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A note on the U-shaped relationship between political competition and economic freedom

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Abstract

We investigate a recent political theory of institutional change according to which institutions of economic freedom are more likely to be adopted at the extreme cases of strong and weak political competition than at cases in between. We find that such a U-shaped relationship is verified when controlling for other political variables and past economic growth, but disappears when controlling for the initial level of development. In this case, the relationship between political competition and the adoption of institutions of economic freedom appears to be positive and linear as suggested by the political principal-agent paradigm.

Key words: Economic Freedom; Institutional Change; Political Competition; Political Institutions

JEL Classification: D720; H110; O570; P160

1 Introduction

Institutions of economic freedom (largely characterized by the protection of private property, free competition and freedom of exchange) have been repeatedly shown to foster economic growth and other indicators of development. Despite this evidence, the adoption of such institutions presents great variation across countries and over time.

Recently, Acemoglu and Robinson (2006) have proposed a political theory of institutional change according to which Pareto-improving institutions are more likely to be adopted at the extreme cases of weak and strong political competition than at cases in between. In the case of weak political competition, a Coase theorem type of reasoning applies: Pareto-improving institutions are promoted by the incumbent ruler as future compensation (confiscation) is assured (the incumbent ruler is not likely to be replaced *ex-post*). In the case of strong political competition, a competitive market type of reasoning analogous to the political principal-agent paradigm (Barro (1973)) applies: Pareto-improving institutions are promoted by the incumbent ruler because, if he does not promote them, he is likely to be replaced by the citizens. In intermediate cases (when the incumbent ruler is just “somewhat entrenched”), however, Pareto-improving institutions are likely to be blocked by the incumbent ruler, as he fears that institutional changes could shift the economic and political power distribution among different groups of society and trigger political replacement. According to this theory, therefore, the relationship between political competition and the adoption of Pareto-improving institutions is U-shaped.¹

We investigate whether the observed adoption of institutions of economic freedom during the 1980-2003 period supports Acemoglu and Robinson’s (2006) political theory of institutional change. We find that the proposed U-shaped relationship between political competition and the adoption of institutions of economic freedom is verified when controlling for other political variables and past economic growth, but disappears when controlling for the initial level of development as captured by GDP per capita. In this latter case, the relationship between political competition and the adoption of institutions of economic freedom appears to be positive and linear as proposed by Barro’s (1973) political principal-agent paradigm.²

¹ Acemoglu and Robinson (2006) noted that the incentives for incumbent rulers to adopt efficient institutions also increase with the level of human capital (future confiscatory rents are higher) and the presence of external threats (falling economically behind makes countries - and rulers - more vulnerable).

² de Haan and Sturm (2003), Adserà et al. (2003), and de Vanssay et al. (2005), among others, have all found empirical support to this theory.

2 Model

We assess the U-shaped relationship between political competition and the adoption of institutions of economic freedom using the following quadratic form:

$$EFW_{it} = \alpha + \beta Polity_{it} + \gamma Polity_{it}^2 + \delta C_{it} + u_{it}$$

where EFW is a measure of economic freedom, $Polity$ is a measure of political competition, C is a vector of control variables, and u is the error term. All variables are observed for country i ($i = 1, \dots, N$) and year t ($t = 1, \dots, T$).

Dependent variable

Our measure of the adoption of institutions of economic freedom is the Economic Freedom of the World - chain-linked summary - Index (EFW). This index scores countries on a 0 to 10 scale where 10 represents the highest degree of economic freedom (Gwartney et al. (2005)).

Political competition

Our measure of political competition is the index Polity which measures the country's degree of autocracy or democracy on a -10 (highest autocracy) to 10 (highest democracy) scale (Marshall and Jaggers (2002)).³

Control variables

Party orientation: We control for the incumbent's political orientation with two dummy variables: Right and Left. These variables take the value of 1 if the affiliation of the party is considered "right" or "left," respectively, and zero otherwise (Beck et al. (2001)).

Executive's special interests: As the Public Choice literature has argued, the adoption of efficient institutions may depend on whether the executive represents groups with special interests or not. We control for this influence with a dummy variable (Execspec) that takes the value of 1 if the party in power is "nationalist," represents rural or peasants' interests, regional interests, or a religion, and takes the value of zero otherwise (Beck et al. (2001)).

³ We have also used the Executive and Legislative Indices of Electoral Competitiveness (Beck et al. (2001)) which measure political competitiveness at the executive and legislative level on a 1 to 7 scale. The results (available upon request) are qualitatively similar.

Autonomous regions: As de Vanssay et al. (2005) point out, competitive pressures on politicians could tend to be greater in countries with competition at the federal, state, and local levels than in countries with a unified hierarchy where competition occurs only at the top level. The variable *Auton* takes the value of 1 if the country presents contiguous autonomous regions and zero otherwise (Beck et al. (2001)).

Past per capita GDP growth: We control for past per capita GDP growth (the average of the previous five years) as it is likely that countries that grew faster in the recent past, possibly because of the adoption of institutions of economic freedom, may be inclined to increase their economic freedom in the future.

Initial per capita GDP: We also control for the initial level of development (given by the log of the average per capita GDP level of the previous five years) as it is also likely that wealthier countries may be inclined to adopt institutions of economic freedom irrespective of their recent economic growth performance (see de Haan and Sturm (2003)). As we will see below, this variable plays a crucial role in our estimations.⁴

We use a sample of 73 countries and annual data covering 1980, 1985, 1990, 1995, 2000, 2001, 2002, and 2003.⁵

3 Estimation

Table 1 reports the results of various regressions using the methodology proposed by Beck and Katz (1995) using panel corrected standard errors (PCSEs).⁶ We control for political variables first (column 1), past per capita GDP growth (*PpcGDPg*) second (column 2), and the initial per capita GDP level (*InitGDP*) third (column 3).

[Table 1 about here.]

Consistent with Acemoglu and Robinson's (2006) proposed theory, our data reveal the presence of a U-shaped relationship between political competition

⁴ Using the average of the previous five years for these last two variables smoothes out possible short-run shocks and avoids possible problems of endogeneity. Data from Heston et al. (2006).

⁵ Up to 2000 the EFW was computed every five years. We use the largest sample of countries available after consolidating the data.

⁶ This methodology produces larger standard errors than OLS estimations and correct for the overconfidence of the FGLS t-values. Related studies on institutional and political variables such as Adserà et al. (2003) and de Vanssay et al. (2005) have also used this methodology.

and the adoption of institutions of economic freedom when controlling for other political variables (column 1) and past economic growth (column 2): the linear and quadratic terms of Polity are significant and present a negative and a positive sign respectively. Based on these specifications, therefore, institutions of economic freedom seem to be more likely to be adopted at the extreme cases of weak and strong political competition than in cases in between.

The previous result disappears, however, when controlling for the initial level of development as captured by the initial per capita GDP level (column 3). In this case, the appropriate model appears to be consistent with the political principal-agent paradigm as a single linear term of the political competition variable produces a positive and strongly significant coefficient (columns 3 and 4). Importantly, although the coefficient of past per capita GDP growth is always positive and highly significant, its contribution explaining the variation in EFW is minor when compared to the explanatory power of the initial per capita GDP level. Indeed, the R^2 increases by 21 percent when introducing past per capita GDP growth and by 40 percent when introducing the initial per capita GDP level (it increases by 54 percent if past per capita GDP growth is dropped in column 3). This result suggests that while economic growth seems to foster the adoption of institutions of economic freedom, its cumulative effect over the long run is much more important in this regard. Initial development levels explain much of the variation of economic freedom and render the positive effect of weak political competition on this variable (the left arm of the U as proposed by Acemoglu and Robinson (2006)), not significant.

In terms of the political control variables, Left is consistently negative and significant across all models. Right, on the other hand, is never significant. In line with the Public Choice literature, the variable capturing the executive's special interests (Execspec) presents the expected sign (negative) and is always significant. Finally, and contrary to what was expected, Auton seems to be negatively related to EFW although is not always significant. Similar results regarding this variable have also been found by de Vanssay et al. (2005).

4 Conclusion

We investigate a recent political theory of institutional change by Acemoglu and Robinson (2006) according to which institutions of economic freedom are more likely to be adopted at the extreme cases of weak and strong political competition than at cases in between. We find that such a U-shaped relationship is verified when controlling for other political variables and past economic growth, but disappears when controlling for the initial level of development as captured by GDP per capita. In this latter case, the appropriate model ap-

pears to be consistent with the political principal-agent paradigm, as a single linear term of the political competition variable produces a positive and highly significant coefficient. Over the long run, therefore, the adoption of institutions of economic freedom seems to be both a *normal* (increasing in income level and growth) and a *democratic* good.

Our results also indicate that having incumbent rulers from the right does not significantly affect the adoption of institutions of economic freedom, but having incumbent rulers from the left is a significant deterrence of such adoption. Consistent with the Public Choice literature it also appears important for the adoption of institutions of economic freedom that incumbent rulers do not represent special interests, groups or religions.

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Table 1
 Panel data estimates (EFW=dependent variable)

Column no.:	1	2	3	4
Constant	5.731 ^a (0.407)	5.420 ^a (0.390)	0.159 (0.504)	0.517 (0.360)
Polity	-0.143 ^b (0.066)	-0.103 ^c (0.062)	0.095 ^b (0.045)	0.054 ^a (0.010)
Polity ²	0.010 ^a (0.003)	0.008 ^a (0.002)	-0.002 (0.002)	
Auton	-0.154 (0.117)	-0.241 ^b (0.110)	-0.289 ^a (0.101)	-0.290 ^a (0.103)
Execspec	-0.359 ^b (0.142)	-0.328 ^b (0.142)	-0.191 ^c (0.102)	-0.212 ^b (0.106)
Right	-0.096 (0.096)	-0.146 (0.095)	-0.138 (0.095)	-0.149 (0.093)
Left	-0.341 ^b (0.140)	-0.368 ^a (0.134)	-0.280 ^b (0.113)	-0.298 ^a (0.111)
PpcGDPg		0.122 ^a (0.017)	0.100 ^a (0.018)	0.099 ^a (0.018)
InitGDP			0.573 ^a (0.044)	0.550 ^a (0.044)
Adjusted R ²	0.309	0.374	0.520	0.519
Observations	584	584	584	584

Robust standard errors are in parenthesis. Significance levels: *a* (1%), *b* (5%) and *c* (10%).