

What brings Democracy?

< South Africa, Botswana, and Kenya compared >

Takuma Andoh & Bomi Kim

Democracy? Democratization?

- Democracy: “Ruled by People”. A system of government where the citizens exercise power directly or through electing representatives in order to form a parliament. *Main Characteristics: Political freedom, Rule of law, Equality before the law, Majority rule, Free and Fair elections.
- Democratization: A process which leads to a more open, more participatory, less authoritarian society within a sovereign state.

Background Research 1 - Measuring Democracy

- US-based Freedom House Organization: aggregates scores of 25 indicators from political rights and civil liberties in order to evaluate the state of freedom *2016 Report: Out of 195 states, 125 countries are classified as electoral democracies.
- The Polity Project: examines qualities of democratic and autocratic authority in governing institutions to observe a spectrum of governing authority.

→ We used “Polity Score” data from the Polity Project for our dependent variable

Background Research 2 - Democratization in Africa

- Third Wave (1974-1990): During the Third Wave of democratization, over 60 countries throughout the world changed their authoritarian regimes to democracies.
- Repetition of the onset of democratization and frequent slips back to authoritarianism in Africa.
- Making progress towards democracy by improving socioeconomic features and revolting against authoritarian leaders

Selection of Case countries

- World Economic Forum's Global Competitiveness Report 2015-2016: assess the competitiveness of 140 world economies based on 113 indicators such as macroeconomic environment, health and primary education, goods market and labor market.
- Africa's top performers include Mauritius, South Africa, Rwanda and Botswana
- Africa's low performers include Liberia, Sierra Leone, Ivory Coast and Ethiopia

-South Africa (49th), Botswana (71th), Kenya (99th)

Research Question and Hypotheses

< What brings democracy? >

- Investigating the effects of various socioeconomic variables on democratization in African countries.
- Analyzing the correlation between socioeconomic components and democracy.

*Three Hypotheses

- ① There is a significant and positive correlation between socioeconomic variables and democracy
- ② Among four socioeconomic components, the educational effect on democracy is the most significant than others.
- ③ The degree of impact of variables on democracy is consistent across selected African countries.

Democratization level has been changing over time

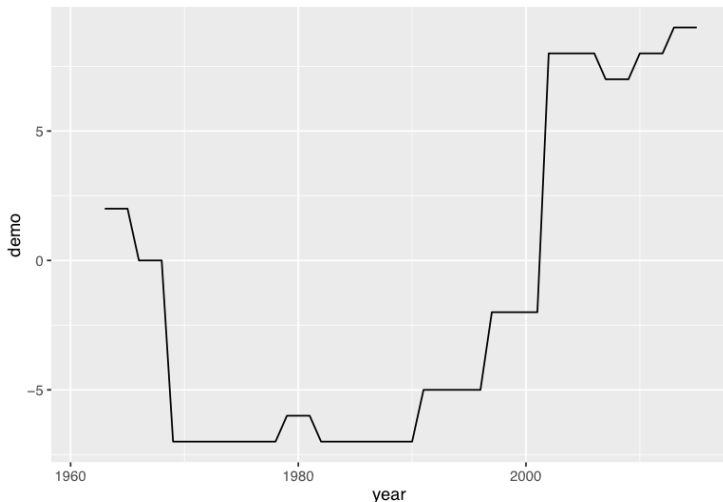


Figure 1: DL in Kenya

Explanatory variables

variable name	detail	source
gdppc	Gross Domestic Production Per Capita	World Bank
pe	Primary ed enrollment	United Nations
mr	Child Mortality under 5	United Nations
gi	gender inequality in labor market	United Nations

Each country has different significant variables

Table 2: Regression results for each country

	<i>Dependent variable:</i>		
	SouthAfrica	demo Botswana	Kenya
	(1)	(2)	(3)
log(gdppc)	-2.78* (1.43)	1.86*** (0.56)	-6.37 (3.79)
log(pe)	0.81 (2.83)	-3.29 (2.31)	9.05 (8.68)
log(mr)	-11.16 (7.05)	2.84*** (0.84)	-34.05*** (9.39)
log(gi)	-43.66*** (13.70)	4.61 (2.85)	-147.18*** (38.41)
Constant	44.40 (73.50)	23.80 (22.73)	21.71 (157.22)
Observations	17	21	19
R ²	0.93	0.85	0.92
Adjusted R ²	0.90	0.82	0.90
Residual Std. Error	0.72 (df = 12)	0.28 (df = 16)	1.94 (df = 14)
F Statistic	38.99*** (df = 4; 12)	23.04*** (df = 4; 16)	42.66*** (df = 4; 14)

Note:

*p<0.1; **p<0.05; ***p<0.01

Figure 2: regression results for each country

All variables except gdppc looks significant

Table 3: Pooled OLS

	<i>Dependent variable:</i>
	demo
log(gdppc)	-0.64 (1.39)
log(pe)	-1.10** (0.46)
log(mr)	-6.89** (3.06)
log(gi)	-39.08*** (10.91)
Constant	41.87* (21.14)
Observations	57
R ²	0.72
Adjusted R ²	0.70
Residual Std. Error	3.16 (df = 52)
F Statistic	33.01*** (df = 4; 52)
<i>Note:</i> *p<0.1; **p<0.05; ***p<0.01	

Figure 3: Pooled OLS

The coefficients are biased and inefficient.

residual vs fitted value

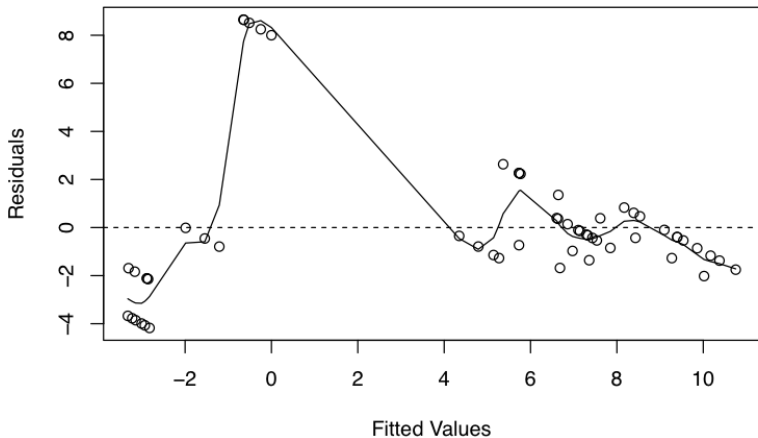


Figure 4: residual vs fitted value

The result of Fixed OLS

Table 4: pooled OLS and fixed effects OLS

	<i>Dependent variable:</i>	
	demo	
	PooledOLS	FixedOLS
	(1)	(2)
log(gdppc)	-0.644 (1.393)	-1.496 (1.424)
log(pe)	-1.103** (0.456)	15.793*** (4.012)
log(mr)	-6.886** (3.062)	-12.087*** (3.176)
log(gi)	-39.075*** (10.914)	-28.940** (11.221)
Constant	41.873* (21.138)	
Observations	57	57
R ²	0.717	0.610
Adjusted R ²	0.696	0.563
F Statistic	33.013*** (df = 4; 52)	19.532*** (df = 4; 50)
<i>Note:</i> *p<0.1; **p<0.05; ***p<0.01		

Figure 5: fixed effect

Findings

- ① There is a significant and positive correlation between socioeconomic variables and democracy
 - Child Mortality and Primary Education have statistically significant and positive effect on democracy
 - Gender equality has negative effect on democracy
 - GDP is not statistically significant
- ② Among four socioeconomic components, the educational effect on democracy is the most significant than others.
 - TRUE
- ③ The degree of impact of variables on democracy is consistent across selected African countries.
 - Inconsistent!