

# Who is Targeted in Corruption?

## The Effects of Wealth, Power, and Shared Ethnicity on Exposure to Bribery \*

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## **Abstract**

Corrupt government officials must weigh the potential costs and benefits of soliciting a bribe using limited information about a citizen's ability to pay and his or her ability to exact retribution. We conducted a field experiment in Malawi to determine the effect of political connections, socioeconomic status, and shared ethnicity on a citizen's exposure to corruption across two contexts: police roadblocks and electricity service offices. We found that political connections reduced exposure to bribery, while relative wealth only insulated citizens from corruption when it was used as a proxy for political power. Shared ethnicity with a public official increased bribe solicitation, but only when seeking an electricity connection, which we attribute to institutional features of the electricity service offices that increase risks to corrupt officials. These findings indicate that officials make strategic decisions about when to engage in corruption, disproportionately targeting the poor and politically powerless.

Corruption, defined as the use of public office for private gain, is prevalent worldwide. One of the most commonly studied manifestations of corruption is a public official accepting a bribe in exchange for providing a good or service. Transparency International (2009) characterizes such petty corruption as the “everyday abuse of entrusted power by low- or mid-level public officials in their interactions with ordinary citizens, who are often trying to access basic goods or services in places like hospitals, schools, police departments, and other agencies.” However, even where levels of corruption are high, not every official solicits a bribe from every citizen he or she encounters; corrupt public officials are often able to choose who they target. As a result, certain segments of society may be subjected to more corruption than others.

Several observational studies demonstrate that wealthier individuals experience more corruption, both because their relative wealth makes them more attractive targets and because they interact with government officials more frequently than the poor (Hunt and Laszlo 2012; Mocan 2008; Rose and Peiffer 2013). However, there is also evidence that rich citizens are better able to insulate themselves (and their wealth) from corruption (Peiffer and Rose 2014). For example, Fried, Lagunes, and Venkataramani (2010) found that rich drivers in Mexico are *less* likely to pay bribes to traffic police than poor drivers are, and that therefore their total corruption burden is smaller, even though the average bribe payment demanded from rich drivers is higher.

It is difficult to interpret corruption patterns across socioeconomic strata in part because wealth in highly unequal societies sends two conflicting signals to corrupt officials. On the one hand, visible wealth suggests a greater ability or willingness to pay, making rich individuals particularly *valuable* targets for corruption. On the other hand, relative wealth also serves as a strong indicator of political connections, making wealthy individuals particularly *risky* targets for corrupt officials who fear repercussions for targeting the powerful. For example, Fried, Lagunes, and Venkataramani (2010) attribute lower rates of bribe solicitation from rich drivers to the fact that “officers associate wealth with the capacity to exact retribution and therefore are more likely to demand bribes from poorer individuals.” The impact of relative wealth on vulnerability to corruption is therefore difficult to determine. We attempt to disentangle socioeconomic status and political connections experimentally, holding constant the frequency of interactions.

We also consider the role of shared ethnicity in shaping corruption patterns. Past research has shown that corruption is more prevalent in ethnically diverse societies (Alesina et al. 2003), but the mechanism driving this relationship is not clear. Because shared ethnicity seems to facilitate cooperation and other pro-social behaviors (Bernhard, Fischbacher, and Fehr 2006; Habyarimana et al. 2009; Miguel and Gugerty 2005), public officials may demand fewer and smaller bribes from coethnic citizens. However, coethnics tend to be trusted at higher rates than non-coethnics (Fershtman and Gneezy 2001; Robinson 2016), which might instead encourage officials to target coethnic citizens, either because they trust them not to report the corruption or because they trust them to follow through with a negotiated bribe.

To study the effects of relative wealth, political connections, and coethnicity on exposure to corruption, we conducted a field experiment in which confederate researchers interacted with two different types of public officials in Malawi, a country with widespread low-level corruption. First, confederates passed through police roadblocks without displaying evidence of insurance coverage. Second, they requested a new residential electricity connection from Electricity Supply Corporation of Malawi (ESCOM) offices. Both the Malawian police service and ESCOM officials are generally regarded as highly corrupt.

To estimate the effect of socioeconomic status on rates of corruption, researchers were randomly assigned to appear as either from a high or low socioeconomic background, conveyed to officials through attire, accessories, and vehicle make and model. To estimate the effect of political connections, we *independently* assigned confederates to signal political clout, conveyed by wearing a ruling party pin – a rare and strong signal of party connections in Malawi – and assuming a demeanor associated with power. Finally, research assistants coded the ethnicity of each official, and coethnicity was varied via the random assignment of confederates to police roadblocks and ESCOM offices. The strength of this design is that, unlike survey-based studies of exposure to bribery, it allows us to isolate the effect of each of these treatments while holding constant the frequency of interaction with officials.

We found that signaling political connections significantly reduced the rate of bribe solicitation (from 94% to 85%) among stopped drivers, and reduced the size of the bribe solicited by 15% (from

2197 MWK to 1868 MWK). In ESCOM offices, political connections cut the rate of bribe solicitation almost in half (from 42% to 23%) and tripled the likelihood of receiving preferential treatment without a bribe (from 15% to 46%). In brief, political connections insulated citizens from bribery. Given the potential to extract more from rich individuals, we anticipated that wealthy individuals would pay larger bribes at higher rates, all else equal. Instead, signals of relative wealth had, on average, very little effect on exposure to corruption, except when direct information about political connections was absent. In particular, vehicles signaling high socioeconomic class were stopped less often for a visible infraction (47% of the time) compared to vehicles signaling low SES (57%). Our findings suggest that wealthy citizens' ability to shield themselves from corruption, as seen in many observational studies, is likely due to the conflation of wealth and political power.

Shared ethnicity had different effects across the two contexts. While we found no effect of shared ethnicity on traffic police bribery, coethnicity increased exposure to corruption in ESCOM offices from 28% to 44%. However, it also increased the likelihood of receiving expedited service without a bribe from 28% to 38%. While the small number of observations in this portion of the study requires some caution in interpretation, they suggest that ESCOM officials are more likely to offer preferential service to coethnics than to members of other ethnic groups, but sometimes this special treatment came at a price.

We also found that bribe solicitation was more common among traffic police – bribes were solicited from 90% among stopped drivers, constituting 45% of all roadblock observations – than among ESCOM officials (33% of interactions). While our research design does not allow us to isolate the mechanisms driving the differences across contexts, our results are consistent with differences in risks faced by public officials. In particular, corrupt ESCOM officials face a greater risk of detection and punishment than corrupt traffic police, which may help explain the lower rates of bribery and the importance of shared ethnicity in the ESCOM context. Whether it is the level of risk or another difference that ultimately drives the cross-context findings in this study, our comparison of institutions illustrates that the targeting strategies of corrupt officials may vary dramatically across contexts – even across highly corrupt public service institutions within the same country.

Together, these results suggest that certain citizens are targeted more than others by corrupt public

officials in Malawi. Our experimental approach moves us closer to disentangling the influence of wealth and power, and our findings suggest that relative wealth protects citizens from corruption largely because it serves as a proxy for political power. Endowing less wealthy citizens with political clout produced a dramatic reduction in bribe solicitation, while doing so for richer citizens was largely ineffective, perhaps because of the perceived benefits of asking a wealthy target for a bribe. Our research also identifies a new dimension – shared ethnicity – along which vulnerability to corruption is at least sometimes conditioned, although additional research is necessary to understand when and why this is the case. Finally, while this is a purely observational finding and we are unable to identify causal mechanisms, we observed a difference in the prevalence of petty corruption across two the Malawian institutions. This difference is consistent with corrupt officials’ responding strategically to the level of risk they face, consistent with broader research on the institutional determinants of corruption patterns.

### **Citizen Characteristics and Exposure to Corruption**

Research has tended to focus on three factors that condition government officials’ willingness to engage in corruption: the potential costs, the expected benefits, and the frequency of opportunities to solicit bribes. These factors have been linked to rates of corruption across countries (e.g., Cameron et al. 2009; Fisman and Gatti 2002; Treisman 2000), across institutional structures (e.g., Abbink 2004; Barr, Linelow, and Serneels 2009; Olken 2009), and across officials in the same institutional context (e.g., Armantier and Boly 2008; Barr and Serra 2010; Fisman and Miguel 2007; Rivas 2013). We build on this literature by studying whether and how *citizens’ characteristics* influence the rates of exposure to corruption, while controlling for country-, institution-, and official-level factors. We theorize that government officials use limited information about a citizen to decide whether to target him in corruption – particularly information concerning the likelihood of retribution for soliciting a bribe (cost) and a citizen’s willingness or ability to pay (benefit).

First, citizens vary in their ability to impose costs on public officials, for example in the degree of their political power or influence. While observational studies have found that political connections

may increase exposure to corruption (e.g., Jagger and Shively 2015; Ufere et al. 2012), such studies are unable to account for the possibility that politically connected individuals simply interact with government officials more often, or that they are more likely to offer bribes. We focus instead on how the perception that a citizen is politically connected affects a public official's propensity to solicit a bribe, holding constant the opportunity for such solicitation. Because political connections can be wielded to punish, public officials avoid soliciting bribes from those they perceive to be powerful (Fried, Lagunes, and Venkataramani 2010; Peiffer and Rose 2014). Powerful individuals typically threaten or enact punishment for bribe solicitation not in order to combat corruption in general, but to shield themselves from having to pay. They can either pressure higher-ranking officials to discipline an official (e.g., by transferring him to a less desirable post or demoting him) or use their influence to apply anti-corruption laws and judicial institutions selectively (Fried, Lagunes, and Venkataramani 2010; Zimmerman 2014). We therefore expect *political connections to reduce exposure to corruption (H1)*.

Second, since wealth is associated with power, corrupt officials may hesitate to engage the wealthy in corruption (Fried, Lagunes, and Venkataramani 2010; Bai et al. 2013; Fadahunsi and Rosa 2002; Nielsen 2006). Indeed, a host of empirical studies suggests that rich individuals are exposed to corruption less often than the poor (Peiffer and Rose 2014; Kaufmann, Montoriol-Garriga, and Recanatini 2008; Tchewonpi and Ventelou 2016; Justesen and Bjørnskov 2014). Where information about political connections is absent, we anticipate that wealth will be used as a proxy, and thus reduce exposure to corruption, in line with **H1**. However, all else equal, wealthy individuals should also be perceived as a valuable source of revenue for corrupt officials (Guerrero and Rodríguez-Oreggia 2008; Hunt 2007; Hunt and Laszlo 2012; Mocan 2004; Olken and Barron 2009; Pande 2007; Seligson 2006). This could be because officials anticipate being able to extract a larger bribe from a wealthy individual, or because they expect the solicitation of a bribe to be faster and easier, since wealthier citizens have a greater ability to pay. Considering these opposing forces, when wealth is not needed as an indicator of power because information about political connections is directly available, we expect that *wealthy individuals experience greater exposure to corruption than poorer individuals (H2)*.

We also consider the role of ethnicity in shaping exposure to corruption. While ethnic diversity is weakly correlated with perceived levels of corruption cross-nationally (Mauro 1995; La Porta et al. 1999; Treisman 2007) and within countries (Glaeser and Saks 2006; Olken 2006), the mechanism behind this link is poorly understood. Some studies have focused on whether members of certain ethnic groups experience more corruption (e.g., Odhiambo 2015), but the effect of *shared* ethnicity has received less attention. To explore how shared ethnicity might affect corruption exposure, we consider both ethnic-based altruism and perceptions of coethnic trustworthiness. Because individuals tend to display higher levels of favoritism toward coethnics (Bernhard, Fischbacher, and Fehr 2006), we might expect to see less corruption targeted at in-group members. However, individuals also display higher levels of trust in members of their own ethnic group (Barr 2004; Fershtman and Gneezy 2001; Robinson 2015), which could increase the perceived credibility of coethnic citizens – an important facilitator of corrupt transactions when risks are high (Treisman 2000). Thus, we anticipate that *shared ethnicity will reduce exposure to corruption (H3a)*, except if the risk of retribution is high, when *shared ethnicity will increase exposure to corruption (H3b)*.<sup>1</sup>

### **Corruption in Malawi: Traffic Police and ESCOM**

To examine the impact of socioeconomic status, political connections, and coethnicity on exposure to corruption, we carried out a field experiment in Malawi. Malawi is one of the ten poorest countries in the world (United States Government 2015), and like most other poor countries (Treisman 2007), it suffers from endemic corruption at all levels of government (Kaufmann, Kraay, and Mastruzzi 2012). Other factors also contribute to widespread corruption in Malawi, including ongoing democratization (Treisman 2007) and poor public service provision (World Health Organization, UNDP 2009), which encourages bribery in exchange for access to goods and services. While attention has tended to focus on high-level corruption (e.g., the “Cashgate” scandal in which high-ranking public officials defrauded the government of over 32 million dollars (Economist 2014)), a more mundane form of

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<sup>1</sup>Our pre-analysis plan outlined the expectation that ethnicity would reduce exposure to bribery, except in highly centralized institutional contexts, where it would increase exposure.

corruption – the solicitation of small bribes in exchange for service provision – is also widespread and directly impacts citizens on a daily basis. In 2010, 79% of Malawians felt that corruption was a major constraint on development, and 83% expressed concern over the level of corruption in their country (Centre for Social Research 2010).

We studied low-level corruption in two Malawian institutions: the police service and the government-owned electricity provider, ESCOM. The Malawi Police Service is one of the country's most corrupt institutions (Transparency International 2013): 95% of surveyed citizens paid a bribe to the police in the previous year. We focused on the most common type of police corruption: the solicitation of bribes from drivers at Malawi's ubiquitous traffic roadblocks.<sup>2</sup> When a driver approaches a roadblock, police officers first determine whether or not to stop the vehicle. If a vehicle is stopped, an officer will inspect the vehicle and the driver's documents and then decide whether to release the driver, issue a citation for any violations, or solicit a bribe from the driver in lieu of a citation. We studied corruption induced by a particular (simulated) infraction – driving without insurance – that carries a fine of 3,000-10,000 MWK.<sup>3</sup>

ESCOM is also perceived to be highly corrupt (Anti-Corruption Bureau 2012). We focused on the solicitation of bribes when a citizen requests a new residence-based electricity connection. Since ESCOM's capacity limits the number of new connections on a given day, citizens often pay a bribe to get connected faster. Refusing to pay a bribe can result in a wait time of months or even years: presumably *including* those who paid a bribe, it took 222 days, on average, to receive a new connection in 2009 (Kaufmann, Kraay, and Mastruzzi 2012).

We studied these two contexts because, while both institutions are perceived to be highly corrupt, there are a number of differences between them that could affect both the prevalence of corruption overall and how officials condition their corruption on citizen characteristics. For example, ESCOM offices are part of a more centralized and institutionalized structure than the traffic police, which potentially gives ESCOM officials less discretion than traffic police to solicit bribes.<sup>4</sup> However, the

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<sup>2</sup>Drivers in our study passed through a roadblock every 34 km, on average.

<sup>3</sup>In June 2014, when this study was conducted, the official exchange rate was 392 MWK to 1 USD.

<sup>4</sup>Our pre-analysis plan focused exclusively on differences in centralization across the two contexts.

study of two different types of interactions between government officials and citizens also means that our measure of “exposure to corruption” is necessarily different in the traffic police and ESCOM interactions. Thus each of the three hypotheses generates specific empirical expectations within each context.<sup>5</sup> In our discussion of the research design, below, we map these three generalized hypotheses onto specific indicators of corruption in each context.

## **Research Design and Experimental Protocols**

Our research design centers on a field experiment in which researchers interacted in an undercover capacity with real public officials in Malawi. We chose to use this approach for two reasons. First, we wanted to observe real behavior in a natural context. Self-reported data on corruption – especially questions about discrimination in the application of corrupt practices – would likely be subject to self-censoring and other forms of social desirability bias. Second, since our objective was to understand the targeted extraction of bribes by public officials, rather than aggregate rates of corruption, we needed to carefully control the characteristics of the “citizens” with whom they interacted. If certain types of individuals (e.g., politically connected citizens, rich citizens, or members of a certain ethnic group) are more likely to interact with public officials or more willing to pay a bribe, then observational data would reveal a positive correlation between individual traits and rates of corruption, even if public officials were not targeting certain citizens. In short, an experimental design is necessary to determine how political connections, socioeconomic status, and ethnicity affect who public officials target for bribes.

Though strong in causal identification, running an experiment of this nature presented ethical challenges, including informed consent, the use of deception, and potential risks to our researchers.<sup>6</sup> In discussing our results, we elaborate on how differences in centralization affect the risks faced by potentially corrupt public officials, and highlight other sources of differential risk.

<sup>5</sup>For this reason, as well as the fact that some interactions contain multiple stages, our pre-analysis plan included 23 empirical expectations based on these three underlying hypotheses.

<sup>6</sup>We discuss these challenges in greater depth in the online appendix.

First, consistent with all field experiments that seek to observe real-world behavior, we did not obtain the officials' consent to participate in the study. We felt that waiving informed consent was justified because of our focus on the behavior of public officials in their normal daily duties. Since they are charged with protecting the public interest, public officials should expect to be subjected to a higher level of scrutiny than normal citizens (McClendon 2012). Second, by using researchers who were secretly playing defined roles, we engaged in deceit. This decision is also consistent with most field experiments seeking to understand discrimination (Riach and Rich 2002). One of the key ethical considerations in using deception in field experiments on discrimination is whether the behavior of the researchers is consistent with that of the types of individuals they impersonate (Riach and Rich 2004). Given that our protocol was based on close collaboration with our Malawian confederates, who all had personal experience with low-level corruption among traffic police and ESCOM officials, we are confident that our protocols reflect real behavior encountered by public officials. Third, since we were interested in collecting information about illegal behavior, we went to great lengths to assure data confidentiality and the anonymity of public officials in the event of a data breach (which did not occur). Finally, the project subjected our research confederates to potential risks. To minimize these risks, they were trained to never suggest paying a bribe, and to record the characteristics of an interaction only when they were out of sight. They also traveled at all times with letters explaining the study, and the government's approval of it, in the event of an escalating situation.

We employed six Malawian confederates in order to be able to manipulate treatment status and to exact as much control as possible over the interactions, both of which were necessary for isolating the causal impact of citizen characteristics. These confederates, all male, hailed from six different ethnic groups and three different regions within Malawi, and each completed 20 hours of training for the study. The study was conducted over five consecutive days, with each confederate driving approximately 4-5 hours per day and visiting ESCOM offices along their driving routes. The short duration of data collection helps to hold constant any temporal variation in bribe solicitation (e.g., proximity to officials' pay day). For safety reasons, confederates were assigned to pairs, and each pair drove the same route each day separated by approximately two hours. We randomly assigned each of three pairs of research assistants to one of eight possible route sequences. Each confederate

passed through between 47 and 75 roadblocks (with around 40% temporary (shifting) roadblocks) and visited approximately 10 ESCOM offices. Figure A.1 in the online appendix shows a map of the police roadblocks and ESCOM offices included in this study, and Table A.1 outlines the driving routes. Data were collected after passing through every roadblock (whether the vehicle was stopped or not) and after every visit to an ESCOM office. Data were collected via Open Data Kit (ODK) on 3G-connected mobile devices, and geolocations of each roadblock and ESCOM office were recorded. A complete list of indicators collected is in Appendix E of the online appendix.

### **Traffic Police Roadblock Protocol**

When interacting with traffic police, there is typically only an opportunity for corruption to take place when there appears to be a traffic infraction. Past studies have created this context by having confederates actually break traffic laws (e.g., making illegal left turns in the Fried, Lagunes, and Venkataramani (2010) study), but we wanted to avoid asking confederates to break laws that exist for safety reasons. Therefore we chose to remove the highly visible marker of liability insurance from the vehicles in our study. Proof of insurance in Malawi is conveyed by a sticker, locally referred to as a “disc,” placed on the windshield, as shown in Figure A.2 of the online appendix. Moving the sticker inside the vehicle allowed our confederates to appear to violate the law without actually violating it.<sup>7</sup> Because the missing disc would have been visible from far away, we assumed that traffic police officers would easily notice the missing disc. If the confederate’s vehicle was stopped and he was asked about the disc, he was trained to appear surprised and then explain to the officer that he had lent his vehicle to a family member – a very common occurrence in Malawi – and had not noticed the disc was missing.

Upon being stopped, all research confederates, regardless of treatment status, were trained to say that they were rushing to a meeting and needed to hurry their interaction with the officer. The confederate would then observe whether the officer solicited a bribe or issued a citation. If a citation was

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<sup>7</sup>Proof of insurance was present in all study vehicles so that confederates could present it if they were facing a punishment more serious than a fine or if they needed it following an accident.

issued, then the confederate paid the fine as required by law and was given an official government receipt. If the officer solicited a bribe, the confederate was trained to negotiate to the lowest possible bribe, including being excused without paying a bribe. Once the amount was negotiated, the confederate paid the requested bribe and completed the interaction. Confederates never initiated bribes, and negotiated only after the officer initiated negotiations. This pattern of interaction – the officer noting an infraction, the driver conveying he is in a hurry, the police soliciting a bribe, and the driver negotiating the amount – represents the modal interaction with a Malawian traffic police officer following an infraction.

For every roadblock our researchers passed through, regardless of whether the vehicle was stopped, they collected information about geolocation, treatments, roadblock type (permanent or temporary), and the number of officers present. For interactions with traffic police after being stopped, they also collected data on the details discussed during the interaction, the sequencing of events, information about the officer's ethnicity, the presence of others, and the length of the interaction.

In the traffic police component of the study, when a car with a visible infraction passes through a roadblock, a police officer must first decide whether to stop the vehicle. Because the officer will have little information about whether a driver is politically connected prior to stopping a vehicle, we anticipate that relative wealth (as conveyed by the type of vehicle) will be used as a proxy indicator of power, and will therefore reduce the likelihood of being stopped (**H1**). If an officer does stop a vehicle, there are three possible outcomes: the driver pays the full fine and receives a receipt, the driver is released without paying anything, or the driver pays a bribe at a lower rate than the official fine, subject to negotiation.<sup>8</sup> For those who were not required to pay the full fine, we can also operationalize exposure to corruption as the amount of the bribe paid. We anticipate that political connections will reduce the likelihood and amount of a bribe (**H1**), high socioeconomic status will increase the likelihood and amount of a bribe (**H2**), and coethnicity between the officer and the researcher will reduce the likelihood and amount of a bribe (**H3a**).

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<sup>8</sup>Because we do not observe these outcomes for vehicles that were not stopped, we account for selection in analyzing these indicators.

**ESCOM Protocol**

For each ESCOM office visited, the researcher obtained the forms to request a connection for residential electricity on a nearby plot, stating that he needed the connection very quickly. At this point, ESCOM officials could either offer to expedite the request or not. If an official asked for a small payment, token of gratification, or extra money, the confederate waited for the official to suggest an amount, said that he would gather and return with the money, and then left the office.<sup>9</sup> If no bribe was solicited, the confederate pretended to be missing a key piece of information (e.g., plot number) and said he would return later. This pattern of interaction – collecting the connection forms, determining the bribe, leaving to collect the money, returning with the fee, bribe money, and completed forms – is a very common pattern of interaction with ESCOM officials. Because setting up a new connection often involves negotiation, this is a task that even wealthy and powerful people typically handle themselves. With less than twenty ESCOM offices in the country, ESCOM officials can not know with certainty whether citizens are local to an area, and as Malawi has no universal address system, detailed location information is not required in the early stages of requesting a new connection. Thus, the variety of roles portrayed by our research confederates were plausible in the ESCOM context.

When an ESCOM official interacts with a customer seeking expedited service, he or she must decide whether to refuse and offer only “normal” service, offer a faster service without a bribe, or to solicit a bribe in exchange for expedited service. We analyze these three possibilities as well as the bribe amount (if applicable). We anticipated that political connections would reduce the likelihood and amount of a bribe (**H1**), and increase the likelihood of receiving expedited service without a bribe. In contrast, we anticipated that high socioeconomic status would increase the likelihood and amount of a bribe (**H2**), and decrease the likelihood of receiving faster service without a bribe. Finally, we expected that coethnicity between the ESCOM official and our confederate would increase the likelihood of a bribe being solicited (**H3b**) – because they will be considered more trustworthy – but decrease the overall amount of the bribe (**H3a**) due to coethnic favoritism.

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<sup>9</sup>The confederates did not pay any bribes or fees to ESCOM.

## Treatments

There were three “treatments” in this experiment: 1) socioeconomic status (high or low); 2) political connectedness (politically connected or not politically connected); and 3) ethnic match with the public official (matched or unmatched). Daily random assignments for each confederate to socioeconomic status and political connectedness were independently determined by a random number generator prior to data collection. The ethnic match between the confederate and the officer was not truly randomized, since the ethnicity of the confederate could not be manipulated. However, randomly assigning the routes and existing variation in the placement of officers of different ethnicities generated variation within and across confederates. The same treatments were implemented in both the traffic police and ESCOM components.

The first treatment was the level of socioeconomic status. High socioeconomic status was conveyed using a new and expensive car (e.g., Audi or Mercedes), an expensive executive suit, a wristwatch, sunglasses, cologne, and a smartphone. Low socioeconomic status was conveyed by an older and less expensive car (e.g., late-model Toyota Tercel) and a casual dress of worn jeans, secondhand T-shirt, and worn sandals. Figure 1 provides photos depicting the same confederate in the low and high socioeconomic conditions. In addition to these two signals, high socioeconomic status individuals also stated that they were businessmen buying and selling imported goods, while low socioeconomic status individuals stated that they were businessmen buying and selling foodstuffs. In the ESCOM component of the study, socioeconomic status was operationalized in the same way, although the ESCOM official was less likely to observe the vehicle driven. While we use “poor” as shorthand for low socioeconomic status, we note that our confederates of low socioeconomic status represent relatively rich individuals by Malawian standards. However, *among Malawians who drive or seek electricity connections*, our confederates did represent the lower end of the income distribution. Random assignment resulted in 51% of traffic police interactions and 40% of ESCOM interactions occurring with high socioeconomic individuals.

[Figure 1 about here.]

The second treatment was whether the confederate appeared to be politically connected. In both

components of the study, political connections were signaled through appearance, demeanor, and script. Confederates signaling political connections behaved in ways consistent with powerful individuals in the Malawian context, including stopping the car in the road rather than pulling off when signaled to stop, talking on the phone during the interaction, and maintaining a “smug” demeanor. This behavioral profile was developed through close discussion with our Malawian confederates and our own observations at police roadblocks throughout the country. This “performance of power” was given a political frame by having the confederate wear a ruling party pin. In Malawi, party paraphernalia such as pins and buttons are typically only accessible to high-level party officials, and thus it constitutes a strong signal of connection to the party.<sup>10</sup> In contrast, non-politically connected individuals did not wear a political party pin and behaved obsequiously towards traffic police officers and ESCOM officials. Confederates were randomly assigned to be politically connected for 42% of observations in the traffic police study and 50% of observations in the ESCOM study.

The final treatment we consider is the ethnic match between the research confederate and the public official, which was only randomized to the degree that randomized route sequencing induced variation in the ethnicities encountered. Each of our confederates was coded on ethnicity and region of origin; they in turn coded the ethnicity and region of origin of the public officials with whom they interacted using surname (when available), language or accent, appearance, and information shared by the official.<sup>11</sup> We used this data to construct an indicator for ethnic match that takes a value of 1 if the public official and confederate are from the same region. We rely on a regional definition of shared ethnicity, because regional identities within Malawi have been the most salient form of ethnic identity (Ferree and Horowitz 2010; Posner 2004).<sup>12</sup> Confederates interacted with coethnic officials

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<sup>10</sup>The party pins used in the study were available because the authors approached a delegation of ruling party officials and asked to purchase three pins.

<sup>11</sup>This coding of ethnicity is likely noisy. However, ethnicity is more identifiable when both physical appearance and speech are observable (Habyarimana et al. 2009), which was the case in our study. Further, if anything, public officials should be able to more accurately judge the confederates’ ethnicities, given that they typically had more information, especially the researchers’ surnames.

<sup>12</sup>We also coded shared ethnicity based on tribe. However, given subject identifiability and data

in 29% of police interactions and 31% of ESCOM interactions.

These three treatments, with two levels each, result in a factorial design with eight possible types of individuals interacting with traffic police and ESCOM officials around Malawi. In evaluating the construct validity of this study, it is important to consider the plausibility of these different types of individuals in Malawi. Individuals representing both socioeconomic strata and many levels of political connections exist in every ethnic group, so the division between coethnics and non-coethnics across types does not detract from the design's validity. Individuals who are rich and connected (e.g., government officials, business executives, and attorneys) are plausible, as are those who are poor and not connected (e.g., farmers, teachers, and laborers). While considerably less common, individuals who are poor and connected are also plausible, since politically powerful individuals are often able to channel opportunities to poorer relatives through low-level positions. Individuals who are rich and not politically connected are least common, but do exist. Some health workers, nonprofit managers, and business managers will have obtained their positions through education and experience while remaining outside the political arena. This is particularly possible for Malawians who completed degrees or obtained work experience in other countries. However, while politically connected poor confederates were made plausible by a strong signal of political connections, rich confederates' lack of political connections could only be conveyed by an *absence* of such signals: because the assumption is that rich people are well connected, confederates assigned to be rich and non-politically connected may have nevertheless been perceived as rich and politically connected.

## Results

In this section, we evaluate the impact of our treatments within each context, as well as compare results across the two contexts. Our analysis is guided by the pre-analysis plan filed prior to data collection (available at <http://goo.gl/OQRbWW>), but deviates from that plan in the following ways. 

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confidentiality concerns, confederates only classified public officials as members of one of the three largest groups (Chewa, Tumbuka, or Yao) or as belonging to an "other" tribe. We were therefore able to code tribe-based coethnicity for only half of the confederates.

First, while our pre-analysis plan pre-specified parametric sample comparison tests, we utilize non-parametric alternatives given our relatively small sample sizes. Second, we utilize more appropriate model specifications in regression-based estimates of our main treatment effects. In particular, we account for the potential selection bias induced by some vehicles not being stopped in the traffic police context using a selection model, and we model the ESCOM interaction as a multinomial outcome. Third, we do not report analyses of paying a citation because it was exceedingly rare, occurring only six times (3% of interactions).<sup>13</sup> Fourth, we estimate an interaction effect between the socioeconomic and political connections treatments for all outcomes, although it was pre-specified only for some. Fifth, our pre-analysis plan specified the inclusion of some variables directly affected by treatments, which potentially introduces post-treatment bias: we now include only pre-treatment covariates.<sup>14</sup> Sixth, we only report results for regionally defined coethnicity, the measure of coethnicity for which we have the most complete data. Seventh, due to the limited observations available for each confederate, we do not include confederate fixed effects. These deviations from the pre-analysis plan do not change the substantive results reported below, and the results from the full set of pre-specified analyses are summarized in Table A.23 of the online appendix.

### **Traffic Police Results**

Over the course of the study, confederates passed through approximately 56 police roadblocks each (59% permanent, 41% temporary) for a total of 333 observations.<sup>15</sup> Figure 2 outlines the decision

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<sup>13</sup>These six citations were given to five different confederate researchers and are not systematically related to any of our treatments: half were given to high socioeconomic status confederates, half were given to politically connected confederates, and two of the six were given to coethnic confederates.

<sup>14</sup>To guard against the selective inclusion of covariates, we include all pre-treatment covariates that were collected. Tables A.4 through A.9 show the covariate balance across treatments, and Table A.21 replicates our analysis accounting for the only significant difference.

<sup>15</sup>Interactions occurred across 40 permanent roadblocks and 83 temporary road blocks. Given that each roadblock was manned by four officers, on average, and officers are regularly rotated among roadblocks, we did not anticipate significant roadblock-specific effects. Indeed, only 13% of the

tree for traffic police officers and shows the proportion of observations for each outcome, and Table A.2 of the appendix provides summary statistics. Even though we used a highly visible (simulated) infraction, and 98.5% of the roadblocks were manned, the vehicles in our study were only stopped about half of the time (52%,  $n = 173$ ). Of the vehicles that were stopped, only 3% of drivers were asked to pay the official fine and received an official receipt ( $n = 6$ ).<sup>16</sup> Of those remaining, 10% were released without paying anything ( $n = 16$ ) while 90% were required to pay a bribe ( $n = 151$ ). The average bribe amount for all those stopped (including those who paid nothing) was 2,067 MWK, while the average among those required to pay was 2,369 MWK, which is considerably less than the official fine of 3,000-10,000 MWK (see Figure A.3 of the online appendix).

[Figure 2 about here.]

How do socioeconomic status, political connections, and shared ethnicity influence exposure to corruption? In order to solicit a bribe, a police officer must first choose to stop a vehicle with a visible infraction. While officers may sometimes miss a vehicle due to engaging with other drivers or other distractions, we anticipated that officers would choose to stop vehicles with the same visible infraction at different rates depending on what a vehicle signaled about the driver's relative wealth. In particular, we anticipated that because wealth and power are closely related in Malawi, vehicles signaling relative wealth would be stopped less often (**H1**).<sup>17</sup> Indeed, confederates assigned to the high socioeconomic condition, and thus driving newer and more expensive vehicles, were stopped less often (47%) than those in the low socioeconomic condition (57%) ( $\chi^2 = 3.69, p = 0.06$ ). Model 1 of Table 1 estimates the effect of high socioeconomic status on the likelihood of being stopped, controlling for whether variation in whether a vehicle was stopped or not, and 2% of the variation in whether or not a bribe was solicited, is explained by roadblock. We replicate our main results with standard errors clustered by roadblock in Table A.13-A.14 for the 322 observations where GPS coordinates could be recorded.

<sup>16</sup>Officers appeared to practice discretion over the fine amount: one researcher was fined 3,000 MWK, two were fined 5,000 MWK, and three were fined 10,000 MWK.

<sup>17</sup>Because our political connections and coethnicity treatments were not observable prior to stopping a vehicle, we do not analyze their effects on being stopped.

the roadblock was temporary, the number of police officers manning the roadblock, and the time of day (hours since 5am) using a linear probability model.<sup>18</sup> The results show that vehicles that signaled relative wealth were 11 percentage points less likely to be stopped by police officers.

[Table 1 about here.]

We next evaluate who was required to pay a bribe in interactions in which the vehicle was stopped. While rates of bribery were similarly high across high and low socioeconomic treatments (92 vs. 89%), politically connected drivers were significantly less likely to pay a bribe (85%) than politically unconnected drivers (94%) ( $\chi^2 = 4.14, p = 0.04$ ). However, these simple comparisons of proportions do not account for selection into being stopped, nor do they control for other treatment conditions. Thus, we next estimate the likelihood of paying a bribe using a Heckman selection model, with results presented in Model 2 of Table 1. We rely on the time of day (hours since 5am) as an instrument in modeling selection, assuming that time of day does not affect corruption outcomes except through its effect on whether or not a vehicle is stopped. Time of day is significantly correlated with whether or not a vehicle is stopped (vehicles are less likely to be stopped later in the day), but there is no observed relationship between time of day and the likelihood of paying a bribe ( $r = 0.03$ ) or the amount of bribe requested ( $r = 0.12$ ) among stopped vehicles. The other two covariates – type of roadblock and the number of police officers manning the roadblock – are included in both stages of the model. Because some vehicles were not stopped, the estimation of treatment effects on outcomes after being stopped is no longer purely experimental. However, for the results reported in Table 1, the insignificance of  $\rho$  suggests that selection is not significantly biasing the estimates.<sup>19</sup>

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<sup>18</sup>Linear models are presented for ease of interpretation. Results replicated using a probit model in Table A.12.

<sup>19</sup>In Table A.15, we estimate the effect of socioeconomic status and political connections on the likelihood of all possible outcomes – and consider the failure to stop a vehicle as one potential outcome – using a multinomial logit. This estimation strategy does not account for potential selection effects, but it most closely maps on to the original experimental design. Results are substantively similar to those obtained in the selection model.

In terms of treatment effects, we found that political connections reduce the likelihood of paying a bribe by 11 percentage points, while socioeconomic status had no effect (Model 2 of Table 1). When we interacted socioeconomic status and political connections (Model 3 of Table 1), we found that the protective power of political connections was largely driven by poor drivers. While the coefficient on the interaction is not statistically significant at conventional levels, its substantive size is almost equivalent to the negative effect of political connections, effectively eliminating the protective effect of political connections among rich drivers. Based on this estimation, the poor and unconnected and the rich and unconnected were the most likely to have to pay a bribe (91%), followed by the rich and connected (86%). However, the poor and connected paid a bribe only 73% of the time. We see similar patterns when we consider a continuous measure of bribery, ranging from 0 to 5,000 MWK. Using the same selection model, political connections are associated with significantly lower bribe amounts (Model 1 of Table A.10 in the online appendix), but this effect is largest for confederates signaling low socioeconomic status (Model 2 of Table A.10). Among confederates who were stopped, the predicted bribe amount is 1,510 MWK for the poor and unconnected, 1,475 for the rich and unconnected, 1,253 for the rich and connected, and only 859 for the poor and connected.

Finally, we found no evidence that shared ethnicity is related to the likelihood of paying a bribe (90% for coethnics and 91% for non-coethnics,  $\chi^2 = 0.07$ ,  $p = 0.80$ ) or the amount of bribe extracted (2,214 MWK for coethnics vs. 2,111 MWK for non-coethnics, Wilcoxin rank-sum  $z = 0.69$ ,  $p = 0.49$ ). Table 1 and Table A.10 of the online appendix similarly show no effect of shared ethnicity.

Taken together, these patterns suggest that political clout is the strongest deterrent of corruption, consistent with **H1**. We attribute this to officers' fear of retribution from powerful citizens, rather than to attempts to curry favor, since none of our confederates were asked for any such favors during the course of their interactions. We found no direct evidence that socioeconomic status increases exposure to corruption, as there was no difference, on average, between confederates signaling high and low socioeconomic status. In particular, we did not see rich but politically unconnected individuals being asked for more bribes or larger bribes, as we had anticipated. This may be due, however, to the difficulty of credibly signaling a rich but politically unconnected citizen. However, we did find evidence indicating that wealth attracts bribery; if we look at the effect of socioeconomic status among

the politically powerful, the rich are targeted at much higher rates than the poor. The fact that political connections limit exposure to corruption primarily among the poor suggests that the deterrent power of political clout may be counteracted by the benefits of a wealthy target, consistent with **H2**.

### **ESCOM Results**

Our research confederates visited a total of 52 ESCOM offices to request a new electricity connection.<sup>20</sup> Figure 2 summarizes the outcome of those interactions and Table A.3 of the appendix provides summary statistics. In 37% of interactions ( $n = 19$ ), the “customer” was told that there was no way to speed up the connection process. When an ESCOM official did signal that an expedited service was possible ( $n = 33$ ), a bribe was solicited only 52% of the time ( $n = 17$ ); the rest of the time, such preferential service was promised without demanding a bribe (31% of all interactions). For those offered expedited service, the average bribe solicited was 12,367 MWK (including those for whom no bribe was asked, and thus the bribe was 0 MWK), while the average amount was 25,560 MWK for all those asked for a bribe (see Figure A.4 of the online appendix).

To estimate the effects of our three treatments – socioeconomic status, political connections, and coethnicity – we analyze how each is related to the likelihood of each of the three possible outcomes in an ESCOM interaction: normal service (non-expedited, no bribe), bribe (expedited service with a bribe), or expedited (expedited service without a bribe).<sup>21</sup> The latter two outcomes are both exam-

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<sup>20</sup>Interactions occurred across 15 different ESCOM offices. However, only 11% of the variation in whether or not an expedited connection was offered, and 3% of the variation in whether or not a bribe was solicited, is explained by which ESCOM office was visited. Tables A.19 and A.20 show the results of our main analyses when standard errors are clustered by ESCOM office for the 46 observations where GPS coordinates could be recorded. The results are largely similar, except for a large interaction effect due to the omission of the six observations without location data, five of which were for rich and connected confederates, rather than the structure of the standard errors.

<sup>21</sup>Given the small sample size ( $n = 52$ ), our analyses of treatment effects in ESCOM interactions are underpowered. As a result, we interpret null effects with caution, focus on substantive effect sizes, and utilize numerous robustness checks for regression-based results.

ples of corrupt practices, but only the offer of expedited service in exchange for a bribe benefits the ESCOM official and is thus considered bribery. These decisions are depicted in Figure 2, which also shows the proportion of observations for each outcome. Similar to the traffic police expectations, we anticipated that political power would reduce the solicitation of bribes from ESCOM officials (**H1**), while socioeconomic status would increase their solicitation (**H1**). In contrast to our traffic police expectations, we anticipated that shared ethnicity would increase the solicitation of bribes from ESCOM officials (**H3b**).

Contrary to expectations, we found that relative wealth had no significant influence on the likelihood of receiving expedited service or exposure to corruption (**H2**). Confederates signaling low socioeconomic status were offered normal service in 35% of interactions, free expedited service in 29% of interactions, and expedited service in exchange for a bribe in 35% of interactions. Outcomes were similar for “rich” confederates: 38% were offered normal service, 33% were offered free expedited service, and 29% were offered expedited service if they paid a bribe. Thus, in this simple comparison of proportions, the socioeconomic treatment is unrelated to the outcome of an ESCOM interaction ( $\chi^2 = 0.28, p = 0.87$ ). We next estimate the effect of socioeconomic status on the ESCOM outcome using a multinomial regression that controls for the other treatment assignments and all pre-treatment controls (including the number of officials present, the presence of other customers, and the time of day).<sup>22</sup> Given our small sample size, we also report a number of alternative model specifications and estimation strategies in the online appendix (see below). Model 1 of Table 2 presents the results of the multinomial logit estimation (with normal service as the comparison category), again showing no statistically significant effect of socioeconomic status. We see similar null effects when we consider the overall amount of the bribe solicited among those offered an expedited connection (12,195 MWK for the poor vs. 12,642 MWK for the rich, Wilcoxin rank-sum  $z = 0.31, p = 0.76$ ; Model 1 of Table A.11 in the online appendix).

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<sup>22</sup>Hausman tests confirm that the independence of irrelevant alternatives assumption (IIA) holds in this case ( $\chi^2 = 1.93, p = 0.96$  excluding Bribe;  $\chi^2 = 0.34, p = 1.00$  excluding Regular Service;  $\chi^2 = -19.94, p = 1.00$  excluding Expedited Service).

[Table 2 about here.]

In contrast, political connections reduce confederates' exposure to corruption and increase the quality of service they receive (**H1**). Among the unconnected, being offered normal service (42%) and expedited service in exchange for a bribe (42%) were equally likely, while being offered *free* expedited service was comparatively rare (15%). However, among politically connected confederates, expedited service with a bribe (23%) was slightly less common than normal service (31%), while free expedited service was the most common outcome (45%). Thus, signaling political clout was significantly related to outcomes overall ( $\chi^2 = 5.94, p = 0.05$ ). Model 1 of Table 2 shows that, when controlling for other treatments and pre-treatment covariates, political connections increased the likelihood of receiving an expedited connection for free compared to both receiving a non-expedited connection and paying a bribe for expedited service. This effect is substantively large, increasing the predicted likelihood of free, expedited service from 15% to 46%. This preferential treatment for the politically connected was not limited to the poor (Model 2 of Table 2). Among those offered expedited connections, on average politically connected confederates were asked to pay only half the amount that unconnected individuals were asked to pay (8,824 MWK vs. 16,671 MWK, Wilcoxin rank-sum  $z = 1.63, p = 0.10$ ). This difference is driven primarily by the fact that politically connected confederates were typically not asked to pay a bribe in exchange for an expedited connection. In a regression framework (Table A.11 in the online appendix), the effect of political connections is not statistically significant at conventional levels, although we again note our weak statistical power.

Finally, unlike among the traffic police, shared ethnicity does affect the outcome of interactions with ESCOM officials (**H3b**). As shown in Figure 3, corruption-free "regular" service was the modal outcome for non-coethnics (44% of non-coethnic interactions), while coethnics were more likely to be offered expedited service with (44%) or without (38%) a bribe than they were to be offered normal service. While expedited service was thus statistically more likely for coethnics than non-coethnics (81% vs. 56%, Wilcoxin rank-sum  $z = 1.80, p = 0.08$ ), when expected service with and without a bribe are considered as separate outcomes alongside normal service, the outcome is not statistically associated with coethnicity ( $\chi^2 = 3.21, p = 0.21$ ). Controlling for other treatments and

characteristics of the context (Model 1 of Table 2), coethnicity is a significant predictor of being offered both expedited service for free (increasing its predicted likelihood from 28% to 38%) and expedited service in exchange for a bribe (increasing its predicted likelihood from 28% to 44%) compared to being offered normal service.<sup>23</sup> The effect of coethnicity on the amount of bribe solicited is substantively small and statistically insignificant (Table A.11 in the online appendix).

[Figure 3 about here.]

The results of the ESCOM component of the field experiment rely on both mean comparison tests and multinomial logistic regressions. With a small sample size, the standard errors computed in the estimation of a multinomial logit may be unreliable because of the model's reliance on asymptotic properties of the data's distribution. Thus, we also present a number of non-parametric and semi-parametric alternatives. First, Table A.16 of the appendix uses randomization inference to approximate exact  $p$ -values for all treatment coefficients based on 10,000 permutations of the treatment assignments (Keele, McConnaughey, and White 2012). This randomization inference assigns the three treatments to units independently, and tests the sharp null of no effect for any unit. Second, Table A.17 presents estimates obtained from a multinomial model using generalized maximum entropy, which avoids strong parametric assumptions and is thus well suited to small samples (Golan, Judge, and Perloff 1996). Third, in Table A.18, we report the posterior means and 90% highest posterior density intervals of a Bayesian multinomial logit model. Bayesian methods do not rely on assumptions about the asymptotic properties of the sample or the sampling distributions of the parameters, which makes a Bayesian approach particularly appealing with small samples (McNeish 2016). Fig-

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<sup>23</sup>It is possible that coethnicity in the ESCOM context is capturing whether a confederate could plausibly be from the region in which the ESCOM office is located, which would be the case if ESCOM officials are more likely to work in regions from which their ethnic group hails. However, the positive effect of coethnicity on the likelihood of expedited service is largely unchanged when controlling for being in the confederate's home region (Table A.22), although the effect of coethnicity on expedited service without a bribe is no longer statistically significant at conventional levels.

ures A.5 and A.6 show density plots of the posterior means on the left and trace plots on the right.<sup>24</sup> In Figures A.7, A.8, and A.9, we examine the sensitivity of the 90% highest posterior density interval to the variance parameter for the prior for the coefficients, finding consistent positive effects for political power (on expedited service) and coethnicity (on both bribery exposure and expedited service). Only when we place a strong prior probability of no effect – setting the prior variance around the coefficients around or below two – do HPD intervals overlap zero. These various approaches, which use different strategies to overcome the limitations of a small sample size, align with the findings reported in Table 2: political connections facilitate free, expedited service, and coethnicity reduces the likelihood of receiving normal service.

### **Comparison of Corruption Patterns across Contexts**

Overall, corruption was much more common among traffic police than ESCOM officials. While traffic police solicited a bribe in 90% of interactions with confederates stopped (45% of interactions overall), ESCOM officials did so in only 33% of interactions. In addition, standard procedures were followed in 37% of ESCOM interactions (i.e., expedited service was not offered), while the standard procedure of issuing a citation occurred in only in 3% of police interactions. In terms of strategic targeting, we found similar effects of socioeconomic status and political connections in the two contexts. In particular, socioeconomic status appeared to have little direct effect, while political connections offered protection from corruption and access to preferential treatment. However, the preferential treatment for politically connected individuals at ESCOM was not limited to the poor, as it was for interactions with traffic police. The most dramatic difference in treatment effects across the two contexts was the effect of coethnicity: it increased the likelihood of bribe solicitation and expedited service in the ESCOM setting, but had no effect on interactions with the traffic police.

While our research design does not allow us to isolate the mechanisms driving these contextual differences, the lower rates of corruption and the greater importance of shared ethnicity among ES-

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<sup>24</sup>The Gelman and Rubin diagnostic produced values below 1.1 for each chain, consistent with Markov chain convergence, a conclusion that comports with visual inspection of the trace plots.

COM officials suggest that they may be at higher risk of retaliation from engaging in corruption, and therefore that they do so less often and prefer to share this risk with coethnics. We argue that ESCOM officials face greater risks than traffic police officers for three reasons.

First, greater centralization and institutionalization expose ESCOM officials to more oversight than traffic police officers, since corruption is potentially traceable to particular individuals and their superiors within the ESCOM bureaucracy. ESCOM is highly centralized, and such centralization is typically associated with lower rates of corruption (Fisman and Gatti 2002; Prud'Homme 1995; Shah 2006). ESCOM falls under both the Ministries of Energy and Finance, and has a centralized chain of accountability to the central government. It is also highly institutionalized: officials are appointed to a specific office with standard business hours, and contact information for ESCOM offices is widely available. In contrast, the traffic police are more decentralized and less institutionalized. The chief of police is autonomous from government ministries, and personnel decisions are made independently at lower levels. There are no publicly available records of police operations, officers rarely wear nametags, and traffic officers do not have set schedules or locations. Corruption is therefore less traceable in the traffic police, and thus bears less risk.

Second, ESCOM officials face a higher risk of retribution than traffic police, because ESCOM bribes are extracted in exchange for providing a government service that is legally available to all Malawians, whereas traffic police bribes are taken in exchange for being let out of a citation that would typically cost more than the bribe. This difference in the perceived fairness of the situation can make citizens more willing to take personal risks in order to punish corrupt officials at ESCOM. Citizens can report corruption to the Anti-Corruption Bureau, the media, or district council officials. While not all of these reports result in investigation, let alone formal sanctions, a corruption investigation in Malawi can be sufficiently invasive and career damaging that officials take care to avoid being reported (Zimmerman 2014). Retribution from higher-level officials is also more likely at ESCOM. Due to the traceability and perceived unfairness of corruption at ESCOM, high-level officials often take care to distance themselves from it by harshly punishing those involved – for example by demoting them, transferring them to a less desirable area, or reporting them for formal investigation and punishment (Zimmerman 2014). However, corruption is also prevalent at high levels of government in Malawi;

dramatic public action may be taken against lower-level corruption to divert scrutiny from the higher levels. Senior officials also often punish lower-level officials not for soliciting bribes in general, but for soliciting them from powerful individuals who seek retribution.

Third, ESCOM officials face a greater risk of bribe payers renegeing. Few citizens arrive at ESCOM with bribe money in hand. It is a negotiation tactic to claim that the funds are not available yet, and citizens often have to raise the money through their network; if they cannot, they may simply not return to complete the electricity connection. Sometimes a citizen will return but will give the money to another officer. Therefore ESCOM officials bear the risks of corruption today but receive the benefits in the future, if ever. In contrast, traffic police officers receive bribes on the spot. Thus a citizen's perceived trustworthiness should be more important for ESCOM officials than for police officers when deciding whether to target them. Our finding that there are different patterns of corruption across different contexts suggests that officials may develop nuanced, context-specific strategies regarding who to target for corruption. This is a promising avenue for future research.

## **Conclusion**

The results of this field experiment suggest that public officials in Malawi strategically target citizens for bribery using limited information about the expected costs and benefits of doing so. We found that perceived political connections significantly reduced the likelihood of being asked to pay a bribe to the traffic police, and increased the likelihood of receiving expedited service from ESCOM without having to pay a bribe. Where information about individuals' political connections is unavailable – as it is for police officers deciding whether to stop a vehicle, for example – government officials may use relative wealth as a proxy indicator of political power, which is consistent with previous research (Fried, Lagunes, and Venkataramani 2010). Explicitly introducing information about political connections, however, complicates this picture. In both contexts, political connections were effective at reducing exposure to corruption, but this effect was observed primarily among the poor in the traffic police interactions. We believe this is due to the contradictory signals implied by wealth in highly unequal societies: wealthy individuals may increase the benefit of corruption by paying bribes more

willingly or in higher amounts, but they may also increase its costs if they are better able to sanction corrupt officials by using their political connections. Thus, when an individual appears to be poor and politically connected, the risks of engaging in corruption outweigh the potential benefits. These findings contribute to the study of corruption by helping to explain contradictory findings concerning the influence of socioeconomic status on exposure to corruption.

These results may have implications for the functioning and stability of democracy amid corruption in partially democratized, developing countries like Malawi. First, while democracy is expected to reduce the prevalence of corruption via increased accountability (Treisman 2000, 2007), our results show that those with the most power and influence within a democratic system – and, thus, those most able to curb corrupt practices – are the least affected by petty corruption, and therefore may not be incentivized to support policies and institutions that shield others from it. Further, although political decentralization is often expected to reduce corruption by bringing officials closer to their constituents (Fisman and Gatti 2002; Ivanyina and Shah 2011), we found prevalent corruption even among low-level officials. Second, research suggests that being targeted for corruption reduces citizens' belief in the legitimacy of the political system (Seligson 2006) and decreases their support for democracy (Mishler and Rose 2001). Thus, targeted bribery may erode democratic support the most among those it is most meant to benefit – the poor and the powerless.

We also found evidence that shared ethnicity increases exposure to corruption within ESCOM offices. We argue that this effect could be driven by the higher levels of trust among coethnics, given the importance of trust when corruption is riskier for public officials. Consistent with this interpretation, we also found that coethnicity increases the chance of receiving expedited service without a bribe. However, we are not able to determine why coethnic favoritism only sometimes requires a bribe. Coethnicity may interact with other citizen characteristics like relative wealth and political connections, which we cannot explore with our limited sample size. Our findings nonetheless signal the potential importance of shared identity for corrupt exchanges, and highlight the need for additional research on how coethnicity and other forms of social proximity shape patterns of corruption.

Finally, our study of two institutional contexts – traffic police roadblocks and electricity supply offices – revealed different levels of corruption overall. This suggests the importance of a continued

focus on the institutional factors that shape the incentives for corruption. For example, the greater centralization and top-down monitoring of ESCOM officials likely contributes to lower rates of corruption. But a focus on *who* is targeted may also help shape efforts to reduce corruption. Endowing those most frequently targeted by corrupt officials – the politically unconnected – with the power to sanction officials to the same degree as more powerful citizens, perhaps through mechanisms of bottom-up monitoring, could be an effective tactic in reducing overall levels of corruption.

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**Table 1:** Traffic Police Results

	I(Stopped)	I(Paid Bribe)	
	(1)	(2)	(3)
High SES	-0.11* (0.05)	0.05 (0.05)	-0.01 (0.05)
Political Connections		-0.11* (0.05)	-0.19* (0.09)
High SES × Connections			0.14 (0.11)
Coethnicity		-0.00 (0.05)	0.00 (0.05)
Temporary Road Block	0.03 (0.06)	-0.03 (0.05)	-0.03 (0.05)
No. of Officials	0.05* (0.02)	-0.02 (0.01)	-0.02 (0.01)
Hours Since 5am	-0.03* (0.01)		
Constant	0.64* (0.10)	0.96* (0.06)	0.99* (0.06)
Selection: I(Stopped)			
High SES		-0.29* (0.14)	-0.29* (0.14)
Temporary Road Block		0.08 (0.15)	0.08 (0.15)
No. of Officials		0.12* (0.04)	0.12* (0.04)
Hours Since 5am		-0.09* (0.02)	-0.09* (0.02)
Constant		0.39 (0.27)	0.38 (0.27)
Observations	333	327	327
Censored Observations		160	160
$\rho$		0.17	0.15
Prob. $\chi^2$		0.12	0.22

All models are estimated linearly.

Models 2 and 3 account for selection using a Heckman selection model.

Robust standard errors are reported in parentheses. \* $p < 0.10$

**Table 2: ESCOM Results**

	(1)		(2)	
	I(Bribe)	I(Expedited)	I(Bribe)	I(Expedited)
High SES	-0.96 (0.85)	-0.48 (0.84)	-1.30 (1.16)	-0.35 (1.70)
Political Connections	-0.12 (0.82)	2.45* (0.96)	-0.47 (1.08)	2.47* (1.19)
High SES × Connections			0.89 (1.58)	-0.04 (2.00)
Coethnicity	1.58* (0.94)	1.60* (0.88)	1.48 (0.94)	1.63* (0.95)
No. of Officials	0.75* (0.43)	0.53 (0.43)	0.78* (0.42)	0.52 (0.41)
Hours Since 5am	0.04 (0.18)	0.12 (0.17)	0.04 (0.18)	0.12 (0.17)
Other Customers Present	-1.09 (1.23)	1.07 (1.19)	-1.18 (1.24)	1.04 (1.18)
Constant	-1.94 (1.82)	-4.15* (1.73)	-1.87 (1.87)	-4.19* (1.78)
Observations	52		52	

Models 1 and 2 are estimated using multinomial logit, with normal service (non-expedited, no bribe) as the reference category.

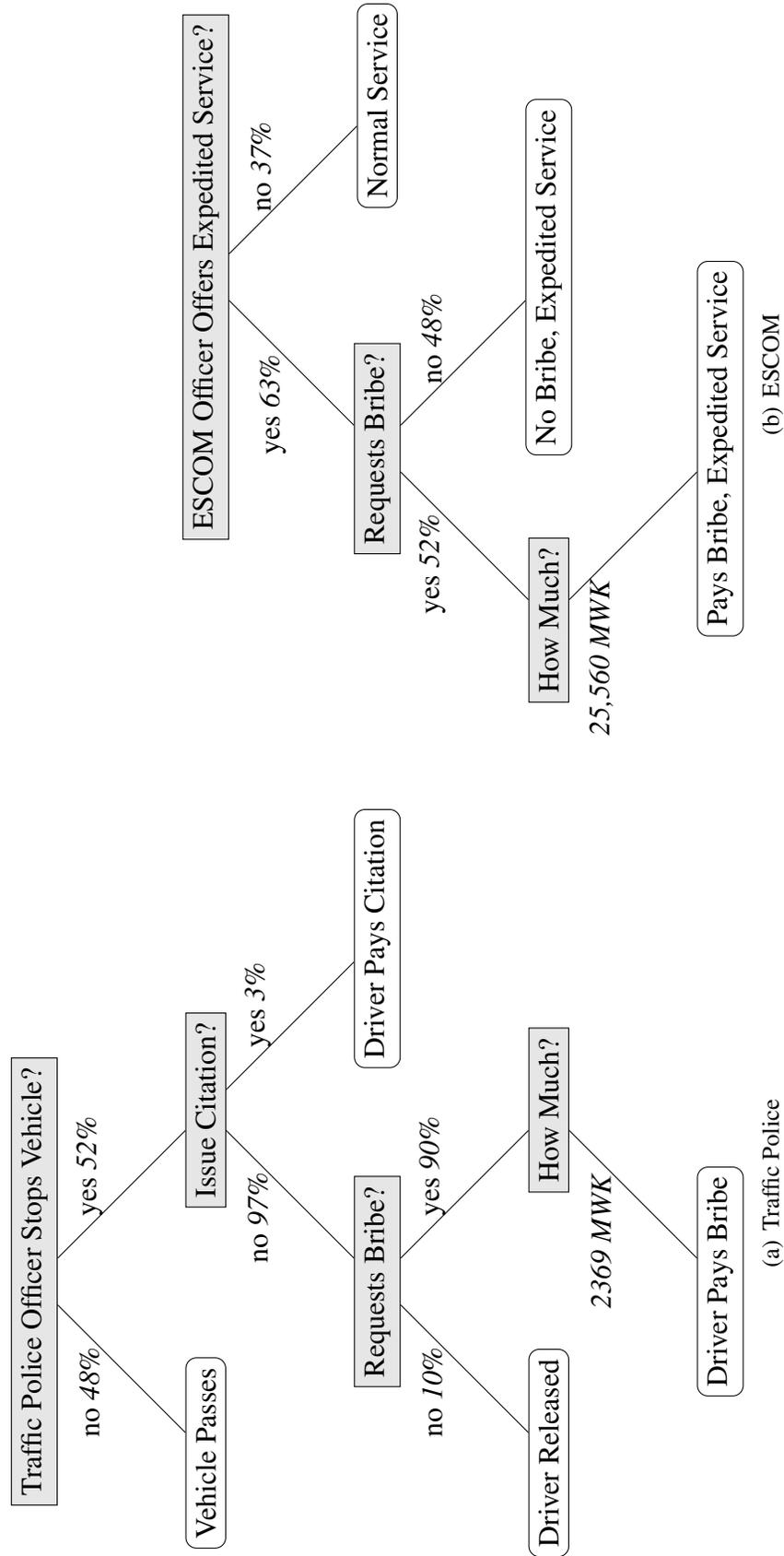
Robust standard errors are reported in parentheses. \*  $p < 0.10$

**Figure 1: Treatment Examples**



(a) Low Socioeconomic Status, Not Politically Connected (b) High Socioeconomic Status, Politically Connected

Figure 2: Decision Trees for Traffic Police and ESCOM Officials



**Figure 3: ESCOM Outcomes by Coethnicity**

