How Does Democracy Influence Citizens' Perceptions of Government Corruption? A Cross-National Study

Abstract

We examine the effect of democracy as an institutional context on individuals' perceptions of government corruption. To do so, we compile an integrated dataset from the Asian, Afro, and Latino Barometer surveys and use a hierarchical linear regression model. Our primary finding is that the effect of democracy has different effects on ordinary citizens' perceptions of corruption in different contexts. In general, people in countries with higher levels of democracy tend to perceive their governments to be more corrupt. However, more importantly, conditional models show that in countries with more developed democratic institutions, individuals with stronger democratic values are less likely to perceive the government to be corrupt. Moreover, people in such countries are less likely to assess their government based on their perceptions of economic situation.

Keywords: democracy, corruption, perceptions of government corruption, multilevel analysis

Introduction

The existing literature on democracy and corruption focuses on whether and how democracy influences government corruption in reality.[1] In this study, we turn our attention to a much-neglected area in this stream of literature: the impact of democracy on citizens' perceptions of corruption. We do so for two reasons: First, most extant studies of the effect of democracy on presumed actual corruption in fact use *perceptions* rather than corruption *per se* as the dependent variable (mainly using CPI[2] and WGI[3]). Some scholars even contend that the real degree of corruption, which CPI and other measures intend to capture, cannot be measured directly due to the secretive nature of corruption and the complex criteria for corruption across countries/cultures.[4] Scholars also are aware that *perception-based* indices for measuring corruption cannot clearly differentiate the reality of corruption from perceptions of corruption.[5] As Treisman[6] suggests that "'*perceived corruption*' may reflect many other things besides the phenomenon itself".

Second, people's perceptions of corruption are of critical importance because of their erosive effect on political trust and political legitimacy.[7] They are important for both authoritative regimes and democracies.[8] As Warren[9] states, "[corruption] undermines democratic capacities of association within civil society by generalizing suspicion and eroding trust and reciprocity." Based on empirical research of Latin America, scholars also have found that perceptions of corruption can create political skepticism, which, in turn, causes citizens to withdraw from public engagement. Further,

perceptions of corruption weaken civil societies by "reinforce[ing] the technocratic and delegative features of many democracies."[10]

Given the importance of citizens' perceptions of government corruption and the inadequate scholarly attention devoted to the effect of democracy on corruption perceptions, in this study, we examine how democracy as a macro-institutional context affects individuals' perceptions of corruption. Specifically, we argue that in addition to its direct effect on people's perceptions of corruption, democracy promotes more favorable views of government integrity by moderating the relationship between perceptions of corruption and their correlates at the individual level.

The two correlates we concern in this study are democratic values and economic perceptions. On the one hand, through institutional supply, democracy satisfies the needs of democratically oriented citizens and thus mitigates the harmful effect of democratic values on perceptions of government. On the other hand, by blurring the boundaries of government institutions' responsibilities through a separation and balance of power, democracy also attenuates the negative effect of economic distress on individuals' assessments of government integrity. In other words, people become less instrumental in a more democratic country. In short, democracy reduces the effect of the factors at the individual level that may cause people to view the government as corruptive.

Our study makes three contributions to the literature on corruption. First, it extends the literature to the individual level. Aside from the necessity of such a measurement, as argued above, a measurement at the individual level helps to avoid the problems of aggregate measurements of actual government corruption.[11] Second, our study identifies

some mechanisms through which democracy contributes to more positive perceptions of government among citizens. We argue that the effect of a greater supply of democratic institutions in generating positive perceptions of the government is not direct or unmediated. Instead, the effect manifests by reshaping the relationship between perceptions of corruption and their determinants, namely, democratic values and economic perceptions.

Third, we test the contextual and moderating effect of democracy by using combined data from three Barometer Surveys, i.e., the Asia Barometer, the Afro Barometer (Africa), and the Latino Barometer (Latin America). This combined dataset covers the largest number of countries (50 countries) outside western democracies, with varying levels of democracy. Although the different Barometer Surveys have coordinated their efforts by including some common questions, little effort has been made to utilize these questions in an analysis of individual attitudes.

Theory and Hypotheses

In recent years, studies of comparative politics have combined variances across macro institutions and social structures with those of micro individual behavior and opinions by using multilevel analyses.[12] This research approach is based on the concept of "nested citizens": "People are nested in identifiable contexts—that is, they form attitudes and make choices in variable macro-political (or other) environments (or contexts)."[13] Following Anderson and Singer's argument, the effect of contextual factors (democracy

in this study) on citizens' attitudes and behaviors (corruption perceptions in this study) can be parsed into direct and conditional (or contingent) effects.

Democracy and perceptions of corruption: The direct effect

Although extant discussions of the effect of democracy on corruption are often intended to link democracy to corruption in reality, we borrow the insights of them to build our expectation with regard to the effect of democracy on corruption in perceptions. Presumably, a more corruptive government in reality should correlate with a population of citizens with perceptions of a higher level of government corruption. Conventionally, democracy is believed to be able to reduce public officials' opportunities to misuse discretion by pluralizing political power, enhancing the transparency of policy decisions, and increasing officials' accountability to the electorate. Some empirical studies have confirmed such a corruption-reducing effect of democracy.[14] However, such a finding faces two challenges. First, given the problem of measuring corruption, these studies actually use corruption perceptions, most often those of elites or experts, as the dependent variable to proxy for the reality of corruption, and such a practice has not been well justified. Given the importance of corruption perceptions themselves, we in this study directly explore how ordinary citizens living in democratic contexts perceive government differently from those living in non-democratic regimes through a cross-national study of individual attitudes.

Second, in the literature of the relationship between democracy and corruption, many more scholars have pointed out how both corruption in reality and in perceptions

can actually increases in democracies.[15] According to Rose-Akerman,[16] for instance, three factors of a democratic polity are responsible for politicians' involvement in political corruption: the existence of narrow benefits available for distribution by politicians, the ability of wealthy groups to obtain these benefits legally, and the existence of constraints on politicians generated by their desire for reelection. Further, Johnston pointed out that in four types of corruption, three can occur in democracies: influence market" corruption, "elite cartels" corruption, and "oligarchs and clans" corruption[17]

When the scope expands to non-democracies, the ability of democracy to mitigate corruption becomes even more debatable. In large-N global comparative studies, the effect of democracy on corruption is mixed, with some research finding no significant relationship. For example, Fisman and Gatti[18] and Ades and Di Tella[19] found no significant effect of democracy on corruption in cross-national statistical models. Case studies have reported similar findings. Sun and Johnston[20], for instance, compared India (a large, poor democracy) with China (a large, undemocratic state) and concluded that democratic India has no clear advantage over authoritarian China in controlling corruption.

Moreover, according to Mohtadi and Roe, democracy, as compared to autocracies, engenders more rent seekers because of an increased information flow and easier access to government officials who control rents. Thus, less institutionalized democratization encourages corruption in a young democracy because constraints on rent seekers are insufficient.[21] Empirical studies from Latin American democracies told a similar story.

As argued by Keefer,[22] the inability of politicians (especially emerging political competitors in younger democracies) to make credible promises to citizens drives politicians to build their own patron-client networks and thus to engage in rent-seeking activities.[23]

In addition, democracy directly increases mass perceptions of corruption through its core institutional arrangement—election and political competition. Scholars of U.S. electoral campaigns have found that political contests can be incredibly dirty—the closer the race is, the meaner the campaign is.[24] With such campaigns, exposure of corruption is often used as a tool to undermine and discredit political opponents. Weyland also found that, in Latin America, the rise in *neopopulism* drives political competitors to reach people by television and other mass media, which are very costly. Then, "the new media-based politics [gave] ambitious politicians much higher incentives to resort to corruption."[25] Moreover, Sharafutdinova[26] reports "that public perceptions of corruption are higher in more politically competitive regions." Using Taiwan Integrity Survey (TIS) data, Yu, Chen, and Lin[27] found that democratization increases Taiwanese perceptions of corruption owing to competitive political parties' media campaigns via television networks. In contrast to democratic regimes, authoritarian regimes can reduce perceptions of corruption by censoring public media. For instance, Zhu, Lu, and Shi[28] show that control of mainstream mass media by the Chinese Central Government reduces people's perceptions of corruption.

In summary, democracy may increase individuals' perceptions of corruption by enabling untamed corruption activities, on the one hand, and by framing public opinions

via media exposure in political campaigns, on the other. Therefore, we propose the following hypothesis:

H1: Democracy as an institutional context increases citizens' perceptions of government corruption.

Democracy, economic well-being, and corruption perceptions

Individuals' attitudes and behaviors are believed to rest on primarily two perceptional bases: instrumental calculations and intrinsic values (Bratton, & Mattes, 2001; Citrin, 1974; Easton, 1975; Finkel, Muller, & Seligson, 1989; Lipset, & Schneider, 1987; Miller, 1974; Muller, & Jukam, 1977; Norris 1999; Rose, Mishler, & Munro, 2011).[29] While instrumental calculations relate to one's judgment about material benefits delivered by a regime, intrinsic values concern the fundamental values and norms for which a regime stands.

From an instrumental-rational perspective, citizens' perceptions of corruption can be influenced by their self-evaluation of economic situation. People will likely to believe that their government is less corrupt when their economic situation is good. This rationale is often used to explain why voters tend to condone corrupt politicians.[30] Konstantinidis and Xezonakis[31] found that Greeks somewhat accept the exchange between a certain level of corruption and economic benefits. Further, Zechmeister and Zizumbo-Colunga[32] show that "individuals facing bad (good) collective economic conditions apply a higher (lower) penalty to presidential approval for perceived corruption."

H2a: Perceptions of a better economic situation are associated with perceptions of a lower level of government corruption.

We further argue that the impact of economic perceptions on perceived corruption is not uniform across national borders. Rather, the relative magnitude of this effect depends on the regime's supply of democracy. Specifically, we argue that the regime's supply of democratic institutions significantly and positively moderates the negative impact of individuals' economic perceptions on perceived government corruption. That is, while a worse economic situation increases corruption perceptions, it does so more in autocracies than in democracies. This moderating effect occurs because the very design of democratic institutions renders economic success or failure attributable less to the regime itself and more to incumbent political leaders. Moreover, democratic regimes dampen political actors' dissatisfaction with the regime "by institutionalizing opportunities for leadership and policy change."[33] Therefore, in a functioning democracy, economic hardships are less likely to be connected with citizens' perceptions of corruption.

In a sharp contrast to the situation in democratic countries, economic responsibility in authoritarian countries is more closely associated with the regime itself. A key characteristic of authoritarian regimes is the natural fusion of the ruling elites with the regime. In most non-democratic countries, governments monopolize economic sources and abuse political power to intervene in market transactions. Citizens and businesspersons have no viable channels by which to influence political decision making, and the economic elites have no choice but to buy policies by bribing public officials or building patron-client networks with politicians. Accordingly, when considering

economic performance, citizens in non-democracies are less able to distinguish between the incumbents and the regime; thus, they readily attribute their economic well-being to the malignancy or benignancy of the regime.

Moreover, lacking institutional legitimacy, authoritarian regimes claim to rule "generally based upon . . . socioeconomic performance, or what has been called 'social eudaemonic' legitimation." This socioeconomic grounding is likely to be the single most important basis for political legitimacy.[34] Empirical studies in countries such as China, Singapore, and Vietnam have confirmed the centrality of economic circumstances in boosting an authoritarian regime's legitimacy, particularly after the collapse of the Communist ideology.[35] Thus, although authoritarian regimes may enjoy all the benefits accompanied by economic growth, they also are likely to take full responsibility for any economic downturns.

In summary, when evaluating a regime, people living in authoritarian regimes are more likely to connect economic perceptions with corruption perceptions than people living in democracies. Therefore, we propose the following hypothesis:

H2b: The negative effect of economic perceptions on corruption perceptions is smaller in magnitude in democracies as compared to autocracies.

Democracy, democratic values, and corruption perceptions

Theoretically, we then propose a positive correlation between individuals' democratic values and their perceptions of corruption—that is, a more democratically minded person is more likely to perceive government corruption. Democracy, as institutionally and

procedurally defined, is a series of arrangements to prevent the abuse of political power via monopolization by political leaders. Thus, people with high democratic values (democratic-minded citizens) tend to demand checks and balances on public power. Corruption can be defined as the "misuse of public power for private gain."[36] Hence, people with high democratic values, who expect political (public) power be strictly limited, are more likely to critically assess whether the regime setting sufficiently limits opportunities for corruption.[37]

H3a: A higher level of democratic values is associated with a higher level of perceived government corruption.

Moreover, we expect the impact of democratic aspirations to vary depending on the regime setting. Specifically, we argue that the positive impact of democratic aspirations on corruption perceptions is significantly and negatively moderated by a regime's supply of democratic institutions. That is, a democratically oriented person is less likely to view the government more corruptive in democracies than in autocracies. This is so because citizens in undemocratic countries often have every reason to attribute government corruption to the regime's undemocratic operation as a whole. For instance, in Indonesia, the rottenness of the Suharto regime was ascribed to its authoritarian nature: "Indonesia's political system…in practice is a democratic facade fronting highly personalized rule."[38] Another case is Daniel arap Moi,[39] the second President of Kenya from 1978 to 2002. Moi's regime was marred by corruption, which was believed to arise from Kenyan pseudo democratic institutions.[40]

Another key aspect of the impact of individuals' democratic values concerns the *quality* of democratic institutions, in which integrity is a salient dimension.[41] In regimes with basic democratic institutions, democracy can be strengthened by building democratic institutions. Individuals with strong democratic values will hence be more satisfied in more mature democracies than in low-quality democracies with flawed democratic institutions. Therefore, the erosive effect of democratic values on government legitimacy would be much weaker in a mature democracy than in a low-quality democracy. That is, the magnitude of the positive impact of democratic values on perceptions of corruption would be decreased by democratic institutions that serve as the regime context. Accordingly, we propose the following hypothesis:

H3b: The positive association between democratic values and corruption perceptions is weaker in democracies compared to autocracies.

Data and Variables

Data

To examine the relationship between democracy and individuals' perceptions of government corruption, we compile a dataset on developing countries from three cross-national surveys: *the Asian Barometer Survey (the second wave) (ABS hereafter)*,[42] *the Afro Barometer Survey (the fourth round) (FBS hereafter)*,[43] and *the Latino Barometer Survey (2008) (LBS hereafter)*.[44] Combining these three surveys allows us to cover three major developing regions and to test our hypotheses on a large scale. Citizens' (not elites') perceptions of government corruption have never been studied to such an

extensive degree. We are able to combine these three datasets because there are identical or similar variables in each dataset, including self-economic evaluations, political trust, media use, political engagement, democratic values, and perceptions of government corruption.

We select the recent datasets that were compiled in the same year or in adjacent years: the second wave of the ABS (2006–2008), the fourth round of the FBS (2008), and the LBS of 2008. Further, we select the survey questions of interest that have identical or highly similar wording and response scales. We then recode all the variables to ensure that their coding and directions are the same. The combined dataset includes 53,065 individuals and 50 countries, including 12 East Asian countries, 20 African countries, and 18 Latin American countries.

Perceptions of government corruption

Our dependent variable is *perceptions of government corruption*. This variable is measured with different instruments in three Barometer Surveys. Specifically, in the ABS, two questions measure respondents' perceptions of government corruption: "How widespread do you think corruption and bribe-taking are in your local/municipal government?" and "How widespread do you think corruption and bribe-taking are in your national government?" Answers to the question are coded on a 4-point scale from 1 to 4, with 1 being *"hardly anyone is involved"* and 4 being *"almost everyone is corrupt."* In the FBS, respondents' perceptions of corruption are tapped in an eight-item question: "How many of the following people do you think are involved in corruption, or haven't

you heard enough about them to say?" The answers are coded on a 4-point Likert scale (0-3), where 0 indicates *"none"* and 3 indicates *"all of them."* From the eight institutions assessed by this question, we chose "the President and Officials in his/her Office" and "Members of Parliament" to measure perceptions of corruption in national institutions and chose "Local Government Councilors" to measure perceptions of local government corruption. Perceptions of government corruption are measured with one general question in the LBS: "Imagine that the total number of public employees is 100 and that you would have to say how many of those you think are corrupt. How many would you say?" The answer is a continuous variable ranging from 0 to 100.

To generate a comparable variable of perceptions of corruption, for the respondents in all three samples, we recode the variables and create an index of government corruption. This index ranges from 0 for lowest corruption perceptions to 1 for highest corruption perceptions. More details regarding the wording and coding rules are presented in the Appendix.

Political democracy

To ensure that our analytical results are not driven by the choice of a particular measurement of democracy, we use two widely used datasets on democracy: "Democracy and Dictators" (DD) and Polity IV. DD is a dichotomous measurement of democracy updated from the "Political and Economic Database."[45] DD categorizes a polity as a democracy if the executive is elected via the legislature or if the legislature is directly elected, there is more than one party, and the executive power alternates. Polity IV is a continuous measurement of democracy with a 21-point (from -10 to 10) scale. It

quantifies five institutional aspects of democracy: competitiveness of participation, regulation of participation, competitiveness of executive recruitment, openness of executive recruitment, and constraints on the chief executive.[46]

Democratic values and self-economic evaluations

Our key independent variables at the individual level are *democratic values* and *self-economic evaluations*, which reflect individuals' perceptional bases of intrinsic values and instrumental calculations, respectively. With regard to democratic values, all three surveys assess the extent to which respondents agree with a set of statements that reflect their democratic orientation.. Specifically, in the ABS and the FBS, respondents are asked whether they reject one-man rule, one-party rule, or military rule.[47] In the LBS, two questions capture whether respondents reject one-man rule or one-party rule.[48] We average the responses to these questions and generate a composite index of democratic values ranging from 0 for lowest democratic orientation to 1 for highest democratic orientation. We fully acknowledge that this index does not comprehensively capture ones' democratic orientations. We are not able to obtain a more comprehensive measurement due to the lack of coherent questions asked in three Barometer surveys. But at the same time, we believe that our measurement suffices to gauge democratic values. In particular, the three questions asked in this index concern the procedural and institutional aspects of a political system. Such an index avoids the problem that directly questions about the norms of democracy might induce socially desired answers. Moreover, the measurements

of democracy (namely, DD and Polity IV) we use in this study mainly focuses on democratic institutions and procedures.

Self-economic evaluations are directly measured by responses to questions in all three surveys. Respondents are asked to describe their present economic situations. Responses are given on a 5-point scale and are recoded such that higher scores indicate better economic situations.

Control variables

At the individual level, we include necessary socio-demographic factors that are recorded in all three surveys: gender, age, and education level. We also include the frequency of *Internet use*[49] to control for its effects on citizens' corruption perceptions. In recent years, the Internet has come to play a pivotal role in political communication. From the Internet, people can acquire various types of negative news about the government, including scandals of political corruption. We also control for *interpersonal trust.*[50] Individuals who tend to trust others are more likely to trust public officials.[51] Therefore, we expect interpersonal trust to decrease citizens' perceptions of government corruption.

At an aggregate level, we add three other control variables: GDP per capita (logged) from the World Bank DataBank,[52] control of corruption from the WGI,[53] and economic retreat. According to Kurtz and Schrank,[54] perceptions of the public institutions are substantially influenced by recent economic performance. Specifically, in 2007 and 2008, the world economy encountered the worst financial crises triggered by the United States housing bubble. In Asia, Africa, and Latin America, a number of countries have

experienced major economic depressions. To control for the potential influence of economic retreat on mass perceptions of corruption, we generate a dummy variable that takes a value of 1 for years with a reduction in economic growth of 3% or more relative to the previous year and 0 otherwise. For the sake of brevity, a full discussion of our expectations regarding the effects of these variables is omitted. We take the values of all the aggregate-level variables in the same survey year of the three Barometer Surveys. Table 1 provides the descriptive statistics for all the relevant variables.

Table 1. Descriptive Statistics for the Relevant Variables (N=53065)

Variable	Mean	Standard deviation	Minimum	Maximum
Individual level				
Corruption perceptions[a]	0.50	0.29	0	1
Democratic values[a]	0.71	0.30	0	1
Economic evaluation	2.86	1.00	1	5
Gender[b]	0.49	0.50	0	1
Age	40.01	16.01	16	110
Educational level	1.49	0.79	0	3
Internet use [b]	0.28	0.45	0	1
Inter-personal trust [b]	0.34	0.47	0	1
Country level				
Democracy (Polity IV)	4.88	5.29	-7	10
Democracy (DD) [b]	0.62	0.48	0	1
GDP per capita (log)	7.39	1.38	5.11	10.62
Corruption control	-0.22	0.71	-1.36	2.22
Economic retreat [b]	0.30	0.46	0	1

Note: a. continuous variables; b. dichotomous variables.

Statistical Models and Findings

To test our hypotheses, we use a HLM. One of the key advantages of a multilevel model is that it enables not only a more accurate estimation of the additive effects of both the individual and contextual correlates but also the estimation of cross-level interactions

between contextual factors and individual factors. Table 2 presents the results of the regression using this method.

Table 2. Hierarchical Linear Models of Corruption Perceptions (with Polity IV)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Fixed effects						
Individual level						
Gender		-0.0041*	-0.0046**	-0.0044**	-0.0044**	-0.0038*
(male=1)		(0.0021)	(0.0021)	(0.0021)	(0.0021)	(0.0022)
Age		-0.00030***	-0.00035***	-0.00031***	-0.00031***	-0.00026***
		(0.000078)	(0.000076)	(0.000078)	(0.000078)	(0.000079)
Education		0.017***	0.017***	0.018***	0.018***	0.018***
		(0.0017)	(0.0017)	(0.0017)	(0.0017)	(0.0017)
Internet use		0.022***	0.023***	0.022***	0.023***	0.022***
		(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0029)
Inter-personal		-0.037***	-0.037***	-0.036***	-0.036***	-0.035***
Trust		(0.0024)	(0.0024)	(0.0024)	(0.0024)	(0.0025)
Democratic		0.036***		0.035***	0.036***	0.036***
Values		(0.0072)		(0.0072)	(0.0072)	(0.0072)
Economic			-0.016***	-0.018***	-0.018***	-0.018***
evaluation			(0.0016)	(0.0017)	(0.0017)	(0.0017)
Aggregate level						
Polity IV		0.011***	-0.00090	0.0055	0.010***	0.010***
		(0.0033)	(0.0034)	(0.0034)	(0.0022)	(0.0024)
Corruption					-0.15***	-0.11***
Control					(0.017)	(0.012)
GDP per capita					0.042***	
(log)					(0.011)	
Economic retreat						0.026
						(0.019)
Cross-level						
interaction						
Polity*democratic		-0.0094***		-0.0094***	-0.0094***	-0.0095***
Values		(0.00095)		(0.00095)	(0.00095)	(0.00096)
Polity*Economic			0.0016***	0.0016***	0.0016***	0.0017***
evaluation			(0.00023)	(0.00024)	(0.00024)	(0.00024)
Continent dummies	No	Yes	Yes	Yes	Yes	Yes
constant	0.51***	0.61***	0.70***	0.67***	0.25***	0.58***
	(.022)	(0.035)	(0.035)	(0.035)	(0.094)	(0.026)
Random effects						
constant	026***	0.009***	0.009***	0.009***	0.003***	0.003***
	(.005)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)

Note: Standard errors are presented in parentheses. N of countries = 49. N of individuals = 52408. Significance: *.1; **.05; ***.01.

We first gauge the intra-class correlation (ICC) of perceptions of corruption in a null model (Model 1). The equation is:

$$\mathrm{ICC} = \frac{\tau_{00}}{\tau_{00} + \sigma^2} = \frac{0.026}{0.026 + 0.061} \approx 0.300$$

where τ_{00} is the country-level variance, and σ^2 is the residual. The ICC score shows that 30% of the variation in perceptions of corruption resides between countries. This result indicates that we must consider country-level determinants when estimating individual corruption perceptions.

In the other five models of Table 2 (Models 2–6), we use Polity IV as the measurement of democracy and examine its relationship with perceptions of corruption. In Model 2, we include all variables at the individual level, including democratic values and economic perceptions, but we only include democracy at the aggregate level because of the limited number of units at the country level. In addition, to estimate the conditional effect of democracy, we first include an interaction term between democracy and democratic values in this model. The results of the HLM regression show that when we control for demographic variables (*gender*, *age*, and *education level*), *Internet use*, and *inter-personal trust*, democratic values has a significantly positive effect on individual corruption perceptions. Further, the coefficient of the cross-level interaction of *Polity IV* and *democratic values* is negative and significant. This result indicates that democracy decreases the positive effect of democratic values on perceived government corruption. Substantively, this result suggests that an individual with a certain level of democratic orientation is less likely to perceive a government to be corrupt in a country with a higher level of democracy than in other countries.

In Model 3, we use the same strategy to include the interaction between individual *self-economic evaluations* and *democracy.* The results also confirm our expectations. *Economic evaluations* have a significant negative effect on individual corruption

perceptions. The coefficient of the cross-level interaction of *Polity IV* and *economic evaluations* is positive and statistically significant. This result indicates that democracy mitigates the negative effect of economic evaluations on perceived corruption. Substantively, this result suggests that a higher level of democracy in a country renders its citizens less likely to judge the government based on their own economic situation.

We include both interaction terms simultaneously in Model 4 and further include a full set of aggregate variables in Model 5 and Model 6. Being aware of the high correlation between GDP per capita and economic retreat, we control for these two variables separately to avoid a multicollinearity problem. As expected, the direction and significance of the effects of key individual variables and the cross-level interactions are consistent with the results of the previous models. Even when we control for the effect of *GDP per capita (logged)*, *corruption control*, and *economic retreat* at the country level, we still find that democracy is positively associated with corruption perceptions.

To provide a more graphic interpretation, we plot the marginal effect of democratic values (Figure 1) and the effect of self-economic evaluations (Figure 2), based on Model 4. Regarding democratic values, we first find that its effect on corruption perceptions is statistically significant and positive at lower levels of democracy. This result indicates that people with higher democratic values are more critical of the ruling regime when the regime lacks a supply of democratic institutions. Moreover, as the levels of democracy increase, the critical effect of democratic values decreases. In particular, when the level of democracy reaches a very high level, people with higher democratic values have more

faith in the integrity of the government and its officials. That is, in a full democracy, a democratically oriented citizen places considerable trust in the government.

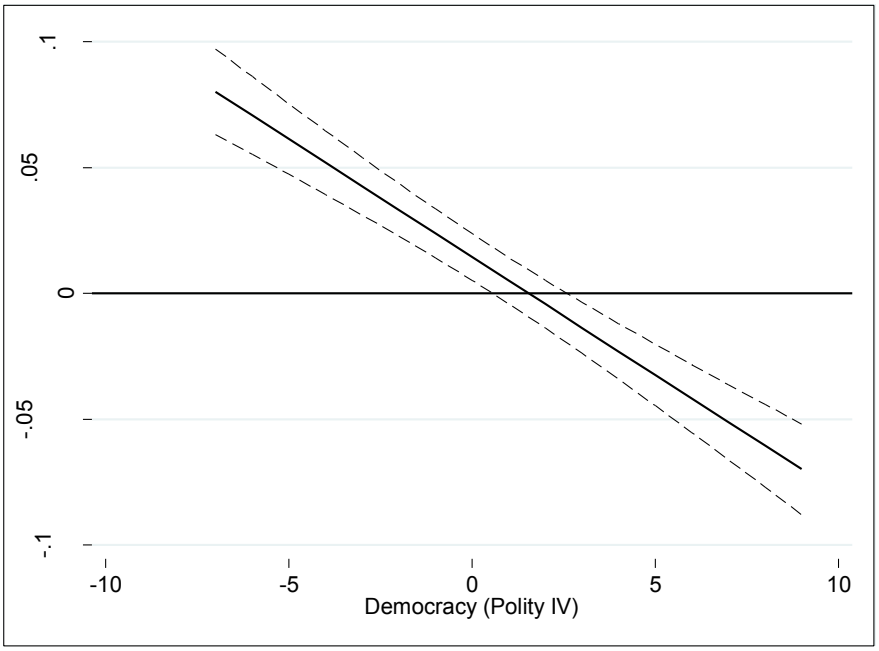

Figure 1. ***Effect of democratic values on perceptions of corruption as moderated by democracy.***

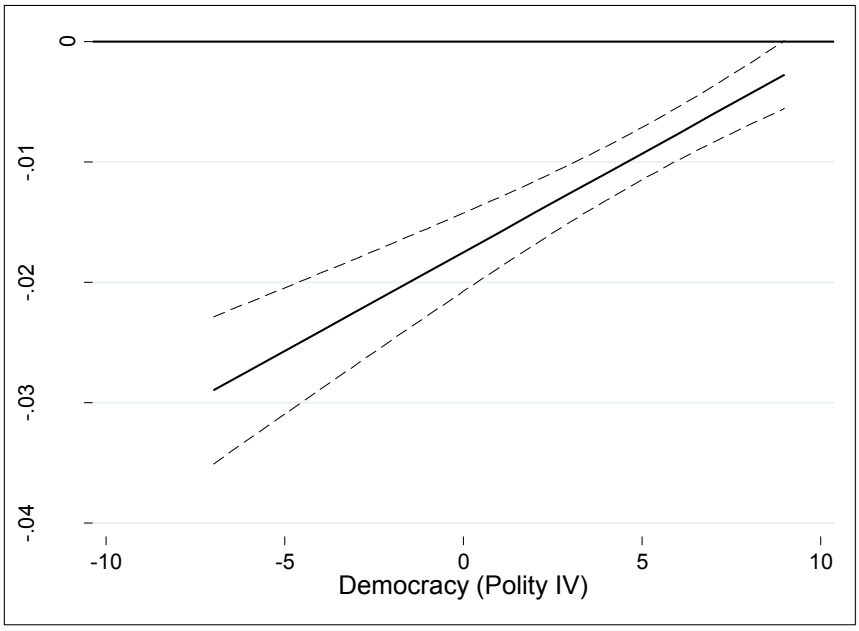

Figure 2. ***Effect of self-economic evaluations on perceptions of corruption as moderated by democracy.***

Self-economic evaluations have a statistically significant and negative effect on perceived government corruption in less democratic countries (Figure 2). This result indicates that individuals who had been economically advantaged under an authoritarian regime are less likely to perceive the government to be corrupt and are more likely to hold favorable attitudes toward the regime. This result demonstrates the strong instrumental logic of political support in countries that lack an institutional supply of democracy. The effect of economic evaluations decreases in magnitude, however, with a higher level of democracy and becomes statistically insignificant in countries with the highest level of democracy. That is, people in democratic countries are less likely to judge a regime based on their instrumental rationality.

To further show the robustness of our findings from the models presented in Table 2, we use DD as an alternative measurement of democracy and conduct the same set of hierarchical linear regressions. The results presented in Table 3 (Models 7–11) are fully consistent with those from the models presented in Table 2. Hence, all of our hypotheses are confirmed by the second set of regression models.

Table 3. Hierarchical Linear Models of Corruption Perceptions (with DD)

	Model 7	Model 8	Model 9	Mode 10	Mode 11
Fixed effects					
Individual level					
Gender	-0.0041*	-0.0047**	-0.0044**	-0.0044**	-0.0038*
(male=1)	(0.0021)	(0.0021)	(0.0021)	(0.0021)	(0.0022)
Age	-0.00031***	-0.00035***	-0.00032***	-0.00033***	-0.00028***
	(0.000077)	(0.000076)	(0.000077)	(0.000077)	(0.000078)
Education	0.017***	0.016***	0.017***	0.017***	0.018***
	(0.0017)	(0.0017)	(0.0017)	(0.0017)	(0.0017)
Internet use	0.022***	0.023***	0.022***	0.022***	0.022***
	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0029)
Inter-personal	-0.036***	-0.037***	-0.036***	-0.036***	-0.035***
trust	(0.0024)	(0.0024)	(0.0024)	(0.0024)	(0.0024)
Economic		-0.015***	-0.016***	-0.016***	-0.016***
evaluation		(0.0017)	(0.0017)	(0.0017)	(0.0017)
Democratic	0.028***		0.026***	0.026***	0.026***
values	(0.0078)		(0.0078)	(0.0078)	(0.0079)
Aggregate level					
DD	0.24***	0.16***	0.21***	0.15***	0.19***
	(0.040)	(0.041)	(0.041)	(0.026)	(0.035)
GDP per capita				0.076***	
(log)				(0.011)	
Corruption				-0.19***	-0.089***
control				(0.020)	(0.021)
Economic retreat					0.050
					(0.036)
Cross-level					
interaction					
DD*democratic	-0.069***		-0.067***	-0.067***	-0.067***
values	(0.0088)		(0.0088)	(0.0088)	(0.0089)
DD*economic		0.012***	0.011***	0.011***	0.012***
evaluation		(0.0022)	(0.0022)	(0.0022)	(0.0023)
Continent	Yes	Yes	Yes	Yes	Yes
dummies					
constant	0.35***	0.42***	0.39***	-0.16**	0.37***
	(0.034)	(0.035)	(0.035)	(0.079)	(0.030)
Random Effects					
constant	0.017***	0.017***	0.017***	0.006***	0.012***
	(0.003)	(0.003)	(0.003)	(0.001)	(0.002)

Note: Standard errors are presented in parentheses. N of countries = 50; N of individuals = 53065. Significance: *.1; **.05; ***.01.

Finally, considering the distinction between ordinary citizen's perceptions of corruption and the corruption *per se*, we run additional regressions to gauge the democracy's effect on real corruption level and corruption perceptions. We use CPI to measure the corruption reality (as perceived by experts) and the country-mean of perceptions of government corruption for aggregate-level corruption perceptions (of ordinary citizens). Table 4 presents the results. It shows that democracy has no direct effect on actual level of corruption since neither Polity IV nor DD is significantly associated with CPI at $p = 0.05$. When measured as DD, democracy increases real corruption level at $p = 0.10$. Democracy, however, as also indicated in analysis of Table 2 and Table 3, is positively associated with corruption perceptions. That is, with a higher level of democracy, citizens on average perceive the government to be more corruptive. In short, both sets of analyses indicate the harmful effect of democracy on corruption in both reality and perceptions.

Table 4. The Effect of Democracy on CPI, and country-averaged corruption perceptions

	Corruption reality		Corruption perceptions	
	Model1	Model2	Model3	Model4
Polity IV	-0.010		0.015***	
	(0.042)		(0.0020)	
DD		-0.56*		0.13***
		(0.33)		(0.024)
GDP per capita	0.82***	0.90***	0.095***	0.087***
(log)	(0.17)	(0.14)	(0.011)	(0.012)
Economic retreat	-0.76*	-0.81**	0.0026	0.0040
	(0.39)	(0.37)	(0.028)	(0.027)
Corruption			-0.23***	-0.20***
Control			(0.022)	(0.022)
constant	-2.10**	-2.36**	-0.32***	-0.26***
	(1.03)	(0.92)	(0.080)	(0.083)
R2	0.51	0.58	0.78	0.77
N	49	50	49	50

Note: Dependent variable in Model1 and Model2 is the Corruption Perception Index from Transparent International. Dependent variable in Model3 and Model4 is the country means of citizens' perceptions of government corruption from our dataset. All are OLS models with robust standard errors in parentheses; Significance:* p<.10, ** p<.05, *** p<.01.

Conclusions and Implications

Although existing studies suggest that democracy drives trust in government, this article depicts dual effects of democracy on perceptions of government corruption. Treating the institutional supply of democracy both as a direct determinant and as the contextual condition of citizens' perceptions of government corruption, we find that democracy plays a dual role in affecting ordinary citizens' perceptions of corruption, as indicated in our analysis of cross-national surveys from East Asia, Africa, and Latin America. First, our study identifies a significant relationship between macro institutional democracy and micro individual perceptions of government corruption. In Asia (mainly Eastern and Southeastern Asia), Africa, and Latin America, democracy itself is associated with higher levels of perceptions of government corruption. Second, when we turn to our primary interest in the conditional effects of rationality, including both instrumental calculations and intrinsic values, on corruption perceptions, we find the opposite effect. The effect of democracy, as institutionally defined, is found to be generally benevolent. With an increasing supply of democratic institutions, the relationship between democratic values and perceptions of government corruption is weakened among ordinary citizens. Moreover, the magnitude of the negative impact of individuals' economic distress on perceptions of government integrity corruption decreases. This result indicates that compared with citizens in authoritarian regimes, citizens in democratic systems are less likely to attribute the improvement of their personal economic situations to government performance.

Today, in Asia, Africa, and Latin American, most recently democratized democracies have experienced extraordinary trials. With scholarly support for the strong resilience of "user-friendly" authoritarians, the race between democracies and authoritarian regimes is intensifying. Further, the advantage of democracy in maintaining public support is being questioned. However, our study indicates that democracy still has the advantage of mitigating citizens' grievances about government stemming from both instrumental calculations and intrinsic values. The dual nature of democracy in terms of influencing individuals' perceptions of corruption implies that we should use caution when drawing conclusions about the institutional outcomes of democracy.

Notes

[1] Bäck and Hadenius, "Democracy and State Capacity"; Charron and Lapuente, "Does Democracy Produce Quality of Government?"; Montinola and Jackman, "Sources of Corruption"; Rose-Ackerman, *Corruption and Government*; Rose-Ackerman, "Political Corruption and Democratic Structures"; Rock, "Corruption and Democracy"; Sun and Johnston, "Does Democracy Check Corruption?"; Treisman, "The Causes of Corruption"; Treisman, "What Have We Learned About the Causes of Corruption From Ten Years of Cross-National Empirical Research?"

[2] Corruption Perception Index. For the measurement details, see: http://cpi.transparency.org/cpi2013/in_detail/.

[3] World Governance Indicators. For the measurement details, see: http://info.worldbank.org/governance/wgi/index.aspx#home.

[4] Svensson, "Eight Questions about Corruption"; Wedeman "China's War on Corruption."

[5] Kurtz and Schrank, "Growth and Governance"; Montinola and Jackman, "Sources of Corruption."

[6] D. Treisman, 2007, 215.

[7] Chang and Chu, "Corruption and Trust." Pharr and Putnam, *Disaffected Democracies*; Seligson, "The Impact of Corruption on Regime Legitimacy"; Canache and Allison, "Perceptions of Political Corruption in Latin American Democracies."

[8] Rothstein and Uslaner, "All for All."

[9] Warren, "What Does Corruption Mean in a Democracy?"

[10] Davis et al., "The Influence of Party Systems on Citizens' Perceptions of Corruption and Electoral Response in Latin America."

[11] Maria, "Measurements and Markets."

[12] Anderson and Singer, "The Sensitive Left and the Impervious Right"; Gingrich and Ansell, "Preferences in Context"; Kedar, "How Diffusion of Power in Parliaments Affects Voter Choice."

[13] Anderson and Singer, *ibid*., 568.

[14] Bäck and Hadenius, *ibid.*; Charron and Lapuente, *ibid.*; Montinola and Jackman *ibid.*; Rock, *ibid.*; Tresiman, 2000,

2007, *ibid.*

[15] P. Heywood, "Political Corruption."

[16] Rose-Akerman, 2001, *ibid.*

[17] Johnston, *Syndromes of Corruption*.

[18] Fisman and Gatti, "Decentralization and Corruption."

[19] Ades and Di Tella, "Rents, Competition and Corruption."

[20] Sun and Johnston, "Does Democracy Check Corruption?"

[21] Mohtadi and Roe, "Democracy, Rent Seeking, Public Spending and Growth."

[22] Keefer, "Clientelism, Credibility, and the Policy Choices of Young Democracies."

[23] Keefer, *ibid.*

[24] Ansolabehere and Iyengar, *Going Negative*.

[25] Weyland, "The Politics of Corruption in Latin American."

[26] Sharafutdinova, "What Explains Corruption Perceptions?"

[27] Yu et al., "Corruption Perception in Taiwan."

[28] Zhu et al., "When Grapevine News Meets Mass Media."

[29] Bratton and Mattes, "Support for Democracy in Africa"; Citrin, "Comment: the Political Relevance of Trust in Government"; Easton, "A Re-Assessment of the Concept of Political Support"; Finkel et al., "Economic Crisis, Incumbent Performance and Regime Support"; Lipset and Schneider, *The Confidence Gap*; Miller, "Political Issues and Trust in Government"; Muller and Jukam, "On the Meaning of Political Support"; Norris, "Introduction: the Growth of Critical Citizens?"; Rose et al., *Popular Support for an Undemocratic Regime*.

[30] Winters and Weitz-Shapiro, "Lacking Information or Condoning Corruption?"

[31] Konstantinidis and Georgios, "Sources of Tolerance towards Corrupted Politicians in Greece."

[32] Zechmeister and Zizumbo-Colunga, "The Varying Political Toll of Concerns about Corruption in Good Versus Bad Economic Times."

[33] Remmer, "The Sustainability of Political Democracy."

[34] Duch, "Economic Chaos and the Fragility of Democratic Transition in Former Communist Regimes"; Remmer, *ibid*.; White, "Economic Performance and Communist Legitimacy."

[35] Chen, *Popular Political Support in Urban China.*; Wang, "Before the Emergence of Critical Citizens."

[36] Rose-Ackerman, 1999, ibid., 91

[37] Philp, "Defining Political Corruption."

[38] Robertson-Snape, "Corruption, Collusion, and Nepotism in Indonesia."

[39] Moi was involved in the Goldenberg scandal and was found to have taken a bribe from a Pakistani businessman to award a monopoly on duty-free shops at the country's international airports.

[40] Brown, "Authoritarian Leaders and Multiparty Elections in Africa."

[41] Diamond and Morlino, *Assessing the Quality of Democracy;* Levine and Molina, *The Quality of Democracy in Latin America*; Morlino, "Legitimacy and the Quality of Democracy."

[42] Data can be accessed at http://www.asianbarometer.org/.

[43] Data can be accessed at http://www.afrobarometer-online-analysis.com/aj/AJBrowserAB.jsp.

[44] Data can be accessed at http://www.latinobarometro.org/.

[45] Przeworski et al., *Democracy and Development*.

[46] Detailed information is available at http://www.systemicpeace.org/polity/polity4.htm.

[47] In the ABS, the questions are as follows: "We should get rid of parliament and elections and have a strong leader decide things." "Only one political party is allowed to stand for election and hold office." "The army (military) should come in to govern the country." Answers are given on a 4-point ordinal scale: *strongly approve*, *approve*, *disapprove*,

and *strongly disapprove.* In the FBS, the questions are as follows: "There are many ways to govern a country. Would you disapprove or approve of the following alternatives: Only one political party is allowed to stand for election and hold office?" "The army comes in to govern the country?" "Elections and Parliament/National Assembly are abolished so that the President/Prime Minister can decide everything?" Answers are given on a 5-point ordinal scale: *strongly approve*, *approve*, *neither approve nor disapprove*, *disapprove*, and *strongly disapprove.*

[48] The questions are as follows: "Some people say that without a National Congress, there can be no democracy, while others say that democracy can work without a National Congress. Which is closer to your view?" Answers are dichotomous: *Without a National Congress, there can be no democracy* versus *Democracy can work without a National Congress*. "Some people say that without political parties there can be no democracy, while others say that democracy can work without parties. Which is closer to your view?" Answers are also dichotomous: *Without political parties, there can be no democracy* versus *Democracy can work without parties*.

[49] In the ABS, the question is as follows: "How often do you use the Internet?" Answers are given on a 6-point ordinal scale: *almost daily*, *at least once a week*, *at least once a month*, *several times a year*, *hardly ever*, and *never*. In the FBS, the question is as follows: "How often do you use the Internet?" Answers are given on a 5-point ordinal scale: *never*, *less than once a month*, *a few times a month*, *a few times a week*, and *every day*. In the LBS, the question is as follows: "Have you ever used email or connected to the Internet?" Answers are given on a 4-point ordinal scale: *every day*, *occasionally*, *rarely*, and *never*.

[50] In the ABS, the question is as follows: "Generally speaking, would you say that 'Most people can be trusted' or that 'You must be very careful in dealing with people'?" Answers are dichotomous: *most people can be trusted* versus *you must be very careful in dealing with people*. In the FBS, the question is as follows: "How much do you trust each of the following types of people: Other?" Answers are given on a 4-point ordinal scale: *not at all*, *just a little*, *I trust them somewhat*, and *I trust them a lot*. In the FBS, the question is as follows: "Generally speaking, would you say that you can trust most people or that you can never be too careful when dealing with others?" Answers are dichotomous: *one can trust most people* versus *one can never be too careful when dealing with others*.

[51] Canache and Allison 2005, *ibid*.; Zhu, Lu and Shi 2012, *ibid*.

[52] Data can be accessed at http://www.worldbank.org/.

[53] Data can be accessed at http://info.worldbank.org/governance/wgi/.

[54] Kurtz and Schrank 2007, *ibid*.