

# LET'S PLAY: BRIBERY GAMES IN THE U.S. AND GERMANY

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### ABSTRACT

This article focuses on behavioral differences across cultures in an experimental bribery game that contributes to cross-country comparisons. To answer the question "What affects an individual's propensity to engage in and punish corrupt actions?", run bribery games have been run with over 700 students, comparing individual decision-making in the U.S. and Germany. Contrary to the assumptions, almost 70% of the Californian participants offered and accepted a bribe. In Germany almost 50% took the opportunity to offer a bribe and 40% accepted one. In the U.S., 52% punished corrupt acts, compared to 80% in Germany. The results can be explained by differences in the level of individualism and by "a cultural transmission of corruption." This explanation should also imply a society's ability to build anti-corruption norms.

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#### Introduction

Corruption's large impact on all areas of individuals' lives reveals the importance of understanding why people act corruptly and why corrupt actions are sometimes punished and sometimes not. Therefore, this paper addresses the question "What affects an individual's propensity to engage in and punish corrupt actions?" Corrupt actions are usually defined as "the abuse of entrusted power for private gain" (Transparency International 2017). Generally, corruption occurs where private wealth and public power overlap and requires three parties: a corrupter, a corruptee and a disadvantaged party. One party must commit the abuse of public power, this means the acceptance of or demand for a payoff from any kind of public official. The second party, a private party, a corporate body, a representative or even another public official (e.g. judiciary executive, a police officer, etc.) is either forced to, or seeks to make a payoff to the first party. The third party as the owner of the common good, in most cases society, bears the external costs of the corrupt act. According to zero-sum theory, this implies that, the corrupt act benefits two parties at the cost of a third party (Rose-Ackerman and Palifka 2016; Banuri and Eckel 2012).

I interpret corruption as a situation where two people can act to increase their own payoff at the expense of a third person, the victim<sup>1</sup>. To shed more light on the micro level factors, I have run bribery games with over 700 students, comparing individual decision-making in the U.S. and Germany. The sequential-move game builds on the work of Alatas et al. (2009) and Cameron et al. (2009), which confronts people with a common bribery problem. It consists of three persons in which two players can act corruptly to increase their own payoff at the expense of a third player. The bribery that takes place between the first two players harms the third player and is illegal. Hence, the third player, the victim, is allowed to punish the first two players at a cost to the victim. The assumption is that individuals' propensity to engage in and punish corrupt actions are shaped by their everyday experiences of corruption. Higher levels of exposure to corruption in daily life may promote a tolerance of corruption that is reflected in norms of behavior and vice versa. Therefore, I suppose that in environments that are characterized by lower levels of corruption, individuals have both a lower propensity to engage in corrupt actions and a higher propensity to punish corrupt acts.

<sup>&</sup>lt;sup>1</sup> This situation describes one form of corruption. There are also individual forms of corruption where a power holder individually abuses power (e.g. see Azfar and Nelson 2007; Abbink and Ellman 2005; Barr et al. 2009)

I have run bribery games in the U.S. and Germany in 2013/2014, comparing individual decisionmaking of over 700 participants. Germany and the U.S. are countries that are both consistently ranked among the least corrupt countries in the world – with a score of 79 out of 100 in Germany in 2014 (12th place out of 174 countries) and a score of 74 out of 100 in the U.S. in 2014 (17th place), where a score of 0 indicates high corruption levels and a score of 100 indicates low levels of corruption (Corruption Perceptions Index 2017). I focus on the correlations between an individual's propensity to engage in and punish corrupt acts, depending on the amount of the bribe, severity of thepunishment and certain socio-demographic characteristics such as gender, religion, field of study, income, work experience, time spent in other countries, experience with corruption and individualism.<sup>2</sup>

The corruption game has already been conducted in countries such as India, Indonesia, Singapore and Australia. Aside from the study by Banuri and Eckel (2011) who conducted bribery laboratory experiments in the U.S. (Texas) and Pakistan, there are no studies that have analysed the propensity to engage and punish corrupt actions in the U.S. (California) and Germany.<sup>3</sup> Both countries are well-established democracies and belong to the least corrupt societies in the world, but nevertheless both have problems with corruption.<sup>4</sup> Besides the micro-level factors, my study also aims at unearthing the reasons for corrupt behavior at the societal level. In doing so, this article gives an insight to why corruption takes place in generally low-corrupt countries and how this phenomenon is influenced by cultural traits of the respective societies. I add a specific focus on low-corruption countries with different cultures to the the already existing studies of Alatas et al. (2009) and Cameron et al. (2009) who have run experiments in countries with high scores of corruption. With my study, I also contribute to the literature that looks at how behavioral ethicists can increase the degree to which behavior in institutions conforms to generally accepted norms and promote ethical behavior in societies to prevent corruption in the future.

<sup>&</sup>lt;sup>2</sup> In this paper, I consider punishment as an endogenous factor that takes place if the victim decides to incur the cost associated with punishment. Thus, I am able to examine both the incentives to engage in corruption and the incentives to punish corrupt behavior (Cameron et al. 2009).
<sup>3</sup> Moreover, in contrast to our study, Banuri and Eckel's experiment is more focused on the mechanisms of punishment.

<sup>&</sup>lt;sup>3</sup> Moreover, in contrast to our study, Banuri and Eckel's experiment is more focused on the mechanisms of punishment and is designed as a repitition game.

<sup>&</sup>lt;sup>4</sup> Furthermore, there are subnational variations of corruption measures in both countries. For instance, in the US, New York is very infamous for its corrupt government culture as is the city of Chicago and many other states (see the Center for Advancement of Public Integrity at Columbia Law School).

#### **Corruption and Culture**

To explain the causes of corruption, studies offer a variety of theoretical-conceptual approaches from different disciplines and a broad spectrum of variables based on various methodological avenues. From a theoretical-conceptual perspective, corruption researchers have mainly focused on economic approaches such as the principal-agent theory that considers human beings as selfinterested actors. Thus, individuals attempt to maximize their benefits and minimize their costs by making rational judgments (homo oeconomicus) (Olson 2003; Klitgaard 2009). Corruption is, therefore, regarded as individual misbehavior, motivated by interests, that arises where and when the costs of behaving corruptly do not exceed the gains that are expected from it. However, economic approaches tend to overlook social norms and reciprocal relationships between actors that play an important role in corrupt transactions (Elster 2000; Green and Shapiro 1994). Thus, my study focuses on cultural approaches that strengthen the focus on an individual's social behavior and highlight social norms, values and morals. That way, corruption is conceived as a way of life, as a kind of tradition and as a set of values and norms that belong to a society's culture and its institutions. Hence, these approaches allow researchers to identify and explain differences in behavior and actions among groups and societies and enable them to go beyond explanations of social processes that are the mere aggregate of individuals' actions. This implies that corrupt behavior is not only caused by rational interests and lack of competition and transparency in economic and political areas, but also by certain contexts such as culture, traditions and informal conventions that, in turn, influence the institutions and organizations in which people operate. Besides, cultural approaches do not deny that individuals attempt to calculate their interests, but argue that outcomes are the product of a society's culture, implying the interaction among various groups, interests, ideas, and institutional structures (Thelen 1999; Azfar and Nelson 2007; March and Olsen 2006).

Previous cultural research has indicated that corruption and culture are strongly interrelated (Sandholtz and Taagepera 2005; Fisman and Miguel 2007; Barr and Serra 2010; Banuri and Eckel 2012). In these studies, culture often refers to concrete factors such as trust, religiosity or institutional arrangements, or to less tangible elements such as values, norms, or morals. Usually culture is described as a property of whole societies, consisting of attitudes and behaviors and essentially observed as a collective concept, applicable to social groups and composed of shared meanings and interpretations (Geertz 2006; Hofstede et al. 2010).

Generally, culture interacts with corruption through two channels, formal and informal institutions, and both differ across and within countries (Elster 2000; Banuri and Eckel 2012). Formal institutions are usually observed as formal rules that govern individual behavior and that are also influenced by values and attitudes (Harrison and Huntington 2001).<sup>5</sup> Informal institutions are usually defined as informal rules, driven by values, norms and beliefs that are constitutive elements of personal identities and govern interaction, and are both shared and sustained by group members. As a result, people's actions are partly intentional and norms and values constitute a central element in people's intentions. They are a powerful motivators of action and can be moral resources from which societies can profit (Posner 2002; Welzel 2013). Following this, corruption norms are a specific form of social norms that dictate the extent to which individuals engage in, and expect others to engage in corruption (Sandholtz and Taagepera 2005; Banuri and Eckel 2012). Or, as in the words of Rothstein and Torsello (2013, p. 5): "The reason why people, although condemning corruption, participate in corrupt practices seem to be that they understand the situation as a 'collective action' problem where it makes little sense to be the only one that refrains from using or accepting bribes and other kickbacks." Or, as Myrdal (1968, p. 409) stated, "Well if everybody seems corrupt, why shouldn't I be corrupt." This argues for a "cultural transmission of corruption" (Hauk and Saez-Marti 2002; Brunetti and Weder 2003). This should also imply a society's ability to build anticorruption norms, because, if culture transmits corruption, the same should be possible for counter-measures. So, the saying should finally be: "Well if nobody seems corrupt, why should I be corrupt."

To measure culture I also refer to the individualism-collectivism dimension as one of six cultural dimensions of Hofstede et al. (2010). It is defined as the extent to "which decisions about a person's life are determined by the individual or by the ingroup - a person's circle of family, friends, or peers" (Husted 1999, p. 334).<sup>6</sup> The high side of this dimension, called individualism, can be defined as a preference for a loosely-knit social framework in which individuals are expected to take care of only themselves and their immediate family members. Therefore, individualism refers to the degree of interdependence a society maintains among its members. It has to do with whether people's self-image is defined in terms of "I" or "We". In individualist societies people are rather supposed to

<sup>&</sup>lt;sup>5</sup> Formal institutions are particularly considered by new institutional approaches that are often used by sociologists to analyze corruption by stressing the role of institutions actors operate in. Thus, it is assumed that the relationship between institutions and actors are reciprocal and cyclical (Groenendijk 1997; Scharpf 2006).

<sup>&</sup>lt;sup>6</sup> The other dimensions include: 1. Power distance; 2. Uncertainty avoidance; 3. Masculinity vs. femininity; 4. Long-term vs short-term orientation and 5. Indulgence vs. restraint.

look after themselves and their immediate family. In contrast, collectivism represents a preference for a tightly-knit societal framework in which individuals can expect their relatives or members of a particular in-group to look after them in exchange for unquestioned loyalty. This implies that the collective or group can work as a deterrent due to social concepts like "losing face".

#### **Experiments on Corruption and Punishment**

Experimental research on corruption has considerably increased in recent years (Bertrand et al. 2007; Rothstein and Eek 2009; Serra and Wantchekon 2012; Banerjee 2016). Several papers in theoretical and empirical literature on corruption focus on individual determinants of corruption and consider the influence of an individual's gender (Rivas 2013; Frank et al. 2011; Rivas 2013), amount of wages (Azfar and Nelson 2007; Van Veldhuizen 2011), the amount of bribe, level of monitoring and punishment (Frank and Schulze 2000; Banuri and Eckel 2011), religion (Rivas 2013; Armantier and Boly 2008) and the cultural transmissions of corruption (Andvig and Moene 1990; Tirole 1996; Hauk and Saez-Marti 2002).

Abbink (2002) published one of the most important studies on the topic, analyzing individual decision-making in an experimental corruption game. They have designed a bribery experiment that focuses on the influence of punishment and negative external effects that has been replicated in subsequent work. In their original experiment, the authors model corruption as a variant of the two-person trust and reciprocation game, where the participants play the role of a firm or a public official. The firm has the opportunity to propose a bribe to the public official and has to pay a relatively low transfer fee. If the public official rejects the bribe, both players get their initial endowment, less the transfer fee. If the public official accepts, both payoffs increase significantly. In the second stage of the game, the public official decides between two options: one option significantly increases the pay-off of the firm but has a lower pay-off for the public official. The other option is better for the public official but has a negative effect on the pay-off of other players. On the one hand, the study indicates that the introduction of a negative external effect in the form of a reduced payoff of other players does not seem to significantly influence the amount and frequency of bribing. Additionally, after the introduction of a punishment mechanism, the average bribing amounts as well as the frequency in the choice of the option, which is better for the public official, significantly decrease.

Alatas et al. (2009) also used the set-up design of Abbink (2002) for experiments conducted in Australia, India, Indonesia and Singapore. They investigate gender differences in behavior when three persons are confronted with a common bribery problem. The authors demonstrate that Australian women are less likely to offer bribes and more likely to punish corrupt behavior than men in Australia. In India, Indonesia and Singapore, there are no significant gender differences. They conclude that the gender differences are rather more culture-specific than universal, as reported in previous studies. In response, Cameron et al. (2009) find that there is a greater variation in the propensity to punish corrupt behavior than in the propensity to engage in corrupt behavior across cultures. Consistent with existing corruption indices, the subjects in India exhibit a higher tolerance of corruption than the subjects in Australia. However, the subjects in Singapore have higher tolerance levels than the subjects in Indonesia. They also vary their experimental design to examine the impact of a more effective punishment system and the effect of the perceived cost of bribery.

Similar to Abbink (2002) and Alatas et al. (2009), Banuri and Eckel (2011) conducted laboratory experiments in Texas and Pakistan, with different levels of corruption, to assess the use and effects of sanctions. They use a repeated three person game design that varies the sanctioning institution (with and without a citizen option to punish), using both between and within-subject variations. They study the long-term impacts of a short-term policy shock on bribing behavior by running 10 rounds with no punishment, 10 rounds with punishment, and then 10 rounds without punishment. The experiment was conducted with 189 undergraduate students at the University of Texas at Dallas and 213 undergraduate students at the Institute for Business Administration in Karachi, Pakistan. The authors find that punishment is effective in constraining favor provisions, but has no independent effect on bribes. Rather, bribes are reduced as a response to a lowered favor provision in the U.S., but no reduction in bribes is observed in Pakistan. For instance, in Texas, bribes were sent in 60 percent of decisions in the no-punishment treatment and 42 percent of decisions with punishment. For favors given, the proportions follow a similar pattern and are 52 percent and 28 percent, respectively. In both cases, the availability of punishment reduces corrupt behavior. In Pakistan, however, bribes were also offered in 60 percent of no-punishment decisions, and 59 percent of decisions with punishment; favors were given in 58 and 41 percent of decisions, respectively. Banuri and Eckel (2011) conclude that bribery is unresponsive to the punishment regime, while favors respond similarly to the U.S. Thus, in the U.S., the sanction mechanism is viewed as a reinforcement of low corruption norms, and U.S. firms would reduce their level of bribe initiation. In Pakistan, however, since corruption norms are stronger, this would have a reduced impact.

I also refer to the experiment of Abbink (2002) and Alatas et al. (2009). With my study we contribute new country data for the U.S. and Germany that enable a cross-country comparison of an individual's propensity to engage in and punish corrupt actions. Moreover, the article uses two wellestablished democracies as cases that have low scores of corruption. By looking at two comparatively honest societies, we focus on what we assume are different cultural traits that favour or hinder the propensity to engage in corrupt actions.

#### Hypotheses and Measurement

To answer the question: "What affects an individual's propensity to engage in and punish corrupt actions?", I develop the following hypotheses:

Hypothesis 1: According to the low level of corruption in the U.S. and Germany, I assume that the first two participants of the game acting as firm and official have a low individual propensity to engage in corrupt actions.

I expect that an individual's propensity to engage in corrupt actions is shaped by their everyday experiences of corruption determined by the country's level of individualism and different attitudes towards corruption. I believe that lower levels of exposure to corruption in daily life reduce the tolerance for corruption. According to the principle "Corruption breeds corruption" – and vice versa – a less corrupt environment may make it more difficult to justify one's own corrupt actions. This implies that the participants resist corruption where it is already culturally and institutionally stigmatized (Cameron et al. 2009; Esarey and Chirillo 2013). According to this assumption, the firms do not have a high propensity to offer a bribe because both countries the U.S. and Germany are characterized by low levels of corruption. In the case that the firms actually do bribe, I expect that the officials will not have a high propensity to accept. Moreover, the firms can choose between an amount of 4 and 8 experimental dollars for the bribe. I expect that if the firms bribe, they will choose the lowest amount of bribe.

Furthermore, according to Hofstede's cultural dimension of individualism-collectivism and the higher level of corruption compared to Germany, we expect that a U.S. citizen has a higher propensity to engage in corrupt actions. By a score of 91 (out of 100), the U.S. is characterized as one of the most individualistic societies in the world in which the community plays a minor part, compared to other low-corrupt countries such as German. The German society is individualistic as well,

but lower ranked at a score of 67 (Hofstede 2016). In individualistic societies, people are supposed to look after themselves and their direct family. Individualism implies that a person attempts to further his or her own interests, or at least demands the right to serve his or her own interests without taking the interests of society into consideration. According to the higher level of individualism, I hypothesize that the U.S. participants act more selfishly in the experiment than the German participants. I assume that the U.S. firms and officials pursue their own goals and attempt to increase their payoff. To check this assumption, I measure individualism (culture) by a dummy variable (1/0).

I also ask the participants, according to their role, why they chose the specific action they engaged in. They can mention several reasons.<sup>7</sup>

Hypothesis 2: According to the third person of the game, I assume that the citizens in the U.S. and Germany will punish the firm and official when they acted corruptly.

I expect that the citizens will punish the corrupt actions because, on the one hand, the firm and the officer act corruptly to increase their own payoff at their expense. Additionally, they can choose between a punishment amount of 2 and 12 experimental dollars. Yet, according to the individualism dimension, I also expect that the U.S. citizens, compared to the Germans, have a lower propensity to punish corrupt actions because they are more individualistic and are less interested in the society as a whole.<sup>8</sup>

I also controlled if certain socio-demographic characteristics of the participants such as gender, religion, field of study, income, work experience, time spent in other countries, and experience with corruption have an influence on an individual's propensity to engage in and punish corrupt actions<sup>9</sup>.

<sup>&</sup>lt;sup>7</sup> For instance, the firms can select between the following answers if they have bribed: "payoff maximation", "for the social / economic good of the country (e.g. reduce unemployment etc.)", "to see the response of the official / citizen" or "other reasons". If they have not bribed they can choose between "morality", "to reduce corruption (social cost)", "profit-maximisation (in the long run it is bad for the firm)", it is "not necessary for firms to bribe", "equity" or "other reasons".

If the officials have accepted the bribe they can decide between the options "necessary for firms to bribe / will be able to help the firm", "necessary because salaries are low", "payoff maximation", "equity", "game will continue" or "other reasons". If they have not accepted the bribe they can select between the reasons "morality", "to reduce corruption (social cost)", "scared of implications / risk", "payoff maximisation", "fairness", "bribe too small" or "other reasons". If the citizens punish the bribery, they have the opportunity to choose between the following response options: "morali-

<sup>&</sup>lt;sup>8</sup> If the citizens punish the bribery, they have the opportunity to choose between the following response options: "morality", "reduce corruption", "fairness", "negative reciprocity" or "other reasons". If the citizen has not punished the other actors, he or she can select an answer between "payoff maximisation", "difficult to change the system", "ineffective punishment system", "bribe may be for a good purpose or may be necessary" or "other reasons."

<sup>&</sup>lt;sup>9</sup> I have not included an individual's age because of missing variance in the data.

Alatas et al. (2009), who investigated gender effects, found a significant relationship on the probabilty of offering and accepting the bribe. They assumed that one possible explanation for the different gender effects in the context of corruption that they observed was the differing social roles of women across cultures. "In relatively more patriarchal societies where women do not play as active a role in the public domain, women's views on social issues may be influenced to a greater extent by men's views. Hence, in such societies, one would expect to see less of a gender difference in behavior towards corruption as compared to societies where women feel more comfortable in voicing their own opinions" (Alatas et al. 2009, p. 17). According to the U.S. and German participants, I expect that there is no effect between gender and the propensity to engage in corrupt actions for the first two players of the game. I rather assume that there are cultural and contextual effects. However, there are other studies that have different findings. Rivas (2013) examines in a controlled environment whether women and men behave in different ways with respect to corruption. The results show that women are less corrupt than men. He assumes, according to Gottfredson and Hirschi (2004), that women are more risk-averse and self-controlled and therefore refrain from engaging in corrupt acts. From an institutional perspective, the study by Sundström and Wängnerud (2016) shows that where corruption levels are high, the proportion of women who are elected is low. They assume that corruption indicates the presence of 'shadowy arrangements' that benefit the already privileged and pose a direct obstacle to women when male-dominated networks influence political parties' candidate selection. Based on the data from 18 European countries, they also found an indirect signal effect derived from citizen's experience with a broad range of government authorities. Another gender-corruption-explanation offered by Rivas (2013) is that women are more sensitive to others' losses and that is why they choose the corrupt alternative with negative externalities over all the other participants less frequently. For the citizens, however, we assume that gender does have an influence because women seem to be more responsive to punishment, compared to men (Armantier and Boly 2008; Esarey and Chirillo 2013; Esary and Schwindt-Bayer 2016).

To measure gender I use two categories (1 = female; 0 = male). I also check if there is a relationship between an individual's religious identification and the propensity to offer or accept the bribe (Dreher et al. 2007; Armantier and Boly 2008; Treisman 2000). For instance, Dreher et al. 2007, p. 448) theorizes that "religion may shape social attitudes towards social hierarchy and family values and thus determine the acceptability, or otherwise, of corrupt practices. In more hierarchical systems or religions (for example, Catholicism, Orthodoxy and Islam), challenges to the status quo are less frequent than in more egalitarian or individualistic religions." Religion is measured by seven dimensions (Catholic, Protestant, Islam, Hindu, Atheist, none, other).

According to the study of Frank and Schulze (2000) and Schulze and Frank (2003) who found that economics students are significantly more corrupt than others, we also assume that the field of study has an influence on the propensity to engage in and punish corrupt actions. In particular, we assume that economics students have a significantly higher propensity to engage in corrupt actions than others. Frank and Schulze (2000) suggest that although economic students are significantly more self-interested and corrupt than other students, it shows that it is not because of their exposure to economic theory (self-interest etc.). It is rather a form of self-selection that implies that students choose to study economics because they are, on average, more self-interested. This thought proposes that corruptibility and self-interest differ significantly among members of society. I also consider an individual's income and assume that people with lower income have a higher propensity to engage in corrupt actions. This implies that low or no income creates strong incentives to take some extra money in the form of bribery (Watson and McNaughton 2007). Van Veldhuizen (2011) found that increasing the wage of public officials significantly reduces their corruptibility. He shows that experienced, low wage public officials accept 91% of bribes on average. In contrast to this, only 38% of high wage public officials choose the corrupt option. Comparing sessions with and without monitoring demonstrates that a non-zero level of monitoring seems to be necessary for the link between wages and corruption to occur.

For the citizens, however, I assume that there is no relationship between income and punishment because the citizen will punish unfair behavior and the violation of norms of cooperation or fairness independently, even when such punishment is costly and they do not benefit personally (Bowles and Gintis 2004; Carpenter and Seki 2011).

I also assume that an individual's work experience<sup>10</sup> has an influence on people's propensity to engage in and punish corrupt actions because they might already be more experienced already in corrupt actions. I measure work experience by two dimensions (0= no experience; 1=yes). This is also in line with the time someone spent in other countries, as time in a corrupt setting could influence the actor's accepted norms of behavior. I also ask if they have heard about or have come in

<sup>&</sup>lt;sup>10</sup> Work experience includes any type of job and any period of time.

contact with corruption (experiences of corruption) and look for correlations to find out their attitudes towards corruption.<sup>11</sup> Additionally, I ask them if they want to work in the private or public sector after graduating to see trends in which positions the participants may work in the future.

#### Methodology and Data

#### Design

Similar to the experiments of Alatas et al. (2009) and Cameron et al. (2009), I have conducted laboratory experiments designed as a sequential-move game. In the experiments three persons are confronted with a common bribery problem<sup>12</sup>.

The people included are a manager of a firm, a government official and a citizen who start respectively with a fictitious endowment of 30, 60, and 80 experimental dollars. Figure 1 contains an extensive-form representation of the game, where all of the payoffs are denoted in experimental dollars.

- The firm moves first and must decide whether to offer a bribe to the government official to avoid complying with an environmental regulation (in order to increase its own payoff at the expense of society), and if so, how much to offer. It can choose a bribe amount B ∈ [4, 8]. It costs the firm two experimental dollars to offer the money and the firm incurs this transaction cost regardless of whether the bribe is accepted.
- 2. If the bribe is offered, the official can either accept or reject it. Acceptance of the bribe implies favorable treatment of the firm. It increases the payoffs of both the firm and the official by 3B, but decreases the payoff of the citizen by 7B. Bribery has a significant impact on society. This is captured by the large decrease in the citizen's payoff. The payoff increases the likelihood that the firm benefits from avoiding environmental regulation. The official's payoff also increases by 3B even though the amount of bribe paid by the firm is B. This is due to a difference in the marginal utility of income. Since the income earned in the public sector is likely to be lower than that earned in the private sector, the same amount of money can be assumed to have a lower marginal utility value to the firm than to the official.<sup>13</sup>

<sup>&</sup>lt;sup>11</sup> For this question, I have five dimensions (personally in your workplace, personally at university, via friends / family, via mass media, no contact). I also ask them to provide us relevant examples.
<sup>12</sup> I define bribery as an activity that involves a payment in money, services, or other valuables to make things pass

<sup>&</sup>lt;sup>12</sup> I define bribery as an activity that involves a payment in money, services, or other valuables to make things pass smoothly, swiftly or more favorable through private, public, or government bureaucracies. It describes a behavioral exchange that involves a person that seeks a public service and a person that delivers a public service.

<sup>&</sup>lt;sup>13</sup> Abbink (2002) makes a similar assumption in their study. As in their paper, this multiplier also has the additional advantage of helping us prevent negative total payoffs.

3. The third player is called the citizen and moves last after observing the choices made by the firm and the official. The citizen observes the decisions made by the firm and the official and can punish them for the act of bribery by choosing an amount P ∈ [2, 12] in penalty. Punishment is costly to the citizen and reduces the citizen's payoff by the amount of the punishment, P. However, it imposes a monetary sanction on the firm and official by reducing their payoffs by 3P. Hence, the net benefit to the firm and the official from the corrupt transaction is 3B -2 -3P and 3B -3P respectively.



FIGURE 1, THE GAME TREE

Source: Alatas et al. (2009); Cameron et al. (2009)

To avoid any repeated game effects, the experiment is conducted as a one-shot game. In this experiment, the punishment has no economic benefit to the citizen and so the decision to punish is not affected by the anticipation of possible future economic gains. Hence, with a one-shot game, a comparison of the citizen's willingness to punish corrupt acts across different cultures reveals the differences in the tolerance levels for corruption. The citizens who choose to punish in a one-shot game would have even more incentives to punish in a multi-period game since by doing so, they can deter corruption and decrease the harm they suffer. The one-shot nature of the game also helps to avoid the issues associated with repeated games, such as signaling, reputation formation and serial correlation in decisions. Each subject in the database participated in the experiment only once and played only one role. The subjects playing the three roles were grouped anonymously in the experiment to avoid conscious or unconscious signaling.

As Alatas et al. (2009) and Cameron et al. (2009), I decided to use emotive terms such as "bribe" and "punishment" in the instructions, presenting a deviation from the standard practice of using neutral language in economics experiments. However, since the aim was to simulate a real-life corrupt transaction, loaded language is used."<sup>14</sup>

#### Sample and Procedure

The laboratory experiments were run at the University of California, Irvine and at Leuphana University in Lüneburg in 2013/2014. From the questionnaire at the end of the experiment, we obtain socio-demographic information about the subjects (see below). Subjects were bachelor's and master's students from different fields of study. After participating in the experiment, every participant received some sweets as compensation. While the German students participated without payment, the Californian subjects also received a fixed \$7 show-up payment in addition to the candies because it is common at the University of Irvine. We consciously avoided additional financial incentives because we did not want the participants to act according to payments, but rather to their norms and values regarding corruption.

#### U.S. sample

In California, 366 subjects took part once in 122 plays of game and only once as a firm, an official, or a citizen. The sample consisted of 63% females (n = 229) and 37% males (n = 137), the average age was 20.3 years (std. dev. = 1.87). The participants were mainly students from economics (18%), biology (13%), engineering (12%), public health (8%), psychology (7%) and pharmacy (6%). 33% are non-religious, 25% Catholic, 11% Protestants, 9% Buddhist, 7% Atheists and 15% other. The average monthly income is \$642 (std. dev. = 1958.74). On an average of 17 months (std. dev. = 20.42), 61% of the participants have work-experience (n=224). The average participant spent 24 months (std. dev. = 55.56) living in other countries. 16% are experienced in corruption, this means

<sup>&</sup>lt;sup>14</sup> Cooper and Kagel (2003) consider the role of loaded language in signaling games and suggest that the use of a meaningful context might better capture behavior in field settings than the use of neutral language. However, Abbink and Hennig-Schmidt (2006) suggest that neutrally framed experiments are not necessarily less interpretable in terms of a real-life situation than those presented in a context. They find that the use of words like "bribe" do not make a difference in corruption games they have conducted.

that they have been in contact with corruption personally in their workplace or at university. In contrast to this, 65% of the students are well-informed about corruption including that they have heard about corruption via friends / family or mass media such as TV, newspaper or radio. 21% have never been in contact with corruption, meaning they have never been involved or heard about corruption. 24% of the participants attempt to work in the private sector, 22% in public sector, however, 55% do not know at the time of the experiment.

#### German sample

In Germany, 348 subjects took part once in 116 plays of game and only once as a firm, an official, or a citizen. The sample consisted of 51% females (n = 175) and 49% males (n = 171), the average age was 22.7 years (std. dev. = 3.31). The participants were mainly students from economics (22%), political science (19%), education (15%), environmental science (11%), cultural studies (11%) and business psychology (9%). 42% of the participants were Protestants, 27% are non-religious, 16% Catholic, 11% Atheists, 3% Muslims and 1% other. The average monthly income is €681 (std. dev. = 315.35).

On an average of 35 months (std. dev. = 34.33), 80% of the participants have work-experience (n=276). The average participant spent 16 months (std. dev. = 29.04) living in other countries. 14% are experienced in corruption, this means that they have been in contact with corruption personally in their workplace or at university. Similar to the U.S., 63% of the students are well informed about corruption including that they have heard about corruption via friends / family or mass media such as TV, newspaper or radio. 23% have never been in contact with corruption, meaning they have never been involved or heard about corruption. 22% of the participants attempt to work in the private sector, 36% in public sector, however, 42% do not know at the time of the experiment (see appendix).

In order to minimize the experimenter effects, we were present in all sessions that were run as noncomputerized experiments. Each experiment lasted about 30 minutes and each session consisted of at least 15 subjects who, on entering the room, were randomly assigned to the roles of firms, officials or citizens. Each group was located apart from the others in a recognizable cluster. Thus, each group could see the members of the other groups, but individual subjects were unaware of which three specific subjects constituted a particular firm-official-citizen trio. At the beginning of each session, each subject received a copy of the instruction of the game. Then, the subjects playing the role of a firm were asked to decide whether or not to offer a bribe. If they chose to offer a bribe, they also had to choose an amount (4 or 8 experimental dollars). The envelopes with the bribe amounts were then collected and distributed by the experimenter to the corresponding officials. After the officials made their decisions, the corresponding citizens were informed by the envelope about whether a bribe was offered and whether it was accepted. The game ended after the citizens decided whether to punish by choosing a punishment amount (2 or 12 experimental dollars).

All the subjects filled out a demographic survey, which asked them a series of questions regarding their gender, age, religion, field of study, work experience, income, exposure to corruption, and time spent in other countries and the motivation for their decisions (see appendix).

#### Results

Table 1 and 2 illustrate that out of 122 Californian firms, 80 participants bribed (66%). Out of these offered bribes, 54 (68%) officials accepted the offer. In Germany, out of 116 participating firms, 54 people bribed (47%) and 20 officials (37%) accepted these bribes. The result does not confirm my first hypothesis suggesting that the first two participants of the game acting as firm and official have a low individual propensity to engage in corrupt actions. More than half of the firms and officials offered or accept a bribe in California<sup>15</sup> and almost half in Germany accept the bribe. However, this finding does confirm my assumption that the U.S. participants have a higher individual propensity to engage in corrupt actions as compared to Germans. To control for an individual's sociodemographic characterestics and an individuals' propensity to engage in and punish corrupt actions, I conduct logistic regression analyses. In both countries, I find a negative significant relationship with an individual's work experience. This implies that the probability to bribe decreases if the participant has work experience. In Germany, this relationship is even stronger than in the U.S. Additionally, there is a weak positive relationship between the propensity to offer a bribe and time spent in other countries. This result illustrates that the probability of offering a bribe increases if the participant has spent time in other countries. I assume that people spending time in other countries adapt to the respective society's norms very quickly and offer bribes if they think it is necessary. This is also in line with the argument of a "cultural transmission of corruption" (Hauk and Saez-Marti 2002; Barr and Serra 2010) and its implication that corruption norms are a specific form of

<sup>&</sup>lt;sup>15</sup> Comparing my results with the findings of Banuri and Eckel (2011), at the University of Texas, where bribes were sent in 60 percent of decisions in the no-punishment treatment and 42.33 percent of decisions with punishment, we can show that the propensity to engage in corrupt actions is even higher in California with the punishment treatment.

social norms. In the German sample, I also find that men have a higher propensity to bribe than women. Almost 60% of the German men bribed (24 out of 41). In contrast to this, only 41% of the women (30 out of 73) offered a bribe. This suggests that women might be more scared of potential consequences and risks than men. Additionally, I found a significant relationship between bribery by the firms and individualism and between the acceptance of bribes and individualism implying that there are cultural differences in corrupt actions between both countries (see appendix).

Bribery	U.S.	Germany
Yes	66% (80)	47% (54)
No	34% (42)	53% (62)
Total	100% (122)	100% (116)

TABLE 2, ACCEPTANCE OF BRIBE BY OFFICIALS

Bribery	U.S.	Germany
Yes	68% (54)	37% (20)
No	32% (26)	63% (34)
Total	100% (80)	100% (54)

With regards to the amount of bribe offered, 53% of the Californian and 55% of the German bribers chose the highest amount of bribe. This finding does not confirm my expectation that the firms will choose the lowest amount of bribe. A regression analysis also reveals that in California, males tended to give higher bribes compared to women. While 22 out of 31 men (71%) offered 8 experimental dollars, only 42% of the female offered the highest amount. This finding confirms previous studies indicating that women might be more risk-averse than men or just behave conform to gender expectations (Watson and McNaughton 2007; Croson and Gneezy 2009). All other control variables are not significant in my models (appendix).

TABLE 3,	AMOUNT	OF	BRIBE
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Amount	U.S.	Germany
4	47% (37)	45% (22)
8	53% (42)	55% (27)
Total	100% (79)	100% (49)

Asking for the reasons of the firm's behavior, table 4 indicates that most participants in California, almost 80%, claimed that they bribed because they were interested in seeing the response of the official and citizens (62 people stated this). In Germany, 60% claimed this (32 people). I interpret

these answers as justifications or rationalizations because people asserted that thery were not corrupt but merely wanted to see whether the other person is. That might be a typical example of selfserving behavior with a post-hoc rationalization (Bersoff 1999; Mazar et al. 2008). At least 51 bribes were justified with profit-maximization (64%), while 28 firms did it for the social / economic good of the country to reduce unemployment, for instance 35% in the U.S. In Germany, 29 times people justified bribes by payoff maximation and 8 times they did it for the social / economic good of the country.

Looking at the reasons for non-bribery, the majority of the U.S. and German non-bribers explained their decision by ethical reasons (morality, 15 times in the U.S. and 48 times in Germany). In the U.S., seven times participants refused to bribe because of profit-maximisation and because they assumed that, in the long-run, bribery is bad for the firm, and 10% mentioned that they were afraid of sanctions. In Germany, 48% stated they did not bribe to reduce corruption and 16% because of equity. 29% refused to bribe because of profit-maximisation and 15% because they believed that it was not necessary to bribe. Four people even stated that they did not bribe because they did not want the firm to overcome the environmental regulation.

Bribery		
	U.S.	Germany
Payoff Maximation	64% (51)	54% (29)
For the social / economic good for the country (e.g.	35% (28)	15% (8)
reduce unemployment etc.)		
To soo the response of the official / citizons	78% (62)	50% (22)
	70% (02)	35% (32)
Total	80	54
Non-Bribery		
Morality	36% (15)	77% (48)
To reduce corruption (social cost)	0.05% (2)	48% (30)
Profit-Maximisation	17% (7)	29% (18)
(in the long-run it is bad for the firm)		
Not necessary for firms to bribe	0.02% (1)	15% (9)
Equity	0.02% (1)	16% (10)
Other reasons: Fear of sanctions	10% (4)	5% (3)
Other reasons: Environmental protection		6% (4)
Total	42	62

TABLE 4, REASONS FOR (NON)-BRIBERY<sup>16</sup>

<sup>&</sup>lt;sup>16</sup> The respondents could give several answers. That is why, the the sum of percentages is over 100%.

When I asked the U.S. officials their reasons for accepting the bribe, the majority, 24 people, stated that they did it because of payoff maximation. However, 19 times people were interested only in continuing the game, while 8 times it was mentioned that the salaries were too low. 7 times they accepted the bribe because they believed that it is necessary for the firm to survive. In Germany, the majority, 11 people (55%), stated that they did it because they were interested in continuing the experiment, 40% (8 times) because of payoff maximation. Five times (30%) people accepted the bribe because their salaries were too low, while 4 times (20%) it was mentioned that it was necessary for the firm to survive.

Asked about the rejection of the bribery, 42% of the U.S. participants either stated it was because of moral reasons or they were scared of potential consequences and risks (11 times respectively). However, 9 times the officers rejected the bribe to reduce corruption and 5 times because of fairness. Nevertheless, 19% stated that the bribe was too small (Table 5). In Germany, 79% of participants (27) stated it was because of moral reasons, 62% (21 times) to reduce corruption, 41% (14) because of fairness and 21% (7) were scared of potential consequences and risks. For 20% (7 times) the bribe was too small and 9% (3 times) rejected the bribe because of payoff maximisation. In both countries, a logististic regression analysis indicates that there are no significant relationships between the acceptance of bribes and the control variables (appendix).

Acceptance			
	U.S.	Germany	
Necessary for firms to bribe / will be able to help the firms	13% (7)	20% (4)	
Necessary because salaries are low	15% (8)	30% (5)	
Payoff Maximation	45% (24)	40% (8)	
Equity	0.07% (4)	5% (1)	
Game will continue	35% (19)	55% (11)	
Total	54	20	
Rejection	1		
Morality	11 (42%)	79% (27)	
To reduce corruption (social cost)	9 (35%)	62% (21)	
Scared of implications / risk	11 (42%)	21% (7)	
Payoff Maximisation	7 (27%)	9% (3)	
Fairness	5 (19%)	41% (14)	
Bribe too small	5 (19%)	20% (7)	
Other reasons:		3% (1)	
Personal understanding of democracy			
Total	26	34	

TABLE 5, REASONS FOR ACCEPTANCE

In the U.S., out of the 55 corrupt acts, 28 were punished by the citizens (52%). With regards to the second hypothesis, this result hardly confirms my assumption that the citizens are willing to punish the firms and officials when they behave corruptly – even if such punishment is costly to the citizen. In Germany, 80% of participants punished corrupt actions.

In the Californian sample, I found a relationship between punishment and an individual's field of study. Participants studying economics (7 out of 11 didn't punish), engineering (5 out of 7) and psychology students (4 out of 4 didn't punish) punished less compared to other students. Moreover, there is a significant relationship between the punishment of corrupt actions and individualism (see appendix).

Punishment	U.S.	Germany
Yes	51% (28)	80% (16)
No	49% (27)	20% (4)
Total	100% (55)	100% (20)

TABLE 6, PUNISHMENT BY CITIZEN

#### TABLE 7, AMOUNT OF PUNISHMENT BY CITIZENS

Amount	U.S.	Germany
2	14 (48%)	7 (50%)
12	15 (52%)	7 (50%)
Total	29 (100%)	14 (100%)

However, 48% of the Californian citizens and 50% of the Germans who punished chose the lowest amount of 2 experimental dollars, although they had the opportunity to use a very effective punishment system for corrupt actions.<sup>17</sup> Asking for the reasons for punishment, almost 70% of the Californian participants stated that they did it because of moral (19 times) and fairness reasons (17 times), and to reduce corruption (17 times). 29% of the participants acting as punishing citizens claimed they punished because of negative reciprocity. In Germany, almost 90% (14 times) stated that they punished because of morality, 81% (13 times) to reduce corruption and 44% (7 times) because of fairness.

<sup>&</sup>lt;sup>17</sup> An alternative way of designing a more effective punishment system would be to increase the multiplier on the punishment level chosen by the citizen. However, I chose to increase the punishment options available to the citizens since I am also interested in examining "choice set" effects.

Asking the Californian non-punishers for their reasons, 78% said that they did not punish because of pay-off maximation. Seven times (26%) people stated it was because of the ineffective punishment system and six times (22%) because it is difficult to change the system. Two times people even asserted that bribery may be for a good purpose or may even be necessary. In Germany, three people (75%) stated that they did not punish because of an ineffective punishment system, three participants (75%) said that the bribe may be for a good purpose or may be necessary and two times (50%) people did not punish because of payoff maximisation implying that for the majority of the non-punishers in both countries' punishment seems to be a highly resource-intensive process they do not see the point in and do not want to invest in (Table 8).

Yet, I could not find significant relationships between the amount of bribery and the control variables, except for the relationship between gender and the wish to work in the private or public sector in the German sample. All the men (four) punished with the highest amount, while out of the ten women, seven chose the lowest amount of punishment. This indicates that there are gender differences in the tolerance of corruption and the responsiveness of punishment.

Yes		
	U.S.	Germany
Morality	68% (19)	88% (14)
Reduce corruption	61% (17)	81% (13)
Fairness	61% (17)	44% (7)
Negative Reciprocity	29% (8)	6% (1)
Total	28	16
No		·
Payoff Maximisation	78% (21)	50% (2)
Difficult to change the system	22% (6)	25% (1)
Ineffective Punishment system	26% (7)	75% (3)
Bribe may be for a good purpose or may be nec-	0.07% (2)	75% (3)
essary		
Total	27	4

TABLE 8, REASONS FOR (NON-)PUNISHMENT

Asking the Californian participants for some examples of corruption that they have heard from 25% associated corruption with politics and government ("officials take bribes") – either with the Californian ("California state senator selling weapons"; "Arms Deals with San Fransisco state senator"; "California Senators, government officials recently"), Mexican ("In Mexico, law enforcement

can be easily bribed"), Chinese, North Korean ("North Korea and its propaganda to its citizens, the mass killings") or Venezuelan governments. A few respondents just mentioned countries such as Mexico and China. People also mentioned the police several times ("Police asks for bribes to let people go sooner"), the banking system and media in general, nepotism at the workplace and the educational system (high school, university). 15 participants even admitted that they already bribed during exams and for homework to get better grades at the university ("other people cheating on homework"; "buying fake diplomas"; "cheating classmates on exams"; "cheating on tests"; "people have paid for essays", "bribing teachers to get higher grades"). They also give examples such as "on campus organization, student government", "it's hard not to encounter; sharing online pdfs of books", "messed up how university trips to take so much money from students" or the "sociology department". Two people mentioned that they had bribed the doctor such as the dentist. This result is very astonishing suggesting that the Californian students are very well-experienced with corruption.

It is also considerable what some people understand by corruption such as "friends talking behind other's back" or "people losing jobs because of personal feelings", "most global affairs are driven by resources, but usually humanitarian / "democratic" motives are presented", "False documentation, volunteer experiences", "Reduction by winterbreak by 1 week to favor a specific eht-nic/cultural group at the expense or ignorance of the oher ethnic/cultural groups on campus", "how some races are injusticely trialed for their crimes while others do not get the same level of punishment", "government has too much power, is the power really of the people/ Obama care? not optional", "Malaysian 'missing plane", "my brother is a lawyer property corruption underhand dealings", "NSA", "my father bribes a lot of people to "look away" from his immoral doings", "friends arguing with roommates about living situations" or "hook-ups at food places".

Almost 40% of the German students experienced corruption while travelling: 11% (16 people) of the respondents have been in contact while travelling in South and Latin American countries such as Argentina, Ecuador, Columbia or Mexico; ; 8% (12 participants) in South Asian countries such as in India, Indonesia, Vietnam, Malaysia and Bali; 6% (8 people) in African states such as Uganda, Tansania or Kenya; 3% (5 people) in Eastern Europe such as Russia, 6% (8) in South European countries such as Greece and Spain. Moreover, 11% of the German participants associated corruption with politics and government and mentioned examples such as "Wulff-Affäre" or "Karl-Heinz Schreiber-CDU Spendenaffäre." 7% (10 people) mentioned "Berlusconi" or "Italy", the ADAC

(2%), 3% soccer, 6% of the students have heard from corruption at the university ("Liebeskind-Bau"; "Audimax"). 3% associated corruption with managers and private companies such as "Siemens", 3% with the "USA-Waffenlobby", 3% also mentioned the "police" and 1% have been in contact with corruption in the cultural scene ("theatre"; "Künstlerauftritte"). Furthermore, the German students seemed to be well-informed by the media because 8% (12 students) mentioned that they heard about corruption by the "media", "news" and "documentatries".

#### **Concluding Remarks**

This study has analyzed the propensity to engage in and to punish corrupt behavior in the context of a three-person sequential move-game in the U.S. and Germany in 2013/2014. I could show that almost 70% of the Californian offered and accepted a bribe. In Germany almost 50% of German particiants took the opportunity to offer and 40% accepted a bribe. This does not confirm the study's assumption that in environments that are characterized by lower levels of corruption, individuals have a lower propensity to engage in corrupt actions. I assume that an individual's actions are shaped by their everyday corruption experiences determined by the culture of the countries in which they live. The results argue for a "cultural transmission of corruption" and are, particularly, in line with the research of Hauk and Saez-Marti (2002). This should also imply a society's ability to build anti-corruption norms, because, if culture transmits corruption, the same should be possible for counter-measures. Regression analyes show that the higher propensity to engage in corrupt acts in the U.S. could, particularly, be related to the higher degree of individualism implying that people are rather supposed to look after themselves and care less of the well-being of their society.

Yet, asking the firms the reasons for their behavior, 78% of the U.S. and 59% of the German people claimed that they bribed because they were just interested in seeing the response of the official and citizens. This answer rather suggests that the participants are reciprocal actors who like playing games and might indicate that the majority of the students bribed because they were curious about the further procedure of the game. However, the believability of what people indicate as their motivations has to be viewed with caution as we as humans typically are very good at coming-up with self-serving justifications for our behavior (Haidt 2001). These findings could also be a social desirability bias in their responses as they know that corruption is not an acceptable form of behavior. This, in turn, would correspond to the corruption-culture-nexus. Finally, I assume that the participants acted selfishly and came up with alternative explanations because all of these actions were visible to the citizens and the firms did know that and nonetheless bribery occurred frequently.

I have also found that in both countries the probability of bribing decreases if the participants have work experience and increases with the time the participants spent in other countries. Additionally, in Germany men have a higher propensity to bribe than women, while in California males tend to give higher bribes compared to females. This illustrates that there are still differences in the behavior of men and women and the latter might be more scared of potential consequences and risks. Looking at the reasons for non-bribery, the majority of the non-bribers in both countries explained their decision by ethical and fairness reasons. This implies that people seem to be motivated by improving their environment and avoid violating norms of fairness and morality. In Germany, participants even mentioned that they don't want that an environmental regulation is avoided implying that there are high standards of morality and interests in the welfare of the society.

Officials' answers in both countries show a similar result. Of those who rejected the bribe, most of them either stated it was because of moral reasons and fairness or they were scared of potential consequences and risks. They also wanted to reduce corruption, which is in line with my assumption that people are willing to punish unfair behavior (negative reciprocity), even when such punishment is costly and they do not benefit personally.

In the U.S., 52% of citizens punished corrupt acts, compared to 80% in Germany. For the German sample, this finding reveals that people seem willing to sanction behavior which is socially regarded as immoral when they see it in others or when they are victimized by it. This confirms arguments made in previous studies that the extent to which individuals care about others regarding preferences like fairness or morality may depend on whether they are predators or potential victims (Fehr and Schmidt 1999; Bolton and Ockenfels 2000). I also found a relationship between punishment and an individual's field of study in the Californian sample. Participants that study economics, engineering, pharmacy, computer science or psychology students punished less compared to other students. Moreover, there is a significant relationship between the punishment of corrupt actions and individualism as well. However, 48% of the Californian and 50% of the German citizens who punished chose the lowest amount of 2 experimental dollars, although they had the opportunity to use a very effective punishment system for corrupt actions. I suppose that people who chose the lowest

amount of punishment did it because they just wanted to give the corrupt actors a "shot across the bows". At the same time they were reluctant to use the higher punishment because it is always connected to higher transaction costs.

As for the reasons for punishment, almost 70% of the Californian and 90% of the German participants stated that they did it because of moral and fairness reasons, and to reduce corruption. I could also find significant relationship between gender in the German sample. Men tended to punish with the highest amount, while the majority of women chose the lowest amount of punishment. This indicates that women might be less risk-averse than men and are more aware of potential consequences of high amounts of punishment. This is conclusive with findings of earlier studies on gender and corruption (Gottfredson and Hirschi 2004).

The Californian and German results are in line with the corruption scores done by Transparency International. While this is an issue worthy of additional research, we know that the results reflect attitudes towards corruption rather than corrupt actions or punishment per se. Furthermore, the U.S. and Germany are functioning democracies with a free press and the majority of the participants were very well-informed about corruption scandals in their country. Compared to countries with high levels of corruption or less democratic traditions, such as India or Indonesia, corruption receives more attention in German and U.S. media and was a major issue at the time when the experiments were conducted. The respondents have been sensitized to this issue and were influenced in their attitudes and actions towards corruption. They mentioned, for example, "the news", "the media" and "I see corruption in the news on TV." This would be in line with the study of Brunetti and Weder (2003) who find evidence of a significant negative relationship between freedom of the press and corruption. Moreover, based on the results of Brazil's anti-corruption program, Ferraz and Finan (2008) show that the media can enable voters to hold corrupt politicians accountable and to reward non-corrupt politicians by reducing informational asymmetries. Gentzkow et al. (2004) also discuss how the rise of informative media may have been one of the reasons why corruption declined in the U.S. That is why the role of media should be included in further research on the propensity to engage in and punish corrupt actions.

Other possible avenues for future research might include experimental research involving other countries with different levels of corruption, particularly since the results suggest that the existing corruption indices might not be fully capturing how individuals behave in corrupt environments. In general, the differences between my results and what one would expect to observe in these countries based on the existing corruption indices suggest that experimental approaches can be used as an alternative methodology for eliciting attitudes towards corruption. Policymakers value more forward-looking measures that assess an individual's propensity to support anti-corruption policies in the future. My study suggests that experimental methodology can provide such information. Subsequent studies should also look at how behavioral ethicists can increase the degree to which behavior in institutions conforms to generally accepted norms and promotes ethical behavior in societies to prevent corruption in the future. So that the saying will finally be: "Well if nobody seems corrupt, why should I be corrupt."

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## APPENDIX

	Dependent Variable: Bribed as a Firm		
Variables			
	(1)	(2)	
Gender	-0.712*		
	(0.414)		
Religion	-0.057		
	(0.083)		
Field of Study	-0.022		
	(0.032)		
Work Experience	-0.954*		
	(0.501)		
Time spent in other countries		0.023	
		(0.019)	
Corruption Experience		0.740	
		(0.674)	
Wish to work in private or public sector		-0.430	
		(0.267)	
Constant	1.424**	0.432	
	(0.639)	(0.635)	
Observations	101	111	
Pseudo R2	0.0513	0.0364	
Prob > chi2	0.0961	0.1657	

#### TABLE 1A, BRIBED AS A FIRM: GERMANY

Note: Standard errors in parentheses\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

#### TABLE 1B, BRIBED AS A FIRM: U.S.

Voriables	Dependent Variable: Bribed as a Firm	
variables	(1)	(2)
Gender	-0.318	
	(0.418)	
Religion	-0.003	
	(0.065)	
Field of Study	-0.015	
	(0.020)	
Work Experience	-0.779*	
	(0.449)	
Time spent in other countries		0.008*
		(0.005)
Corruption Experience		0.103
		(0.541)
Wish to work in private or public sector		0.286
		(0.243)
Constant	1.635***	-0.236
	(0.630)	(0.611)
Observations	122	108
Pseudo R2	0.030	0.036
Prob > chi2	0.451	0.166

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#### TABLE 2A, AMOUNT OF BRIBE: GERMANY

	Dependent Variable: Amo	ount of Bribe	
Variables			
	(1)	(2)	
Gender	-0.986		
	(0.594)		
Religion	-0.075		
	(0.122)		
Field of Study	-0.015		
	(0.047)		
Work Experience	0.152		
	(0.638)		
Time spent in other countries		0.034	
		(0.032)	
Corruption Experience		0.364	
		(0.880)	
Wish to work in private or public sector		-0.524	
		(0.376)	
Constant	7.013***	6.968***	
	(0.751)	(0.898)	
Observations	49	42	
Prob > F	0.4815	0.4537	
R-squared	0.0744	0.0658	

#### TABLE 2B, AMOUNT OF BRIBE: U.S.

	Dependent Variable: Amount	of Bribe	
Variables			
	(1)	(2)	
Gender	-1.073**		
	(0.477)		
Religion	0.0157		
	(0.0762)		
Field of Study	-0.0170		
	(0.0277)		
Work Experience	0.544		
	(0.464)		
Time spent in other countries		0.002	
		(0.003)	
Corruption Experience		0.278	
		(0.652)	
Wish to work in private or public sector		0.319	
		(0.294)	
Constant	6.577***	5.332***	
	(0.648)	(0.772)	
Observations	79	69	
Prob > F	0.090	0.677	
R-squared	0.101	0.023	

Note: Standard errors in parentheses\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

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#### TABLE 3A, ACCEPTANCE OF BRIBE: GERMANY

	Dependent Variable: Accep	tance of Bribe
Variables	(4)	
	(1)	(2)
Gender	-0.214	
	(0.639)	
Religion	0.066	
	(0.140)	
Field of Study	-0.014	
	(0.057)	
Work Experience	0.498	
	(0.842)	
Time spent in other countries		-0.024
		(0.028)
Corruption Experience		0.273
		(0.759)
Wish to work in private or public sector		-0.298
		(0.430)
Constant	-0.889	0.0929
	(1.015)	(0.951)
Observations	51	46
Pseudo R2	0.010	0.025
Prob > chi2	0.952	0.685

Note: Standard errors in parentheses\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

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#### TABLE 3B, ACCEPTANCE OF BRIBE: U.S.

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	Dependent Variable: Acce	ptance of Bribe	
Variables			
	(1)	(2)	
Gender	-0.062		
	(0.521)		
Religion	0.126		
	(0.086)		
Field of Study	-0.011		
	(0.020)		
Work Experience	0.207		
	(0.494)		
Time spent in other countries		-0.000	
		(0.004)	
Corruption Experience		-0.226	
		(0.603)	
Wish to work in private or public sector		-0.158	
		(0.320)	
Constant	0.245	1.124	
	(0.592)	(0.812)	
Observations	80	72	
Pseudo R2	0.025	0.004	
Prob > chi2	0.625	0.937	

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### TABLE 4A, PUNISHMENT OF BRIBE: GERMANY<sup>18</sup>

	Dependent Variable: Pun	shment of Bribe	
Variables			
	(1)	(2)	
Religion	-0.001		
	(0.274)		
Field of Study	-0.269		
	(0.426)		
Time spent in other countries	-	0.166	
		(0.124)	
Corruption Experience		-1.439	
		(1.912)	
Wish to work in private or public se	ector	-1.540	
		(1.297)	
Constant	1.623	3.518	
	(1.676)	(3.437)	
Observations	12	16	
Pseudo R2	0.029	0.214	
Prob > chi2	0.801	0.277	

Note: Standard errors in parentheses\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

<sup>&</sup>lt;sup>18</sup> I had to exclude the variable gender and work in this model because of too less obervations.

#### TABLE 4B, PUNISHMENT OF BRIBE: U.S.

	Dependent Variable: Punis	hment of Bribe	
Variables	(1)	(2)	
Gender	0 264		
	0.204		
	(0.676)		
Religion	0.107		
	(0.104)		
Field of Study	0.101**		
	(0.0422)		
Work Experience	0.314		
	(0.597)		
Time spent in other countries		-0.005	
		(0.004)	
Corruption Experience		-0.726	
		(0.806)	
Wish to work in private or public sector		-0.057	
		(0.357)	
Constant	-2.179**	0.503	
	(1.038)	(0.904)	
Observations	55	50	
Pseudo R2	0.125	0.034	
Prob > chi2	0.048	0.500	

#### TABLE 5A, AMOUNT OF PUNISHMENT: GERMANY

	Dependent Variable: Ame	ount of Punishment
Variables	(1)	(2)
	(1)	(2)
Gender	-7.930**	
	(2.601)	
Religion	-0.692	
	(0.460)	
Field of Study	-0.604	
	(0.711)	
Work Experience	2.339	
	(2.727)	
Time spent in other countries		0.275
		(0.163)
Corruption Experience		4.655
		(3.303)
Wish to work in private or public sector		-4.064**
		(1.584)
Constant		11.46**
		(3.708)
Observations	14	11
Prob > F	0.030	0.055
R-squared	0.662	0.639

#### TABLE 5B, AMOUNT OF PUNISHMENT: U.S.

	Dependent Variable: Amo	unt of Punishment	
Variables			
	(1)	(2)	
Gender	-2.791		
	(2.576)		
Religion	-0.233		
	(0.405)		
Field of Study	-0.007		
	(0.100)		
Work Experience	-0.228		
	(2.227)		
Time spent in other countries		-0.015	
		(0.020)	
Corruption Experience		1.622	
		(3.241)	
Wish to work in private or public sector		-0.904	
		(1.261)	
Constant	10.92***	9.045***	
	(3.371)	(3.139)	
Observations	29	27	
Prob > F	0.779	0.673	
R-squared	0.068	0.063	

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#### TABLE 6A, BRIBED AS A FIRM: TOTAL SAMPLE

	Dependent Variable: Bribed as a Firm
variadies	(1)
Gender	-0.634*
	(0.328)
Religion	-0.026
	(0.053)
Field of Study	-0.013
	(0.018)
Work Experience	-0.837**
	(0.363)
Time spent in other countries	0.009*
	(0.005)
Corruption Experience	0.431
	(0.431)
Wish to work in private or public sector	0.054
	(0.190)
Individualism	0.747**
	(0.351)
Constant	0.065
	(0.727)
Observations	206
Pseudo R2	0.0791
Prob > chi2	0.0043

#### TABLE 6B, AMOUNT OF BRIBE: TOTAL SAMPLE

	Dependent Variable: Amount of Bribe
Variables	(1)
Gender	-1.544***
	(0.404)
Religion	-0.043
	(0.064)
Field of Study	-0.001
	(0.024)
Work Experience	0.619
	(0.394)
Time spent in other countries	0.001
	(0.003)
Corruption Experience	0.210
	(0.496)
Wish to work in private or public sector	0.367
	(0.231)
Individualism	-0.130
	(0.439)
Constant	6.276***
	(0.880)
Observations	111
Prob > F	0.029
R-squared	0.150

#### TABLE 6C, ACCEPTANCE OF BRIBE: TOTAL SAMPLE

/ariables	
Gender	-0.326
	(0.437)
Religion	0.067
	(0.075)
Field of Study	-0.011
	(0.020)
Work Experience	0.470
	(0.460)
Time spent in other countries	-0.001
	(0.004)
Corruption Experience	-0.058
	(0.495)
Wish to work in private or public sector	-0.164
	(0.262)
Individualism	1.595***
	(0.507)
Constant	-2.256**
	(0.932)
Observations	115
Pseudo R2	0.0887
Prob > chi2	0.0806

TABLE 6D,	, PUNISHMENT	OF BRIBE:	TOTAL	SAMPLE
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Variables	
	(1)
0 an dan	0.005
Gender	-0.035
	(0.752)
Religion	0.152
	(0.106)
Field of Study	0.105**
	(0.048)
Work Experience	0.424
	(0.639)
Time spent in other countries	-0.004
	(0.005)
Corruption Experience	-0.495
	(0.773)
Wish to work in private or public sector	-0.112
	(0.409)
Individualism	-1.915**
	(0.836)
Constant	2.128
	(1.681)
Observations	65
Pseudo R2	0.159
Prob > chi2	0.077

/ariables	Dependent Variable: Punishment of Bribe
variadies	(1)
Gender	-4.145*
	(2.176)
Religion	-0.532
	(0.314)
Field of Study	-0.001
	(0.090)
Work Experience	2.142
	(1.901)
Time spent in other countries	-0.020
	(0.021)
Corruption Experience	1.802
	(2.556)
Wish to work in private or public sector	-1.527
	(1.036)
Individualism	1.559
	(2.197)
Constant	12.52**
	(4.574)
Observations	38
Prob > F	0.229
R-squared	0.281

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#### TABLE 6E, AMOUNT OF PUNISHMENT: TOTAL SAMPLE

Experim Please fil Code Nur FIRM 1.	ents: out the following document: nber: □ OFFICIAL □ CITIZEN Age:years
2.	Gender:  □ FEMALE  □ MALE
3.	Field of Study:
4.	Semester:
5.	Work Experience:  Que YES Que NO
	If yes, where and how long (in months):
6.	Religion:       □       CATHOLIC       □       PROTESTANT       □       MUSLIM       □       HINDU       □       ATHEIST       □       Other       □
	None
7.	Income:
8.	Time spent in other countries (months):
9.	Reasons for your behavior:
	<u>FIRM</u>
	Bribe?
	<b>IF, YES:</b> D PAYOFF MAXIMATION D FOR THE SOCIAL / ECONOMIC GOOD OF THE COUNTRY (e.g. reduce unemployment etc.)
	□ TO SEE THE RESPONSE OF THE OFFICIAL / CITIZEN
	OTHER REASONS
	<b>IF, NO:</b> □ MORALITY □ TO REDUCE CORRUPTION (SOCIAL COST) □ PROFIT-MAXIMISATION (IN THE
	LONG RUN IT IS BAD FOR THE FIRM) $\square$ NOT NECESSARY FOR FIRMS TO BRIBE $\square$ EQUITY
	OTHER REASONS
	OFFICIAL
	ACCEPT?
	IF, YES:  □ NECESSARY FOR FIRMS TO BRIBE / WILL BE ABLE TO HELP THE FIRM □ NECESSARY BE-

CAUSE SALARIES ARE LOW  $\ \square$  PAYOFF MAXIMATION  $\ \square$  EQUITY  $\square$  GAME WILL CONTINUE

OTHER REASONS

**IF, NO:** DORALITY DOREDUCE CORRUPTION (SOCIAL COST) DORALDOF IMPLICATIONS / RISK PAYOFF MAXIMISATION DORALING BRIBE TOO SMALL OTHER REASONS\_\_\_\_\_\_

#### **CITIZEN**

PUNISH?

**IF, YES:** 
□ MORALITY □ REDUCE CORRUPTION □ FAIRNESS □ NEGATIVE RECIPROCITY □ OTHER REASONS

**IF, NO:** DAYOFF MAXIMISATION DIFFICULT TO CHANGE THE SYSTEM DIREFFECTIVE PUNISHMENT SYSTEM

□ BRIBE MAY BE FOR A GOOD PURPOSE OR MAY BE NECESSARY □ OTHER REA-SONS\_\_\_\_\_

**10.** After graduating do you wish to work in the private or public sector?

#### 11. Hear about or come in contact with corruption?

PERSONALLY IN YOUR WORKPLACE
 PERSONALLY AT UNIVERSITY
 VIA FRIENDS / FAMILY
 VIA MASS MEDIA (TV, NEWSPAPER, RADIO)
 NO CONTACT
 If, Yes: Example: