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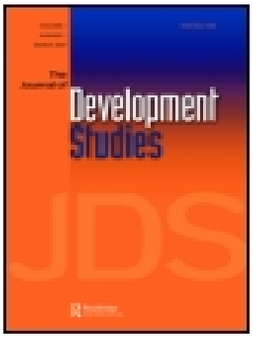

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Why Are the Poor More Vulnerable to Bribery in Africa? The Institutional Effects of Services

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ABSTRACT *Whereas most studies find the poor in Africa to be more vulnerable to bribery because of their lower socio-economic status, this paper proposes institutional differences as an alternative explanation. Because poor people are unable to afford privately provided services, they must use public services. In relying on the state more often, the poor become more vulnerable to bribery. Analyses of Afrobarometer data show that the poor are not more likely to pay bribes for state monopolised services. The poor's disproportionate vulnerability to bribery for choice services is a function of their greater likelihood to have contact with the state.*

Corruption imposes political, economic and social costs on societies where it is widespread and the costs are unequally distributed (see Heywood, 2015, part IV). In the words of UN Secretary-General Kofi Annan (2004, p. iii), 'Corruption hurts the poor disproportionately diverting funds intended for development, undermining a government's ability to provide basic services, and feeding inequality and injustice'. Empirical research in Africa has consistently found that the impoverished are more likely to pay bribes than those who are well off (Justesen & Bjornskov, 2012, 2014; Kaffenberger, 2012; Peiffer & Rose, 2014; Razafindrakoto & Roubaud, 2007). From a rational choice economic perspective, this appears the opposite of what might be expected. Bribe-seeking officials should target better off people because they have more money to pay bribes, the marginal cost of a bribe is less, and the marginal utility of the time saved in getting services is greater (compare with Becker, 1968). That the poor may be more likely to be bribe payers has worrying consequences. Corrupt exchanges with state bureaucracy can be instrumental in shaping trust in and perceived legitimacy of governments and the broader national governance frameworks in which they are located (Lavelle, Razafindrakoto, & Roubaud, 2008; Seligson, 2002). Insofar as the poor are more likely bribe payers, we should also expect to observe state legitimacy and trust crises acutely experienced within those communities, as well.

An effective policy response to the issue requires an understanding of the persisting relationship between poverty and bribery. Sociological theories of differences in life chances (Weber, 1958) have been used to explain the association. This perspective posits that the poor are more often made to pay bribes because bureaucrats view them as being easy targets, believing that they will lack the knowledge, financial resources and social connections to resist requests for bribes. In effect, poverty is an

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indicator of inequality in power (see for example Rothstein, 2011, p. 68ff; Uslaner, 2015, p. 200ff). Thus, in Hunt's (2007) phrase, 'Corruption hits people when they are down' (p. 574).

An institutional theory offers an alternative explanation. It explains who pays bribes as a function of differences in the public services that people contact. Public services can be distinguished between those that are a state monopoly such as law enforcement, and services for which a choice may be offered between state and non-state providers, such as education and health care. Regardless of income, everyone must contact public officials to make use of state monopoly services (Klitgaard, 1988). However, where there is a choice of providers, better off people may avoid contact with a corrupt institution by paying for services from a non-state provider while the poor lack the money to exit from the state service (Hirschman, 1970). For this reason, the poor are more vulnerable to bribery insofar as they are more likely than the better off to have contact with the state to get choice services. If the institutional theory is more accurate, there are significant policy implications. Promoting privatisation, for example, may help those able to afford privately provided services to avoid bureaucratic corruption, but still leave poorer citizens disproportionately more vulnerable. Such a consequence would increase inequality, rather than reduce it.

The innovative contribution of this paper is to provide a theoretically grounded empirical test of whether the correlation between poverty and the payment of bribes for public services in Africa is influenced more by the sociological vulnerability of poor people to exploitation by public officials or by having more contact with public services from which better off people can exit.[1]

Testing these alternative explanations requires going beyond the association between poverty and public services in general. It requires comparing the effect of poverty on the payment of bribes for two different types of public services, those for which the state has a monopoly and services for which there is a choice between state and non-state providers. In strong contrast to the findings of other studies on bribery in Africa, we find that poverty is not a uniformly significant determinant of bribery. Instead, statistical analysis of the freshly released 34-country Afrobarometer survey shows that institutional differences between services matter; the poor are not more likely to be bribe payers to state monopoly services. A further two-step analysis demonstrates that poor people are disproportionately vulnerable to paying bribes for choice services because they are more likely to contact those services than the better off.

1. Theories and hypotheses about poverty and bribery

The theory of the powerless poor characterises individuals in poverty as being an 'easy target' for extracting bribes because they have less understanding and knowledge of their rights to receive services, less status and money to demand their rights and less political influence to see that they are delivered (Brady & Burton, 2015; Piven & Minnete, 2015; Sefton, 2006). This perspective emphasises that poverty is a proxy for a lack of power. When confronted by demands for a bribe from public officials, the poor are less capable of resisting. The hypothesis that follows is:

H1 (Poverty): Poor people are more likely than the better off to pay bribes because they lack the capacity to resist public officials demanding money.

A field experiment in Mexico City illustrates how being perceived as one of the powerless poor can influence bribery, Fried, Lagunes, and Venkataramani (2010) staged minor traffic infractions in the same location using four different cars: two newer luxury cars and two older inexpensive cars. Traffic police overwhelmingly pulled over and requested bribes from drivers making the infraction in inexpensive cars. In subsequent interviews the officers explained that they were prone to ignore the infractions committed in more expensive cars because they feared that wealthier drivers would have personal connections with the judiciary or their own superiors in the police force, and use these to punish them. A secondary reason was that past experiences had taught the officers that interactions with higher status people were time-consuming and arduous, since they had a better understanding of the law than poorer citizens and often attempted to argue their way out of a ticket. In effect, targeting

people with less money for bribes was a more efficient and less risky way for officials to pocket money.

Cross-national analyses of bribery using Afrobarometer survey data have found consistent evidence of a positive poverty-bribery association (Justesen & Bjornskov, 2012, 2014; Kaffenberger, 2012; Peiffer & Rose, 2014; Razafindrakoto & Roubaud, 2007). Justesen and Bjornskov's (2014) study stands out because the impact of poverty on bribery is their primary focus. Using the 2005 third-round Afrobarometer survey of 18 countries they find, after controlling for the potential effects of other variables, that poverty is positively associated with an index capturing the frequency with which respondents have paid a bribe to any service, whether a bribe was paid to each of the five services asked about, and whether a bribe was paid by anyone in the respondent's household in the last year.

However, the link between poverty and bribery is not so consistently found in other studies focusing on different regions and in some cases the opposite is found. For example, income is positively associated with bribery for health care in Vietnam (Nguyen Van, 2008), for several services in Mexico (Guerrero and Rodriguez-Oreggia 2008; Morris, 2008) in Uganda and Peru (Hunt & Laszlo, 2012), and across multi-country samples (Mocan, 2008). However, Morris (2008), Rose and Mishler (2010) and Tavits (2010) all fail to find a significant association between income and bribery in Mexico, Russia and Estonia respectively.

By contrast with the 'easy target' hypothesis, a second theory emphasises institutional differences between services that are a monopoly of the state and those for which there is a choice between state and non-state providers (Klitgaard, 1988). When the state lacks a monopoly over a service, there is in principle a choice for users between using a government provided service where public officials can make demands for bribes or turning to a market or not-for-profit provider (Hirschman, 1970). Health and education are familiar examples of choice services and in all but totalitarian societies, non-governmental organisations can and do provide them to some degree. Justesen and Bjornskov (2012, 2014) rightly point out that the option to exit the state service system has a cash cost that is rarely within the reach of the poor. Since poorer citizens are less able to afford the charges involved in obtaining privately provided services, they are more likely to come into contact with choice services than wealthier citizens able to pay private service fees. If public officials set bribes on the basis of what an individual can pay, then the cost of paying them bribes will not prevent the poor from using these services (Kauffmann, Montoriol-Garriga, & Recanatini, 2008) and more frequent use will result in greater vulnerability to bribery.

Unlike choice services, by definition services that are a state monopoly do not give people the opportunity of exiting from what may be perceived to be a corrupt institution. Monopoly services include law enforcement through the courts and police and the local issuance of permits and licenses for housing, maintaining an automobile and other documents that must be state-supplied if they are to be valid. If monopoly providers seek bribes from all users at a similar rate, it follows that all users of these services will be similarly vulnerable to requests for bribes. The institutional differences between choice and monopoly services suggest two complementary institutional hypotheses:

H2A: (Choice) Poor people are more likely than the better off to pay bribes for choice services because they are more likely to be in contact with choice services.
H2B. (Monopoly) Better off people are as likely to pay bribes as poor people for monopoly services because they cannot exit from contact with monopoly services.

Institutional theories postulate that bribery is the result of a two-step process of contingent interactions with public services. The first step is that citizens must come into contact with a public service. Only if there is contact does the second step, paying a bribe, become contingently possible. This means, for example, that elderly people are less likely to pay a bribe for education services than those of child-rearing age, while they are more likely to be vulnerable to bribery for health services because they tend to have more health problems.

Insofar as the theory underlying the institutional hypothesis is correct, variations in contact with particular public services are related to life-cycle characteristics as well as poverty. If the influence of

these factors on contact is not taken into account, statistical analyses testing for the influence of poverty on the likelihood of paying a bribe can be misleading. Without accounting for the influence of poverty on contact with a service, analyses of bribery may show that the poor are significantly more likely bribe payers than the better off. When contact differences are accounted for, analyses may instead find that while poverty positively influences the likelihood of having contact with a service, it has no independent effect on bribing. This would mean the poor are disproportionate bribe payers because of their contact patterns, and not because they are more likely to be victimised once in contact with a public service. None of the many studies of poverty and bribery in Africa have appropriately accounted for contact patterns.[2] The logic of a two-step model is:

H3. (Contact) If differences in contact with public services are taken into account, there is no significant difference in the likelihood of poorer and better off people paying bribes.

This paper advances our understanding of the process of bribery by taking into account the differential effect of poverty on the likelihood of individuals having contact with choice and monopoly services. First, we categorise citizens into non-bribe payers and bribe-payers; the latter category is further divided into those paying bribes for state monopoly services, for choice services, and for both types of services. Secondly, we test the extent to which poverty influences the odds of being a bribe payer for each type of service, as opposed to being a non-bribe payer. Finally, we test the importance of differential contact rates in making the poor more vulnerable to bribery for choice services by using two-stage Heckman analysis. It estimates the extent to which poverty's influence on bribery is a function of having a higher likelihood of coming into contact with the state to obtain choice services.

2. Measuring bribery: the Afrobarometer data

To test our hypotheses we analyse data from the fifth round of the Afrobarometer survey conducted in 2011–2013. A total of 51,605 respondents, selected through multi-stage sampling, were interviewed. It covered 34 countries across the continent from southern Africa through east, central and west Africa and five north African countries (www.afrobarometer.org). This coverage is almost double the number of countries in its 2005 third round, which has most often been used for the analysis of bribery in Africa (see for example Justesen & Bjornskov, 2014). While the choice of countries was determined by the availability of institutions for fieldwork and political conditions (Bratton, Mattes, & Gyimah-Boadi, 2005), the populations sampled do cover more than 70 per cent of the total population of Africa.

The Afrobarometer includes five explicit questions about bribery for specific services. Respondents are asked: In the past year, how often, if ever, have you had to pay a bribe, give a gift, or do a favour to government officials in order to get: a document or permit?, water or sanitation services?, treatment at a local health clinic or hospital?, a place in a primary school?, or avoid a problem with the police like passing a checkpoint or avoiding a fine or arrest? (Q61A-E). Responses are coded as: never, once or twice, several times, many times, always, and no contact with a service in the past year. The proportion of Afrobarometer respondents reporting the payment of a bribe varies to a limited degree between services. Obtaining a government permit or official document is the service most subject to bribery; 16 per cent report that they have paid a bribe to do so in the past year, 15 per cent report paying a bribe for health services, 14 per cent bribed the police, 10 per cent bribed education services and 8 per cent paid a bribe for water or other utility services.

Altogether, 29 per cent of Afrobarometer respondents reported paying a bribe in the past year to any service, while 71 per cent did not do so. The proportion of non-bribe payers is much lower than what would be expected from a reading of difficult-to-replicate ethnographic studies that generalise about 'a moral economy of corruption in Africa' (Olivier de Sardan, 1999; see also Ekeh, 1975). Sceptics assert that this is due to survey respondents under-reporting their actual experience of bribery. One of the simplest ways for a person to conceal paying a bribe is to reply

'don't know' or refuse to give an answer when asked about doing so. Afrobarometer respondents rarely refuse to give an explicit answer. For each service, an average of less than 1 per cent said don't know or refused to give an answer, which is far lower than the non-response to questions about income. For example, in the 2012 round of the European Social Survey (http://www.europeansocialsurvey.org/), when asked about their income 11 per cent refused to give an answer and an additional 10 per cent replied 'don't know'.

Of the five services, the state holds a monopoly over the provision of official documents and permits and policing. We label education and health services as choice services since they are provided by both state and private actors. Water and sanitation services are more difficult to categorise, because in some places they are provided by the state, but in others they are provided by non-governmental means or citizens have a choice.[3] Therefore, water and sanitation services are not included in our analyses. The majority of people who pay a bribe do so for only one type of service: 35 per cent only pay a bribe for monopoly services and 24 per cent pay a bribe just for choice services. Two in five report paying a bribe for both types of services.

2.1. Measuring poverty

Since many Africans do not receive a regular money income and many subsist on casual income from trading and non-monetised production of food and services, the Afrobarometer survey does not ask respondents about their cash income. As is appropriate in countries in which people meet their needs with a variety of resources (Bratton, 2008; Rose, 2009, chapter 8), to measure the experience of poverty the Afrobarometer asks a battery of questions about how often during the past year respondents, or anyone in their family, have had to go without basic necessities. In the African context to ask about 'family' when measuring poverty recognises that because many households in Africa have very 'flexible membership' proximity to poverty may be misrepresented if questions are limited to a household (Randall & Coast, 2015). The fifth Afrobarometer round asks about doing without food, water, medical care, cooking fuel, and a cash income (Q8A-E). Response codes range from (1) never to (4) always. A substantial majority, 84 per cent, said they or a family member had gone without at least one of these necessities at some point in the past year and the mean family had gone without at least two necessities.

Following the lead of others in the literature (Bratton, 2008; Bratton et al., 2005; Justesen & Bjornskov, 2014; Peiffer & Rose, 2014), we combined the responses to these questions into a single poverty index. A principal component factor analysis finds that the five items load on a single dimension with an eigen value of 2.65. Our poverty index ranges from −1.31 to 2.93, with a higher score indicating greater poverty; the mean score for the entire sample is 0.02. The mean poverty index for payers of bribes only for monopoly services is 0.04 while the score for those who have only paid a bribe for non-monopoly services is much higher, 0.36. Although these figures do not take into account the potential impact of other factors, they do offer support for hypothesis H2a; non-monopoly bribe payers are poorer, on average, than other types of bribe payers.

3. The effect of differences in services on bribery

Our institutional theory predicts that whether poor people are more likely than the better off to pay bribes varies between choice and monopoly services. Poverty is expected to make a significant difference for bribery for choice services but not for monopoly services. To test whether our hypotheses are supported we analyse Afrobarometer data using multinomial logistic regression in STATA, version 13.1. It separately estimates the probability of poverty having a significant impact on a respondent paying a bribe for choice services only (coded as 1), for monopoly services only (coded as 2), or for both types of services (coded as 3) as compared to the base-line category of people who do not pay a bribe for any service (coded as 4). Since poverty is unlikely to be the sole influence on bribe payment, the regression controls for other variables that have been found to influence the

payment of bribes in Africa (see Justesen & Bjornskov, 2014; Rose & Peiffer, 2015, table 6.2). The Online Appendix gives details of the coding of all variables.

In order to focus on individual influences on bribery, we use fixed effects at the country level. In all analyses we weight each national sample with its country weights and then equally to avoid giving a country with a larger sample a disproportionate influence on the results, and, using Stata's survey commands, we also cluster the standard errors at the country level. Since the total number of respondents is in the tens of thousands, we regard relationships as statistically significant if there is a p-value of less than 0.001. To estimate the size of the impact of significant influences, we report predicted probability shifts calculated after holding the effect of all other variables constant. They articulate the extent to which a change from the minimum to the maximum value of an influence will increase or decrease the probability of paying a bribe when the influence of all other variables is held at their means. Because they are standardised (minimum to maximum), the size of the estimated shifts are comparable across variables.

As the first hypothesis predicts, the first two columns of Table 1 show that among those who pay bribes for both choice and monopoly services, the likelihood of paying bribes is higher for poor people than for better off Africans. This finding is consistent with other studies on bribery in Africa that do not distinguish between services for which there is institutional choice and those that are state monopolies (Justesen & Bjornskov, 2012; Razafindrakoto & Roubaud, 2007).

The multinomial logit also separately tests whether poverty significantly affects the payment of bribes by those who only do so for choice or for monopoly services. As predicted by institutional hypotheses 2A and 2B, the results in Table 1 confirm that differences in institutional services matter. Poverty positively influences the odds of paying a bribe for choice services. Holding the effects of all else constant, a minimum to maximum shift in the poverty score is associated with a 6 per cent increase in the probability of paying a bribe for a choice service compared to not doing so. Since this predicted probability shift is the highest of all variables tested, this means that poverty is the most influential factor tested, differentiating between a respondent paying a bribe or not doing so for a choice-service.

In the monopoly column of Table 1, the multinomial logit reports an important null finding: being worse off is no more likely to affect bribe-paying than being better off. This shows that previous

Table 1. Paying bribes for services: multinomial logistic regression

	Both types		Choice only		Monopoly only	
	PP shift	P-value	PP shift	P-value	PP shift	P-value
Poverty	0.12	0.000	0.06	0.000	−0.02	0.099
Education	0.02	0.000	−0.01	0.706	0.07	0.000
Urban	0.02	0.000	0.01	0.005	0.01	0.000
Female	−0.01	0.000	0.01	0.000	−0.05	0.000
Age	−0.04	0.000	−0.02	0.001	−0.05	0.000
Voluntary assn.	0.01	0.000	0.00	0.157	0.01	0.000
Religious group	0.02	0.000	0.00	0.136	0.01	0.014
Political contact	0.03	0.000	0.01	0.000	0.02	0.000
Patron	0.18	0.000	0.03	0.000	0.06	0.000
Has party	0.00	0.071	0.01	0.020	0.01	0.081
Perceived corruption	0.07	0.000	0.01	0.000	0.06	0.000
F	64.92					
Prob>F	0.000					

Notes: Results are from a multinomial logistic regression, with the baseline category being a non-bribe payer. PP shifts are the estimated shift in the predicted probability of the payment of a bribe by a person in the named category compared to a non-bribe payer. The numerical value is an estimate of the change in the probability of paying a bribe when a minimum to maximum change is made in the respective independent variable.
Source: Afrobarometer survey (www.afrobaromter.org), 2011–2013, 34 countries with 50,393 respondents.

African studies may have been misleading; by failing to differentiate between types of services, they have concluded that poverty uniformly increases the likelihood of paying bribes for all public services (Justesen & Bjornskov, 2012, 2014; Kaffenberger, 2012; Peiffer & Rose, 2014; Razafindrakoto & Roubaud, 2007). The lack of a significant association supports our institutional hypothesis 2. When compared to the odds of avoiding bribery altogether, the poor have the same odds as the better off to pay a bribe for monopoly services.

In theories of the powerlessness of poor people, lacking the resources to obtain necessary goods is but one feature of a syndrome of social and economic handicaps generally associated with poverty. The distinctiveness of choice services is shown by the fact that three other socio-economic characteristics often associated with bribery vulnerability – education, age and urban residence – each fail to have a significant influence on whether a person pays a bribe for a choice service. This emphasises that as far as paying a bribe for a service is concerned, it is the cash nexus that counts rather than the social status or knowledge associated with education or age. By contrast, for paying bribes for monopoly services, all three variables are statistically significant. Education is especially likely to boost payment of a bribe for monopoly services, perhaps a reflection of people with more education also being more likely to make use of local government documents and the courts. Urbanites are also more likely to pay bribes for monopoly services. The estimated effect of urbanisation is small, being an urbanite only increases the probability of being a bribe payer by 1–2 per cent, depending on the type of service.[4]

Being female reduces the chances of being a monopoly bribe payer and a bribe payer to both types of services, but increases the chances of being a choice-service bribe payer. This effect may reflect the fact that gendered social norms prompt women to come into contact more with the choice services we examine – health and education – while men are more likely to deal with the police and with local government offices when a household or business needs a document or permit (Wängnerud, 2015).

In common with many other studies of the payment of bribes (Hunt & Laszlo, 2012; Mocan, 2008; Morris, 2008; Peiffer & Rose, 2014) the perception of institutions as corrupt has a significant and substantial effect on bribery. People who see institutions as corrupt are 6 per cent more likely to be a bribe payer for monopoly services and 7 per cent more likely to be a bribe payer for both choice and monopoly services, as compared to the likelihood of being a non-bribe payer. The relationship between perceptions and the payment of bribes may be endogenous – those who have paid a bribe for a public service may be more likely to perceive officials as corrupt or reciprocally a perceived high level of corruption in the public sector may encourage people to pay a bribe because it is considered the normal thing to do when dealing with public officials.[5]

Having initiated political contact with an influential person, having been approached by a politician with election incentives (patron), and having identified with a political party also have a consistent positive impact on being a bribe payer in any of the categories. The two indicators of social capital networks facilitating the payment of bribes are contrary to Robert Putnam's (2000) theory that social capital promotes civic norms and good governance. In the African context, social capital networks can serve as social institutions that help individuals to find how to get the public service that they want by bribery if formal entitlement or informal personal links are not effective. This is somewhat in line with Isakson's (2015) finding that bribery patterns in Africa vary systemically along ethnic lines; belonging to influential ethnic groups is associated with a greater probability of having experienced corruption. While social capital links are positive for individuals who want to obtain a public service by whatever means necessary, they are negative in terms of promoting good governance (compare with Rose, 2009, chapter 7).

4. The role of contact

Our third hypothesis offers a two-step explanation: the poor are more vulnerable to bribery for choice services because their poverty means they have more contact with these public services than the better off. In other words, the disproportionate vulnerability to paying bribes for choice services is a function of greater reliance on the state for these services. Going beyond Justesen and Bjornskov (2014), who

did not account for differential contact with institutions, in the following pages we test whether institutional differences in choice or monopoly explain the higher rate of paying bribes among poor Africans.

4.1. Measuring contact with choice services

To test the contact hypothesis, we need a measure for contact with choice services. Unlike other cross-national Barometer surveys, the Afrobarometer has not asked whether the respondent has been in contact with a service before asking about paying a bribe (Rose & Peiffer, 2015, chapter 3) and the options it offers for no contact are not mutually exclusive: 'never paid a bribe' or 'no reported experience in the past year'. If 'no experience' is used as the appropriate response for not having contact, then only 22 per cent of the population would have had no contact with health services, and 30 per cent with education services. These figures are a third or more lower than results of surveys that ask contact questions with mutually exclusive alternatives (see Rose & Peiffer, 2015, p. 30).

Fortunately, other Afrobarometer questions do unambiguously ask respondents about contact with health and education choice services. Q67D and Q67E give respondents the option of answering that they have never tried to obtain the service' after being asked: 'How easy or difficult it is to obtain [education/health] services from government?' Six additional questions are asked about potential problems encountered when accessing public education (Q68A-F) and six about health (Q69A-F) services. Again, respondents can report that they have not used the service in the last 12 months. To construct our contact measure, we cross-checked responses to all of these questions. We first coded all reporting having had no experience with the service as having no contact (Q61C and Q61E) and then coded all reports of never having tried to get the service (Q67D and Q67E) as not having contact. Using the questions about encountering problems, we also coded all reports of not having had experience with the service as not having contact with it (Q68A-F and Q69A-F). Finally, we also confirmed that any report of having paid a bribe for the service is treated as also having had contact. According to this effort, an estimated 70 per cent of the population has come into contact with government health services; 55 per cent with public education institutions; and 75 per cent have contacted at least one of the choice services.

4.2. Modelling the stage of contact: Heckman analyses

We use Heckman's (1979) two-stage selection linked probit model to test what impact poverty has on the likelihood of having contact with and paying a bribe. At the first stage, the model estimates how poverty influences the likelihood of having contact with choice services. After accounting for poverty's influence on contact, the second stage tests whether poverty has an independent impact on paying a bribe (Table 2). The Heckman selection model accounts for the fact that those who have had contact with the state are not a randomly selected sample, and allows us to test the extent to which the same factors that impact the likelihood of having contact with the state also influence bribery. In other words, it assumes that the two stages are interrelated. The Wald test of independent equations tests whether the assumption is fair to make. The result of our Wald's test rejects the null hypothesis that the two equations determining contact and bribery are independent (Wald's test p-value: 0.006). It thus confirms that the Heckman model is appropriate to use. We include in the Heckman analysis the same independent variables as in the multinomial logistic analysis.

The two-stage analysis strongly supports our theory of the importance of institutional services: poverty is a significant positive predictor of contact with choice services, but after its influence on contact is accounted for, it is not a significant predictor of paying a bribe for those services. Moreover, of all the independent variables, poverty has the strongest impact: the poorest Africans are 11 per cent more likely to have contact with health and/or education services. As predicted in hypothesis 3, after accounting for poverty's influence on contact, poverty has no significant effect on the payment of bribes for choice services. Even though the total number of bribes paid by poorer Africans for health and education services is greater than that paid by the better off, the Heckman analysis shows that this

Table 2. Contact and bribery for choice services: Heckman linked probit

	Contact		Bribery	
	PP shift	P-value	PP shift	P-value
Poverty	0.11	0.000	0.03	0.270
Education	0.01	0.231	−0.03	0.002
Urban	−0.02	0.001	0.01	0.017
Female	0.01	0.011	0.02	0.001
Age	0.00	0.921	−0.03	0.065
Voluntary assn.	0.04	0.000	−0.01	0.005
Religious group	0.02	0.000	−0.01	0.119
Political contact	0.05	0.000	−0.02	0.001
Patron	0.10	0.000	−0.02	0.018
Has party	0.01	0.000	0.00	0.403
Perceived corruption	0.00	0.512	0.00	0.873
F (prob>F)			28.87 (0.000)	
Rho			−0.814	
Wald's test of Independent Equations			7.46 (0.006)	

Notes: Results are from a Heckman selection model, of linked probit equations. PP shifts are the estimated shift in the predicted probability of having contact or paying a bribe when a minimum to maximum change is made in the respective independent variable.
Source: Afrobarometer survey, 2011–2013, 34 countries with 50,393 respondents.

is due to poorer people making up a disproportionate number of the users of choice services, because better off people are better able to exit by paying for non-state services.

As social capital theories predict, people are significantly more likely to contact choice services if they have a political patron, can ask a politician or public official for help, have a party identification or belong to a voluntary association or religious group. Whereas a simple logit model finds that having political contacts and a patron significantly increases the likelihood of paying a bribe, accounting for their influence on contact reverses the effect. Africans who have social capital networks not only use them to access public services but to reduce the need to pay a bribe (compare Tables 1 and 2). Among socio-economic characteristics, education has no significant influence on contact, but more educated people are significantly less likely to pay a bribe for choice services, presumably because they are better informed about their rights to obtain them. Women are marginally more likely to contact choice services than men and, when they do so, to be subject to paying a bribe. Age has no effect on either contact or bribery.

Contrary to other findings, the perception of corruption does not have a significant effect on whether a person contacts a public service nor is there a significant association between perceptions and paying a bribe. Whereas in the single-stage logit model urbanisation was significantly associated with paying a bribe for choice services it had no significant effect on bribery in the two-stage analysis. Instead it found that it marginally reduced contact because of the greater availability of non-state alternatives in cities (Table 2).

5. Conclusions

Up to a point, our research confirms the sociological theory that the 'poor pay more' (Caplovitz, 1967) not only for conventional consumer goods but in bribes for public services that are meant to be delivered without charge. However, comparing the payment of bribes for services that are a state monopoly and those for which there is a choice reveals institutional differences in contact as the primary cause of the poor paying more bribes. Being poor does not increase the odds of being a bribe payer for services that are a state monopoly, because there is no alternative to their use. This challenges the sociological theory that the poor will be more likely to pay bribes because they are more vulnerable

to being exploited than are better off people. The critical influence in paying a bribe is not the lower status of poor people but the lack of money to turn to a non-state institution to avoid use of a service where corruption is perceived as being widespread.

Methodologically, our approach challenges the simple cost-benefit calculation that individuals will pay a bribe for a service if it is deemed worth the cost (Becker, 1968; cf. della Porta & Vanucci, 1999). For a public official soliciting a bribe, the cash cost of providing a service is nil, since it is funded by the state. The chief cost is the risk of punishment if exposed; the likelihood is low when corruption is common. For a poor person, the cost of a bribe can be adjusted to what he or she can pay, since the proceeds are all profit to the official and the alternative is to do without a choice service such as health care or education. For a monopoly service, the price of a bribe can be adjusted upwards to take into account the user's ability to pay and the fact that the user has no choice. This is especially so when a service is an obligation and there is no alternative source for a license to drive an automobile or a police order. However, if there is a choice, then a better off person has two alternatives: to pay a bribe that is less than the cost of the non-state alternative or to avoid the state service and ostensibly pay more for non-state provided choice services. Insofar as this happens, it implies that, even if poor people do not have to pay a bribe to use the state's education and health services, they are nonetheless suffering from the receipt of inferior services.

Expanding choice through the increased privatisation of public services has been a prominent policy response to bribery and inefficiency. It is promoted on the assumption that profit-making institutions will not only be more efficient in producing outputs but also more effective in reducing any tendency of their employees to take bribes (Huther & Shah, 2000; Rose-Ackerman, 1996). Privatisation limited to responsibility for the administration of hospitals or educational institutions in hopes of cutting costs may encourage employees to respond to cuts in wages and reduced resources for providing services by taking bribes. Privatisation introduces competition by creating expanding choices between institutions within a community. Its effects depend upon how access is determined. If the state gives vouchers to poorer people that meet the cost of privatised institutions this would give poor people an effective alternative to paying a bribe to a public official. If a privatised official asked for a bribe, a person could turn to another alternative, generating a fall in revenue that would be a market signal to the employer of dishonest staff. However, insofar as charges for private-sector institutions were not fully met by universally available vouchers, our findings suggest that any increase in the exit of better off people to more widely available but costly choice institutions would increase inequality because poorer people would be even more disproportionately vulnerable to corrupt public services. Thus, it would be possible for an increase in the scope for choice to produce a net fall in bribery while also generating a net increase in inequality.

Writing with a focus on Western societies, Hirschman (1970, p. 21ff) calls attention to the potential of dissatisfied citizens to exercise voice through the ballot box or public protests. Since casting a ballot or participating in a demonstration does not require a substantial income, it can be done by poorer people aggrieved by corrupt services. However, the capacity to do so is institutionally contingent: people must live in a country where free competitive elections hold politicians accountable. This condition is not met in many African societies (Freedom House, 2016). A second condition is that aggrieved individuals must have the political skills, social resources and free time and energy to engage in non-remunerated political activities. These conditions are less likely to be met by poor Africans (Bratton et al., 2005). Mungiu-Pippidi (2015) interprets the absence or weakness of voice to reduce corruption in developing countries as a low-level equilibrium trap in which the institutionalisation of an unequal distribution of power enables those who collect bribes to prevent the disruption of a system from which they benefit.

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Afrobarometer provided the data used, and the full dataset can be found here: www.afrobarometer.org. Upon an emailed request, the authors can provide the Stata code used to produce the analyses.

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Notes

1. Our focus is on public sector bribery, not bribes made to non-state actors.
2. In an analysis of the 2005 Afrobarometer survey, Razafindrakoto and Roubaud (2007) include a variable that they label as measuring contact but this is a flawed measure of contact because respondents not having contact were given two non-mutually exclusive response options to the bribery questions: They could say that they had 'never paid a bribe' or had 'no experience' with the service. The unusual variations across countries with these two responses showed that 'no experience' was not universally used as an indication of non-contact. For example, less than 3 per cent of Benin's sample reported 'no experience' with services.
3. The World Bank's World Development Index (WDI) provides data on the per cent of primary and secondary school aged children that attend private institutions. For all Afrobarometer countries (and most other African countries), private institutions are used by varying percentages of primary and secondary school aged children. The WDI also shows all African countries, except Somalia, report having both private and public health expenditures. Comparable data on the private/public provision of water and sanitation services is not provided by the WDI and could not be found elsewhere.
4. This is somewhat surprising given that Justesen and Bjornskov (2014) find that well off urbanites are least likely bribe payers. In an unreported multinomial logit model, we test for the significance of this interaction term; the interaction term was significantly associated with being a bribe payer to both types of services, but not to the other two categories. The estimated effect, however, was in an unexpected direction; for the least poor (a minimum score on the poverty index), being an urbanite is estimated to *increase* the probability of being a bribe payer to both types of services by just 2 per cent. Also tested were each of the models, restricted to a sample of urbanites only. Our main findings were robust in these unreported models as well; specifically, the multinomial logit revealed that the poor in urban areas were no more likely to pay bribes for monopoly services than not pay a bribe, but were more likely to pay a bribe for choice services and to both types of services. And the Heckman analysis showed that the poor in urban areas were more likely to have contact with non-monopoly services, and once this contact was accounted for, were no more likely to pay a bribe for those services.
5. Due to concerns of potential endogeneity of perceptions of corruption and the payment of bribes, in unreported models we reran the analyses in Tables 1 and 2, excluding perceptions of corruption as a control variable. The results of these models were very similar to those reported; most important, the significance and direction of poverty's influence on contact and bribery is estimated to be the same in both sets of tests.

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