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Working Paper No. 148

WHY DO SOME AFRICANS PAY BRIBES

WHILE OTHER AFRICANS DON'T?

by Caryn Peiffer and Richard Rose

A comparative series of national public attitude surveys on democracy, markets and civil society in Africa

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Working Paper No. 148

WHY DO SOME AFRICANS PAY BRIBES WHILE OTHER AFRICANS DON'T?

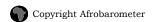
by Caryn Peiffer and Richard Rose

September 2014

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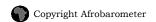








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#### **ABSTRACT**

Generalizations about African societies being pervasively corrupt are refuted in this innovative paper. Among 25,397 Afrobarometer respondents in 18 countries, 26% report paying a bribe, while 74% do not. Five hypotheses offer explanations: institutional context, inequalities of socio-economic resources, social inclusion and exclusion, social and political capital, and conflicting norms. Multilevel statistical analysis identifies as most important: contextual differences in colonial legacies, ethnic politicization, service provision, press freedom, and having social or political capital. The analysis emphasizes studying behavior rather than perceptions of corruption and supports a public-policy focus on bribery as an exchange for specific public services.

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#### INTRODUCTION

The relationship of public officials and citizens who receive public services can take many different forms. In the ideal-type Weberian state, officials deliver public services to individuals according to bureaucratic rules. However, a state in which there is a substantial amount of bribery, in which public officials receive a material benefit from individuals in exchange for the provision of a public service in violation of bureaucratic rules, is unable or unwilling to enforce impartial bureaucratic procedures on its own officials (Rothstein, 2011, p. 14). Although bribery is not the only activity that can make a government corrupt, it is an integral part of every definition of corruption (see Heidenheimer and Johnston, 2004; Heywood and Rose, 2014). Weber's (1948) emphasis on the culture-specific origins of bureaucratic norms has been borne out by the difficulties that intergovernmental agencies have faced in seeking to promote governance without bribery (Norad, 2011; Banerjee et al., 2012; Mungiu-Pippidi, 2013).

Bribery has long been described as a pervasive, even banal feature of African states (Médard, 2004). The macro-level rating of national political systems by the Corruption Perceptions Index (CPI) of Transparency International (2014) supports this judgment. On a scale with 100 representing the highest level of integrity and zero the most corruption, the mean rating for 48 African countries is 33. The mean CPI rating for Asian countries is 40; for Latin American countries, 43; for post-Communist states, 51; and for member states of the European Union, 65. Chabal and Daloz (1999, p. 99) conclude, "Corruption is not just endemic but an integral part of the social fabric of life [in Africa]."

Explanations of corruption in African<sup>1</sup> states are multiple. Ekeh's (1975) seminal article offered a cultural theory that postulated that many African public officials do not see themselves as rule-bound bureaucrats in the Western mode but have a primordial loyalty to family, kin, and ethnic groups. Researchers have subsequently elaborated on the way in which patron-client networks have persisted by mixing of formal bureaucratic procedures with more traditional patron-client relationships and neo-patrimonial norms (Bayart, 1993, p. 238; Olivier de Sardan, 1999; Smith, 2001; Gyimah-Brempong, 2002; Bratton, Mattes, and Gyimah-Boadi, 2005:38; Blundo and Olivier de Sardan, 2006; Andvig, 2008, p. 22). Theories that view African states from a global perspective offer explanations for corruption in terms of generic attributes of economic development, political institutions, traits of national culture, or other system-level characteristics (for reviews, see Hofstede, 1997, 1999; Treisman, 2000; Aidt, 2011).

Although they are quantitative, macro-level indexes are also subjective, aggregating the opinions of business consultants and desk-based researchers evaluating published materials (Transparency International, 2014; World Bank, 2013). By contrast, sample surveys ask individuals whether they sometimes obtain public services in exchange for small sums of money paid as bribes to low-level public officials working in their community. Micro-level survey data is subjective in the sense of being personal reports of behavior and attitudes rather than data registered in official statistics of the governing process.

A different picture emerges when the focus is shifted from generalizing about national corruption to particularizing about the micro-level relation between individuals and public officials within a state. A holistic national index such as the CPI precludes considering why some individuals in a society pay bribes while others do not. It is important to consider this because national sample surveys invariably find differences in the reported experience of respondents. For example, the Global Corruption Barometer survey found that 24% of its multinational respondents reported paying a bribe, while 76% did not. Similar within-nation divisions are found in Afrobarometer surveys (Transparency International, 2013; www.afrobarometer.org).

The public services that are the object of analysis in surveys about individual and household experience are a distinctive form of excludable goods, with public officials having a choice about whether or not to

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<sup>&</sup>lt;sup>1</sup> In this paper, the word "Africa" refers to the sub-Saharan portion of the continent, and the term "Africans" refers to people who live in sub-Saharan Africa.

provide a service to an identifiable recipient. However, some major public policy services are nonexcludable, such as national security, the rate of inflation, and air quality (Samuelson, 1954). Although these collective goods affect everyone in a society, officials cannot collect bribes to deliver them because no one can be excluded from their effects. Excludable goods and services are colloquially described as objects of grand or petty bribes. Grand bribery refers to the large sums paid to national politicians and high-ranking civil servants to obtain contracts for capital-intensive projects; these are projects such as bridge building or the exploitation of natural resources. The contracts go to business corporations that have the capital required to build bridges or fighter planes and the money to pay bribes in exchange for such procurement contracts. The resources required to engage in capital-intensive corruption are far beyond the capacity of most citizens. By contrast, individuals can engage in retail corruption involving the exchange of a bribe to a low-level public employee responsible for delivering health care, education, or other excludable goods and services. By comparison with corporate bribes, the absolute sums involved appear petty, but they may not appear small to poor households that pay such bribes. Moreover, because a large portion of the population uses the services that are the object of retail bribes, the total number of citizens directly affected by retail-level bribery is much greater than the restricted elite engaged in capitalintensive bribery.

The purpose of this paper is to explain under which circumstances and to what extent the payment of bribes by individual Africans varies both within and between countries. It is innovative in its theoretical approach because it integrates macro-level theories of the institutional causes of corruption and micro-level theories of the influence of individual characteristics on the payment of bribes. In doing so, it draws on ideas generated from "thick" ethnographic studies of particular African countries as well as "thin" social science models developed in Western countries. It is also innovative in testing these hypotheses with multi-level logit statistics that take a multiplicity of individual and contextual influences into account in the analysis of nationwide sample surveys in 18 sub-Saharan African countries.

#### THEORIES OF WHO PAYS BRIBES AND WHY

**Alternative social science theories.** The combination of economic, social, legal, and institutional influences impacting bribery has attracted the interest of social scientists from many different disciplines. In keeping with their academic discipline, each group tends to call attention to different influences, creating a large and diverse range of theories. Four approaches are particularly relevant here.

Because a bribe is an illegal form of micro-economic exchange, Becker's (1968) economic approach to crime has been the basis of a rational-actor approach to the payment of bribes. Whether an individual pays a bribe if it is demanded by a public official depends on his or her cost-benefit calculation of the cost of the bribe for a service in comparison to the utility of obtaining or doing without the service (see e.g. Justesen and Bjornskov, 2012, p. 2). The specific determinants of costs and benefits are left open to contextual specification. The service sought can be a benefit for which the claimant is not bureaucratically qualified, such as a university place for a youth who has failed the entrance examination, jumping a queue to obtain promptly a permit to which one is entitled, or gaining exemption from an obligation such as paying a fine for a motoring offence. The simplicity of this micro-model and the absence of cultural or institutional assumptions make it particularly suitable for experimental studies of the payment of bribes (for examples, see Serra and Wantchekon, 2012). However, the behavior of participants in experiments cannot be reliably generalized to whole societies, and still less to cross-national comparisons involving both macro- and micro-level influences.

Theories of who is most likely to pay a bribe draw heavily on sociological studies of inequality. Whereas theories of economic exchanges emphasize the ability of individuals to pay, theories of economic inequality emphasize the vulnerability of individuals to exploitation. Individuals paying bribes are seen as victims of unfair and extortionate treatment by public officials as, in Hunt's phrase (2007), "corruption

hits people when they are down." Class differences are seen as the foundation of inequality; income, education, and social status, usually inter-linked, are the defining attributes of an individual's class. The logic of inequality in interaction with public officials is also central to theories of social exclusion (Hills et al., 2002). Socially excluded individuals are unable to obtain their full entitlement under the law to public services. Exclusion can be based on such social characteristics as ethnicity, gender, age, or living in remote rural areas. Social inclusion is strengthened if individuals have social capital networks. Putnam (1993) found that in northern Italy this resource promoted obtaining public services without paying a bribe.

An exchange between a bribe-payer and a public official is a social-psychological relationship in which the behavior of those seeking public services is influenced by their expectations of whether officials act according to bureaucratic rules or expect a bribe. In an ideal-type Weberian state, individuals are socialized to expect that services will be delivered by matching their entitlements and obligations with bureaucratic rules. Weber (1958) described such a mechanical outcome as vending-machine administration. Theories of collective action postulate that when the dominant perception in a society is that many public officials are corrupt, this creates a cultural expectation that "everybody" pays a bribe, and this behavioral norm overrides any ethical objections that individuals may have about doing so (see e.g. Persson et al., 2013). The result is a low-level equilibrium trap in which public officials and those seeking services collectively maintain a "moral economy of corruption" (Olivier de Sardan, 1999; see also Helman, 1998).

Because bribery involves the violation of institutional rules, it challenges specialists in law and public administration to explain why laws and institutions do not operate as expected. Reform-oriented policy makers as well as academics have focused on the institutions that enable public officials to collect "rents" from the properties attached to their office. The aim of reform is to reduce their potential for extracting bribes by reducing or eliminating contact, for example, repealing regulations or reducing official discretion by computerizing the routine delivery of permits and making the allocation of public services more transparent (see www.anticorrp.eu; www.u4.no/; Mungiu-Pippidi, 2013). In addition, political scientists have begun to include measures of corruption as an independent variable when testing theories about the determinants of trust in politics (cf. Bardhan, 1997).

This paper applies a public-policy approach to bribery that draws on insights from multiple social sciences insofar as they are relevant to the issue at hand. Because the focus is on individuals, a large body of literature that compares countries on the basis of aggregate indexes is not directly relevant. Nor is the payment of bribes by business corporations for capital-intensive contracts. Given that our research context is African, we treat institutions taken for granted in a Western context as potentially significant variables. Thus, our public-policy model of who pays bribes stipulates that the likelihood of a person doing so is a function of their institutional context, inequalities of socio-economic resources, social inclusion or exclusion, and potentially conflicting norms. Table 1 states the testable hypotheses derived from the theoretical literature.

#### Table 1: Hypotheses about who pays bribes

#### 1. INSTITUTIONAL CONTEXT

- a. Individuals living in a country with a legacy of British legal culture will be less likely to pay a bribe.
- b. The greater the degree of politically salient ethnic fractionalization, the more likely individuals are to pay a bribe.
- c. If the supply of positively valued public services is scarce, individuals are more likely to pay a bribe.
- d. The greater the accountability of government, the less likely individuals are to pay a bribe.

#### 2. INEQUALITIES OF SOCIO-ECONOMIC RESOURCES

- a. The lower the income of individuals, the more likely they are to pay a bribe.
- b. The higher the education of individuals, the less likely they are to pay a bribe.

#### 3. SOCIAL INCLUSION AND EXCLUSION

- a. If individuals live in an urban area, they are more likely to pay a bribe.
- b. Women are less likely to pay a bribe than men.
- c. If individuals are old, they are less likely to pay a bribe.

#### 4. SOCIAL AND POLITICAL CAPITAL

- a. If individuals have social capital networks, they are less likely to pay a bribe.
- b. If individuals have political capital networks, they are more likely to pay a bribe.

#### 5. CONFLICTING NORMS

- a. The more individuals perceive bribery as wrong, the less likely they are to pay a bribe.
- b. The more individuals perceive public services as corrupt, the more likely they are to pay a bribe.

Influence of institutional context. The institutions of the great majority of contemporary states have a legacy of colonial governance, and every imperial power introduced some form of Western legal system defining bureaucratic and corrupt practices. Imperial powers were prepared to accept, faute de mieux, a substantial degree of indirect rule through African institutions. This allowed the continuation of "traditional African practices" of small groups of big men providing services to individuals, families, and villages according to personalistic and clientelistic norms rather than bureaucratic rules (LaPalombara, 1963; Bleich, 2005). The imposition of Western institutions was thus mediated by the response of existing African cultures (Mamdani, 1996; Acemoglu, Johnson, and Robinson, 2000; Sachs and Warner, 1997). This is the basis of theories of corruption that stress the degree of fit or misfit between bureaucratic institutions and pre-existing indigenous norms and practices (see e.g. Englebert, 2000).

The legal systems introduced by imperial powers differed in their potential for limiting corruption. Treisman (2000, p. 403) argued that the English common-law tradition was more conducive to reducing corruption because of its "almost obsessive focus on the procedural aspects of law" – and procedure is the essence of bureaucratic governance (italics in the original. See also La Porta et al., 1999). By contrast, the Napoleonic codes of France and Portugal gave greater scope for rulers to use their hierarchical power to achieve substantive goals with less regard for procedure (Joierman, 2001). Hypothesis 1a states the implication of different historical legacies: Bribery ought to be lower in former British colonies.

Ethnic and tribal diversity is found in many African countries, and ethnic ties can be stronger than formal bureaucratic rules of the state. Martin et al. (2007, p. 1404) theorize that within each ethnic group there is a strong sense of interdependence that discourages the exploitation through bribery of fellow group members. However, in countries in which a single ethnic group is large enough to seize political power on its own or with a few allies (Posner, 2004), there is a division between insiders and outsiders. In such circumstances, ethnic solidarity can result in the allocation of services to the dominant ethnic group regardless of bureaucratic rules while minority group members are forced to pay bribes to gain services (see also Azam, 2006). Hypothesis1b predicts that the greater the degree of politically salient ethnic fragmentation, the greater the extent of bribery (cf. Easterly and Levine, 1997; Vanhanen, 1999; Husted, 1999, p. 344).

In developing countries, retail public services such as education and health care may be in short supply. Even when legislation nominally entitles all citizens to such "good" goods, the state may lack the resources to provide them to everyone who is bureaucratically entitled to these valued benefits, thus giving public officials the informal power to determine how they are allocated. In countries where this is the case, public officials are likely to be poorly paid, and for "lowly civil servants, the sale of the limited amount of power they possess is virtually their only means of survival" (Chabal and Daloz, 1999, p. 99). Such a situation also gives individuals wanting health care, education, and other valued private goods an incentive to offer bribes to get what they want. Hypothesis 1c predicts that scarcity of public services increases bribery.

Since bribery involves public officials exploiting citizens, theories of institutional accountability postulate that the greater the extent to which governors are accountable to citizens, the lower the level of bribery (for a review, see Potter and Tavits, 2011; Deininger and Mpuga, 2005). Accountability can be institutionalized in elections in which dissatisfied citizens have the power to hold the government of the day accountable and replace it with an alternative (cf. Schumpeter, 1952). Treisman (2007, Table 4) finds that a variety of indicators of democratic accountability tend to reduce corruption as measured by a World Bank aggregate index. Where government institutions of accountability are weak, a degree of accountability can be exercised externally by institutions of civil society. A free press can hold government publicly to account by reporting incidents involving bribery and making corrupt public officials fear exposure (Freille, Haque, and Kneller, 2007; Lessman and Markwardt, 2010; Norris, 2014). Hypothesis 1d is endorsed by the emphasis that anti-corruption campaigners give to openness in the conduct of governance and is exemplified in the very name of Transparency International.

**Inequalities of economic resources.** In developing countries, there are substantial inequalities in the distribution of income and education. Poor people are more easily intimidated into paying a bribe because they have less political influence and lack the option of the better off of buying private education or health care rather than paying a bribe (Klitgaard, 1988; Hunt and Laszlo, 2012). Economists have used Afrobarometer data to test theories of bribery being part of a poverty trap in which the poor are exploited, and their conclusions are the basis of Hypothesis 2a (Razafindrakoto and Roubaud, 2007; Justesen and Bjornskov, 2012). However, other studies have found some evidence that people with more income are readier to pay bribes because they have the money to do so and public employees, recognizing this, exploit them (Krishna, 2007; Mocan, 2008).

Education is a resource that enables individuals, regardless of their income, to gain a better knowledge of the public services to which they are entitled and of their obligations. More educated people may use this knowledge to make clear to officials what they have a right to be given and thereby reduce the likelihood of being compelled to pay a bribe for a service to which they are entitled. Educated people may also be more civic-minded and accepting of their obligations, for example, paying a fine for speeding rather than paying a lesser sum as a bribe to avoid a fine. Insofar as education is not strictly correlated with income, more educated but poorer people may use their knowledge to reduce vulnerability to bribes. To test the

independence of these two resources, Hypothesis 2b predicts that more educated people are less likely to pay bribes.

**Social inclusion and exclusion.** Individual resources and the concomitant inequalities that they create cannot be reduced to a single dimension of income or education. Since public services tend to be concentrated in urban areas, people who live in cities are more likely to be in contact with public officials while rural residents are more likely to be excluded from their use. A consequence of greater contact, spelled out in Hypothesis 3a, is that urban residents are more vulnerable to paying bribes (Poku and Mdee, 2011; Justesen and Bjornskov, 2012).

In African societies, researchers have found that dealing with public officials has a gender dimension: Women are less likely to do so than men (Kevane, 2004; Boko et al., 2005). Insofar as women are more likely to be excluded from contacts with officials, Hypothesis 3b predicts that they will be less vulnerable to the payment of bribes. Advancing years are likely to reduce activities of people, including networks that facilitate social inclusion and contact with public officials. If public services are sought, the tendency for older Africans to receive deference (Aboderin, 2011) can reduce their vulnerability to paying a bribe. Thus, Hypothesis 3c predicts that old people are less likely to pay bribes because they have fewer contacts with public services and, if they do, receive more deference.

**Social and political capital.** Belonging to a social or political network is by definition a form of social inclusion. Social-capital networks consist of face-to-face ties that bring individuals together in their locality (Coleman, 1990; Putnam, 1993). Given the limitations of many formal institutions in developing African societies, individuals can turn to others in their social-capital networks for help in obtaining public services (Andvig, 2008, p. 25). Following Putnam, Hypothesis 4a predicts that people with social capital will be less likely to pay bribes.

By contrast, Coleman (1990, p. 302) has argued that the uses of social-capital networks are not always positive for good government (see also Knack and Keefer, 1997). Portes (1998) has written of the "dark side" of social capital in promoting bribes (see also Uribe, 2014). Political-capital networks give individuals first-hand contact with public employees and politicians. In Africa, individuals with social and political capital can use it to find a politically well-connected person who can secure them a public service as part of a patron-client relationship (Smith, 2001, p. 353; Ufere et al., 2012). Olivier de Sardan (1999) documented that in West Africa the norm is the reciprocal exchange of gifts and tributes, a practice that by impersonal bureaucratic standards can be considered bribery. Hence, Hypothesis 4b postulates that Africans with political capital are more likely to pay bribes to obtain public services.

Conflicting norms. The evaluation of corruption reflects individual ethical and behavioral norms. When surveys ask for an ethical evaluation of giving public officials money in exchange for public services, 77% of Afrobarometer respondents describe it as wrong. However, insofar as individuals perceive public officials as expecting a bribe, this will create a behavioral justification for paying a bribe on the grounds that "everybody does it" (Karklins, 2005). When Afrobarometer asks a battery of questions about how public officials behave, an average of 23% of respondents see most or all officials as corrupt; 51% regard some officials as corrupt; and 26% see very little or no corruption among public officials. This creates a conflict within society, and sometimes within individuals, between conflicting ethical and behavioral norms. Hypotheses 5a and 5b take into account both contrasting norms, leaving to empirical analysis whether one or the other is dominant.

#### AFROBAROMETER SURVEY DATA

In principle, the payment of bribes is an observable act, but because it is illegal, it is usually measured by proxies, such as the perception of corruption. Macro-level indexes rely heavily on the perceptions of business consultants drawing on their experience of capital-intensive projects, of employees of business

enterprises, and of desk-based researchers (Transparency International, 2014; World Bank, 2013a). Many criticisms have been made of the reliability and validity of these sources and how they are aggregated into a single quantitative score (Tetlock, 2005; Sampford et al., 2006; Treisman, 2007; Olken, 2009; Donchev and Ujhelyi, 2014). A study comparing perceptions of corruption among African elite and mass samples found that elites, drawing on their own experience, overestimated substantially the extent to which the mass of citizens paid bribes (Razafindrakoto and Roubaud, 2010; on Asia, see Lin and Yu, 2014). Barometer surveys on every continent find that far more people in a country perceive the government to be corrupt than report that they themselves have paid a bribe (Rose and Peiffer, 2012, Chapter 6). Andersson and Heywood (2009, p. 762) concluded, "Perceptions ought not to be allowed to serve as a proxy for reality."

Any theory about an exchange between an individual bribe-payer and a receiver of bribes should be tested with reliable micro-level data; to take variations in national institutions into account requires comparable data about individuals in different national contexts. Sample surveys are the conventional social-science method for obtaining data about individual attitudes and behavior. Sample surveys can and do ask individuals to report whether they have contacted public services and whether they have paid a bribe to obtain a service. Increased recognition of the importance of corruption for governance has led a number of major multinational surveys to include a few questions about corruption. Some multinational surveys have a module that offers sufficient data for intensive analysis (for a detailed overview citing questions and responses, see Rose and Peiffer, 2012).

Two multinational surveys ask a module of questions about corruption in Africa. However, the Global Corruption Barometer of Transparency International has limited coverage; only nine of its 2013 round of surveys had samples that approximated national coverage. The Afrobarometer survey includes a battery of questions about bribery and is unique in having the resources and local knowledge to administer nationwide sample surveys in dozens of African countries (see www.afrobarometer.org). In this paper we analyze the third-round Afrobarometer survey conducted in 2005-2006, because it has all the indicators required to test the above hypotheses. By contrast, the fourth-round 2008 survey did not ask questions about bribery for education and health, services for which bribery tends to be most frequent. Using the 2005 survey is acceptable since there are good theoretical reasons for expecting corruption to persist at much the same level over a period of years (Norad, 2011; Mungiu-Pippidi, 2013). This is confirmed by correlations of the national percentages reporting having paid a bribe in successive surveys. On this variable, the third and fourth rounds correlate at 0.86, and the third and fifth rounds correlate at 0.84.

The 18 countries in the third-round Afrobarometer survey are an opportunistic sample, that is, countries where resources for fieldwork and political conditions made it possible to conduct a proper survey (Bratton, Mattes, and Gyimah-Boadi, 2005). The mean rating of the sample countries on what was then the 10-point Transparency International Corruption Perceptions Index was 3.4, compared to 2.9 for all the sub-Saharan African countries that Transparency International evaluated. At that time, the mean score for the Afrobarometer countries on the seven-point Freedom House measure of democracy was 2.9, compared to a lower partly free mean of 4.1 for all sub-Saharan countries. In strict statistical terms, we cannot generalize from the Afrobarometer results to the whole of sub-Saharan Africa. Nonetheless, the 25,397 people interviewed in nationally representative samples do cover more than 56% of the total population of sub-Saharan Africa (for full sample details, see www.afrobarometer.org/data/round-3-merged). In terms of race, 88.4% of respondents were black Africans; 4.3% were Coloured or mixed race; 1.3% were white European; 0.4% were Indian, Pakistani or other South Asian; and 5.6% were coded "Other."

<sup>&</sup>lt;sup>2</sup> The 2005 Afrobarometer data has been analyzed by Razafindrakoto and Roubaud (2007) without using multi-level modeling to control for the influence of national context. Justesen and Bjornskov (2012) concentrate on a single theoretical point – the extent to which the poor are most likely to pay bribes. Our multi-level and multi-causal approach is much broader, and the statistical results presented in tables 2 and 3 justify this strategy.

Midway through a questionnaire asking questions about government, politics, and society, respondents were asked: In the past year, how often, if ever, have you had to pay a bribe, give a gift, or do a favor to government officials in order to obtain ... each of five enumerated services: getting a document or permit; getting a child into school; securing a household utility such as piped water, electricity, or telephone; getting medicine or health care; avoiding a problem with the police. The phrasing "had to pay" emphasizes that the bribe was a condition of obtaining a service. It leaves open whether the initiative in proposing a bribe was with the official or the claimant. When a claimant expects an official to require a bribe, there is a common understanding in which an official does not need to make a direct request for money. Hints can be made in a variety of ways that claimants are likely to understand, and doing nothing about a valid request can trigger an anxious claimant to offer a bribe.

In keeping with our basic assumption that the payment of bribes is a variable rather than a necessary condition of getting a public service, in every African society there is a division between people who report paying a bribe and those who do not; 26% report paying a bribe, while 74% do not. There are also differences between public services in the reported incidence of bribery. The public service most in demand, health care, is also high on the list of objects of bribery; 13% report paying a bribe for health care in the previous year. The same percentage report paying a bribe to get a permit required by government regulations. While education is a basic service, households without school-age children do not use it; hence, those reporting a bribe, 8%, are not so numerous. Getting a household utility has involved 7% in paying a bribe. Bribes may also be paid to avoid public services: 12% said they had bribed the police in order to avoid a fine or arrest.

There are wide variations in reported bribery between countries (Figure 1). In Kenya, 49% of respondents report having paid at least one bribe in the previous year, as do 42% in Nigeria and Uganda. At the other end of the continuum, respondents in Lesotho, Malawi, Cape Verde, and Botswana appear less than half as likely to pay bribes as the average for all countries in the Afrobarometer survey. The contrast between the levels of bribery indicated by national indexes of African countries and by interviews with individual Africans reflects differences in purpose and methodology. National indexes aggregate expert statements that emphasize the extent of bribery by businesses for service and for capital-intensive projects decided at high levels of government. By contrast, surveys such as Afrobarometer focus on the experience of a representative sample of citizens in the encounters that they have with low-level officials delivering retail services in their locality.

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<sup>&</sup>lt;sup>3</sup> It would, of course, be desirable to have empirical data about under which circumstances some public officials seek bribes while others do not. At present, our knowledge is restricted to a priori theories that tend to generalize about all public officials and inferences drawn from aggregate national statistics, for example, relating the salary of officials to CPI scores (see e.g. Rose-Ackerman and Soreide, 2011).

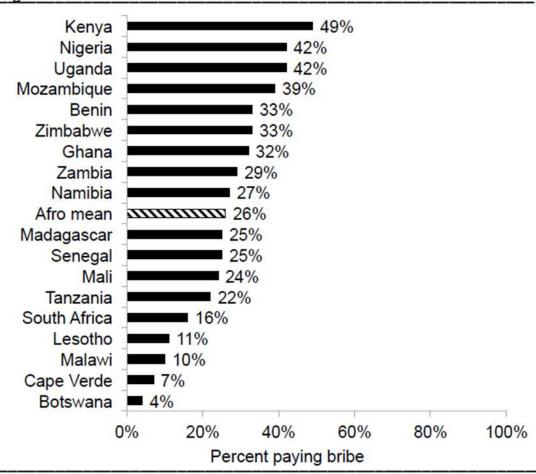


Figure 1: PERCENT PAYING A BRIBE BY COUNTRY

Source: Afrobarometer, 2005-6.

Afrobarometer reports a level of bribery much lower than what is described in difficult-to-replicate ethnographic studies like that of Blundo and Olivier de Sardan (2006) and implied by national corruption measures of Transparency International and the World Bank. Skeptics of Afrobarometer estimates may assert that surveys inherently and grossly under-estimate the extent to which bribes are paid. In a society that treats bribery as socially unacceptable, reporting bribe payment would be evidence of a moral fault and of being an accessory to a crime. To avoid this, critics argue, many bribe-payers will not admit to what they have done. However, this assertion is based on a socially constructed norm originating in Western bureaucratic societies that stigmatize giving material benefits in violation of bureaucratic rules (see Tänzler et al., 2012). A variety of ethnographic studies emphasize that in many African settings, local norms may evaluate a "gift" to a public official as an obligation in recognition of receiving a service (see e.g. Smith, 2007; Torsello, 2011). In the words of a Kenyan official to a Swedish academic, there is a "stigma attached to honest behavior" (quoted in Persson et al., 2013, p. 414). This remark is supported by 49% of Kenyans telling Afrobarometer interviewers that they had paid a bribe in the previous year.

Three challenges that state testable propositions about the behavior of survey respondents can be tested with Afrobarometer data. The simplest way for a person to conceal the payment of a bribe when asked is

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<sup>&</sup>lt;sup>4</sup> Even if a public official who accepts a bribe is committing an illegal act, laws regulating public officials normally do not apply to the payer of a bribe.

to reply "Don't know" or refuse to give any answer. Afrobarometer respondents rarely do this. For each service covered, an average of less than 1% gave this opaque reply.

Secondly, insofar as there is a tendency for individuals to conceal the payment of a bribe, this tendency should be much stronger among those who think that paying a bribe is wrong than among those who find it understandable. However, this is hardly the case. Among Afrobarometer respondents who think bribery is wrong, 25% say they have paid a bribe in the past year. This is little different from the 30% reporting the payment of a bribe among those who do not endorse this ethic. Since those thinking bribery is wrong and should be punished are a big majority of respondents, the upshot is that more than three-quarters of those who report the payment of a bribe are people who think bribery is wrong and should be punished.

Thirdly, studies in Western nations have found some evidence that under-reporting of socially undesirable activities may vary with education. Insofar as more educated people are more sensitive to what is socially acceptable, they may be "most likely to misrepresent their true beliefs, attitudes, or practices" (Karp and Brockington, 2005, p. 826). This implies that more educated people will be less likely to report paying bribes. This is not the case. Multivariate analysis finds that education has no significant influence on paying a bribe (see also Justesen and Bjornskov, 2012, p. 10).

To identify respondents who could be reticent about expressing their opinions because of fear of government retribution, each Afrobarometer interview concluded with an open-ended question: Who do you think sent us to do this interview? The assumption is that people who believed that a government office sent the interviewer would be less likely to report a bribe because this might get them unwelcome official attention. In fact, there was no difference in the percentage reporting a bribe among the 55% thinking that the survey was being conducted by a government agency, the 27% believing it had a sponsor independent of government, and the remainder who had no idea of the sponsor.

The chief weakness of the Afrobarometer questionnaire concerns the interpretation of those who do not pay bribes. They divide into two groups: people who have not paid a bribe because they have not been in contact with a public service and those who have contacted a service and received it without having had to pay a bribe. Unfortunately, the Afrobarometer questionnaire does not allow for an unambiguous determination of which group most respondents belong in. If a proper measure of contact were available, it would be possible to calculate the percentage of those having contact who have paid a bribe. Controlling for contact would necessarily produce a higher percentage of bribe-payers.

#### TESTING HYPOTHESES ABOUT WHO PAYS BRIBES

The theoretical hypotheses set out in Table 1 can be linked in a simple model. Institutions establish the matrix within which individuals have exchanges with public officials who deliver public services. Inequalities in economic resources and an individual's degree of social inclusion and exclusion affect their dealings with public officials from whom they seek services. When confronted with a demand to pay a bribe, individuals who believe it is ethically wrong to do so will be subject to cross-pressures if they perceive that officials expect bribes as a condition of providing a service.

To test these hypotheses, our dependent variable is whether an individual reports paying a bribe in the previous year. The alternative would be to use the number of services for which an individual reported paying a bribe. However, this is unsuitable because the distribution is badly skewed: 74% did not report paying a bribe for any service; 12% paid a bribe for one service; 7% for two services; 4% for three

<sup>&</sup>lt;sup>5</sup> Checking these replies by reference to other Afrobarometer questions confirms their unsuitability as a measure of contact. Results available from the authors on request.

services; 2% for four services; and 1% for five services. A full range of indicators for testing hypotheses can be found in the Afrobarometer questionnaire. The Appendix gives details of all variables.

Given the range of national variations in bribery reported in Figure 1, in the first instance we test the influence of national institutions with a logit analysis. This is followed by a multi-level logit regression (Stata 12.1) treating countries as cluster variables and taking into account the Afrobarometer survey weights (see Rabe-Hesketh and Skrondal, 2012). Given that the data set includes more than 25,000 individual respondents, we set <0.001 as the threshold for regarding individual indicators as significant. Because context indicators have the same coding for all of a country's residents, this reduces the degrees of freedom, so we set <0.10 as the level of significance for measures of national context. Because standard logit coefficients are difficult to interpret substantively, they are transformed into more readily understood odds ratios. A significant odds ratio with a value greater than 1.00 indicates the extent to which a one-unit increase in the independent variable increases the odds of an individual paying a bribe, whereas a value of less than 1.00 shows a decrease.

**Influence of institutional context.** The context in which an individual pays a bribe is fixed by national institutions, and the scale of cross-national differences implies that national context affects individual behavior while challenging researchers to specify which particular contextual attributes are influential. The first set of hypotheses identifies four specific attributes of African countries as influencing whether a bribe is paid by an individual in the country. The logit test in Table 2 finds that all four influences are statistically significant and there is a good statistical fit for the context model as a whole (probability of chi-squared: 0.000).

Consistent with the theory of the importance of the British legal emphasis on procedural correctness, individuals subject to governments established in the 10 former British colonies in the Afrobarometer survey are significantly less likely to pay a bribe than those formerly governed in a mixture of French, Portuguese, and Dutch Afrikaans colonies (Table 2). The effect is substantial, with an odds ratio of 0.58. Hypothesis 1a therefore finds support.

Table 2: Contextual influences on payment of a bribe

| Logit analysis of whether respondent reports paying a bribe |             |          |  |  |  |
|---|-------------|----------|--|--|--|
|   | Odds ratios | P-values |  |  |  |
| British legacy  | 0.58        | 0.030    |  |  |  |
| Ethnic fractionalization                                    | 1.20        | 0.000    |  |  |  |
| More public services  | 0.82        | 0.000    |  |  |  |
| Freer press   | 0.88        | 0.008    |  |  |  |
| Wald chi <sup>2</sup>                                       | 57.73       |          |  |  |  |
| Probability of chi <sup>2</sup>                             | 0.000       |          |  |  |  |
| Pseudo R <sup>2</sup>                                       | 0.045       |          |  |  |  |
| Log pseudolikelihood  | -11816.04   |          |  |  |  |

Source: Third-round Afrobarometer survey in 18 countries, 25,367 respondents

Given the way in which imperial powers drew the boundaries of what are now independent African states, ethnic and tribal fractionalization varies greatly across the continent. Moreover, its political salience varies substantially between countries. Posner's (2004) index of Politically Relevant Ethnic Groups reflects the degree to which a society is ethnically fragmented along politically salient lines. For the

<sup>&</sup>lt;sup>6</sup> An ordered logit regression using the number of bribes paid as a dependent variable shows a similar pattern of support for hypotheses as in Table 3, but the statistical fit is less good, and the pseudo r-squared is 0.11 (cf. Table 3).

Afrobarometer sample, it ranges from zero in Botswana, Lesotho, and Madagascar to a high of 0.66 in Nigeria and 0.71 in Zambia. Higher fractionalization can create a division between ethnic insiders, who receive benefits because of the ethnic solidarity of the group in power, and ethnic outsiders, who are excluded from power and must pay bribes for services or do without. As Hypothesis 1b predicts, the logit analysis finds that the greater the politically salient ethnic fractionalization, the greater the odds that a bribe will be paid. Holding fixed the effect of all other variables, for each 10% increase in the degree of ethnic fractionalization, the odds of paying a bribe rise by 20%.

Since African states have developing or low-income economies, there is substantial cross-national variability in the supply of social services. World Bank data shows that while a modicum of elementary education is available to almost all children, the proportion of youths of secondary-school age actually attending school varies from 13% in Mozambique to 97% in Tanzania. Similarly, the percentage of births attended by skilled health staff ranges from 35% in Nigeria to 95% in Botswana. These differences reflect political choices made by governors as well as officially recorded Gross Domestic Product. Since the provision of services data is directly related to activities for which individuals may pay bribes and is likely not flawed like African statistics of Gross Domestic Product (Jerven, 2013), we use that to test the scarcity hypothesis. Our indicator is the average of a country's percentage of births attended by skilled health staff and percentage of youths attending secondary school; the two correlate at 0.63. Hypothesis 1c is supported. An increase in public provision reduces the likelihood of paying a bribe by reducing the scarcity of services (Table 2).

Accountability is a political concept that can be indicated by a variety of highly correlated measures; for example, there is a correlation of 0.80 between the rating of Afrobarometer countries on the Press Freedom Index of Reporters Without Borders (<a href="www.rsf.org">www.rsf.org</a>) and the Freedom House Index (<a href="www.freedomhouse.org">www.freedomhouse.org</a>). Press freedom directly relates to the control of corruption, inasmuch as it can expose bribe-takers (Norris, 2014, p. 534). Such publicity can lead to public protests that warn elected governors with a loss of votes and threaten authoritarian governors with a loss of regime support. By contrast, electoral sanctions operate indirectly, and African voters may support clientelistic governors who deliver benefits in violation of bureaucratic rules. Hence, we use the extent to which the press is freer as our indicator of accountability. As hypothesized in 1d, in countries in which the press is freer, individuals are much less likely to pay bribes.

Consistently, the logit analysis in Table 2 finds significant support for the theory that institutional characteristics of a country influence the likelihood that its citizens pay bribes. In some countries, multiple contextual influences operate in the same direction. For example, Botswana is not only advantaged by being a former British colony with low ethnic fractionalization but also by its high provision of public services and free press. In other countries, influences push in opposite directions. While Nigeria is a former British colony, politically salient ethnic fractionalization is also very high. However, because contextual influences affect all citizens, they cannot take into account the substantial within-country differences between individuals that are the focus of hypotheses 2 to 4. To do this, we turn to multi-level analysis that combines contextual and individual influences.

Inequalities in socio-economic resources. Given the extent to which people in Africa rely on non-monetized household production and irregular trading income as well as or instead of a steady wage, Afrobarometer measures poverty by asking respondents how often during the past year they have gone without food, water, medical care, cooking fuel, cash, and school expenses (see Bratton, 2008). Replies were coded 0 for never going without in the course of a year; 1 for doing without just once or twice; 2, several times; 3, many times; and 4, always. Averaging the replies to all six necessities produces a single

<sup>&</sup>lt;sup>7</sup> As indicated in the Appendix table, to ease interpretation of impact, ethnic fractionalization, press freedom, and availability of public services were all recoded to 0-10 scales. Moreover, the original press freedom score was manipulated so that higher scores indicate greater press freedom.

scale in which only 1% reported they always went without all necessities while 21% never did so in the course of a year. The majority intermittently did without some necessities.

The multi-level logit analysis finds that, consistent with Hypothesis 2a, poorer people are significantly more likely to pay a bribe (Table 3). Holding all other effects constant, each one-unit increase in the degree of poverty on the five-point scale increases the odds of paying a bribe by 15%. Since bribes represent a higher relative cost to low-income people, this implies that poorer people likely pay for these much-needed services under greater duress from an official. This effect, however, also can be due to people with more money tending to exit to the private sector for health care or education rather than pay a bribe (Hirschman, 1970; Klitgaard, 1988). Multi-level logits that separately analyze the payment of bribes for each service (not shown) give statistical support to this view, for poverty has a stronger influence on the payment of a bribe for health or education than for the public services whose provision is a government monopoly, police and permits.

While there is a 0.26 correlation between the Afrobarometer measures of poverty and education, the logit analysis shows a difference between these two factors. Contrary to Hypothesis 2b, having more education does not significantly impact the likelihood of paying a bribe. Nor is there a significant interaction effect on bribery if people are poorer and have less education (unreported model).

Table 3: Contextual and individual influences on payment of a bribe

| Logit analysis of whether respondent reports paying a bribe. |             |          |  |  |  |  |
|--|-------------|----------|--|--|--|--|
|  | Odds ratios | P-values |  |  |  |  |
| Socio-economic resources                                     |             |          |  |  |  |  |
| Lived poverty  | 1.15        | 0.000    |  |  |  |  |
| Education  | 1.11        | 0.006    |  |  |  |  |
| Social inclusion   |             |          |  |  |  |  |
| Urban  | 1.40        | 0.000    |  |  |  |  |
| Female   | 0.81        | 0.000    |  |  |  |  |
| Older age: 60+   | 0.68        | 0.000    |  |  |  |  |
| Social and political capital                                 |             |          |  |  |  |  |
| Member, voluntary ass'n                                      | 1.21        | 0.000    |  |  |  |  |
| Religious contact  | 1.38        | 0.000    |  |  |  |  |
| Traditional contact  | 1.08        | 0.304    |  |  |  |  |
| Political contact  | 1.41        | 0.000    |  |  |  |  |
| Has patron   | 4.54        | 0.000    |  |  |  |  |
| Party identified   | 1.16        | 0.000    |  |  |  |  |
| Conflicting norms  |             |          |  |  |  |  |
| Perceived corrupt  | 1.31        | 0.000    |  |  |  |  |
| Corruption wrong   | 0.80        | 0.032    |  |  |  |  |
| Context  |             |          |  |  |  |  |
| British legacy   | 0.57        | 0.032    |  |  |  |  |
| Ethnic fractionalization                                     | 1.12        | 0.000    |  |  |  |  |
| More public services   | 0.87        | 0.001    |  |  |  |  |
| Freer press  | 0.90        | 0.041    |  |  |  |  |
|  |             |          |  |  |  |  |
| Pseudo R <sup>2</sup>  | 0.158       |          |  |  |  |  |
| Log pseudolikelihood   | -10416.37   |          |  |  |  |  |

Source: Third-round Afrobarometer survey in 18 countries, 25,367 respondents.

Note: Stata did not report the Wald Chi2 statistics; of this omission it notes: "Stata has done that so as to not be misleading, not because there is something necessarily wrong with your model."

Social inclusion and exclusion. The commitment of Afrobarometer to achieving nationwide coverage resulted in 66% of respondents being rural residents, three-quarters of whom interviewers could not reach by a paved road. Slightly more than one-third lived in urban areas, where public services are more accessible. As predicted in Hypothesis 3a, after controlling for other effects, being in reach of public services as an urban resident increases the odds of paying a bribe, by 40%. The effect of city living may also reflect greater monetization; it is easier to have a cash income there, if only as a street trader, and urban officials dealing impersonally with claimants may want cash rather than engaging in the rural practice of relying on other forms of mutual aid.

The effect of gender is as predicted in Hypothesis 3b: Women are 0.80 times as likely as men to pay a bribe. More detailed analysis indicates that the extent to which women are included or excluded varies significantly from service to service. Dealing with the police and with permits appears to be a role more often taken by African men. Logit analyses for these specific services (not shown) find that women are significantly less likely to pay a bribe than men for a permit (odds ratio: 0.73) and to the police (odds ratio: 0.68). However, there is no significant difference between the sexes in paying bribes for the caring services of education and health, for which women are involved insofar as they are traditionally more responsible for looking after children as well as themselves.

Whether through reduced contact with public officials or increased deference to older people in African societies, the effect of age predicted in Hypothesis 3c is supported (Table 3). After controlling for other influences, the logit analysis finds that people age 60 or above are significantly less likely to pay a bribe than those under the age of 60 (odds ratio: 0.68) (Table 3).

Social and political capital. We can quantify ethnographic observation of the impact and role that informal networks play in bribery patterns with three independent variables drawn from Afrobarometer's detailed range of questions about social networking. Whether individuals are members of voluntary associations is identified by their responses to specific questions about membership in a community development group, trade unions, and/or business organizations. Two-fifths of respondents belong to at least one voluntary association. The social capital represented by membership in voluntary organizations is a significant predictor of bribe payment, but not in the direction that Putnam (1993) predicts. The odds ratio for members is 1.21, showing that Africans who belong to voluntary associations have 21% greater odds of paying a bribe than those who do not belong to such associations. This supports the theory of Portes (1998) and Uribe (2014) that how socially integrated people relate to public officials is context-dependent. In a political system in which bribery is prevalent, those who have informal networks are likely to use them to identify whom to pay a bribe. The experience of contacting a religious leader for help about resolving a problem further supports this interpretation. Having made contact with a religious leader in the previous year is significantly and positively associated with bribe payment. However, turning to a traditional leader for help does not have a significant effect on whether an individual pays a bribe.

As predicted in Hypothesis 4b, political inclusion facilitates rather than substitutes for the payment of a bribe. Political contacts are indicated by an individual having asked a local councilor, Member of Parliament, party leader, or government official for help in dealing with a problem; 34% report having done so in the previous year. These contacts are significant; the odds of those with such contacts paying a bribe are 41% higher than for those who have not made such a contact.

Our measure of having a patron is whether the respondent has been personally offered money or goods in return for a vote; 18% of the sample had had this experience in the past. People who have been thus approached are also much more likely to pay a bribe to get a public service; in other words, the cash nexus between patron and client may involve exchanges of money as well as services (Table 3). The readiness of African political parties to make face-to-face contact with supporters is shown by 62% of

respondents having a party identification. Party identifiers are significantly more likely to pay a bribe for public services than those who have no party to turn to for help. In sum, both social and political networks are examples of the "dark" side of political capital rather than making democracy work (cf. Portes, 1998; Putnam, 1993).

**Conflicting norms.** To assess popular expectations of the behavior of public officials, Afrobarometer asks a series of questions about respondents' perceptions of the degree of corruption in specific institutions ranging from the president and his advisers to teachers and school administrators. The answers allow respondents to characterize the proportion of officials perceived as corrupt on a four-point scale ranging from none to all. There is a wide distribution on this scale. While a limited minority gives an institution a clean bill of health, those seeing all officials as corrupt are also in a minority. There are also differences in the perception of particular institutions: 45% see all or most police as corrupt and 29% hold this view of local government officials, while only 20% think most health officials are corrupt and 16% hold this view of education officials. The Afrobarometer evidence thus shows a difference of opinion rather than a consensus about the degree of corruption to be found in particular public services.

Given our focus on the retail-level delivery of services to individuals, we have created an index of the number of times a respondent has characterized most or all officials in police, local government, health, and education as corrupt. This shows a wide distribution of perceptions of corruptions. Only 7% view all four groups as being mostly or all corrupt, while 34% do not see any as mostly or all corrupt. The median respondent perceives corruption in a minority of teachers, health workers, and local government officials and a majority of the police.

Consistent with Hypothesis 5b, there is a significant relationship between the perception of services as corrupt and the payment of a bribe; for each unit increase in the five-point perception scale, the odds of paying a bribe increases by 31 percentage points. Given differences in the perception of corruption in specific services, we have repeated the logit analysis shown in Table 3 four times, with paying a bribe for a particular service the dependent variable and substituting service-specific measures of perceived corruption for the composite measure used in Table 3. As expected, this shows a significant and strong effect. The odds ratio for the degree of corruption perceived in the health service is 1.85; for education it is 1.71; for police, 1.52; and for the issuance of permits, 1.39. This evidence offers further support for a social-psychological understanding of the interaction between claimants and public officials: The more a set of officials delivering a service is perceived as on the lookout for payments, the greater the odds that an individual will pay a bribe.

There remains the possibility that the strong relationship between the perception and the experience of corruption is due to endogeneity, that is, people who pay bribes are more likely to see public officials as corrupt as well as vice versa. The standard statistical procedure to control for this potential two-way causal relationship is to identify independent variables that are likely to influence bribery only through their effect on perceptions and are not correlated with the error term of the original logit analysis. Such instrumental variables can then be used in an additional analysis to test whether perceptions impact bribery, bribery impacts perceptions, or they reciprocally influence each other (Wooldridge, 2009).

The Afrobarometer questionnaire provides measures that on theoretical grounds appear potentially suited to qualify as an instrumental variable. Other research has found that individual perceptions of corruption have been influenced by media consumption and by discussing politics with friends, but bribery patterns were not directly affected by these factors (see Rose and Mishler, 2010). We have found this to be the case with Afrobarometer respondents as well. However, variables approximating media consumption and

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<sup>&</sup>lt;sup>8</sup> Not shown; results available on request.

discussing politics with friends were correlated with the error term of the original logit analysis, thus invalidating their use as instrumental variables.<sup>9</sup>

Contrary to Hypothesis 5a, the ethical view that corruption is wrong has no significant effect on whether an individual pays a bribe (Table 3). Moreover, an interaction term testing whether bribes are more often paid by people who see officials as corrupt and do not think bribery is wrong has no significant effect. Thus, there is not a major conflict between behavioral and ethnical norms. Ethical judgments of bribery appear to be contextual. In a discussion about bribery in the abstract, bribery can be labeled wrong. However, when confronted by a public official who wants to be paid in exchange for providing prompt medical treatment or a place in a good school for their child, people can behave in accord with simple cost-benefit analysis showing that the benefit received is worth the money demanded. Moreover, when a bribe is paid for a service that an individual is entitled to receive without a bribe, payment can be rationalized as the lesser wrong compared to the action of an official violating his or her position of trust to exploit fellow citizens.

#### DISCUSSION AND CONCLUSION

Because the evidence shows that some Africans do not pay bribes while others do, this paper demonstrates the need to identify the multiple influences, both individual and national, that affect under which circumstances Africans pay bribes. In so large a sample, it is not surprising that the logit analysis attributes statistical significance to indicators of each of our five hypotheses. However, the influences are not equal in their impact. Running four separate multilevel logit analyses can assess that. In each, we add independent variables used to test related hypotheses to a model controlling only for the impact of contextual variables; on its own, a model testing only for the impact of contextual influences has a pseudo r-squared of 4.5% (Table 2). The addition of variables approximating social and political capital in a logit analysis controlling only for contextual variables raises the pseudo r-squared to 12.9%. By contrast, a logit analysis that adds only variables approximating behavioral and ethical norms to the influence of context increases the pseudo r-squared to just 6.3%. The estimated impact of income and education, plus only context influences, returns an even lower pseudo r-squared of 5.6%, and adding the three indicators of social inclusion to the variance explained by context on its own raises the pseudo r-squared to only 5.4%.

Whereas the direction of influence of social and political capital is consistent – bribery is increased – different measures of inequality and exclusion do not reinforce each other in the same way. Being poor increases the payment of bribes, but being uneducated has no independent effect. By being relatively excluded from contact with public officials, women and old people are significantly less likely to pay bribes, while urban residents are more likely to do so as a consequence of their social inclusion. It is possible to construct ideal-type examples of Africans most likely to pay a bribe (urban men who are young and in poverty) and Africans least likely to pay a bribe (women who are old, live in the countryside, and are not in poverty). Among those in the former group, 46% reported paying a bribe, while only 15% in the latter group did so.

However, each of these groups is a very small proportion of Afrobarometer respondents. Only 4% had all four characteristics making them vulnerable to bribery, and only 3% were quadruply insulated. Most Africans are subject to a mixture of positive and negative influences affecting bribery, for example being low in income and a woman, or being prosperous but living in a country where bribery is relatively widespread, such as in Kenya. Even when a particular characteristic is statistically significant, the size of

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<sup>&</sup>lt;sup>9</sup> Additionally, when we tested whether attendance at religious services could serve as an instrumental variable to tease out the direction of the relationship between a belief that corruption is wrong and bribery patterns, we found that attendance at religious services also correlated with the error term in the original logit analysis, and was thus not acceptable for testing endogeneity.

the group affected can limit its overall impact. For example, urban residents are significantly more likely to pay bribes for services, but because they are little more than one-third of Afrobarometer respondents, the result is that almost two-thirds of those paying bribes live in rural areas.

While the proportion of variance accounted for by the logit analysis in Table 3 is acceptable statistically, it nonetheless leaves a lot open to further explanation. Adding an unambiguous question about whether individuals have contacted a public service in the past year would make it possible to discriminate between Afrobarometer respondents who do not pay bribes because they have no contact with a service and those who have contact and receive a service without paying a bribe. <sup>10</sup> Analysis of Barometer surveys on other continents that do ask questions about contact consistently find it has a big impact on whether people are vulnerable to paying a bribe (Rose and Peiffer, 2013). The absence of contact in a given year may reflect life-cycle effects (for example, whether a household has children in school) or fluctuating needs (for example, for a permit or for health care). Therefore, extending the years covered by questions about bribe paying should increase the number of people reporting that they have paid a bribe in the past. However, the longer the time period covered, the greater the risk of bias in recalling this information. More dialogue between ethnographic specialists and designers of survey questionnaires has the potential of mutual benefit insofar as it becomes possible for ethnographic conclusions to be tested for their generalizability in nationwide surveys and for the findings of statistical relationships to be explained by fitting them to on-the-ground knowledge of how Africans live.

Understanding how national contexts affect individual behavior can be furthered by increasing the number of countries included in a comparative Barometer survey. Since the third-round study analyzed here, Afrobarometer has expanded to cover 35 countries, including five in North Africa as well as 30 countries in sub-Saharan Africa. 11 Surveys that already have tens of thousands of respondents are unlikely to find altered the high levels of statistical significance attributed to the impact that individual-level variables have in explaining bribery patterns. However, virtually doubling the number of countries gives a substantial boost to the degrees of freedom available when testing for the statistical and substantive significance of differences in national contexts.

Since this paper deals only with sub-Saharan African countries, it cannot be taken for granted that its conclusions are applicable to citizens and public officials in other continents. Nonetheless, the generic character of our multi-level multivariate model makes it appropriate in principle for testing the extent to which context causes variations in who does and does not pay bribes for public services. All four contextual influences – colonial history, ethnic fractionalization, the extent of publicly provided retail services, and freedom of the press – are amenable to cross-continental testing for their significance. Moreover, a comparative review of Barometer surveys of bribery on other continents finds surprising similarities across regions. The national-level mean percentage reporting the payment of a bribe in the past year in 13 Asian countries, covered by Transparency International's 2013 Global Corruption Barometer, is the same as in our Afrobarometer survey, 26%. It is 24% for both the 29 formerly communist countries of the 2010 Life in Transition survey and the 24 Latin American countries covered by the 2012 Americas Barometer. Equally important, within each continent there are similarly great differences in the percentage of a country's citizens experiencing bribery; the range between surveyed countries with the lowest bribery rating and the highest bribery rating is 71 percentage points in former communist countries, 61 percentage points in Latin America, 55 percentage points in Asian countries, and 44 percentage points in Afrobarometer countries. It is governments in advanced industrial societies that are atypical in adherence to bureaucratic rules. The 2013 Eurobarometer survey of 27 EU member states finds that on average 96% of respondents do not pay a bribe when receiving public services. In

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<sup>&</sup>lt;sup>10</sup> Suitable contact questions are included in the sixth-round Afrobarometer survey (2014-2015); full results will be publicly available for analysis in 2016.

11 The full data file of the sixth round is projected to be publicly available in 2016.

other words, considerations of non-generalizability can be raised about theories of bribery based on the experience of Western countries.

For policy makers responsible for anti-corruption policies, this study has both negative and positive implications. Two features of institutional context are not subject to easy or immediate change. Ethnic fractionalization persists even when the boundaries of a state remain unchanged and can lead to political disruptions beyond the capacity of bureaucratic institutions to control. Traditional practices of neopatrimonial governance reflected in measures of social and political capital co-exist with bureaucratic standards, and subjects can use these to exploit regimes that they see as exploiting them.

Two influences identified in our logit analysis – the scale of provision of public services and the freedom of the press – are amenable to government action. Since it is scarcity that encourages bribery, greater provision of health and education services should decrease the number of citizens paying bribes. With limits to the revenue that a developing country can raise, this would require reducing expenditures on other activities of government. Insofar as capital-intensive spending on infrastructure projects and military equipment attracts bribes from those wanting contracts, then switching money to health and education could have a double impact in reducing bribery. Since government regulations controlling the media are a major limitation on freedom of the press, this civil-society check on corruption can be strengthened if policy makers repeal regulations that reduce the capacity of the media to publicize wrongdoing. Not least, major variations between African countries in the incidence of bribery offer an alternative to reducing corruption by adopting Western-developed institutions and procedures. Instead, they suggest that an African government whose leaders wanted to take effective action to reduce corruption could look for lessons to other African countries.

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### **Appendix: List of Variables**

| Variable                     | Mean | Std<br>Dev. | Values &<br>Range | Construction notes  |
|------------------------------|------|-------------|-------------------|---|
| Dependent                    |      |             |                   |   |
| Bribe any                    | 0.26 | 0.44        | 0,1               | 1 bribe for any of the services; 0 all others   |
| Socio-economic resources     |      |             |                   |   |
| Degree of poverty            | 1.30 | 0.95        | 0-4               | Mean response to how often gone without several goods   |
| Education                    | 1.76 | 1.21        | 0-4               | 0 none, 1 some primary, 2 primary, 3 secondary, 4 post-secondary  |
| Social inclusion             |      |             |                   |   |
| Urban                        | 0.10 | 0.29        | 0,1               | 1 if urban; 0 if rural  |
| Female                       | 0.50 | 0.50        | 0,1               | 1 female; 0 male  |
| Older age: +60               | 0.10 | 0.29        | 0,1               | 1 if 60+ years old; 0 if not  |
| Social and political capital |      |             |                   |   |
| Member, voluntary ass'n      | 0.38 | 0.49        | 0,1               | 1 if a member of 3 types of voluntary associations; 0 all others  |
| Religious contact            | 0.40 | 0.48        | 0,1               | 1 if had contact with a religious leader to solve problem; 0 if not   |
| Traditional contact          | 0.22 | 0.41        | 0,1               | 1 if had contact with a traditional leader to solve problem; 0 if not   |
| Political contacts           | 0.34 | 0.47        | 0,1               | 1 if had contact with a local councilor, MP, official at gov't ministry, or political party official to solve problem; 0 if not   |
| Has patron                   | 0.18 | 0.38        | 0,1               | 1 if has been personally offered money or goods in return for a vote; 0 if not  |
| Party identified             | 0.18 | 0.38        | 0,1               | 1 if indicates at least somewhat close to party; 0 all others   |
| Conflicting norms            | 0.01 | 0.49        | 0,1               | I if indicates at least somewhat close to party, o all others   |
| Perceived corrupt            | 1.33 | 1.17        | 0-4               | Number of times officials in police, local government, health, and education perceived  |
| reiceived corrupt            | 1.33 | 1.17        | 0-4               | to be mostly or all corrupt.  |
| Corruption wrong             | 0.78 | 0.41        | 0,1               | 1 if thinks gov't official asking for a bribe is wrong and punishable; 0 all others   |
| Contextual                   | 0.70 | 0.11        | 0,1               | i if thinks gov t official asking for a office is wrong and pullishable, o air others   |
| British legacy               | 0.57 | 0.50        | 0,1               | 1 if former British colony; 0 if not.   |
| Ethnic fractionalization     | 4.15 | 2.25        | 0-7.1             | Posner (2004), Politically Relevant Ethnic Groups; higher score indicates greater ethnic  |
| Edille Hactionalization      | 1.13 | 2.23        | 0 7.1             | fractionalization. Rescaled to 0-10.  |
| More public services         | 5.20 | 2.02        | 3.05-9.18         | Average of % births attended by skilled health staff for 2005 or closest year and % secondary school enrollment (gross) for 2005 or closest year from World Bank's WDI; rescaled to 0-10. |
| Freer press                  | 8.16 | 1.35        | 3.67-9.55         | Reporters Sans Frontières Free Press Index score; inverted (101 minus original) so that higher score indicates more freedom. en.rsf.org; rescaled to 0-10.                                |

Note: The small number of missing values and "Don't know" replies are imputed to the country mean.

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