What brings Democracy?
< South Africa, Botswana, and Kenya compared >

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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 Charateristics: 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 soceity within a sovereign state.

Background Research 1 - Measuring Democracy

- US-based Freedom House Organization: aggregates scores of 25 indicators from politial 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 insitutions 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): Durig 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

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.

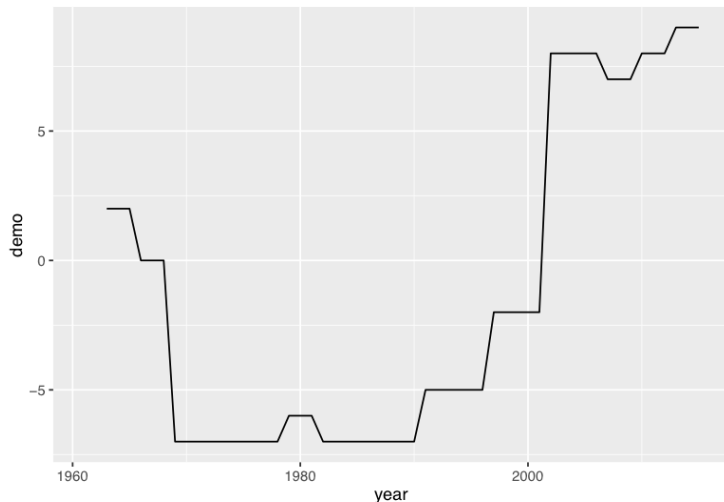# Democratization level has been changes over time

Figure 1: DL in Kenya

Explanetory 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

	Dependent variable:		
		demo	
	SouthAfrica	Botswana	Kenya
	(1)	(2)	(3)
log(gdppc)	−2.78*	1.86***	−6.37
	(1.43)	(0.56)	(3.79)
log(pe)	0.81	−3.29	9.05
	(2.83)	(2.31)	(8.68)
log(mr)	−11.16	2.84***	−34.05***
	(7.05)	(0.84)	(9.39)
log(gi)	−43.66***	4.61	−147.18***
	(13.70)	(2.85)	(38.41)
Constant	44.40	23.80	21.71
	(73.50)	(22.73)	(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

	Dependent variable:
	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)
Note:	*$p<0.1$; **$p<0.05$; ***$p<0.01$

Figure 3: drawing

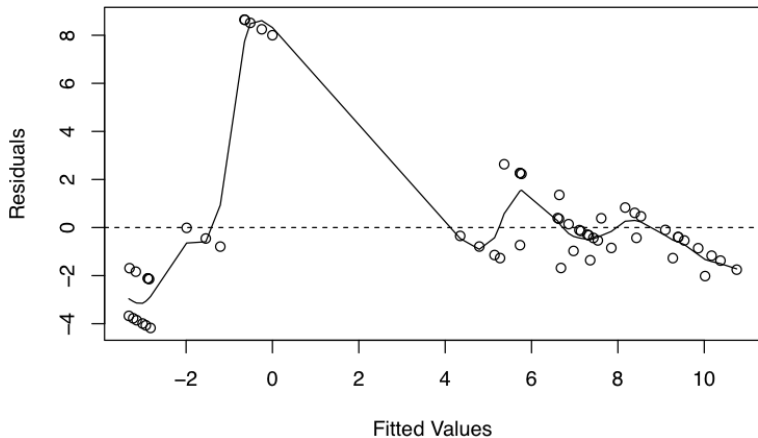# The coefficients are biased and inefficient.

residual vs fitted value

Figure 4: drawing

Gender equality has negative effects on democracy

1. and (2) are the results of pooled OLS and fixed OLS.

Table 4: pooled OLS and fixed effects OLS

	Dependent variable:	
	demo	
	PooledOLS	FixedOLS
	(1)	(2)
log(gdppc)	−0.644	−1.496
	(1.393)	(1.424)
log(pe)	−1.103**	15.793***
	(0.456)	(4.012)
log(mr)	−6.886**	−12.087***
	(3.062)	(3.176)
log(gi)	−39.075***	−28.940**
	(10.914)	(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)

Note: *p<0.1; **p<0.05; ***p<0.01

Conclusion

References