

Clientelism, Credibility, and the Policy Choices of Young Democracies

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This article identifies for the first time systematic performance differences between younger and older democracies and argues that these are driven by the inability of political competitors to make broadly credible preelectoral promises to voters. Younger democracies are more corrupt; exhibit less rule of law, lower levels of bureaucratic quality and secondary school enrollment, and more restrictions on the media; and spend more on public investment and government workers. This pattern is exactly consistent with the predictions of Keefer and Vlaicu (n.d.). The inability of political competitors to make credible promises to citizens leads them to prefer clientelist policies: to underprovide nontargeted goods, to overprovide targeted transfers to narrow groups of voters, and to engage in excessive rent seeking. Other differences that young democracies exhibit, including different political and electoral institutions, greater exposure to political violence, and greater social fragmentation, do not explain, either theoretically or empirically, these policy choices.

Many democracies fall short of many autocracies in the provision of public services or the protection of human and economic rights. Recent contributions to the literature on democracy underline how puzzling this is. Acemoglu, Robinson, and Johnson (2002) conclude that universal suffrage, competitive elections, and restraints on the executive branch should be strongly associated with the security of property rights. Engerman and Sokoloff (2002) argue that the expansion of the franchise should open the way to wider access to education. However, the rule of law and corruption in approximately half of all countries exhibiting either checks and balances or competitive elections in the 1990s was the same or worse as in the median country lacking either one or the other.¹ Baum and Lake (2003) find no relationship between democracy and female secondary school enrollment. Understanding this puzzle is of increasing importance: the number of countries holding competitive elections doubled, from 53 to 101 between 1985 and 2000 (*Database of Political Institutions*; Beck et al. 2001).

The analysis here focuses on the performance differences between younger and older democracies. It is generally accepted that young democracies are particularly

likely to experience bad outcomes. However, neither the precise characteristics of poor performance in young democracies nor the reasons for it are clear. For example, Clague et al. (1996) find that the tenure in office of an autocrat and the age of a democracy are both positively related to the rule of law. They argue that longer-lived autocrats reap the long-term economic gains of an attractive investment climate, giving them an incentive to protect property rights. However, this argument does not extend easily to democracies. Treisman (2000) shows but does not explain that the age of democracy is associated with lower corruption.

Evidence presented below documents for the first time that younger democracies exhibit systematic performance differences: they underprovide nontargeted goods (e.g., universal education, secure property rights, or access to information), overprovide targeted goods (e.g., jobs and public work projects), and are more corrupt. Analysis of these results indicates that the most plausible explanation for this performance is the inability of political competitors in young democracies to make credible, preelectoral promises to voters. This conclusion is not based on a direct test of the proposition, since no variables

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¹These variables are discussed below.

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exist to measure the credibility of candidate promises to voters. The test is indirect, asking, first, whether the pattern of policies pursued by young and old democracies is significantly different; second, whether the differences are consistent with those predicted to exist between credible and noncredible democracies; and third, whether alternative, noncredibility explanations can account for the performance of young democracies.

Keefer and Vlaicu (n.d.) point to the importance of credibility in their argument that in democracies where political competitors can make credible promises only to small segments of the electorate, governments prefer to pursue clientelist policies—high targeted spending, high rent seeking, and low public good provision. The statistical tests presented below demonstrate that the age of democracy exhibits a large and statistically significant effect on policies consistent with this pattern. The most plausible competing explanations (poverty, political and electoral institutions, voter information, social cleavages, and violence) cannot account, either theoretically or empirically, for this particular pattern of performance.

The analysis also sheds light on a different question: how do young, poorly performing democracies become older, well-performing democracies? This dynamic question is more difficult to analyze because the acquisition of credibility is not inevitably associated with the passage of time. Still, fixed-effects estimates presented below indicate that on average, greater experience with democratic competition eventually promotes political credibility.

What Is a “Young Democracy”?

The puzzle that drives the analysis is why *electoral* pressures exerted in younger democracies have a different effect on political accountability than in older democracies. Consequently, the measure of the age of democracy employed below is based only on the presence of competitive elections, specifically, the 7-point Legislative and Executive Indices of Electoral Competition (*LIEC* and *EIEC*) from the *Database of Political Institutions* (Beck et al. 2001). These variables are objective. The highest score on each index (7) is assigned to countries in which multiple parties compete in elections and no party receives more than 75% of the vote. The measures exclude any country attributes that might be linked to the *performance* of elected governments, such as whether the executive is de facto constrained by formal institutions (as in Polity IV), whether the rule of law is respected (as in Freedom House measures), or whether elections have led to the replacement of an incumbent by a challenger (as in the democracy

data used by Przeworski et al. 2000). The measures exclude nonelectoral institutions, such as the presence of checks and balances.

The continuous years of competitive elections are the number of consecutive years in which a country has the highest score on both indices. From 1975 to 2000, the period under study here and for which the *LIEC* and *EIEC* (as well as many of the policy variables considered below) are available, the median number of years of continuous competitive elections in democracies is 11 and the mean 27.² The data encompass 133 democratic episodes in 113 countries, both developed and developing. Of these episodes, 102 began in 1975 or later.

The democracy variable constructed by Przeworski et al. (2000) is highly correlated with the DPI variable and covers the period since 1950. The earlier period, 1950–74, is not useful in this analysis because the policy variables do not extend back that far (e.g., the security of property rights and government spending variables). In any case, the 1975–2000 period captures the great majority of discrete democratic episodes from 1950 to 2000, missing only those that ended during the period 1950–74. If democratic deaths are related to democratic births, however, this number is likely to be small: only seven democratic episodes in the data emerged during the period 1950–74.

Why Do Young Democracies Perform Badly? The Role of Political Credibility

The empirical analysis below explores a large number of potential explanations for the performance of young democracies, concluding that the most plausible is the inability of political competitors in young democracies to make credible promises to citizens about broad public policies. The theoretical literature reviewed in this section indicates why we might expect credibility to be a particular problem in young democracies. Most analyses in the literature have generally assumed either that all preelectoral promises are credible to all voters, or that none are and that politicians can do nothing about their credibility (see Persson and Tabellini 2000 for a review). The policies pursued by noncredible politicians range from, at best, the underprovision of public and private goods to, at worst, no provision at all.

²DPI begins in 1975. The 1975 values are based on the “age of democracy” variable from Clague et al. (1996). They truncate the age of the oldest democracies, so the maximum continuous years of elections in the analysis below is 70, attained by 19 countries.

Keefer and Vlaicu (n.d.) use more realistic assumptions to generate different policy predictions. They observe that candidates in noncredible political settings have recourse to two possible strategies to make credible promises to at least some voters. One is to invest resources to build up their credibility among voters directly (by vote buying, advertising, or canvassing). Politicians can reach some fraction of all voters with these investments; the smaller is the fraction they reach, the greater are policy distortions. Over time, distortions may diminish as candidates (parties) develop policy reputations among an ever larger fraction of voters.

Another strategy is to rely on patrons, whose clients trust them but not the candidates.³ By relying on patrons, candidates do not have to invest their own resources in building credibility. However, patrons are interested only in targeted goods that benefit their clients. Politicians are therefore unable to use public good promises to attract voter support, even if it is the most efficient way to improve voter welfare. In addition, patrons may retain some fraction of the benefits that politicians promise to deliver, imposing a tax on the ability of politicians to reach patrons' clients.

The key prediction emerging from their analysis is that, as long as these efforts only reach a minority of voters, political incentives to provide public goods are weak (public good provision provides no electoral benefit when promised to voters who do not believe the promises of the politician); incentives to provide private or targeted goods are strong (because these benefit only the voters who believe the politician); and the electoral costs of corruption or rent seeking are lower, since most voters are roughly indifferent to candidate performance, believing neither challenger nor incumbent promises.

It is more than coincidental that the policies associated with low-credibility democracies are also those associated with clientelist democracies. The clientelism literature emphasizes that patron-client relationships are personalized, ongoing, and reciprocal—characteristics sufficient for reputational equilibria to exist in a non-cooperative game. Scott characterizes patron-client relations in Southeast Asia as ones “in which an individual of higher socioeconomic status (patron) uses his own influence and resources to provide protection or benefits, or both, for a person of lower status (client) who, for his part, reciprocates by offering general support and assistance, including personal services, to the patron”

³Patrons are relatively few in number and often have personal relationships with candidates, such that candidates and patrons can make credible agreements with each other.

(1972, 92). Keefer and Vlaicu (n.d.) identify conditions under which politicians take advantage of these patron-client relationships to make credible appeals to (some) voters.

Theory, then, points to a particular pattern of policy outcomes that we should expect to see in low-credibility democracies. We also expect that younger democracies, in particular, should be most likely to suffer from low credibility. First, policy reputations can take time to build. Political competitors in younger democracies have had less opportunity, on average, to build reputations than competitors in older democracies. Evidence presented below suggests an association between aging and the acquisition of credibility.

However, the acquisition of political credibility is not inevitably correlated with age. Building up a policy reputation with broad groups of voters is expensive and politicians may prefer to use patrons. If patrons are cheap enough, politicians may postpone indefinitely the decision to invest resources in directly convincing large segments of the voting population of their credibility (Keefer and Vlaicu n.d.). In addition, some democracies are born with credible politicians. Shefter (1994) and Kitschelt et al. (1999) argue that, given a legacy of patronage-based government, voters expect competitively elected politicians to provide patronage. Keefer and Vlaicu (n.d.) contrast Great Britain in 1832, when the franchise began to expand by orders of magnitude from very low levels (less than 5% of the adult population), with the Dominican Republic following the assassination of Rafael Trujillo and the introduction of democracy in the early 1960s, to argue that some new democracies *inherit* policy reputations developed in the predemocratic period. In the latter case, where all forms of political expression and debate, as well as civic or labor organization, had been suppressed for decades, no political movements with identifiable policy traits existed, contrary to the British case. Subsequent policy performance reflected this.

However, those democracies in which political competitors fail to develop broad policy credibility are less responsive to citizens and more vulnerable to replacement by nondemocracies. A second reason for an association between the age of democracy and credibility is therefore simply that regime duration is shorter in those countries in which political competitors fail to acquire credibility. Consistent with this, the 19 democracies that slipped below the threshold for competitive elections after 1986 had experienced continuous competitive elections for an average of only six years, compared to the 27-year average of all 52 countries that exhibited competitive elections in 1987.

Policy Outcomes in Young Democracies: Testing Strategy

Although the empirical analysis here focuses on cross-country statistical evidence, qualitative evidence in the literature supports the claim that younger democracies pursue more targeted, less public, and more corrupt policies. For example, various contributors in Malloy and Seligson (1987), looking at countries experiencing the transition from authoritarian to democratic government, repeatedly note the reliance of new political competitors on narrow benefits to targeted constituencies. Conaghan characterizes the parties of the young Ecuadorian democracy as fundamentally clientelist (1987, 157), and Rosenberg describes political decision making in young Central American democracies as personalized and based on vertical patronage networks (1987, 197). The democratic regime that succeeded the authoritarian government of Getulio Vargas in post-World War II Brazil was itself soon replaced in 1964 by the military, with the purported aim of creating the conditions for the introduction of a "clean democracy," one in which the citizenry were free of clientelist ties to political bosses and where rural voters were not controlled by country bosses (Duncan Baretta and Markoff 1987, 53).

Sayari writes that in the early years of Turkish democracy in the 1940s, "party strategies for peasant mobilization were based largely on the recruitment of notables into party ranks who were then entrusted with the task of providing 'ready vote banks' . . . This strategy met a favorable response from the notables since assuming the leadership post of a party's local unit meant that a notable could (a) gain additional status and prestige vis-à-vis rival notables, (b) secure new sources of outside support for members of his faction, and (c) maintain and improve his economic standing through party ties" (1977, 107). These notables were the heads of extended clientelist networks. Sayari notes the importance to parties of providing individualized assistance: first, in navigating the bureaucracy (which are "relayed to local party leaders or deputies," 108) and, second, in the provision of public investment for rural development projects (108).

The remainder of the article presents more systematic evidence that younger democracies provide more private, targeted goods and fewer public goods and that they are more corrupt. The evidence emerges from estimates of the following three equations.

$$\begin{aligned} \text{Rent seeking}_i &= \alpha + \beta_1(\text{age of democracy}_i) \\ &+ \mathbf{X}_i + \epsilon_i. \end{aligned} \quad (1a)$$

Nontargeted good provision_i

$$= \gamma + \beta_2(\text{age of democracy}_i) + \mathbf{X}_i + \epsilon_i. \quad (1b)$$

Targeted good provision_i

$$= \zeta + \beta_3(\text{age of democracy}_i) + \mathbf{X}_i + \epsilon_i. \quad (1c)$$

In these equations, i indexes democratic episodes and \mathbf{X} is the vector of control variables. Dependent and independent variables are averaged over the entire democratic episode; results are robust using the dependent policy variables averaged over the most recent four years of the democratic episode. If lack of credibility is responsible for the policy performance of young democracies, we expect β_2 to be positive and β_1 and β_3 to be negative.

Two sources of attenuation bias make it *less* likely that we will observe the predicted coefficient values. First, the *age of democracy* may be associated with factors other than political credibility, with offsetting effects on public policy, attenuating the estimated impact of age of democracy on policy. Second, (unobserved) political credibility is causally related to many of the control variables in \mathbf{X} . To the extent that the age of democracy captures *only* political credibility, multicollinearity emerges between the age of democracy and \mathbf{X} , further attenuating the estimated effect of age of democracy on policy.⁴

On the other hand, the coefficient on the age of democracy may be spuriously *increased* if omitted variables unrelated to credibility are responsible for the pattern of policy impact identified in the estimation of the three equations. The analysis offers evidence that this is not the case, however. First, the introduction of numerous other plausible explanations for the performance of young democracies does not cause the estimated association between age of democracy and policy outcomes to disappear. Second, the estimates of equations (1) are robust to explicit controls for omitted variable bias. Third, alternative explanations are themselves usually insignificant.

Policy Variables That Capture Differences between Young and Old Democracies

Seven policies are used to estimate equations (1). Four are nontargeted policies benefiting all citizens: secondary school enrollment, bureaucratic quality, the rule of law, and government ownership of newspapers. Targeted policies, benefiting discrete and identifiable groups of voters,

⁴This is a less-often considered effect of multicollinearity; unstable coefficient estimates are the usual concern.

are reflected by public investment (where pork barrel projects reside) and the central government wage bill (which finances patronage jobs). Rent seeking is measured with a commonly used assessment of corruption.

Measuring Rent Seeking: Corruption

Rent seeking—the diversion of economic resources to the private requirements of political decision makers—is a key measure of government incentives to satisfy broad social interests and is typically measured using corruption assessments. One such assessment that has been broadly used (starting with Knack and Keefer 1995) and that has the greatest country and year coverage is the corruption indicator from Political Risk Service's *International Country Risk Guide*. This is a subjective measure of the extent to which bribes are a significant determinant of government decision making—of the extent to which politicians make decisions in their private interests at the expense of citizens. Higher values of the corruption variable signify reductions in corruption.

Measuring Nontargeted Good Provision: The Rule of Law and the Quality of Bureaucracy

When the rule of law prevails, the umbrella of secure property, contractual and other rights extends over all citizens. The benefits of the rule of law—faster growth, for example—are similarly nontargeted and extend to all citizens. However, when special interests (including politicians themselves) can use the power of government to abrogate the government's obligations to average citizens—for example, to protect the property or contractual rights of average citizens—the rule of law is weak.⁵ *International Country Risk Guide* contains a commonly used measure of the rule of law that is employed here (see, e.g., Acemoglu et al. 2002; Clague et al. 1996; Knack and Keefer 1995).

Low bureaucratic quality implies that the quality of public services offered generally by government to the average citizen is low but that for favored constituents, bureaucratic procedures can be simplified. Bureaucratic quality is therefore a third indicator of government incentives to provide nontargeted or public goods. It can,

⁵The literature (Clague et al. 1996; North and Weingast 1989) typically argues that political checks and balances protect property rights. Checks and balances are weak predictors of the property rights measures used here. The uneven incentives of elected politicians to pursue broad public interests explains why this might be the case.

again, be measured using the eponymous variable from *International Country Risk Guide*.

The corruption, rule of law, and bureaucratic quality measures are available only since 1984. Since the hypothesis is that these measures should be better (larger) in older democracies, the absence of the earlier values could bias these measure upwards for democracies that began before 1984. Bias arises because, had the measures been available for the period when the democracies were younger, their presumably lower values would have lowered the average for the whole democratic episode. One way to correct for this bias is to use the average of these variables from the latest four years of *all* democratic episodes, omitting earlier values uniformly across all democratic episodes. Results reported below are entirely robust to this procedure.

Measuring Public or Nontargeted Good Provision: Secondary School Enrollment

The best measure of nontargeted goods would simply be government spending on them. Unfortunately, even categories of government spending that appear to be untargted are often not. This is true for education. Education spending can be aimed at raising achievement for all children (through curriculum reforms, testing, high-quality teachers) or it can be targeted (by building new schools in some areas, but not in others). Cross-country data on education spending do not distinguish which.⁶ To measure the extent to which government education policy is nontargeted, the estimates below use gross secondary school enrollment from *World Development Indicators*.⁷ If politicians care relatively more about political targeting than they do about providing quality education to all children, the overall quality of schooling should suffer. As quality falls, families should demonstrate increasing reluctance to incur the financial and opportunity costs of sending their children to secondary school; secondary school enrollment should then fall.

The literature provides ample evidence that enrollment is likely to be a better measure of the quality of education available to all children than education spending itself. Bommier and Lambert (2000) find that students

⁶Stasavage (2005) shows that multi-party elections in Africa led to substantially greater spending on primary education. However, it is not clear whether it went to nontargeted policies (quality and curricular improvements) or was targeted (teaching positions and school buildings). Pritchett and Filmer (1999) provide evidence that the latter is more likely to explain the tenuous connection between spending and outcomes in education.

⁷Primary school enrollment could also be used, but varies much less across countries: most countries send most of their children to primary school.

enroll earlier in Tanzanian schools where school quality is higher. Crucial inputs into quality, however, are a function of management decisions, unrelated to budgets, as much as to budgets. Ballou (1996) argues that a good academic record does little to boost an applicant's chances to be hired as a teacher in the United States because administrator incentives are too weakly linked to classroom performance and student achievement. Hanushek et al. (2005) show that teacher quality is a function of the ability of school systems to retain teachers and that this ability significantly depends on factors other than teacher compensation. Teacher absenteeism is strongly associated with student absenteeism (see Carlson 2000 on Chile; Ehrenberg et al. 1991 on the United States; and Harber 1989 on Nigeria) and student scores (Michaelowa 2001, looking at four Francophone African countries), but is also a consequence of management decisions. Michaelowa (2001) finds that another management tool, visits by school inspectors, increased student scores by much more than textbooks, an education input more related to budgets.

Measuring Public or Nontargeted Good Provision: Government Ownership of Newspapers

The final indicator of nontargeted good provision is related to government policy towards citizen information. Since citizen information is a public good, government policies towards citizen access to information should be influenced by the same forces that drive public good provision more generally. One such policy is government ownership of newspapers. Government ownership might be a way to *increase* the flow of information to citizens, but the evidence suggests this is not usually the case. Prat and Strömberg (2005) document a significant increase in citizen information with the introduction of private television stations in Sweden. Djankov et al. (2003) present the market share of government-owned newspapers as a fraction of the market share of the top five newspapers in a country for a large number of countries. Using their data, one can show that a one standard deviation increase in the market share of state-owned newspapers reduces newspaper circulation by 0.4 standard deviations. The market share of government-owned newspapers is significantly higher in younger democracies.

Measuring Targeted Government Spending: Public Investment and the Government Wage Bill

Just as public good spending is not a budget category for most governments, neither is targeted good spending.

Two categories of expenditure that appear to be more often used than others to target benefits to particular constituencies are government jobs and infrastructure projects. Patronage employment is a well-known staple of clientelist governments. The government wage bill as a fraction of GDP, taken (like public investment) from *Government Financial Statistics*, therefore offers a measure of government incentives to channel spending to targeted constituencies. Similarly, as the phrase "pork barrel spending" recalls, political preferences for targetable public investment spending are well known. Public investment spending as a fraction of GDP is therefore used here as a measure of government incentives to target public spending to narrow constituencies.

Neither indicator is perfect. Public investment can flow to large projects (national highway networks, for example) that benefit most citizens; governments seeking to improve service delivery to all corners of a country might increase government employment. To the extent that these expenditures are really public goods, however, the estimations below are biased towards *rejecting* the hypothesis that governments in young democracies have a preference for private or targeted goods.

Control Variables

Two sets of control variables are used here. The parsimonious set consists of country land area and total population: the demand for roads or the costs of providing education or ensuring the rule of law are different in large, thinly populated countries than in small, densely populated countries. Secondary enrollment regressions include three additional variables. The fraction of the population that is young and gross primary school enrollment both influence the demand for secondary education. The education regressions also control for education spending.

The broader set of controls captures other determinants of the demand for public services: income per capita, the percent of the population that is young, and the percent that is rural, taken from *World Development Indicators*. Unfortunately, these variables also influence the attractiveness of clientelist political strategies. Their inclusion therefore can spuriously obscure the credibility-driven relationship between young democracies and policy outcomes. For example, Dixit and Londregan (1996) argue that it is politically more attractive to make targeted payoffs to poor voters. Young, rural voters pose different challenges to political competitors seeking to mobilize support.⁸ In fact, each of these is highly correlated with

⁸The connection between poverty or agriculture and democratic instability is well established (Boix 2001; Boix and Stokes 2003;

TABLE 1 Summary Statistics

Variable	N	Mean	Median	Std. dev.
Rule of law	100	6.22	6.23	2.8
Share of government-owned newspapers/ market share of top five newspapers	74	.16	0	.33
Corruption in government	99	5.9	5	2.3
Bureaucratic quality	100	5.9	5.4	2.6
Gross secondary school enrollment	121	62.9	65.3	31.9
Public investment/GDP	86	0.039	0.032	0.027
Gov't. wages/GDP	90	0.061	0.055	.035
Average continuous years of competitive elections	133	13.6	5.5	17.8
Ethnic fractionalization	132	.41	.42	0.25
Linguistic fractionalization	127	.37	.33	.28
Religious fractionalization	133	.46	.47	.24
Newspaper circulation per 1000 inhabitants	118	119.66	71.99	131.2
Majoritarian (1) or non-majoritarian	133	0.33	0	0.47
Presidential (2), Semi-presidential (1), or Parliamentary (0)	133	1.10	1.69	0.95
Percent population young	131	0.34	0.35	0.1
Total population (10 millions)	133	3.4	.83	10.5
Percent population rural	132	0.48	0.48	0.22
Land (millions km ²)	131	.82	.14	.22
Primary school enrollment	123	99.5	100.7	17.6
Total education expenditures/GDP	114	0.034	0.032	0.02

Note: Observations are episodes of continuous competitive elections. Variables are the sum of the yearly observations divided by the number of years the episode lasts in the sample (a maximum of 26 years, since the data run from 1975 to 2000).

the years of continuous competitive elections: “rural” is correlated at -0.51 ; “young” at $-.50$; and income per capita at $.71$. Despite these correlations, however, young democracies exhibit a significant pattern of policy performance consistent with the credibility explanation in all specifications. Table 1 presents a summary of all of the variables used here.

Results: Young Democracies and Policy

For each of the seven policy variables, Table 2 presents two estimates, one using the parsimonious and the other the

Przeworski et al. 2000), but is typically explained in terms of class conflict, the marginal returns to capital in poor countries, and wealth redistribution (see Boix and Stokes 2003 for a summary). Class-based and redistributive political arguments are uncommon in younger democracies, however, making the credibility arguments here a useful complement to these other contributions.

more elaborate set of controls. The pattern of election coefficients across the different policies is exactly consistent with the credibility explanation: rent seeking falls (recalling that the corruption is worst when the corruption variable is lowest) and government provision of public goods (the rule of law, bureaucratic quality, the absence of government newspapers, and secondary school enrollment) rises the more continuous years of competitive elections that countries have experienced. Government provision of targeted goods—public investment and employment—is lower in older democracies. Consistent with the theory, the magnitude of the age of democracy variable drops in the presence of the expanded set of controls, all of which affect political incentives to use patrons and clientelist policies rather than investing in broad-based policy credibility.

The effects are, finally, large. A 10-year increase in the years of continuous elections is associated with more than a .8 improvement in the corruption and rule of law variables in the parsimonious specification, about one-third of a standard deviation. Similar effects are observed with

TABLE 2 Effect of the Persistence of Competitive Elections (OLS)

Dependent Variable	Nontargeted Goods													
	Rent Seeking	Market Share,				Gross		Targeted Goods						
		Corruption in Government	Rule of Law	Bureaucratic		Gov't-owned Newspapers	School Enrollment	Central Gov't. Wage Bill/GDP	Public Investment/GDP					
				Quality	Quantity									
Continuous years of competitive elections	.087 (.00)	.051 (.00)	.083 (.00)	.02 (.05)	.10 (.00)	.03 (.00)	-.005 (.00)	.002 (.09)	.92 (.00)	.22 (.02)	-.0004 (.00)	-.0005 (.01)	-.0003 (.00)	.00007 (.58)
Total population (10 millions)	-.15 (.003)	-.13 (.01)	-.18 (.00)	-.11 (.09)	.11 (.19)	.21 (.00)	-.33 (.02)	-.50 (.00)	-3.5 (.00)	-.58 (.41)	-.006 (.00)	-.007 (.00)	-.0003 (.00)	-.0005 (.00)
Land (millions km ²)	-.03 (.94)	-.14 (.81)	.37 (.21)	.03 (.95)	.44 (.34)	.29 (.63)	-.03 (.63)	-.01 (.89)	-1.5 (.89)	-5.73 (.20)	-.03 (.00)	-.03 (.03)	-.002 (.00)	-.0002 (.01)
GDP/capita (real, PPP-adjusted, thousands)	.083 (.16)	.16 (.00)	.16 (.00)	.28 (.00)	.28 (.00)	.004 (.57)	.004 (.57)	.95 (.03)	.95 (.03)	.02 (.08)	.02 (.08)	-.001 (.20)	-.001 (.20)	
Percent population young	-7.2 (.014)	-11.7 (.00)	-11.7 (.00)	-1.98 (.48)	-1.98 (.48)	1.79 (.003)	1.79 (.003)	-190.12 (.00)	-190.12 (.00)	.14 (.02)	.14 (.02)	.02 (.55)	.02 (.55)	
Percent population rural	1.12 (.23)	1.28 (.22)	1.28 (.22)	1.29 (.24)	1.29 (.24)	.15 (.52)	.15 (.52)	-12.60 (.15)	-12.60 (.15)	.025 (.32)	.025 (.32)	.03 (.05)	.03 (.05)	
Primary school enrollment						.44 (.03)	.44 (.03)	.26 (.004)	.26 (.004)					
Total education expenditures/GDP						-85.5 (.56)	-85.5 (.56)	132.06 (.12)	132.06 (.12)					
R ²	.57	.68	.42	.72	.55	.73	.15	.40	.86	.22	.31	.17	.31	
N	97	96	98	98	98	97	73	106	106	89	89	85	84	

Note: *p*-values in parentheses. Each observation is the average across a country-regime, beginning in the first year a country has competitive elections (or 1975) and ending in the last year that a country has competitive elections (or 2000). Robust standard errors are reported, clustered by country so that multiple country-regimes from the same country are not treated as independent observations. All regressions include a constant (not reported).

gross secondary school enrollment and somewhat smaller effects with the market share of government-owned newspapers and the public sector wage bill, where an additional 10 years of elections is associated with approximately 10% of a standard deviation reduction.

Alternative Explanations for the Performance of Young Democracies

Table 2 provides strong evidence that broad and systematic differences in the policy decisions of young and old democracies correspond to the predictions of Keefer and Vlaicu (n.d.) regarding the policy choices of noncredible political competitors. Other politically salient characteristics also vary systematically between younger and older democracies, though: the rules of the formal political and electoral institutions through which politicians are elected and govern to voter information; ethnic, linguistic, or religious cleavages; voter information; and conflict.⁹ However, as the discussion in this section indicates, there is little theoretical support for the argument that these explain the pattern of policy outcomes in young democracies. Results in the subsequent section demonstrate that empirical support is lacking as well.

Political and Electoral Institutions

All democracies in the sample exhibit political checks and balances. They vary significantly, however, with respect to political regime (whether countries are presidential or parliamentary) and electoral rules (whether countries use proportional representation or plurality rules to elect their legislators, and the number of legislators per electoral district). The *Database of Political Institutions* (Beck et al. 2001) contains variables that indicate whether countries are presidential or parliamentary (the variable *system*), use plurality rules or proportional representation or both, and their district magnitudes. Approximately 42% of younger democracies (those with the median or fewer years of continuous competitive elections, where the median is 11 years) are parliamentary; more than 60% of older democracies are parliamentary. Of the younger democracies, 33 use only plurality electoral rules and 15 only proportional representation. The figures are reversed for longer democratic episodes: 16 use only plurality rules and 28 use proportional representation. District magnitude differs little, however. It averages 15 in younger democracies and 12 in older.

⁹See Keefer (2004) for systematic reviews of the ways in which political credibility, voter information, and social polarization can distort policy outcomes in democracies.

Theory does *not* predict that these institutional differences should give rise to the policy performance observed in younger democracies. Persson, Roland, and Tabellini (2000) argue that because elected officials in presidential systems cannot make credible agreements with each other, all forms of spending, including corruption or rent seeking, are lower in presidential systems. Younger democracies exhibit *higher* targeted spending and corruption.¹⁰

Persson and Tabellini (2000) argue, together with many others, that majoritarian systems (those with plurality electoral rules and a small median district magnitude) force competing political parties to focus exclusively on the swing (indifferent) district, leading to fewer non-targeted goods (which benefit all constituencies), more targeted goods (targeted exclusively at the swing constituency), and *less* rent seeking. Using a district magnitude of three as the cutoff, younger democracies are only slightly more majoritarian (and exhibit *more* rent seeking).

Ethnic, Religious, or Linguistic Cleavage

Younger democracies may also perform less well because they exhibit more social fractionalization, the probability that two randomly selected people are not from the same group (for example, religious, ethnic, or linguistic). Przeworski et al. (2000, 81) reiterate a common argument, that the more fractionalized a society is, the more difficult it is to govern.¹¹ Alesina et al. (2002) have assembled the most recent data tracking ethnic, linguistic, and religious fractionalization across countries. According to their measures, ethnic, linguistic, or religious fractionalization among younger democracies is between one-third and one-half of a standard deviation greater than in older democracies. However, as a theoretical proposition, it is not clear that social cleavages yield the specific pattern of policy differences observed in younger democracies.

For example, if voter preferences are conditioned heavily on the group identification of candidates, and there is only one candidate from every group, candidates

¹⁰In contrast to Persson and Tabellini's assumptions, Shugart and Haggard (2001) find that in seven out of 23 presidential systems, the president enjoys exclusive proposal power over spending legislation and the legislature confronts severe constraints on amending presidential proposals. These alternative institutional rules are not predicted to yield the policy pattern found in young democracies, however.

¹¹Social cleavages may also give rise to greater polarization, which is distinct from fractionalization: a society characterized by two equally large and discordant groups is more polarized than a society characterized by many small and discordant groups. Measures of polarization are nearly the same across younger and older democracies, however, and are not significant determinants of the policies considered here.

have less incentive to provide both targeted *and* nontargeted services and face a lower electoral penalty for rent seeking, since the group identity of candidates matters more than candidate performance. Alternatively, if, as in Persson and Tabellini (2000, chapter 8), social distance between groups increases with homogeneity within groups, politicians have incentives to focus more intensely on swing voters, leading to reduced rent seeking. Neither prediction corresponds to young democracies; though they are more fractionalized, they exhibit *more* targeted policies and rent seeking.

Moreover, the political salience of social cleavages could emerge precisely because political credibility is absent. Chandra (2004), for example, argues that ethnic-based parties are more likely to emerge when political competition is dependent on patronage, while Keefer and Vlaicu (n.d.) conclude that clientelism is most likely precisely when political competitors cannot make credible policy promises to voters.

Voter Information

When voter welfare is a product of both political decisions and nonpolitical factors and voters can observe neither, voters have no way of holding politicians accountable for their promises. Considerable evidence suggests that citizens may be less informed in younger democracies. Newspaper circulation, the usual proxy variable for information in the empirical literature, is almost three times greater in countries where elections have occurred for more than 12 continuous years than in countries where they have occurred for fewer.¹² However, it is less clear that information explains the policy outcomes observed in younger democracies.

Besley and Burgess (2002) and Strömberg (2004) present theory and evidence that politicians are more likely to underprovide targeted transfers to voters and to retain greater rents for themselves when voters are uninformed. Adserá, Boix, and Payne (2003) also use newspaper circulation to show that corruption is higher when citizens are less informed. These arguments do not address information effects on nontargeted goods. One can infer from this literature, however, that informed voters should be able to hold politicians accountable for the provision of *both* nontargeted and targeted goods. In the experience of younger democracies, however, the provision of targeted goods is actually significantly higher.

The evidence presented earlier suggests that newspaper circulation is itself the result of government policies

towards public access to information. In this case, results linking newspaper circulation to policy outcomes reflect credibility rather than information effects.

Civil Conflict

Some democracies emerge from the ashes of civil conflict; they are on average younger. About one-third of democratic episodes that began after 1974 experienced conflict at their birth. The median deaths due to conflict during the three years before, during, and after the first year of competitive elections in these countries was 7,600.¹³ Again, however, there is no reason to expect that the policies of young democracies are a legacy of conflict. Conflict often decimates the machinery of government, which should increase the difficulty of providing all types of public services. In addition, whether because of the emotional responses that conflict engenders or citizen concerns about security, many public policies analyzed here may be less salient to voters in the aftermath of conflict. This allows politicians to underperform on all policy dimensions with impunity, as in the earlier arguments on social cleavages. For these reasons, we would expect conflict to reduce the provision of both nontargeted goods *and* targeted goods, rather than *increasing* the provision of targeted goods, as we observe in young democracies.

Summarizing the Explanations

Two key conclusions emerge from the foregoing discussion. First, many of the possible explanations for the performance of young democracies do, in fact, vary with the age of democracy. Younger democracies are more presidential, fractionalized, and affected by conflict. Voters in young democracies are systematically less informed. Second, however, none of these predict the pattern of policies found in young democracies. Other explanations may predict higher rent seeking and less government provision of goods and services of all kinds, but the absence of political credibility explains why young democracies exhibit lower provision of nontargeted goods and *greater* provision of targeted goods. Table 3 summarizes these different predictions.

One can imagine other, less quantifiable differences that vary with democratic age. For example, citizens and

¹²Newspaper circulation per 1000 population is taken from *World Development Indicators*.

¹³Calculated by dividing the total number of deaths from conflict reported by Doyle and Sambanis (2000) by the total number of years of conflict that they report. If the conflict was ongoing during the entire three-year window, the number of deaths is three times this number. If the conflict overlapped with only two of the three-years, the number of deaths is two times, and so forth.

TABLE 3 Predicted Policy Outcomes in Young Democracies

Distinguishing Characteristics of Young Democracies	Policy Consequences of This Characteristic for:		
	Provision of Nontargeted Goods	Provision of Targeted Goods	Rent Seeking
More presidential	Less	Less	Less
More majoritarian*	Less	More	Less
Greater social cleavages*	Less	Less	More
More affected by conflict*	Less	Less	More
Less citizen information	Less	Less	More
Less political credibility	Less	More	More

*The predictions marked for majoritarian systems are “less, no difference, more” if politicians are not credible and can do nothing about it; for social cleavages and conflict, the predictions are “less, more, less” if a swing group of voters exists that is indifferent to social grouping or former combatants.

politicians in younger democracies might have less understanding of the way democratic political competition is supposed to work; voters in newly democratic states might exhibit greater impatience to see “results on the ground”; or citizens and politicians may be accustomed to political transactions that revolve around clientelist promises and believe that it is too risky to focus on nontargeted goods (see Heilbrunn 2006 for a review of these arguments in the context of failed states). The policy predictions that emerge from these arguments are not consistent with the observed performance of young democracies, however.

Lack of understanding of how democratic political competition works, for example, is an information problem that should reduce government performance on all margins, leading to both lower targeted and nontargeted good provision and higher rent seeking. Impatience among citizens should result in *more* provision of all goods and *less* rent seeking, in contrast to what we observe in young democracies. Finally, even if citizens and politicians are simply averse to shifting away from clientelism, this does not explain citizen tolerance for politician rent seeking, only citizen preferences for targeted over nontargeted government services.

Results: Other Explanations for the Performance of Young Democracies

To examine these alternative explanations, each of the 14 specifications in Table 2 is replicated six different times. In the first replication, institutional variables are added; in the second, fractionalization; in the third, newspaper circulation; in the fourth, deaths from conflict. The fifth replication adds all of these variables jointly. The sixth replication, recognizing that newspaper circulation likely captures credibility effects directly, adds all variables

except newspaper circulation. Regression specifications that estimate the effects of newspaper circulation on state ownership of newspapers are omitted, since they are obviously endogenous, leaving a total of 80 specifications (rather than 84).

Table 4 reports the estimated coefficients of the age of democracy variable from the 80 different specifications. The estimated coefficients of the variables capturing the competing explanations are then reported in Table 5. Table 4 tells us that alternative explanations do not account for the pattern of policies pursued by young democracies. Even controlling for alternative hypotheses, the pattern of results is exactly the same as in Table 2 and uniquely consistent with the credibility hypothesis: the age of democracy variable continues to be a largely significant determinant of rent seeking, nontargeted public goods, and targeted public goods. This includes specifications with controls for *all* alternative hypotheses (rows 5 and 6).

The democracy coefficients are somewhat more fragile when controlling for newspaper circulation. This is almost certainly because newspaper circulation itself captures credibility effects: in low credibility states, governments restrict access to the public good of information, suppressing newspaper circulation. As the earlier discussion pointed out, newspaper circulation is itself determined by state newspaper ownership, a nontargeted government policy determined by the years of democracy and political credibility (Table 2). Consistent with this interpretation, greater newspaper circulation is associated with *less* targeted good provision, consistent with the credibility hypothesis but not the information hypothesis.

Results in Table 5 demonstrate that none of the other alternative explanations of democratic performance is a systematically significant predictor of government

TABLE 4 Coefficient Estimates on "Continuous Years of Competitive Elections," Controlling for Alternative Explanations (OLS)

Dependent Variable	Nontargeted Goods						Targeted Goods	
	Rent Seeking			Market Share,			Gross	
	Corruption in Government	Rule of Law	Bureaucratic Quality	Gov't.-owned Newspapers	School Enrollment	Secondary	Central Gov't. Wage Bill/GDP	Public Investment/GDP
Each row presents the coefficient estimates of the variable "continuous years of competitive elections" from the corresponding regression in Table 2, modified according to the indicated specification change. Change in specification in row 0: None—these are the coefficients reported in Table 2.								
0	.087 (.00)	.083 (.00)	.10 (.00)	-.005 (.00)	.002 (.09)	.92 (.00)	-.0004 (.00)	-.0003 (.00)
Change in specification in row 1: addition of <i>political system</i> (presidential/parliamentary) and <i>majoritarian</i>								
1	.081 (.00)	.06 (.00)	.08 (.00)	-.004 (.01)	-.0008 (.60)	.37 (.00)	-.0006 (.00)	-.0005 (.00)
Change in specification in row 2: addition of religious, linguistic, and ethnic fractionalization								
2	.07 (.00)	.06 (.00)	.08 (.00)	-.001 (.52)	-.003 (.08)	.38 (.00)	-.0003 (.01)	-.0003 (.01)
Change in specification in row 3: addition of newspaper circulation/1000 population								
3	.06 (.00)	.03 (.00)	.06 (.00)	NA	NA	.33 (.00)	-.0001 (.51)	-.0001 (.36)
Change in specification in row 4: addition of deaths from conflict at the beginning of the democratic period								
4	.09 (.00)	.08 (.00)	.10 (.00)	-.005 (.00)	-.002 (.14)	.39 (.00)	-.0004 (.01)	-.0003 (.00)
Change in specification in row 5: addition of <i>all</i> alternative political explanations (political system through deaths from conflict)								
5	.06 (.00)	.02 (.06)	.06 (.00)	NA	NA	.29 (.04)	-.0001 (.62)	.000 (.95)
Change in specification in row 6: addition of all alternative political explanations <i>except</i> newspaper circulation								
6	.07 (.00)	.05 (.00)	.07 (.00)	.0004 (.76)	-.0008 (.63)	.60 (.00)	-.0006 (.00)	-.0004 (.01)

Note: *p*-values in parentheses. Each cell is the coefficient estimate on the age of democracy from a different regression. The specification of each regression is the same as in the corresponding specification in Table 2, with the additional controls specified in the line above each row. Each observation is the average across a country-regime, beginning in the first year a country has competitive elections (or 1975) and ending in the last year that a country has competitive elections (or 2000). Robust standard errors are reported, clustered by country so that multiple country-regimes from the same country are not treated as independent observations. All regressions include a constant (not reported).

TABLE 5 Effects of Alternative Explanations of Policy Performance (OLS)

Dependent Variable	Nontargeted Goods										Targeted Goods	
	Rent Seeking	Market Share, Gross Secondary										
		Corruption in Government	Rule of Law	Bureaucratic Quality	Gov't.-owned Newspapers	School Enrollment	Central Gov't. Wage Bill/GDP	Public Inv./GDP				
Coefficient estimates on the variables in the left-hand column. Specification numbers correspond to specifications 1–4 in Table 4.												
1 Presidential = 0	.30 (.13)	-.17 (.38)	.84 (.00)	-.01 (.97)	.77 (.00)	.32 (.14)	-.10 (.05)	-.08 (.09)	-1.3 (.46)	-.52 (.76)	.01 (.02)	.008 (.03)
semi-pres. = 1												.009 (.03)
parliamentary = 2												
Majoritarian = 1	-.71 (.02)	-.14 (.69)	.12 (.77)	1.24 (.00)	-.29 (.38)	.22 (.53)	.17 (.08)	.04 (.67)	7.53 (.05)	7.4 (.05)	.01 (.74)	.005 (.46)
non-major. = 0												-.005 (.47)
2 Ethnic	-1.76 (.04)	.05 (.95)	-3.22 (.00)	-.01 (.99)	-2.42 (.01)	.37 (.64)	-.24 (.09)	-.42 (.02)	-7.94 (.41)	-7.90 (.39)	-.02 (.38)	.01 (.70)
fractionalization												-.003 (.84)
Linguistic	-.54 (.49)	-.47 (.59)	-.14 (.84)	.42 (.56)	.58 (.42)	.85 (.14)	.45 (.00)	.37 (.03)	-.03 (.99)	2.67 (.75)	.01 (.72)	-.01 (.47)
fractionalization												.03 (.03)
Religious	.73 (.25)	.17 (.75)	1.13 (.25)	.02 (.98)	2.13 (.02)	.92 (.18)	.10 (.59)	.11 (.52)	9.73 (.12)	8.25 (.19)	.03 (.09)	.02 (.21)
fractionalization												.03 (.07)
3 Newspaper	.01 (.00)	.002 (.11)	.01 (.00)	.002 (.18)	.01 (.00)	.0002 (.88)	NA	NA	.005 (.06)	.005 (.68)	-.00003 (.40)	-.00004 (.01)
circulation/1000												.00002 (.40)
population												
4 deaths from	-.008 (.08)	-.004 (.65)	-.017 (.00)	-.01 (.02)	-.01 (.03)	-.005 (.56)	.004 (.00)	.002 (.09)	.01 (.87)	.03 (.70)	.0005 (.36)	-.00001 (.98)
conflict at the												-.0003 (.56)
beginning of the												
democratic period												
(1,000s)												

Note: *p*-values in parentheses. Each cell is the coefficient estimate on variables in the left-most column. The specification of each regression is the same as in the corresponding specification in Table 4 (see numbers in left-hand column), with the addition of the controls specified in the cell adjacent to the specification number. Each observation is the average across a country-regime, beginning in the first year a country has competitive elections (or 1975) and ending in the last year that a country has competitive elections (or 2000). Robust standard errors are reported, clustered by country so that multiple country-regimes from the same country are not treated as independent observations. All regressions include a constant (not reported).

performance across all policy dimensions. This is true even if the age of democracy itself is omitted (not shown). Still, some results in Table 5 are worth noting. Parliamentary systems of government exhibit significantly less state-owned media and more targeted spending (jobs and public investment); majoritarian systems of government are associated with significantly better education outcomes; and no measure of fractionalization affects secondary school enrollment, in contrast to findings using U.S. data in Alesina, Baqir, and Easterly (1999). Finally, greater violence is associated with greater corruption, lower rule of law, and state control of media, but no difference with respect to other policies.

Omitted Variables and Endogeneity

The lengthy investigation of alternative explanations for government policy choices shows that it is nontrivial to find characteristics of young democracies that might explain why they exhibit the particular pattern of policy outcomes identified here. Evidence reported in this section supports the more general conclusion that the results in Table 2 are not driven by omitted variables that jointly determine both policy outcomes and the age of democracy. The effects of age of democracy are robust to an instrumental variables procedure that controls for unobserved omitted variables generally. They are also robust to controls for other variables omitted earlier: the religious beliefs of the population, the years in office of the elected executive, and government spending as a fraction of GDP.

Instrumental variables. Table 6 reports *IV* estimates of the parsimonious specifications in Table 2 using latitude and British colonial heritage as instruments.¹⁴ Each influences the institutional development of countries, but neither is plausibly related to policy choices from 1975 to 2000. Latitude captures geographic endowments, such as climate, that might affect elite incentives to adopt democratic institutions (in unpleasant climates, elites are only interested in resource extraction and less interested in empowering a labor force through democratization); colonial history more directly reflects the institutional origins of a country. The F-test roundly rejects the null hypothesis that the instruments provide no explanatory power in the first-stage equation; the F-statistic is in every case quite large. More weakly, in four of the seven cases, the Hansen

J-test also rejects the hypothesis that the instruments should not be excluded from the second-stage regression.

The democracy effect is *larger* in the *IV* estimates in Table 6 than in the corresponding estimates in Table 2, indicating that measurement error introduces significant *downward* bias in the results reported in Table 2. Table 6 results are therefore evidence that the results in Table 2 are neither the product of reverse causality—policy choice driving regime duration—nor of an omitted determinant of policy choice that also determines regime duration.¹⁵

Religious affiliation, government spending, and the leader's tenure in office. If religion affects the propensity to embrace democracy, its omission could bias the earlier results. Alesina et al. (2002) have the most complete data on the religious profile of countries. However, controls for the population share of numerous different religious denominations in the regressions in Tables 2 and 6 have no effect on the estimated policy effects of the continuous years of competitive elections (results not reported).

Nearly all of the policy variables in the estimates of Tables 2 and 6 are related to government expenditure. Government expenditure is nevertheless excluded from the core specifications because its inclusion reduces sample sizes by approximately 25%. Results, though, are robust to its inclusion. Wherever the years of continuous elections are significant in Table 2 (*OLS*) or Table 6 (*2SLS*), it remains significant when controlling for government expenditure as a fraction of GDP.

Finally, the results in Tables 2 and 6 might have emerged because the years of continuous competitive elections are conflated with leader tenure. There are 36 episodes in which countries fall from the most competitive electoral category. The average tenure of incumbents prior to this change in electoral competitiveness is 7.3 years, compared to 4.3 years for all country-years during periods of continuous competitive elections, suggesting that leaders in short-lived democracies may abuse their office to gain unfair and illicit advantage in elections. They would be less accountable, more likely to engage in corruption, and less inclined to provide broad-based public goods.¹⁶ This would give rise to an association between age of democracy and policy outcomes, but driven by unobserved leader behavior rather than credibility.

To investigate this, the average years in office of the chief executive over the democratic episode in question (from the *Database of Political Institutions*) was included in all of the specifications in Tables 2 and 6. In every case,

¹⁴Among the instruments that are widely used in the literature to control for the endogeneity of institutions, these do the best job of explaining the age of democracy. For other purposes, Persson, Tabellini, and Trebbi (2003) have also used these instruments.

¹⁵These results are not the last word on endogeneity: though they are the best available, the instruments are weaker than desirable.

¹⁶Clague et al. (1996) and others have emphasized that long-surviving autocrats are associated with more secure property rights.

TABLE 6 Effect of the Persistence of Competitive Elections (Two-Stage Least Squares)

Dependent Variable	Continuous Years of Competitive Elections	R ²	N	F-test on Instruments (See Note)	Hansen's J-Test (p-value, See Note)
Corruption in government	.11 (.00)	.94	95	12.92	.08
Rule of law	.12 (.00)	.92	96	12.35	.37
Bureaucratic quality	.12 (.000)	.92	96	12.35	.57
Market share, gov't.- owned newspapers	-.008 (.03)	.34	65	10.32	.91
Gross secondary school enrollment	1.778 (.00)	.88	96	14.62	.93
Central gov't. wage bill/GDP	-.0006 (.05)	.83	79	15.51	.002
Public investment/GDP	-.0005 (.01)	.73	78	15.48	.006

Note: *p*-values in parentheses. The second-stage specification is the parsimonious specification from Table 2. The F-statistic tests the hypothesis that the instruments add *no* explanatory power to the first-stage determinants of *years of continuous competitive elections*; a large F-statistic (greater than three) rejects this hypothesis. Hansen's J-test examines the hypothesis that instruments can be excluded from second stage. Rejection (a large *p*-value) indicates excludability and the validity of the instruments. Each observation is the average across a country-regime, beginning in the first year a country has competitive elections (or 1975) and ending in the last year that a country has competitive elections (or 2000). Robust standard errors are reported, clustered by country so that multiple country-regimes from the same country are not treated as independent observations. All regressions include a constant (not reported).

the estimated coefficient of the continuous years of election variable was essentially unchanged. The average years in office of the executive were associated with greater state ownership of newspapers, greater rule of law, and higher bureaucratic quality, but no other significant effects.

Does Growing Old Help?

Although the evidence is convincing that performance of young democracies can be attributed to the lack of political credibility, it is unclear whether the accumulation of electoral experience leads political competitors to acquire credibility, or whether this association is driven by historical factors (some democracies are born with credible political actors and endure; others are not and are replaced by nondemocratic regimes). To explore the effects of aging, Table 7 presents regressions following the specifications in Table 2, estimated using panel data and ordinary least squares, isolating the effects of time by controlling for country fixed effects. Because the shape of the time path of reputation acquisition is unknown, the number of continuous years of competitive elections is allowed to enter both linearly and quadratically. The share of state-owned newspapers is only available for one year and is omitted.

Table 7 indicates that democracies can improve policy performance over time. The effect is highly nonlinear—both linear and quadratic terms are highly significant—and the effects not as large as in the cross-section results. Corruption falls for approximately 30 years before it stops improving. The rule of law and bureaucratic quality improve for more than 40 years. Schooling effects are insignificant. However, the government wage bill falls steadily as democracies age, as in the cross-section results. Contrary to expectations, public investment initially rises, but the effect is short-lived: after fewer than two years in the parsimonious specification and 12 years in the second specification, public investment falls.

Conclusion

The foregoing analysis is the first to demonstrate systematic performance differences, across seven areas of significant concern for economic development, between younger and older democracies. A number of explanations for these differences are examined here; the most plausible is the inability of political competitors in these countries to make credible promises to broad groups of

TABLE 7 The Effects of Additional Years of Competitive Elections (OLS, fixed effects, specifications are those in corresponding columns in Table 2)

Dependent Variable	Nontargeted Goods						Targeted Goods		
	Rent Seeking			Gross Secondary			Central Gov't.		
	Corruption in Government	Rule of Law	Bureaucratic Quality	School Enrollment	Wage Bill/GDP	Investment/GDP	Public		
Continuous years of competitive elections	.057 (.00)	.08 (.00)	.05 (.00)	1.22 (.00)	.11 (.63)	-.0002 (.15)	-.0008 (.57)	.0006 (.02)	
(Continuous years of competitive elections) ²	-.0008 (.00)	-.0005 (.00)	-.0003 (.00)	.003 (.11)	.003 (.32)	-.00002 (.19)	-.00005 (.00)	-.00005 (.06)	
within-R ²	.10	.11	.07	.42	.42	.03	.12	.03	.04
(N; democratic episodes)	(899; 98)	(872; 97)	(1152; 105)	(597; 100)	(589; 100)	(1069; 89)	(1022; 88)	(1077; 85)	(1027; 83)

Note: Specifications are those in corresponding columns in Table 2 (state-owned newspapers is omitted because of lack of time variation); other coefficients not reported. *p*-values in parentheses. Each observation is the average across a country-regime, beginning in the first year a country has competitive elections (or 1975) and ending in the last year that a country has competitive elections (or 2000).

voters. When politicians are not credible, patron-client relationships are transported to the political realm, generating high targeted spending, high rent seeking, and low levels of nontargeted good provision.

This argument ties together elements of a diverse body of research examining clientelism, the performance of young democracies, and the importance of democratic institutions for key public policy outcomes. Huntington (1971) argues, for example, that democracies differ significantly in the extent to which they are politically institutionalized and that political systems are unstable when political participation advances more rapidly than political institutionalization. The acquisition of political credibility is one compelling way to operationalize the broad concept of political institutionalization. Barndt et al. (2005) shows that countries with less democratic experience grow more slowly. The lack of credibility of politicians in young democracies can explain this.

More work is needed, however, to answer the question, under what conditions do political competitors acquire credibility? Though policy performance seems to improve with age, it is clear that democratic experience alone is far from a necessary condition for credibility. Interactions between the persistence of democracy and such variables as income and the age of the population and its urban-rural distribution may inform the question of when political calculation leads to investments in credibility; they hint, at any rate, to the complexity of the calculation.

References

- Acemoglu, Daron, James A. Robinson, and Simon Johnson. 2002. "Reversal of Fortune: Geography and Institutions in the Making of the Modern World." *Quarterly Journal of Economics* 117(4): 1231–94.
- Adserà, Alicia, Carlos Boix, and Mark Payne. 2003. "Are You Being Served? Political Accountability and Governmental Performance." *Journal of Law, Economics and Organization* 19(2): 445–90.
- Alesina, Alberto, Reza Baqir, and William Easterly. 1999. "Public Goods and Ethnic Divisions." *The Quarterly Journal of Economics* 114(4): 1243–84.
- Alesina, Alberto, Arnaud Devleeschauwer, William Easterly, Sergio Kurlat, and Romain Wacziarg. 2002. "Fractionalization." *Journal of Economic Growth* 8(2): 155–94.
- Ballou, Dale. 1996. "Do Public Schools Hire the Best Applicants?" *The Quarterly Journal of Economics* 111(1): 97–133.
- Barndt, William, Philip Bond, John Gerring, and Carola Moreno. 2005. "Democracy and Economic Growth: A Historical Perspective." *World Politics* 57(3): 323–64.
- Baum, Matthew, and David Lake. 2003. "The Political Economy of Growth: Democracy and Human Capital." *American Journal of Political Science* 47(2): 333–47.
- Beck, Thorsten, George Clarke, Alberto Groff, Philip Keefer, and Patrick Walsh. 2001. "New Tools in Comparative Political Economy: The Database of Political Institutions." *World Bank Economic Review* 15(1): 165–76.
- Besley, Timothy, and Robin Burgess. 2002. "The Political Economy of Government Responsiveness: Theory and Evidence from India." *Quarterly Journal of Economics* 117(4): 1415–51.
- Boix, Carles. 2001. "Democracy, Development and the Public Sector." *American Journal of Political Science* 45(1): 1–17.
- Boix, Carles, and Susan Stokes. 2003. "Endogenous Democratization." *World Politics* 55(4): 517–49.
- Bommier, Antoine, and Sylvie Lambert. 2000. "Education Demand and Age at School Enrollment in Tanzania." *The Journal of Human Resources* 35(1): 177–203.
- Carlson, Beverly A. 2000. "Achieving Educational Quality: What Schools Teach Us—Learning from Chile's P900 Primary Schools." Serie Desarrollo Productivo No. 64, CEPAL, Santiago, Chile (January).
- Chandra, Kanchan. 2004. *Why Ethnic Parties Succeed*. Cambridge: Cambridge University Press.
- Clague, Christopher, Philip Keefer, Stephen Knack, and Mancur Olson. 1996. "Property and Contract Rights under Democracy and Dictatorship." *The Journal of Economic Growth* 1(2): 243–76.
- Conaghan, Catherine M. 1987. "Party Politics and Democratization in Ecuador." In *Authoritarians and Democrats: Regime Transition in Latin America*, ed. James M. Malloy and Mitchell A. Seligson. Pittsburgh, PA: University of Pittsburgh Press, pp. 145–66.
- Dixit, Avinash, and John Londregan. 1996. "The Determinants of Success of Special Interests in Redistributive Politics." *Journal of Politics* 58(4): 1132–55.
- Djankov, Simeon, Caralee McLiesh, Tatiana Nenova, and Andrei Shleifer. 2003. "Who Owns the Media?" *Journal of Law and Economics* 46(2): 341–81.
- Doyle, Michael, and Nicholas Sambanis. 2000. "International Peacebuilding: A Theoretical and Quantitative Analysis." *American Political Science Review* 94(4): 779–801.
- Duncan Baretta, Silvio R., and John Markoff. 1987. "Brazil's Abertura: A Transition from What to What?" In *Authoritarians and Democrats: Regime Transition in Latin America*, ed. James M. Malloy and Mitchell A. Seligson. Pittsburgh, PA: University of Pittsburgh Press, pp. 43–66.
- Ehrenberg, Ronald G., Randy A. Ehrenberg, Daniel I. Rees, and Eric L. Ehrenberg. 1991. "School District Leave Policies, Teacher Absenteeism, and Student Achievement." *Journal of Human Resources* 26(1): 72–105.
- Engerman, Stanley L., and Kenneth L. Sokoloff. 2002. "Factor Endowments, Inequality and Paths of Development among New World Economies." NBER Working Paper No. 9259.
- Hanushek, Eric A., John Kain, Daniel O'Brien, and Steven Rifkin. 2005. "The Market for Teacher Quality." NBER Working Paper W11154.
- Harber, Clive. 1989. *Politics in African Education*. London: Macmillan.
- Heilbrunn, John. 2006. "Paying the Price of Failure: Reconstructing Failed and Collapsed States in Africa and Central Asia." *Perspectives on Politics* 4(1): 135–50.

- Huntington, Samuel P. 1971. "The Change to Change: Modernization, Development and Politics." *Comparative Politics* 3(3): 283–322.
- Keefer, Philip. 2004. "What Does Political Economy Tell Us about Economic Development—and Vice Versa?" In *Annual Review of Political Science*, ed. Nelson Polsby. Palo Alto, CA: Annual Review, pp. 247–72.
- Keefer, Philip, and Razvan Vlaicu. n.d. "Democracy, Credibility, and Clientelism." *Journal of Law, Economics, and Organization*. Forthcoming.
- Kitschelt, Herbert, Zdenka Mansfeldova, Radoslaw Markowski, and Gabor Toka. 1999. *Post-Communist Party Systems: Competition, Representation and Inter-Party Collaboration*. New York: Cambridge University Press.
- Knack, Stephen, and Philip Keefer. 1995. "Institutions and Economic Performance: Cross-Country Tests Using Alternative Institutional Measures." *Economics and Politics* 7(3): 207–28.
- Michaelowa, Katharina. 2001. "Primary Education Quality in Francophone Sub-Saharan Africa: Determinants of Learning Achievement and Efficiency Considerations." *World Development* 29(10): 1699–1716.
- North, Douglass C., and Barry R. Weingast. 1989. "Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Seventeenth-Century England." *Journal of Economic History* 49(4): 803–32.
- Persson, Torsten, Gerard Roland, and Guido Tabellini. 2000. "Comparative Politics and Public Finance." *Journal of Political Economy* 108(6): 1121–61.
- Persson, Torsten, and Guido Tabellini. 2000. *Political Economics: Explaining Public Policy*. Cambridge, MA: MIT Press.
- Persson, Torsten, Guido Tabellini, and Francesco Trebbi. 2003. "Electoral Rules and Corruption." *Journal of the European Economic Association* 1(4): 958–89.
- Prat, Andrea, and David Strömberg. 2005. "Commercial Television and Voter Information." Centre for Economic and Policy Research Working Paper 4989.
- Pritchett, Lant, and Deon Filmer. 1999. "What Education Production Functions Really Show: A Positive Theory of Education Expenditures." *Economics of Education Review* 18(2): 223–39.
- Przeworski, Adam, Michael E. Alvarez, Jose Antonio Cheibub, and Fernando Limongi. 2000. *Democracy and Development: Political Institutions and Well-being in the World, 1950–1990*. New York: Cambridge University Press.
- Rosenberg, Mark. 1987. "Political Obstacles to Democracy in Central America." In *Authoritarians and Democrats: Regime Transition in Latin America*, ed. James M. Malloy and Mitchell A. Selig. Pittsburgh, PA: University of Pittsburgh Press, pp. 193–218.
- Sayari, Sabri. 1977. "Political Patronage in Turkey." In *Patrons and Clients in Mediterranean Societies*, ed. Ernest Gellner and John Waterbury. London: Duckworth, pp. 103–114.
- Scott, James C. 1972. "Patron-Client Politics and Political Change in Southeast Asia." *American Political Science Review* 66(1): 91–113.
- Shefter, Martin. 1994. *Political Parties and the State. The American Historical Experience*. Princeton, NJ: Princeton University Press.
- Shugart, Matthew S., and Stephan Haggard. 2001. "Institutions and Public Policy in Presidential Systems." In *Presidents, Parliaments and Policy*, ed. Stephan Haggard and Mathew McCubbins. New York: Cambridge University Press, pp. 64–104.
- Stasavage, David. 2005. "Democracy and Education Spending in Africa." *American Journal of Political Science* 49(2): 343–58.
- Strömberg, David. 2004. "Radio's Impact on Public Spending." *Quarterly Journal of Economics* 119(1): 189–221.
- Treisman, Daniel. 2000. "The Causes of Corruption: A Cross-National Study." *Journal of Public Economics* 76(3): 225–56.