

Socio-economic factors for Democracy

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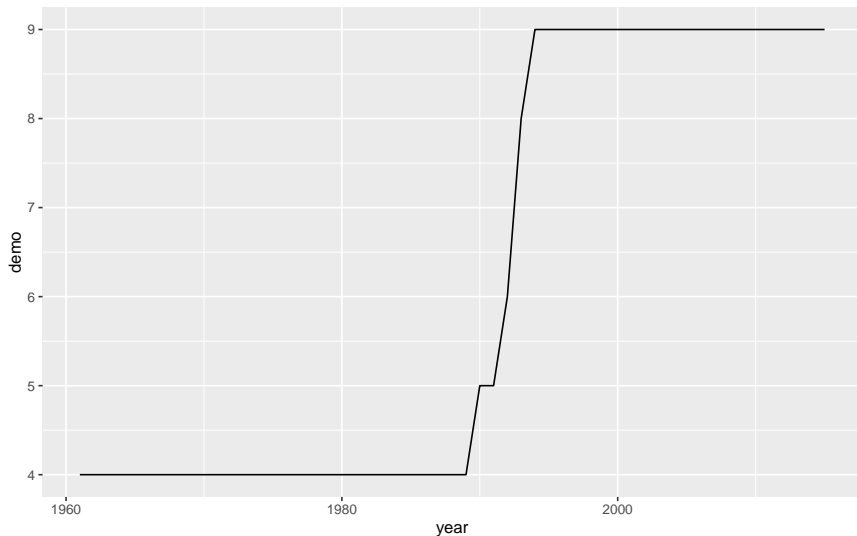
Democracy? Democratization?

Background Research 1 - Factors for Democratization

Background Research 2 - Democratization in Africa

Research Question and Hypotheses

Democratization in South Africa



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

Regression results

Table 2: Regression results for each country

	<i>Dependent variable:</i>		
	demo		
	(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 1: drawing

Pooled OLS

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 2: drawing

Heteroscedasticity in residuals

residual vs fitted value

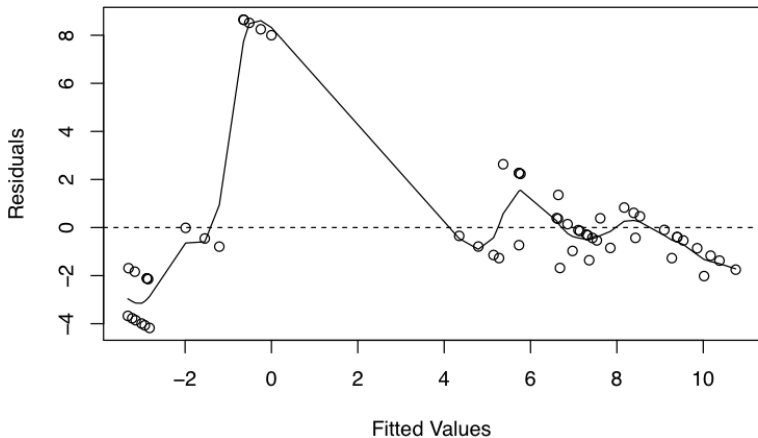


Figure 3: drawing

Fixed-Effect model

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

Table 4: pooled OLS and fixed effects OLS

	<i>Dependent variable:</i>	
	demo	
	(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)

Note:

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

$$democratization = -1.496\log(gdppc) + 15.793\log(pe) - 12.087\log(mr) - 28.940\log(gi) + \alpha_i$$

where α_i represents panel specific effects

Figure 5: drawing

Conclusion

References