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Political competition and economic growth: A test of two tales

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HIGHLIGHTS

- We study the relationship between political competition and economic growth.
- We nest two competing hypotheses drawn from the relevant literature.
- Results support a U-shaped relationship between political competition and growth.

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ABSTRACT

We empirically compare the thesis of Acemoglu and Robinson (2006) that the impact of political competition on economic growth is non-monotonic with that of Besley et al. (2010) that it is monotonically increasing, using data on 119 economies in the period 1980–2010. The results are in accord with Acemoglu and Robinson (2006).

1. Introduction

Acemoglu and Robinson (2006) (henceforth AR) suggest that policymakers adopt growth-enhancing policies if this does not threaten their power. They assume that policies for growth improve welfare but also generate political turbulence that spawns new political competitors. According to AR, this makes the effect of political competition on growth non-monotonic, with the greatest impact of competition coming at its extreme values. If political competition is intense, electoral victory depends on growth-enhancing policies, which create consensus for the incumbent. But political leaders also enact pro-growth policies when political competition is minimal, precisely because they are not threatened by political competitors and the policy produces additional taxable wealth. The authors cite studies explaining why Britain, Germany and the US adopted policies leading to growth during the 19th century, while Russia and Austria–Hungary did not. They also ask for additional empirical evidence, as "more conclusive evidence requires proper statistical testing" (AR, p. 125).

One such analysis is that of Besley et al. (2010) (henceforth BPS), who emphasize voters' role in political decisions for growth-enhancing policies. They assume two types of voter: party voters and swing voters, whose choice depends on the parties' platforms. BPS assume that as political competition sharpens, swing voters become more decisive in determining the winner. This results in a monotonic positive relationship between political competition and growth. BPS support this hypothesis with evidence from the US states and call for additional evidence: "whether similar results can be found in other contexts is ripe for investigation" (BPS, p. 1350), since "competition [that] enhances policies conductive to growth may […] be overturned in a model … highlight[ing] dynamic incentives along the lines of Acemoglu and Robinson (2006)" (BPS, p. 1335).

The present paper offers empirical evidence. We extend the analysis beyond historical accounts, test the existence of alternative growth mechanisms using well-established datasets, and expand the sample of countries. We nest the AR and BPS hypotheses

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Table 1
Variable definitions, sources and sample.

Variable	Definition	Source
y	(log of) Income per worker	Penn World Table (Heston et al., 2012)
PC	Political competition. Ranges continuously from 1 to 10, where low (high) values stand for weak (strong) political competition	Polity IV database (Marshall et al., 2012)
$\ln(s) - \ln(n + g + \delta)$	(log) difference between the saving rate and the sum of population growth rate, depreciation rate and rate of technological change	Penn World Table (Heston et al., 2012)
Human capital	Literacy rate of the adult population	Barro and Lee (2013)
Rents	Corruption in the political system. It ranges on a 7-point scale from 0 to 6, where low (high) values stand for a low (high) level of corruption in the political system	Political Risk Services Group (2012)
Threat	Index ranging between 0 and 12, where higher values stand for a higher risk of being involved in episodes of international violence	Political Risk Services Group (2012)

Sample of economies:
Albania, Algeria, Angola, Argentina, Australia, Austria, Bahrain, Bangladesh, Belgium, Benin, Bolivia, Botswana, Brazil, Bulgaria, Burkina Faso, Burundi, Cambodia, Cameroon, Canada, Central African Republic, Chad, Chile, China, Colombia, Congo Dem. Rep., Congo Rep. of, Costa Rica, Cote d'Ivoire, Cyprus, Czech Republic, Denmark, Dominican Republic, Ecuador, Egypt, El Salvador, Ethiopia, Fiji, Finland, France, Gabon, Germany, Ghana, Greece, Guatemala, Guinea-Bissau, Guyana, Haiti, Honduras, Hungary, India, Indonesia, Iran, Ireland, Israel, Italy, Jamaica, Japan, Jordan, Kenya, Korea Rep. of, Kuwait, Lesotho, Madagascar, Malawi, Malaysia, Mali, Mauritania, Mauritius, Mexico, Mongolia, Morocco, Mozambique, Namibia, Nepal, Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Qatar, Romania, Russia, Rwanda, Saudi Arabia, Senegal, Sierra Leone, Singapore, South Africa, Spain, Sri Lanka, Sweden, Switzerland, Syria, Taiwan, Tanzania, Thailand, Togo, Trinidad and Tobago, Tunisia, Turkey, Uganda, United Arab Emirates, United Kingdom, United States, Uruguay, Venezuela, Vietnam, Zambia, Zimbabwe.
Number of economies: 119. Average time dimension: 5.72. Maximum time dimension: 7.

Table 2
Main results.

Panel (a) Parameter estimation

	Kiviet bias-corrected WG			GMM-difference			GMM-system		
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
$(\ln)y_{it-1}$	0.864***	0.864***	0.888***	0.779***	0.836***	0.861***	0.935***	0.928***	0.961***
	(0.033)	(0.034)	(0.040)	(0.156)	(0.147)	(0.146)	(0.022)	(0.021)	(0.012)
$\ln(s_{it}) - \ln(n_{it} + g + \delta)$	0.134***	0.135***	0.141***	0.152***	0.154***	0.155***	0.136***	0.143***	0.165***
	(0.019)	(0.019)	(0.019)	(0.068)	(0.071)	(0.061)	(0.052)	(0.053)	(0.050)
PC_{it}	−0.036*	−0.025**	0.001	−0.305*	−0.130**	0.009	−0.211*	−0.086**	0.002
	(0.038)	(0.013)	(0.003)	(0.148)	(0.048)	(0.007)	(0.132)	(0.033)	(0.004)
PC_{it}^2	0.005	0.003**		0.051	0.014**		0.036	0.009**	
	(0.008)	(0.001)		(0.032)	(0.005)		(0.027)	(0.004)	
PC_{it}^3	−0.000			−0.002			−0.002		
	(0.001)			(0.002)			(0.002)		
Hansen test				57.45	59.12	60.92	63.67	66.24	69.55
				[0.141]	[0.130]	[0.118]	[0.253]	[0.214]	[0.164]
Test for AR(1) in residuals				−2.90	−3.06	−2.96	−3.81	−4.05	−4.26
				[0.004]	[0.002]	[0.003]	[0.000]	[0.000]	[0.000]
Test for AR(2) in residuals				−0.41	−0.87	−1.34	−0.64	−1.01	−1.35
				[0.683]	[0.382]	[0.181]	[0.521]	[0.310]	[0.175]
Hansen-in-difference test							3.60	5.48	5.54
							[0.609]	[0.360]	[0.353]

Panel (b) Test for non-monotonic U-shaped function for the preferred model

Slope at		U-shape overall test	Estimated minimum	Confidence interval for minimum	
Min PC_{it}	Max PC_{it}				
−0.068	0.097	2.53	4.719	Lower	3.961
[0.005]	[0.006]	[0.006]		Upper	5.675

Notes: All the models include time dummies. Standard errors are clustered by country, and reported in brackets. p-values are reported in square brackets. '***', '**' and '*' indicate significance at 1%, 5% and 10%, respectively.

in a single reduced-form model and test for the curvature of the relationship between political competition and economic growth.

Section 2 describes the testing strategy, Section 3 presents the data and results, and Section 4 concludes.

2. Testing strategy

We assume that the log output per worker in economy i at time t:

$$y_{it} = \rho y_{it-1} + \sum_{j=1}^{J} \beta_j PC_{it}^j + \alpha[\ln s_{it} - \ln(n_{it} + g + \delta)] + \mu_i + \eta_t + \varepsilon_{it}, \quad (1)$$

depends on the lagged value, y_{it-1}, the polynomial of degree J of political competition, PC_{it}, the Solow-type growth variable (where s_{it}, n_{it}, g and δ are the saving rate, growth rate of the population, the technological progress and the depreciation rate), country and time dummies, μ_i and η_t, and a random *i.i.d.* shock, ε_{it}. Eq. (1) is a straightforward reformulation of AR and BPS, where the two hypotheses are nested: if $J = 1$ and the estimate for β_1 is positive, the model is consistent with BPS; if $J = 2$ and the curve has a minimum, the model is consistent with AR, instead.

Leonida et al. (2013) provide evidence in favour of the existence of a non-monotonic relationship between political competition and economic liberalization. In Eq. (1), the dependent variable is the log output per worker instead. The model is therefore meant to