Introduction

Corruption has detrimental societal effects. Corruption raises prices, distorts fair competition, and undermines trust in governments (Chan, 2000; Osborne, 2013). To effectively counter corruption, insight into its causes is vital. The aim of this PhD thesis is to gain insight into why people engage in corruption. The form of corruption I focus on is bribery. Bribery requires the involvement of at least two individuals: a bribe-giver and a bribe-taker. This PhD thesis is limited to the commonest form: the bribery of public officials by employees of companies (Rose-Ackerman, 1997). The aim is to offer more insight into why employees of companies bribe public officials (active bribery) and why officials take bribes from employees of companies (passive bribery). This PhD thesis, therefore, searches for explanations for the behavior of both parties involved, as it “takes two to tango”.

A large amount of research has been conducted into the causes of corruption (de Graaf, von Maravić, & Wagenaar, 2010). The vast majority of this research searches for explanations for differences between countries: why is corruption widespread in some countries and far less prevalent in other countries (Collins, Uhlenbruck, & Rodriguez, 2009; Dong, Dulleck, & Torgler, 2012; Svensson, 2003)? This research revealed that, among other aspects, the duration of democracy in a country appears to be related to the perceived level of corruption: the longer the duration, the less corruption seems to occur (Treisman, 2000). However, such macro factors influencing corruption are rather stable, and difficult to change. This knowledge, therefore, provides no easy solutions to prevent corruption in the short term. Moreover, it does not offer an explanation for variations in corruption within countries: why is corruption more prevalent in some organizations than in others, why within organizations or departments do some people engage in corruption while their colleagues do not, and why does a particular person engage in a corrupt collaboration with one business contact but not with another? Corruption researchers have paid relatively little attention to answering these questions. The goal of this PhD thesis is to provide insight into these under-researched ‘type’ of factors that may influence corruption which are: 1) characteristics of public officials and employees of companies who are prone to corruption, 2) characteristics of their organizations, and 3) characteristics of their (corrupt) relationships. In doing so, this PhD thesis not only considers how individual, organizational and interactional factors separately affect corruption but also how they do so in combination.

Various research methods have been employed to gain insight into possible causes of corruption: questionnaires (see for instance Tavits, 2010), experiments (see
for instance Köbis, Van Prooijen, Righetti, & Van Lange, 2015), and case studies (see for instance de Graaf & Huberts, 2008). Each of these methods has important advantages but each method also has weaknesses (Johnston, Leach, & Liu, 1999). For example, questionnaires can provide insight into which factors (most strongly) correlate with corruption by questioning large and representative samples. A disadvantage of questionnaire research, however, is the risk of socially desirable response behavior; people can falsely deny corrupt tendencies (Torfason, Flynn, & Kupor, 2013). In addition, questionnaire studies cannot establish cause-and-effect relationships. Experiments do permit identifying causes of corruption, and allow to observe real behavior (Köbis et al., 2015; Sequeira, 2012). A drawback of experiments, however, is their often artificial environments, which may bear little resemblance to real-life situations (Sequeira, 2012). It is, therefore, not clear whether people who make corrupt decisions in an experimental study would do so in real life as well. Case studies enable profound examination of real-world situations where people actually engaged in corruption (Johnston et al., 1999; Luck, Jackson, & Usher, 2006). A shortcoming of case studies is that the results are usually based on a limited number of cases (de Graaf & Huberts, 2008). In addition, case studies necessarily only consist of detected cases, which may not be representative of all corruption occurring. Moreover, similar to questionnaires, case studies do not allow to establish whether the variables studied are actual causes of corruption. In short, each of the methods has certain advantages but also disadvantages. That is why in this PhD thesis I apply a combination of research methods: if different methods show similar results, this increases confidence in the results, even more so if the studies are carried out under representative samples; in this case, among people who actually work as a public official or an employee of a company and who are likely to encounter the opportunity to bribe or be bribed in their professional life.

**Outcomes of the studies**

To gain more insight into which individual, organizational and interactional factors influence corruption, separately and in combination, I conducted four studies: two questionnaire studies, an experimental study, and a case-study analysis. The questionnaires and the experiment were administered to large samples of public officials and business employees, who frequently interacted professionally with employees of the other sector, while carrying out tasks concerning which they had decision-making powers. Below, is a summary of the outcomes of the four studies for each type of factor included in my studies, after which I discuss the practical implications of the research.
Individual factors
Corruption ultimately results from decisions made by individuals. In the first study (a questionnaire study) the main question was: which individual factors can explain proneness to corruption. I investigated whether the following motives are related to corruption-proneness: perceived costs and benefits of corruption, perceived opportunities to engage in and to refrain from corruption, and personal and social norms on corruption. The results suggest that public officials and business employees are more prone to engage in corruption if they perceive higher benefits and lower costs (in this case a lower risk of being caught and lower sanctions) of corruption; if they perceive more opportunities to engage in and less opportunities to refrain from corruption; if they feel less morally obliged to refrain from corruption; and if they think their colleagues accept and engage in corruption. The key predictors, that is the individual factors that uniquely contribute to the explanation of corruption, were perceived opportunities to refrain from corruption and personal and social norms on corruption, while perceived opportunities to engage in corruption and the perceived costs and benefits of corruption did not explain unique variance in corruption. The results were similar for employees of companies and public officials and thus for both the active and the passive sides of bribery. These results were replicated in the second questionnaire study.

Next, I examined whether these same factors were present in the files of actual bribery cases. The criminal files indicated that the offenders were after both financial gains and less tangible benefits; they deliberately tried to reduce the chances of detection; they perceived or created opportunities to engage in corruption; they did not recognize the severity and moral reprehensibility of their actions; and they thought their close colleagues accepted and also engaged in corruption. Hence, it appears that the questionnaire studies and case studies yielded similar results on which motives are related to corruption, providing important convergent evidence for their possible influence on corruption.

The corruption literature so far assumed that particularly economic factors such as estimated costs and benefits explain corruption (Andvig et al., 2001; Dong et al., 2012; Shover & Bryant, 1993). Importantly, the studies reported in this PhD thesis conjointly show that in addition to costs and benefits, other factors, especially personal and social norms, play a role, and perhaps even a more crucial role. The view that corruption is merely the result of a rational assessment of risks and benefits seems too limited, and perhaps even incorrect. Rather, the results of this PhD thesis suggest that corruption is particularly a moral issue and not primarily the result of a cost-benefit analysis.
Organizational factors

Corruption occurs in an organizational context. It is, therefore, important to not only investigate the role of the ‘bad apple’, but also that of a possible ‘corrupting barrel’. What is the role of organizational characteristics in corrupt transactions between public officials and employees of companies? In the second questionnaire study I investigated whether the ethical climate of an organization is related to corruption-proneness of its employees. If maximizing self-interest is seen to be the dominant criterion when making decisions in an organization, the organizational climate can be characterized as predominantly egoistic. If maximizing the interests of others and society is seen to be the dominant decision criterion, the organizational climate can be characterized as predominantly ethical (Arnaud & Schminke, 2006; Kish-Gephart, Harrison, & Treviño, 2010). The results of this study suggest that people who work in a more egoistic and less ethical climate are more prone to engage in corruption. Subsequently, six weeks after administering the questionnaire study, I conducted an experimental study among the same participants to examine to what extent the ethical climate of organizations causally influences corrupt decisions of employees. In the experiment, the professional identity of the participants either was made salient or not (see Cohn et al., 2014), after which participants played a corruption game (see Köbis et al., 2015). The results showed that among the participants whose professional identity was salient, a more egoistic climate led to more corrupt decisions, while a more ethical climate led to less corrupt choices. If the professional identity of the participants had not been made salient, the perceived ethical climate of their organization did not influence their choices to engage in corruption in the corruption game. This means that I found a causal relationship between the perceived ethical climate of companies and corrupt decisions of employees: an organizational climate that is perceived to be predominantly egoistic increases the likelihood of corruption. This is the first study that reveals a causal relationship between the ethical climate of an organization and corruption, indicating that ‘bad barrels can cause apples to rot’. In addition, the study revealed that the decisions of the participants in the corruption game were significantly and positively related to their self-reported proneness to engage in corruption at work. This indicates that the corruption game was not ‘just a game’, but actually provides insight into the corruption-proneness of employees in real life.

The case studies indicate that, in addition to the ethical climate, other organizational factors also play a role in corruption. The study showed that relevant anti-corruption measures were lacking in the organizations of the corrupt officials, such as separation of duties, job rotation and adequate controls. In addition, the files suggest that supervisors of corrupt officials did not properly monitor the corrupt officials and their
activities, did not always set the right example, and did not respond adequately to warning signals. Although corruption is committed by individuals, the experiment and the case studies suggest that the apple might not have gone bad without a ‘moldy’ barrel.

**Interactional factors**

A corrupt collaboration requires not only two motivated perpetrators; they also need to interact. Little is known about which factors in the interaction between people influence the likelihood of them engaging in a corrupt collaboration. The results of the case studies suggest that interactional factors indeed play a role, both in the onset of corrupt collaborations and in the continuation thereafter. The officials and the company representatives who bribed them generally maintained long-term and (increasingly) intensive contacts, and exchanged gifts that gradually seemed to increase in both size and frequency. These findings indicate that a relatively long, intensive and personal relationship can increase the risk of corruption, especially if the officials and company representatives also meet each other outside work and working hours, which may slowly blur the boundaries between their work and private lives. This could lead to the emergence of corrupt collaborations that not only persist but also become increasingly serious over time.

**Interplay factors**

The aim of the second questionnaire study was to gain insight into how organizational and individual factors, in concert, shape corruption. More specifically, I examined whether the ethical climate of organizations directly affects employees’ corruption-proneness, or through individual factors. The results indicate that ethical climate influences corruption of employees via personal and social norms. In particular, the results indicate that public officials and company employees who work in a more egoistic climate, experience weaker personal norms to refrain from corruption, which, in turn, increases their proneness to corruption; moreover, employees of companies working in a more egoistic climate additionally experience weaker social norms to refrain from corruption, making them more corruption-prone. In contrast, employees in a more ethical climate seem to experience stronger social and/or personal norms to refrain from corruption, decreasing their proneness to engage in corruption. The case studies show that, in addition to organizational and individual factors, interactional factors also play a role in corruption; the three factors not only co-occurred in the bribery cases, but also seemed to influence and reinforce each other. Corruption therefore does not seem to be the result of one or a limited number of ‘prominent factors,’ but rather, the result of a combination of individual, organizational and interaction factors co-occurring and reinforcing each other, together creating a toxic mix.
Practical implications

This PhD thesis into explanations for corruption is an important contribution to the corruption literature, where the focus has been on macro factors influencing corruption. Based on my research, a number of recommendations can be made for measures to deter those who ultimately make the corrupt decisions: individuals.

Individual factors: The conclusion that corruption seems primarily a moral issue rather than a rational cost/benefit decision, implies that increasing the chance of detection and severity of sanctions is not the only or most effective way of preventing corruption. This is an important finding because many anti-corruption policies mainly aim to change the costs and benefits of corruption. The results of my research suggest that it is especially important to reinforce personal and social norms to refrain from corruption, and to make it as easy as possible for employees to do so.

Organizational factors: This PhD thesis shows that organizational characteristics, in particular the ethical climate of organizations, can influence corrupt choices. This finding means that organizations are not only capable of combating corruption but can also be held responsible for doing so. Since ethical climate causes corruption, creating an ethical climate and discouraging an egoistic climate may be effective ways to prevent corruption. This can be done, for example, by abolishing incentive structures that encourage employees to base their decisions on self-interest, and instead by encouraging employees not to primarily reason on the basis of self-interest but to also consider the interests of others and society as a whole.

Interactional factors: Taking measures on the organizational level may positively impact interactional factors that seem to promote corruption. By implementing measures such as separating duties and ensuring task rotation, employees’ opportunities for engaging in corruption is restricted since they can less easily engage in an intensive and long-term relationship with business relations. Moreover, by performing inconspicuous checks, irregularities may be detected sooner, which may diminish the likelihood of employees becoming entangled in a corrupt collaboration with a business contact that gradually increases in severity.

Interplay factors: Although organizations can take anti-corruption measures on all three levels, this PhD thesis suggests it may not be necessary to take measures targeting all factors and at all levels. The toxic mix that occurs when various factors, at different levels, converge, may not arise if measures target a ‘main ingredient’ of the mix; a factor that affects other factors at other levels. A single anti-corruption measure targeting a key antecedent of corruption could therefore have a widespread
effect, precisely because the factors are related. By targeting a key factor, the ‘toxic mix’ may be neutralized, and perhaps even prevented. Ethical climate could be such a key factor: ethical climate influences corruption, and influences personal and social norms on corruption. Measures aimed at strengthening the ethical climate of the organization may thus strengthen employees’ personal and social norms to refrain from corruption, which implies that such an intervention may not only reduce corruption, but strengthen employees’ motivation to refrain from corruption, thereby consolidating changes.