Clientelism, credibility and the policy choices of young democracies

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Abstract: This paper 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 credible pre-electoral 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 (2005), who argue that the inability of political competitors to make credible promises to citizens leads them to prefer clientelist policies: to underprovide non-targeted goods, 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.

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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, et al. (2002) conclude that universal suffrage, competitive elections and restraints on the executive branch should have a profound effect on 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] Lindert (2003) distinguishes "full" and "elite" democracies (both exhibiting competitive elections), finding that primary education is significantly lower in the latter. 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 has 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

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[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.

characteristics of poor performance in young democracies nor the reasons for this performance 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. However, the argument that they use to explain why longer-lived autocrats should better protect property rights (that such autocrats can reap the long-term economic gains of an attractive investment climate) applies naturally to individuals and less clearly to regime types. Treisman (2000) controls for the age of democracy and finds that it is associated with lower corruption, but does not explain the association. Some attribute the performance of young democracies to lack of "institutionalization" or to clientelism, but such arguments, as the discussion below makes clear, are better seen as descriptive of the problems of young democracies rather than as explanations for them.

The argument developed here is that political competitors in young democracies are less able to make credible, pre-electoral promises to voters. Keefer and Vlaicu (2005) argue that the lack of political credibility of political competitors generates incentives to pursue clientelist policies – to under-provide non-targeted goods (e.g., universal education, secure property rights, or access to information), to over-provide targeted goods (e.g., jobs and public work projects), and to engage in rent-seeking. Two sets of evidence support this claim. First, in documenting for the first time systematic performance differences between younger and older democracies, precisely this pattern is uncovered. Second, numerous other distinguishing characteristics of younger democracies are investigated and found not to predict, either theoretically or empirically, this pattern of performance. Political and electoral institutions, voter information, social cleavages, and violence, though significant determinants of some of the policies examined here, are not robustly and systematically

associated with all of them and their inclusion in the regressions does not attenuate the particular pattern of association between age of democracy and policy outcomes predicted by the credibility explanation.

The analysis below is primarily comparative and asks what drives performance differences across democracies, finding that credibility offers the most comprehensive explanation. The analysis also sheds some 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, though with many exceptions and in a highly non-linear fashion, greater experience with democratic competition does promote political credibility.

What is a "young democracy"?

Numerous strategies for defining democracy can be found in the literature. The puzzle that drives the analysis here is concerned with electoral accountability – why electoral pressures exerted in younger democracies have a weaker or 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 seven-point Legislative and Executive Indices of Electoral Competition (*LIEC* and *EIEC*) from the *Database on Political Institutions* (Beck, et al. 2001).

These variables are objective: 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. The measures are also narrow, excluding 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 measure excludes non-electoral institutions linked with democracy, such as the presence of checks and balances.

The continuous years of competitive elections are then 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 and for which the *LIEC* and *EIEC* (as well as many of the policy variables considered below) are available, for those countries holding competitive elections, the median number of years of continuous competitive elections is eleven and the mean 27.[2] The period captures a large number of new democracies: 76 democratic episodes in the sample began in 1975 or later.

Although the DPI democracy variable is preferable for the analysis here because of its exclusive focus on the competitiveness of elections, other variables that are highly correlated with it, particularly the Przeworski, et al. (2000) democracy variable, cover more years (the period since 1950). The earlier period, 1950 – 74, is however not useful in this analysis because of sparse coverage with respect to the policy variables investigated (e.g., the security of property rights and government spending variables). At the same time, the 1975-2000 period captures most of the discrete democratic episodes from 1950 – 2000. Of the 34

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[2] *DPI* begins 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 19 countries.

democratic episodes in the DPI data that emerged prior to 1975, only seven emerged from 1950 – 74 and more than half substantially pre-date World War II.

Why do young democracies perform badly? The role of political credibility

Early work put forth "political institutionalization" as a key difference between democracies. 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. He suggests that systems are more highly institutionalized when they are "more adaptable, complex, coherent and autonomous" (1971, p. 315). It is reasonable to expect that institutionalization takes time, but it has always been unclear how one would empirically characterize institutionalization. One way to operationalize the concept is as the process by which obstacles to the electoral accountability of politicians are lifted. Political credibility is one key obstacle.

Absent the credibility of policy promises, citizens have little basis on which to judge candidates and to hold incumbent candidates accountable for poor performance.   This is well-recognized in the literature. However, analyses in the literature assume either that all pre-electoral promises are credible to all voters, or that none are (see Persson and Tabellini 2000 for a review). These polar cases apply in scarcely any democracies and assume as well that credibility is an exogenous characteristic of political competition. Keefer and Vlaicu (2005) argue, in contrast, that when political competitors are less able to make credible promises to voters regarding public good provision and economic performance generally, they attempt either to build their credibility among smaller groups of voters or to rely on patrons who, in turn, can make credible promises to clients. Either strategy influences the policy making incentives of politicians.

In low-credibility countries – where politicians are reliant on patrons or have succeeded in establishing credible relationships with a few voters – politicians focus on government policies that benefit small, targeted groups of voters, give shorter shrift to public good provision (policies that benefit voters as a whole) and are freer to engage in rent-seeking. These results are counter-intuitive because they begin with the assumption that the cheapest way for politicians to deliver benefits to the largest number of voters is through the provision of goods that are not targeted to narrow constituencies, such as universal high quality education or high bureaucratic quality – the opposite of what politicians actually do.

The policy pattern observed in low-credibility countries is exactly what scholars associate with clientelist countries. In this sense, the credibility framework provides an explanation for why some countries are clientelist and some are not. In fact, this credibility connection is already implicit in the clientelism literature, which emphasizes that patron-client relationships 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." The analysis in Keefer and Vlaicu (2005) explains why clientelism at the social and local levels enters politics at higher levels: the credibility of patrons with respect to clients makes patrons valuable allies of political competitors. However, since patrons only value

public policies that transfer benefits to their clients, political reliance on patrons also leads non-credible politicians to underprovide public goods.[3]

The conclusion that political competitors in young democracies are less credible, more reliant on patrons, and more likely to focus public policy on transfers and rent-seeking than broad public good provision finds substantial implicit support in the case study literature. 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 (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).

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[3] Patron preferences here are related to 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).

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 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." (p. 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).

For purposes of the analysis below it is only necessary that an association exist between the age of a democracy and credibility. The evidence suggests that the association exists for two reasons. First, politicians can acquire credibility as voter experience with politicians increases. Second, though, democracies in which politicians are non-credible are more vulnerable to replacement by non-democratic regimes.

On the one hand, reputation can provide the basis for credibility and reputation can take time to build. Even if a reputation for pursuing policies that favor broad societal interests need not always develop over time, it would still be the case that political competitors in younger democracies would, on average, have less opportunity to have built reputations than competitors in older democracies. There is some evidence for this below (see Table 7). However, several forces attenuate the effects of democratic experience on the acquisition of political credibility.

First, building up a policy reputation with broad groups of voters is expensive. If it is cheap enough for politicians to use patrons to mobilize voters, as Keefer and Vlaicu (2005) demonstrate, they may postpone indefinitely the decision to invest resources in directly convincing large segments of the voting population of their credibility. Second, some democracies are born with credible politicians. Shefter (1994) and Kitschelt (1999) argue that, given a legacy of patronage-based government, voters expect competitively-elected politicians to provide patronage. In the language of the argument here, voters do not believe broad policy promises of new democratic politicians when the government decisions are traditionally patronage-based. Keefer and Vlaicu (2005) contrast Great Britain in 1832, when the franchise began to expand by orders of magnitude from very low levels (less than five percent 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 pre-democratic period. In the latter case, where all forms of political expression and debate had been suppressed for decades, no political movements with identifiable policy traits existed, contrary to the British case.[4] Subsequent policy performance reflected this.

Where political competitors in democracies do not acquire credibility, they are disadvantaged in fending off threats to the regime from non-democrats. In those cases where credibility does not increase with the age of democracy, therefore, we would nevertheless expect an association between democratic age and credibility as non-credible democracies are replaced by non-democratic regimes. There is evidence for this, as well.

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[4] Nor could new political movements in the Dominican Republic seek the endorsement of organized issue groups to establish their policy credibility – these also did not exist.

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.

Testing strategy

Evidence for the central hypothesis of this paper, that the lack of political credibility

explains the policy performance of countries that have experienced fewer continuous years

of competitive elections, emerges from estimates of the following three equations, asking

whether the age of democracy has the effect on rent-seeking, non-targeted and targeted good

provision predicted to emerge in non-credible political settings.

(1a) $Rent\text{-}seeking_i = a + \beta_1(age\ of\ democracy_i) + \mathbf{X}_i\mathbf{B_1} + \varepsilon_i.$

(1b) $Non\text{-}targeted\ good\ provision_i = \gamma + \beta_2(age\ of\ democracy_i) + \mathbf{X}_i\mathbf{B_2} + \varepsilon_i.$

(1c) $Targeted\ good\ provision_i = \zeta + \beta_3(age\ of\ democracy_i) + \mathbf{X}_i\mathbf{B_3} + \varepsilon_i.$

In these equations, i indexes the democratic episode under observation and $\mathbf{X}$ is the vector

of control variables. If lack of credibility is responsible for the policy performance of young

democracies, then we expect β_2 to be positive and β_1 and β_3 to be negative.

This is a stringent test, for two reasons. First, to the extent that *age of democracy* is an

imperfect measure of political credibility, attenuation bias makes significant results less likely.

Second, though it is well-known that multicollinearity increases standard errors, it is also the

case that it sharply increases attenuation bias. This is a particular difficulty here because

political credibility is causally related to other right hand side variables.

The second test of the credibility hypothesis is to re-estimate equations (1),

controlling for the directly measurable alternative explanations for the performance of

democracy, such as institutional and other differences. If these explain the policy

performance of young democracies, contrary to the predictions in the literature, then their

introduction into equations (1) would cause the estimated association between age of democracy and policy outcomes to disappear. For example, we would expect the age of democracy coefficients to be insignificant when controlling directly for institutional differences across countries.

Policy variables that capture differences between young and old democracies

Seven policies characterize democratic performance with respect to the provision of non-targeted and targeted goods and rent-seeking. The measurement and rationale of each is detailed here. Four are non-targeted policies: secondary school enrollment, bureaucratic quality, the rule of law and government ownership of newspapers. Targeted policies, benefiting discrete and identifiable groups of voters, 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. The measure is available since 1984. 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.

Measuring non-targeted good provision: The rule of law and the quality of bureaucracy

The rule of law is easily seen as a non-targeted good provided by government. 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 non-targeted 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] Political Risk Service's *International Country Risk Guide* contains a commonly used measure of the rule of law that is used here (see, e.g., Knack and Keefer 1995 and Acemoglu, et al. 2002, Clague, et al. 1996).

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. Hence, bureaucratic quality is a useful indicator of the tradeoff that governments make between the pursuit of general and private interests. It can, again, be measured using the eponymous variable from *International Country Risk Guide*.

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[5] The literature (North and Weingast 1989, Clague, et al. 1996) typically argues that secure property and contractual rights are the product of political checks and balances that create institutional road blocks to expropriation. Empirically, checks and balances are weak predictors of the property rights measures used here. 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.

Measuring public or non-targeted good provision: secondary school enrollment

The best measure of non-targeted goods would be one that quantified government spending on them. Unfortunately, even when we can identify categories of government spending that appear to be untargeted, the actual destination of these funds is often targeted. In the case of education, spending can be aimed at raising achievement for all children (through curriculum reforms, testing, spending on high quality teachers); or it can be targeted (by building new schools in some areas, but not in others). Cross-country budget data on education spending do not distinguish which.[6]

To circumvent this difficulty, an outcome indicator, gross secondary school enrollment from *World Development Indicators*, is used below to approximate the extent to which the non-targeted component of education spending predominates.[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

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[6] Stasavage (2005), for example, has found a strong association between the introduction of multi-party elections in Africa and substantially greater spending on primary education. Extra primary school spending could go either to the non-targeted aspects of education (quality and curricular improvements) with large marginal effects on education outcomes or to targeted aspects (teaching positions and school buildings) with smaller marginal effects. Pritchett and Filmer (1999) provide evidence that the latter is more likely and show that connection between spending and outcomes in education is tenuous.

[7] Primary school enrollment could 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.

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 supports the contention that the relationship between learning and enrollment is a function of non-targeted policies, independent of resource commitments. For example, teacher absenteeism has been strongly associated with student absenteeism (see Ehrenberg, et al. 1991 on the United States; Carlson 2000 on Chile, and Harber 1989 on Nigeria).[8] Absenteeism is clearly the outcome of education management decisions as well as the compensation of teachers. Similarly, teacher turnover and the prevalence of first year teachers (management decisions that are difficult to target) are key determinants of teacher quality, even controlling for teacher compensation (Hanushek, et al. 2005).

Looking at four Francophone countries, Michaelowa (2001) finds further evidence that management decisions are key. She finds that s visit by a school inspector in the previous year increased scores, teacher absenteeism reduced them, as did whether a teacher was a civil servant or a union member (both of which are indicators of the degree of teachers' ability to act collectively in their private interests). These influences more than offset the positive effects on learning associated with textbooks or parental literacy.[9]

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[8] Bommier and Lambert (2000) find, in addition, that students enroll earlier in Tanzanian schools where school quality is higher.

[9] Even when additional (and targetable) physical inputs have a positive effect on enrollment or educational achievement, the effect is small (see, e.g., Michaelowa 2001, and Hanushek 1996 for a broad review). Ballou (1996) also 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

Measuring public or non-targeted good provision: government ownership of newspapers

The final indicator of non-targeted good provision is related to government policy towards citizen information. Since citizen information is a public good, government policies that expand or restrict 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. Though government-owned newspapers might be a way to *increase* the flow of information to citizens, for example if they are heavily subsidized and distributed below cost, 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

Government employment and public investment or infrastructure spending are traditional ways for governments to target benefits to particular constituencies. This is straightforward in the case of patronage in government employment, which benefits job holders and their families. 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.

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achievement.

The second indicator of targeted spending is public investment. Relative to other categories of public spending, politicians can target a large fraction of public investment undertaken every year; the recipients of public investment spending vary substantially from year to year. 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.

Control variables

Two sets of control variables are used here, one that is more parsimonious and a second that includes variables that should affect the incentives of politicians to invest in credibility, and therefore might spuriously obscure the relationship young democracies and policy outcomes to the extent that this relationship is driven by credibility. Country land area and total population affect the demand for and costs of provision of government services: 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. These are controlled for in all specifications. Secondary enrollment regressions all include three additional variables. The fraction of the population that is young and gross primary school enrollment both influence the demand for secondary education. In addition, since the point of the test is to capture the extent to which years of democracy explains non-targeted government policies that influence secondary school enrollment, the education regressions also control for education spending, the targetable dimensions of government policy towards education.

The broader set of controls captures the extent to which countries vary with respect to intrinsic characteristics that influence the attractiveness of clientelist political strategies,

but that also influence the costs and benefits of providing different public services. These controls are income per capita, the percent of the population that is young, and the percent that is rural, taken from *World Development Indicators*. It is well-known that poor voters are more subject to clientelist promises (see Dixit and Londregan 1996) and that young, rural voters pose different challenges to political competitors seeking to mobilize support.[10] Not surprisingly, therefore, these are all highly correlated with the years of continuous competitive elections: the percent of the population that is rural is correlated at -0.51; the percent that is young at -.50; and income per capita at .71. On the other hand, these variables also influence directly the demand for public services, which are related to income, age, and whether voters are rural or urban. Although the inclusion of these controls should spuriously reduce the observed relationship between the credibility characteristics of young democracies and policy outcomes, young democracies exhibit a significant pattern of policy performance consistent with the credibility explanation in all specifications.

Table 2 presents a summary of all of the variables used here. Each continuous episode of competitive elections constitutes an observation. All variables are therefore averaged over the duration of the episode.

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[10] The connection between poverty or agriculture and democratic instability is well-established (Przeworski, et al. 2000, Boix and Stokes 2003, Boix 2001), but is typically explained in terms of class conflict, the marginal returns to capital in poor countries and wealth redistribution (see Boix and Stokes 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.

Results: Young democracies and policy

For each of the seven policy variables, Table 3 presents two estimates, one using the parsimonious and the other the 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. In contrast, government provision of targeted goods – public investment and employment – falls. Consistent with the theoretical arguments for the expected collinearity of income and the rural and age demographic variables with political credibility, the magnitude of the age of democracy variable drops when the expanded set of controls is used, but in all but one case, public investment, still remains large and significant.

Alternative explanations for the performance of young democracies

Table 3 provides strong evidence of broad and systematic differences in the policy decisions of young and old democracies, and that those differences correspond to the predictions of Keefer and Vlaicu (2005) regarding the policy choices of non-credible political competitors. However, other politically salient characteristics also vary systematically between younger and older democracies. These are briefly discussed here (each is the subject of a large literature in its own right): the rules of the formal political and electoral institutions through which politicians are elected and govern to voter information; ethnic, linguistic or religious cleavages; and conflict.[11] In nearly all cases, they differ significantly

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

between younger and older democracies and are therefore plausible candidates to explain the effects of democratic age on performance. However, neither theory nor evidence suggests that they can explain the particular pattern of performance exhibited by young democracies.

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 35 percent of younger democracies (those with the median or fewer years of continuous competitive elections, where the median is eleven years) are parliamentary; more than 60 percent of older democracies are parliamentary. Thirty-three of the younger democracies 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.[12] District magnitude differs little, however. It averages 15 in younger democracies and 12 in older.

Though stark, these institutional differences are not predicted to give rise to the policy performance observed in younger democracies. Persson, Roland and Tabellini (2000) argue that a key difference between presidential and parliamentary forms of government is the inability of elected official in presidential systems to make credible agreements with each other. As a consequence, they predict that all forms of spending, including corruption or

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[12] Of countries exhibiting both electoral rules, 14 are younger democracies and 17 are older.

rent-seeking, will be lower in presidential systems. The evidence below shows that both

targeted spending and corruption are significantly *higher* in younger democracies, however.[13]

Electoral institutions come in bundles. Two such bundles are commonly compared

in the literature: majoritarian – countries with plurality electoral rules and a small median

district magnitude – and non-majoritarian.[14] Persson and Tabellini (2000) argue, together

with many others, that majoritarian systems, disproportionately prevalent in younger

democracies, force competing political parties to focus exclusively on the swing (indifferent)

district, leading them to promise fewer non-targeted goods (which benefit all constituencies),

more targeted goods (targeted exclusively at the swing constituency), and to engage in *less*

rent-seeking. Young democracies, though, exhibit *more* rent-seeking.[15]

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[13] Their assumptions regarding presidential systems are controversial. In contrast to their

assumptions, for example, 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. Under

these alternative institutional assumptions, the prevalence of presidential systems in young

democracies also fails to explain their policy performance.

[14] Using a district magnitude of three as the cutoff, 64 percent of older democracies are

majoritarian, compared to 37 percent of younger.

[15] If politicians *cannot* make credible promises (and, in contrast to Keefer and Vlaicu 2005,

can do nothing about their credibility), targeted transfers go to zero in all electoral systems

and rents are *higher* under majoritarian electoral rules than non-majoritarian.

Ethnic, religious or linguistic cleavage

Younger democracies may also perform less well because they exhibit more social cleavages than older democracies. The literature suggests two ways to think about these cleavages. One argument is that the more fractionalized a society is, the more difficult it is to govern (e.g., Przeworski, et al. 2000, p. 81).[16] A second is that social cleavages are likely to be most detrimental to political competition and decision making when they give rise to greater polarization: a society characterized by two equally large and discordant groups is more polarized than a society characterized by many small and discordant groups. The first is the focus of attention here since polarization is nearly the same across young and old democracies and is an insignificant determinant of policy.[17]

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, social cleavages are not necessarily predicted to yield the policy differences observed in younger democracies. For example, if voter behavior is highly conditioned on group identification, candidates from the appropriate group could increase rent-seeking and reduce the provision

[16] Fractionalization is the probability that two randomly selected people are not from the same group (for example, religious, ethnic, or linguistic).

[17] Polarization measures can be derived from fractionalization measures by noting that polarization should be lowest when societies are entirely atomized (fractionalized), and when they are entirely uniform (not at all fractionalized); but that at moderate levels of fractionalization it is most likely to encounter polarization – two large opposing groups.

of *all* services – targeted and non-targeted – without suffering an electoral penalty; young democracies exhibit greater targeted services, however. If increased social distance between groups is accompanied by increased homogeneity within the groups, as in Persson and Tabellini (2000, chapter 8), it might lead politicians to focus more intensely on swing voters who are indifferent to social cleavages, leading to reduced rent-seeking, lower public good provision and higher targeted good provision. This case, again, contrasts with the experience of young democracies.

Moreover, the political salience of social cleavages could emerge precisely because of difficulties that political competitors confront in making credible promises, in which case evidence that social cleavages matter for policy could be indirect evidence in support of the credibility hypothesis. Chandra (2004), for example, argues that ethnic-based parties are more likely to emerge when political competition is dependent on patronage. As long as a party can demonstrate its intention to cater to an ethnic group, members of that ethnic group cannot gain better access to patronage or targeted benefits by voting for another party and the party can do no better than to direct patronage benefits to that ethnic group. However, Keefer and Vlaicu (2005) suggest that clientelism is most likely precisely when political competitors cannot make credible policy promises to voters.

Voter information

One element of the credibility problem is information: when voter welfare is a product of both political decisions and non-political 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 twelve

continuous years than in countries where they have occurred for fewer.[18] However, it is less clear that information explains the policy outcomes observed in younger democracies.

Besley and Burgess (2003) and Strömberg (2001) present theory and evidence that where in the presence of uninformed voters, politicians are more likely to under-provide targeted transfers to voters and to retain greater rents for themselves. Adserá, et al. (2003) similarly demonstrate that that newspaper circulation is significantly associated with lower corruption. These arguments do not address information effects on non-targeted goods. One can imply from this literature, however, that if voters cannot observe political compliance with promises, rent-seeking should be higher and the provision of *both* non-targeted and targeted goods should be lower, in contrast to the experience of younger democracies, where targeted good provision is significantly *higher*.

Regardless of information predictions generally, however, the evidence presented earlier suggests that the information proxy most commonly used, newspaper circulation, is itself the direct 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 and these democracies are on average younger. Doyle and Sambanis (2000) assembled data on countries that experienced civil wars from 1944 – 1999, including the number of deaths associated with the wars. About one-third of democratic episodes that began after 1974 experienced conflict at

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[18] Newspaper circulation per 1000 population is taken from *World Development Indicators*.

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 7600.[19]

The consequences of the conflict legacy for public policy do not match the pattern of policy performance observed in younger democracies, however. First, conflict often decimates the machinery of government (from records to offices to the bureaucracy itself). This should reduce public services of all kinds – targeted and non-targeted– in post-conflict countries. Second, conflict often reduces the salience of many public policies of interest here. If public policy is less important to voters in the aftermath of conflict, politicians can under-perform with impunity, as in earlier the arguments on social cleavages. These predictions are inconsistent with the policy performance of young democracies and the inclusion of civil war deaths does not account for the performance of young democracies.

Summarizing the explanations

Two key conclusions emerge from the foregoing discussion. First, many of the possible explanations for performance among young democracies systematically vary with the age of democracy. Younger democracies are more presidential, majoritarian, socially fractionalized, and affected by conflict. Voters in young democracies are systematically less informed. Second, however, only the credibility hypothesis predicts the pattern of policies identified below in young democracies. Other explanations may predict higher rent-seeking and less government provision of goods and services of all kinds, but only the absence of

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[19] Calculated by dividing the total number of deaths in Doyle and Sambanis 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.

political credibility explains why young democracies exhibit lower provision of non-targeted goods and *greater* provision of targeted goods. Table 1 summarizes these predictions.

One can imagine other, less quantifiable differences that vary with democratic age. For example, citizens and 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 non-targeted goods (see Heilbrunn, forthcoming, 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 reduces government performance on all margins, leading to both lower targeted and non-targeted 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 non-targeted government services.

Results: Other explanations for the performance of young democracies

Tables 4 and 5 report the results of the second experiment. If we control for each of the alternative explanations for democratic performance, do the effects of democratic age disappear? This experiment entails a large number of regressions, replicating each of the 12 specifications in Table 3, taking into account each alternative explanation sequentially, and then all alternative explanations jointly. Two tables are used to summarize the results. Table

4 reports only the estimated coefficients of the age of democracy, concisely indicating whether controlling for alternatives attenuates the effects of democratic age. For each policy area, Table 4 presents results from 12 different specifications: adding the alternative political hypotheses one by one, and all together, and doing so with and without the expanded set of controls, as in Table 3.[20] Table 5 reports the estimated coefficients of the alternatives themselves; these are taken from the same regression as the age of democracy coefficient in the corresponding cells in Table 4.

For every alternative hypothesis, in all of the specification rows 1 through 6 in Table 4, the age of democracy variable continues to be a largely significant determinant of rent-seeking, non-targeted public goods, and targeted public goods. This includes specifications in which *all* alternative hypotheses are controlled for (rows 5 and 6). The pattern of results is exactly the same as in Table 3 and uniquely consistent with the credibility hypothesis.

Results in Table 5, in contrast, demonstrate that none of the alternative explanations of democratic performance is a systematically significant predictor of government performance across all policy dimensions. This is not because of collinearity with the democracy variable: they are insignificant when this variable is omitted. Some results in Table 5 are nevertheless 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 US data in Alesina, Baqir and Easterly (1999).

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[20] Newspaper circulation and state ownership of newspapers are clearly endogenous to each other; this alternative specification is therefore omitted.

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.

The democracy coefficients are somewhat more fragile when controlling for newspaper circulation, and newspaper circulation itself has significant effects in the more parsimonious specification in Table 5. However, these results are almost certainly driven by the relationship between newspaper circulation and political credibility. First, the significant newspaper coefficients in Table 5 are consistent with the credibility predictions; in particular, greater newspaper circulation is associated with *less* targeted good provision, consistent with the credibility hypothesis but not the information hypothesis. Second, as the earlier discussion pointed out, newspaper circulation is itself determined by state newspaper ownership, a non-targeted government policy determined by the years of democracy and political credibility (Table 3).

Omitted variables and endogeneity

It is unlikely that the pattern of policy distortions associated with young democracies is the spurious outcome of omitted variables that might, for example, simultaneously determine the policy choices and survival of a democracy. On the one hand, the lengthy discussion of alternative explanations for government policy choice suggests that it is non-trivial to find characteristics of young democracies that might explain why they exhibit the particular pattern of policy outcomes identified here, much less characteristics that, in addition, simultaneously lead to democratic demise. On the other, the association between age of democracy and policy is robust to a large number of alternative specifications.

Further evidence reported here yields the same conclusion. The effects of age of democracy are robust to an instrumental variables procedure that controls for unobserved omitted variables generally. In addition, they are unaffected by controls for the religious

beliefs of the population, the years in office of the elected executive, nor the size of government (government spending as a fraction of GDP).

Instrumental variables

Table 6 reports *IV* estimates of the parsimonious specifications in Table 3 using latitude and British colonial heritage as instruments.[21] Conceptually, both of these are thought to have some influence on the institutional development of countries, while neither is plausibly related to policy choices from 1975-2000. Latitude captures geographic endowments such as climate that influence production choices and the early political choices made to control those production choices; colonial history 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.[22] 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 3. This result suggests that measurement error introduces significant *downward* bias in the results reported in Table 3, since instrumental variables mitigate measurement error. Table 6 results also argue strongly that the results in Table 3 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.

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[21] These are two of a limited set of instruments widely used in the literature to control for the endogeneity of institutions (Persson, Tabellini and Trebbi 2003).

[22] For space reasons, only the *F*-statistic from the first stage, summarizing the significant explanatory power of the instruments in the first stage, is reported.

Religious affiliation, government spending and the leader's tenure in office

Religion is sometimes argued to affect the propensity to embrace democracy. Alesina, et al. (2002) have the most complete data on the religious profile of countries, at often fine levels of denominational disaggregation. Including any combination of these religion variables into the regressions in Tables 3 and 6 has no effect on the estimated policy effects of the continuous years of competitive elections (results not reported). Most of the religion variables are themselves insignificant, though both public sector wages and public investment are a significantly larger fraction of GDP in more Muslim countries.

Nearly all of the policy variables in the estimates of Tables 2 and 3 are related to government expenditure. Government expenditure is nevertheless excluded from the core specifications because its inclusion reduces sample sizes by approximately 25 percent. Results, though, are robust to its inclusion. Wherever the years of continuous elections is significant in Table 3 (*OLS*) or Table 6 (*2SLS*), it remains significant when controlling for government expenditure as a fraction of GDP.

Finally, the results in Tables 3 and 6 (below) might simply have spuriously emerged because the years of continuous competitive elections is 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.[23] This would

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

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 3 and 6. In every case, the estimated coefficient of the continuous years of election variable was essentially unchanged. The average years in office of the executive was associated with greater state ownership of newspapers, *greater* rule of law, *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 non-democratic regimes). To explore the effects of aging, Table 7 presents regressions following the specifications in Table 3, 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, but the effects are not as strong as in the cross-section results. Both linear and quadratic terms are highly significant: 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. Public investment initially rises, but the effect is short-lived – after fewer than 2 years in the parsimonious specification and after about 12 years in the second specification, public investment also falls, as in the cross-section results.

Conclusion

The foregoing analysis is the first to demonstrate systematic differences in the policy performance of younger democracies, across seven areas of significant concern for economic development. Only the inability of political competitors in these countries to make credible promises to voters explains these differences. When politicians are not broadly credible, patron-client relationships are transported to the political realm, generating high transfers, high rent-seeking, and low levels of non-targeted 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. For example, Gerring, Bond and Barndt (2005) show convincingly that countries with less democratic experience grow more slowly. The results here point both to an underlying political dynamic that might explain this (the lack of credibility of politicians in young democracies) and to the policy failures that might directly limit growth. Much 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: 1231 – 1294 (November).

Adserà, Alícia, Carlos Boix and Mark Payne (2003). "Are you being served? Political accountability and governmental performance." *Journal of Law, Economics and Organization* 19:445-490 (October).

Alesina, Alberto, Arnaud Devleeschauwer, William Easterly, Sergio Kurlat and Romain Wacziarg (2002). "Fractionalization." *Journal of Economic Growth* 8:2, 155-94 (June).

Alesina, Alberto, Reza Baqir and William Easterly (1999). "Public Goods and Ethnic Divisions". *The Quarterly Journal of Economics*, 1243-1284 (November).

Ballou, Dale (1996). "Do Public Schools Hire the Best Applicants?" *The Quarterly Journal of Economics* 111:1, 97 – 133 (February).

Baum, Matthew and David Lake (2003). "The Political Economy of Growth: Democracy and Human Capital." *American Journal of Political Science* 47:2, 333-347 (April).

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): 165-176.

Besley, T. and R. Burgess (2003). "The Political Economy of Government Responsiveness: Theory and Evidence from India". *Quarterly Journal of Economics*, Forthcoming

Boix, Carles (2001). "Democracy, Development and the Public Sector." *American Journal of Political Science* 45:1, 1-17.

_____ and Susan Stokes (2003). "Endogenous Democratization." *World Politics* 55:4, 517-549.

Bommier, Antoine and Sylvie Lambert (2000). "Education demand and age at school enrollment in Tanzania." *The Journal of Human Resources*. 35:1, 177-203 (Winter).

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.

Christopher Clague, Philip Keefer, Stephen Knack and Mancur Olson (1996). "Property and Contract Rights under Democracy and Dictatorship." *The Journal of Economic Growth* 1:2, 243-276 (June).

Dixit, Avinash and John Londregan (1996). "The Determinants of Success of Special Interests in Redistributive Politics." *Journal of Politics* 58: 1132-1155.

Djankov, Simeon, Caralee McLiesh, Tatiana Nenova and Andrei Shleifer (2003). *Journal of Law and Economics* 46:2 (October).

Doyle, Michael and Nicholas Sambanis (2000). "International Peacebuilding: A Theoretical and Quantitative Analysis." *American Political Science Review* 94:4.

Duncan Baretta, Silvio R. and John Markoff (1987). "Brazil's *Abertura*: A transition from what to what?" In Seligson and Malloy, eds., 43 – 66.

Ehrenberg, Ronald G., Randy A. Ehrenberg, Daniel I. Rees, Eric L. Ehrenberg (1991). "School District Leave Policies, Teacher Absenteeism, and Student Achievement." *Journal of Human Resources* 26:1, 72-105 (Winter).

Engerman, Stanley L. and Kenneth L. Sokoloff (2002). "Factor endowments, inequality and paths of development among New World economies." NBER Working Paper No. 9259 (October).

Gerring, John, Philip Bond, William Barndt and Carola Moreno (2005). "Democracy and Economic Growth: A Historical Perspective." Mimeo, Boston University.

Hanushek, Eric A. (1996). "Measuring Investment in Education." *Journal of Economic Perspectives* 10:1, 9-30 (Fall).

_____, John Kain, Daniel O'Brien and Steven Rifkin (2005). "The Market for Teacher Quality." NBER Working Paper W11154 (February).

Harber, Clive (1989). *Politics in African Education.* London: Macmillan.

Heilbrunn, John (forthcoming). "Paying the Price of Failure: Reconstructing Failed and Collapsed States in Africa and Central Asia, a Review Essay." *Perspectives on Politics.*

Huntington, Samuel P. (1971). "The Change to Change: Modernization, Development and Politics." *Comparative Politics.* 3:3, 283-322 (April).

Keefer, Philip (2004). "What does political economy tell us about economic development -- and vice versa?" *Annual Review of Political Science*, Nelson Polsby, ed. Palo Alto: Annual Review (p. 247-72).

Keefer, Philip and Razvan Vlaicu (2005). "Democracy, credibility and clientelism." World Bank Policy Research Working Paper 3472 (January), presented at the meetings of the American Political Science Association, September 2005.

Kitschelt Herbert, Zdenka Mansfeldova, Radoslav 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, 207-228 (November).

Lindert, Peter H. (2003). "Voice and Growth: Was Churchill Right?" *Journal of Economic*

History. 63:2, 315 – 350 (June).

Malloy, James M. and Mitchell A. Seligson, eds. (1987). *Authoritarians and Democrats: Regime Transition in Latin America.* Pittsburgh: University of Pittsburg Press.

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 (December).

Persson, Torsten and Guido Tabellini (2000). *Political Economics: Explaining Public Policy.* Cambridge, MA: The MIT Press.

_____ and Francesco Trebbi (2003). "Electoral Rules and Corruption." *Journal of the European Economic Association.* 1:4 958-89 (June).

Prat, Andrea and David Strömberg (2005). "Commercial Television and Voter Information." Centre for Economic and Policy Research Working Paper 4989 (April).

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 (April).

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 Malloy and Seligson, eds, p. 193 – 218.

Scott, James C. (1972). "Patron-Client Politics and Political Change in Southeast Asia." *American Political Science Review* 66: 1, 91 – 113 (March).

Shefter, Martin (1994). *Political Parties and the State. The American Historical Experience.* Princeton: Princeton University Press.

Shugart, Matthew S. and Stephan Haggard (2001). "Institutions and Public Policy in Presidential Systems." In Haggard S and McCubbins M, eds., *Presidents, Parliaments and Policy.* New York: Cambridge University Press, 64 -104.

Stasavage, David (2005). "Democracy and Education Spending in Africa." *American Journal of Political Science* 49:2, 343-358.

Strömberg, David (2001) "Radio's Impact on New Deal Spending", mimeo, Princeton University.

Treisman, Daniel (2000). "The Causes of Corruption: A Cross-National Study." *Journal of Public Economics.* 76:3, 225-56 (July-September).

Table 1: Predicted policy outcomes in young democracies

Distinguishing characteristics of young democracies	Policy consequences of this characteristic for:		
	Provision of non-targeted 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 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.

Table 2: 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 km²)	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

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).

Table 3: Effect of the persistence of competitive elections
(OLS)

Dependent variable:	Rent-seeking		Non-targeted goods								Targeted Goods			
	Corruption in Government		Rule of law		Bureaucratic quality		Market Share, Gov't-owned newspapers		Gross secondary school enrollment		Central gov't. wage bill/GDP		Public investment/GDP	
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 (million km²)	-.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)		.28 (.00)		.004 (.57)		.95 (.03)		.02 (.08)		-.001 (.20)
Percent population young		-7.2 (.014)		-11.7 (.00)		-1.98 (.48)		1.79 (.003)		-190.12 (.00)		.14 (.02)		.02 (.55)
Percent population rural		1.12 (.23)		1.28 (.22)		1.29 (.24)		.15 (.52)		-12.60 (.15)		.025 (.32)		.03 (.05)
Primary school enrollment									.44 (.03)	.26 (.004)				
Total education expenditures/GDP									-85.5 (.56)	132.06 (.12)				
R²	.57	.68	.42	.72	.55	.73	.15	.40	.39	.86	.22	.31	.17	.31
N	97	96	98	98	98	97	73	73	106	106	89	89	85	84

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).

Table 4: Coefficient estimates on "continuous years of competitive elections", controlling for alternative explanations (OLS)

Dependent variable:	Rent-seeking	Non-targeted goods				Targeted goods	
	Corruption in Government	Rule of law	Bureaucratic quality	Market Share, Gov't-owned newspapers	Gross secondary school enrollment	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 3 modified according to the indicated specification change.

Change in specification in row 0: None.

| 0 | .087 (.00) / .05 (.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) |

Change in specification in row 1: addition of *political system* (presidential/parliamentary) and *majoritarian*..

| 1 | .081 (.00) / .053 (.00) | .06 (.00) / .010 (.27) | .08 (.00) / .024 (.01) | -.004 (.01) / -.0008 (.60) | .37 (.00) / .20 (.04) | -.0006 (.00) / -.0006 (.00) | -.0005 (.00) / -.00004 (.75) |

Change in specification in row 2: addition of religious, linguistic and ethnic fractionalization.

| 2 | .07 (.00) / .05 (.00) | .06 (.00) / .016 (.06) | .08 (.00) / .03 (.00) | -.001 (.52) / -.003 (.08) | .38 (.00) / .24 (.01) | -.0003 (.01) / -.0004 (.04) | -.0003 (.01) / .0002 (.27) |

Change in specification in row 3: addition of newspaper circulation/1000 population

| 3 | .06 (.00) / .047 (.00) | .03 (.00) / .01 (.13) | .06 (.00) / .03 (.00) | NA / NA | .33 (.00) / .21 (.02) | -.0001 (.51) / -.0003 (.18) | -.0001 (.36) / .00005 (.68) |

Change in specification in row 4: addition of deaths from conflict at the beginning of the democratic period

| 4 | .09 (.00) / .05 (.00) | .08 (.00) / .01 (.06) | .10 (.00) / .03 (.00) | -.005 (.00) / -.002 (.14) | .39 (.00) / .23 (.02) | -.0004 (.01) / -.0005 (.02) | -.0003 (.00) / .0001 (.65) |

Change in specification in row 5: addition of *all* alternative political explanations (political system through deaths from conflict)

| 5 | .06 (.00) / .05 (.00) | .02 (.06) / .003 (.76) | .06 (.00) / .03 (.01) | NA / NA | .29 (.04) / .23 (.03) | -.0001 (.62) / -.0003 (.20) | .000 (.95) / .0002 (.36) |

Change in specification in row 6: addition of all alternative political explanations *except* newspaper circulation

| 6 | .07 (.00) / .06 (.00) | .05 (.00) / .008 (.43) | .07 (.00) / .03 (.00) | .0004 (.76) / -.0008 (.63) | .60 (.00) / .23 (.03) | -.0006 (.00) / -.0006 (.01) | -.0004 (.01) / .00008 (.60) |

N.B. *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 3, with the additional controls specified in the left-most cell of 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 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)

Coefficient estimates on the variables in the left-hand column. Specification numbers correspond to specifications 1 – 4 in Table 4.

	Dependent variable:	Rent-seeking						Non-targeted goods				Targeted goods			
		Corruption in Government		Rule of law		Bureaucratic quality		Market Share, Gov't-owned newspapers		Gross secondary school enrollment		Central gov't wage bill/GDP		Public inv./GDP	
1	Presidential=0; semi-pres.=1, parliamentary=2	.30 (.13)	-.17 (.38)	**.84 (.00)**	-.01 (.97)	**.77 (.00)**	.32 (.14)	**-.10 (.05)**	**-.08 (.09)**	-1.3 (.46)	-.52 (.76)	**.01 (.02)**	**.01 (.01)**	**.008 (.03)**	**.009 (.03)**
	Majoritarian=1, non-major=0	**-.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)	-.003 (.70)	.005 (.46)	-.005 (.47)
2	Ethnic fractionalization	**-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)	**-.04 (.10)**	.01 (.70)	-.003 (.84)
	Linguistic fractionalization	-.54 (.49)	-.47 (.59)	-.14 (.84)	.42 (.56)	.58 (.42)	.85 (.14)	**.45 (.00)**	**.37 (.03)**	-.03 (.99)	2.67 (.75)	.01 (.72)	-.003 (.88)	-.01 (.47)	**-.03 (.03)**
	Religious fractionalization	.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)**	**.03 (.07)**	.02 (.21)	**.03 (.07)**
3	Newspaper circulation/1000 population	**.01 (.00)**	.002 (.11)	**.01 (.00)**	.002 (.18)	**.01 (.00)**	.0002 (.88)	NA	NA	**.02 (.06)**	.005 (.68)	-.00003 (.40)	-.00005 (.20)	**-.0004 (.01)**	.00002 (.40)
4	deaths from conflict at the beginning of the democratic period (1,000s)	**-.008 (.08)**	-.004 (.65)	**-.017 (.00)**	**-.01 (.02)**	**-.01 (.03)**	-.005 (.56)	**.004 (.00)**	**.002 (.09)**	.01 (.87)	.03 (.70)	.0005 (.36)	.0002 (.77)	-.00001 (.98)	-.0003 (.56)

N.B. *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 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).

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

N.B. p-values in parentheses. The second stage specification is the parsimonious specification from Table 3. 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).

Table 7: The effects of additional years of competitive elections
(OLS, fixed effects, specifications are those in corresponding columns in Table 3).

Dependent variable:	Rent-seeking				Non-targeted goods				Targeted Goods			
	Corruption in Government		Rule of law		Bureaucratic quality		Gross secondary school enrollment		Central gov't. wage bill/GDP		Public investment/GDP	
Continuous years of competitive elections	**.057** **(.00)**	**.053** **(.00)**	**.08** **(.00)**	**.09** **(.00)**	**.05** **(.00)**	**.05** **(.00)**	**1.22** **(.00)**	.11 *(.63)*	-.0002 *(.15)*	**-.001** **(.00)**	.00008 *(.57)*	**.0006** **(.02)**
(Continuous years of competitive elections)^2	**-.0008** **(.00)**	**-.0009** **(.00)**	**-.0005** **(.00)**	**-.0009** **(.00)**	**-.0003** **(.00)**	**-.0007** **(.00)**	.003 *(.11)*	.003 *(.32)*	**-.00002** **(.19)**	-.00002 *(.36)*	**-.00005** **(.00)**	**-.00005** **(.06)**
within-R^2	.10	.11	.15	.16	.07	.08	.42	.42	.03	.12	.03	.04
(N; democratic episodes)	(899; 98)	(872; 97)	(1152; 105)	(1120: 104)	(1152; 105)	(1120; 104)	(597; 100)	(589; 100)	(1069; 89)	(1022; 88)	(1077; 85)	(1027; 83)

N.B. Specifications are those in corresponding columns in Table 3 (state-owned newspapers is omitted because of lack of time variation); other coefficients not reported. -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).