

Democratization and clientelism: Why are young democracies badly governed?

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Abstract: There is no consensus – but many competing theories – about the conditions under which political competition supports economic development in some countries but not in others. Theories range from the lack of political “institutionalization” to the lack of elite interest in the economic development of non-elites to voter information and polarization, and variations in electoral institutions. Keefer (2002) argues instead that political incentives to promote development depend on the ability of political competitors to make credible pre-electoral promises to voters. When promises are only credible to voters with whom competitors have personal relationships, patron-client relationships in society are replicated in politics, with notable consequences for policy making. In this paper, significant and previously unnoticed variation in the policy performance of young and old democracies is documented. It is robust to controls for other political explanations. Young democracies are more corrupt and exhibit less rule of law, which is known, but they also exhibit more public investment and lower school enrollment. Consistent with the theory, majoritarian electoral rules and ethnic polarization matter most in countries with fewer continuous years of competitive elections, consistent with the argument that personalized promises to voters matter most in such countries.

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Philip Keefer

A large and significant literature asks whether democracies perform better than autocracies. Many authors argue that universal suffrage, competitive elections and restraints on the executive branch are necessary for secure property rights, which in turn are important for economic growth (Acemoglu, et al., 2002). These characteristics are clearly not sufficient, however. Among countries endowed with these institutions, the security of property rights and other measures of government and economic performance vary enormously. For example, the rule of law in 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 The sources of this varied performance remain a continuing puzzle, and of growing importance, since the number of countries holding competitive elections has doubled, from 53 to 101 between 1985 and 2000, and the number exhibiting some checks and balances has risen from 62 to 112.²

Other areas of government performance have also been found to be sensitive to universal suffrage and competitive elections. Engerman and Sokoloff (2002), for example, point to the links in Latin America between the expansion of the franchise and the provision of education. Again, though, democracy seems to be far from sufficient: more than twenty percent of countries exhibiting strong checks and balances and competitive elections

¹ The rule of law measure is from Political Risk Services' *International Country Risk Guide* and the measures of checks and balances and competitive elections from the *Database on Political Institutions*. These are discussed below.

² Based on World Development Indicators PPP adjusted income per capita, and using the Database on Political Institutions variables *Executive Index of Electoral Competition (EIEC)* and *Legislative Index of Electoral Competition (LIEC)*, and *Tenure of System (tensys)* which are explained in more detail below. Democracies are defined as those countries with competitive elections for both the legislative and executive branches, $EIEC=LIEC=7$.

perform worse than the median country that does not. Lindert (2003) documents this as well, showing that “full” democracies are more likely than “elite” democracies to provide primary education.

One characteristic of democracies that explains much of the variation in their performance is their age. Young democracies have been found to offer less security to property rights (Clague, et al., 1996) and to be more corrupt (Treisman, 2000). However, there has been no systematic explanation of why young democracies would perform worse than older democracies. Some possible explanations – that young democracies are more “clientelist” or less “institutionalized” – are tautological from the point of view of explaining performance. Clientelism, as it is frequently defined, is the preference of governments for focusing on the provision of targeted benefits to friends and supporters rather than on improving the quality of public policy and public goods broadly. However, it is precisely this preference that we would like to explain. Similarly, the symptoms of a lack of “institutionalization” in younger democracies are corruption and the personalization of political relationships – again, phenomena that we would like to explain rather than take as a starting point.

In fact, there is a rich literature that suggests several possible reasons for differences in performance across democracies, whether young or old. These include the extent of voter information on politician performance, the polarization of voters, and the structure of democratic institutions (e.g., the rules of electoral competition and of political decision making). The discussion here reviews these explanations, but suggests that a fourth, from Keefer (2002), offers a more powerful explanation of why young democracies perform worse. Keefer (2002) argues that political incentives to promote development depend on the ability of political competitors to make credible pre-electoral promises to voters. When

promises are only credible to voters with whom competitors have personal relationships, patron-client relationships in society are replicated in politics. This has notable consequences for policy making.

All of these theories explain the performance of democracy based on electoral incentives. The focus here is therefore on a specific feature of democracy, the presence of competitive elections. The key variable throughout is therefore the number of continuous years that countries have held competitive elections, or the “persistence” of competitive elections. The argument is made below that this is in fact the most relevant attribute of countries for many analyses, since other variables often used to define democracies are arguably endogenous to the distortions that may be present in elections. For example, checks and balances are much less of a constraint on executive action when there is no electoral reward to legislators to prevent the executive from acting arbitrarily or destructively. This point is made at greater length below.

After outlining the hypotheses concerning democratic performance, the argument shifts to several empirical tests. The first verifies that countries with less persistent competitive elections perform differently on a variety of margins. These include not only the rule of law and corruption, as documented by Clague, et al. (1996) and Treisman (2000), respectively, using different institutional measures than those used here, but also public investment and gross secondary school enrollment, where the contrast between targeted redistribution to “clients” and broad public good provision is more obvious.

The empirical specification is then modified to allow outcomes to be explained by voter information and polarization, and by particular political institutions. If it is the case that these are systematically different in countries with less persistent competitive elections, and that they are responsible for the differential performance of these countries, then the

estimated effect of variable on the persistence of competitive elections should become insignificant. The continuing significance of this variable across the diverse set of policies provides indirect support for the credibility hypothesis advanced by Keefer (2002).

Three more direct tests are then conducted of the credibility hypothesis.

Characteristics of the political system that lead voters to pay more attention to the personal characteristics of politicians – such as majoritarian electoral rules and ethnic polarization – should matter most in countries where the credibility of pre-electoral promises depends on the personal characteristics of candidates and their relationship with voters. One way to verify that politicians in countries with fewer continuous years of competitive elections are really less credible, then, is to ask whether the estimated effects of these variables change in predictable ways with the persistence of competitive elections.

The credibility of pre-electoral promises and government performance

Credibility is an important feature of all models of political competition. Most models assume either that all pre-electoral promises are credible to all voters, or none are (see Persson and Tabellini 2000 for a review). There are, however, scarcely any democracies in which *no* candidate is credible to *any* voter. Almost universally, some voters can believe the promises of some candidates on some issues. Keefer (2002) argues that candidates can generate some credibility with some voters because of prior personal interactions with them, such as those associated with a patron-client relationship. However, political competition on the basis of such promises dissuades politicians from providing public goods or goods available to all voters on a non-targeted basis, and encourages politicians to provide private or narrowly targeted goods to more privileged voters – those with whom they have a personal relationship and who believe their pre-electoral promises to provide these goods.

It is common in the literature to label political transactions that result in the receipt of targeted goods by particular individuals as clientelist. However, the credibility argument here *explains* such transactions by focusing on an attribute of patron-client relationships noted in the literature – that they are characterized by repeated, reputation-building interaction. Scholars who have closely studied patron-client relationships in the field have found that they are personalized, on-going and reciprocal – characteristics sufficient for reputational equilibria to exist in a non-cooperative game. For example, Scott (1972, 92) 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.”

Unfortunately, “patron-politicians”, and all politicians whose pre-electoral promises are credible only to a limited number of voters, have two strong disincentives to promise public goods to their “clients”. First, for a sufficiently small number of “clients” and sufficiently expensive public goods, politicians may find that using public resources as targeted transfers to clients offers greater welfare to clients than would using these resources to provide public goods. Second, even if it is the case that public goods could potentially improve constituent welfare more than narrow transfers, patrons would still avoid them if they cannot convince constituents that the public or untargeted goods, which apparently benefit constituents only by chance, are in fact the result of efforts by patrons on their behalf. This is a generic problem in political economy: when politicians have narrow constituencies, it is easier for constituents to give credit to politicians for public services that

the constituents and no one else receives than for public services that benefit all citizens and that many politicians could have had a role in providing (e.g., Mayhew 1974).

In the specific context of patron-client relations, client uncertainty about whether the public good was provided to her or to some other beneficiary, and about whether the public good was provided through the patron's efforts or those of someone else, diminishes the reciprocal obligation of the client to the patron. Hence, where voters cannot rely on the promises of political parties or national candidates, but can rely on the promises of patrons, politicians under-provide public or non-targeted goods and favor targeted goods.

Political systems in which the credibility of pre-electoral promises depends disproportionately on the history of personal interaction between candidates and voters are also likely to be less competitive, thereby promoting corruption or rent-seeking. Voters who have a history of personal interaction with only one candidate cannot believe the promises of competing candidates. This means, however, that the one candidate can make small promises to voters and still capture the voter's support, since other candidates can make no promises at all. The one candidate is therefore able to retain significant rents once in office, since pre-electoral competition does not force her to do otherwise. Moreover, given this, candidates always have an incentive to first build personal credibility with voters who have no other credible candidates. Based on this logic, as political competitors rely more for their credibility on a history of personal interaction with voters, Keefer (2002) predicts that governments will provide fewer public or broadly available goods and more targeted goods, and extract greater rents.

Political competitors in younger democracies should be more vulnerable to this type of political competition. Politicians in younger democracies have had less chance to develop policy reputations with voters. Political parties are likely to be younger and less well-

established as vehicles for conveying credible policy stances (the number of continuous years of competitive elections is the best predictor of the age of a political party according to information from the *Database on Political Institutions*).³ If it is true, however, that political competitors in young democracies are more likely to suffer from credibility problems, then the policy choices of young democracies should be precisely those of countries where the credibility of pre-electoral promises is limited.

This conclusion finds substantial implicit support in the qualitative literature, which is replete with observations that young democracies seem to focus on narrow transfers to the detriment of broad public good provision. Various contributors to 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, for example, characterizes the parties of the young Ecuadoran democracy as fundamentally clientelist (p. 157), and Rosenberg describes political decision making in young Central American democracies as personalized and based on vertical patronage networks (p. 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. One of the military's purported aims in replacing this young democracy was to create 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, 53).

Sayari (1977) 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

³ Though an established political party could also be one that has had time to develop effective party machinery for the distribution of patronage, rather than one that has developed a policy reputation.

strategy met a favourable 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." (p. 107). These notables were the at 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).

Theory and this qualitative evidence together suggest the first testable proposition that is the focus of this paper:

Hypothesis 1: Public good provision is lower, private or targeted good provision is greater and rent-seeking or corruption is greater in countries with fewer continuous years of competitive elections.

The decision of governments to provide public versus private goods is of more than academic interest. Increasing government bias towards the provision of non-public goods can have significant welfare implications. Assume that voter welfare is given by $U(t, P(g))$, where t is a transfer from the government, g is the amount spent on public goods, and $P(g)$ is the quantity of public goods received by the voter. As a classic public good, the voter's consumption of P does not diminish the amount available to other voters. Assume further, for purely illustrative purposes, that utility is separable and simply given by $t + P(g)$. At the point where an additional dollar of public good spending leads to one additional unit of public good provision, $P_g = 1$, a dollar spent on the public good would therefore improve

the welfare of *all* voters by one unit. If it spent the same dollar on transfers, the government could only increase the welfare of *one* citizen by one unit.⁴

Other explanations for policy preferences of elected officials

There is a large literature exploring other possible distortions in the relationship between voters and politicians, especially voter information, voter polarization, and political and electoral.⁵ These sources of electoral distortion are both important alternative explanations for the performance of countries with fewer years of competitive elections, as well as additional vehicles for empirically examining the importance of credibility.

In the data employed below to examine these questions, newspaper circulation is three times greater in countries where elections have occurred for more than nineteen continuous years than in countries where they have occurred for fewer; ethnic fractionalization and polarization are about one half a standard deviation higher in countries with fewer years of continuous elections; countries with more years of continuous elections are approximately 50 percent more likely to be parliamentary democracies with proportional representation electoral rules. Potentially, then, each of these differences could explain the performance of young democracies, independent of the credibility explanation. The discussion below shows, however, that theoretically, variations among countries with respect to information, polarization, or institutions are not predicted to yield the phenomena identified in young democracies: lower public good provision, higher targeted good provision and higher rent-seeking. On the other hand, theory does predict that the influence

⁴ It is not always true that public goods have a greater development impact than transfers to specific voters. In the presence of significant market failures (credit, labor, etc.) or natural disasters that burden some voters more than others, the income effect of some narrow transfers could be greater than those of many public goods. However, the empirical tests below focus on measures of private, targetable goods (infrastructure investment) and of public goods (secondary school enrollment) to which these caveats are likely to apply.

⁵ See Keefer and Khemani (2003) for a review of these findings.

of some of these, particularly voter polarization and majoritarian electoral rules, depends on the importance of personal contact in establishing the credibility of pre-electoral political promises.

Voter information

The voter information literature has two strands. One focuses on the effect of information on politician incentives to favor special interests. In this literature, voters are uninformed about the preferred policy stance of politicians. In these models, politicians have an incentive to expend resources to inform uninformed voters, collecting resources from special interests in return for policy favors (Grossman and Helpman 1996). The political competitors are able to commit credibly to policies prior to the election, attracting votes from informed voters who favor one party's announced policy offers over the other, and money from special interests, who believe that their interests will be taken into account by the party that takes their money. The larger the fraction of uninformed voters, the greater are the incentives of politicians to cater to special interests. Since younger democracies are likely to have fewer informed voters, such models would predict that young democracies are more likely to exhibit policies that benefit narrow rather than broad interests. However, these models abstract from issues of rent-seeking or shirking by politicians.

The second strand of literature asks instead when politicians will shirk rather than undertake a particular policy or transfer, holding aside the question of political incentives to satisfying broad or narrow social interests. The information problem is also somewhat different here: voters are ignorant, rather than perfectly informed, about politician effort or policy choice, and are uncertain of politician "type". Besley and Burgess model such a process and predict that politicians will be more responsive to citizens when media exposure

and voter turnout are greater. They provide evidence for both predictions from Indian states. Greater circulation of vernacular newspapers leads governments to make larger transfers to citizens affected by food shortages.⁶ This work explicitly predicts that, to the extent that uninformed voters are more numerous in young democracies, politician shirking is greater. To the extent that shirking equates to rent-seeking or corruption, these are also greater. These models abstract from the tradeoffs politicians make between providing public or non-targeted goods and targeted goods, however.

These models do not offer predictions about how increased voter information would simultaneously lead to greater public good provision, lower rent-seeking and lower targeted transfers to narrow constituencies. For example, if one allows politicians to decide between public good spending and targeted spending, more information could lead to more or less of either depending on whether politicians had incentives to be more responsive to narrow or broad constituencies. Theoretically, then, the fact that voters in young democracies are less informed does not yield the prediction that young democracies should exhibit less targeted spending and greater non-targeted spending and rent-seeking, unlike the credibility model.

Voter polarization

Voter polarization also has a significant effect on policy outcomes. However, models of the effects of polarization do not yield predictions that can explain the policy performance of young democracies. For example, in models where pre-electoral commitments are credible, it is common to assume that voters have a randomly assigned “ideological” affinity to one party or another.⁷ One question addressed by these models is

⁶ Strömberg considers a similar information problem, but assumes that credible pre-electoral promises can be made, and shows that households with radios were more likely to receive transfers from a particular US government program during the Great Depression.

⁷ If voters care only about policy promises and can observe them perfectly, then the slightest deviation in policy by either party can lead to a large shift in votes, counter to what we observe. The uncertain ideological

how politician trade off efforts to capture the votes of core supporters and swing or non-ideological voters (see Dixit and Londregan 1996, Persson and Tabellini 2000).

Persson and Tabellini (2000, chapter 8) assume three groups of voters.⁸ Voters from one group prefer on average one party independent of the policies advocated by the party; voters from a second group prefer the other party; voters from the third are on average indifferent.⁹ Policy is affected by the density, or ideological homogeneity, of the three groups (the two polarized groups and the swing group). Polarization of the two groups falls as their internal heterogeneity increases. When this happens, voters range more widely over the average ideological preference of the group and the fraction of group votes that are changed by a change in policy towards the group drops. Therefore, as the polarized groups grow more heterogeneous (less dense) relative to the swing voters, political competitors promise more transfers to the swing voters and fewer public goods to all voters. However, under these same circumstances, rent-seeking actually falls, since the increased competition over the support of swing voters forces politicians to give up rent-seeking. That is, if politics in young democracies is more polarized, and polarized voting groups are more homogeneous internally, then we expect more public good spending, lower targeted spending and *more* rent-seeking.¹⁰ These predictions are in sharp contrast to the credibility model, which predicts *lower* public good spending, *higher* targeted spending and more rent-seeking

affinity of voters gives rise to a smoother relationship between policy platforms and votes.

⁸ Persson and Tabellini use this model for purposes other than the analysis of polarization; the discussion here therefore describes implications of their modeling assumptions that they themselves do not draw out.

⁹ This situation might emerge if voters come from one of two tribes, ethnic groups or religions, and group membership strongly shapes voting preferences.

¹⁰ With other preference distributions, however, other outcomes are possible. For example, if 51 percent of the voters have a strong ideological predisposition towards one party independent of its performance, that party's leaders will be freer to engage in corruption. In addition, in majoritarian electoral systems, polarization has no effect, since competitors care only about swing voters under all ideological distributions.

The credibility discussion offers a complementary view of the effects of polarization, especially the ethnic or linguistic polarization that is used in the empirical tests below. Where parties are non-credible, politicians rely on personal connections with voters to establish credibility. Those connections are likely to be strongest for voters and political competitors belong to the same ethnic, religious or linguistic groups. If this is the case, then the effect of polarization on government decision making would be greatest in the least credible environments. If it is true that countries with fewer continuous years of competitive elections are especially vulnerable to credibility problems, then the following hypothesis is suggested:

Hypothesis 2: The impact of ethnolinguistic polarization on government policy should be strongest in countries with the fewest years of continuous competitive elections.

Electoral institutions

The institutional literature, finally, also offers powerful explanations for the varying performance of democracies. Persson and Tabellini (2000) examine the effect of changes in numerous electoral and political institutions on government spending decisions, particularly the provision of public goods, transfers to narrow constituencies, and rent-seeking. Of greatest interest here, they show that electoral institutions – whether elections are first past the post or proportional, whether district magnitudes are large or small – have a significant impact on these decisions. However, the direction of the institutional effect depends heavily on the specification of the model and on whether one cares about local public goods or national public goods.

If pre-electoral promises are credible, swing districts receive disproportionate attention in majoritarian systems, so targeted transfers are higher, public good provision lower, when voting is majoritarian. Rent *fall*. If promises are not at all credible, however,

transfers play no role in voter decision making and they go to zero in all electoral systems, proportional or majoritarian. Here, rents are *higher* under majoritarian electoral rules. On the other hand, if promises are not credible, but public goods are local and candidate competence (or other individual characteristics of candidates) affects public policy towards voters, then majoritarian systems result in lower rents and higher *local* public good provision. List systems allow incompetent candidates to hide from voters more easily and encourage even competent voters to extract rents.

Again, the earlier credibility arguments provide a complementary prediction regarding the effects of majoritarian electoral rules. If parties are credible, then parties can make credible promises to voters in a district regardless of whether the electoral rules are proportional or majoritarian. If only individual candidates are credible with some voters, by virtue of their personalized interactions with those voters, then majoritarian elections promote candidate interest in extending those personalized interactions to as many voters as possible, ultimately yielding an interest on the part of candidates in improving local public good provision in the whole district. Under list systems, however, no particular candidate wins unless all candidates have a sufficient number of voters to whom they can make credible promises; the benefits of investing in more “clients” or committed voters are shared by all candidates, and therefore are underprovided. Consequently, in low credibility states, majoritarian voting rules are most likely to improve the provision of local public goods. This suggests a third testable hypothesis, to the extent that countries with fewer years of continuous competitive elections confront credibility problems:

Hypothesis 3: The impact of majoritarian voting rules on the provision of public goods should be positive in countries with the fewest years of continuous competitive elections.

Estimation strategy

The three hypotheses suggest that if political competitors in countries with fewer continuous years of competitive elections confront greater difficulties in establishing credibility, the number of continuous years of competitive elections should influence economic policies in particular ways. The tests below examine only country-year observations in which competitive elections are held. Each continuous episode of competitive elections constitutes an observation, and contains variables averaged over the period of competitive elections. This leads to a general specification of the first hypothesis like the following:

$$(1) \text{ Policy choice} = \beta_{0i} + \beta_{1i} (\text{years of competitive elections}) + \mathbf{X}' \boldsymbol{\delta}_i + \varepsilon_p,$$

where i indexes the democratic episode under observation. Two specifications of (1) are examined, one in which \mathbf{X} includes no other political controls, and one in which all of the political controls (voter information and polarization, and political institutions) are taken into account. Similarly, the second and third hypotheses suggest the following, interactive specification:

$$(2) \text{ Policy choice} = \beta_{0i} + \beta_{1i} (\text{years of competitive elections}) + \beta_{2i} (\text{years of competitive elections}) * (\text{political variable}) + \mathbf{X}' \boldsymbol{\delta}_i + \varepsilon_p,$$

where the political variable (either voter information or polarization, or institutions) enters multiplicatively and (in \mathbf{X}) linearly.

Endogeneity problems are endemic in cross-country tests. In the case of the research here, there may be unobserved conditions, unrelated to the credibility arguments made here, that allow countries to have more years of competitive elections and that simultaneously influence policy choice. There are, however, few *a priori* grounds for concern that omitted variables could be responsible for the findings reported below. The omitted

variables would need to generate spurious results across several different policy variables and in an interactive specification. As the discussion above shows, even plausible alternative distortions in political markets fail to yield predictions that are consistent with those of Hypothesis 1. It is unlikely that omitted variables exist that would both explain the pattern of results hypothesized above and not be themselves simply be proxies for the credibility arguments advanced here.

A stronger objection to claims of endogeneity is that credibility itself provides explains why some democracies do not endure, for two reasons. First, when most voters do not believe the promises of political competitors, their aversion to autocracy drops. To the extent that popular resentment of *coups d'etat* is a constraint on those who carry them out, the lack of credibility of political competitors in democracies lowers the cost of coups and reduces the persistence of competitive elections. Second, incumbents have a significant advantage in any case when political challengers are not credible to voters. As the arguments in Ferejohn (1986) and Persson and Tabellini (2000) make clear, voters to whom challengers cannot make credible promises have little leverage to threaten incumbents with expulsion should they perform badly. As incumbent advantage increases, though, the competitiveness of elections falls.

Nevertheless, endogeneity issues are addressed in the estimation below. One typical approach is to exploit the panel nature of the underlying data by controlling for country fixed effects, removing the influence of country-specific, time-invariant unobserved conditions. In this case, though, fixed effects estimation would require that cross-country variation be ignored, although cross-country variation is much greater than over-time

variation for both key exogenous and endogenous variables.¹¹ This is not surprising: the nature of credibility between voters and political competitors does not change dramatically overnight, or from year to year. Nor do the policy variables of interest here (secondary school enrollment, rule of law, public investment) change significantly.

Instead, in addition to ordinary least squares estimates, additional estimates are presented using three instruments: latitude, years since independence, and the colonial heritage of countries. None of these is plausibly related to policy choices from 1975 to 2000, the years over which data are available for the estimations. At the same time, latitude (or geographic location more generally) and colonial experience are likely to capture unobserved factors that might influence whether countries become democratic and how long they are able to remain democratic.

Data

To test the three hypotheses, plausible variables are needed that capture relevant measures of government policy choices, on the one hand, and a variety of political variables on the other. In some cases, the match with theory is exact, as in the case of the years of competitive elections, discussed below. However, with respect to policy choice, there are of course few decisions by government that are purely public and non-targeted. The key is to identify decisions that are more or less likely to be the product of governments seeking to target specific individuals or constituencies.

Political variables

The analysis here focuses primarily on the competitiveness of legislative and executive elections, comparing countries with fewer and more years of continuous

¹¹ Random effects estimation, generalized least squares estimation that takes a weighted average of the over-time and cross-country estimates while controlling for country fixed effects, is only feasible in unusual circumstances: when the exogenous variables are not correlated with the error term. This is rarely the case in cross-country regressions, and is not the case with the data under consideration here.

competitive elections. The two variables are the seven-point Legislative and Executive Indices of Electoral Competition (*LIEC* and *EIEC*) from the *Database on Political Institutions* (Beck, et al. 2002). The two variables have a number of advantages for the purposes of this paper. First, they are objective and match up well with theories that focus on distortions in electoral markets, specifically. Second, they and other *DPI* variables (such as those tracking checks and balances and electoral rules) allow tests of distinct institutional effects that are bundled together in the broader democracy variables. Third, they are somewhat more nuanced in their characterization of elections – given that countries hold elections, those elections are sorted into five different categories depending on the number and vote share of competitors.

The highest score on each of these two indices (seven) is assigned to countries in which multiple parties compete in legislative and executive elections and no party receives more than 75 percent of the vote. In all of the discussion here, the continuous years of competitive elections are measured as the number of consecutive years in which a country has the highest score on both indices. From 1975 – 2000, the period under study here, among countries that ever held competitive elections, the median number of years of continuous elections is eleven and the mean 27.¹²

Three other explanations for the distinct performance of countries with fewer continuous years of competitive elections are that voters are less well-informed in these countries, or more polarized, or that political institutions are distinct in these countries. To capture the first, following Besley and Burgess (2002), Adsera, et al (forthcoming) and others, newspaper circulation per 1000 population, from *World Development Indicators*, is used.

¹² *DPI* begins in 1975 but obviously many countries were already democracies in 1975. To establish the number of continuous years of democracy in 1974, the “age of democracy” variable from Clague, et al. (1996) is employed. Their methodology truncates the age of the oldest democracies, so the maximum continuous years of elections in the year 2000 in the analysis below is therefore 70, attained by nineteen countries.

To capture polarization, ethnolinguistic fractionalization is adjusted, following Keefer and Knack (2002), to assign the highest values to countries in which individuals have approximately a 50 percent chance of encountering someone from the same ethnolinguistic group, and the lowest values when they have either a very high chance or very low chance of encountering someone from the same ethnolinguistic group. The theory suggests that it is this middle range in which societies are likely to be most polarized, since two large and evenly matched groups are more likely to generate conflict than many small groups or one large group.

The institutional variable of greatest interest is the electoral system, specifically whether it is majoritarian or not. The *DPI* has data on the electoral rules of countries. Using these, countries were coded as majoritarian if they had plurality electoral rules and the median district magnitude was less than 3, following Persson, Tabellini and Trebbi (2001). To control for the possibility that electoral institutions might pick up regime-type effects (whether countries are presidential or parliamentary), estimations of the impact of majoritarian electoral rules control as well for the political system of a country, using the *system* variable from the *DPI*.

Measuring government tendencies to provide public goods, targeted goods and to rent-seek

One compelling yardstick for assessing the performance of democracies is to ask how well they address issues of recognized importance for economic development. Five are considered here: corruption, to capture rent-seeking tendencies; bureaucratic quality, the rule of law and secondary school enrollment, as proxies for public or non-targeted good provision; and public investment, as a policy variable particularly vulnerable to targeting. .

Corruption

There are a number of corruption measures available in the literature. None have ample country coverage going back to 1975, as far as the political variables here. One that has been used in a number of articles (e.g., Knack and Keefer 1995) is the corruption indicator from Political Risk Service's *International Country Risk Guide*. It has broad country coverage, and is available since 1986. All of the Political Risk Service variables are scaled so that higher values are "better". Hence, higher values of the corruption variable signify *reductions* in corruption.

The rule of law and the quality of bureaucracy

The rule of law measure from Political Risk Service's *International Country Risk Guide* is a common measure of the extent of government credibility and its willingness to respect property rights of individuals (see, e.g., Knack and Keefer 1995 and Acemoglu, et al. 2002, Clague, et al. 1996). It is more typical to discuss the security of property rights in terms of a government's ability to commit credibly not to act opportunistically and expropriate sunk investments (see Acemoglu, et al. 2002, Clague, et al. 1996). This literature, beginning with the argument in North and Weingast (1989) has argued for the importance of political checks and balances in securing property and contractual rights. However, measures of checks and balances, even if sometimes statistically significant predictors of the rule of law, are often not economically significant. There is substantial variation in the rule of law across countries exhibiting checks and balances. The divergent incentives of politicians to pursue broad public interests, the core problem in the analysis here, explains why checks and balances may not always be a strong guarantee of the security of property rights.

The rule of law problem is easily translated into a problem of government incentives to respond to broad or narrow interests in society. When the rule of law prevails, the

umbrella of secure property (and other) rights extends over all citizens, equally. The rule of law is weak when special interests (e.g., the clients of patron politicians, or politicians themselves) are able to secure privileges at the expense of the rest of society at low or no political cost. In particular, they can use the power of government to abrogate their obligations to average citizens or to expropriate the property of the average citizen.¹³

Citizens without property are vulnerable in such situations, since privileged interests are also free to renege on labor contracts. In and of themselves, such expropriation or contract repudiation constitute transfers from one citizen to another. However, the possibility of such actions constitutes a threat that imposes costs on all citizens. Political actors who can make credible pre-electoral promises to only a few voters have little incentive to protect the rule of law. Similarly, checks and balances have less of an effect on the rule of law or the security of property rights if the politicians controlling them have no incentive to veto efforts by other politicians to expropriate, checks and balances have less of an effect.¹⁴

Bureaucratic quality is another public good, again measured using the eponymous variable from Political Risk Service's *International Country Risk Guide*. Lower bureaucratic quality implies that the quality of public services offered generally by government to the average citizen is low, and that the average citizen confronts more obstacles to doing business with government. At the same time, those obstacles can always be eliminated for favored constituents of the government. Hence, bureaucratic quality is a useful indicator of the tradeoff that governments make between the pursuit of general and private interests.

¹³ This definition of rule of law is not the only one. However, the specifics of the definition fit squarely in any definition, and are tracked by the Political Risk Services rule of law indicator.

¹⁴ Stasavage (2003) finds that this was so even in the example discussed by North and Weingast; the simple empowerment of Parliament did not lead to an immediate reduction in interest rates paid by the English Crown to Dutch lenders; this reduction awaited a logroll in the Parliament between those favoring the fulfillment of sovereign debt obligations and those favoring freedom of religion.

Secondary school enrollment

Like all spending, education spending has both public and private good components. Secondary school enrollment, however, is a useful indicator of the extent to which the public component of spending predominates and is therefore used below to assess the effects of years of competitive elections.¹⁵ Where spending on education is high and secondary enrollment is low, controlling for other factors, one can infer that politicians care relatively more about the opportunities that education spending presents for political targeting than they do about providing the public good of quality education to broad numbers of children. That is, they care more about siting schools on the basis of criteria other than the educational payoff. High spending and low enrollment signals as well that politicians might care more about ensuring that favored constituents are given teaching positions rather than the most qualified applicants, again pushing down the quality of education and the incentives of parents and children to enroll.

In addition, where enrollment is low controlling for spending, one can also infer that active interest on the part of politicians in providing the “public good” inputs into education are also low. It is certainly the case that important inputs into education are “targetable”, such as school building and teaching jobs. However, there is ample evidence that resources alone are insufficient to ensure student learning, and that management of resources to maximize student learning – a public good – is also essential. One fundamental symptom of management failure to use resources effectively is teacher absenteeism, which has been linked in turn to student absenteeism and low performance in the US (Ehrenberg, et al. 1991), Chile (Carlson 2000) and Nigeria (Harber 1989).

¹⁵ Primary school enrollment could, in principle, also be used, but most countries send most of their children to primary school. The coefficient of variation in the sample used here is 17.6 percent for primary school enrollment, and 50.8 percent for secondary school enrollment.

These and other studies also point to the negative effects of learning imposed by high teacher turnover and low quality teaching. Looking at four Francophone countries, Michaelowa (2001) finds that teacher absenteeism substantially reduces student performance (math/french) for fifth graders, as expected. She finds that a visit by a school inspector in the past year increased scores, whether a teacher was a civil servant reduced scores, and union membership reduced scores, all by amounts substantially larger than those associated with the presence of textbooks or the literacy of a child's parents. Ballou (1996) concludes that a good academic record does little to boost an applicant's chances to be hired as a teacher in the United States and argues that this is because administrator incentives are too weakly linked to classroom performance and student achievement to persuade them to place weight on a candidate's academic success, even when this is associated with better classroom performance.

Even when the relationship between additional physical inputs and enrollment or educational achievement is positive, the magnitude of the effect is small (see, e.g., Michaelowa 2001 and Glewwe and Jacoby 1994 on blackboards in four Francophone African countries and Ghana, respectively; and Harbison and Hanushek for a broad review). Glewwe and Jacoby 1994 only find a significant effect of the physical condition of classrooms on student testing, but condition is related to maintenance expenditures, which are precisely the types of government spending that are difficult for politicians to target (it is difficult for a politician to get credit for the repair of a door or window compared to the construction of a new school).

Taken together, this evidence shows that a focus on quality is critical to learning, and that where learning is low so is enrollment. Bommier and Lambert (2000) find some evidence that school quality is in fact a significant determinant of the age of enrollment in

Tanzanian schools. The correlation between teacher and student absenteeism suggests a similar relationship. Quality, however, is not a targetable good. One essential aspect of quality control, for example, is benchmarking student achievement across schools. This is a non-costly public good, but one that is likely to be underprovided when political decision makers are not motivated by public good provision.

In the estimations below, therefore, gross secondary school enrollment, from *World Development Indicators*, is taken as an indicator of incentives to provide public rather than private and targetable goods. The estimations control for three additional variables: spending on education as a percentage of GDP and total spending as a percentage of GDP, which capture the resources available to education; and primary school enrollment, which controls for alternative uses of the resources.

Public investment

Like education or other spending, public investment has both public good and targetable, private components. However, relative to other budget rubrics, a higher fraction of public investment undertaken every year is targetable than is the case in other spending categories. Most education spending, for example, is on teachers and other administrative staff. On the margin, politicians can influence which teachers are hired or where they are posted, but most teachers and postings are fixed from year to year. Public investment spending, on the other hand, disproportionately consists of new construction that benefits particular constituencies; and temporary jobs to undertake the construction.

Given the characteristics of public investment, politicians interested in providing narrowly targeted services to constituents should therefore be disproportionately interested in increasing public investment. In fact, political preferences for public investment

spending, because it is targetable, are well-known. The phrase “pork barrel” spending was coined precisely to capture this phenomenon.

Table 1: Summary of variables

Variable	N	Mean	median	std dev.
Rule of law	101	6.187	6.167	2.48
Corruption in government	100	5.89	5	2.25
Bureaucratic quality	101	5.816	5.39	2.61
Gross secondary school enrollment	121	62.885	65.32	31.87
Public investment/GDP	86	0.039	0.032	0.027
Average persistence of competitive elections	137	13.35	5.5	17.65
Ethnolinguistic polarization	128	0.561	0.038	0.72
Newspaper circulation per 1000 inhabitants	118	119.66	71.99	131.2
Majoritarian (1) or non-majoritaria	137	0.328	0	0.47
Presidential (2), Semi-presidential (1), or Parliamentary (0)	137	1.096	1.692308	0.95
Percent population young	133	0.336	0.353	0.1
Total population (10 millions)	135	33600000	8330978	104000000
Percent population rural	134	0.487	0.49275	0.22
Land (millions km ²)	133	825394	143000	2190413
Total government expenditures/GDP	91	0.286	0.28	0.11
Primary school enrollment	123	99.47	100.7	17.59
Total education expenditures/GDP	115	0.034	0.032	0.02
Kilometers of paved roads (in millions)	108	10700000	1339487	35500000

N.B. 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 – 2000).

There is an alternative interpretation of the effect of competitive years of democracy on public investment, however. Public infrastructure projects are a well-known source of corruption. Keefer and Knack (2002) have shown that in countries where property rights

are less secure or where elections are less competitive, public investment is much larger as a fraction of GDP, but makes a much smaller contribution to economic growth. They conclude that extra public investment in such countries is most likely due to unproductive rent-seeking or the political targeting of investment instead of the creation of a growth-promoting public capital stock. As a consequence, higher public investment in younger democracies might be due either to greater political preferences for targeted spending, or fewer political sanctions for corrupt behavior.

The additional control variables in the public investment equations are especially useful in isolating the political motivations in public investment spending. Country size and population capture the demand for public infrastructure, since the demand for roads is surely different in large, sparsely populated than in small, densely populated countries. In addition, the stock of kilometers of paved roads at the beginning of the period of continuous competitive elections is taken into account, as a proxy for the total stock of public infrastructure. The larger the stock, the lower are subsequent public investment needs.¹⁶

Other control variables

Three other factors are also controlled for in all estimations reported below: the land area of a country; its total population; the fraction of the population that is rural; and the fraction that is young. These are all taken from *World Development Indicators*. Higher values of the first two directly influence how difficult it is to guarantee the rule of law and, in general, to govern effectively in a country. Rural or youthful populations place different demands on government; their ability to organize to influence government also differs from that of more urban or working-age and senior populations.

¹⁶ There are other measures of public capital stock (e.g., access to potable water or adequate sanitation), but these also reduce the sample size substantially and are omitted.

The persistence of competitive elections and government performance: testing Hypothesis 1

The argument summarized by Hypothesis 1 is that countries with fewer years of competitive elections exhibit greater reliance on personalized promises, and that such reliance leads to greater rent-seeking, lower provision of public goods, and greater provision of private or targeted goods. These differences are readily apparent, comparing policy outcomes in shorter- and longer-lived democratic episodes (where “democratic” implies only that competitive elections, given by countries exhibiting the maximum values of both *LIEC* and *EIEC*, were continuously held). Public investment, the rule of law, and bureaucratic quality are one standard deviation higher and secondary school enrollment one standard deviation lower in the group where competitive elections have been held for fewer than the median number of continuous years.

More rigorous support for Hypothesis 1 comes from Tables 2 and 3. Table 2 demonstrates that the predicted effects of the variable “persistence of competitive elections” (or number of continuous years of competitive elections) are not simply correlations, but are robust to the presence of numerous controls and to specifications that control for possible endogeneity bias. Each individual regression in Table 2 examine the proposition that countries that exhibit fewer continuous years of competitive elections perform differently than other countries, and that this effect is robust to a number of controls. Collectively, however, the regressions in Table 2 can be seen as a test of Hypothesis One, that the performance of young democracies can be attributed to the difficulties confronting politicians in these countries when they seek to make credible pre-electoral promises.

Table 2: Effect of the persistence of competitive elections

	Corruption in Government		Rule of law		Bureaucratic Quality		Gross secondary school enrollment		Public investment/GDP	
	OLS	IV	OLS	IV	OLS	IV	OLS	IV	OLS	IV
Persistence of competitive elections	.062 (.000)	.076 (.000)	.036 (.000)	.051 (.01)	.065 (.000)	.053 (.011)	.369 (.000)	.431 (.021)	-.00016 (.091)	-.00034 (.147)
Percent population young	-9.7 (.000)	-7.4 (.008)	-16.3 (.000)	-14.1 (.000)	-10.2 (.000)	-13.6 (.000)	-200.5 (.000)	-204.7 (.000)	.06 (.201)	.03 (.547)
Total population (10 millions)	-.014 (.002)	-.017 (.001)	-.014 (.01)	-.016 (.003)	.016 (.03)	.011 (.11)	-.102 (.158)	-.071 (.254)	-.0003 (.000)	-.0003 (.002)
Percent population rural	.56 (.54)	.75 (.42)	.39 (.71)	.59 (.59)	-.39 (.73)	.09 (.94)	-15.46 (.108)	-14.81 (.097)	.024 (.083)	.024 (.133)
Land (millions km ²)	-.026 (.67)	.039 (.61)	-.012 (.84)	.065 (.15)	-.002 (.97)	.09 (.15)	-.690 (.155)	-1.21 (.100)	-.0013 (.045)	-.0012 (.219)
Total government expenditures/GDP							10.27 (.598)	17.42 (.506)	.065 (.07)	.074 (.082)
Primary school enrollment							.378 (.002)	.426 (.006)		
Total education expenditures/GDP							88.67 (.405)	63.85 (.696)	.00002 (.37)	.00004 (.30)
Kilometers of paved roads (in millions)										
R ²	.68	.68	.70	.71	.66	.70	.83	.88	.39	.39
N	98	87	99	88	99	88	84	65	70	56

N.B. *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)

The pattern of coefficients revealed in Table 2 across the different policy dimensions is exactly consistent with the credibility explanation. In addition, the magnitude of the effect of continuous competitive elections is large. The coefficients estimated using ordinary least squares indicate that a one standard deviation increase in the years of competitive elections (approximately 20 years) increases the rule of law by one-half a standard deviation, integrity in government and bureaucratic quality by more than one-half a standard deviation, secondary school enrollment by a little less than one-fourth of a standard deviation, and reduces more narrowly targeted public investment by about one-third of a standard deviation.

The instrumental variable estimations reveal coefficient magnitudes that are generally larger. This suggests that if there are omitted variable biases in the ordinary least squares regression, they are in a downward direction and the true magnitude of the effects of persistence of competitive elections may be larger. However, standard errors are generally larger and the coefficient estimates less significant. This is easily explained, however, since testing supporting the validity of the instrument set do not imply that the instruments are strong.¹⁷ In the first stage regressions only latitude (distance from the equator) is consistently significant, although it is highly significant. Weak instruments attenuate significance, even while they correct for biases due to omitted variables.

Table 3 demonstrates that other political explanations for the performance of young democracies do not account for the effects noted in Table 2. The years of continuous

¹⁷ The instruments are jointly significant in the first stage estimations, and in unrestricted ordinary least squares regressions that include both the persistence of democracy and the instruments. Instruments that are significant in the first stage, such as latitude, are insignificant, suggesting that they do not belong in the second stage equation. Moreover, if the colonial dummies are removed from the instrument set (they are generally insignificant, in any case), the Hausman test results do not reject the null hypothesis that the instrument set is valid. In the presence of the colonial dummies, the asymptotic assumptions of the Hausman test are invalid (yielding negative chi-square statistics). For completeness, though, results using all instruments are reported here.

elections continue to have strong explanatory power, in the predicted direction, after simultaneously controlling for the level of voter information, the extent of voter polarization, and for choices countries made regarding electoral and political institutions. This is a severe test since at least voter information should be influenced by the credibility of the political system. In countries where politicians cannot make credible promises about such actions, the ability of informed voters to hold politicians accountable to a higher standard of performance is more limited. Voter incentives to be informed are therefore reduced. By this logic, however, measures of voter information capture credibility rather than information effects.

Despite the stringency of the test, the persistence of competitive elections continues to exert a significant influence on policies even after controlling for other political variables. With the exception of the rule of law estimation, the magnitudes of the coefficient on *persistence* are little changed after controlling for alternative political explanations when compared to the corresponding specifications in Table 2. The instrumental variable estimations in Table 3 are all of the right sign, but only two are significant, although in all cases but one (rule of law), the magnitude of the coefficient increases under IV estimation, as in Table 2. Attenuation bias due to weak instruments is likely responsible for this result.¹⁸

¹⁸ Although the other political variables fare better in the IV estimation, it is important to recall that they are all potential endogenous, but all are treated as exogenous. As Dollar and Kraay (2003) show, using weak instruments to separately identify multiple endogenous variables is uninformative and does not allow one to distinguish the relative effects of the endogenous variables. When all political variables are instrumented for, most are insignificant most of the time.

Table 2: Alternative explanations for the performance of democracies

	Corruption in government		Rule of law		Bureaucratic quality		Gross secondary school enrollment		Public investment/GDP	
	OLS	IV	OLS	IV	OLS	IV	OLS	IV	OLS	IV
Persistence of competitive elections	.060 (.000)	.090 (.002)	.016 (.084)	.022 (.311)	.052 (.000)	.020 (.514)	.311 (.003)	.313 (.103)	-.0002 (.239)	-.0006 (.246)
Ethnolinguistic polarization	.036 (.854)	.059 (.831)	.285 (.188)	.398 (.110)	-.166 (.595)	.136 (.691)	-2.56 (.157)	-4.11 (.133)	-.005 (.159)	-.002 (.667)
Newspaper circulation per 1000 inhabitants	.003 (.024)	.001 (.672)	.003 (.017)	.003 (.082)	.003 (.187)	.004 (.084)	.023 (.123)	.019 (.287)	.000002 (.941)	.00002 (.620)
Majoritarian (1) or non-majoritarian (0)	-.12 (.737)	-.33 (.407)	1.33 (.000)	1.20 (.002)	.29 (.491)	.32 (.524)	9.38 (.037)	5.35 (.207)	-.01 (.279)	-.006 (.471)
Presidential (2), Semi-presidential (1), or Parliamentary (0).	-.266 (.208)	-.364 (.186)	.029 (.909)	-.021 (.940)	.314 (.191)	.491 (.077)	-1.59 (.465)	.313 (.899)	.006 (.242)	.007 (.347)
Percent population young	-8.78 (.002)	-6.95 (.027)	-15.28 (.000)	-14.29 (.000)	-6.79 (.014)	-9.26 (.002)	-204.1 (.000)	-206.4 (.000)	.080 (.273)	.058 (.46)
Total population (10 millions)	-.012 (.027)	-.013 (.041)	-.024 (.000)	-.026 (.000)	.007 (.400)	-.002 (.768)	-.18 (.012)	-.137 (.027)	-.00032 (.002)	-.00036 (.024)
Percent population rural	1.75 (.097)	2.12 (.039)	1.04 (.338)	1.38 (.229)	-.11 (.918)	.74 (.484)	-11.9 (.23)	-16.8 (.107)	.014 (.42)	.014 (.509)
Land (millions km ²)	-1.51 (.841)	3.65 (.719)	.14 (.984)	9.31 (.097)	5.53 (.445)	19.8 (.004)	-79.2 (.153)	-130 (.076)	-.062 (.41)	-.068 (.709)
Total government expenditures/GDP							20.0 (.364)	27.3 (.313)	.051 (.119)	.061 (.189)
Primary school enrollment							.436 (.000)	.463 (.001)		
Total education expenditures/GDP							18.74 (.819)	-14.24 (.922)		
Kilometers of paved roads (millions)									.000006 (.234)	.000008 (.237)
R ²	.68	.67	.73	.75	.65	.70	.87	.90	.40	.36
N	87	76	87	76	87	76	79	63	65	54

N.B. *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)

The coefficients on the other political variables are nevertheless interesting in their own right. Newspaper circulation reduces corruption and rent-seeking, increases the provision of the public good (secondary school enrollment), but has an insignificant effect on the more “targetable” public investment. This is notable since other tests have shown that targeted spending tends to reach informed voters (e.g., Besley and Burgess), but have not shown that the net effects of information on government performance are positive. Table 3 provides some evidence in this direction.

Majoritarianism has a strong positive effect on the rule of law and secondary school enrollment. These results can best be understood by noting that both the rule of law and secondary school enrollment have significant local public goods dimensions. It is of course unusual to claim that the rule of law has some local public good attributes (though not secondary school education). One way to see this, however, is to recall that local authorities often pose the greatest threat to the rule of law; majoritarianism seems to give national officials the strongest incentive to restrain banditry by local authorities.

Given the local public goods interpretation, one might then turn to the career concerns model for an explanation of these results. However, rent-seeking is also predicted to be lower in majoritarian systems in the career concerns model; the results are inconsistent with this, however.¹⁹ The credibility explanation provides a third possibility, one that is examined below in the tests of Hypothesis 2: it turns out that the effect of majoritarianism is heavily driven by the impact of majoritarianism on policy making in young democracies.

¹⁹ Majoritarianism has no significant effect at all on corruption, in contrast to findings by Persson, Tabellini and Trebbi (2001). The data sources for corruption and political variables, as well as the model specifications, are different here and further research is needed to establish which are correct. Nevertheless, it is worth noting that the raw correlation between the corruption variable and majoritarianism is weakly negative overall, strongly negative in parliamentary systems, and weakly positive in presidential systems (recalling that a positive correlation implies that majoritarianism is associated with lower corruption).

The interaction of majoritarianism and ethnic polarization with the persistence of elections: testing Hypotheses 2 and 3

The two remaining hypotheses argue that majoritarianism and ethnic polarization are likely to matter most for policy outcomes when pre-electoral promises depend on the credibility of the candidate and the history of personal interaction between the candidate and a district's voters. In theory, majoritarianism and ethnic polarization can exert an influence on each of the policy dimensions considered here. In practice, from Table 3, majoritarianism is a significant determinant only of secondary school enrollment and of the rule of law; ethnic polarization is nearly significant as a determinant of secondary school enrollment and public investment.²⁰ It is therefore only possible to examine whether the effects of these two variables are contingent on the credibility of political promises, as proxied by the continuous years of competitive elections, by focusing on these four relationships.

In each of these four cases, theory predicts that the interaction of ethnic polarization or majoritarianism and *persistence* should be significant. In the three cases reported in Table 4, this is the case. The interaction of persistence and ethnic polarization is not a significant determinant of public investment, though it is of the right sign; these results are not reported. Recalling the argument, the rule of law and secondary school enrollment are public goods that can be provided locally or nationally. Legislators have an incentive to support their provision when they can make credible pre-electoral promises about them and when they can take credit for providing them. When political parties and national candidates cannot in general make credible pre-electoral promises, voters can only believe the personal promises of candidates. These promises are more valuable in majoritarian systems, since

²⁰ Credibility has implications for the effects of majoritarianism and ethnic polarization on other policy outcomes. These implications are conditional, however, on the two variables mattering for other policy outcomes.

(closed list) proportional representation systems attenuate the relationship between individual legislator performance and the legislator's electoral success. However, when political parties and national candidates are more credible, they have an incentive to promise the national provision (or supervision) of these goods, making it difficult for local legislators to take credit for their improvement. In this case, institutional differences should matter less. In exactly the same way, ethnic ties between voters and candidates should matter most in the delivery of public goods that can be locally provided when only the personal promises of candidates are credible prior to the election.

Table 4 provides support for these arguments. Majoritarianism increases the rule of law by 1.8 points on a ten-point scale. The effect is strongest, though, when the continuous years of competitive elections are fewest. The effect of majoritarianism drops modestly, though significantly, to 1.5 points when *persistence* goes from zero to its mean value, 13.5. It drops to nearly zero at the maximum value of *persistence*. Similarly, the positive effect of majoritarianism on secondary school enrollment is found only in young democracies: when the persistence of competitive elections rises above six, the effect turns negative. The effect of ethnic polarization on secondary school enrollment is strongly negative in countries with few continuous years of democracy, as the last two columns in Table 4 demonstrate. The interaction with persistence is significant and positive, however, indicating that when politicians are more credible across a wide range of voters, the importance of ethnic ties declines.

Table 4: Credibility, majoritarianism and ethnic polarization

	Rule of law		Gross secondary school enrollment		Gross secondary school enrollment	
	OLS	IV	OLS	IV	OLS	IV
Persistence of competitive elections	.038 <i>(.000)</i>	.048 <i>(.022)</i>	.441 <i>(.000)</i>	.245 <i>(.314)</i>	.22 <i>(.085)</i>	.296 <i>(.153)</i>
Ethnolinguistic polarization					-7.74 <i>(.008)</i>	-13.46 <i>(.000)</i>
Polarization*persistence					.173 <i>(.042)</i>	.288 <i>(.016)</i>
Majoritarian (1) or non-majoritarian (0)	1.77 <i>(.000)</i>	2.07 <i>(.000)</i>	18.8 <i>(.002)</i>	4.54 <i>(.552)</i>		
Majoritarian * persistence	-.028 <i>(.027)</i>	-.05 <i>(.003)</i>	-.352 <i>(.016)</i>	.10 <i>(.682)</i>		
Presidential (2), Semi-presidential (1), or Parliamentary (0).	-.032 <i>(.883)</i>	-.073 <i>(.74)</i>	-2.24 <i>(.300)</i>	1.57 <i>(.588)</i>		
Percent population young	-18.4 <i>(.000)</i>	-17.0 <i>(.000)</i>	-227.6 <i>(.000)</i>	-208.5 <i>(.000)</i>	-210.1 <i>(.000)</i>	-204.7 <i>(.000)</i>
Total population (10 millions)	-.025 <i>(.000)</i>	-.029 <i>(.000)</i>	-.17 <i>(.009)</i>	-.13 <i>(.098)</i>	-.137 <i>(.07)</i>	-.131 <i>(.086)</i>
Percent population rural	.282 <i>(.784)</i>	.257 <i>(.807)</i>	-13.8 <i>(.117)</i>	-19.18 <i>(.058)</i>	-16.8 <i>(.086)</i>	-18.8 <i>(.055)</i>
Land (millions km ²)	1.8 <i>(.823)</i>	14.5 <i>(.006)</i>	-53.1 <i>(.213)</i>	-154 <i>(.07)</i>	-37.6 <i>(.449)</i>	-114 <i>(.06)</i>
Total government expenditures/GDP			19.6 <i>(.323)</i>	26.7 <i>(.39)</i>	9.92 <i>(.608)</i>	19.3 <i>(.502)</i>
Primary school enrollment			.443 <i>(.000)</i>	.464 <i>(.000)</i>	.362 <i>(.002)</i>	.466 <i>(.000)</i>
Total education expenditures/GDP			61.6 <i>(.455)</i>	-15.8 <i>(.912)</i>	70.22 <i>(.522)</i>	-20.02 <i>(.884)</i>
R ²	.76	.75	.87	.88	.85	.89
N	99	88	84	65	82	63

N.B. *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)

The instrumental variables specifications are strongly supportive of these hypotheses, except in the estimation of the effect of majoritarianism on rule of law. There, however, not only is the interaction term insignificant, but so also is majoritarianism at most values of *persistence*; multicollinearity introduced by the estimation method is most likely responsible for this.²¹

The individual results in Tables 2 – 4 confirm that the number of years of continuous elections has strong effects on policy outcomes in ways not anticipated in the literature. The pattern of results in these tables, however, provides substantial evidence for the explanation of these effects: the reliance of political competitors in young democracies on personalized means for conveying the credibility of pre-electoral promises.

Income, party development and machine politics

The foregoing arguments and evidence raise three additional questions. First, given that the correlation between income per capita and continuous years of competitive elections is approximately 0.8, are the problems associated above with the years of democracy simply driven by income? Evidence summarized in Table 5 suggests that none of these can explain the results reported above. Second, if one advantage of older democracies is that political parties have had more time to develop reputations for public good provision (or public policy more generally), should we expect the average age of political parties to account for the differences identified with the continuous years of competitive elections? Third, is the definition of competitive elections (multiple parties competing with no party receiving more than 75 percent of the vote) too generous? If so, the problems associated with years of

²¹ The predicted value of persistence is substituted into the linear and multiplicative term in the second stage equations reported in the table.

competitive elections may be due to the greater likelihood that a single individual dominates political life in younger democracies.

Income per capita

There is a close relationship between income per capita and the persistence of competitive elections. Not only are contemporaneous values of the two variables highly correlated, but the persistence of elections, lagged twenty years, is a substantial determinant of current income per capita; the reverse is also true. Nevertheless, as Table 5 indicates, the magnitude of the effect of the *persistence* variable is the same or larger as in Table 2, though standard errors also rise. The interaction terms of Table 4 remain highly significant and little changed in the presence of income per capita.

The resilience of the *persistence* variable is somewhat remarkable because income is endogenous to the policy choices of governments, which are themselves determined by the credibility constraints confronting political competitors. This is one explanation of the significance of the income variables in the regressions reported in Table 5, more supportive of the credibility model advanced here.

An alternative explanation for the significance of income per capita is simply that income, in and of itself, drives policy in democracies. That is, the poor may have a weaker preference for public goods than the rich. Then it is more likely that poor voters would prefer targeted transfers, independent of the political economy environment. The evidence that income drives observed differences in voter preferences is weak, however, since poor families are frequently observed to make larger sacrifices, relative to family income, for the education of their children than are rich families.

The poor might also place a higher value on targeted payments simply because the marginal utility of consumption is falling (Dixit and Londregan 1996 make this argument).

However, the problem under analysis here is why politicians offer transfers when the same amount of resources devoted to public good provision would leave transfer recipients at least as well off and all other voters unambiguously better off. The marginal utility of consumption plays no role here: both the poor and the rich always prefer more consumption to less, whether in the form of public goods or targeted.

One might also argue that poor countries cannot afford to set up the administrative infrastructure required to provide government services efficiently or to police corruption. Certainly it is the case that public sector bureaucracies are unusually underdeveloped and unreliable in poor countries. Bureaucratic quality in 2000, as measured by Political Risk Services, is more than one standard deviation lower in the poorest half of countries than in the richest half. Again, though, there is little evidence that the cost of improving bureaucratic quality is a better explanation than the politics of bureaucratic quality for this. The costs of administration, unlike the costs of semiconductor production, are mostly in the form of labor (prosecutors, budget analysts, service providers. etc.). Consistent with the discussion on returns to education, Easterly and Levine (2001) present evidence that skilled workers earn proportionately less in poor countries than in rich (e.g., engineers earn only three times as much as building laborers in India). If anything, then, a lower share of national income would be needed to set up an efficient administrative infrastructure in poor than in rich countries, making public sector infrastructure (at least in this sense) more affordable, rather than less.

These arguments suggest that there is little theoretical reason for poor countries to exhibit the policies that are predicted to be associated with the credibility of political decision making. However, there are a number of reasons to think that credibility effects drive income through policy.

Party age

As political parties develop, they might be expected to attempt to develop a reputation for policy performance. The addition of average party age (taken from the *Database of Political Institutions*) to the earlier regressions might then be expected to account for the estimated effects of years of competitive elections. As the results reported in Table 5 indicate, this is not the case. On the contrary, in several cases (the rule of law, bureaucratic quality, public investment), the magnitude of the estimated effect of years of competitive elections more than doubles compared to the original regression. The age of political parties, on the other hand, is often negative and typically not significant, with the exception of secondary school enrollment. This might be taken to mean that political party development is not helpful for policy outcomes – but only if one assumes that mature political parties are also “developed” in a particular way.

At every juncture, political competitors have a choice in the way they build electoral capital. For example, an incumbent politician with a small base of clients, confronting challengers with a similarly small base of clients, could find it cheaper to cement his re-election chances by doubling his client base rather than by investing in public good provision. Moreover, the incumbent would prefer to refrain from improving the machinery of government to provide services – public or targeted – to citizens. Such machinery, if located in the public sector, would be available to successors and could be used by them to affirm the credibility of their promises to the electorate regarding their ability to provide public goods. To avoid this, incumbents would find it more useful to build up the redistributive machinery of their party, channeling state benefits through the party and using the party machinery itself as a way to guarantee the credibility of party promises.

Machines solve several obstacles to credible commitment: they convince voters that party leaders can identify supporters and non-supporters; that they can calibrate benefits to supporters to the actions taken by supporters on behalf of the party; and that there is a machinery in place to deliver promised benefits. However, as Shefter (1994) documents and as Cox and McCubbins (1986) emphasize, it is costly to set up a machinery capable of identifying supporters and opponents, gauging their levels of support, and distributing benefits and sanctions accordingly and individually. In particular, it can take time.

The variable, average age of political parties, does not distinguish those political parties that have used their years of existence to build up policy reputations from those that have invested in party machinery. The residual effect of political parties, after years of competitive elections are taken into account, is therefore generally negative or insignificant.

There are two implications of this logic regarding the development of political machines. First, they give incumbents a sizeable advantage (Dixit and Londregan 1996 make a similar point); second, they should be associated with lower income, given the “clientelist” policy choices and entrenched inefficiency of the public sector that they promote. The evidence suggests that these implications are borne out in practice.

Table 5: Income, party age and machine politics

Specification change	Variable	Corruption		Rule of law		Bureaucratic quality		Gross secondary school enrollment		Public investment/ GDP	
		Table 2	Table 2	Table 4 – majori- tarian	Table 2	Table 2	Table 4 - majoritarian	Table 4 - polarization	Table 2	Table 2	
Add average age of political parties.	Persistence (Table 2) or Persistence*major. or polarization (Table 4)	.066 (.000)	.04 (.000)	-.02 (.08)	.06 (.000)	.37 (.000)	-.34 (.02)	.17 (.05)	-.0002 (.16)		
	Age of political parties	-.005 (.17)	-.008 (.17)	-.008 (.19)	.001 (.87)	.012 (.01)	.007 (.87)	.015 (.74)	.00003 (.36)		
Add average real income per capita, purchasing power parity- adjusted.	Persistence (Table 2) or Persistence*major. or polarization (Table 4)	.05 (.000)	.013 (.13)	-.026 (.03)	.02 (.02)	.22 (.06)	-.34 (.03)	.14 (.09)	-.0001 (.28)		
	Per capita GDP	.00007 (.22)	.00013 (.002)	.0001 (.005)	.0002 (.000)	.0008 (.06)	.0007 (.05)	.0009 (.03)	-.000001 (.85)		
Add average continuous years in office of the chief executive.	Persistence (Table 2) or Persistence*major. or polarization (Table 4)	.06 (.000)	.03 (.000)	-.024 (.06)	.066 (.000)	.36 (.000)	-.33 (.02)	.16 (.05)	-.00016 (.09)		
	Average continuous years in office	.007 (.82)	.077 (.004)	.05 (.013)	.10 (.001)	1.64 (.002)	1.36 (.005)	1.46 (.01)	-.000092 (.99)		

N.B. Coefficient estimates are taken from larger specifications of the respective tables, as indicated. *p*-values are 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)

If patronage networks are optimal strategies for political competition for incumbents, one might expect that the incumbent advantage increases over time, eventually leading to the disappearance of real challengers. As political challenges become more feeble, countries fall out of the “most competitive” election category in two ways. On the one hand, as electoral support for challengers declines, challengers can no longer surpass the threshold that signifies that a country lies in the “most competitive” electoral category (in this paper, using *DPI* data, the threshold is 25 percent). On the other hand, given the inexorability of their declining electoral support and the lack of institutional means to reverse it, any change in government is most likely to be non-institutional. Challengers are likely to use extra-constitutional means to take power.

The data suggests that this description fits closely the experience of countries that drop out of the most competitive electoral category. In the *DPI*, there are 36 episodes in which countries leave the most competitive electoral category. In all 36 cases, the average tenure of incumbents prior to the change in electoral competitiveness was 7.3 years, compared to 4.3 years for all country-years during periods of continuous competitive elections. In addition, the majority party controlled 66 percent of the seats in the legislature on average, compared to 58 percent, on average, among all countries in the “most competitive” category.

The countries that dropped out of the most competitive electoral fell into two sharply different categories. In fourteen cases, the government remained in power, continued to hold somewhat less competitive elections (in which multiple parties competed, but the government party received more than 75 percent of the vote) and simply accumulated a more dominant political position. In these cases, the government majority in the legislature rose to 77 percent, on average. In 13 of the 22 cases in which the incumbent

lost power, on the other hand, the new government took control extra-institutionally and not even sham elections were held.²² Again, given the difficulties of competing institutionally in this environment, this is precisely how one would expect control of government to change in countries in which the incumbency advantage.²³

Finally, consistent with the policy incentives of governments in which organized patronage rather than organized public good provision is an optimal political strategy, these are poor countries. Income per capita in all countries with competitive elections was 76 percent higher than the median of those countries in the year that they dropped out of the category “most competitive elections.” This is consistent with the earlier explanation for the significance of income per capita in estimations reported in Table 5.

Control of government by a single individual

Often, the emergence of democracy is associated with the efforts of a particular individual (e.g., Nelson Mandela or Robert Mugabe), who enjoys an insurmountable electoral advantage, even if elections are apparently competitive. To the extent that these leaders do not actually confront significant political competition, their performance would be worse. In this case, the results attributed to credibility would actually be due to the limited political competition that exists in such countries. Table 5 shows that the average continuous years

²² Following the DPI coding of *LIEC* and *EIEC*, the group of 19 countries fell from scores of 7 on *LIEC* or *EIEC* to 6, while the 13 countries that abandoned elections fell from 7 to 2.

²³ There are numerous examples of the following kind that illustrate the more statistical findings. The former President of Perú, Alberto Fujimori, entered office having gathered approximately 25 percent of the first round votes in 1990. It is well-known that he enjoyed increasing public support, even after dissolving the legislature and firing most judges in 1992, and that he captured about 65 percent of the vote in 1995, against the former General Secretary of the United Nations, Javier Pérez de Cuellar. Less known is that, once in office, Fujimori was aggressive about personally inaugurating small projects around the country. and nearly immediately, he began to assiduously cultivated voters who had scant knowledge of him by personally inaugurating small, narrowly targeted public works projects in their villages, using such well-financed programs rolled by the President’s Office, such as FONCODES.

in office of a country's chief executive has no impact on the magnitude or significance of the *persistence* variables.

Years in office is generally positive and significant across the different regressions. This is what one would expect, however, controlling for continuous years of competitive elections. Leaders who choose to consolidate power through the construction of party machines and a one-party state, such as Robert Mugabe (Zimbabwe), eventually drive out democracy, an effect that is captured by the *persistence* variable. Among the remaining, longer-lived democracies, leader tenure is likely to be associated with good policy performance.

Conclusion

The evidence here robustly demonstrates the importance of the number of continuous years of competitive elections for outcomes in five policy areas widely identified as key to economic development. Moreover, a series of indirect tests support the argument that the key characteristic of young democracies that leads to these results is the lack of credibility of pre-electoral promises of political competitors and the disproportionate reliance by competitors on personal interactions with voters to establish credibility. Patron-client relationships in society are transported to the political realm with great facility in such an environment, generating high transfers, high rent-seeking, and low levels of public good provision.