# Corruption, Political Allegiances, and Attitudes Toward Government in Contemporary Democracies

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*Using surveys conducted in sixteen mature and newly established democracies around the globe, this study examines the effect of corruption on people's attitudes toward government. The analysis demonstrates that citizens in countries with higher levels of corruption express more negative evaluations of the performance of the political system and exhibit lower levels of trust in civil servants. However, the results also show that the negative effect of corruption on evaluations of the political system is significantly attenuated among supporters of the incumbent political authorities. These findings provide strong and systematic evidence that informal political practices, especially those that compromise important democratic principles, should be considered important indicators of political system performance. Moreover, they imply that, while corruption is a powerful determinant of political support across widely varying political, cultural, and economic contexts, it does not uniformly diminish support for political institutions across all segments of the electorate.*

The principles underlying democratic political systems presume that governments are accountable to their citizens, that they administer laws equitably and fairly, that their actions are transparent, and that all citizens have access to the political process. As a result, political scientists have long assumed that political systems that fail to live up to these promises are likely be plagued with low levels of legitimacy. This study investigates one feature of modern democracy—corruption—that systematically undermines democratic principles and, as a result, diminishes people's faith in the political process. We argue that corruption is an important indicator of the performance of a political system and show that high levels of corruption reduce citizen support for democratic political institutions across mature and newly established democracies around the globe. Moreover, we hypothesize and show empirically that the negative effect of corruption on people's beliefs about government is filtered through voters' political allegiance. Building on the insight that those who voted for the incumbent government are more likely to evaluate the performance of political institutions positively, we find that corruption has less of a corroding effect on people's evaluations of the political system's performance among supporters of the government than among those who oppose it.

This article seeks to make several contributions. First, it aims to enhance our knowledge of the distortion effects produced by corruption. Even though corruption is widely assumed to have negative consequences for a country's social, economic, and political life, political scientists have not systematically examined how it affects people's views of the political system and institutions of government. Instead, political researchers have focused mainly

on the effects of corruption on democratic principles such as accountability, equality, and fairness. We go beyond these earlier studies by establishing a connection between corruption and mass perceptions of how well the political system works and whether public officials can be trusted across widely different contemporary democracies. Second, our research breaks new ground in the study of political legitimacy by focusing on corruption, an indicator of political performance and an explanatory variable not usually examined in studies of political support. Thus, we seek to develop a more complete understanding of the legitimacy of political systems by examining whether and how corruption affects attitudes about government. Third, our research examines the contingent nature of the relationships among corruption, political allegiances, and political support. In particular, we seek to determine whether individual-level factors, such as having allegiance to those in power, can serve to neutralize the negative impact of corruption on people's views of the political system. If they do, inferior performance may not necessarily be recognized by all citizens, and we may not see a decrease in the level of public support for political authority as a result among important segments of the electorate.

The next section describes some of the gaps in what we know about the relationship between corruption and mass support for the political system. Subsequently, we discuss the hypothesized effect of political allegiance on attitudes about government, as well as our contention of why the effect of corruption on political support may hinge, in part, on membership in the political majority and minority. We then turn to issues of measurement and data analysis. After presenting the results, we discuss the importance of the findings for the study of political support in democracies and spell out avenues for further research.

## Corruption and Attitudes Toward Government

Political trust or system support is an important indicator of a healthy civic and democratic political culture. Scholars commonly assume that disenchanted citizens are more likely to push for radical changes in the system, and that distrust of government may be detrimental to the establishment and survival of democratic life in the long run. It also is widely acknowledged that system outputs—also commonly referred to as system performance—are key to understanding why public support for the political system fluctuates (Easton 1965). Curiously, economic performance has been the most widely studied facet of

system performance that shapes the reputation of political institutions. In contrast, the question of how political performance affects system support has received much more limited attention by social scientists.[1] The few studies that do exist are important, however, because they show that political performance and the functioning of formal political institutions matters for how people view the functioning of the political system. Below, we seek to add to our understanding of the effects of political performance on political support by investigating whether and how informal institutions and practices in the form of corruption influence people's attitudes toward the existing political order.

Examining the effects of corruption, which we define as "the misuse of public office for private gain" (Sandholtz and Koetzle 2000, 32), means investigating a phenomenon whose existence is more difficult to conceptualize and measure than that of economic performance or formal political institutions, and whose consequences are not always obvious. A voluminous literature has documented the negative effects of corruption on a nation's social and economic life (for reviews, see Montinola and Jackman 2002; Rose-Ackerman 1999). More importantly for the purposes of this study, however, corruption also has been found to fundamentally undermine the principles of democratic accountability, equality, and openness (Dahl 1971).[2] When corruption is present, democracy's tenets of procedural and distributive fairness become a myth; this, in turn, is likely to diminish the legitimacy

[1] Few comparative studies have examined how formal political institutions and their outputs affect support for the political system. Among them, Miller and Listhaug (1990, 1999), for example, have found that opportunities to express discontent and positive perceptions of procedural and outcome fairness are related to positive attitudes about government (see also Hofferbert and Klingemann 1999). Similarly, studies have shown that more proportional electoral systems are associated with higher levels of regime support (Anderson 1998). Aside from institutional elements such as opportunities for dissent, it appears that government stability matters for how people view the political system. Specifically, people in systems with more durable governments are more supportive of the existing political arrangements (Harmel and Robertson 1986). Finally, studies of system support in new democracies have pointed to the importance of political performance as determinants of support for democratic institutions more generally (Evans and Whitefield 1995; Mishler and Rose 1997, 2001a), and that the institutional quality of domestic institutions can affect support for supranational institutions (Rohrschneider 2002).

[2] For example, corruption undermines democratic rule when public goods are available only for those who have either connections or money (or both) (Treisman 2000). And although corruption does not necessarily prevent a government from accomplishing society's ends, it will do so inefficiently. As a result, corruption violates important principles of modern bureaucracy, including the idea that public agencies should operate in an impartial and rule-based fashion (Sandholtz and Koetzle 2000).

of democratic political institutions (Gibson and Caldeira 1995; Tyler 1990).

The idea that corruption has a negative impact on people's views of their government is open to both theoretical and empirical challenge, however. On a theoretical level, some would argue that a country's political culture, which shapes people's perception of corruption, can diminish or eliminate the relationship we hypothesize here. Culture provides a lens for how people view the world, motives for human behavior, criteria for evaluating actions, and, more generally, orientations to action, all of which are learned during cultural socialization (Eckstein 1988). If a country's cultural context predisposes people to view corruption as acceptable practice and therefore relatively benign, measures of corruption may not coincide with how people in different cultural settings respond to corrupt political practices (cf. Nye 1967). Under these conditions, higher levels of corruption should not be associated with more negative attitudes toward government. This view also is consistent with a strand of research labeled "the functional theory" after Merton's (1968) seminal discussion of the latent functions of political machines, which highlights the positive aspects associated with the buying and selling of political favors (Leff 1964; Huntington 1968; see also Montinola and Jackman 2002). Viewed from this perspective, corruption may increase the efficiency of government because public servants may become more helpful and effective if paid directly. Thus, bribes may help overcome bureaucratic obstacles and "add to a nation's economic efficiency" (Goldsmith 1999, 869).

Empirically, the hypothesis that there is a relationship between corruption and attitudes toward government is also open to challenge, given the limited evidence the nascent literature on the topic has produced. Simply put, to date researchers have paid little systematic attention to the effects corruption might have on the attitudes of ordinary people toward political institutions in their country. This is surprising, given that scholars have pointed to attitudes about government responsiveness (external efficacy) and procedural fairness as important indicators of support for the political system (Iyengar 1980; Miller and Listhaug 1999). And while there are a few case studies that discuss the relationship between corruption and system legitimacy (e.g., della Porta 2000; Pharr 2000), few scholars have examined the relationship systematically from a cross-national perspective.

Among the few studies that systematically examine the impact of corruption on system support, Rose, Mishler, and Haerpfer's (1998) cross-national study of nine Central and East European countries found that higher levels of corruption were associated with lower levels of support for the regime and a decreased likelihood that people would reject undemocratic alternatives. Similarly, Mishler and Rose's (2001a) study of political trust across 10 East-Central European states found that higher levels of corruption were related to lower levels of political trust. However, both studies also reported that, once alternative explanations of system support were taken into account, the effect of corruption as a predictor of system support was substantially attenuated or reduced to insignificance (Rose, Mishler, and Haerpfer 1998, 189–94; Mishler and Rose 2001a). An individual-level study of Bolivia, Nicaragua, Paraguay, and El Salvador showed that people's experiences with corruption are negatively correlated with diffuse regime support (Seligson 2002). Given the potential for endogeneity among the primary variables of interest (trust and reports of corruption) inherent in the study's cross-sectional individual-level research design and the select, small number of countries examined, these results are suggestive of a correlation among the relevant individual-level constructs but far from generalizable across a wider range of contemporary democracies.

At this time, the empirical record thus is insufficient and open to crucial challenges when it comes to determining conclusively whether there is a relationship between corruption and system support at the individual level once alternative explanations of system support are accounted for. For one, when present, the effects of corruption on system support have not been found to be overwhelmingly strong. Moreover, because the sample of countries considered in these studies has been limited to new democracies in Eastern Europe or Latin America—that is, countries that score relatively high on corruption and related factors, such as level of development—it is uncertain whether corruption is correlated with political support in countries representing varying levels of wealth and different political cultures.

Moreover, it is yet to be determined whether citizens associate corruption with the political system generally or specific political actors, such as government bureaucrats. Below, we therefore compare the effect of corruption on one general attitude toward government—evaluations of the performance of the political system generally—and one specific attitude particularly relevant to the question of corruption—trust in civil servants. At the outset, it is not obvious whether both attitudes should be affected, or whether they should be affected similarly by the presence of corruption. Given that much of everyday corruption is perpetrated by government bureaucrats, while the political system is a more abstract and distant object of consideration, attitudes toward civil servants are the more proximate measure in the context of this study. Following this logic, we would expect stronger effects of

corruption on trust in civil servants than on evaluations of system performance. At the same time, it is plausible that people will be more willing to identify corruption as a systemic problem than to lay the blame for corruption on the doorstep of specific actors they have encountered. After all, it is possible that citizens themselves either are civil servants or know someone who is and, therefore, may be more willing to blame an anonymous set of institutions than specific individuals they know. Moreover, because the political process involves multiple governmental agents, citizens may have more evidence available about the system and how well it functions than about specific actors (Weatherford 1987). Whether corruption is viewed as a systemic phenomenon, as resulting from the actions of a specific group of political actors, or both, is therefore a question we seek to answer below.

## The Contingent Effects of Corruption on Political Support: The Role of Political Allegiances

We also posit that the effects of corruption on attitudes toward government are strengthened or weakened, depending on whether people have a stake in the existing political regime and the maintenance of the status quo. This expectation emerges from a growing number of studies, which show that citizens who identify with or voted for a governing party are predisposed to evaluate the government's performance positively and to be more supportive of the political system (Anderson and Guillory 1997; Anderson and LoTempio 2002; Ginsberg and Weissberg 1978; Nadeau and Blais 1993; Norris 1999).[3] We test two key hypotheses associated with this literature. First, we hypothesize that individuals who belong to the political majority are more likely to exhibit positive attitudes toward government than those in the minority. Second, and more important, we argue that people's political allegiances motivate them to connect corruption with their views of the political system in different ways. Specifically, we posit that political majority and minority status acts as a screen for how people view government corruption and the extent to which they use corruption to judge the performance of the political system. Those who elected the current government are likely to view cor-

ruption less negatively than those in the minority. If this is the case, the effect of corruption on attitudes toward government should be smaller for the political majority than the political minority.

Our expectations regarding this interaction are based on research showing that people are prone to view the political world in ways that are consistent with their political predispositions (Zaller 1992). Public opinion scholars theorize that individuals use heuristics to filter, and to simplify analysis of, the information they choose to receive (Sniderman, Brody, and Tetlock 1991; Zaller 1992). We argue that, in the context of analyzing corruption and support for the political system, the relevant heuristic is likely to be support for the incumbent political authorities. Empirically, this expectation is, generally speaking, compatible with the notion that individuals with particular views interpret new information so that it reinforces previously held attitudes, thereby augmenting rather than tempering the differences between their beliefs and those of individuals with opposing predispositions (Zaller 1992). It is also consistent with the finding that people exaggerate the performance of the macroeconomy in line with their partisan leanings, for example (Duch, Palmer, and Anderson 2000). Finally, it is consistent with Mishler and Rose's conjecture that the effects of corruption are likely to be mediated by micro-level attitudes (Mishler and Rose 2001a, 50).

Aside from the psychological mechanisms that may condition people's views of corruption, there also may be direct pay-offs associated with corruption that are more likely to accrue to one part of the population than another. In particular, we hypothesize that government supporters are more likely to be the beneficiaries of the goods distributed by corrupt public officials in the form of attention by officials, favorable treatment in the awarding of government contracts, or patronage jobs, for example (Fiorina and Noll 1978; Golden n.d.; Warner 1997). As a result, those with an allegiance to the incumbent government also are likely to take a more benign view of corruption because it benefits them personally.

In sum, we argue that those who elected the incumbent government are less likely to seek out information about corruption and less likely to interpret such information negatively. Moreover, we posit that, when corruption occurs, it is more likely to benefit supporters of the government than supporters of the opposition. As a result, corruption should produce less of a negative impact on political support among those who elected the incumbent government (the majority) than among those who supported the opposition (the minority).

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[3]The so-called "winner effect" or "home-team effect" has been documented with regard to a number of different political attitudes such as feelings of government responsiveness, satisfaction with democracy, as well as people's willingness to engage in political activism (cf. Anderson and Tverdova 2001; Clarke and Acock 1989; Ginsberg and Weissberg 1978; Whiteley and Seyd 1998).

# Data and Measures

Our individual-level data come from surveys collected as part of the *International Social Survey Program* (ISSP) in 1996 as part of a study called *Role of Government III*. Countries that provided the most important survey items and that had a sufficient number of cases for multivariate analysis included Australia, Canada, the Czech Republic, Germany, Great Britain, Hungary, Ireland, Italy, Japan, Latvia, New Zealand, Norway, Russia, Slovenia, Sweden, and the United States. Thus, we were able to employ surveys from a diverse set of countries with widely varying political cultures, structures, and histories.

## Dependent Variables

Our dependent variable indicators tap into different dimensions of support for the political regime, with one geared toward general evaluations of the system's performance and the other asking respondents to evaluate particular institutional actors—civil servants.[4] To measure performance evaluations, respondents were asked: "All in all, how well or badly do you think the system of democracy in (country) works these days?" The answer categories were: "It works well and needs no changes; it works well, but needs some changes; it does not work well and needs a lot of changes; it does not work well and needs to be completely changed." These answer categories ranged from 1 to 4, with 4 denoting the most positive and 1 the most negative evaluation.

This measure does not capture citizen attitudes toward democracy as an ideal; instead, it focuses on people's responses to the actual process of democratic governance and their attitudes toward a country's "constitutional reality" (Fuchs, Guidorossi, and Svensson 1995, 328). Using Easton's categories, this indicator has been identified as a measure of support for the performance of the political regime (cf. Klingemann 1999; Norris 1999). Because it allows us to connect corruption, which we argue to be an indicator of system performance, with an evaluation of the performance of the system in the eyes of its citizens, this measure is particularly useful for our purposes.

[4]Using a single item indicator, as opposed to a multi-item construct, may compromise the reliability of our dependent variables. Note, however, that adding more items to an indicator has no direct effect on its validity (Guilford 1954; Kerlinger and Lee 2000). Moreover, an unreliable dependent variable does not bias regression estimates, but it makes it harder to achieve statistical significance (King, Keohane, and Verba 1994).

To gauge whether people had trust in civil servants, they were presented with the following statement: "Most civil servants can be trusted to do what is best for the country." Respondents could answer "strongly agree," "agree," "neither agree nor disagree," "disagree," and "strongly disagree." This question gauges people's trust in a fairly specific set of actors—more specific, certainly, than asking about the political system as a whole. Generally, this question and similar ones aimed at parliament, the courts, the armed services, etc., have been considered indicators of support for regime institutions (cf. Klingemann 1999). The variable was coded as a five-category measure that ranked trust from 1 to 5, with 5 denoting the most trusting response.

Figure 1 shows the distribution of positive responses to the two support variables (percentages saying that the political system works well and that civil servants can be trusted) across the countries included in this study. First, on average, 60 percent of citizens have a positive opinion about their political system, but only 23 percent have trust in civil servants. Second, the graph shows that there is considerable cross-national variation in people's attitudes toward government. Specifically, positive performance evaluations range from around 18 percent saying that the system works well in Russia all the way to more than 88 percent saying the system works well in Norway, with most countries' levels of positive evaluations ranging somewhere between 60 and 70 percent. The graph also shows that there is considerable variation across contemporary democracies with regard to whether people feel they can trust civil servants to do what is best for the country. While the Irish and the Norwegians are quite trusting of their civil servants at 52 and 37.5 percent, respectively, Italians, Swedes, Hungarians, Czechs, and Russians are considerably less trusting, with only about 10–15 percent of them expressing trust in civil servants.

## Independent Variables

**Corruption.** Recall that our primary goal is to test the following relationships: (1) between corruption and attitudes toward government, (2) between political allegiances and attitudes toward government, and (3) the interactive effects of corruption and political allegiance on attitudes toward government. To estimate the impact of corruption, we need to connect attitudes about government with information about corrupt practices in the respondent's country. To do so, we combined a country-level measure of corruption with the individual-level surveys.

Our measure of corruption is based on the Corruption Perception Index (CPI) developed by Transparency

**FIGURE 1   Evaluations of Political System Performance and Trust in Civil Servants**
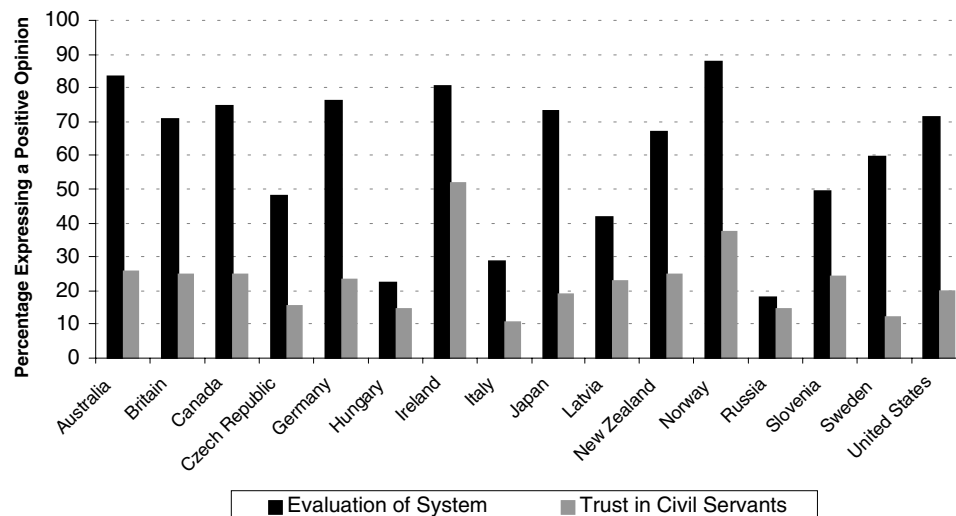


International, the most frequently used and most comprehensive measure of corruption around the world. The CPI is a composite measure based on the assessments of country experts as well as the views of many different individuals in each country who encounter corruption in differing ways and in a variety of contexts. It is based on the scores of ratings published by international organizations and constitutes the average of the scores from those surveys (see the appendix for details).[5] We used the corruption index measured for 1996 to match with our survey data.[6] The original measure runs from 0 (highly corrupt) to 10 (absolutely clean from corruption). To facilitate the interpretation of the statistical results in light of our hypotheses, we reversed the scale such that 0 stands

for totally clean from corruption and 10 indicates a highly corrupt country.[7]

Figure 2 shows the distribution of the corruption index across the countries included in this study. As in the case of the political support questions, the data show considerable cross-national variation in corruption. On average, the countries included in the analysis were only moderately corrupt at 3.1. The highest levels of corruption were found in Russia and Latvia (at over 7 on the 10-point scale), whereas the cleanest countries turned out to be

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[5]Although researchers have evaluated the validity, reliability, and robustness of the index with extremely positive results (Lancaster and Montinola 1997), it is not without limitations because it assumes that corruption is a one-dimensional phenomenon that can be measured along a single continuum, and that those surveyed operate with a similar definition of corruption. However, given that there usually are few witnesses to corruption and because those who have knowledge of it typically have an interest in keeping it secret, people's perceptions are likely to be more accurate than any government-sanctioned count of corrupt actions (Treisman 2000).

[6]Because the CPI for 1996 did not include data for Latvia and Slovenia, we used the data for 1998 instead, assuming that corruption levels are unlikely to change radically over time. Inspection of trends in the CPI data for other countries confirms that this was a reasonable assumption (see also Treisman 2000).

[7]Our research design requires that our measure of corruption be exogenous to attitudes toward the system. Given that our corruption index is a measure of public and elite perceptions of corruption (albeit aggregated at the system level), it is possible that our measure of corruption, at least in small part, is endogenous to the model. To test whether this was the case, we conducted a Hausman two-step test of exogeneity (Hausman 1978; see also Pindyck and Rubinfeld, 1991, 303–05). In the first stage, corruption was regressed on all independent (exogenous) variables of the original model plus some instrumental variables that are directly related to the suspected endogenous variable but not the dependent variable of interest. Following previous research (cf. Sandholtz and Koetzle 2000; Treisman 2000), we used trade (% GDP) and a measure of economic freedom as exogenous predictors of corruption in the first stage regression (yielding an $R^2$ of .87). The estimated residuals from this regression were then defined to form a "residual variable" that was added to the model explaining system support in a second stage regression. If the residual variable is statistically significant in the second stage regression, even when controlling for the presumed exogenous variable, then the regressor is, in fact, endogenous. Results from the second stage regression show that the residual variable failed to achieve statistical significance (system performance model: $\beta = .011$ (s.e.: .011); trust in civil servants model: $\beta = .030$ (s.e.: .019). We therefore concluded that the corruption variable was not endogenous to system support.

## FIGURE 2    Cross-National Levels of Corruption
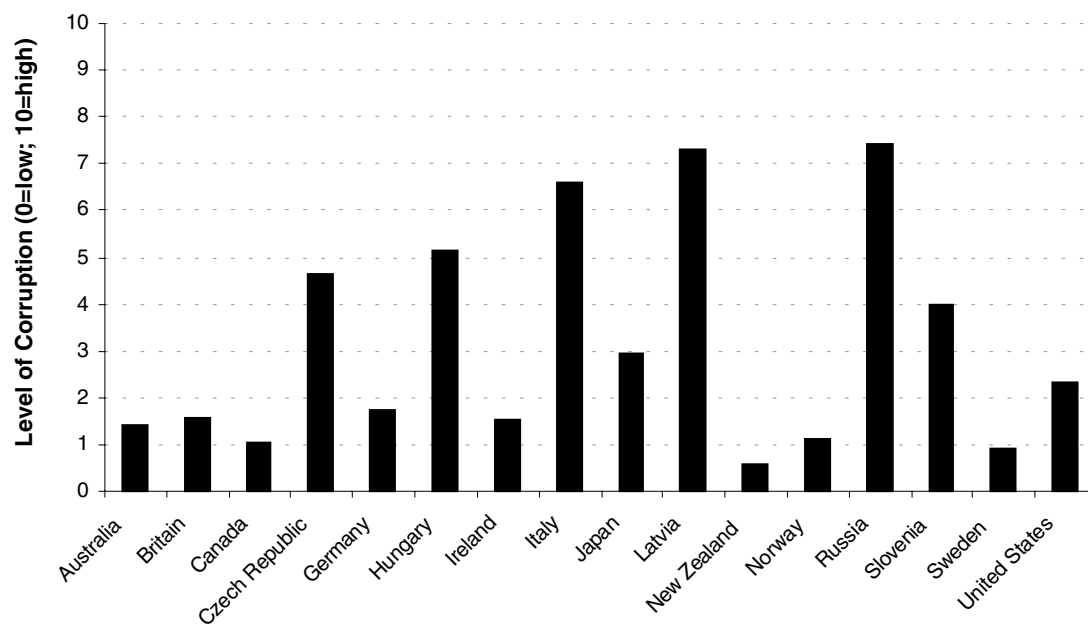


New Zealand and Sweden at less than 1. Of the remaining countries, six scored between 1 and 2 (Australia, Britain, Canada, Germany, Ireland, and Norway), two scored between 2 and 3 (Japan and the United States), and four (the Czech Republic, Hungary, Italy, and Slovenia) scored higher than four but lower than Russia and Latvia at the high end.

**Political allegiance: Majority and minority status.** The political majority and minority status variable was created with the help of a question asking which party or presidential candidate the individual had voted for in the last national election. Relying on *Keesing's Archives,* the *Political Handbook of the World,* and the *European Journal of Political Research,* the next step was to determine who won the election in each country. We then combined the information about the person's past vote with the information about the party in power.[8] If the respondent

voted for the current government, he was coded as belonging to the majority (coded 1); all others were coded 0. To examine the interaction between levels of corruption and political allegiance on attitudes toward the system, we also added an interaction term (majority-minority status * corruption) to the equation.

## Control Variables

We also sought to control for a variety of factors that have been found to predict support for the political system in previous analyses. Including these variables avoids drawing faulty inferences due to spuriousness that can result from omitting relevant variables. The control variables fall into two categories: system-level variables and individual-level variables. At the system level, these

[8]The measure of majority-minority status may suffer from the potential problem of biased recall or overreports favoring the victorious party (cf. Wright 1993). Note that, depending on the electoral cycle, over- and underreporting both are possible, given that governments' honeymoon is usually followed by a decline in popular support during the electoral term. When present, overreporting is likely to be less problematic because it implies that some of the respondents who claim to have voted for the victor in fact did not. In this case, some of the respondents classified as belonging to the majority are, in fact, members of the minority. This would lead to underestimating the true effect of having voted for the winning party or parties. As a check on the accuracy of the reported vote, we compared the aggregate distributions of actual election out-

comes and recalled election outcomes. In our sample, 49.1 percent of respondents reported voting for the majority parties in their countries; this is slightly higher than the 46.6 percent of actual voters for winning parties. As these figures suggest, overreporting is thus slightly more pervasive than underreporting. This means that our results are likely to understate the true effects of political majority and minority status. Another source of bias could exist if voters who are more (less) trusting of the political system would over(under)report their vote for the incumbent government. If such a bias exists, there should be a relationship between levels of trust and over(under)report of the vote. We therefore calculated the difference between the reported and the actual vote in a country and correlated this figure (a measure of over/underreport of the vote) with the levels of system support. These correlations were statistically insignificant (trust in civil servants: .05 (p = .9); democracy satisfaction: −.2 (p = .9)).

include current macroeconomic performance,[9] economic development,[10] democratic longevity, and level of democracy.[11] At the level of individual respondents, we controlled for such factors as political interest, electoral participation,[12] socioeconomic status, employment situation, and a standard set of demographic variables. Coding procedures and descriptive statistics for all variables are listed in the appendix.

## Analysis and Results

Our research design requires that we combine information at the level of respondents (micro-level) and countries (macro-level). This means that our data have a multilevel structure where one unit of analysis (voters) is nested within the other (countries) (Bryk and Raudenbush 1992). This type of data structure can generate a number of statistical problems, such as nonconstant variance and clustering. Failure to recognize the hierarchical nature of the data can lead to underestimating standard errors—particularly at the macro-level—and, thus,

a higher probability of Type I errors (see also Zorn 2001). To estimate our models, we therefore relied on statistical techniques developed specifically for modeling multilevel data structures (Steenbergen and Jones 2002).[13]

Several specific issues may pose problems for inference because of the multilevel nature of our data. First, the intercepts may be variable across countries; failure to control for this may result in biased estimates. Specifically, if intercepts are variable, we may be overestimating the effect of corruption on system support, as the corruption coefficient could be capturing both the true effects of corruption as well as other country-specific effects.[14] A secondary concern is that the individual level variables may have unequal slopes across nations. In this case a pooled estimator may be biased for each particular country. A third concern relates to the robustness of our inferences based on potentially inefficient standard errors resulting from potential clustering (cf. Zorn 2001). To deal with these issues, multilevel modeling techniques allow for estimating varying intercepts and slopes, produce asymptotically efficient standard errors, and provide for a direct estimation of variance components at each level of the model.

Below, we show the coefficients of interest (constants and independent variables), as well as the variance components at each level of our data (individual and country-level). These estimations allow us to establish (a) whether corruption is a significant determinant of system support once we allow the intercepts to vary across countries and obtain better estimates of standard errors; and (b) whether our macro-variables explain a substantial proportion of the country-level variance in order for us to be able to claim that we have minimized a potential omitted variable bias.

## Analysis of Variance

To determine, first, whether there is significant variation in system support at the individual and country levels, we estimated an ANOVA model that decomposes the variance in the dependent variables, where

$$\text{Support}_{ij} = \gamma_{00} + \delta_{0j} + \varepsilon_{ij}$$

In this model, $\gamma_{00}$ is the grand mean of support. The sources of cross-national variation, which cause particular countries to deviate from this mean, are contained in

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[9]The ISSP surveys used here did not furnish variables measuring people's perceptions of economic performance. Thus, to the extent that economic perceptions deviate from objective reality, our estimates of the "true" economic effects may be biased. To get a rough sense of how well objective economic conditions match up with economic evaluations, we constructed a dataset that included the West European countries included in our sample (comparable data were not available for the other countries). Using survey data drawn from the Eurobarometer and objective economic indicators for 1991–95, the correlation of growth and retrospective evaluations of national economy was a robust and statistically significant .68 (p < .01); the correlation of growth and retrospective evaluations of personal financial situation was a similarly strong .67 (p < .01).

[10]A number of scholars have argued that levels of economic development are associated with levels of democracy. However, most analysts have not drawn a direct link between economic development and democratic legitimacy; instead they have focused on a more indirect connection of the two via democratic stability. We also included a measure of development because corruption is more prevalent in less developed countries, and it is conceivable that any effect for corruption on system support might pick up both the actual effect of corruption as well as the effect of a country's wealth.

[11]Democratic longevity was measured by the number of years of continuous democracy since 1920. We used the logged values of this variable to reduce the effects of extreme cases, though the results do not change noticeably when the simple scale is used in the analyses.

[12]Following the argument that participation enhances feelings of trust and external efficacy (and vice versa) (cf. Finkel 1987), we included a variable distinguishing voters and nonvoters to control for differences attributable to having participated in the election. Including this variable also ensures that we properly attribute any effects for being among the majority and minority. We expect that those who did not participate in the election (coded 1) will have more negative attitudes toward the political system than those who did (coded 0).

[13]We used MLwiN 1.10.0006 (2000) to estimate these models (see also Rasbash et al. 1999).

[14]A way to capture variable intercepts would be to introduce a series of dummy variables for each country in the data set, but one. In our case, however, this solution is impossible, because of perfect multicollinearity among the macro-level variables and the set of country dummies.

## TABLE 1 ANOVA

| | Estimate | |
|---|---|---|
| Parameter | Evaluation of System Performance | Trust in Civil Servants |
| **Fixed Effects** | | |
| Constant | 2.555*** | 2.561*** |
| | (.082) | (.079) |
| **Variance** | | |
| **Components** | .107*** | .098** |
| Country-level | (.038) | (.035) |
| | .417*** | 1.069*** |
| Individual-level | (.004) | (.010) |
| −2 log likelihood | 41,886.88 | 62,023.61 |

*Notes:* Entries are maximum likelihood (IGLS) estimates; standard errors in parentheses.

*p < 0.05; **p < 0.01; ***p < .001.

$\delta_{0j}$, and $\varepsilon_{ij}$ contains sources of inter-individual variation. The argument that both levels of analysis are important for understanding attitudes toward the political system is supported if both variance components are statistically significant (cf. Steenbergen and Jones 2002).

Table 1 shows the ML estimates of the grand mean and the variance components. Both variance components are statistically significant, suggesting that there is significant variance in system support at both levels of analysis. Results of the ANOVA model show that country-level variance is proportionally much smaller than individual-level variance. Given that the data are measured at the individual level, this is not surprising (Steenbergen and Jones 2002, 231). Specifically, individual-level variance constitutes 79.6 percent of the total variance in the general system support model, whereas this part of the variance is even greater in the trust of civil servants model (91.6 percent).[15] The results of the ANOVA model indicate clearly that there is significant variation in system support for both dependent variables with regard to both levels of analysis. Thus, we now turn to the question of whether the model we have specified can account for this variance.

## The Effects of Corruption and Political Allegiance on Evaluations of System Performance

**Direct effects.** Table 2 shows the results of several models estimating the direct effects of corruption and majority-

[15]These calculations are based on the ratios of each variance component relative to the total variance in system support (cf. Bryk and Raudenbush 1992; Snijders and Bosker 1999).

minority status, as well as the interactive effects of these variables, on evaluations of political system performance. We show four models: Models 1 and 2 are random intercept multilevel maximum likelihood IGLS (Iterative Generalized Least Squares) models with and without the interaction terms of corruption and majority-minority status. In addition, we report the results of parametric and nonparametric bootstrapping estimations (Models 3 and 4).[16] The results from the bootstrapped estimations serve to examine the robustness of the IGLS estimates, in particular the results involving the macro-level variables (such as corruption), given that our level 2 variables are measured at the level of countries and thus for a fairly small number of cases.

Regardless of estimation method, the results provide unambiguous evidence in support of our main hypothesis: individuals in countries with higher levels of corruption evaluate the performance of the political system more negatively. In short, corruption breeds discontent with the performance of the political system. The results obtained with the random intercept models (Models 1 and 2) show that the corruption coefficient was statistically and substantively significant. As importantly, the bootstrapped results shown in Models 3 and 4, which reexamine the results of the fully interactive Model 2, indicate that these results were extremely robust. Visual inspection of the distribution of the coefficients for corruption showed them to be normally distributed.

Our results also show that those who voted for parties in power had more positive attitudes toward the political system. As expected, citizens in the political majority thought the political system worked better than did those in the minority. Again, all four models using different estimation techniques showed that this result was significant and extremely robust.

To better understand the estimated substantive impact of the variables of interest, we calculated how average respondents' evaluations of the political system varied

[16]Bootstrapping procedures estimate the sampling distribution of a statistic, treating the sample as a population. We present results estimated by both parametric and nonparametric bootstrapping. In the parametric bootstrap procedure, MLwiN resamples from the residual distribution specified by the model at each level, which in our particular model is assumed to be normal. The model is then refitted using these responses. In the parametric bootstrap procedure confidence intervals are estimated in accordance with the normal distribution sampling theory and are easy to interpret. However, since we did not have any strong reasons to believe that our residuals are distributed normally, we also performed nonparametric bootstrapping, which does not require any distributional assumptions. However, note that the more complex computation of confidence intervals in the nonparametric bootstrap procedure calls for more caution when drawing inferences on the basis of results obtained with this procedure (Mooney 1996).

**TABLE 2**    **Effects of Corruption and Political Allegiance on Evaluations of Political System Performance in 16 Democracies**

| | Evaluations of System Performance | | | |
|---|---|---|---|---|
| **Independent Variable** | **Model 1**<br>**Random**<br>**Intercept Model** | **Model 2**<br>**Random Intercept**<br>**Model with Interaction** | **Model 3**<br>**Parametric**<br>**Bootstrapping** | **Model 4**<br>**Non-Parametric**<br>**Bootstrapping** |
| **Fixed Effects** | | | | |
| Constant | 2.423*** | 2.542*** | 2.619*** | 2.586*** |
| | (.475) | (.451) | (.522) | (.572) |
| Corruption | −.078*** | −.092*** | −.101*** | −.092*** |
| | (.023) | (.022) | (.023) | (.024) |
| Majority-minority status | .149*** | .042** | .042** | .043** |
| (1 = majority, 0 = minority) | (.011) | (.018) | (.017) | (.018) |
| Corruption * majority-minority | | .037*** | .037*** | .037*** |
|   status | | (.005) | (.005) | (.005) |
| Nonvoter | −.021 | −.022* | −.022* | −.022* |
| (1 = did not vote, 0 = voted) | (.013) | (.012) | (.012) | (.012) |
| Socioeconomic status | .059*** | .058*** | .058*** | .057*** |
| (high = high social class) | (.005) | (.005) | (.005) | (.005) |
| Interest in politics | .020*** | .021*** | .020*** | .021*** |
| (high = great interest) | (.005) | (.005) | (.005) | (.005) |
| Employment status | .080** | .079** | .080*** | .079** |
| (high = employed) | (.026) | (.026) | (.023) | (.026) |
| Gender | −.065*** | −.065*** | −.065*** | −.065*** |
| (1 = female) | (.011) | (.011) | (.011) | (.010) |
| Age | .000 | .000 | .000 | .000 |
| (high = old) | (.000) | (.000) | (.000) | (.000) |
| Education | .012** | .011** | .011* | .011** |
| (high = high education) | (.004) | (.004) | (.005) | (.004) |
| GNP per capita | .013** | .013** | .011* | .013* |
| | (.005) | (.005) | (.006) | (.006) |
| Economic growth | .032* | .033* | .030 | .032* |
| (percent change in GDP) | (.017) | (.016) | (.019) | (.019) |
| Democratic age | −.032 | −.011 | .004 | −.010 |
| (in years since 1920, logged) | (.054) | (.052) | (.057) | (.052) |
| Democracy score | −.037 | −.057 | −.062 | −.065 |
| (Freedom House index) | (.078) | (.074) | (.072) | (.117) |
| **Variance Components** | | | | |
| Country-level | .017** | .016** | .023** | .024* |
| | (.006) | (.006) | (.010) | (.012) |
| Individual-level | .384*** | .383*** | .382*** | .382*** |
| | (.005) | (.005) | (.005) | (.004) |
| N | 13,867 | 13,867 | 13,867 | 13,867 |
| −2 log likelihood | 26142.230 | 26086.050 | 27537.440 | 27597.070 |

*Notes:* Estimates are maximum likelihood estimates (IGLS) and bias corrected bootstrap estimates; standard errors in parentheses. Bootstrap estimates and standard errors are computed using resampling of the residuals with 5 sets of 300 replicates in parametric bootstrapping and 5 sets of 500 replicates in non-parametric bootstrapping.

*p < .05; **p < .01; ***p < .001.

**FIGURE 3** **Effects of Corruption on Evaluations of the Political System**
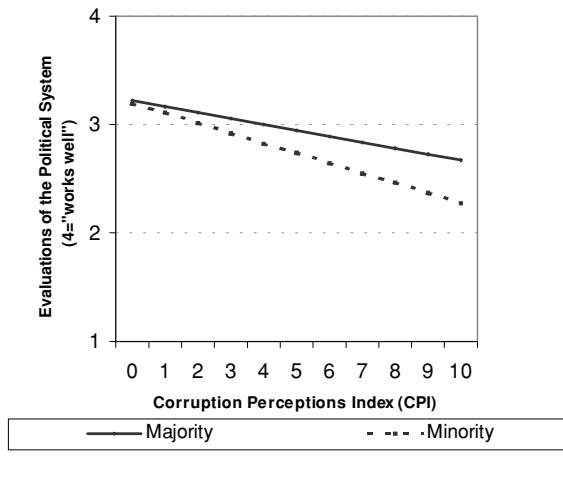


with different levels of corruption. Using the coefficients from the fully specified Model 2, we find that a typical respondent in a country where corruption is absent scores a 3.22 on the four-point scale measuring respondents' system performance evaluations. In contrast, the average respondent in a country in the most corrupt category scores a 2.61, while respondents in a country scoring in the mid-range of the corruption measure (=5) score a 2.80. Looking at the effect of being in the majority or minority on system performance evaluations, we find that the average respondent in the majority scores a 3.04 and those in the minority a 2.91 on the four-point scale.

**Contingent effects.** To test the hypothesis that there is an interactive effect of corruption and majority-minority status on views about government, Models 2–4 also included an interaction variable for political majority status and corruption. The results show robust support for the contention that corruption has less of a negative effect on evaluations of the political system among respondents in the political majority. Thus, in keeping with our prediction, we find that being in the majority attenuates the negative effects of corruption on people's views of the political system. Moreover, this effect is particularly pronounced in the more corrupt systems. As Figure 3 shows, in a completely honest system, being in the political majority or minority makes little difference to people's evaluations of the political system, with the average system evaluation at around 3.2. In contrast, in a completely corrupt system, members of the political majority still have a reasonable chance of evaluating the system positively, with an average score of 2.67, while those in the minor-

ity expressing a less positive view at 2.28. At this extreme end of the corruption scale, there was thus a significant difference in the effect of corruption on evaluations of the system between the political majority and minority. Moving from the least corrupt to the most corrupt system reduces the average value on the four-point scale by .55 from 3.22 to 2.67 among the majority, while it decreases evaluations among the minority by about twice as much (from 3.20 to 2.28). Thus, while corruption had a negative effect on evaluations of the system among both segments of the population, this effect was much more pronounced among those in the minority.

Most of the other variables included in the analysis also achieved conventional levels of statistical significance. Regarding the individual-level control variables, the results show that women were consistently less happy with the system than men. Similarly, moving up on the political interest scale (from less interested to more interested) increased a level of satisfaction with the performance of the political system. Also, as hypothesized, we found that socioeconomic status had a highly significant effect on attitudes toward government. Those in the upper class had significantly more favorable evaluations of the system than those in the middle and lower classes. In addition, people with jobs and with higher levels of education also were more positive in their evaluations of the political system. Similarly, those who did not participate in the previous election exhibited lower levels of support for the political system. Among the individual level predictors, age was the only one that did not exert significant effects on how people evaluated the performance of the political system.[17]

Looking at the macro-variables, the results show that level of economic development increased positive evaluations of the system's performance. Consistent with expectations, we also found that economic growth had a positive impact on people's views of the political system. In contrast, however, the democratic performance indicators did not have the hypothesized effects. We found that level of democracy was not related to system performance evaluations. Thus, once levels of development and economic performance were accounted for, citizens in more democratic countries were no more critical of the way their political system worked. Similarly, democratic age did not affect evaluations of the political system once other macro-level factors were accounted for.

[17]To establish whether the slopes of our individual-level independent variables are equal across countries, we also calculated country-level variance components for each β-coefficient separately while allowing it to vary randomly around its mean. As it turned out, the variability of the slopes was extremely small, and we therefore do not report on them further.

## The Effects of Corruption and Political Allegiance on Trust in Civil Servants

**Direct effects.** Table 3 shows the results of multilevel maximum likelihood (IGLS) and the bootstrapped estimates of the effects of corruption and majority-minority status on trust in civil servants. The models we estimated are identical to those in Table 2; the only difference is in the dependent variable. Again, the results unequivocally support our main hypothesis: individuals in countries with higher levels of corruption are less trusting in civil servants. Moreover, the results for both standard random intercept models (Models 1 and 2) as well as the models employing the bootstrap procedures demonstrate that the corruption coefficient is statistically and substantively significant. Thus, as in the case of general system evaluations, the results are extremely robust; they point to a significant corroding effect of corruption on trust in civil servants. Again, visual inspection of the distribution of the coefficients for corruption showed them to be normally distributed.

Our results also show that respondents who were among the majority were significantly more trusting of civil servants than those in the minority. The results are virtually identical across the random intercept model and the bootstrap models. Using the coefficients from the fully specified Model 2, we find that a typical respondent in a country where corruption is absent scores a 4.26 on the five-point scale measuring respondents' trust in civil servants. In contrast, a respondent in a country in the most corrupt category scores a 2.76, while respondents in a country in the mid-range of the corruption scale ($=5$) rate civil servants a 3.33. Looking at the effect of being in the majority or minority on trust in civil servants, we find that those in the majority score a 3.98 and those in the minority a 3.83 in the average country.

**Contingent effects.** As in the case of general system evaluations, the results show that the negative effects of corruption on people's trust in civil servants is of varying strength among those in the majority and the minority. Thus, corruption affects those in the minority more strongly than those in the majority, indicating that the negative effect of corruption on trust in civil servants is attenuated among those in the political majority. However, this effect is weaker in the case of trust in civil servants than general system evaluations; the coefficient for the interaction variable is considerably smaller and manages to achieve statistical significance only at the .1 level (one-tailed). Thus, the results indicate that interactive effect of corruption and political majority-minority status

is much stronger in the case of general system evaluations than for trust in civil servants.

The other variables in the analysis did not all manage to achieve conventional levels of statistical significance in the models estimating trust in civil servants. The only significant individual-level determinants were class, electoral participation, and age. Thus, individuals of higher social status, those who report having voted and having greater political interest, and older respondents were more trusting of civil servants. In contrast, employment status, gender, and education did not affect people's views of civil servants in their country. More generally, when we compare the effects of the individual-level variables on evaluations of the political system and trust in civil servants reported in Tables 2 and 3, we found that these were clearly better able to explain variation in system performance evaluations than in trust in civil servants.

Aside from corruption, the only macro-level variable achieving statistical significance was economic growth, indicating that individuals in countries with higher levels of growth were more trusting of civil servants. In contrast, levels of development, democracy, or democratic age did not exert any statistically significant effects on trust in civil servants.[18]

## Discussion

Building on studies that have documented the far-reaching negative effects of corruption on the economy, the legal system, and democratic principles, we investigated how corruption affects citizens' attitudes toward

[18]Tables 2 and 3 also contain estimates of the variance components, which we can compare with the estimates reported in Table 1. As the results show, the variability of the intercept among countries was relatively small, ranging between .017 and .024 across the four models for evaluations of system performance and between .045 and .067 for trust in civil servants. In addition, the magnitude of the predicted effect for the corruption variable was very similar to the single intercept model (results not shown here). Finally, country-level variance estimates show that we are unlikely to have an omitted variable bias at the macro-level. After estimating our full models, we manage to explain between 78 and 85 percent of the country-level variance in the system performance models and between 32 and 55 percent of the country-level variance in the trust in civil servants models. As a result, the models explain a significant portion of the total variance attributed to the variation among countries, with the system performance models outperforming the trust in civil servants models. Thus, we believe the threat of an omitted variable bias at the country-level to be small, especially for the system performance estimations, because (a) the models account for a substantial portion of the country-level variation with the macro-variables included in our analysis (especially in the case of system evaluations), and (b) the remaining unexplained country-level variance constitutes a small portion of the total unexplained variance (which mostly comes from differences among individuals).

**TABLE 3  Effects of Corruption and Political Allegiance on Trust in Civil Servants in 16 Democracies**

| Independent Variable | Trust in Civil Servants | | | |
|---|---|---|---|---|
| | **Model 1 Random Intercept Model** | **Model 2 Random Intercept Model with Interaction** | **Model 3 Parametric Bootstrapping** | **Model 4 Non-Parametric Bootstrapping** |
| **Fixed Effects** | | | | |
| Constant | 3.517*** | 3.553*** | 3.599*** | 3.637*** |
| | (.768) | (.762) | (.887) | (.907) |
| Corruption | −.109*** | −.114*** | −.115*** | −.114*** |
| | (.037) | (.037) | (.044) | (.039) |
| Majority-minority status | .188*** | .156*** | .155*** | .155*** |
| (1 = majority, 0 = minority) | (.018) | (.029) | (.026) | (.029) |
| Corruption * majority-minority status | | .011‡ | .011‡ | .011‡ |
| | | (.008) | (.008) | (.008) |
| Nonvoter | −.038* | −.038* | −.038* | −.038* |
| (1 = did not vote, 0 = voted) | (.021) | (.021) | (.019) | (.020) |
| Socioeconomic status | .048*** | .048*** | .048*** | .048*** |
| (high = high social class) | (.009) | (.009) | (.008) | (.008) |
| Interest in politics | .015* | .015* | .015* | .015* |
| (high = great interest) | (.009) | (.009) | (.009) | (.008) |
| Employment status | .029 | .028 | .030 | .029 |
| (high = employed) | (.042) | (.042) | (.045) | (.042) |
| Gender | −.009 | −.009 | −.009 | −.010 |
| (1 = female) | (.018) | (.018) | (.016) | (.023) |
| Age | .006*** | .006*** | .006*** | .006*** |
| (high = old) | (.001) | (.001) | (.001) | (.001) |
| Education | .003 | .003 | .003 | .002 |
| (high = high education) | (.007) | (.007) | (.008) | (.005) |
| GNP per capita | −.002 | −.002 | −.002 | −.002 |
| | (.009) | (.008) | (.009) | (.007) |
| Economic growth | .061* | .061* | .063* | .065* |
| (percent change in GDP) | (.028) | (.028) | (.034) | (.038) |
| Democratic age | −.062 | −.056 | −.056 | −.056 |
| (in years since 1920, logged) | (.088) | (.087) | (.138) | (.127) |
| Democracy score | −.168 | −.174 | −.182 | −.188 |
| (Freedom House index) | (.126) | (.125) | (.148) | (.162) |
| **Variance Components** | | | | |
| Country-level | .045** | .044** | .067* | .067* |
| | (.016) | (.016) | (.030) | (.031) |
| Individual-level | 1.038*** | 1.037*** | 1.037*** | 1.037*** |
| | (.012) | (.012) | (.012) | (.013) |
| N | 13,862 | 13,862 | 13,862 | 13,862 |
| −2 log likelihood | 39907.210 | 39905.310 | 42096.140 | 42120.970 |

*Notes:* Estimates are maximum likelihood estimates (IGLS) and bias corrected bootstrap estimates; standard errors in parentheses. Bootstrap estimates and standard errors are computed using resampling of the residuals with 5 sets of 300 replicates in parametric bootstrapping and 5 sets of 500 replicates in non-parametric bootstrapping.

‡p < .1; *p < .05; **p < .01; ***p < .001.

their governments. Starting from the assumption that corruption violates fundamental tenets of democracy such as equality, fairness, and accountability, we hypothesized that citizens in more corrupt democratic societies would report lower levels of satisfaction with the performance of their political systems and trust in civil servants compared to people in democracies that are cleaner. The analysis supported our hypothesis. Moreover, we hypothesized that these effects would be mediated by people's political allegiances. As predicted, the effects of corruption on political support were weaker for citizens who had elected the incumbent government (members of the political majority) and stronger for those who had cast votes for the opposition (members of the political minority). However, we also found that these interaction effects were much stronger with regard to general system evaluations than for trust in civil servants. We discuss these results and their implications below.

The consistent finding that corruption leads people to believe that the political system performs worse than it could and that those who work for the state cannot be trusted is important, first, because it strongly suggests that corruption is likely to be an important component of government performance people use to judge political institutions. Our findings indicate, therefore, that informal political practices—such as corruption—can have important consequences for the legitimacy of a political system as well. Thus, both economic and political performance matter for understanding trust in government; but so do both formal and informal political institutions. While the results cannot show to what extent people are aware of the level of corruption in their country—this would require an objective measure of corruption, which simply does not exist—our results do show that corruption significantly affects people's evaluations of their political system's performance and the trustworthiness of civil servants.

Second, the results presented above demonstrate that corruption has a negative influence on indicators of system legitimacy, even in societies that are culturally dissimilar, and that the patterns uncovered here are thus generalizable across a wide range of countries, including established and new democracies. Put another way: even if culture serves to diminish the effects of corruption on political support, it does not erase its overall negative effect. Given the variety of countries included in our study, our analyses contribute to the growing literature on corruption and mass political behavior, and they extend research focusing exclusively on new democracies in Eastern Europe and Latin America to estab-

lished democracies as varied as Japan, Italy, and the United States.

Building on prior research, we find that people's status as members of the political majority or minority strongly affects their perceptions of how well the political system works and whether civil servants can be trusted. This finding lends further support to the notion that taking political allegiance into account is critical for understanding and predicting how citizens will respond in the political arena. More importantly, we found that allegiance to those in power provides a lens through which people view the political world around them. While government and opposition supporters in very clean countries are both likely to have positive views of the political system, there is a significant difference in the negative effects of corruption on evaluations of the political system's performance among members of the majority and the minority in more corrupt countries. Specifically, the views of those who voted for the government are affected less negatively by high levels of corruption than the views of those who voted for the opposition.

Election outcomes not only determine who occupies the seats of power, but they also determine the extent to which citizens are satisfied with their political outcomes, are willing to push for change, and view their political environments as friendly or hostile places. In other words, by determining who wins and who loses, elections create a lens through which people evaluate their political context and that shapes political behavior generally. However, this effect is not uniform. Our results indicate that majority-minority status mediates the effect of corruption on trust in civil servants to a much lesser extent. Thus, while we find that corruption and majority-minority status both directly affect trust in civil servants, the mediating effect of the majority-minority status "lens" appears much more relevant when it comes to connecting corruption with general system evaluations than the trustworthiness of a specific set of actors (civil servants).

It is worth mentioning that the distinction between majority and minority is a truly political variable. Unlike predictors such as education or partisan attachment, which are determined relatively early in life, political majority-minority status is a direct product of the political process, and it can vary with each election cycle for individual citizens. Thus, by examining how majority-minority status affects such important political phenomena as participation in the political system and attitudes toward government, we can connect social and individual choices in ways that are easily compared across elections and countries. Our findings thus further highlight the

significance of the majority-minority distinction for theory and contribute to a growing literature that seeks to understand how political allegiance and election outcomes affect political behavior.

More generally, we explain people's support for their system by examining the contingent effects of an individual-level variable that has been found to play a critical role in previous studies (political minority-majority status), and a contextual variable (corruption) that has received little empirical attention in the system support literature. By integrating both micro- and macro-level explanations of system support, our analysis enhances our understanding of how citizens view the institutions of representative democracy in countries with different levels of public honesty. By doing so, it enhances our understanding of the nature of political support. The results show that the comparative study of political attitudes is especially fruitful when it combines the particular political context in which people form those attitudes—in this case, a country's political performance in the form of corruption—with critical individual-level variables—in this case, political allegiance—because it leads to a more general model and comprehensive understanding of the forces that shape citizen political behavior.

The finding that corruption undermines citizens' faith in their governments is sobering, and it has noteworthy implications for policymakers. For one, it is well known that corruption is higher in countries that have adopted democracy more recently. Transitions to democracy can be quite painful for citizens, causing economic insecurity and uncertainty about what the future will bring. While corruption, if discovered and punished, can provide an impetus for democratic reform (Manion 1998; Rose, Shin, and Munro 1999), it also may leave citizens wondering why they should endure the challenges of a painful transition when others seem to be profiting from illegal and dishonest activity. This line of reasoning and the results we report above suggest that when a political system is tainted by corruption, people's willingness to accept government-initiated reforms or even the legitimacy of the system as a whole may flag. In the long term, this can pose significant challenges to the sustainability of democratic government.

While corruption traditionally has been considered a problem that affects newly established democracies most acutely, both new and established democracies have witnessed spectacular and mundane episodes of government corruption over the years. In recent years, corruption has become such an important topic and such a universally recognized problem that international organizations such

as the International Monetary Fund (IMF), the World Bank, and the OECD have sought to find ways to prevent it. Our results demonstrate that such efforts are well placed. Our results show that reductions in corruption are likely to have significant positive effects on both majority and minority. Thus, reductions in corrupt government practices are certainly worthwhile and likely to ensure a healthier and more legitimate political system.

However, we also would argue that the results presented here do not necessarily bode well for those hoping to inject reforms into corrupt governments, nor do they suggest obvious remedies for fighting corruption. Maybe most importantly, our results pose a challenge to those seeking to fight corruption because they imply that inferior performance leads to a parallel reduction in public support for political authority among all citizens with regard to trust in civil servants but not when it comes to evaluations of the performance of the system as a whole. Thus, members of the political minority face an uphill battle if they set their sights on reducing corruption as a systemic condition because those in the majority evaluate the performance of the regime more positively than those in the minority, even when levels of corruption are high. As a consequence, those in the political majority are unlikely to be as motivated to push for systemic changes as those in the minority. This is likely to complicate efforts to reduce corruption and leads us to speculate that outside pressures or exogenous shocks may be vital for battling corrupt government practices and maintaining or improving the legitimacy of democratic political systems.

# Appendix A
# Measures and Coding

*Evaluations of Political System Performance.* "All in all, how well or badly do you think the system of democracy in (country) works these days?" It works well and needs no changes (4), it works well but needs some changes (3), it does not work well and needs a lot of changes (2), it does not work well and needs to be completely changed (1).

*Trust in Civil Servants.* "How much do you agree or disagree with each of the following statements." Most civil servants can be trusted to do what is best for the country. Strongly agree (5), agree (4), neither agree nor disagree (3), disagree (2), strongly disagree (1).

*Political Majority-Minority Status.* "Which party did you vote for in the last general election?" If party choice

matches with a governing party (1), if it matches with an opposition party (0).

*Nonvoter.* "Did you vote in the most recent national election?" No (1); all others (0).

*Subjective Social Class.* "In terms of your social status, which of the following categories do you think you belong to?" Upper class (6), upper middle class (5), middle class (4), lower middle class/upper working class (3), working class (2), lower class (1).

*Interest in Politics.* "How interested would you say you personally are in politics?" Very (5), fairly (4), somewhat (3), not very (2), not at all (1).

*Age.* Actual age of respondent.

*Sex.* Male (0), female (1).

*Employment Status.* "Respondent's current employment status—current economic position, main source of living." Employed (1), unemployed (0).

*Education.* "What is the highest level of education that you attained?" Respondents were coded on a 1 to 7 scale, where 7 denotes the highest level of education.

*Corruption.* Corruption Perception Index (1996). Scale ranks countries from 0 (highly corrupt) to 10 (fully clean from corruption). The index was inverted for the purposes of analysis. Source: Transparency International. For the countries included in our analyses, the Corruption Perception Index was based on between five and nine sources, with most countries' measure of corruption based on six different and independently collected sources. These included surveys from the *World Competitiveness Yearbook* (WCY) published by the Institute for Management Development (Lausanne, Switzerland), a survey conducted by the German magazine *Impulse* (Peter Neumann), expert assessments by DRI/McGraw-Hill Global Risk Service and Political Risk Services, as well as an internet survey by Göttingen University (Germany), where the CPI was conceived. The samples for the surveys were drawn from business executives in top and middle management (WCY) and staff at embassies and Chambers

of Commerce (*Impulse*). The WCY survey asked business executives to assess their country of residence. Specifically, they were asked to assess the extent of "improper practices (such as bribing and corruption)," with the scale ranging from 1 ("prevail in the public sphere") to 10 ("do not prevail in the public sphere"). For the survey conducted by *Impulse*/Peter Neumann, respondents were asked to assess the "spread and amount of corruption in public and private business." The contributions by DRI/McGraw Hill Global Risk Service and by the Political Risk Services refer to assessments made by their staff after in-depth country analysis and discussion. The DRI/McGraw Hill assessments calculated "estimated business losses caused by corruption," whereas the Political Risk Services experts assessed the likeliness to demand special and illegal payments in high and low levels of government. Finally, the internet-based Corruption Perception Index calculated by Göttingen University for 1995–96 surveyed employees of multinational firms and institutions. This survey sought to ascertain the "degree of misuse of public power for private benefits." Combinations of these ratings were then combined, averaged, and normalized to form the CPI.

*Economic Performance.* Percentage change in Gross Domestic Product over the previous year (1995–96). Source: World Bank. *World Development Report*.

*Level of Development.* GNP/per capita, in 1,000s of dollars (U.S.). Source: World Bank. *World Development Report*.

*Age of Democracy.* Number of years of continuous democracy since 1920 as of 1996 (logged). Source: Inglehart, Ronald. 1997. *Modernization and Postmodernization: Cultural, Economic, and Political Change in 43 Societies*. Princeton: Princeton University Press, 358–59.

*Level of Democracy.* Freedom House index, ranking countries from 1 (free) to 7 (not free), on two dimensions: political rights and civil liberties. Average score of political rights and civil liberties ratings. The index was inverted for the purposes of analysis. Source: Gastil, Raymond, various years. *Freedom in the World.* New York: Freedom House.

# Appendix B

**TABLE A.1 Descriptive Statistics**

| Variable | Min | Max | Mean | Std. Dev. |
|---|---|---|---|---|
| Evaluations of system performance | 1 | 4 | 2.58 | .73 |
| Trust in civil servants | 1 | 5 | 2.56 | 1.07 |
| Corruption | .57 | 7.42 | 3.14 | 2.38 |
| Economic growth | −4.51 | 10.35 | 2.80 | 3.14 |
| Wealth | 2.30 | 41.29 | 17.89 | 11.46 |
| Age of democracy (logged) | 0 | 4.33 | 3.27 | 1.49 |
| Level of democracy (Freedom House) | 3.5 | 7 | 6.50 | .86 |
| Majority-minority status | 0 | 1 | .48 | .50 |
| Social class | 1 | 6 | 3.14 | 1.16 |
| Interest in politics | 1 | 5 | 3.00 | 1.11 |
| Employment | 0 | 1 | .94 | .23 |
| Nonvoter | 0 | 1 | .31 | .46 |
| Age | 18 | 96 | 45.85 | 16.74 |
| Education | 1 | 7 | 4.53 | 1.38 |
| Gender | 0 | 1 | .52 | .50 |

# References

Anderson, Christopher J. 1998. "Party Systems and Satisfaction with Democracy in the New Europe." *Political Studies* 46(4):572–88.

Anderson, Christopher J., and Christine A. Guillory. 1997. "Political Institutions and Satisfaction with Democracy: A Cross-National Analysis of Consensus and Majoritarian Systems." *American Political Science Review* 91(1):66–82.

Anderson, Christopher J., and Andrew J. LoTempio. 2002. "Winning, Losing, and Political Trust in America." *British Journal of Political Science* 32(2):335–51.

Anderson, Christopher J., and Yuliya V. Tverdova. 2001. "Winners, Losers, and Attitudes Toward Government in Contemporary Democracies." *International Political Science Review* 22(4):321–38.

Bowler, Shaun, and Todd Donovan. 2002. "Democracy, Institutions and Attitudes about Citizen Influence on Government. *British Journal of Political Science* 32(2):371–90.

Bryk, Anthony S., and Stephen W. Raudenbush. 1992. *Hierarchical Linear Models*. Newbury Park, CA: Sage.

Clarke, Harold D., and Alan C. Acock. 1989. "National Elections and Political Attitudes: The Case of Political Efficacy." *British Journal of Political Science* 19(4):551–62.

Dahl, Robert. 1971. *Polyarchy*. New Haven: Yale University Press.

della Porta, Donatella. 2000. "Social Capital, Beliefs in Government, and Political Corruption." In *Disaffected Democracies: What's Troubling the Trilateral Democracies?*, ed. Susan J. Pharr and Robert D. Putnam. Princeton: Princeton University Press.

Duch, Raymond M., Harvey D. Palmer, and Christopher J. Anderson. 2000. "Heterogeneity in Perceptions of National Economic Conditions." *American Journal of Political Science* 44(4):635–52.

Easton, David. 1965. *A Systems Analysis of Political Life*. New York: John Wiley.

Eckstein, Harry. 1988. "A Culturalist Theory of Political Change." *American Political Science Review* 82(3):789–804.

Evans, Geoffrey, and Stephen Whitefield. 1995. "The Politics and Economics of Democratic Commitment: Support for Democracy in Transition Societies." *British Journal of Political Science* 25(4):485–514.

Finkel, Steven E. 1987. "The Effects of Participation on Political Efficacy and Political Support: Evidence from a West German Panel." *Journal of Politics* 49(2):441–64.

Fiorina, Morris P., and Roger Noll. 1978. "Voters, Legislators, and Bureaucracy: Institutional Design in the Public Sector." *American Economic Review, Papers and Proceedings* 68(2):256–60.

Fuchs, Dieter, Giovanna Guidorossi, and Palle Svensson. 1995. "Support for the Democratic System." In *Citizens and the State*, ed. Hans-Dieter Klingemann and Dieter Fuchs. New York: Oxford University Press.

Gibson, James L., and Gregory A. Caldeira. 1995. "The Legitimacy of Transnational Legal Institutions: Compliance, Support, and the European Court of Justice." *American Journal of Political Science* 39(2):459–89.

Ginsberg, Benjamin, and Robert Weissberg. 1978. "Elections and the Mobilization of Popular Support." *American Journal of Political Science* 22(1):31–55.

Golden, Miriam. "Electoral Connections: The Effects of the Personal Vote on Political Patronage, Bureaucracy and Legislation in Postwar Italy." *British Journal of Political Science*. Forthcoming.

Goldsmith, Arthur A. 1999. "Slapping the Grasping Hand: Correlates of Political Corruption in Emerging Markets." *American Journal of Economics and Sociology* 58(4):865–83.

Guilford, Joy Paul. 1954. *Psychometric Methods*. New York: McGraw-Hill.

Harmel, Robert, and John Robertson. 1986. "Government Stability and Regime Support: A Cross-National Analysis." *Journal of Politics* 48(4):1029–40.

Hausman, J.A. 1978. "Specification Tests in Econometrics." *Econometrica* 46(6):1251–71.

Hofferbert, Richard I., and Hans-Dieter Klingemann. 1999. "Remembering the Bad Old Days: Human Rights, Economic Conditions, and Democratic Performance in Transitional Regimes." *European Journal of Political Research* 36(2):155–74.

Huntington, Samuel P. 1968. *Political Order in Changing Societies*. New Haven: Yale University Press.

International Social Survey Program (ISSP). 1999. *International Social Survey Program: Role of Government III, 1996* [Computer file]. Cologne, Germany: Zentralarchiv fuer Empirische Sozialforschung [producer]. Cologne, Germany: Zentralarchiv fuer Empirische Sozialforschung/Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributors].

Inglehart, Ronald. 1997. *Modernization and Postmodernization: Cultural, Economic, and Political Change in 43 Societies*. Princeton: Princeton University Press

Iyengar, Shanto. 1980. "Subjective Political Efficacy as a Measure of Diffuse Support." *Public Opinion Quarterly* 44(1):249–56.

Kerlinger, Fred N., and Howard B. Lee. 2000. *Foundations of Behavioral Research*. 4th ed. Orlando: Harcourt College Publishers.

King, Gary, Robert Keohane, and Sidney Verba. 1994. *Designing Social Inquiry*. Princeton: Princeton University Press.

Klingemann, Hans-Dieter. 1999. "Mapping Political Support in the 1990s: A Global Analysis." In *Critical Citizens: Global Support for Democratic Governance*, ed. Pippa Norris. New York: Oxford University Press.

Lancaster, Thomas D., and Gabriella R. Montinola. 1997. "Toward the Methodology for the Comparative Study of Political Corruption." *Crime Law and Social Change* 27(3–4):185–206.

Leff, Nathaniel H. 1964. "Economic Development Through Bureaucratic Corruption." *American Behavioral Scientist* 8(3):8–14

Manion, Melanie. 1998. "Issues in Corruption Control in Post-Mao China." *Issues and Studies* 34(9):1–21.

Merton, Robert K. 1968. *Social Theory and Social Structure*. New York: Free Press.

Miller, Arthur H., and Ola Listhaug. 1990. "Political Parties and Confidence in Government: A Comparison of Norway, Sweden and the United States." *British Journal of Political Science* 29(3):357–86.

Miller, Arthur H., and Ola Listhaug. 1999. "Political Performance and Institutional Trust." In *Critical Citizens: Global Support for Democratic Governance*, ed. Pippa Norris. New York: Oxford University Press.

Mishler, William, and Richard Rose. 1997. "Trust, Distrust and Skepticism: Popular Evaluations of Civil and Political Institutions in Post-Communist Societies." *Journal of Politics* 59(2):418–51.

Mishler, William, and Richard Rose. 2001a. "What are the Origins of Political Trust? Testing Institutional and Cultural Theories in Post-Communist Societies." *Comparative Political Studies* 34(1):30–62.

Mishler, William, and Richard Rose. 2001b. "Political Support for Incomplete Democracies: Realist versus Idealist Theories and Measures." *International Political Science Review* 22(4):303–20.

Montinola, Gabriella R., and Robert W. Jackman. 2002. "Sources of Corruption: A Cross-Country Study." *British Journal of Political Science* 32(1):147–70.

Mooney, Christopher Z. 1996. "Bootstrap Statistical Inference: Examples and Evaluations for Political Science." *American Journal of Political Science* 40(2):570–602.

Nadeau, Richard, and André Blais. 1993. "Accepting the Election Outcome: The Effect of Participation on Losers' Consent." *British Journal of Political Science* 23(4):553–63.

Norris, Pippa. 1999. "Institutional Explanations for Political Support." In *Critical Citizens: Global Support for Democratic Governance*, ed. Pippa Norris. New York: Oxford University Press.

Nye, Joseph S. 1967. "Corruption and Political Development." *American Political Science Review* 61(2):417–27.

Pharr, Susan J. 2000. "Officials' Misconduct and Public Distrust: Japan and the Trilateral Democracies." In *Disaffected Democracies: What's Troubling the Trilateral Democracies?*, ed. Susan J. Pharr and Robert D. Putnam. Princeton: Princeton University Press.

Pindyck, Robert S., and Daniel L. Rubinfeld. 1991. *Econometric Models and Economic Forecasts*. New York: McGraw-Hill.

Rasbash, Jon, William Browne, Harvey Goldstein, M. Yang, Ian Plewis, Michael Healy, G. Woodhouse, David Draper. 1999. *A User's Guide to MLwiN*. London: Institute of Education.

Rohrschneider, Robert. 2002. "The Democracy Deficit and Mass Support for an EU-Wide Government." *American Journal of Political Science* 46(2):463–75.

Rose, Richard, William Mishler, and Christian Haerpfer. 1998. *Democracy and Its Alternatives: Understanding Post-Communist Societies*. Baltimore: The Johns Hopkins University Press.

Rose, Richard, Doh C. Shin, and Neil Munro. 1999. "Tensions Between the Democratic Ideal and Reality." In *Critical Citizens: Global Support for Democratic Governance*, ed. Pippa Norris. New York: Oxford University Press.

Rose-Ackerman, Susan. 1999. *Corruption and Government: Causes, Consequences, and Reform*. Cambridge: Cambridge University Press.

Sandholtz, Wayne, and William Koetzle. 2000. "Accounting for Corruption: Economic Structure, Democracy, and Trade." *International Studies Quarterly* 44(1):31–50.

Seligson, Mitchell A. 2002. "The Impact of Corruption on Regime Legitimacy: A Comparative Study of Four Latin American Countries." *Journal of Politics* 64(2):408–33.

Sniderman, Paul M., Richard A. Brody, and Philip E. Tetlock. 1991. *Reasoning and Choice: Explorations in Political Psychology*. New York: Cambridge University Press.

Snijders, Tom A.B., and Roel J. Bosker. 1999. *Multilevel Analysis: An Introduction to Basic and Advanced Multilevel Modeling*. London: Sage.

Steenbergen Marco R., and Bradford S. Jones. 2002. "Modeling Multilevel Data Structures." *American Journal of Political Science* 46(1):218–37.

Treisman, Daniel. 2000. "The Causes of Corruption: A Cross-National Study." *Journal of Public Economics* 76(3):399–457.

Tyler, Tom R. 1990. *Why People Obey the Law: Procedural Justice, Legitimacy, and Compliance.* New Haven: Yale University Press.

Warner, Carolyn M. 1997. "Political Parties and the Opportunity Costs of Patronage." *Party Politics* 3(4):533–48.

Weatherford, M. Stephen. 1987. "How Does Government Performance Influence Political Support?" *Political Behavior* 9(1):5–28.

Whiteley, Paul F., and Patrick Seyd. 1998. "The Dynamics of Party Activism in Britain: A Spiral of Demobilization?" *British Journal of Political Science* 28(1):113–37.

Wright, Gerald C. 1993. "Errors in Measuring Vote Choice in the National Election Studies, 1952–88" *American Journal of Political Science* 37(1):291–316.

Zaller, John R. 1992. *The Nature and Origins of Mass Opinion.* New York: Cambridge University Press.

Zorn, Christopher J.W. 2001. "Generalized Estimating Equation Models for Correlated Data: A Review with Applications." *American Journal of Political Science* 45(2):470–90.