

# Institutions Slides

Econ 560

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# Political Institutions and Human Capital

## Volatility of political institutions and human capital

The table shows the average within-country standard deviation of various measures of political institutions and human capital. Due to data availability, we measure human capital (years of schooling) and the Polity IV variables of political institutions in 1960, 1965, 1970, 1975, 1980, 1985, 1990, 1995 and 2000. We measure the autocracy variable from Alvarez et al. (2000) for 1960, 1965, 1970, 1975, 1980, 1985 and 1990 only because their data ends at that point. All variables were normalized to vary between 0 and 1. All variables are defined in Appendix 1.

	Polity IV		Alvarez et al. (2000)	
Executive constraints (1960-2000)	Democracy (1960-2000)	Autocracy (1960-2000)	Autocracy (1960-1990)	Years of schooling (1960-2000)
<i>Average within-country standard deviation</i>				
18.53%	17.52%	19.36%	18.86%	10.33%

# Persistence of Institutions and Human Capital

## Lecture Note

### Growth

The table shows OLS regressions for the cross-section of countries. The specifications include a constant but we do not report the estimates in the table. Robust standard errors are shown in parentheses. All variables are defined in Appendix 1.

	<i>Dependent variables:</i>			
	Years of schooling (2000)	Executive constraints (2000)	Autocracy -- Polity IV (2000)	Democracy (2000)
Years of schooling (1960)	1.1773 <sup>a</sup> (0.0885)			
Executive constraints (1960)		0.2719 <sup>b</sup> (0.1246)		
Autocracy -- Polity IV (1960)			0.1810 <sup>c</sup> (0.0926)	
Democracy (1960)				0.3065 <sup>b</sup> (0.1341)
Observations	50	50	50	50
R <sup>2</sup>	0.73	0.09	0.07	0.10

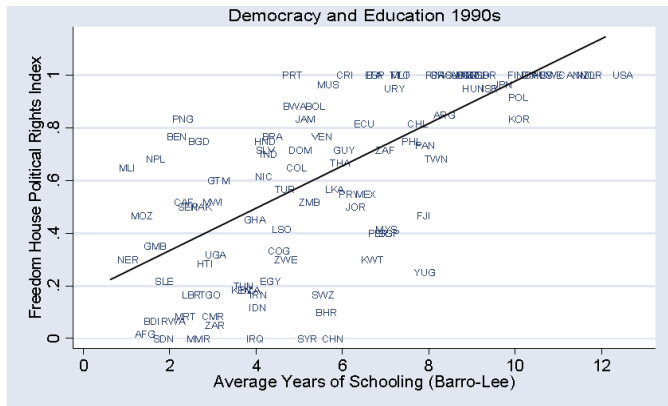
a=significant at 1 percent; b=significant at 5 percent; c=significant at 10 percent.

Figure: Persistence of institutions and human capital

# Democracy and Education

## Lecture Note

### Growth



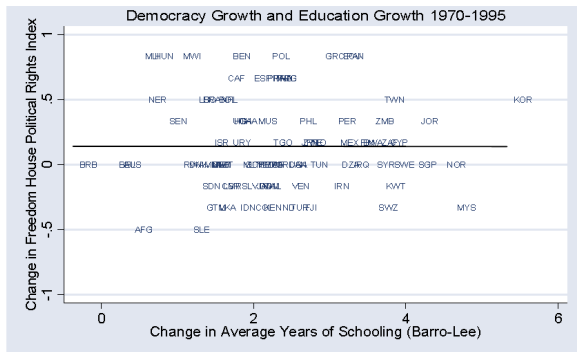
Freedom House Political Rights Index is normalized from 0 to 1 and is from Freedom House (2004). Average years of schooling in the adult population (25 years of age and older) is from Barro and Lee (2000). Values are averaged by country from 1990 to 1999.

Figure: Education and Democracy

# Democracy Growth and Education Growth

## Lecture Note

### Growth



Freedom House Political Rights Index is normalized from 0 to 1 and is from Freedom House (2004). Average years of schooling in the adult population (25 years of age and older) is from Barro and Lee (2000). Changes are total differences between 1970 and 1995.

Figure: Democracy Growth and Education Growth

# Fixed Effects Regression

Table 4

Fixed Effects Results: Education, Democracy, and Political Institutions

Glaser et al. (2004) Sample, 1965-2000

5-year data

Panel A: No Time Effects	Fixed Effects OLS			
	(1)	(2)	(3)	(4)
	Dependent Variable is Change in Institutions			
	Exec	Autocracy	Democracy	Autocracy
Institutions <sub>t-1</sub>	-0.572 (0.072)	-0.547 (0.068)	-0.515 (0.065)	-0.864 (0.103)
Education <sub>t-1</sub>	0.498 (0.119)	0.909 (0.179)	0.700 (0.180)	0.096 (0.071)
Log GDP per Capita <sub>t-1</sub>	0.038 (0.403)	-0.508 (0.630)	0.292 (0.606)	0.267 (0.202)
R-squared	0.33	0.32	0.30	0.47
	Dependent Variable is Change in Institutions			
	Exec	Autocracy	Democracy	Autocracy
Institutions <sub>t-1</sub>	-0.618 (0.073)	-0.616 (0.071)	-0.580 (0.067)	-0.897 (0.106)
Education <sub>t-1</sub>	-0.163 (0.192)	-0.318 (0.267)	-0.432 (0.298)	-0.137 (0.126)
Log GDP per Capita <sub>t-1</sub>	0.168 (0.360)	-0.317 (0.550)	0.477 (0.561)	0.292 (0.192)
Time Effects F-test	[0.01]	[0.00]	[0.00]	[0.08]
R-squared	0.39	0.40	0.37	0.50
	Dependent Variable is Change in Institutions			
	Exec	Autocracy	Democracy	Autocracy
Institutions <sub>t-1</sub>	-0.617 (0.073)	-0.615 (0.071)	-0.579 (0.066)	-0.891 (0.107)
Education <sub>t-1</sub>	-0.125 (0.182)	-0.389 (0.229)	-0.324 (0.289)	-0.088 (0.125)
Time Effects F-test	[0.01]	[0.00]	[0.00]	[0.07]
R-squared	0.39	0.40	0.37	0.49
Observations	499	499	499	340

Fixed effects OLS regressions in all columns with country dummies and robust standard errors clustered by country in parentheses. Year dummies are included in panels B and C, and the time effects F-test gives the p-value for their joint significance. Dependent variable in column 1 is change in Coefficient on the Executive from Policy. Dependent variable in column 2 is change in negative Autocracy Index from Policy. Dependent variable in column 3 is change in Democracy Index from Policy. Dependent variable in column 4 is change in negative Autocracy Index from Frameworks et al. (2000). Base sample in all columns is an unbalanced panel, 1965-2000, with data at 5-year intervals where the start date of the panel refers to the dependent variable (i.e., t=1965, so t-1=1960). See Glaser et al. (2004) for data definitions and sources.