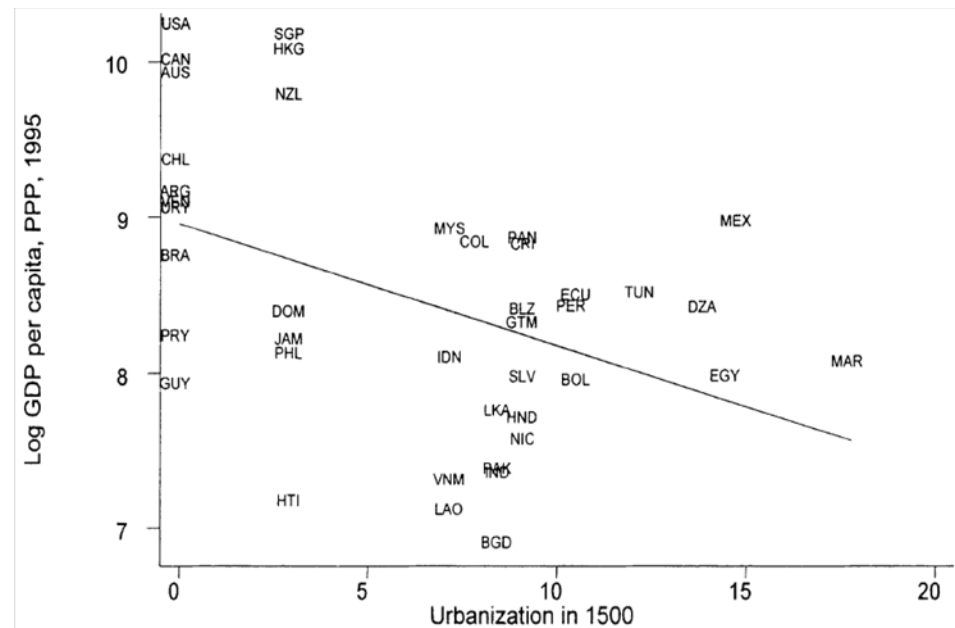
- **in places with high mortality rates, European settled by setting up short-term extractive institutions: colonization of Congo under Belgian**
- **in places with low mortality rates, Neo-Europes were created (Western European Offshore) in which institutions such as private property protection were established: colonization of Australia/New Zealand/US under English**



- **The institutions established in colonial eras persisted even after independence**
- **So neo-Europes post-independence per capita income turned out to be higher**

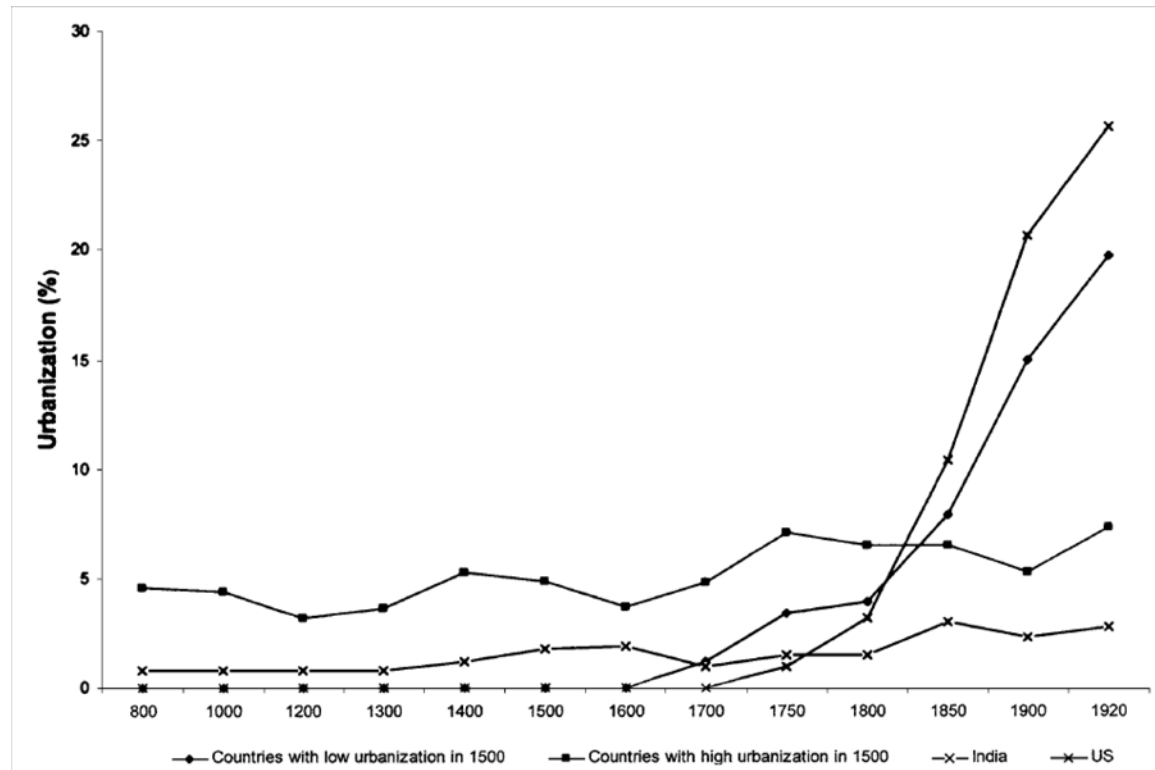
#### D. Institutional Reversal: Acemoglu, Johnson and Robinson (2002)

- Many countries which were initially rich in 1500AD became relatively poor now: Australia, New Zealand & US
- In initially poor places, there were more opportunities, which induced Europeans to establish institutions to encourage investments
- Measure of prosperities: urbanization
  - those with lowest levels of urbanization in 1500, such as Australia, Canada, Hong Kong, New Zealand, Singapore & US, achieved highest (PPP adjusted) per capita income in 1995
  - those with highest levels of urbanization in 1500, such as Algeria (DZA), Egypt, India, Morocco (MAR) and Tunisia, stagnated





- **the reversal can be best seen from the time series plot below**
  - **countries with low urbanization outperformed those with high urbanization (also see US vs. India)**
  - **reversal occurred between 1750 and 1850**
  - **it coincided with**
    - **widespread of industrial technologies**
    - **intensity of trade**
    - **establishment of private property protection**



## E. Political Transition: Acemoglu and Robinson (2001)

- In Western Europe and Latin America, nondemocratic societies were controlled by a rich elite
- The initially non-elite poor could challenge the elite by threatening revolution
- Would such a political transition toward democracy occur?
  - When the opportunity cost of revolution facing the poor was low (e.g., during recessions), such a threat could force the elite to permit democratization
  - Yet the redistribution from elite to the poor lowered the incentives of the elite for democratization
  - The latter could dominate when the loss by the elite turned out to be big
  - Yet if the elite could benefit from having a better motivated group of poor, the associated loss would become more bearable
- Examples:
  - Chin Dynasty in 200BC
  - Robin Hood in the 14<sup>th</sup> century
  - Louis XVI in the 18<sup>th</sup> century



## F. Institutions and Growth: Acemoglu-Naidu-Restrepo-Robinson (2017)

- **Simple cross-country regressions show the absence of a robust relationship between democracy and growth**
- **This paper uses a consolidated dichotomous measure of democracy and controls for country fixed effects and the rich dynamics of GDP (long lagged dependent)**
- **A country is called democratic in a given year if Freedom House codes it as free or partially free and if Polity IV assigns a positive score to it; with missing data, it is called democratic if either Cheibub-Gandhi-Vreeland (2010) or Boix-Miller-Rosato (2012) codes it as democratic**

	NONDEMOCRACIES			DEMOCRACIES		
	<i>Obs.</i>	<i>Mean</i>	<i>Std. dev.</i>	<i>Obs.</i>	<i>Mean</i>	<i>Std. dev.</i>
GDP per Capita	3,376	\$2,074.46	\$3,838.65	3,558	\$8,149.97	\$9,334.83
Investment Share of GDP	3,225	0.2182	0.1023	3,340	0.2328	0.0741
TFP	1,863	1.0676	0.4056	2,744	0.9345	0.1646
Trade Share of GDP	3,175	0.7162	0.5106	3,485	0.7715	0.4104
Primary Enrollment Rate	2,861	90.29	29.51	2,823	101.60	15.86
Secondary Enrollment Rate	2,424	45.76	31.77	2,538	75.40	29.78
Tax Revenue Share of GDP	3,122	0.1587	0.0948	2,564	0.2075	0.0955
Child Mortality Per 1000 births	4,142	77.29	49.64	3,615	33.26	32.65
Unrest Dummy	3,739	0.2870	0.4524	3,610	0.2191	0.4137
Market Reforms Index (0-100)	3476	21.89	23.26	2,829	52.11	24.75

## ● Empirical findings

COVARIATES INCLUDED:	(1)	GDP in 1960 quintiles × year effects (2)	Soviet dummies (3)	Lags of unrest (4)	Lags of trade (5)	Lags of financial flows (6)	Lags of demographic structure (7)	Region × regime × year effects (8)
<i>Panel A: Within estimates.</i>								
Democracy	0.787 (0.226)	0.718 (0.249)	0.911 (0.251)	0.705 (0.224)	0.595 (0.264)	0.926 (0.244)	0.650 (0.230)	0.834 (0.264)
Long-run effect of democracy	21.240 (7.215)	22.173 (8.702)	24.860 (7.783)	17.000 (5.980)	14.593 (7.122)	23.870 (8.211)	14.153 (5.419)	16.651 (5.546)
Effect of democracy after 25 years	16.895 (5.297)	16.261 (5.982)	19.587 (5.724)	13.567 (4.644)	11.500 (5.336)	18.149 (5.435)	12.251 (4.552)	14.532 (4.726)
Persistence of GDP process	0.963 (0.005)	0.968 (0.005)	0.963 (0.005)	0.959 (0.004)	0.959 (0.006)	0.961 (0.006)	0.954 (0.005)	0.950 (0.005)
Observations	6,336	5,523	6,336	5,643	5,750	4,950	6,262	6,336
Countries in sample	175	149	175	171	172	171	172	175
<i>Panel B: Arellano and Bond estimates.</i>								
Democracy	0.875 (0.374)	0.730 (0.387)	1.073 (0.403)	0.693 (0.396)	1.034 (0.469)	1.017 (0.373)	0.756 (0.370)	1.217 (0.420)
Long-run effect of democracy	16.448 (8.436)	14.865 (8.998)	20.006 (8.981)	9.871 (6.479)	17.926 (9.021)	18.607 (7.842)	12.152 (6.639)	18.209 (6.746)
Effect of democracy after 25 years	14.713 (7.128)	12.759 (7.350)	17.874 (7.564)	9.159 (5.768)	15.659 (7.593)	15.903 (6.327)	11.334 (6.004)	16.861 (6.050)
Persistence of GDP process	0.947 (0.009)	0.951 (0.008)	0.946 (0.009)	0.930 (0.012)	0.942 (0.009)	0.945 (0.007)	0.938 (0.010)	0.933 (0.010)
AR2 test p-value	[0.51]	[0.90]	[0.28]	[0.62]	[0.72]	[0.34]	[0.58]	[0.70]
Observations	6,161	5,374	6,161	5,467	5,570	4,779	6,090	6,161
Countries in sample	175	149	175	171	172	171	172	175

- **democracy always has a significantly positive effect on output growth**

## ● Potential channels

DEPENDENT VARIABLE:	Log of investment share in GDP	Log of TFP	Index of economic reforms	Log of trade share in GDP	log of tax share in GDP	Log of primary enrollment	Log of secondary enrollment	log of child mortality	Dummy for unrest
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Panel A: Within estimates.</i>									
Democracy	2.391 (1.114)	-0.205 (0.276)	0.687 (0.348)	0.689 (0.676)	3.311 (1.409)	1.042 (0.338)	1.345 (0.610)	-0.253 (0.063)	-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	0.738 (0.020)	0.929 (0.012)	0.877 (0.012)	0.873 (0.011)	0.794 (0.016)	0.952 (0.008)	0.929 (0.013)	0.993 (0.001)	0.344 (0.030)
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
<i>Panel B: 2SLS estimates.</i>									
Democracy	2.211 (2.852)	-0.941 (0.667)	3.224 (0.863)	5.512 (2.005)	8.088 (3.021)	1.757 (0.721)	4.116 (1.626)	-0.715 (0.164)	-5.569 (5.682)
Long-run effect of democracy	8.440 (10.705)	-12.738 (8.854)	23.775 (6.215)	40.589 (13.580)	38.609 (14.330)	36.693 (15.505)	57.072 (21.698)	-95.728 (26.347)	-8.471 (8.577)
Effect of democracy after 25 years	8.419 (10.681)	-12.167 (8.380)	23.156 (6.039)	39.817 (13.375)	38.159 (14.121)	31.611 (12.863)	54.252 (20.267)	-58.625 (13.123)	-8.471 (8.577)
Persistence of outcome process	0.738 (0.020)	0.926 (0.012)	0.864 (0.012)	0.864 (0.012)	0.791 (0.017)	0.952 (0.008)	0.928 (0.013)	0.993 (0.001)	0.343 (0.030)
Exc. instruments F-stat.	21.7	27.7	43.7	21.5	31.8	12.1	10.4	26.3	28.6
Hansen p-value	[0.29]	[0.06]	[0.22]	[0.09]	[0.69]	[0.09]	[0.12]	[0.02]	[0.84]
Observations	5,640	3,871	4,670	5,714	4,489	3,710	2,879	6,057	5,619
Countries in sample	168	107	149	171	130	164	156	172	170

- **significant channels: democracy promotes physical, knowledge and health capital accumulation and leads to less unrestness**

### G. Institutions and Development: Wang-Wong-Yip (2017)

- **Over the past half-century, world income disparities have been widened**
- **The gap in real GDP per capita relative to the U.S. between advanced and poor countries has been rising over time**
- **The ratio of average real GDP per capita of the top 10% to the bottom 10% has increased from less than 20 in 1960 to over 40 in 1990 and to more than 50 since the turn of the new millennium**

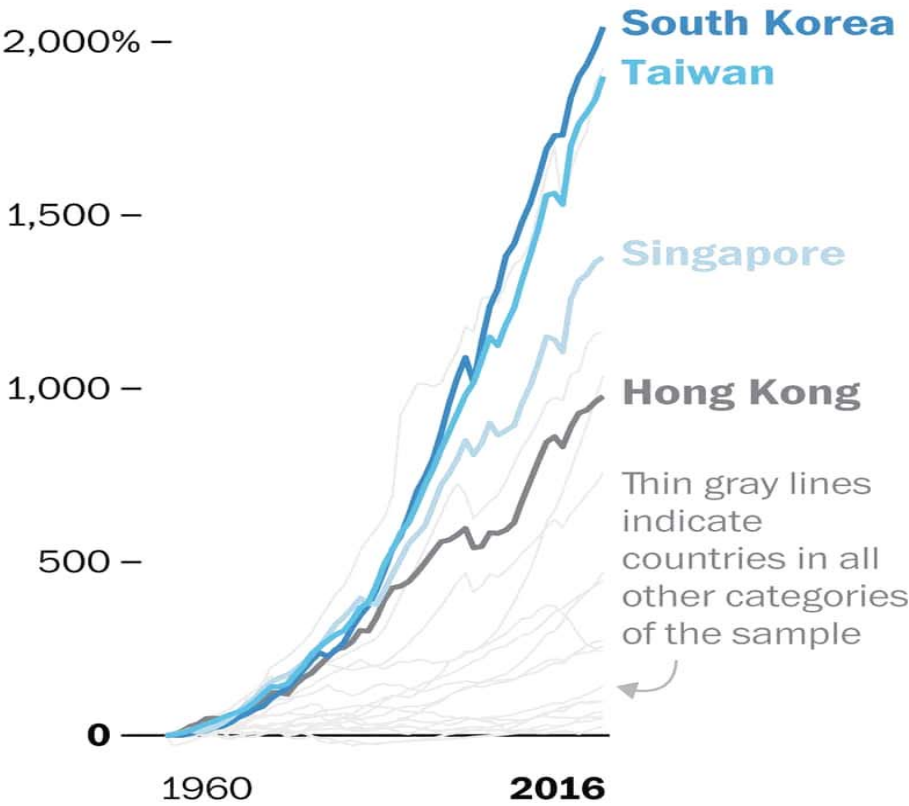
Year	Average per capita income bottom 10%	Average per capita income top 10%	Ratio
1960	606.2	12015.0	19.8
1970	758.1	16072.5	21.2
1980	716.9	24545.9	34.2
1990	637.0	26390.7	41.4
2000	657.9	35522.1	54.0
2010	852.0	45277.3	53.1

Note: Data from the Penn World Table 8.0, in US dollars.

# Faster-growing economies

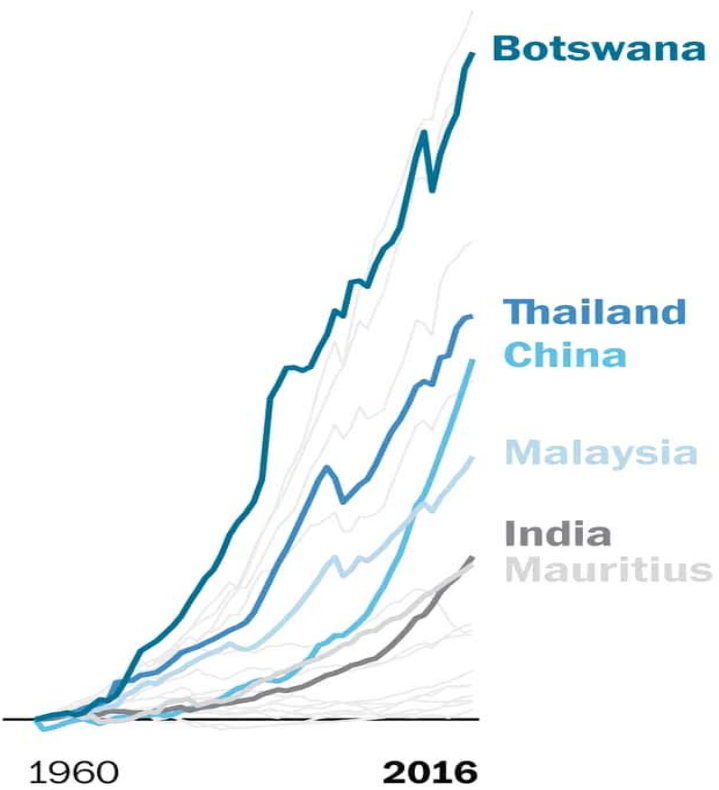
Change since 1960 in inflation-adjusted gross domestic product

## Asian Tigers



Source: Penn World Table

## Other high-growth countries

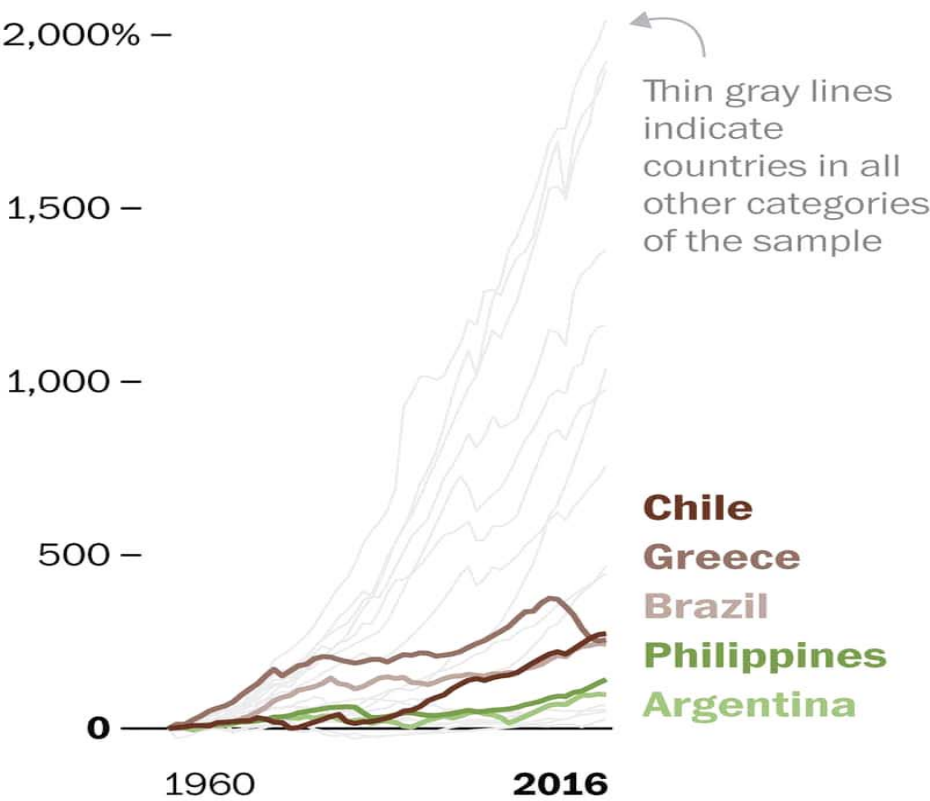


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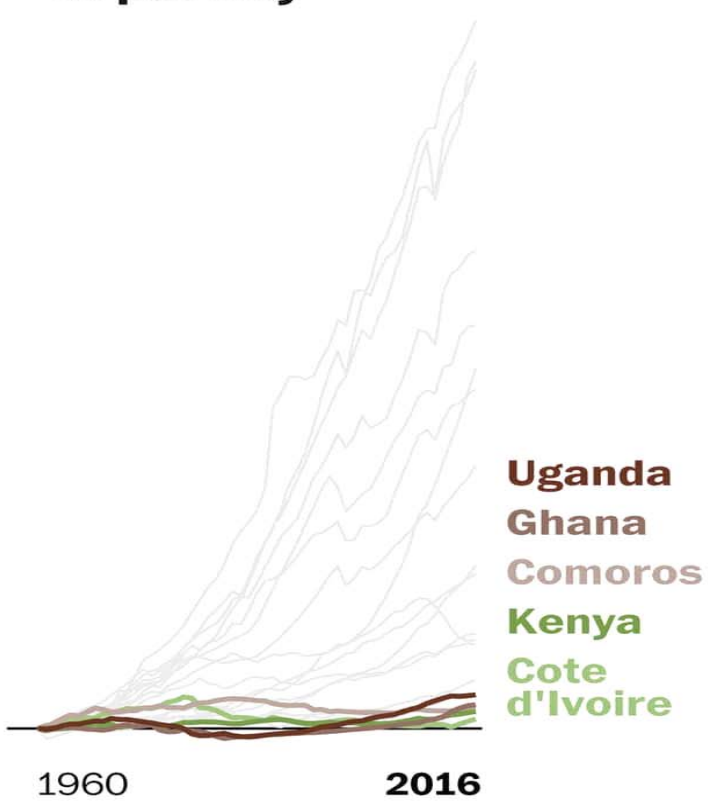
# Slower-growing economies

Change since 1960 in inflation-adjusted gross domestic product

## Countries that fell behind



## Countries trapped in poverty



Source: Penn World Table

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- **Consider a simple reduced form setting (Basu-Weil 1998; Acemoglu 2009; Wang-Wong-Yip 2017):**

- **Per capita output:**  $y_{j,t} = \frac{Y_{j,t}}{L_{j,t}} = \frac{A_{j,t}F(K_{j,t}, L_{j,t})}{L_{j,t}} = A_{j,t}f(k_{j,t})$

- **Global technology frontier:**  $y_{US,t} = A_{US,t}k_{US,t}^\alpha$

- **Assimilation of global technology:**

$$A_{j,t} = \tau_{j,t}A_{US,t} \min \left[ 1, (k_{j,t}/k_{US,t})^{\zeta_j} \right]$$

- $\zeta_j = 0$  (no barriers)
- $\zeta_j = 1-\alpha$  (maximum barrier)

- **Relative income:**  $\frac{y_{j,t}}{y_{US,t}} = \tau_{j,t} \left( \frac{k_{j,t}}{k_{US,t}} \right)^{\alpha+\zeta_j}$

- **Development accounting: fast growing countries**

	development accounting				growth accounting		
	average growth of relative income 1960-2011	relative income in 1960	relative TFP	institutional barrier parameter	institutional barriers	relative TFP advancement	capital deepening
Hong Kong	2.45%	29.85%	1.087	0.667	78.31%	-17.47%	39.16%
Singapore	2.92%	20.95%	0.697	0.103	13.92%	40.83%	45.25%
South Korea	4.06%	10.64%	0.901	0.391	57.61%	-6.70%	49.09%
Taiwan	3.59%	13.62%	1.551	0.533	82.40%	-33.96%	51.56%
Malaysia	2.21%	10.73%	1.067	0.667	102.46%	-53.68%	51.23%
Thailand	2.70%	5.10%	0.405	0.296	36.33%	22.71%	40.95%
China	4.95%	2.67%	0.406	0.389	38.81%	27.91%	33.28%
India	1.11%	4.85%	1.544	0.667	92.94%	-39.41%	46.47%
Botswana	4.03%	3.09%	0.244	0.000	0.00%	68.16%	31.84%
Mauritius	0.97%	14.31%	0.867	0.667	23.44%	64.84%	11.72%
Average	2.90%	11.58%	0.877	0.438	52.62%	7.32%	40.05%

- **average growth 2.9%; average TFP about 88% of the U.S.**
- **average  $\zeta_j$  about 44%**
- **institutions account for over 50%; TFP contributes less than 10%**

- **Development accounting: trapped countries and development laggards**

	development accounting				growth accounting		
	average growth of relative income 1960-2011	relative income in 1960	relative TFP	institutional barrier parameter	institutional barriers	relative TFP advancement	capital deepening
<b>A. Trapped Economies</b>							
Comoros	-2.01%	4.34%	0.596	0.667	61.65%	7.53%	30.82%
Cote d'Ivoire	-2.76%	8.26%	1.420	0.667	74.95%	-12.42%	37.47%
Ghana	-0.83%	10.28%	0.508	0.509	187.76%	-210.81%	123.05%
Kenya	-1.32%	6.46%	0.132	0.000	0.00%	52.03%	47.97%
Uganda	-0.85%	4.73%	0.428	0.285	7.18%	84.42%	8.40%
<b>Average</b>	<b>-1.56%</b>	<b>6.82%</b>	<b>0.617</b>	<b>0.425</b>	<b>66.31%</b>	<b>-15.85%</b>	<b>49.54%</b>
<b>B. Other Laggards</b>							
Argentina	-0.58%	43.51%	0.734	0.667	73.66%	-10.48%	36.83%
Brazil	0.42%	15.56%	0.328	0.000	0.00%	36.79%	63.21%
Chile	0.45%	25.87%	1.382	0.667	284.46%	-326.69%	142.23%
Greece	0.61%	34.71%	1.113	0.667	185.22%	-177.84%	92.61%
Philippines	-0.65%	11.68%	0.722	0.483	-34.85%	158.93%	-24.07%
<b>Average</b>	<b>0.05%</b>	<b>26.27%</b>	<b>0.856</b>	<b>0.497</b>	<b>101.70%</b>	<b>-63.86%</b>	<b>62.16%</b>

- **average growth 0.05%; average TFP about 61-86% of the U.S.**
- **average  $\zeta_j$  about 42.5-50%, slightly higher than fast growing countries**
- **institutions account for 2/3 - 100%; TFP contributes negatively**