

On the individual decisions to commit corruption: A methodological complement

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Abstract

This paper contributes to the analysis of corruption by complementing two different methodologies to determine the behavior of citizens who Participate in corruption acts, focusing in Mexico. A quantitative analysis, combined with a survey and econometric techniques, is used to determine sociodemographic and institutional factors affecting such behavior, and complemented by focus groups, collecting some knowledge on how informal institutions and norms could promote or block corrupt behavior. It is shown that there is a trade-off between perceptions, social dynamics and individual incentives for corrupt behavior within an institutional framework, creating a kind of vicious circle difficult to break up.

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1. Introduction

Corruption is widely recognized as a major economic problem around the world as it creates many economic problems and inequities (Bardhan, 1997), reduces growth and the flows of private investment (Mauro, 1995; Burky and Perry, 1998), limits development through lowering basic indicators (Kaufman et al., 1999), limits economic policy making (Bai and Wei, 2000), misallocates talents (Acemoglu and Verdier, 1998), weakens the public confidence

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in institutions and leads to the contempt for the rule of law. Moreover, the higher the frequency of corruption, the higher the propensity to replicate such acts (Andvig and Moene, 1990), even affecting young generations' attitudes, and possibly behavior, as they are signed with no incentives to be honest (Tirole, 1996). Because of these reasons, there is a growing interest in empirical analyses that could help us determine the main origins of corrupt behavior.

The work of Becker (1968) and Becker and Stigler (1974) has set a framework for the understanding of such behavior, when an individual values her/his utility in comparison to the allocation of time to other activities, which has been also adapted to the agent-principal model. However, corruption has been also linked to ethical, social and cultural patterns, which makes more difficult to identify the different aspects that may influence individuals behavior.

This work focuses on an issue that has not been widely analyzed: the interaction of individual incentives, the social context and the perceptions that individuals hold to act corruptly or, in the case of this paper, to pay a bribe. Individuals evaluate their costs and benefits when offering a bribe, and in so doing they take into account a wider social and institutional context. Thus, corruption may be a rational and understandable consequence of institutional failures (Colombatto, 2003). Perceptions about corruption and institutions may induce individuals to behave in certain ways, which are consonant with extended social feelings and beliefs. Given the complexity between incentives and behavior this work complements two methodologies, one quantitative and the other qualitative, in order to better understand such interaction.

We use a survey where participants mark whenever they accept their payment of a bribe for obtaining a public service from a list, helping us in this way to calculate probabilities for the payment of bribes. Most of the microdata analysis in the existent literature on corruption has been based on individuals' perceptions (e.g. Gatti et al., 2003). In this work, we decided to enrich the analysis with a qualitative methodology where perceptions are shown to determine also the corrupt behavior of individuals. Our case of study is Mexico, a developing country that has been ranked 64 out of 146 countries on the 2004 International Transparency Corruption Perceptions Index (with a score of 3.6, with 10 being the least corrupt).

Corruption in Mexico affects different aspects of the economic life since it is reflected in transaction costs, uncertainty and lower productivity all across the country, creating also an atmosphere of complicity among public officials, providers and citizens (Barquin-Liaño, 2001). It is important to note here that the mechanisms through which corruption evolves and operates in Mexico may also be found among other Latin America countries. Thus, this paper contributes to unveil similarities useful for the understanding of corruption in the Latin American context, providing a solid analysis enriched through methodological complement.

2. Individual's decisions and corruption

Corruption may have different meanings to different people and under different contexts. Bardhan regards corruption as the use of public office for private gains, which is usually termed as political corruption. Nye (1967, p. 416) has offered the following definition: "A political act is corrupt when it 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 violates rules against the exercise of certain types of private-regarding influence" (p. 416).

Following Becker's framework (1968), individual behavior regarding corruption is determined by expected utility of the individual committing a corrupt act; if a corrupt act has higher yields,

the individual will engage in corruption. The chances of being caught and convicted, the earnings from the illegal activity and the individual's personal characteristics determine the probability of an individual to commit corruption. The model is:

$$p_i = \beta' X_i + v_i$$

p is the probability of committing a corrupt act, i denotes the individual, β a vector of coefficients, X vector of factors and v is an unobserved error term.

In the X factors there are three main sets of characteristics that we would like to emphasize in this kind of behavior.

A first set relates to the individuals' incentives. According to [Becker \(1968\)](#) and [Becker and Stigler \(1974\)](#), individuals value their utility function costs and benefits derived from such acts. Individuals take into account monetary and non-monetary profits and compare them against the probability of being caught and punished (enforcement), and their opportunity costs. There are also other criteria, such as the moral and ethical nature of the act or the kind of indoctrination in relation to norms ([Klitgaard, 1988](#)). The individual does not easily calculate some of these factors accurately, but there are some variables that may provide some light on this matter.

A second set considers how does the social context affect the behavior of individuals in relation to corruption. [Andvig and Moene \(1990\)](#) show how corruption may produce a vicious circle where individuals see themselves partially forced to commit such acts, affecting the implicit system of values in a society and making the individual act corruptly based on rewards and incentives. Besides, the awareness of such a circle in the individual's mind also makes him/her more inclined to these acts beforehand. On the other hand, not following such conduct could lead individuals to feel excluded from society, since they may be forced to forego of extra profits. However, in other places, corruption may be regarded so negatively that the social burden could be higher than the possible individual benefit, making him/her less inclined to practice these acts. Individuals are, thus, affected by the social context as well.

The third set of factors is related to perceptions. On the one hand, perceptions people hold are shaped in a collective and negotiated way and not constructed in the solitude of the individual's consciousness ([Berger and Luckmann, 1967](#)). This means that reality itself may be a creation of a complex process of social construction. On the other hand, we assume that the attributes that people use to evaluate their own behavior and their relation with certain institutions are more the outcome of a specific kind of social and cultural context than the outcome of a strictly individual consideration about reality ([Searle, 1995](#)).

These sets of factors will be analyzed in next sections. At the end, it is the individual who internalizes all those factors, but it is important to separate all the different effects for analytic purposes. Notwithstanding, at the same time, these sets entail a complex relation among individuals, society and institutions. In order to have a better insight about such sets of factors, the analysis in next sections will be based on two different methodologies to understand why individuals decide to pay bribes.

3. The quantitative analysis of corruption

This section deals with the quantitative approach to analyze the individual's decision about paying bribes and the incidence of such payments. In order to proceed, we will use micro data from a national survey. Here, we must remark that though most of the theoretical literature on corruption has been based on microeconomic approaches ([Shleifer and Vishny, 1993](#)), empirical studies using micro data to analyze corruption are not common ([Swamy et al., 2001](#); [Svensson,](#)

2003; Gatti et al., 2003) or they present their findings in aggregate fashion (Treisman, 2000). Studies based on microeconomic data are useful in determining the origins of the incentives to commit corruption and are also helpful in explaining internal variations of corrupt behavior within countries not reflected in aggregate data. While most of the previous studies have focused on the behavior of firms and their managers, here we focus on the decisions of common citizens. We first describe the models and the variables used, followed by a description the outcomes.

3.1. The model and variable description

The decision to pay a bribe is modeled through a maximum-likelihood probit model (see, for example, Greene, 2003):

$$\text{Pr}(\text{bribe}) = \beta x + \varepsilon, \quad (1)$$

where x is a matrix of characteristics inherent to the individual and others, β the vector of coefficients and ε is the error term. The model to fit is

$$\text{Pr}(\text{bribe} = 1) = \Phi(\beta_i x_{ij}) \quad (2)$$

with Φ as the cumulative normal function, bribe taking the value 1 if the individual effectively made such a payment, i the number of parameters to estimate and j is the individual. Using the probit, it is possible to calculate the marginal effects of the variables on the probability $d\text{Pr}(\text{bribe} = 1)/dx_i$, which is read as the change in the probability of paying a bribe when the variable x_i changes its value, ceteris paribus.

We will use the *Encuesta Nacional sobre Corrupción y Buen Gobierno* (National Survey on Corruption and Good Governance) described in [Appendix A in Supplementary material](#). The variables to include in the models are presented next, while descriptive statistics are displayed in [Appendix A in Supplementary material](#). In this study, we include: a dummy variable for male (some studies using micro data show a higher incidence of corruption; see Swamy et al., 2001), dummies for different income levels; dummies for different school levels; dummies for different age cohorts; a dummy for owner/self-employed condition; dummies for geographical areas; an index for institutional framework (ITESM, 1999), where a higher index means that institutions are more effective in the provision of the rule of law; a dummy (fear) if the individual says s/he complies with the law because of fear of being caught by the authorities; a dummy (blaming) if the individual says s/he complies with the law in order to avoid regrets or being blamed by society.

Regarding the social context we propose two variables:

- The variable Trust stands for the aggregate answers of people who in the survey agree with the statement “most of the people can be trusted”, which could be interpreted as an indicator of social capital.
- The variable System stands for the aggregate answers of people who in the survey agree with the statement “Mexicans are honest, but the system induces corruption”, which could be interpreted as a reason used to justify some actions within a given institutional framework.

3.2. Empirical results of the quantitative analysis

Table 1 displays results for the probit model, with the independent variable being 1 if the individual paid a bribe and 0 otherwise. The sample included in the regressions corresponds to

Table 1
Probit

	(1)	(2)	(3)	(4)	(5)	(6)	(7) IV	(8) IV
Male	0.2323*** (4.22)	0.1851*** (3.32)	0.2282*** (4.15)	0.2323*** (4.21)	0.2355*** (4.27)	0.2372*** (4.29)	0.2028*** (3.68)	0.2039*** (3.71)
Income 1.2–3.6	–0.0110 (–0.19)	0.0104 (0.18)	–0.0096 (–0.17)	–0.0052 (–0.09)	0.0004 (0.01)	–0.0026 (–0.05)	0.0013 (0.02)	0.0134 (0.24)
Income 3.7–6.0	0.2212*** (3.22)	0.2384*** (3.45)	0.2206*** (3.21)	0.2249*** (3.26)	0.2443*** (3.55)	0.2438*** (3.54)	0.2287*** (3.34)	0.2553*** (3.72)
Income 6.1–8.7	0.2787*** (2.79)	0.2689*** (2.67)	0.2787*** (2.79)	0.2790*** (2.78)	0.3022*** (3.03)	0.2998*** (3.01)	0.2563*** (2.55)	0.2830*** (2.81)
Income 8.8–10.8	0.2788* (2.26)	0.3091*** (2.57)	0.2807*** (2.29)	0.2794*** (2.28)	0.3113*** (2.54)	0.3112*** (2.54)	0.2804*** (2.38)	0.3143*** (2.65)
Income >10.9	0.3691*** (3.37)	0.4289*** (3.97)	0.3655*** (3.33)	0.3615*** (3.29)	0.3892*** (3.55)	0.3875*** (3.55)	0.3838*** (3.58)	0.4115*** (3.83)
Primary	0.0087 (0.13)	–0.0200 (–0.29)	0.0089 (0.13)	0.0103 0.15	–0.0076 (–0.11)	–0.0084 (–0.13)	0.0058 (0.08)	–0.0090 (–0.13)
Secondary	0.1648** (2.06)	0.1651** (2.02)	0.1657** (2.07)	0.1634** (2.04)	0.1484** (1.85)	0.1454** (1.82)	0.1806** (2.21)	0.1694** (2.08)
High school	0.2505*** (2.77)	0.2729*** (2.98)	0.2511*** (2.77)	0.2491*** (2.74)	0.2318*** (2.55)	0.2283*** (2.51)	0.2694*** (2.94)	0.2513*** (2.74)
University	0.1804** (1.89)	0.1757** (1.83)	0.1855** (1.94)	0.1856** 1.93	0.1657* (1.72)	0.1576* (1.64)	0.1770** (1.85)	0.1571* (1.64)
Owner/self-employed	0.0677 (1.41)	0.0889** (1.83)	0.0649 (1.35)	0.0589 (1.23)	0.0568 (1.18)	0.0568 (1.18)		
North	–0.6627*** (–8.80)		–0.6693*** (–8.87)	–0.5541*** (–6.38)	–0.6195*** (–6.20)	–0.6161*** (–6.78)		
Center	–0.4450*** (–6.07)		–0.4482*** (–6.11)	–0.3744*** (–4.52)	–0.4232*** (–4.63)	–0.4213*** (–4.92)		
South	–0.5676*** (–7.31)		–0.5693*** (–7.35)	–0.5312*** (–6.60)	–0.5997*** (–6.09)	–0.5922*** (–6.99)		
Institutions				–0.1960*** (–2.69)	–0.1682** (–2.21)	–0.1670*** (–2.26)	–0.6260*** (–5.60)	–0.8249*** (–7.14)
Fear		0.0627 (0.87)	0.0720 (1.05)	0.0773 (1.13)	0.0680 (0.99)			
Blaming		–0.1774 (–1.16)	–0.2464 (–1.58)	–0.2596* (–1.66)	–0.2529 (–1.60)	–0.2608* (–1.65)	–0.2437* (–1.61)	–0.2473* (–1.62)
26–50 years	–0.0149 (–0.17)	0.0237 (0.28)	–0.0119 (–0.14)	–0.0176 (–0.21)	–0.0176 (–0.20)	–0.0219 (–0.25)	0.0076 (0.09)	0.0034 (0.04)
>50 years	–0.1917** (–2.06)	–0.1287 (–1.40)	–0.1893** (–2.04)	–0.1971** (–2.12)	–0.2021** (–2.15)	–0.2066** (–2.20)	–0.1529* (–1.68)	–0.1634* (–1.78)
Trust					0.01938 (–0.19)			
System					0.8567*** (3.93)	0.8593*** (4.02)		0.9921*** (5.14)
Constant	–0.3715*** (–2.85)	–0.8101*** (–7.09)	–0.3705*** (–2.82)	–0.5864*** (–3.71)	–4.0955*** (–4.60)	–4.1587*** (–4.74)	–1.2618*** (–9.02)	–5.6354*** (–6.62)
N	7427	7427	7427	7427	7427	7427	7427	7427
Wald χ^2 (p)	208.44 (0.0000)	128.43 (0.0000)	210.51 (0.0000)	212.79 (0.0000)	229.87 (0.0000)	228.60 (0.0000)	148.14 (0.0000)	180.80 (0.0000)
Log likelihood	–4358.6127	–4476.4919	–4354.6077	–4349.7228	–4335.1697	–4336.1107	–4447.1794	–4429.1706

Dependent: 1, paid a bribery. Sample for household head. Z-test in parentheses. ***, **, * Significant at 1, 5 and 10 percent, respectively. Weighted coefficients. Income in thousands. Base categories: female, income lower than 1.2; no schooling, salaried and other workers; capital, beneficial to the society/order/peace; 18–25 years old.

household heads who requested at least one of the different public services listed in the survey. Appendix B in Supplementary material displays also the marginal effects of the variables. The male variable is positive and significant, the marginal effects indicating that they have about 7 percent more probability than females for paying bribes. This finding is consistent with other international analyses (Swamy et al., 2001; Gatti et al., 2003) that find that males are more prone to corrupt behavior than females. Such propensity to bribe may be read in light of Bose's (2004) findings, where individuals may have different valuations of time (opportunity costs) and then different willingness to pay bribes; perhaps this entail different negotiations schemes according to gender.

There are two striking findings in these results. Dummy variables for income and education are positive and significant. Moreover, the higher the education and income levels, the more likely an individual pays bribes (marginal effects increasing according to an increase in the levels). By contrast, studies with aggregate data (at national level, for instance) have found that countries with higher levels of education are positively correlated with lower figures of corruption. In our case, it could be argued that those variables may be a proxy for opportunity costs and that the higher the opportunity costs, the higher the probability of committing a corrupt act through a bribe. Although both sets of variables may be argued to be correlated, we have run the regressions without school levels and without income level, and the results remain robust. We have also tested for the equality of coefficients, and they are statistically different.

The owner/self-employed condition is positive, but it is not significant in most of the regressions. That would suggest that an individual would be prone to pay a bribe or not independently of her/his working status. Dummies for different country regions are negative and significant, and when compared with Mexico City's (the country's capital), they have lower probability of paying bribes. It has to be mentioned that Mexico City still centralizes most of the bureaucratic activities.

The institutional variable is negative and significant, and our interpretation is that the higher the institutional framework (understood as the provision of effective law and ethical practices in a state), the lower the probability of an individual living in that state to pay bribes. This provides support for considering the importance of the state's institutional framework and consolidation level for affecting social (and individual) behavior in the public sphere. This we could term as "institutional quality". Conversely, weak institutions induce individuals to trespass legality and, in our study, be willing to pay bribes in order to obtain preferential treatment, save time, distort decisions and obtain benefits when dealing with public bureaucracies.

However, there may be endogeneity between the payment of a bribe and institutional quality since it is not clear whether it is institutional lack of quality that favors corruption or the people's actions that weaken institutions. Although such a relation needs further research, we have implemented an instrumental variable (IV) in the last columns in order to undertake this potential problem. Since most of the research about the endogeneity of institutions discusses the problem at the international level, we face more difficulty in instrumenting such variables within a country, as our variable reflects the institutions at the state level. Researchers have proposed a variety of possible instruments for institution.¹ In our case, we have determined that distance to the US and

¹ For example, settlers mortality, distance to the equator, ethnolinguistic fractionalization, population speaking a European language, the intensity of trade, etc. (among others, see, for example, Acemoglu et al., 2001; Rodrik et al., 2004).

to Mexico City as well as the share of land received by peasants from the government after the passing of the new Constitution in 1917 and the year 1946 may reflect the evolution of institutions and their actual quality.² Results remain significant and robust to the inclusion of the IV, and the instrument is significant.³

Fear, a variable proxy for the probability of being caught by law, is not significant in any case, that is, individuals perceive that law enforcement is irrelevant to them in their decisions, or perhaps they perceive a low level of enforcement, which is better explanation for the Mexican case. Blaming is significant and negative for most cases, hinting that a part of the decision may be based on a moral and ethical understanding of the situation by the individuals. For Trust, a proxy for social capital is not significant. This may not be surprising given that, as has been shown, Mexican social links and trust do not result in group benefits as Mexicans value personal rather than social benefits (Dayton-Johnson, 2000). The variable System is positive and significant, hinting that the higher the proportion of population in a state agreeing that “Mexicans are honest, but the system is corrupt”, the higher the propensity of an individual to pay a bribe. That is, people sharing the idea that institutions are corrupt are more prone and willing to pay bribes.⁴

The variable for the lower age cohort is not significant, although the higher age variable is significant most of the time and with a negative sign. This would mean that older people might be less prone than younger people to paying bribes. Gatti et al. (2003) also found that older individuals show lesser propensity for corruption. On the one hand, it may be that they really are less prone to corruption, but on the other, it could also be that older people, especially the elderly, tend to be less involved in some procedures in daily life.

An important point to bear in mind is that we only consider as corruption the payment of bribes, which in this case is only the monetary payment made to obtain a public service. However, there are multiple other ways of obtaining public services that are not necessarily considered as bribes but may be illegal and/or immoral and were not considered in the questionnaire used in this work (see, for example, Bardhan, 1997); some examples are: benefiting a relative or a friend or putting some kind of pressure or even making use of connections in order to get research grants or awards. Nevertheless, taking measures of corruption that include the whole phenomena is nearly impossible.

Up to this point, we have analyzed the sociodemographic, institutional and social factors that affect the propensity to commit bribery. However, the quantitative analysis can hardly include factors that are relevant in the analysis of corruption: opportunities, attitudes, paradigms and values deeply rooted in the culture of the population and reflected in the perception of citizens (Benaissa, 1993). The following section deals with this issue through a qualitative analysis of corruption, which may be helpful for better understanding the mechanisms of corruption in the Mexican context.

² The land provided by the government (LAND) in that period reflects how property rights may have developed later. In addition, distance to the US and to the capital (DF) may also provide insights into the evolution of the quality of institutions. The regression result is $\text{institutions} = -0.59(0.04) + 0.12\text{LAND}(0.00) - 0.06\text{US}(0.02) + 0.08\text{DF}(0.00)$, $R^2 = 0.43$ with p -value in parentheses.

³ As the instrument depends on distance to the US and the capital, it is highly correlated with the regional dummies; then in IV we have to take those dummies out of the regression.

⁴ According to Manski (1993), it is not possible to disentangle endogenous and exogenous social effects, so the variables Trust and System may reflect both the influence of regional characteristics and peer effects. The use of regional dummies provides some relief for omitted variables bias.

Table 2
Focus groups by age and sociodemographic criteria

Age/S.D. level	D+	C	C+
20–28	Group A	Group B	Group C
30–40	Group D	Group E	Group F
>40	Group G	Group H	Group I

Sociodemographic categorization following the *Asociacion Mexicana de Agencias de Investigacion* (2000).

4. The qualitative analysis of corruption

In this section, we show through the exposition of qualitative findings on the perceptions and representations of corruption that the results we found here either complement or explicitly contradict the results of the quantitative analysis we have presented and discussed in the previous section. We carried on a qualitative study in order to understand better what are the logic and the dynamic of the process of corruption in different situations in Mexico City, the place where corruption acts are more likely to be committed. We focus on the kind of perceptions people have about corruption and similar notions, how do they apply them in their daily life and how they represent both their own conduct and that of the public institutions in the different situations that involve corruption (i.e. the context in which corruption takes place).

4.1. *The qualitative methodology on corruption*

In our study, we recognize that perceptions may not be the most adequate unit of analysis to measure “the real level” of corruption within a polity, but they do help us to understand and evaluate the context in which it occurs and the logic it follows. Perceptions transcend the pure affective level since they imply a complex process of active selection of different “features of reality” in order to make sense of it (Forgus, 1966; Forgas and Melamed, 1976). Previous similar experiences, memory, values and beliefs combine to generate our perceptions of the world (Zakia, 1997).

We decided to use focus groups to carry out our study because this technique enables us to understand how the perceptions are constructed, how people represent themselves and the public institutions with regard to corruption, and how they feel and think about that. Moreover, focus groups provide a series of qualitative data useful for recognizing similarities of opinion along different ranges of groups that are helpful to identify the conformation of collective and negotiated notions about the ways in which, in our case, people perceive and represent corruption (Debus, 1990; Greenbaum, 1998; Merton et al., 1956).

In our study, we organized 9 focus groups composed of 8–10 participants, and we recruited them by age and socio-demographic criteria. All of the participants were family heads (both males and females) from Mexico City.⁵ Table 2 shows the final conformation of the focus groups.

We must mention that though we paid strong attention to the frequency with which some situations and events were mentioned, we avoided using numbers in this second study since this is a qualitative and not a quantitative analysis, thus unable to extrapolate its findings to a wider

⁵ The participants were all inhabitants of the Metropolitan Area of Mexico City, though some were not born there. In Mexico City’s, Metropolitan Area (composed by Distrito Federal and 30 urbanised municipalities), the sociodemographic composition of the population is as following: A/B 1300,000 people; C 8800,000 people; D 9400,000 people.

universe, something that lies outside the aim of these kind of studies (Krueger and Casey, 2000). The richness of qualitative methods is that the data that can be obtained are useful to understand how certain situations and processes develop (Manson, 2002), though the results also serve to formulate hypotheses that may be tested with other kind of quantitative approaches in order to generalize their findings to wider populations.

4.2. Legality and perceptions and representations of corruption

Our quantitative model is based upon the decision to pay bribes. In our qualitative study, we depart from a restricted definition of corruption against which we will later contrast the conduct and perceptions that individuals say they have in relation to corruption situations. However, having only a definition to contrast people's behavior with, we identify corruption as the violation of an obligation by a public official or public services provider in order to obtain a personal benefit in the form of money or gifts from the person or persons that bribe him or whom he extorts.

We discovered that people have a very flexible understanding of corruption. Indeed the range of ideas people (sometimes the same people) have about corruption oscillates from a moral-ethical dimension ("corruption is something bad") to a legal-normative one ("corruption means breaking the rules . . . not respecting the law"). Moreover, there were many situations in which participants did not classify their own conduct as corrupt, even though an external observer could define it as such. For instance:⁶

Group A: (When recalling a situation in which the person was going to initiate the procedures to renew her driving license) "I remember . . . I was in a hurry. So I came next to a desk when I noticed that the employee was just arriving and I said to him: 'good morning, could you please be so kind and do me a *favor*?—and he knew what I was talking about. How much is it going to cost me? *I can give you some tip*, and bring me my license faster'. So was it".⁷

What is noticeable is that for the narrator in the situation above, though she recognizes that the situation is, at least, irregular since she had not to queue on the line, it was not completely "incorrect", since she represents it as an exchange of favors. The delimitation of corrupt practices is not at all clear for the people. In this sense, one of the most interesting findings is that beneath the practices and perceptions of corruption there is a quite particular idea of legality and the law. Legality appears to be quite diffuse and is not necessarily considered as a first choice in daily life practices. The reasons for this consideration of legality have to do with the perception that the law is:

- *Not legitimate* (it is only an alternative that can be followed or not by the individuals, but obviously it is not the only way to do the things). For instance

Group F: "One behaves well, if one knows that everything works well, or if one knows that you are going to be punished if you do not behave well, I mean . . . if you have the

⁶ We will only include what we consider the most representative comments, since including as many as are usually in this kind of study would take a large space. All comments are available from the authors upon request.

⁷ We must make some remarks here. The word *favour* is our translation of the Spanish "*favorcito*", which literally means a *small favour* but that is used to emphasise a gentle wording and a gentle tone of voice that usually accompanies the *mordida* (bribe) situations. The phrase *I can give you a tip* is a free translation of the following sentence: "*Ahí te doy para el refresco*", which literally would mean *Here I'll give you some money for you to buy yourself a soft drink*.

certainty . . . and of course, if the authority is respectable. Then yes, in such case everyone would behave well”.

- *Law is regarded as a last option* (if one does not have the right friends, enough money or enough malice to arrange things in your favor and skip the law without consequences, then try the legal way). For example:

Group H: “In Mexico if you are not corrupt, you are an idiot . . . You know, as the saying goes, *if you do not cheat, you do not progress*. A typical way of thought here . . . A way of living for many groups of people, for many of us”.⁸

- *Law is not effective* (the legal procedures are not only full of corruption, but even if the individual resort to them to find solutions, they will not be effective in helping him/her defending his/her interests).

Group F: (When recalling a situation in which the person was in the middle of a legal process in which he accused someone else of committing fraud) “I think that here (in Mexico) we face so many frauds because simply there are no laws that can help you or that can back you up in such cases”.

Thus, the legal order is perceived more as a penalty that people without the right resources or cleverness must suffer in order to get their interests defended. Law is not regarded as the natural framework for social behavior, and thus corruption in its many forms becomes the alternative, more effective way of channeling the social conduct.

4.3. The notion of “*Mordida*” (literally, “the bite”)

As for the more quotidian notion of *mordida* (bribe), we found that people understand it more clearly as an irregular or illicit payment in order to obtain a “favor” or a better service from a public official, or even in order to be exempted from the application of the law. And this notion is equivalent to the penalty of bribery that is already coded in article 222 section I of the Mexican Federal Penal Code (“The act of receiving money, gifts or promises directly or indirectly in exchange for doing something related to the public activity, be it fair or unfair”). Someone in *Group B* expresses it clearly: “(*Mordida*) is a payment, is a kind of effective way of getting back a favor, or of making the authority turn its head towards another place while you do something that should not be done”.

We also found that the notion of *mordida* is also consistent with the theoretical models found in the literature for explaining and understanding bribery. On the one hand, we have the kind of bribes whose aim is to speed up a decision or a process, to skip up the normal procedures that are involved in the regulation, and that are known as speed payments. On the other, we have the kind of bribes intended to change a decision, altering completely the rules and norms of the whole process, and that are known as distort payments. An example of the first is to bribe an official in charge of the licenses in order to get it faster, and an example of the second is to bribe another official who is not directly in charge of the licenses, but who has some authority over those who are in charge in order to get one. In the first case, the briber buys priority and in the second he/she buys a decision.

⁸ The phrase in italics is a translation of the saying “*el que no transa, no avanza*”.

4.4. On the perceptions and representations of corruption: the commission of corruption

In this section, we want to complete our findings of the quantitative study with two aspects: in that study we found that males tend to pay more bribes than females, and that individuals with higher education and income tend also to pay more bribes than people with lower income and educational levels. In the qualitative study, we obtain information that helps to explain such findings. Some of the situations are:

In the case of the police:

- Whenever people are in a hurry (speed payment):

Group E: “For instance, when you have to arrive at a certain time at your workplace and you have also to leave your children in the school first . . . I mean, you calculate your time . . . and in these circumstances you can always see how it works: in the mornings you will notice that police cars are always parked near the schools. And there they (the policemen) are waiting patiently that you pass by and *violate a traffic rule*, yeah? Then, in the moment you *violate it* they get you immediately, because it is everything already planned for that. Then they stop you and, since they know that you have to take your children to school, that you are in a hurry, they tell you that they have to fine you and that the process is long. In these circumstances you have to calculate that if you do not arrive to school before they close the doors, your children will have to stay with you. Then, what do you do? Well, you say, take here fifty pesos and let me go, I mean, you try to give the guy the least you can . . .”

- When people do not know the rules:

Group B: “I used to work in a car rental agency, and many foreign tourists came in order to rent a car since the agency is within the airport. These people rented cars to go out of town mostly to Puebla, so they had to drive out through Puerto Aereo Boulevard and Zaragoza Avenue. The thing is that whenever they came back to return the cars they always complained about a policeman who stood in the crossing of those avenues and stopped them all in order to fine them for whatever reason, making long stories about the driving rules, and saying at the end that with some money he would let them go immediately. Some gave him up to \$ 500 U.S. Dollars. The point is that this guy was waiting for “blondies”, since he knew that these people usually would drive as in their countries, but that they would not know the traffic rules of Mexico City.”

In the case of the public services:

- Whenever people are in a hurry (speed payment), or want to skip completely the normal procedures (distort payment):

Group H: “Oh, well yes, I had an experience about that (bribing for obtaining the driving license quickly) . . . Actually very recently . . . I went with my daughters to get their driving licenses. There we always give some money in order to get them quickly without waiting too much or to avoid the examination . . . In this sense, I have just had the experience with my daughters, directly, and it worked”.

- Whenever people want to have certainty that their problem will be solved or that the procedure of their interest will be served, i.e. (they will have some control over the process):

Group G: (When referring to a situation in which the person did not receive the official form to pay the taxes of his house and went directly to the tax office, he says) “There one has to make a huge queue and bring all the required documentation, two photocopies of this, two copies of that, there are many documents requested, aren’t there? And we do not know exactly why it becomes so complicated. Instead of making things easier, shorter . . . I think that to make things easier would diminish a lot of the situations in which we face corruption . . . because the government or whoever makes these arrangements is wrong . . . because the procedures are so complex, you never know what to bring with you, what to expect, and when to expect your proceeding to end . . . That is why it is always better to give a *tip* to the official, before you get angry with the uncertainty, and you will get your problem solved”.

These justifications are understandable when you establish a connection with the way people perceive the legal framework that lies beneath them: the general legal-institutional framework is perceived as flexible, negotiable, non-legitimate, optional and people regard it as a last resource to regulate social conduct. This is consistent with the findings of the quantitative study that finds that the institutional framework is statistically significant for affecting the incidence and frequency of bribery: a more consolidated institutional framework, understood as one in which there is no great divergence between the laws and daily-life practices, affects negatively the incidence and frequency of bribery.

Let us now turn to our findings in relation to the difference between males and females towards acting corruptly. As said above, both males and females show the same disposition to bribe. The difference is that, at least what we find in Mexico City, males face more situations from which they cannot escape so easily without “giving *mordida*” (bribing). For instance, in the focus groups we find that in all situations where people narrated experiences with the police in which a police car stopped them after committing a traffic rule violation, males and females resort to different sort of strategies to negotiate the *mordida*. Males usually end up giving money to the officers, while females frequently escape “without paying a cent”. Let us compare two stories from females with two from males.

Group I (female): (Whenever a patrol stops her) “Well, look, I *have never given mordida*. Instead, I must accept, I get a little bit insolent with the cops, even when they stop me when I have done something wrong . . . I think this is bad, but nevertheless, the good thing is that I always get on my way without giving them a cent”.

Group C (female): “When you put the example of the car, I remembered that I have also been stopped by a police car. I was just arrived in this city . . . The thing is that I was stopped, and though I have a relatively good car I played the “poor little girl from the province” with the policemen . . . I told them that I did not know how things work here. At the end, I did not give them money, and they let me go . . .”

Group A (male): “When the police stops you, it is better to give the *mordida* there to them . . . Well, it is true, you could also pay it if you go to the police station, but you save time and procedures paying it there”.

Group B (male): “OK, if you get caught after doing something wrong, then you try to negotiate and try to pay them (the police) the least you can. If that is the case, and you are really guilty, then you say: ‘Uff, I got out smart’⁹”

Thus, we found that if it is true that males tend to pay more bribes than females this may not be explained by the fact that males are necessarily more corrupt but rather by their different sort of strategies when negotiating with the authority the application of the law.

The other aspect we found quite interesting in the quantitative study is that contrary to what occurs at a macro level in which wealthier states tend to have fewer degrees of corruption, at a micro level in Mexico individuals with higher levels of education and income, a proxy for their opportunity costs, tend to pay more bribes than people with lower income and education. From the findings of the focus groups, we think that this has to do again with the perception that the law is negotiable and the institutional framework flexible. In a highly consolidated institutional system in which social conduct goes more or less along the lines of the established norms and rules, the more educated and wealthier people see their interests better protected if they just follow the procedures and respect the norms. Conversely, in the case of a system in which social conduct goes at times in the opposite direction to what the norms and rules establish, to follow these rules becomes not only irrational (since everything can be done through the informal channels), but can also be more dear in terms of time and energy, becoming close to the idea of opportunity costs.

The following examples illustrate similar perceptions both from middle-high socioeconomic level and lower socioeconomic level participants towards the officials that work in the public dependencies and offices:

Group C: “Look, all the guys of the windows and desks, and the entire public official whose responsibility is to solve problems are corrupt”.

Group G: “Corruption exists in all the government, from the bottom to the top, not only in the police, and we know how to deal with it . . . paying”.

Maybe the most important aspect participants take into account when deciding if they bribe or not an official is the perception of the level of corruption that exists in the institution to which the official belongs. If people think that the institution is inherently corrupt, as is the case with the police in Mexico City, they will take that perception as a point of departure of all encounters with the police and, thus, they will be more inclined to bribe or to enter into negotiations with the police officer than, for example, accept to get a fine..

Finally, here it seems that people have no important sense of guilt when paying bribes (in the quantitative part the variable blaming is a bit inconsistent). This does not mean that people do not consider corruption as a “bad thing” in ethical and moral terms. Actually, we have evidence that it is so, as the following examples show:

Group B: “Corruption is something that offends”

Group C: “When talking about corruption I start thinking about dishonesty”

Group E: “Corruption is like spoiling the natural order of things”

The point is that people tend to bribe not because they do not consider it to be wrong, but because they see it as a practical way of behavior within a system that, at least, *does not punish*

⁹ Translation of the phrase “*la libre*”, which refers to the fact that the man escaped without facing further consequences.

them for it, reinforcing of Becker's work (1968). In this sense, though participants initially seem to say the opposite, they justify it, as can be seen next:

Group G: "It is not justifiable, but it is understandable . . . even acceptable in certain circumstances"

Group A: "You cannot justify corruption, but in a country in which even the politicians break up the rules constantly, well, you know . . ."

What we would like to emphasize in the qualitative study is that perhaps our most important finding was that beneath the practices of corruption lies the perception that the general legal-institutional framework is perceived as flexible, negotiable, non-legitimate and optional, and people regard it as a last resource to regulate social conduct. Consequently, all honest and transparent behavior is just an individual's alternative that people can follow or not depending on various factors (time, resources, certainty, etc.) and that, in any case, since dishonest and corrupt behavior will be seldom punished, it will save a lot of energy, resources and time. In any case, the most probable kind of regret for behaving corruptly will come not from a legal fine, but in the conscience of the individual who committed such an action.

5. Final considerations

Corruption has worldwide become one of the main problems for development with consequences in the economic, social and political spheres. This makes for researchers a rich field of interest, and more attention must be paid for understanding the incentives and the mechanisms through which corruption is generated, maintained and reproduced. The aim of this paper has been to analyze how individual incentives, the social dynamic and perceptions influence an individual's decisions to commit corruption acts (in this particular case, to pay bribes). We have used two methodologies, a quantitative and a qualitative one, and we focused on Mexico, a country where corruption seems rampant in everyday life.

The outcomes show that individuals take into account, when considering paying bribes, their opportunity costs, which involve perceptions about norms and institutions. Given a low level of law enforcement, there is a high benefit for individuals when paying bribes, since this grants them the obtention of expected results. There is also a higher propensity to pay bribes from people with higher education and income levels. There are also important effects from social dynamics that tend to foster the propensity to bribe, otherwise falling in a kind of "social exclusion". There is the perception that since institutions are corrupt, nothing can be done to put an end to corruption at the individual's level until those institutions are first changed.

In general, it seems that there is a trade-off between the perceptions of inefficient institutions, beliefs of the population, the social context *and* the individual's behavior. In this sense, some other studies show that in similar situations even enthusiastic media campaigns against corruption are doomed to fail in changing corrupt behavior (e.g., Corduneanu et al., 2005). However, additional work must focus on the many other components of corruption in order to complement this work. We also need more research using other techniques, such as lab experiments. From a policy-making viewpoint, the work presented here must raise concerns on the transparency of institutions, the effective application of the law and also the perceptions about corruption shared by citizens. Transparency, law enforcement and perceptions are intertwined. Therefore, weak and discredited institutions cannot play any important role in promoting transparency and law enforcement; here we must bear in mind that the beliefs of the population cannot be changed in the short

terms. Integral policies tackling both institutional strengthening and perceptions must be carefully designed, but they would nevertheless take a long time to permeate and show their first results.

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Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at doi:10.1016/j.jebo.2005.09.006.

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