BOONDOGGLES, RENT-SEEKING, AND POLITICAL CHECKS AND BALANCES: PUBLIC INVESTMENT UNDER UNACCOUNTABLE GOVERNMENTS

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Abstract—We show that public investment is dramatically higher in countries with low-quality governance and limited political checks and balances or no competitive elections. This result is robust to a number of specifications. The most plausible interpretation of these results is that these governments use public investment as a vehicle to increase their rent-seeking. This evidence suggests that efforts to increase public investment in countries with weak governance, or to measure the growth effects of productive public investment using only observed measures of public investment, should be undertaken with caution.

I. Introduction

POLICYMAKERS and international aid agencies regard productive public investment as essential for economic development. Sachs and colleagues (2004) argue strongly that high transport costs and other infrastructure weaknesses are key bottlenecks to African development. The Commission for Africa report (2005, ch. 7) urges donor nations to provide $10 billion per year more in aid for African infrastructure from 2005–2010, with a further increase to $20 billion per year over the following five years. Public investment is also well-known as a vehicle for rent-seeking, however. If rent-seeking is a sufficiently powerful motivation for public investment expenditures, we might expect an association between government incentives to seek rents and the quantity of public investment. The results presented here show that levels of observed public investment, whether as a fraction of national income or of total investment, public and private, are substantially higher in countries that exhibit low levels of a composite measure of expropriation and contract repudiation risk, law and order, corruption, and bureaucratic quality. Public investment is also much higher in countries that have noncompetitive elections and few political checks and balances.

The most plausible explanation for the findings reported below is that extra public investment associated with weak institutions is unproductive and largely intended to steer rents to government officials or their cronies. These results therefore signal the need for donor agencies to exercise particular caution in supporting public investment in countries with a weak institutional environment. They also have implications for a number of research directions that are prominent in the literature.

The results first suggest some rethinking of research strategies that use observed public investment data to establish the effects of public investment on growth. In addition, the results here reveal additional and previously unexplored implications of institutions that limit government (elections and political checks and balances). The evidence below demonstrates that institutional variables that elsewhere in the literature are taken as proxies for limited government are associated with both less corruption and less (but, we argue, more productive) public investment, results that are consistent with predictions by Acemoglu (2005) about the effects of limited government. Finally, previous work has linked corruption to distortions in government spending. One obvious policy conclusion from such work is the need to fight corruption more vigorously. Our findings suggest that this may be ineffective in combating the deeper institutional difficulties that we associate with those same spending distortions.

II. Measuring Corruption, Property Rights Security, and Political Checks and Balances

The conclusions here, that public investment rises when governments have greater incentives to seek rents, depend fundamentally on the quality of the two measures of rent-seeking incentives we use. On the one hand, rent-seeking can be viewed as the extent to which governments tax the fruits of citizen effort and retain the revenues from these taxes for their own purposes. Citizen effort drops when taxes are high. Governments that engage in significant rent-seeking therefore do so because they believe that their share of the long-run rents from high citizen effort are lower than the short-run rents that they can extract at the expense of citizen effort (Acemoglu, 2005; Clague et al., 1996). For example, governments that expect to be expelled from office regardless of whether they perform well have little incentive to restrain their rent-seeking behavior.[1] Such governments also have little reason to refrain from expropriation or from the repudiation of contracts, nor do they have an incentive to ensure that citizens benefit from the rule of law or from the services of high-quality bureaucracies.

Our first indicator of government rent-seeking incentives captures these effects. It is a composite of subjective evaluations of different dimensions of country risk prepared by the PRS Group, a firm specializing in political risks to foreign investment, and published as the *International Country Risk Guide* (ICRG). This is a familiar variable; the particular index here was first used in Keefer and Knack (1995). The ICRG is provided monthly to subscribers, mainly multinational investors. To examine this relationship,

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[1] A government laboring under significant negative shocks whose consequences are attributed by citizens to the government's own actions would confront such a situation.

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we use five variables from the ICRG to form an additive index, "quality of governance."[2] These variables are bureaucratic quality, the risk of expropriation and of repudiation of contracts by government, corruption, and the law and order tradition of the country. The index is measured on a scale of 0–50, with higher values indicating better quality of governance. The median values of these are used over the period 1974–1998.[3]

The ICRG assigns low ratings of its corruption variable ("corruption in government") to countries in which top government officials are likely to demand special payments and where illegal payments are generally expected throughout lower levels of government. The quality of the bureaucracy assesses the degree to which the bureaucracy has the strength and expertise to govern without drastic changes in policy or interruption of governmental services. Such bureaucracies have established mechanisms for recruitment and training, and some autonomy from political pressure. If politicians are unconstrained in the demands that they can place on bureaucracies, or if they are subject to frequent replacement, bureaucratic quality is likely to be lower.[4] Expropriation risk tracks the risk of confiscation and forced nationalization while the risk of contract repudiation assesses the risk that governments will repudiate or otherwise unilaterally change the terms of contracts with foreign businesses. Finally, the extent to which disputes in a country are resolved legally and through formal channels is measured in the variable "law and order tradition."

The quality of governance is a direct measure of the incentives of governments to seek rents and to refrain from establishing institutions that would limit their ability to seek rents. The multidimensional index is more informative than the simple corruption measure for several reasons. First, rent-seeking need not be corrupt. On the contrary, efforts to channel benefits away from citizens to political officials and their constituencies are usually legal. Second, political institutions could limit rent-seeking behavior by politicians but bureaucratic corruption could nevertheless be high, because of capacity constraints due to poverty or lack of experience in exercising oversight over bureaucrats. Thus, low scores on the index reflect distortions associated with "excessively strong" or "excessively weak" states (Acemoglu, 2005). The five dimensions of the quality of governance, taken together, offer a clearer picture of political incentives to pursue rents and to undermine or refrain from building institutions that would restrain political rent-seeking.

In addition to setting high taxes in anticipation of an early departure from power, governments may also wish to deny citizens access to rents (for example, from natural resources). This might have little influence on citizen effort except that citizens have no reason to acquiesce to such a decision by government. To protect their privileged access to natural resources or other exogenous sources of rents, governments restrict citizen influence on political decisions and political careers. Political checks and balances are few and elections absent.[5] Regardless of the historical genesis of these institutional arrangements, governments that do not exhibit political checks and balances or that suppress electoral competition may have a more difficult time making the credible commitment to citizens that their assets will be safe from expropriation after they have exerted effort to accumulate them.[6] Such governments have no reason to refrain from expropriation, since citizens have no reason to expect that they will, so again we should observe high levels of rent-seeking.

Our second measure of accountability captures these basic institutional characteristics of countries. The Database of Political Institutions (DPI) (Beck et al., 2001) contains an objective measure of checks and balances cum elections, "checks." The measure is a function of the number of parties in the government coalition (for parliamentary systems), whether the president's party has a majority in the legislature (presidential systems), and whether elections are governed by closed-list or open-list rules (the former granting more authority to the heads of parties). Since constitutional checks on executive behavior typically mean little if the relevant actors are not elected, the construction of checks also takes into account the DPI's legislative index of electoral competitiveness (LIEC), scaled one to seven.[7] The average value of checks, 1974–1998, is used in the analysis below.[8]

To measure public investment, we follow Levine and Renelt (1992) and Devarajan, Swaroop, and Zou (1996) by taking data on public investment from the Government Finance Statistics (GFS) of the International Monetary Fund. While GFS has some data on public investment by state and local governments, its most complete and reliable coverage is of central government expenditures, not includ-

[2] The results we report are not sensitive to the manner in which the index is constructed.

[3] Period medians are more appropriate for ordinal data like the ICRG indicators, but are in any case correlated at 0.99 with the period means.

[4] Noll and Fiorina (1978) is one of the first of a growing literature examining the interaction of political and bureaucratic agents.

[5] Acemoglu, Johnson, and Robinson (2001) make this argument.

[6] These fundamental institutions—elections and checks and balances—are the focus here and emphasized by, among many others, North and Weingast (1989) and Acemoglu, Johnson, and Robinson (2001). However, incentives to extract rents also vary with the detailed institutions of democracy (whether governments are parliamentary or presidential, for example), as in Persson and Tabellini (2000).

[7] Where there are no elections, countries receive a one; the scores rise to seven when there are multiple candidates and multiple parties, and no single party or candidate receives more than 75% of the vote. If the legislative index of electoral competitiveness is less than five (where five indicates that multiple parties can legally be established, but where only one party wins any seats in the legislature), checks is always one. For other coding rules, see Beck et al. (2001).

[8] Other commonly used measures of democracy, such as Polity IV or Freedom House, extend across a wider set of democratic characteristics, including performance characteristics (such as human rights guarantees). These additional characteristics cloud the essential role of elections and checks and balances; because of the subjectivity of these variables, it is not possible to ensure that these multiple characteristics are equally weighted across countries or over time.

TABLE 1.—DESCRIPTIVE STATISTICS

	Multivariate Sample			Settler Mortality Sample		
	Mean	Std.Dev.	N	Mean	Std.Dev.	N
Public investment/GDP	5.2	3.6	89	5.3	3.4	51
Public investment/total investment	18.4	11.6	86	19.5	12.1	49
Quality of governance index	31.3	11.2	80	26.6	8.3	45
Checks	2.9	1.6	89	2.4	1.2	51
Area (in logs)	16.7	2.1	89	16.9	2.5	51
Population (in logs)	15.7	1.7	89	15.6	1.7	51
Left party largest (prop. of years)	0.32	0.36	89	0.34	0.39	51
Price of investment goods, U.S. = 100	96.5	46.0	89	104.6	53.6	51
Per capita income (logs)	8.4	1.0	87	8.1	0.9	50
Settler mortality (logs)	4.5	1.2	51	4.5	1.2	51
Degrees from equator	25.0	17.1	89	17.1	11.4	51

Multivariate sample includes countries in either equation (3) or (4) in tables 2 and 3. Settler mortality sample includes countries in either equations (1) or (3) of table 4.

ing investments by state-owned enterprises.[9] We look at average public investment over the period as a fraction of GDP and of total investment.

A number of other possible determinants of public investment are taken into account in the analysis below. The returns to public investment may depend on the amount of initial public infrastructure already in place as well as the overall level of economic income. We therefore control for initial purchasing power parity–adjusted income per capita (Summers & Heston, 1991) to capture the effect of both. The land area of a country (in logs) and the log of initial population are included because the economic returns to public investment may vary with the size of a country. The political demands made on governments by citizens may vary as well with size.

Spending preferences of governments may be correlated with their ideological tendencies (left, favoring more redistribution and government intervention in the economy, or right, favoring less). The DPI provides information on parties' ideological tendencies, so we control for the percentage of years from 1975 to 1998 that the largest party in the legislature is coded in DPI as left-leaning. Investment is likely to be influenced by the price of investment goods, so we account for the initial price level of investment goods in a country relative to prices in the United States (Summers & Heston, 1991). The U.S. value is 100. Public investment/GDP should be lower where the initial price index is higher; public investment/total investment should rise if private investors are more sensitive to investment prices. Table 1 presents the summary statistics on these variables.

III. Governance, Checks and Balances, and Public Investment

A simple exercise suggests that there are dramatic differences between countries with high and low values of checks or quality of governance. If the sample is divided into two equal-sized groups (those above and below checks equal to 2.5, or those above and below a score of 30 on quality of governance), public investment in the low checks sample is 6.7% of GDP and in the low quality of governance sample it is 6.1%. Public investment is 3.9% of GDP in the high checks sample and 3.6% in the high quality of governance sample.

These differences persist in the analysis below, using ordinary and two-stage least squares estimates of the determinants of average public investment as a fraction of GDP and of total investment over the period 1974–1998. This time period is driven by the availability of the DPI (which begins in 1975) and ICRG variables (which start in 1982). Like most empirical efforts using these institutional data, which vary relatively little over time but substantially across countries, we focus our analysis on cross-section averages.

Results in table 2 are OLS estimates of determinants of public investment/GDP. The first two columns display a large bivariate association between the quality of governance and checks and balances. The association changes little when controls are added in the remaining columns. A ten-point increase in the quality of governance is associated with a reduction in public investment of 1.2% of GDP, not controlling for income per capita. The effect of an increase in checks by one point on the seven-point scale is nearly the same. Income per capita is highly correlated both with the quality of governance (as Acemoglu, Johnson, & Robinson, 2001, also report) and with checks. Nevertheless, results are robust to the inclusion of initial income per capita in columns 5 and 6. Initial income per capita is itself not a significant determinant of public investment, nor are the other controls.

The dependent variable shifts to public investment/total investment in table 3, but the results are similar. A ten-point increase in quality of governance is associated with a reduction in the ratio of public to total investment by 3 or 4 percentage points, depending on the specification. A one-point increase in checks reduces public investment/total

[9] Barro (1991) appears to use the general government public investment, including decentralized government expenditures from GFS where available. For a few dozen countries, Easterly and Rebelo (1993) supplement GFS data on central government public investment with World Bank country reports that most notably include data on investments by state-owned enterprises.

TABLE 2.—DETERMINANTS OF PUBLIC INVESTMENT/GDP
OLS REGRESSIONS

	1	2	3	4	5	6
Quality of governance	−0.120		−0.121		−0.093	
(period median)	(0.027)		(0.031)		(0.048)	
Checks		−1.145		−1.171		−1.017
(period mean)		(0.206)		(0.196)		(0.229)
Area			−0.294	−0.331	−0.286	−0.343
(log sq km)			(0.225)	(0.215)	(0.239)	(0.230)
Population			−0.305	−0.211	−0.382	−0.237
(log of initial)			(0.352)	(0.321)	(0.377)	(0.354)
Mean years that largest party			0.529	0.336	0.405	0.291
is left-leaning			(1.111)	(0.943)	(1.094)	(0.944)
Price of investment			0.004	−0.001	0.003	−0.002
goods (initial)			(0.007)	(0.007)	(0.008)	(0.007)
Log per capita income					−0.404	−0.362
(initial)					(0.636)	(0.462)
R^2	0.16	0.23	0.30	0.36	0.29	0.36
No. of obs.	93	114	79	88	77	86

Dependent variable: public investment/GDP, in percent, mean 1974–98 (from IMF's Government Finance Statistics). Quality of governance is an equal-weighted index of the median values over 1982–98 of the ICRG variables corruption in government, bureaucratic quality, expropriation risk, repudiation of contracts by government, and law and order tradition. The index is measured on a scale of 0–50, with higher values indicating better quality of governance. Checks is the number of veto players in the political system (median value for 1974–98). Robust standard errors are in parentheses.

investment by 3.5%.[10] Again, adding income per capita might be expected to weaken these relationships, but they remain large and significant with its inclusion in columns 5 and 6. As in table 2, income is again insignificant in table 3, as are most other controls. The price of investment goods is significant and positive; private investors may be more sensitive to the price of investment goods than public investors.

These results are robust to alternative specifications. For example, using alternative estimation procedures (median regression and robust regression) that downweight the influence of outlying observations has little effect on these results. Coefficients for checks and quality of governance change very little in all of these tests but one, and in that case the coefficient of quality of governance substantially increases in absolute value.

Although there are good reasons to expect a causal relationship between government accountability and high public investment, tables 2 and 3 are insufficient to document such a relationship. Omitted effects could also be responsible for the relationships identified in these tables. For example, internal strife could lead governments to abandon checks and balances, reduce accountability, and at the same time deter private investment and lower incomes. Alternatively, ICRG evaluators may, lacking better information, infer corruption or expropriation risk from public or private investment or GDP. This might bias upward the quality of governance coefficients in tables 2 and 3. Table 4, however, provides evidence in support of a causal link among these phenomena.

Using as base specifications models 3 and 4 from tables 2 and 3, the instrumental variable estimates in table 4 use two instruments for institutions that have a prominent place in the literature: the log of settler mortality (Acemoglu, Johnson, & Robinson, 2001), available for former colonies, is used in the odd-number equations; the degrees of latitude from the equator (Hall & Jones, 1999) in the even-numbered ones. They are used interchangeably as instruments for quality of governance and checks.[11] Panel B in table 4 indicates that both instruments are strong predictors of the quality of governance and checks. Panel A shows that the predicted values of quality of governance and checks are significant and negative, as in the earlier tables. The magnitude of their effect is more than 50% larger than in the OLS coefficients reported in panel C, using the same samples.[12]

These results would be spurious if the instruments were correlated with the error terms of the regressions in tables 1 and 2. This is not the case. The instruments are each insignificant when added to the OLS specifications of tables 1 and 2. We also fail to reject the null hypothesis that exclusion of both instruments is appropriate.[13]

IV. Discussion of Results

The inverse association between observed public investment and the quality of governance or political checks and

[10] The standard deviation of the quality of governance is approximately 11.3 for those countries appearing in any of regressions 3–6 in tables 1 or 2; the standard deviation of checks is 1.62.

[11] Each of these instruments is expected to raise incomes through its effects on institutions: conditions that reduce settler mortality promote the creation of institutions that in turn sustain higher growth over long periods. We therefore expect the correlation of income per capita with predicted accountability variables to be higher than with the raw variables in tables 2 and 3. This is the case, so table 4 omits income per capita.

[12] Table 4 results could differ from those in tables 2 and 3 because of the smaller sample of countries for which settler mortality data are available. The coefficients in panel C of table 4 indicate that the coefficients on checks and quality of governance are unaffected by the change in sample, however.

[13] The *p*-values from these over-identification tests are, for using checks, 0.47 (public investment/total investment) and 0.20 (public investment/GDP). The corresponding values for quality of governance are 0.13 and 0.24.

TABLE 3.—DETERMINANTS OF PUBLIC INVESTMENT/TOTAL INVESTMENT
OLS REGRESSIONS

	1	2	3	4	5	6
Quality of governance	−0.392		−0.372		−0.286	
(period median)	(0.081)		(0.095)		(0.159)	
Checks		−3.622		−3.531		−2.404
(period mean)		(0.612)		(0.637)		(0.700)
Area			−0.765	−0.668	−0.657	−0.632
(log sq km)			(0.605)	(0.814)	(0.608)	(0.800)
Population (log			−0.225	−0.176	−0.580	−0.596
of initial)			(0.795)	(0.884)	(0.871)	(1.007)
Mean years that largest			0.243	−1.580	0.024	−1.818
party is left-leaning			(2.806)	(2.991)	(2.759)	(3.082)
Price of investment			0.055	0.064	0.047	0.055
goods (initial)			(0.019)	(0.022)	(0.022)	(0.023)
Log per capita income					−1.146	−2.590
(initial)					(2.038)	(1.665)
R^2	0.16	0.23	0.35	0.36	0.33	0.38
No. of obs.	93	114	78	85	76	83

Dependent variable: public investment/(public + private investment), in percent, mean 1974–98 (from IMF's Government Finance Statistics). Quality of governance is an equal-weighted index of the median values over 1982–98 of the ICRG variables corruption in government, bureaucratic quality, expropriation risk, repudiation of contracts by government, and law and order tradition. The index is measured on a scale of 0–50, with higher values indicating better quality of governance. Checks is the number of veto players in the political system (median value for 1974–98). Robust standard errors are in parentheses.

balances has two possible explanations. One seems more plausible, but we can discard neither based on the evidence presented above. First, in countries where governance or checks on political behavior are weak (where rulers are strong), governments face fewer political costs from rent-seeking. Because public investment is a favored vehicle for extracting rents, observed public investment rises. This result is consistent with the argument in Acemoglu (2005) that strong rulers are freer to extract revenues for their own benefit. The evidence is insufficient to test the further prediction that strong states that are unable to collect revenues will undertake lower productive public investment, since productive public investment is unobserved.

It could be, however, that public investment is not disproportionately used to seek rents. This does not seem to be the case. From pork barrel spending in the United States to white elephant steel factories in Nigeria, public investment has served purposes other than maximization of growth, ranging from securing political support to increasing personal fortunes. In Turkmenistan, where roads were crumbling and water was unavailable for hours on end, the authorities built an international airport with the capacity to receive 4.5 million visitors a year, though only a few hundred thousand used the airport; authorities further insisted on building the control tower on the wrong side of the terminal, blocking the controllers' view of the runway.[14] Statistical evidence suggests as well that public investment improves the quality of infrastructure only when the quality of governance is high (Keefer & Knack, 2002).[15]

The second explanation for the inverse association of public investment and governance is that governments with no interest in rent-seeking nevertheless find themselves unable to demonstrate their credibility. They therefore increase productive public investment in order to offset the fact that their lack of credibility has driven off private investment. This explanation seems less plausible because governments unable to make credible commitments (for example, governments with short horizons) also tend to have fewer incentives to promote growth. The findings here therefore at least advise caution when increasing public investment in countries with a weak institutional environment.

The findings also have implications for a number of research directions prominent in the literature. A significant body of research uses observed public investment data to assess the impact of public investment or public infrastructure on economic growth. Pritchett (1996) and others have argued that observed public investment is a poor proxy for productive investment. Our results suggest that it may not only be a noisy indicator, but a systematically biased one as well: there may be an inverse correlation between observed and productive public investment. Attempts to use observed public investment to assess the effect of public investment on growth are unlikely to yield accurate estimates without controlling for the possibility of this inverse correlation.

Another line of research investigates the effects of corruption on government decision making and specifically on the allocation of public spending. Tanzi and Davoodi (1997) conclude that public investment is strongly associated with greater corruption. They argue explicitly that this "extra" public investment is aimed at rent-seeking. Mauro (1998) finds similar, though weaker, evidence of the same phenomenon. Our findings, particularly the strong relationship between public investment spending and political checks and balances and competitive elections, indicate that the connection between government decisions and corruption is the product of deeper phenomena that may influence both corruption and public investment simultaneously. Supporting this, the results reported above are equally strong using

[14] "Palaces and Poverty in Central Asia," *Washington Post,* November 11, 1994, p. A35. Robinson and Torvik (2005) provide more examples.

[15] There, the quality of infrastructure is approximated by an index of such indicators as electricity losses, kilometers of paved roads, and access to adequate sanitation.

TABLE 4.—INSTRUMENTAL VARIABLES ESTIMATES OF THE DETERMINANTS OF PUBLIC INVESTMENT/GDP

	Public Investment/GDP (%)				Public Inv./Total Inv. (%)			
	1	2	3	4	5	6	7	8
Panel A: Two-Stage Least Squares								
Quality of governance	−0.166	−0.179			−0.603	−0.466		
	(0.099)	(0.043)			(0.285)	(0.116)		
Checks			−1.515	−1.356			−6.621	−4.484
			(0.814)	(0.338)			(3.306)	(1.157)
Area (log sq km)	−0.472	−0.402	−0.313	−0.373	−1.364	−0.936	−0.738	−0.885
	(0.274)	(0.233)	(0.251)	(0.216)	(0.780)	(0.617)	(0.976)	(0.713)
Population (log of initial)	−0.023	−0.138	−0.136	−0.136	0.881	0.043	0.062	0.222
	(0.398)	(0.300)	(0.369)	(0.300)	(1.136)	(0.794)	(1.449)	(0.994)
Left-party largest (mean)	2.758	0.741	2.475	0.434	5.519	0.632	4.643	−0.826
	(1.121)	(0.932)	(1.111)	(0.877)	(3.330)	(2.537)	(4.745)	(3.065)
Price of investment goods (initial)	0.001	0.002	−0.002	−0.001	0.047	0.052	0.044	0.058
	(0.009)	(0.008)	(0.008)	(0.007)	(0.025)	(0.022)	(0.036)	(0.027)
Panel B: First-Stage Regressions								
Log settler mortality	−3.676		−0.438		−3.661		−0.416	
	(0.959)		(0.134)		(0.976)		(0.136)	
Degrees lat. from equator		0.450		0.056		0.455		0.054
		(0.051)		(0.008)		(0.053)		(0.008)
Area (log sq km)	−0.127	−0.976	−0.047	−0.149	−0.124	−0.982	−0.043	−0.152
	(0.717)	(0.586)	(0.092)	(0.083)	(0.727)	(0.589)	(0.093)	(0.085)
Population (log of initial)	0.859	1.370	0.057	0.225	0.865	1.349	0.068	0.234
	(0.980)	(0.740)	(0.134)	(0.112)	(0.993)	(0.744)	(0.136)	(0.114)
Left-party largest (mean)	1.968	2.235	0.398	0.374	2.098	1.913	0.552	0.477
	(2.882)	(2.435)	(0.388)	(0.352)	(3.029)	(2.512)	(0.407)	(0.376)
Price of investment goods (initial)	0.027	−0.010	−0.001	−0.003	0.027	−0.010	−0.001	−0.003
	(0.024)	(0.022)	(0.003)	(0.003)	(0.024)	(0.022)	(0.003)	(0.003)
R^2	.33	.58	.27	.49	.33	.58	.28	.47
Panel C: OLS								
Quality of governance	−0.110	−0.121			−0.360	−0.373		
	(0.055)	(0.032)			(0.165)	(0.095)		
Checks			−1.279	−1.171			−4.230	−3.531
			(0.380)	(0.196)			(1.267)	(0.637)
No. of obs.	45	79	51	88	44	78	49	85

Panel A reports the two-stage least squares estimates with public investment/GDP (in percent, mean 1974–98) as the dependent variable in columns 1–4 and public investment/total investment (in percent, mean 1974–98) as the dependent variable in columns 5–8, instrumenting for the institutional variable with log settler mortality and/or degrees from equator. Panel B reports the corresponding first-stage regressions. Panel C reports the OLS coefficient from regressing the indicated public investment variable on the indicated institutional variable, for the same (2SLS) sample, with the other control variables listed in panel A (full results not reported to save space).

a quality of governance index that excludes the corruption variable; at the same time, corruption used alone is not as statistically significant.

Others have found no connection between institutions—specifically, democracy—and many government spending decisions. Mulligan, Gil, and Sala-i-Martin (2004) contrast two arguments. On the one hand, the presence of democratic institutions should influence public spending by giving the poor greater opportunity to redistribute spending to their own benefit. On the other, all leaders, democratic or not, seek to maximize the gains from dealing with interest groups, so that underlying economic interests rather than political institutions should determine cross-country differences in observed public spending outcomes. Mulligan et al. find that noninstitutional variables are significant determinants of social and education spending, while their measure of democracy is not. Our results suggest that political institutions affect spending at least to the extent that they facilitate citizen control of political rent-seeking.

In our tables 2 and 3 regressions using checks, an objective measure of two key democratic institutions (elections and political checks and balances), checks remains a significant determinant of public investment even when we control for these same noninstitutional measures.[16] Even if citizens cannot systematically influence who benefits from redistributive government spending, and provided that public investment is, indeed, a preferred vehicle for rent-seeking, the robustness of these results implies that democratic institutions influence the degree to which citizens can control rent-seeking behavior by politicians.

The findings here also contribute to the literature on the effects of credible commitment on policymaking. Typically,

[16] Their five noninstitutional variables are a communist dummy, a British legal origin dummy, the log of population, the fraction of the population over 65, and the log of initial income. Adding British legal origin and the fraction of the population over 65 does not change our results; mean years that the largest party is left-wing captures the same effect as the communist dummy.

this literature has found that governments unable to make credible commitments create a greater risk of expropriation on citizens or limit government ability to conduct monetary policy and that political checks and balances mitigate the credibility problem.[17] Acemoglu (2005) offers theoretical support for the argument that limited government should also affect government spending. The results here support this line of analysis, demonstrating that political checks and balances also influence the composition of government spending, and may do so because of the influence they have on government incentives to seek rents.

V. Conclusion

We document that observed public investment as a fraction of national income or total investment is much higher in countries that exhibit weak governance or few political checks and balances. Further research is needed to determine the extent to which public investment in these countries is less productive and intended to serve the private interests of government officials, or is rather an effort by those same public officials to compensate for their inability to offer a secure environment to private investors. If the former explanation is correct, scaling up aid for infrastructure or other public investment in countries with weak governance will have little impact on economic growth. Advocates of dramatic increases in aid for infrastructure often acknowledge that scaled-up funding should be accompanied by anticorruption programs, to ensure the resources are well spent (Commission for Africa, 2005). However, policies to fight corruption similarly may be ineffective in counteracting the more deeply seated incentive structure that leads to distortions in public investment.

[17] Acemoglu, Johnson, and Robinson (2002) and North and Weingast (1989) emphasize the importance of political checks and balances for the security of property rights. Keefer and Stasavage (2003) demonstrate that political checks and balances improve the credibility of government monetary policy, thereby reducing inflation.

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