CORRUPTION AND INEQUALITY AT THE CROSSROAD

A Multimethod Study of Bribery and Discrimination in Latin America

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Abstract: *How does corruption interact with inequality? To answer this question, we employ a field experiment that examines the manner in which police officers in a major Latin American city respond to socioeconomic distinctions when requiring a bribe. In this experiment, four automobile drivers commit identical traffic violations across a randomized sequence of crossroads, which are monitored by transit police. We identify the effect of citizens' perceived wealth on officers' propensity to solicit bribes and on the size of the bribes that they solicit. We complement our experimental results with qualitative findings from interviews with police officers. Our core finding is that officers are more likely to target lower class individuals and let more affluent drivers off with warnings. The qualitative results suggest that officers associate wealth with the capacity to exact retribution and therefore are more likely to demand bribes from poorer individuals. We conclude that a multimethod approach provides a richer account of corrupt behavior than that found in most contemporary research.*

Dependiendo del sapo,
Así es la pedrada.[1]

   1. This folk saying translates to "The stone you throw depends on the size of the toad." In several Latin American countries, it serves as a reminder that people are treated according to their position on the socioeconomic ladder.

INTRODUCTION

Corruption, commonly understood as the abuse of public office for private gain (e.g., Rose-Ackerman 1978; Kaufmann 1997; You and Khagram 2005), is the subject of a rapidly growing literature in political science and economics.[2] However, the relationship between corruption and inequality has received less research attention. In particular, there is scant evidence on whether public officials take an individual's income or socioeconomic class into account when asking for bribes. Our article addresses this particular gap in the literature by exploring corruption in the context of traffic violations in a large Latin American city.

We conduct a field experiment to test how traffic police officers respond to drivers of different income levels. In our experiment, we employ two male upper-class and two male lower-class drivers who are of a similar age. The class of the drivers is differentiated by their manner of speech, their choice of clothing, the vehicle that they drive, and phenotypic characteristics such as skin tone. The four drivers commit identical minor but visible traffic violations (e.g., illegal left turns) across a randomized sequence of intersections monitored by transit police. We then observe whether officers stopped the driver for committing the infraction and, if so, whether they issued a ticket, demanded *mordida* (a bribe), or simply gave a warning. In addition, we interview a number of police officers to test the plausibility of different explanations for our results.

We chose to use a field experiment to study the association between socioeconomic status and corruption over more common approaches based on observational data for three reasons.[3] First, survey data used in observational studies typically rely on self-reports of corrupt practices, which often are unreliable. Second, such data do not differentiate between bribes that are paid for convenience from those paid as a result of coercion from public officials. For example, a positive association between wealth and the payment of a bribe found in survey data may reflect public officials' targeting of wealthy individuals for bribes, an increased propensity for the rich to pay bribes out of convenience, or both. As our study aims to explore bribe-seeking behavior on the part of public officials, the inability to distinguish between the two possibilities is problematic. Third, to the extent that the likelihood of interacting with a traffic officer varies with

2. The classic definition comes from Joseph S. Nye (1967, 416): "[Corruption is] . . . behavior which deviates from the formal duties of a public role (elective or appointive) because of private-regarding (personal, close family, private clique) wealth or status gains: or [which] violates rules against the exercise of certain types of private-regarding influence."

3. Exceptions to the use of observational studies include the field experiments of Bertrand, Djankov, Hanna, and Mullainathan (2007), Olken (2007), and Peisakhin and Pinto (2009).

class, the relationship between income and corrupt behaviors might be driven by selection bias rather than discrimination.

We find that transit police are equally likely to stop well-off and less well-off drivers for committing traffic infractions. However, among those who are stopped, officers are more likely to demand a bribe from poorer drivers. To our surprise, not a single ticket was written. Moreover, our data on bribe requests suggest that officers expect to receive roughly the same payoff from stopping an upper- and a lower-class driver. Collectively, the results suggest that bribery places a heavier burden on the poor.

The semistructured interviews of police officers and experts shed light on the mechanisms driving our experiment's results. Most traffic officers believe that wealthier individuals tend to be well connected and can sometimes punish officers for issuing them tickets, even when they are written in response to a legitimate traffic violation. As a result, transit police are more reluctant to seek bribes from richer individuals vis-à-vis the less well-off because the perceived cost of repercussions outweighs the greater potential payoff of extorting richer individuals.

We proceed by reviewing the existing literature on the intersection between corruption and inequality. In the subsequent section, we discuss our experimental methods and results. The final sections present the qualitative survey and conclusion.

CORRUPTION AND INEQUALITY: LITERATURE REVIEW

The existing literature provides conflicting views on the relationship between corruption and socioeconomic status. Some scholars contend that bribery assists the impoverished and provides them with important benefits, such as catching a government official's elusive attention (Nye 1967; Scott 1969). If true, this argument would make corruption seem almost humane.[4]

However, others view corruption as a useful instrument of the rich. This can work in two ways. First, high levels of inequality create an institutional environment that favors those with income to spare. This, in turn, may lead people to question the regime's legitimacy and to circumvent laws and regulations with greater frequency. As a result, a norm of illegally swapping cash for favors is fostered (You and Khagram 2005). Second, corruption (similar to other mechanisms of influence) can lead to the

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4. There are a number of anecdotes to support the idea that a bribe payment can result in a humane outcome. One tells of how a community in the poor district of Iztapalapa, Mexico City, had to pool enough resources to bribe workers from the publicly owned electricity company. Otherwise, their local grid, which had been damaged by vandalism, would not be repaired, their refrigerated food would continue to spoil, and their children would be forced to continue doing their homework by candlelight.

unequal access of goods and services (Johnston 1989). As several authors have noted, wealth can enable those with more resources to buy influence both legally and illegally (Kaufmann 1997; Hellman and Kaufman 2002; Glaeser, Scheinkman, and Shleifer 2003; de Ferranti, Perry, Ferreira, and Walton 2004). This kind of interaction has recently been termed *inequality of influence.*[5]

There are also different viewpoints on how bribe negotiations between individuals and public officials vary by socioeconomic class. From the standpoint of public officials, which is of particular interest to this study, some might expect them to prey more on wealthier individuals, who carry thicker wallets. In contrast, the poor could be more vulnerable as they are less likely to be in a position to penalize an unscrupulous officer.

Ultimately, as formal models of public officials' decision making illustrate (see appendix 1), whether and how a public official discriminates between individuals of differential socioeconomic classes when demanding bribes is an empirical question. Recent research has brought some evidence to bear on this issue. Regarding corruption and inequality of influence more broadly, evidence from Indonesia and Uganda suggests that larger and more powerful firms are shielded from high bribery demands (Robinson 1986, qtd. in Rose-Ackerman 1999; Svensson 2003). In Denmark, large private companies are subject to more lenient inspection from public officials (Nielsen 2006). In Nigeria, wealthier and more established commercial traders receive fewer hassles from border officials (Fadahunsi and Rosa 2002). In Mexico, a correspondence test showed that a seemingly prominent business owner with potential political connections systematically receives better treatment from bureaucrats working at the cabinet level than does an average citizen (Lagunes 2009).

Evidence at the individual level, using observational data, suggests that wealthier individuals are more likely to pay bribes (Guerrero and Rodríguez-Oreggia 2005; Hunt 2007; Hunt and Laszlo 2006). As discussed earlier, it is unclear whether this reflects the targeting of wealthy individuals by public officials or an increased propensity for the wealthy to pay bribes out of convenience. However, evidence that the rich are less averse to corrupt behavior supports the latter explanation (Gatti, Paternostro, and Jamele 2003). This is a key shortcoming of studies based on survey data: it is difficult to characterize the individual-official interactions resulting in bribes with current surveys, which pose questions to the bribe payers

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5. The concepts of inequality of influence and differential treatment are related. The latter is understood as more lenient treatment for some than for others on the basis of some particular factor (Nielsen 2006). A number of studies examine differential treatment (see, e.g., Hebl, Bigazzi Foster, Mannix, and Dovidio 2002; Weichselbaumer 2003; Bertrand and Mullainathan 2004; King, Hebl, Singletary, and Turner 2006). One in particular involves an experiment that uncovers differential treatment based on race and sex in the market for new cars (Ayres 1991).

and often do not ask which party initiated the payment discussion. This methodology also assumes that individuals accurately report their corrupt behavior. Furthermore, survey-based studies are prone to selection bias; for example, the association between individual income or class and bribe payments may, in part, reflect the unobserved likelihood of interacting with public officials. We circumvent these measurement and selection issues by conducting a field experiment, described in the next section.

RESEARCH STRATEGY AND EXPERIMENTAL RESULTS

In designing our experiment, we focused on interactions with police officers in Mexico City to assess whether public officials differentiate on the basis of class when making bribe requests.[6] This choice was motivated by anecdotal and empirical evidence on how police officers distinguish between the poor and the wealthy.[7] We focus on high-visibility traffic violations that incurred moderate fines (less than US$50) and could be carried out with no greater risk to the confederates than that of driving in a busy city. This section details the experimental design and presents our results.

Experimental Methods

We selected three violations for exploratory work: driving without a license plate, driving while speaking on a cellular phone, and making illegal left/U-turns. As the discussion in appendix 2 illustrates, the confederates were not stopped once in pilot runs focusing on the first two violations. As we observed ample evidence that illegal left-turn violations were well policed, we designed the experiment around the third infraction.[8]

6. Bribery is a common practice around much of the world. Thus, we could have conducted our study in any of several large cities around the world. However, we selected Mexico City for two reasons. First, inequality is pervasive there: the wealthiest 10 percent of the country's population receive as much income as the poorest 70 percent of households (Alatorre 2007; Rodriguez J. 2006). Second, Mexico City's police force is known for its corruption. Between December 2000 and June 2006, 13 percent (or a total of 4,851) of Mexico City's police officers were arrested for committing a crime (Fernández 2006). Moreover, Elena Azaola (2006) provides extensive qualitative proof of this problem.

7. One anecdote relates how a young man wearing smart clothes had a hand-to-hand altercation with a taxi driver of more modest appearance. The encounter ends with a police officer reprimanding the cab driver without investigating the cause of the situation. Another tells of a police car following a shiny, white Mercedes-Benz with polarized windows and no license plates. The two policemen appear to debate whether to ask the luxury car to pull over for two or three city blocks. They eventually opt against taking action.

8. Before conducting our experiment, we monitored police officers at various intersections. One encounter offers an extraordinary example of the regular enforcement on this

This particular infraction was reminiscent of a test that a former Mexican president once ran.[9]

All of the illegal turns that we observed were made on large, six-lane roadways divided by a median. Such turns either occurred at a no-left-turn sign or involved going against traffic for a few yards. Once an illegal turn was made, the driver had no option but to stop at the large median and wait for oncoming traffic to subside before he could continue (see figure 1). Despite the small fines for this violation (US$25), we believe that officers enforce illegal left turns with greater frequency than the other infractions we considered for two reasons. First, this particular infraction is highly visible—even more visible than a missing license plate or expired emissions sticker. Second, the police officer, generally on foot, has an excellent opportunity to intercept the driver while the driver is stopped at the median.

We identified twelve intersections that were safe for making illegal left turns and were usually manned by traffic officers. We then hired four confederates to role-play the drivers of the two treatments. All confederates were similar in age (around thirty years old) and male, but the upper- and lower-class confederates differed in physical appearance and in their choice of clothing.[10] Furthermore, the two lower-class confederates drove older, less expensive cars, while the two upper-class confederates drove newer, more luxurious cars.

All confederates received training and precise instructions.[11] They followed the same protocol when interacting with police officers. When confronted by a traffic officer, the drivers maintained a neutral attitude and stated that they did not know that the left turn that they had made was illegal. This allowed police officers to set the terms of each encounter and freely choose to write a ticket, give a warning, or ask for a bribe. Re-

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infraction. Around seven-thirty on a weekday morning, we observed a transit officer talking to the driver of a pickup truck. The officer had stopped the driver for making an illegal left turn. The official was probably describing the penalty for committing such an infraction when, suddenly, the driver stepped on the gas to flee the scene. But before he drove off, the officer jumped and grabbed onto the truck—left arm inside the door, right arm holding onto a railing on the hood. They traveled only a few yards before a patrol car began tailing the truck. The latter came to a stop and the negotiations began. A few minutes later, the acrobatic police officer entered the truck. The driver shook hands with the other officers present and entered the automobile. Both the officer and the driver headed off—most likely to an ATM so that the driver could buy his way out of serious trouble.

9. In the 1950s, President Adolfo Ruiz Cortines had his chauffeur make an illegal U-turn in Mexico City to force local traffic officers to enforce the law (Krauze 1997).

10. Drivers in this experiment had phenotypic characteristics and speaking patterns that reflected the socioeconomic background associated with each treatment.

11. It is also worth noting that one of the study's authors observed every single police-confederate interaction from a short distance and confederates were consistently debriefed after each infraction was committed.
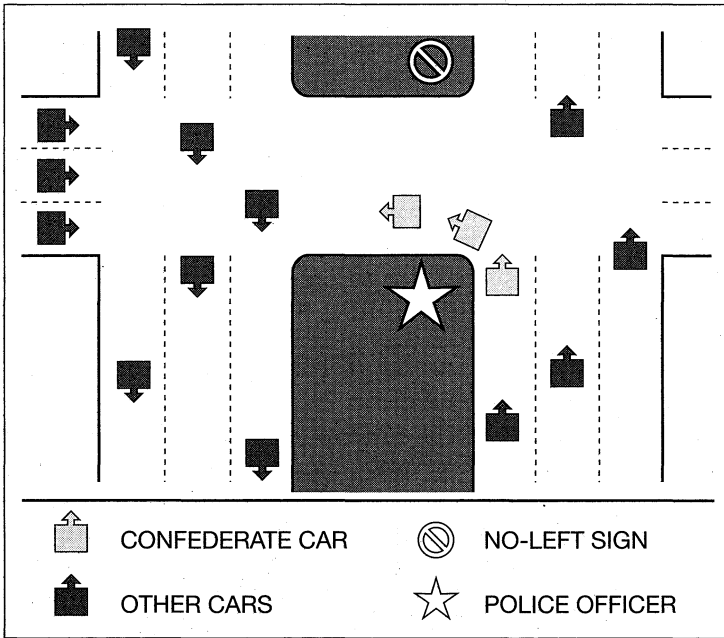
Figure 1 Crossroad Schematic
Note: Authors' illustration; depicts one of the traffic patterns commonly encountered.

garding this last option, a police officer never explicitly asked for money but instead said something along the lines of "We can solve this the easy way," or "Together we can fix this." We controlled for differences in the drivers' negotiating ability by having all drivers follow a similar script.[12]

Because of shift changes at the policed intersection, which occurred early in the afternoon, we allowed for two iterations of the experiment per day, with each driver visiting all intersections both in the morning and in the afternoon. The confederates drove to each intersection according to a predetermined, randomly assigned ordering. If in the afternoon run a driver observed that a police officer with whom an encounter had already occurred was still present, then that intersection was skipped. The details of the encounter were recorded immediately.

12. Although each driver was told to follow a script when responding to officers' demands, we allowed drivers enough leeway to ensure that their responses sounded natural. Given the possible idiosyncrasies in drivers' responses to officers during the (often stressful) negotiation of the bribe and the small number of interactions in which officers asked for a bribe, we have less confidence in our data on the amount of the bribe request associated with each treatment than we do in our other findings.

Results

Table 1 displays the main results of our experiment. Panel A of the table provides the raw data and panel B provides statistical comparisons testing for differences between the upper- and lower-class groups. Upper- and lower-class drivers made thirty-three and twenty-three visits, respectively. After removing instances in which the same police officers were present on the afternoon visit or when no officers were around, twenty-seven upper-class and fifteen lower-class interactions remain. Although the distribution of intersections visited by the drivers in each condition are similar, the differential sample sizes across treatment conditions may be a result of factors other than chance (i.e., selection effects). We address this possibility subsequently.

Given the observed data, what effect does socioeconomic class have on the propensity to demand a bribe? Before delving further into the results,

Table 1 Results from the Main Experiment

	Group	Not stopped	Bribe requested	Warning	Ticket	Observations
			Outcome — Stopped			
Panel A	Upper class	14	6	7	0	27
	Lower class	7	7	1	0	15

	Comparisons	Fisher exact test (*p*-value) Two-tailed	One-tailed	OLS regression (*p*-value)* Two-tailed	One-tailed
Panel B	Stopped vs. not stopped	1.000	0.500	0.52 (0.744)	(0.372)
	Bribe vs. other	0.163	0.099	0.24 (0.105)	(0.052)
	Bribe vs. warning|stopped	0.085	0.074	0.42 (0.062)	(0.031)

Notes: For the OLS regression results, estimates were taken from OLS regressions of a binary outcome variable on a dummy for lower-class driver. The dependent variable for the first comparison = 1 if the driver was stopped and 0 otherwise. The dependent variable for the second comparison = 1 if the driver was asked to pay a bribe and 0 for any other outcome (warned, not stopped). The dependent variable for the third comparison = 1 if the driver was asked to pay a bribe and 0 if the driver was warned. The sample in consideration comprises only those whom a traffic officer stopped.
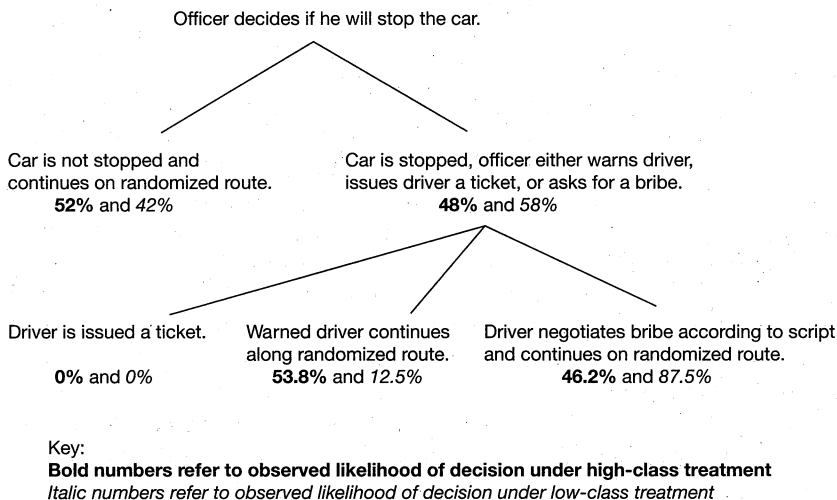
Officer decides if he will stop the car.

Car is not stopped and
continues on randomized route.
52% and *42%*

Car is stopped, officer either warns driver,
issues driver a ticket, or asks for a bribe.
48% and *58%*

Driver is issued a ticket.

0% and *0%*

Warned driver continues
along randomized route.
53.8% and *12.5%*

Driver negotiates bribe according to script
and continues on randomized route.
46.2% and *87.5%*

Key:
Bold numbers refer to observed likelihood of decision under high-class treatment
Italic numbers refer to observed likelihood of decision under low-class treatment

Figure 2 A Depiction of Officers' Behavior

there are two statistical issues to discuss. First, in comparing outcomes faced by upper- versus lower-class drivers, we use two tests of statistical significance: the (nonparametric) Fisher exact test and (parametric) ordinary least squares regressions, which recover the difference in means across the two treatment groups.[13] We computed the regression estimates by regressing the outcome variable on the treatment dummy.[14] Second, we present both one- and two-tailed p-values in our analysis. We do this recognizing that priors may differ from reader to reader. For those who use the literature to form their priors, a two-tailed test may be appropriate, given the lack of consensus in existing research. Our initial priors, based on local knowledge and experience, led us to believe that police officers would offer preferential treatment to upper-class individuals. In this case, interpretations based on the one-tailed test are appropriate.

As panel B of table 1 and figure 2 illustrate, the likelihood of being stopped for an upper- and lower-class driver is neither substantively nor statistically different. Also, the probability of being asked for a bribe on being stopped is more than 40 percent higher for lower-class drivers, an effect that approaches conventional levels of significance in both the Fisher exact and regression-based tests. These results are shown in a more

13. The Fischer exact test is for m-by-n contingency tables with expected cell sizes of less than five observations.

14. For the class dummy variable, lower class is assigned the value of 1 and upper class 0. We use the linear probability model over probit and logit specifications to preserve ease of interpretation. The choice of estimator has little bearing on our results.

intuitive fashion in figure 2. The decision tree in figure 2 displays the likelihood that an officer will take an action conditional on a previous action being taken for both upper- and lower-class drivers.

As poorer drivers were asked to pay smaller bribes more frequently, the average amount asked did not differ significantly across class. That is, police officer's expected value for stopping the upper-class driver was 64.62 pesos (US$6.50) and the expected value for stopping the lower class driver was 45 pesos (US$4.50).[15] To our (and many Mexicans') surprise, not a single ticket was written. We discuss the implications of this finding in the conclusion.

Finally, we would like to address the possible reasons for observing more upper-class than lower-class interactions with police officers. As mentioned earlier, we recovered nearly twice as many observations for the upper-class treatment. Although this pattern could easily arise from random chance, it also could indicate nonrandom selection. For example, other motorists may be less aggressive in their driving behavior toward an upper-class driver in a more expensive car, thus allowing that driver to proceed through the city in a relatively less obstructed fashion than a lower-class car and driver.

Although our data indicate that the relative propensity to visit a given intersection was virtually identical for both classes of drivers, we decided to pursue this point more rigorously. The conventional econometric method of addressing selection issues is to use intersection and time-of-day fixed effects, which facilitate comparisons within intersection × time × round cells across treatments. However, such a procedure is demanding on the data, especially given our small sample sizes. To circumvent this limitation, we examine intersections where, for a given time of day and round, we recorded an observation for both the upper- and the lower-class driver. This offers a robustness check of our results and a means to investigate differential treatment of upper- and lower-class individuals, holding constant the specific intersection, shift specific patterns, and other possible confounding factors.

We identified the ten cases in which lower- and upper-class drivers passed through the same intersection during the same time of day and survey round. Of these, we focus on the seven observation pairs for which a traffic officer stopped at least one of the drivers. Table 2 details the outcomes experienced by the two experimental groups at each of the matched time of day, round, and intersection instances. The main point to note is that the results observed in table 1 are also observed in this restricted subsample: officers do not distinguish between rich and poor when stop-

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15. After running several nonparametric tests, such as the Wilcoxon rank-sum test, on forty-two observations we found no statistical difference between both values (p-value = 0.1783).

Table 2 Outcomes for Upper- and Lower-Class Observations Sharing Common Intersection × Round × Time of Day Cells

	Lower-Class Driver			Upper-Class Driver		
Instance	Stopped	Bribe requested	Amount asked	Stopped	Bribe requested	Amount asked
1	No	—	—	Yes	No	—
2	Yes	Yes	50	Yes	No	—
3	Yes	Yes	100	Yes	Yes	20
4	Yes	Yes	50	No	—	—
5	Yes	Yes	20	Yes	No	—
6	Yes	Yes	50	Yes	Yes	500
7	Yes	Yes	100	Yes	Yes	70

Notes: Instance refers to event where both groups visited the same intersection during the same experiment round and time of day. Amount asked refers to the amount in pesos requested by the traffic officer in the form of a bribe.

ping a vehicle. However, they are more likely to demand a bribe from lower-class drivers.

WALKING THE BEAT: THE OFFICERS' PERSPECTIVE

As discussed previously, our results indicate that traffic officers are more likely to demand bribes from poorer drivers and give warnings to richer drivers. Although the use of an experiment gives us a high degree of confidence that the difference observed was a result of the treatment (socioeconomic status), it did not indicate why this was the case. We hypothesized a number of explanations and concluded that officers' fear of repercussions from demanding bribes offered the most compelling explanation of the observed behaviors. If officers believe that rich individuals are more likely to seek retribution than poor ones, then the act of stopping a vehicle may be intended to determine whether the driver is likely to offer a bribe without causing problems.

The driver's ability to harm the officer could work through two mechanisms, both associated with class. First, wealthy drivers are more likely to have influence or connections that could be used to punish the officer. Even wealthy individuals without connections could be thought to have them. Second, the driver could take legal action by reporting the officer. An upper-class individual, likely understanding the laws and bureaucracy better, is more capable of pursuing this option. We also hypothesized that local understanding of class and hierarchy cause officers, who generally have lower-class backgrounds, to defer to the status associated with higher levels of income. We do not rule this possibility out but find it unconvincing. If a strong norm of deference prevented officers from tar-

geting individuals who exhibit a high level of socioeconomic status, then why did many officers stop upper-class drivers in the first place?

We tested the plausibility of our hypotheses by conducting interviews of police officers and local experts of security and urban affairs in Mexico City. Given that asking officers to discuss police corruption directly was unlikely to lead to an open response, we developed a circumspect script. Responses help explain the treatment effect and offer perspective on how the officers' position in society and interaction with the public cultivates corrupt practices. In the rest of this section, we discuss the design of the interviews, explain how responses indicate that officers demand bribes from richer drivers less often to minimize repercussions, and report responses that help explain how the institutional framework of law enforcement fosters corruption. Observational and interview data support the hypothesis that officers weigh the risks associated with asking for a bribe against the potential gain. Stopping a car allows the officer to gather information before deciding whether to take a risky action.

Design

We interviewed ten officers.[16] Seven of these supervised traffic in streets comparable to those used during the experiment and carried out duties similar to those of officers stationed at the intersections used during the experiment. Like the officers encountered during the experiment, the respondents worked on foot at intersections where left turns are illegal. Moreover, like the subjects of the experiment, these officers strategically positioned themselves on the (wide) medians to stop drivers who made illegal turns. Realizing that transit officers could hesitate to discuss corruption within their ranks, we also interviewed three members of another police division.[17]

A Spanish speaker with a noticeable American accent conducted the interviews to allay suspicion that responses would be used in Mexico against the officer. On approaching the police officer, the interviewer stated that he was a university student from the United States who was conducting research on police work in Latin America. The interviewer then inquired whether the officer would answer a few questions. The questions that directly relate to our experiment asked how an officer decides whom to stop given the large quantity of infractions, whether officers always issue tickets on stopping someone, and if not, what else takes place. This lat-

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16. Three additional officers declined to respond to our questions. Of these, one simply said no, while the other two—fairly young officers—apologized and said that transit officers were under orders not to give interviews.

17. Officers from this division, many of whom had previously worked as transit officers, are responsible for policing banks and private businesses.

ter question offered the officer an opportunity to mention the existence of bribe taking and to explain why warnings were given. If the respondent did not mention that warnings are sometimes issued, the interviewer asked about them specifically. Other questions asked about how the public treats officers; whether the rich treat officers differently than the poor do; how the officer makes class distinctions; and the respondent's salary, training, and experience.

Explaining Corruption and Deference

Respondents were nearly unanimous in citing the ability of rich individuals with connections to punish the officer for enforcing the law. A number of officers stated that the lack of judicial support allowed well-connected individuals to punish officers who issued them a citation.[18] According to these respondents, the judiciary, instead of supporting the police, generally sides with wealthy individuals. Respondents stated that officers risk losing their job or being sent to jail. Demetrio Sodi, an expert on urban affairs in Mexico City, corroborated this particular fear on the part of police officers. Facing such risks, police officers' tendency to give more warnings to wealthier drivers rather than issuing tickets or demanding bribes seems understandable.

Many of the transit police stated that upper-class individuals have a better understanding of the laws and often attempt to argue their way out of a ticket. Thus, whether maximizing law enforcement, as many officers claimed, or bribes, officers likely expect that interactions with upper-class individuals are more time consuming and arduous than interactions with lower-class drivers.[19] Officers agreed on the traits that differentiate upper-class and lower-class individuals, though the characteristics that received greatest emphasis varied. The most important factors cited were manner of speaking, manner of dress, and type and condition of car. We are confident that the treatment employed in the experiment exhibited significant variation in each of these categories.

The respondents provided less insight on the haphazard enforcement of illegal left turns. Police officers claimed that practicality determined whom they stopped. Many drivers show little respect for officers. In determining when to enforce the law, officers consider the possibility that drivers would seek to evade punishment, potentially harming the officer

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18. The exact phrase used was *apoyo judicial* (literally "judicial support," it was used to refer to the lack of support from the judiciary), though one officer also referred to the *prepotencia* (authoritarian attitude) of the rich.

19. Over the course of the experiment, we regularly observed officers claim that the legal sanction associated with an infraction was much more serious than the law actually stated.

in the process. As we observed firsthand, drivers sometimes attempt to pull away from the officer (see *infra* note 8.) A number of officers cited this practice and stated that it is not worth writing a ticket for someone who runs off, though one officer countered that a new system that forces drivers to pay for outstanding tickets before being allowed to renew their car's registration should alter the balance of power.

The interviews yielded interesting responses in regards to corruption. As one officer explained, "Here there is clientelism."[20] Many superiors demand kickbacks for plum posts. He also described how people with influence and connections threaten officers, call their connections while an officer is trying to write them a ticket, or use other means to show evidence of their influence. In clear contradiction to our empirical findings, the other police officers interviewed stated that officers always give tickets on stopping a driver. When asked about warnings, most respondents admitted that officers give warnings, at times because of intimidation from the driver. The one exception was a pair of officers who claimed that warnings are given only in emergencies and that only ministers are able to use their influence to get out of a ticket. However, other officers stated that warnings are frequently used to get out of a sticky situation. Although we did not expect officers to openly discuss bribe taking, one transit officer and the nontransit officers did refer to corrupt practices and described them as an important source of income for many police officers. This transit officer believed that a substantial minority of officers become police officers seeking income from bribes, while the nontransit officers stated that petty bribery was particularly rampant among transit officers because of the frequent opportunities they have to demand bribes.

The Broader Context

One transit officer's responses were particularly intriguing. Although other officers sometimes ended an interview to take a break or make a phone call, this officer responded fully to the questions and, on our conclusion of the interview, appeared genuinely pleased to have the opportunity to share his thoughts on the problems of policing in Mexico. This officer's remarks were generally in accordance with those made by others but far more detailed, and they offer an intriguing portrayal of how institutional practices encourage corrupt behavior.

Although some officers joined the force seeking a steady salary or because many in their family were already in the police ranks, this officer sought work in law enforcement because he considered it an honorable career. However, he displayed obvious frustration that the police did not live up to his original expectations. He described pressures to conform

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20. Authors' translation.

to the corrupt status quo as emanating from three directions: a system in which higher-ranking officers expect kickbacks from their subordinates, a public that would rather pay a quick bribe than deal with the expense and hassle of a ticket, and fellow officers. He did not state how this latter group pressures others to be corrupt. However, expectations likely play a role, especially when many officers follow relatives in choosing law enforcement. In addition, a clean officer likely would be a pariah in a pool of dirty officers, especially when corrupt practices extend far beyond those we study.

Other officers concurred that law enforcement in Mexico is a job, not a career like it is in the United States. This sentiment indicates a broader attitude that precludes the self-sacrifice and risk taking needed to undermine corrupt practices. When asked about how the public treats officers, many officers stated that, regardless of class, the public is fairly divided between those who show respect and those who do not. Again, if Mexicans held a strong sense of status-based deference, we would expect that officers would observe class distinctions in how the public treated them.

In Mexico, disrespect for public authority lowers police officers' morale, breeds apathy, and places officers in physical danger. Risk of harm comes from other directions as well—officers frequently cited the menace that organized crime and poor training pose.[21] Their salary places them at the bottom end of the middle class but pales in comparison to the take available from petty corruption. Considering the poor pay they receive, significant danger they face, and widespread expectations that they will behave corruptly, honest officers face almost overwhelming pressures to conform and participate in corrupt institutions.

An Assessment

The interviews discussed in this section are more suggestive than conclusive. Small in number, they may not represent the broader attitudes in the police force, though respondents came from diverse age groups and provided varied answers. As many officers clearly failed to respond truthfully to some questions, the reliability of our analysis depends on our ability to filter out prevarications. However, we have additional sources of information. A much smaller leap of faith is required to trust an officer whose responses conform to outside observations than to wade through inconsistencies more generally. By asking more direct questions of officers who glossed over the issuance of warnings, a consensus emerged. Neither interview responses nor experimental results support the hypothesis that

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21. Officers receive limited training before joining the police and bear most of the costs of maintaining their readiness. A shooting range is available, but officers must pay for their own bullets.

officers focus on poorer drivers out of deference to richer individuals. Officers face the possibility of retribution if they cite a well-connected individual and often issue warnings to protect themselves. Officers' position in society is such that corrupt practices are easy to maintain by those (e.g., senior officers and officials) who benefit the most from them. And officers' perception that the rich are able to punish them for issuing citations explains their greater propensity to give warnings to upper-class individuals.

CONCLUSION

In this study, we examine how corruption works at the individual level through a multimethod approach that focuses on whether and how police officers respond to class distinctions. In our experiments, we find that police officers enforce the law selectively. Officers do not punish the violators of many traffic laws. When they enforce a particular law, officers do so only sporadically and with apparent disregard for class. However, once an officer stops a driver, class distinctions clearly arise. Officers are more likely to demand bribes from poorer individuals and to let richer individuals off with a warning. In contrast, officers expect the upper-class individuals from whom they demand a bribe to make a larger payment. On the basis of the data on the quantity that police officers demand, officers should, on average, expect the same amount from lower- and upper-class individuals, but their demands at any particular interaction vary systematically along class lines. Still, poorer drivers who interact with police should expect to pay a larger share of their income than richer drivers. If this holds true across the population more generally, then corruption imposes a disproportionate burden on the poor.

We explore these results in open-ended interviews. The poor pay, high risk, limited accountability, and low prestige of police work may explain our observations. Officers appear to show a higher propensity to warn wealthier individuals because they fear that those individuals may exact retribution if the officers take more significant action. And in cases where they do risk the consequences of a wealthy driver's desire for revenge, officers demand a larger payoff.[22]

A corollary to our study is the distinct advantages that different methods offered in answering various aspects of our question. Although surveys of expert and public perceptions have improved our understanding of corruption's macro effects, these tools seem less suited for describing how corrupt practices play out at the micro level. More specifically, even

22. In appendix 2, we model the situation in which officers must consider both the risk of being caught and the risk that a driver will pursue extrajudicial means of punishing the officer. Officers perceive this latter risk as positively associated with class and thus hesitate to seek bribes from the rich and demand more when they do.

a well-designed and implemented study such as that conducted by Transparencia Mexicana does not provide controls that enable a researcher to parse out distinctions in outcomes that result from differences in public (in our case class) behavior or that of public officials. This particular survey suggests that the wealthy are more likely to pay a bribe, but it does not indicate whether this is out of convenience or because of a tendency of police officers to target them. And, as is the case for surveys more broadly, analysis based on Transparencia Mexicana's data assumes that perceptions accurately reflect reality. However, the Mexicans with whom we discussed our experiment were shocked to learn that, during the course of our research, officers failed to respond to hundreds of infractions and did not issue a single ticket. We do not deny the value of surveys; they have and will continue to reflect broad trends. Yet we found that the combination of experimental and qualitative methods offer a more precise and context-rich means of investigating how corruption works at the individual level.

As is the case in much of the world, corruption places a significant burden on a wide swath of Mexico's population. Casual observation alone indicates that the presence of tens of thousands of officers in Mexico City does little to promote adherence to the traffic laws. Even though officers are poorly paid, the state is assumed to devote significant resources to policing to promote law and order—conditions considered highly conducive to development. Instead, officers' apathy and occasional extortion likely contribute to a lack of respect for low-level legal institutions and may promote criminality more broadly. As is the case with crime in general, the poor bear the brunt of police corruption.

APPENDIX 1: A FORMAL APPROACH TO EXPLAINING INEQUALITY AND CORRUPTION

In the classic principal-agent-client model of corruption, the principal is a government official, the agent is the public official responsible to the principal for law enforcement, and the client is the individual or firm (Becker and Stigler 1974; Rose-Ackerman 1978; Mishra 2006). These models often reflect the perverse institutions that create an environment that promotes corruption between the agent and the client. However, as discussed in the main text and herein, these models do not generate predictions about how the client's class affects the principal's behavior or the manner in which the agent and client reach corrupt forms of cooperation.

In our study, the principal is the government, the agent is the traffic officer, and the client is the driver of the vehicle. Following Becker (1968) and Becker and Stigler (1974), a model of officer's decision making can be described as follows: let w be the officer's (agent's) wage. If the officer commits an act of corruption, such as extorting a bribe from the client, he receives an amount b in addition to w. Let p be the probability of being

caught committing an act of corruption and c the penalty. If those who commit corruption are fired from their jobs, then c represents the (presumably lower) wage earned in alternate employment.

The expected value of acting corrupt is:

$$p \times c + (1 - p)(w + b) \tag{1}$$

A rational agent would be corrupt when Equation (1) exceeds the wage w. According to this model, the likelihood of committing a corrupt act declines as the probability and penalty of being caught increase.

In our study, we seek distinctions in how traffic officers behave toward members of upper and lower socioeconomic classes. Given our study's design, the relevant model becomes:

$$p_L \times c_L + (1 - p_L)(w + b_L), \text{ and} \tag{2}$$

$$p_H \times c_H + (1 - p_H)(w + b_H), \tag{3}$$

where the subscripts L and H represent lower and upper class, respectively. If the expected value of committing a corrupt act is not equal across socioeconomic classes, we would expect that traffic officers' propensity to extort bribes would vary across these groups.

A decision tree offers another means of understanding officers' behavior. Figure 2 depicts the two choices officers make: to stop a car committing an infraction and to issue a warning, demand a bribe, or write a ticket to the drivers that they decide to stop. We assume that officers incorporate the information available to them when choosing a course of action. The appearance of the car and driver inform the officer's decision to stop a car. Should an officer decide to stop a car, the demeanor of the driver offers additional information that enables the officer to weigh the potential payoff from demanding a bribe against the likelihood and potential cost of the driver causing trouble for the officer. The likelihood that an officer will stop the driver and, conditional on doing so, issue a warning, bribe, or ticket, are indicated in bold for upper-class drivers and in italics for lower-class drivers. In addition, while figure 2 displays the overall likelihood of observing a specific action by an officer, some officers behaved differently than others. In other words, officers' responses to the treatments indicate that they held a range of preferences for risk and reward.

APPENDIX 2: PILOT RUNS

In the initial phase of our research, we explored several traffic violations as potential bases for our experimental design. This appendix describes our observations and results pertaining to the two infractions—driving without a front license plate and driving while speaking on the cell phone—which we chose not to move forward with. For both infrac-

tions, we began by randomly assigning the upper-class driver and car and the lower-class driver and car to the time of day. Following the time assignment, each drove through the same 120-mile route, which we selected to maximize the concentration of traffic police who could observe the driver commit one of two traffic violations.

Our first pilot experiment involved removing a license plate from both the upper- and the lower-class car. The rationale was that local transit laws are very explicit regarding the proper exhibition of a car's license plates.[23] Any car that does not have a front or rear license plate is subject to a midlevel fine (approximately US$50). Moreover, this is not a common infraction. After examining the cars in a parking lot, only 6 out of 203 (or 3 percent) were observed without a license plate. Finally, local transit laws demand that officials stop any vehicle when its driver commits an infraction.[24] Thus, given the visibility and low frequency of this particular violation, we expected that officers would frequently stop the drivers who participated in this experiment.

The other infraction that we tried was appearing to use a cellular phone while driving, given that local traffic laws are also explicit on this matter.[25] Drivers who use a cell phone while driving are subject to a low-level fine (approximately US$25). Using the same route and randomization from our prior experiment, we tested this particular violation with the upper-class treatment. The outcomes recorded from all trials are organized in appendix table 1.

To our chagrin, not one of the hundreds of police officers (most of whom were on foot) attempted to intercept the drivers. One could believe that this is a case of justice—literally—being blind, but this result also involved an important element of negligence. We found that police officers often were not focused on their duties. Several of them were observed chatting on their personal cell phones, joking with their partners, or savoring a hamburger midway through the day. We also observed officers watching the national team play in the World Cup at the stalls of nearby street vendors. In addition, even police officers who were attentive to the flow of traffic did not enforce the law. For example, at one point, the upper-class driver approached a street corner with a police officer while pretending to talk on his cellular phone. The light at the intersection was red and the officer asked the driver to pull back a few feet to make room for oncoming traffic. After complying, the driver and the officer sustained eye contact. Although one would expected the officer to take note of the violation and ask the driver to roll down his window, he actually raised his hand and waved to the driver in a clear gesture of gratitude for having moved the car back.

23. See Article 38 of the Reglamento de Tránsito del Distrito Federal.
24. See Article 55 of the Reglamento de Tránsito del Distrito Federal.
25. See Article 82-VIII of the Reglamento de Tránsito del Distrito Federal.

Appendix Table 1 Results from Initial Experiments

	Infraction		
	Front license plate		*Cellular phone*
Outcome	Higher class	Lower class	Higher class
Not stopped (counting the number of officers deemed capable of observing the infraction)	101	81	86
Not stopped (counting the number of officers deemed capable of observing the infraction and stopping the car)	31	35	23
Warning	0	0	0
Bribe	0	0	0
Ticket	0	0	0

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