

FUNDAÇÃO GETULIO VARGAS – ESCOLA DE ADMINISTRAÇÃO DE
EMPRESAS DE SÃO PAULO

ANDRÉA OLIVEIRA DE CARVALHO E SILVA

WHEN DOES IT PAY TO BE CORRUPT IN THE PRIVATE SECTOR?

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Estratégia Empresarial

Orientador: Prof. Dr. Paulo Roberto
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DEDICATÓRIA

To my husband Chen Yen-Tsang, for have given me all the support that I needed.

To the little Eva, my daughter, my motivation to keep going.

To all women that are also mothers. May they also have the support to reach for their dreams.

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EPÍGRAFE

Quem não faz “negociata” leva a pior.

Paulo Roberto Cortez, 2014, em grampo da Polícia Federal.

RESUMO

Corrupção entre agentes privados é um fenômeno que afeta enormemente tanto as firmas quanto os países em que operam. Ambos aspectos contextuais e comportamentais do processo decisório sob risco de corrupção foram estudados previamente. Contudo, como o fenômeno é muito complex, o campo carece de entendimento sobre relações causais e de modelos abrangentes para corrupção privada.

Dadas as oportunidades de pesquisa descritas, esse estudo investigou quando vale se corromper no setor privado. Para realizar esse estudo, empregou-se um *anecdotal field experiment* 3x2 (risco – alto, médio e baixo e corrupção como regra do jogo/ não é regra do jogo) através da técnica de cenários, emulando uma situação de compra e venda. Esse experimento contou com uma amostra de n=168 respondentes; os respondents tinham, em media, tanto experiência de trabalho quanto familiaridade com o processo de compra e venda B2B. Através da teoria de escolha racional e de utilidade esperada, essa dissertação combinou a influência de fatores individuais e contextuais para o processo decisório, revelando os mecanismos através dos quais quem toma a decisão opta por agir ou não de forma corrupta. Foi possível estabelecer relações causais entre normas sociais informais e risco de punição na inclinação em se corromper. Além disso, o presente estudo investigou a robustez das relações entre as variáveis empregando três métodos para analisar os dados empíricos. As variáveis foram analisadas aos pares através de ANOVA e modeladas em conjunto através de dois métodos: OLS e SEM-PLS.

A contribuição dessa dissertação para a literatura é tripla: teoricamente, contribuiu ao reforçar que a teoria das escolhas racionais é adequada para a investigação do processo decisório sob risco de corrupção no setor privado; metodologicamente, foi construído um modelo integrado de múltiplas causas para corrupção, explorando também as relações de mediação – oferecendo, portanto, uma importante contribuição à literatura, que carecia de modelos abrangentes para corrupção e em que a maioria das relações causais era desconhecida; por fim, contribui para a prática ao questionar as políticas atuais para o combate à corrupção: Foi descoberto que, embora haja evidências de que limitações à racionalidade, as pessoas se comportam basicamente de forma racional ao optar por se envolver ou não em corrupção; no entanto, ainda que tenhamos encontrado evidências de que estratégias punitivas baseadas nessa premissa seriam efetivas na redução da corrupção, outras políticas baseadas em questões morais devem se fazer necessárias para que se combata esse problema.

Palavras-chave: 1. Corrupção privada. 2. Processo decisório (Ética). 3. Experimento. 4. Teoria da escolha racional.

ABSTRACT

Private-to-private corruption is a phenomenon that greatly affects both firms and countries they operate in. Both contextual and behavioral aspects of decision-making under corruption risk have been previously studied. However, as the phenomenon is very complex, the field lacks on understanding the causal relationships and comprehensive models for private-to-private corruption.

Given the described research opportunities, this study investigated when it pays to be corrupt in the private sector. To conduct this study, it was employed a 3x2 (risk – high, medium, low and business as usual/not as) anecdotal field experiment through the vignette technique, emulating a procurement process. This experiment had a sample of n=168; respondents had, in average, both work experience and familiarity with the B2B procurement process. Through rational choice and expected utility theory, this thesis was able to combine contextual and individual factors for decisional process, disclosing the mechanisms through what a decision-maker opt whether to act or not corruptly. It was possible to establish the causal relationship of informal social norms and the risk of punishment in corruption inclination. Also, the present study assessed variables relationships' robustness through employing three methods to analyze the empirical data. Variables were modeled jointly through two methods: OLS and SEM-PLS.

This thesis contribution to literature is threefold. In the theoretical perspective, it contributed to literature by reinforcing rational choice theory appropriateness as a framework for studying decision making under corruption risk in the private sector. In the methodological perspective, there were built integrative multiple causation models for corruption (exploring mediating relationships, also), giving an important contribution to literature, which lacked on comprehensive models for corruption and where causal relationships were mostly ignored. In the practical perspective, it contributed by questioning current policy-making strategies: it was found that, despite bounded rationality evidences, people behave mostly rationally when deciding to engage or not in corruption. However, even then we found that punitive strategies that are based on this premise are effective on diminishing corruption, which implies the fact that other policies based on moral issues should be needed to combat this problem.

Keywords: 1. Private corruption. 2. Decision-making process (Ethics). 3. Experiment. 4. Rational Choice Theory.

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List of Acronyms

ANOVA: Analysis of Variance.

B2B: Business to Business.

OLS: Ordinary Least Squares.

PLS: Partial Least Squares.

SEM: Structural Equation Modelling.

1. Introduction

Despite the growing attention that has been given to the corruption theme, we lack on true comprehension of this phenomenon, its causes, consequences and preventative measures (Calderón & Arce, 2007). This shortage of understanding is even more pronounced when it comes to private corruption: although the private sector's major role in public corruption is no secret, recognition that corruption can occur outside of the public sphere has been limited (R. Li, 2013).

Recognizing that private corruption happens opens the door, in turn, to the recognition that private parties may also engage in corrupt transactions with other private parties (Wedeman, 2013). Nevertheless, private-to-private corruption has been relatively under-addressed, even though private corruption has serious organizational consequences and damages for the countries' economic growth (Dridi, 2013; Gopinath, 2008). Publications on this sub-topic of corruption began to appear in the late 90's on business management and related areas and grew in numbers only in the 2000's (Figure 5: Number of References by Year in Appendix 4 – Structured Literature Review).

Even if most authors tend to define corruption from their specific area point-of-view, it is mostly understood as an economic crime, in which there is abuse of public power or position to obtain personal benefits (Faqr, Abu-Karaki, & Marashdah, 2007; Wedeman, 2013; Zhang, 2012). However, it is necessary to expand this definition to also include the corruption that emerges from the interactions among private parties, instead of focusing exclusively on public corruption (Argandoña, 2006), and to include non-criminalized practices. Therefore, in this project it was adopted Argandoña's (2005) corruption definition:

The act or effect of giving or receiving a thing of value, in order that a person do or omit to do something, in violation of a formal or implicit rule about what that person ought to do or omit to do, to the benefit of the person who gives the thing of value or a third party.

Even though some benefits were attributed to corruption, as avoiding the rigidities of bureaucracy (Calderón, 2005; Dridi, 2013), it is uncontestable that the predominant

view is that this phenomenon is overall negative. Drawing on the very idea behind the definition of corruption, that is, to do or omit to do something that is against the rules in his own benefit or for a third party, it is logical to presume that it could work against firms' best interests, threaten fair competition and, thus, misallocate resources. This would have, in turn, a negative impact on countries' development.

Even the pettiest form of corruption, such as facilitating payments, can be the initial move towards more serious forms of corruption, undermining the ethical foundations of the companies in the long run (Argandoña, 2005). Making matters worse, corruption tends to perniciously spread, from one organization to the next, from one country to abroad, through wrongdoing's learning, making its diffusion particularly insidious and the task of preventing and combating it more difficult (Argandoña, 2006).

In commercial situations between countries with different cultures and different legislations, firms from countries in which some corrupt practices are criminalized can be more prone to engage in corrupt practices with foreign firms (Levi & Raphael, 1999). Although corruption in the supply chain is utterly important when talking about corruption spread in a globalizing world, in which firms of many countries are exchanging more than goods, but practices, this subtopic has been mostly ignored by the academic community (Liu & Arthanari, 2014).

The act of corruption naturally starts at individual level. In many situations, the corrupted actors are focused on self-interest and decide to act corruptly based on the perceived benefits for themselves in detriment of his/hers duties and responsibilities (Maheshwari & Ganesh, 2006; Perreault, Keith, & Chin, 2009; Sööt, Johannsen, Pedersen, Vadi, & Reino, 2016).

In many instances of corruption, however, individual-level thought and action occur within an organizational context (Weaver & Clark, 2015). Hence, it is reasonable to consider that organizational-level corruption could also be an extension of individual exchange of good and values (Cropanzano & Mitchell, 2005; Emerson, 1976; Homans, 1958; Napal, 2006). So, to understand the nature of corruption within organizations and the prospects for its remediation, it is important to study how

individuals think and act when confronted with corruption within the context of the organizations they work in (Weaver & Clark, 2015).

Corruption is usually studied as a rational choice, where the agent opts to act or not to act corruptly (Calderon & Arce, 2007). The reason why one engage in corruption is mostly understood by utility maximization theory, where the agent rationally seeks a benefit for himself given their preferences set, weighing the probabilities of apprehension and punishment. However, as peoples' rationality is limited, it was also explored a limitation of the rational choice theory use to this phenomenon study (see Limitations of rational choice theory).

Risks of acting corruptly include a range of sanctions from tangible, monetary fines to abstract, moral costs. Understanding how decision-makers opt to act or not corruptly in the supply-chain can shed light on the main mechanisms that influence corruption. It was conducted an exploratory multiple-case study with top managers and/or owners from small sized firms to well-established multinationals to: 1) conceive a generalist model of procurement, 2) understand the steps of this process that are at risk of corruption, and 3) assess corruption mechanisms used by employees.

Based on the exploratory qualitative study results and previous literature, it was conducted a quantitative study in order to build a model for individual decision-making under corruption risk, in order to understand when it pays to be corrupt in the private sector. This thesis therefore contributed to private-to-private corruption area, which lacks especially on empirical studies (see Appendix 4 – Structured Literature Review –Table 29). Even though developing a systemic and comprehensive corruption model is no trivial task, opting for a randomized experimental approach could solve corruption studies' difficulties such as establishing causal relationships and eliminating both endogeneity and reverse causality (Calderón & Álvarez-Arce, 2006). Using a vignette-based artefactual field experiment, this study was also approximated to a real life setting, strengthening its external validity (Levitt & List, 2009).

In this 3x2 experiment, there were manipulated by this study both risk (punishment events in the past frequencies – three levels) and corruption in the business

environment (corruption as business as usual/ not as – two levels). Our sample was composed of 168 valid responses. Respondents had an average work experience greater than twelve years and were, on average, familiar to B2B procurement process.

The data was analyzed through three techniques to assess the robustness of the relationships among variables. Initially, following prior literature developments on corruption, risk and social norms, individual hypothesis were conceived and tested separately. Variables were measured by a 7-point Likert scale and compared through Analysis of Variance (ANOVA) to assess their orthogonality. Then, all variables of which relationships were tested significant were further tested jointly in the reduced form through Ordinary Least Squares technique (OLS) ($R^2=0.53$). Finally, it was built an integrative model for corruption using the Structural Equation Modelling (SEM) by Partial Least Squares (PLS) technique combined to bootstrapping technique (5000 times). Through the SEM model, it was possible to explore mediating relationships among the studied variables and, thus, to obtain a process inference. The explanatory power of the final model was expressive ($R^2= 0.543$).

This study's findings supported that both social norms and risk of punishment for engaging in corruption influences corruption inclination through rational choice mechanisms. Regarding risk, the individual risk predisposition and risk perception influence a person's inclination to act corruptly. People will use past punishment events frequencies to assess the risk of engaging on corruption. On the other hand, social norms influence a person's willingness to act corruptly through two distinct mechanisms. The first mechanism is rational and involves a positive effect of corruption being usual in the business environment and individual acceptance of the practice. Practice acceptance is partially mediated by negative emotions, a mechanism that has a positive impact on coping with social norms. Greater acceptance of corruption implies on a reduction on the intensity that these negative emotions could be experienced by an individual, therefore, raising this individual's inclination to act corruptly. The other mechanism through what social norms affect corruption inclination is corruption in the business environment: within an environment in which this is a common practice, an individual will tend to perceive the corruption risks of punishment as lower. The latter mechanism could work against an individual best

interest, therefore, showing a shortcoming of the rational choice theory applicability for corruption decision-making studies.

This way, the present thesis contributed to current knowledge on corruption by demonstrating the causal effect of risk of punishment and social norms in corruption inclination. Also, there were disclosed the main mechanisms through what they most likely work, which are coherent to rational choice theory. Additionally, it was made a simple, yet robust and integrative decision-making model combining individual and contextual variables and analyzing the results through three analysis methods: ANOVA, OLS and SEM/PLS. Through contextual variables analysis, the phenomenon can be better understood holistically, and the individual aspects could explain some of the variation on corruption inclination. The main mechanisms through what contextual variables translate into decision-making were also explored. These results were able to generate insights on policy-making efficacy against corruption.

In the item 2 of this thesis, it was presented a conceptual framework for corruption decision-making exploring two major factors that influence decision-making under corruption risk: the risk of punishment for engaging on corruption and social norms. These factors and underlying mechanisms on corruption inclination were studied within the rational choice theory. Studying the interaction among them, this thesis also explored some possible shortcoming of rational choice theory. In the item 3, this study's methods were detailed. Results were presented in the item four and discussed in the item 5. Final considerations of this study's implications on the corruption phenomenon understanding, current theoretical frameworks appropriateness and impacts on policy-making against were displayed in the item 6.

2. Literature Review

2.1. The private-private corruption phenomenon

It is proposed a model for individual-level decision-making under private-to-private corruption risk. This general model was developed following the existent literature. Variables and relationships among them are displayed in Figure 1. The following subtopics comprise the rationales that led to this model conception.

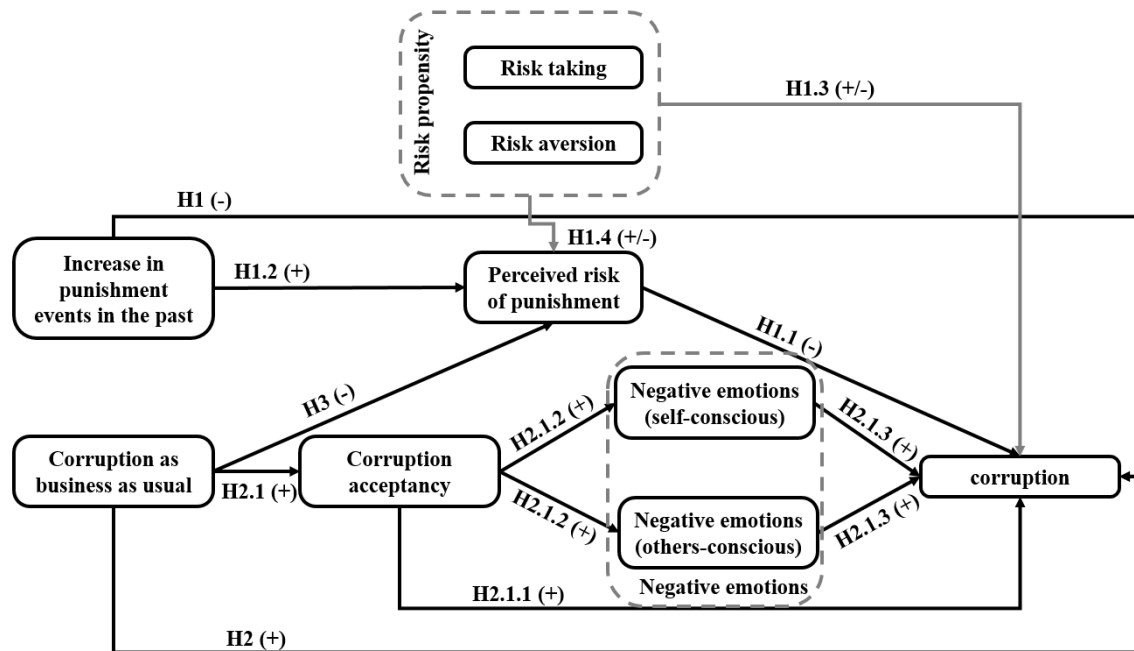


Figure 1: Private corruption phenomenon.

The positive or negative signal next to each hypothesis (H) is the result expected given the probable causal relationships based on literature and on the case study previously conducted in this thesis. In some cases, for example H1.3 and H1.4, our read of literature did not make it clear what was the signal expect between the variables. The dot circle indicates simultaneous influence.

2.2. Phenomenon studied through rational choice theory

Corruption engaging is often viewed as an outcome of a rational choice for an agent, who would consider the costs and benefits involved (Calderon & Arce, 2007; Faqir, et

al., 2007). Being studied as such, rational choice theory was so far a commonly used decisional framework for organizational decisions (Morrell, 2004). The opportunity is not sufficient. If the corrupt agent is a rational one, in the decision to bribe or to accept being bribed, both the profit (difference between benefits and costs — rent-seeking behavior) (Grossman and Helpman, 1994)— and the cost play the main role (Calderon & Arce, 2007).

For example, Napal (2006), in his study, adopted the teleological perspective, that is, the idea that most business decisions are derived from the notion of consequences, which is coherent with the rational choice theory (Morrell, 2004). To the author, corruption involves the weighting of risks and benefits of the situation (Napal, 2006). In the same line, Wedeman (2013), in a corruption study about business corruption in China, stated that it is expected that people might engage in corrupt acts if they perceive that it pays off.

If we assume corruption is, in fact, calculative, people who face the decision to engage or not in corruption would follow a rational path. That said, rational choice theory seems very suitable to explore corruption onset. When applied to business situations, this might lead to the idea of maximization of utility (Napal, 2006). In this point of view, people have a pre-defined set of preferences that guide their actions. The decision they make is a result of weighting gains and losses (Simon, 1955). Thus, people tend to act corruptly when the benefits surpass the drawbacks.

The major anticorruption method employed nowadays is aligned to this rational. Even though many anticorruption tactics have been debated, the actual combat against corruption relies mainly in punitive tactics (Andvig, 2002). These tactics make an effort to diminish the profit that one would have making the corrupt companies and individuals liable to pay fines or criminal sanctions. An increase in the probability and/or magnitude of the punishment would discourage individuals from engaging in a corrupt practice.

Following this rational, risk of being caught and punished would influence one's decision to engage on a corrupt action. According to the normative ethics literature, most decision-makers rely on notions of consequences when faced with ethical

dilemmas (Napal, 2006). Often the decision-maker may choose not to embark onto unethical conduct, not because it is wrong in absolute terms, but because s/he is afraid of getting caught (Napal, 2006).

Given that risk can be understood as a matter of events frequencies (Ranyard, Crozier, & Svenson, 1997), decision making under risk can be viewed as a choice between prospects or gambles: a prospect $(x_1, P_1; \dots; x_n, P_n)$ is a contract that yields outcome x_i with probability P_i , where $P_1 + P_2 + \dots + P_n = 1$ (Kahneman & Tversky, 1979). Following the seminal work of Becker (1968) and the recent developments of Wedeman (2013), the utility formula for corruption taking the risk of being caught and punished into account would be:

$$E(U_j) = p_j U_j(Y_j - f_j) + (1 - p_j) U(Y_j) \quad [1]$$

where $E(U_j)$ is the expected utility of the individual corruption j (this utility is a result of the return generated by corruption);

p_j is the probability of the individual j to be caught performing a corrupt act; Y_j is the expected monetary income of corruption for the individual j ; and f_j is the monetary penalty imposed to the individual that engage on a corrupt act.

A shortcoming of a straightforward monetary approach in corruption case would be that the penalty that can arise from a deviant action is frequently not restrained to monetary losses, but a variety of sanctions from criminal to social that are hardly translatable to monetary terms. This issue was addressed by Reuben & Van Winden (2005) in their model by using a monetary payoff and a ‘non material part’ (*sic*). However, without an empirical approach, this solution can be tautological. Also, an utilitarian perspective would require unit comparability (Hooker, 2013). To curb this issue, rather than using a monetary scale to measure the predisposition to embark on a corrupt act, a cardinal measure for utility can be used (López-Pérez, 2010), such as a scale for the “inclination to act corruptly”. In that case, it can be deducted that:

HIPOTHESIS 1 (H1): An increase in the frequency of punishment in a scenario makes people less inclined to act corruptly.

Another issue of this kind of approach is that, in a real life situation, the exact probability of being punished for a deviant act is usually unknown. Hence, there is a need to introduce a direct determinant of decision-making under risk, the risk perception (Sitkin & Weingart, 1995). Risk perception is defined as an individual's assessment of how risky a situation is in terms of probabilistic estimates of the degree of situational uncertainty, how controllable that uncertainty is, and confidence in those estimates (Sitkin & Weingart, 1995).

HIPOTHESIS 1.1 (H1.1): An increase in the perceived risk of punishment makes people less inclined to act corruptly.

Even when perceived riskiness is based on event rates, it maybe not thought about as identical to these rates (Ranyard, et al., 1997). In the risk and decision-making literature, one outcome possibility is traditionally described as being more or less likely or, more precisely, as having a certain subjective probability value (Ranyard, et al., 1997). Therefore, it can be not only more relatable presenting risks as tangible information about the frequency of negative outcomes that had or not happened in the past embedded within a context, but also more accurate, as it mimics a real-life stance decisional process. The degree to which individuals make risky decisions will be negatively associated with their level of perceived risk (Sitkin & Weingart, 1995).

HIPOTHESIS 1.2 (H1.2): People use past frequencies of punishment within a context as a base for risk assessment.

Also, it should be taken into account the risk propensity of the individual. Risk propensity is defined as an individual's current tendency to take or avoid risks (Sitkin & Weingart, 1995). Also, Sitkin & Weingart (1995) hypothesized that risk propensity could directly influence decision-making under risk, but they found no support to their hypothesis.

One mechanism that influences the risk propensity of an individual is risk attraction. Risk-taking individuals would be more inclined to engage in corruption because they feel excitement about making a risky conduct (in that case, the risk of being caught) (Purcell, 2016; Stensöta, Wängnerud, & Svensson, 2015). In opposition, risk-averse

individuals would be more discouraged to act corruptly under risk of being caught and punished.

HIPOTHESIS 1.3 (H1.3): Risk propensity influences directly on an individual's inclination to act corruptly.

Risk propensity could also influence risk perception and, indirectly, affect the inclination to act corruptly (Sitkin & Weingart, 1995). Therefore:

HIPOTHESIS 1.4 (H1.4): Risk propensity influences on the perceived risk of punishment.

2.3. Social norm on corruption inclination

Less objective factors than risk are also taken into account when deciding for or against corruption. But this not necessarily conflictive to rational choice theory (Huang & Wu, 1994). It is possible to “thicken” the rational choice model taking into account particular values that an individual pursues, as idiosyncratic values are not distributed randomly in a population (Hechter & Kanazawa, 1997). Through a utilitarian perspective, norms are those common values of a group that influence an individual's behavior through being internalized as preferences (Becker, 1996). Breaking the individual values would imply in additional costs, hereinafter called “moral costs” (Zyglidopoulos & Fleming, 2008).

Given that organizations are settings within which individuals often get socialized into corrupt practices (Weaver & Clark, 2015), playing a major role in transforming ethical individuals into corrupt organizational citizens (Zyglidopoulos & Fleming, 2008). In an organizational ambience in which corruption becomes normalized and legitimated, engaging on corruption would imply lower moral costs.

Hence, moral costs are expected to be mediated by the corrupt practice personal acceptability by the individual j.

HIPOTHESIS 2 (H2): In an environment where corruption is the way to do business, the inclination to engage into a corruption practice is be greater if compared to an environment where corruption is not the way to do business.

In an ambience where corruption is the way to do business, it can become rationalized and then normalized so that it is deemed more acceptable to the people involved (Zyglidopoulos & Fleming, 2008). For that normalization effect to happen, people can rely on mechanisms such as rationalizations to lower the moral costs to engage on corruption (Albrecht, Albrecht, Rabl, & Kühlmann, 2009; Anand, Ashforth, & Joshi, 2004; Zyglidopoulos & Fleming, 2008). This mechanism, therefore, would mediate the relationship between corruption ambience (business as usual/ not as usual) and moral costs, what would lead to:

HIPOTHESIS 2.1 (H2.1): When the transactional parties are exposed to the environment “corruption as way to do business”, they perceive corruption as more acceptable practice.

Since outcomes may be partially a function of individual motivations, predictions made on the basis of thick models could turn out as mutually inconsistent; such inconsistencies can only be resolved on the basis of empirical evidence (Hechter & Kanazawa, 1997), such as the experimental approach proposed in this study.

Hence, modeling M_j (moral costs of an individual j) are a function of negative emotions.

HIPOTHESIS 2.1.1 (H2.1.1): People who perceive corruption as a more acceptable practice are more inclined to act corruptly.

The mechanism behind norms sustaining is emotional (Huang & Wu, 1994). Moral behavior is linked to emotional reactions, since a person who does something that violates his/hers personal values may experience a feeling of discomfort (Hopflensitz & Reuben, 2009). Negative emotions such as shame and guilt can be triggered in the case of a violation of their internalized social norms (Reuben & Van Winden, 2005).

It would be expected that:

HIPOTHESIS 2.1.2 (H2.1.2): The more an individual perceives corruption as an acceptable practice, the less he/she experiences negative emotions, both in the case the corruption was done or not in secret.

In this study, there were chosen shame, embarrassment and guilt to represent the negative feelings that can arise from a break in moral values (Tangney, Miller, Flicker, & Barlow, 1996). These three bear a familial resemblance in the sense that they are each negatively valenced emotions of considerable intensity that arise from personally relevant failures or transgressions of one sort or another and that involve a substantial degree of self-evaluation or self-reflection (Tangney, et al., 1996). Each responds to significant social threat: embarrassment to violations of social conventions, and shame and guilt to more fundamental personal failures and transgressions that harm others (Tangney, et al., 1996).

HIPOTHESIS 2.1.3 (H2.1.3): An increase in negative emotions that arise from moral values violation has a negative influence on corruption inclination.

Although all the three of them are “self-conscious” emotions in the sense that they each involve a heightened sense of awareness and evaluation of the self, they are as well “other conscious” emotions (Tangney, et al., 1996). That said, we expect the three of them to have a substantial overlap in an ethical breakage situation and to point to the same direction.

It is also expected that, when a person is caught and punished for an ethical breach, her/his exposure will increase the intensity of the negative feelings. Embarrassment, in particular, involves a sense of exposure and a heightened concern for others’ judgment of the self (Tangney, et al., 1996). Therefore, we expect that embarrassment will be experienced in higher intensity relatively to others in a situation in which the person is caught and punished because of her/his moral deviance.

In that case, the moral cost of engaging in a corrupt act would be a function of negative emotions. Self-conscious negative emotions would behave independently of being caught, while other-conscious emotions would arise if the individual was caught.

HIPOTHESIS 2.1.4 (H2.1.4): An increase in negative emotions that arise when caught by moral values violation has a negative influence on corruption inclination.

2.4. Limitations of rational choice theory

However, actors' ends (and the preferences implied by those ends) must be specified in advance. Without such prespecification of actors' ends, rational choice explanations are liable to be tautological (Friedman & Hechter, 1988).

There are shortcomings related to the use of rational choice theory that could dramatically change the expected outcomes of the decision-making process that can lead to corruption. It is already known that rational choice theory can fall short at explaining the real world variance, as shown by many studies (Ostrom, 1998).

It is not unusual to observe deviation or violation of the basic assumption of rational choice theory, which is why ethical violation could be noted since the personal level up to the organizational level. One limitation of rational choice perspective is associated to the bounded rationality of the decision maker (Simon, 1955). Rational individuals will need to collect information for their decision-making, but due to the limited cognitive capacity, decision making is frequently associated to behavioral aspect of the decision agent. At the point at which decision process recalls behavioral aspects, then the decision-making is not that rational anymore (Morrell, 2004).

An example of behavioral-based decision-making is path dependency (Dierickx & Cool, 1989), when the decisions are made to demonstrate consistency with prior actions, even the past actions have demonstrated unsatisfactory. Other example is the use of social norms in situations where his/her rationality is not sufficient to distinguish between the utility of distinct outcomes (Elster, 1989; Morrell, 2004). In that case, the decision making is based on a desired image projected by the decision maker, and then he will evaluate how the options fit in the personal values, goals and strategies (Morrell, 2004).

Other mechanisms in which rational choice theory is not adequate to explore are those that influence the decision-making of an individual to a direction that does not maximize his/her utility. For example, Gioia's (2016) experiment found that people would have their risk behavior influenced by peer effects. Also, Knoll, Magis-Weinberg, Speekenbrink, & Blakemore (2015), through an experimental approach, found evidence that risk perception can be socially influenced. In some occasions,

individuals are deciding based on how close the options are to their values, beliefs and own goals (Elster, 1989). But those values can be affected by the environment. The way how an individual acts is influenced by the people with whom he relates, therefore ethical decision making is not an individual action, but results of several interactions and exchanges between the individuals (Pelton, Chowdhury, & Vitell Jr, 1999). These individuals reach a common ground for the values and believe through exchange governing rules such as solidarity, role integrity, mutuality, reciprocity and expectations.

That said, imagine a context where corrupt actions are considered a “necessary evil”. If a person’s values can be influenced by the environment they are in, we can infer that if they are in such a context, the corruption practice would be viewed as more acceptable.

But from where the social norms come? Pelton et al. (1999) suggested that the way how an individual acts is influenced by the people with whom he relates, therefore ethical decision making is not an individual action, but results from several interactions and exchanges between the individuals (Pelton, et al., 1999). These individuals reach a common ground for the values and believe through exchange governing rules such as solidarity, role integrity, mutuality, reciprocity and expectations.

The assumptions suggested by Morrell (2004) and Pelton et al. (1999) are in line with other social theories, such as social exchange or social capital theories. These social theories also suggest that the individual decisions are not always calculated or fully rationales, but they might be influenced by the social context that the individual is inserted and also governed by trust, reciprocity, mutual commitments, expectations of repay, intensity of the relations, frequency of the exchanges, social norms, rituals and beliefs.

By considering private-to-private corruption a social transaction that is composed by the ways, means, frequency and good involved in the exchanges, its recurrence could be governed by social rules and norms (Cropanzano & Mitchell, 2005; Elster, 1989). In this case, the rules and social norms could be seen as a set of established,

understood and accepted collectively way of doing business that will drive to individual and, especially, group benefit. These rules and norms might not be explicit nor formal and they also do not forbid the search for self-interest neither behavior rationality (Cialdini, 2007; Elster, 1989; Ostrom, 2000).

Within the social norms, the rules of reciprocity are emphasized as one of the most effective, since it creates commitment and interdependency, which are fundamentals to support exchanges (Cropanzano & Mitchell, 2005; Laran & Janiszewski, 2011). Through reciprocity, implicit exchange policy is established and expectation of retribution is created; afterwards, exchange parties assume their respective duties and possible punishments in case of non-compliance. This mechanism plays the role of the psychological contract, which is a lock in conditions for the agents (Kingshott, 2006; Young-Ybarra & Wiersema, 1999).

In addition, as any corruption is a non-formal transaction, to trust on other party retribution is fundamental. The trust will depend on communication, shared languages and values between agents and it could be built and cumulative (Arrow, 1972; Cropanzano & Mitchell, 2005; Kingshott, 2006; Lewis & Weigert, 1985; Morgan & Hunt, 1994; Young-Ybarra & Wiersema, 1999).

Moreover, the exchanging agents should be interdependent and social-psychologically involved. Thus, from the exchange perspective, the present study considered that social exchange theory among many others could be suitable to explore and theoretically explain the phenomenon.

HIPOTHESIS 3 (H3): In a context where corruption is understood as the way to do business, the risk is perceived as lower than in a context where it is not understood as such.

2.5. Current empirical literature on private-to-private corruption

The structured literature review on private-to-private corruption conducted by present research retrieved only two experimental studies. Thus, the literature review was extended to include other existing experimental studies on corruption in the discussion.

Rabl & Kühlmann (2008) developed through an experiment an action model of corrupt action based on the interrelation among motivational, willingness, emotional, and cognitive aspects in the decision-making process. The authors drew on the Model of Effortful Decision (Bagozzi, Dholakia, & Basuroy, 2003) and the Theory of Planned Behavior (Ajzen, 1991), exploring the phenomenon from desire to action. Later, Rabl, collaborated with Albrecht & Albrecht (2009), publishing an experiment on corruption rationalizations, which are tactics used by individuals to justify their acts of corruption. In these experiments, it was conducted a business game with students.

Rabl (2011) then changed her focus from the individual towards the situational aspects of corruption decision-making in organizations. Studying the receiving-side of a bribery act through a business game with businesspeople, she modeled the amount of financial gain, time pressure and the degree of abstractness of the company's business code. She did not find a significant relationship between bribe size nor degree of abstractness of the company's business code and inclination to act corruptly, but she showed that people's subjective norm changes with the circumstances when studying time pressure.

These studies were based on two action models, derived from Ajzen (1991) and Bagozzi et al. (2003), that draw onto the Theory of Planned Behavior. Both models' goal is behavior prediction, from some goal attainment desire to intention and then, its achievement. In their model, individuals purposely and intentionally pursue this goal. They focus on the individual, and do not directly study contextual factors.

Contextual factors influence on corruption were later studied by Rabl (2012) through a vignette study/factorial survey: the scope of action (national versus international), the business practice (usual versus unusual), the size of the bribe (high versus low), the form of action (initiatively versus reactively), the motive (private versus organizational), and the initial situation (financial sufficiency versus financial deficiency). To each respondent, 16 vignettes were presented for he/she to ethically judge them. The author found significant relationship among business practice, motive and initial situation and ethical judgments.

3. Empirical Strategy

We establish three empirical procedures to explain the phenomenon of private-to-private corruption. First, we did a Vignette experiment to investigate the set of previous hypothesis and to generate the variables used on the general model. Second, an alternative general model testing all variables together directly on the existence or not on acts of corruption (methodology on reduced form). Third, a main general model closer to those showed on Figure 1, considering multiple causes with moderator variables to explain the on the existence or not on acts of corruption.

Prior to that, other two empirical procedures to explain the phenomenon of private-to-private corruption were established using a structural model (Structural Equation Model – SEM).¹ At first, a case study was conducted to know how the corruption occurs on the organization process.² After, it was conducted a pretest of the vignette experiment in order to assess vignettes realism, overall understandability, variables operationalization and any other possible issue that may have arose³. From the case study, it was created a realistic procurement situation based on those described by the interviewees. The Vignette experiment is explained in more details on sequence.

The present research opts to conduct an artefactual field experiment study based on vignette technique as a solution when investigating phenomenon in which variables do correlate, but there is endogeneity between them, reverse causality, and when the causal direction is not known (Aguinis & Bradley, 2014). Also, this approach is appropriate where addressed topics involve ethical dilemma or sensitive issues – when studying corruption, both of these issues are to be concerned about (Aguinis & Bradley, 2014).

¹ SEM estimates various equations simultaneously as it happens in the real world while other methodologies have constraints for such estimation (see Weston & Gore, 2006).

² See details of development on Appendix 5 – Exploratory multiple case study.

³ This pretest was conducted with 60 people before the experiment. The experiment was approved by an Academic Committee of NEOMA Business School and no relevant ethical concerns were found.

3.1. Artefactual vignette-based experiment⁴

It was conducted an artefactual field experiment (Levitt & List, 2009) employing a scenario-based technique (Cui, Chen, Chen, Gavirneni, & Wang; Rungtusanatham, Wallin, & Eckerd, 2011) to explore causal relationships between individual and contextual factors on the corruption decision making within a business context. There were followed best-practices recommendations of Aguinis & Bradley (2014) regarding experimental design.

To answer, at least partially, to the criticism that vignette experiments lacks realism, it was used the “actual derived case” approach (Shepherd & Zacharakis, 1999). The vignettes employed in this study were based on the procurement situation mapped during the qualitative phase of this study to assure realism, addressing Rungtusanatham, Wallin, & Eckerd (2011) concerns on results reliability. The vignettes were then cross-checked with several of the interviewees from the initial case study and academic colleagues; also, the respondents were allowed to participate in their natural setting through an online surveying method (Aguinis & Bradley, 2014).

As corruption is a sensitive topic, it was used a policy of capturing experimental study to capture implicit decisions of the respondents, which are often not made openly and with the participants’ full awareness (Aguinis & Bradley, 2014). To avoid disclosing of the study’s purpose, that is, investigating corruption, therefore inhibiting morally questionable answers, we conducted a between-subject experiment in which each respondent was randomly assigned to a single vignette (control or one of treatments) (Charness, Gneezy, & Kuhn, 2012 2012).

Moreover, to avoid threats to the experiment validity such as its history, the experiment was conducted in a single session (Aguinis & Bradley, 2014). Also, due to the extension of each scenario, it might lead to a cognitive overload and fatigue of the

⁴ Through the evaluation of the research strategies used so far to the study of private-to-private corruption, it was observed that experiments were very rarely employed in private-to-private studies (see Appendix 4 – Structured Literature Review – Table 29).

respondents (J. Weber, 1992). In addition, the time constraint for a respondent to participate in the study should be reasonable, since they are not expected to leave their daily activities to spend one or two hours in our study.

The vignettes emulated a procurement situation between two private parties, in which respondents are asked to pay a bribe to a sales manager (extortion). It was described a firm's purchase situation of a non-strategic item, in order to increase generalizability across industries.

Once the respondents from the Amazon Mturk platform accepted to take part of our study, they were redirected to the Qualtrics platform to answer the questionnaire. The respondents were assigned randomly to one of the scenarios powered by Qualtrics. The results treatments were compared among them and to the control group. The respondents were selected from USA because of its international influence. In our questionnaire, there were four attention check questions regarding the scenario. Respondents were made aware that failing to answer correctly would imply in not receiving the payment.

Data collection lasted 7 days (11th to 18th of May). It was paid U\$ 1.20 dollars for valid questionnaire. The value paid was estimated according to the minimum wage in the USA. The reward was about U\$7.20/ hour (Average completing time = 10 min.). This value was also way above the Amazon Mturk's average reward for the respondents, which is around U\$2.25/hour. To assure the quality of responses, respondents must have 95% of approval rates with at least 5000 valid questionnaires approved previously. There were retrieved 180 valid responses from a total of 225. After eliminating outliers, the final sample consisted of n=168 responses.

3.2. Definition of the variables

In this section, variables employed in this study are defined and how each construct was measured is described.

3.2.1. Corruption

The dependent variable in this study was corruption, being the inclination to act corruptly its proxy, since it could be a strong predictor of engaging into a corrupt act

(Rabl & Kühlmann, 2008). We expect that the stronger the inclination to engage in this behavior is, the stronger will be his/her intention and therefore, the more likely should be its performance (Ajzen, 1991). Hence, the obtained results were a trustworthy estimative of the likeliness of the decision-making under corruption risk on the private sector practice.

To measure this construct, it was used a single item. Respondents were asked how inclined they were to agree to his/her business partner extortion demand. This question was the self-declared intention to engage on the corrupt act. It was measured in a 7-point Likert scale, where the higher scale, the higher the inclination towards corruption.

3.2.2. Punishment events in the past

The number of punishment events in the past was the first manipulated variable in this vignette experiment. To assess the correct manipulation of this construct, the perceived risk of being caught and punished was measured, since an individual will assess the perceived risk based on the past events rates (Ranyard et al, 1997). Assuming this suggestion, the amount of punishment events in the past was operationalized as how many times the punishment had been previously applied in the organization in a pre-established timespan. The definition of the frequency (in this case, the number of past events) was operationalized in three levels (high, medium and low) according to the results of the exploratory qualitative cases studies conducted.

The operationalization of punishment intensity was based on the prior study of Chen et al (2012), who described intensities of punishment from “calling attention of the employee” to “fine payment”. In this study, there was a sole intensity level for punishment, which was to be fired. It was decided to do so since individuals are more sensitive to the probability of apprehension than to the severity of sanction (Chalfin & McCrary, 2014).

To operationalize the three frequency levels, multiple strategies were employed. The exploratory case study interviews was used as a base, i.e. “The risk was zero (when asked about the risk of being caught and punishment in one case)”; this case was used

to set the low level. After that, the vignettes were presented to the interviewees and in an academic meeting for realism assessment. Finally, the levels were pretested and their effects on risk perception analyzed. Therefore, combining the exploratory case studies and the suggestion of Ranyard et al (1997), the three punishment frequency levels employed by this study are shown in Table 1:

Table 1

Operationalization of punishment events in the past

Levels	Punishment events in the past (frequency)
Low	Nobody was caught and punished in the last five years
Medium	One manager was caught and punished in the last five years
High	Several managers were caught and punished in the last two years.

3.2.3. Perceived risk of punishment

The construct perceived risk of punishment was measured by four similar direct questions: “In how much risk of being caught and punished is a purchasing manager who agrees to a demand such as the sales manager's in the described business context? “How frequently / How common / How probable it is for a purchasing manager to be caught and punished for agreeing to a demand such as the sales manager's in the described business context?”. These four items were measured with a 7-point Likert scale, where higher ratings mean higher levels of the construct.

3.2.4. Corruption as business as usual (social norms)

The second manipulated variable was the business environment. To emulate the social norms, it was decided to investigate this effect based on the suggestion of the literature review – corrupted business environment. This type of environment was selected because of its relevance to this increasingly globalizing world, which is the corruption spread and perpetuation by its environment.

To operationalize the corruption as business as usual, this study employed the suggestion of the theoretical exposition of Morrell (2004): the scenario just mentioned if the corrupt practice proposed in the vignette (extortion) was or not a common practice in the given business environment.

To assess the correct manipulation of this variable, there were employed four questions. We asked “How usual / How frequent / How common / How current is the practice performed by the sales manager in the described business context? These four items were measured with a 7-point Likert scale, where the higher the ratings, the more common was the corrupt practice.

3.2.5. Risk taking and risk aversion – Risk propensity

To investigate the risk propensity of the respondents, we employed an individual’s self-reported propensity risk questionnaire (Charness, Gneezy, & Imas, 2013; Donthu & Gilliland, 1996). We divided the risk propensity into two variables, risk aversion and risk taking, each of them with three items of 7-point Likert scale, where higher ratings corresponded to higher levels of construct (Griffin, Babin, & Attaway, 1996). To measure risk aversion, there were employed three questions: “I would rather be safe than sorry”, “I want to be sure before I purchase anything”, “I avoid risky things” (Donthu & Gilliland, 1996). To assess the risk taking behavior, the following three questions were employed: “Taking risks can be fun”, “I would like to drive a race car”, “I sometimes do things I know are dangerous just for fun” (Griffin, et al., 1996).

3.2.6. Corruption acceptance

As indicator of corruption acceptance, this variable was measured using two direct questions: “How acceptable / How fair do you think is the demand of the sales manager?” (Code: Q34_How_acceptable / Q35_How_fair). They were measured with a 7-point Likert scale, where higher rating also means higher level of construct.

3.2.7. Negative emotions (self-conscious) / Negative emotions (others-conscious)

As mentioned previously, there are two types of negative emotions: self-conscious and others-conscious. Meanwhile the self-aware negative feelings arise from the personal believes and values when an individual acts against his/her self-values, the others-aware arises when the unethical practice breaks acceptable social rules and the rules breaker is caught by others.

To measure these two variables, a 7-point Likert scale was used, where higher rating also means higher level of construct. The self-conscious includes three questions:

“How guilty / How ashamed / How embarrassed would you feel if agreed to the sales manager's demand, in the case that only you both knew that arrangement? The others-aware negative feeling included another set of three similar questions: “How guilty / How ashamed / How embarrassed would you feel if agreed to the sales manager's demand, in the case that you were caught and punished for making that arrangement?

Table 2 summarizes each of the construct's questions and analytic codes of each question.

Table 2

Questions and analytic codes for the construct's items

Corruption - Inclination to act corruptly	
Q17_Incline_to agree	How inclined are you to agree to the demand of the sales manager?
Perceived risk of punishment	
Q27_Punish_Risk	In how much risk of being caught and punished is a purchasing manager who agrees to a demand such as the sales manager's in the described business context?
Q28_Punish_FRQ	How frequently is for a purchasing manager caught and punished for agreeing to a demand such as the sales manager's in the described business context?
Q29_Punish_common	How are common is for a purchasing manager caught and punished for agreeing to a demand such as the sales manager's in the described business context?
Q30_Punish_prob	How probable is for a purchasing manager to be caught and punished for agreeing to a demand such as the sales manager's in the described business context?
Corruption as usual	
Q23_Corruption_Usual	How usual is the practice performed by the sales manager in the described business context?
Q24_Corruption_FRQ	How frequent is the practice performed by the sales manager in the described business context?
Q25_Corruption_Common	How common is the practice performed by the sales manager in the described business context?
Q26_Corruption_Current	How current is the practice performed by the sales manager in the described business context?
Risk aversion – Risk propensity	
Risk_aver_1	I would rather be safe than sorry

Risk_aver_2	I want to be sure before I purchase anything
Risk_aver_3	I avoid risky things
Risk taking – Risk Propensity	
Risk.1	Taking risks can be fun
Risk.2	I would like to drive a race car
Risk.3	I sometimes do things I know are dangerous just for fun
Negative emotions – Self-conscious	
Q37_How_guilty_feel	How guilty would you feel if agreed to the sales manager's demand, in the case that only you both knew that arrangement?
Q38_How_ashame_feel	How ashamed would you feel if agreed to the sales manager's demand, in the case that only you both knew that arrangement?
Q39_How_Embarrassed_feel	How embarrassed would you feel if agreed to the sales manager's demand, in the case that only you both knew that arrangement?
Negative emotions – others-conscious	
Q40_How_guilty_caught	How guilty would you feel if agreed to the sales manager's demand, in the case that you were caught and punished for making that arrangement?
Q41_How_ashame_caught	How ashamed would you feel if agreed to the sales manager's demand, in the case that you were caught and punished for making that arrangement?
Q42_How_Embarrassed_caught	How embarrassed would you feel if agreed to the sales manager's demand, in the case that you were caught and punished for making that arrangement?

4. Results

4.1. Sample description

The total sample of the study was composed by 168 valid responses, of which 49.4% were male and were 50.6% female. They were, on average, 38 ± 11.54 years old with 12.09 ± 7.76 years of professional experience and they were familiar with B2B procurement (4.46 ± 1.652 from a scale of 1 to 7).⁵ The respondents were assigned randomly to one of the scenarios of the experiment as can be seen on Table 3:

Table 3

Respondents allocations in the vignette

		Frequency of punishment				Total
		Low	Neutral	Mid	High	
Corruption as way to do business	Not usual	18	-	13	27	58
	Neutral	-	32	-	-	32
	Usual	35	-	25	18	78
Total		53	32	38	45	168

4.2. Construct assessments and measurements

Before starting the analysis, there were assessed the constructs' reliability and validity. To verify this issue, it was followed the recommendation of Wong (2013), who compiled the best practices of PLS Structural equation modelling. All the indicator validity (square of loading) is above 0.7. The internal consistency reliability of the constructs were also acceptable, since all constructs' Cronbach's alpha ranged between 0.81 and 0.95. The composite reliability computed ranged between 0.89 and 0.97. For the convergent validity, all the Average Variance Explained (AVE) ranged from 0.73 to 0.94 (See Table 4).

⁵ As were the interviewees from the case study on procurement (see appendix 5)

Table 4

Construct validity and reliability assessment

Construct	Indicator	Loading	Indicator reliability	Composite reliability	Average variance extracted (AVE)	Cronbach alpha
Inclination to corruption	Q17_Inclined_to_agree	1	1	1	1	1
Corruption as usual	Q23_Corruption_Usual	0.9399	0.883	0.96	0.86	0.95
	Q24_Corruption_FRQ	0.9561	0.914			
	Q25_Corruption_Common	0.9627	0.927			
	Q26_Corruption_Current	0.8551	0.731			
Perceived risk of punishment	Q27_Punish_Risk	0.8675	0.753	0.94	0.8	0.92
	Q28_Punish_FRQ	0.9173	0.841			
	Q29_Punish_common	0.8891	0.790			
	Q30_Punish_prob	0.9128	0.833			
Corruption acceptance	Q34_How_acceptable	0.972	0.945	0.94	0.97	0.94
	Q35_How_fair	0.9683	0.938			
Negative emotion (self-conscious)	Q37_How_Guilty_Feel	0.9485	0.900	0.97	0.9	0.95
	Q38_How_Ashame_feel	0.9562	0.914			
	Q39_How_embarrassed_feel	0.9449	0.893			
Negative emotion (others-conscious)	Q40_How_guilty_caught	0.9625	0.926	0.98	0.94	0.95
	Q41_How_ashame_caught	0.9726	0.946			
	Q42_How_embarrassed_caught	0.9736	0.948			
Risk taking	Risk.1	0.8815	0.777	0.89	0.73	0.81
	Risk.2	0.8166	0.667			
	Risk.3	0.871	0.759			
Risk aversion	Risk_aver_1	0.9096	0.827	0.89	0.73	0.82
	Risk_aver_2	0.7684	0.590			
	Risk_aver_3	0.8838	0.781			

To assess the discriminant validity, Wong (2013) suggested that the square root of the AVE in each latent variable can be used to establish discriminant validity, if this value

is larger than other correlation values among the latent variables. From the Table 5, it is possible to observe that this condition was fulfilled.

Table 5

Correlation \times Square root of AVE (Discriminant validity)

	Inclination to corruption	Corruption as usual	Perceived risk of punishment	Corruption acceptance	Negative emotion (self)	Negative emotion (others)	Risk taking	Risk aversion
Inclination to corruption	Single item							
Corruption as usual	0.162	0.927						
Perceived risk of punishment	-0.487	-0.240	0.894					
Corruption acceptance	0.626	0.187	-0.311	0.985				
Negative emotion (self)	-0.587	-0.136	0.385	-0.63	0.949			
Negative emotion (others)	-0.491	-0.171	0.279	-0.56	0.618	0.970		
Risk taking	0.289	0.046	-0.096	0.15	-0.228	-0.086	0.854	
Risk aversion	-0.309	-0.017	0.133	-0.23	0.270	0.175	-0.780	0.854

It was found that risk taking and risk aversion are negatively and highly correlated. Also, both self-conscious and others-conscious negative emotions are positively and highly correlated. Only one of each highly correlated pair is expected to remain in the joint models. Other high correlations are mainly due mediating relationships and are expected to remain in the final SEM model.

4.3. Procedures of experiment (internal) validity

To ensure the correctness of the manipulation, the effect of the treatment was assessed comparing treatments among them and to the control through One-way ANOVA.

4.3.1. Realism

As recommended by Hidghhouse (2009), an experiment must emulate a real situation. To assess if this issue was correctly addressed, this study asked the respondents to rank, from 1 to 7, how possible were the described scenarios to happen in the real life (1=impossible; 7=perfectly possible). Results had shown that respondents answered that there is a high probability of scenarios as such to happen in the real life (M=5.79

± 1.34) and, therefore, they most likely reflect a realistic situation. Thus, the vignettes had fulfilled the realism recommendation, as suggested by Hora & Klassen (2013).

4.3.2. Manipulation check

4.3.2.1. *Corruption as business as usual*

The construct “corruption as business as usual” was measured by four items, as described previously. The respondents were asked to answer four questions: how frequent, how common, how usual and how current the unethical practice in the business scenarios presented is. These four questions were measured by a seven-point Likert scale, with a higher rating representing higher level of construct to be measured. To assess the effectiveness of the manipulation, the difference between the scores of the manipulated and neutral groups were compared.

The results of ANOVA test (Table 6 and Table 7) demonstrated that “corruption as business as usual” was effectively manipulated, once the two manipulated group of respondent exhibited statistically different values from the neutral ($M_{\text{not_usual}}=2.147$; $M_{\text{usual}}=5.471$; $p=0.000$) and also between them.

Table 6

ANOVA manipulation check for corruption as business as usual

	SSQ	df	MSQ	F	Sig.
Between Groups	372.255	2	186.127	232.88	0.000
Within Groups	131.875	165	0.799		
Total	504.129	167			

The descriptive statistics of the answers are shown on Table 7:

Table 7

Descriptive statistic of control and manipulated respondents

	Obs.	Mean	Std. Deviation
Corruption not usual	58	2.147	0.834
Neutral	32	3.633	1.326
Corruption usual	78	5.471	0.700
Total	168	3.973	1.737

4.3.2.2. Punishment events in the past

Concerning the manipulation of construct “punishment events in the past”, it was measured by the “perceived risk of punishment”, since Rynard et al (1997) suggested that an individual assesses the risk based on the past events rates. Therefore, four questions were employed to indicate “perceived risk of punishment”: how risky, how frequent, how common and how usual the punishment in the organization for the sales manager be caught in unethical practices is. This construct was measured in seven-point Likert scale, where higher rating also means higher level of construct.

The result of ANOVA test demonstrated (Table 8)that the manipulation was effective and respondents used the frequency of past events as proxy of perceived risk of punishment. From the results, the average of the three groups (Low, Mid, High) were statically different, as seen on **Error! Reference source not found.** ($M_{Low_FRQ}=2.802$; $M_{Mid_FRQ}=4.349$; $M_{High_FRQ}=5.239$; $p=0.000$). However, when there is no information about past frequency of punishment, respondents assumed that it was a medium risky situation.

Table 8

ANOVA manipulation check Frequency of past punishment events

	SSQ	d.f.	MSQ	F	Sig.
Between Groups	151.147	3	50.382	35.926	0.000
Within Groups	229.995	164	1.402		
Total	381.142	167			

The descriptive statistic of answers is on table below:

Table 9

Description of Frequency of past punishment events

	N	Mean	Std. Deviation
Low frequency	53	2.802	1.297
Neutral	32	4.289	1.212
Medium frequency	38	4.349	1.173
High frequency	45	5.239	1.024
Total	168	4.088	1.511

4.3.2.3. *Risk propensity*

Since the vignettes assignment to respondents was random, it was expected that the proportion of individuals that have risk taking behaviour should not differ statistically among the manipulated and control groups. The risk propensity concept was measured with two constructs: risk taking and risk aversion. These two constructs were considered parts of an individual's risk propensity, because they may represent different cognitive mechanisms in the risk assessment of an individual. Each of them was based on four items of seven-point Likert scale (Allen & Seaman, 2007). The higher the score, the higher would be the construct level.

By performing an ANOVA test, it could be observed that no significant difference ($P=0.901$) in risk taking were reported between corruption as business as usual ($M_{\text{Corruption_Usual}}=3.39$), corruption not as business as usual ($M_{\text{Corruption_No_Usual}}=3.27$) and control ($M_{\text{Neutral}}=3.31$).

This procedure was repeated for the "risk aversion" and no statistical differences were observed among them ($p=0.973$). The corruption as business as usual reported average of $M=5.52$; corruption not as business as usual reported average of $M=5.56$ and the control group, average of $M=5.52$.

4.4. Testing hypothesis using the variables obtained on experiment

As previously, it was used ANOVA to assess the significance of differences between variables among groups (means) and OLS estimative to test the hypothesis. The results with variables generated on experiment showed no bias. Our results are showed on sequence.

H1: An increase in the frequency of punishment in a scenario makes people less inclined to act corruptly

Table 10 pictures the means of inclination to act corruptly according to three different levels of punishment groups (low, medium, and high):

Table 10

Effect of frequency of punishment on inclination to act corruptly (ANOVA)

Punishment	N	Inclination to act corruptly	Std. dev
Low frequency	53	4.62	1.94
Medium frequency	38	2.92	1.85
High frequency	45	2.76	1.97
Total	168	3.80	2.11

Note: Significant difference between Low and Medium/High ($p < 0.001$).

No significant difference between mid and high

The results show that there is no significant difference between the means of inclination to act corruptly for mid or high frequencies of punishment events in the past. Thus, to assess H1, it was estimated (OLS) on table below with some combined results (medium and low frequency and high and low frequencies) on our dependent variable (inclination to act corruptly). On the first case, medium and low frequencies groups on the inclination to act corruptly were analysed, comparatively to the low frequency data on the residue. On the second case, the other two variables were compared to mid frequency. There were created three dummy variables for each level (if the answer was low frequency, the value equals to 1 and 0 otherwise; the answer being medium frequency, the value equals to 1 and 0 otherwise; if the answer was high frequency, value equals to 1 and 0 otherwise). The Table 11 shows the results from OLS estimative.

From the results of the first estimative (1), it was possible to observe that the significant negative regression coefficients represented a decrease in the inclination to act corruptly when the punishment frequency increased (comparing to the low frequency, which was on residue). On the other hand, only low frequency was significantly related to the dependent variable on the second estimative (2). The results indicated that low frequency group (i.e., less punishment on the past) has, on average, higher inclination towards corruption compared to the high frequency group. Medium frequency showed no significant relationship towards corruption inclination.

Table 11

Effect of frequency of past punishment on the inclination to act corruptly (OLS)

Dependent Variable: Inclination to act corruptly				
Estimative 1				
Model	Unstandardized Coefficients		t	Sig.
	Beta	Std. Error		
(Constant)	4.623	0.265	17.47	0.000
High Frequency	-1.867	0.39	-4.782	0.000
Mid Frequency	-1.702	0.409	-4.156	0.000
$R^2 = 0.175$; R^2 adjusted = 0.162				
Estimative 2				
(Constant)	2.756	0.287	9.596	0.000
High Frequency	-0.165	0.424	0.39	0.697
Low Frequency	1.702	0.39	4.782	0.000
$R^2 = 0.175$; R^2 adjusted = 0.162				

Summarizing the two estimates, we have that compared to the low frequency of punishment, a frequency increase to medium and then to high implied a significant decrease of inclination to act corruptly. However, when compared to high frequency of punishment, a frequency decrease to medium did not significantly increase the inclination to act corruptly. This increment was only significant compared to the low frequency of punishment group. Therefore, H1 was confirmed.

H1.1: An increase in the perceived risk of punishment makes people less inclined to act corruptly.

To test this hypothesis, it was adopted the inclination to act corruptly as dependent variable and the perceived risk of punishment as independent variable (a construct variable). Thus, it was employed linear regression for this purpose. The outcome indicated a significant regression coefficient, supporting this hypothesis (Table 12).

Table 12

Effect of perceived risk of punishment on the inclination to act corruptly (OLS)

Dependent Variable: Incline to act corruptly				
	Unstandardized Coefficients		t-student	Sig.
	Beta	Std. Error		
Perceived risk of Punishment	-0.645	0.101	-6.369	0.000
Note: $R^2=0.232$; R^2 -adjusted=0.227				

H1.2: People use past frequencies of punishment within a context as a base for risk assessment.

To assess the hypothesis 1.2, an ANOVA test was performed in a first moment. The results demonstrated in the Table 13 showed that increasing the levels of the past frequency of punishment caused an increase in the level of perceived risk of punishment.

Table 13

Effect of frequency of past punishment on perceived risk of punishment (ANOVA)

Past frequency of punishment	N	Perceived risk of punishment	Std. Deviation
Low frequency	53	2.8019	1.29659
Mid frequency	38	4.3487	1.17338
High frequency	45	5.2389	1.02380

Note: Significant difference of perceived risk of punishment at $p < 0.001$ between Low-Mid; Mid-High and Low-High.

To complete this hypothesis test, there were generated two linear regressions, as described in the H1 testing, with two of the three dummies created each time and using as the dependent variable the perceived risk of punishment.

Table 14

Effect of frequency of past punishment on perceived risk of punishment (OLS)

Dependent variable: Perceived risk of punishment					
Estimative 1					
Model	Unstandardized Coefficients		t	Sig.	
	Beta	Std. Error			
(Constant)	5.239	0.176	29.84	0.000	
Low frequency	-2.437	0.239	-10.208	0.000	
Mid frequency	-0.89	0.259	-3.431	0.001	
R2 = 0.448; R2 adj = 0.439					
Estimative 2					
Model	Unstandardized Coefficients		t	Sig.	
	Beta	Std. Error			
(Constant)	4.349	0.191	22.761	0.000	
Low frequency	-1.547	0.25	-6.179	0.000	
High frequency	0.89	0.259	3.431	0.001	
R2 = 0.448; R2 adj = 0.439					

From the estimative 1, it was possible to observe that, comparing to the high frequency of punishment, the lower frequencies of past punishment events led to lower perceived risk of punishment, since the both regression coefficients were negative and statistically significant. By analysing the second estimative, it was observed that comparing to the medium frequency of punishment, the lower frequency group demonstrated a significant negative regression coefficient, which means that lower frequencies led to lower perceived risk. Meanwhile, higher frequencies conducted to higher perceived risk of punishment due to the significant positive regression coefficient.

These results, combined with the ANOVA test, supported the hypothesis H1.2.

H1.3: Risk propensity influences directly on an individual's inclination to act corruptly.

To test this hypothesis, we conducted a linear regression to verify the relation between risk propensity and inclination toward corruption. Hence, inclination to act corruptly was adopted as dependent variable and the independents were behavior of risk taking and risk aversion. The outcome demonstrated that the higher the risk aversion of an individual, the less inclined to engage on a corrupt act he/she would be (Table 15).

Table 15

Effect of risk propensity on the inclination to act corruptly (OLS)

Dependent Variable: Inclined to act corruptly				
Model	Unstandardized Coefficients		t-student	Sig.
	Beta	Std. Error		
(Constant)	5.252	1.830	2.869	.005
Risk Aversion	-.406	.244	-1.661	.099
Risk Taking	.157	.169	.930	.354
Note: $R^2=0.094$; R^2 -adjusted=0.088				

H1.4: Risk propensity influences on the perceived risk of punishment.

In order to assess this hypothesis, we ran the OLS linear regression adopting perceived risk of punishment as the dependent variable and the two dimensions of risk propensity (Risk taking and risk aversion) as independent variables. The results

demonstrated that risk propensity did not significantly influenced on the perceived risk of punishment; therefore, this hypothesis was rejected.

Table 16

The effect of risk propensity on perceived risk of punishment (OLS)

Dependent Variable: Perceived risk of Punishment				
Model	Unstandardized Coefficients		T-student	Sig.
	Beta	Std. Error		
(Constant)	2.777	1.430	1.942	.054
Risk Aversion	.213	.191	1.118	.266
Risk Taking	.025	.132	.188	.851

4.5.1. Social Norms

H2: In an environment where corruption is the way to do business, the proneness to engage into a corruption practice is greater when compared to an environment where corruption is not the way to do business.

To test the hypothesis 2, we used ANOVA to verify if the inclination to act corruptly is different between both groups – corruption as business as usual and corruption not as business as usual. Then, we ran the OLS linear regression to finalize the test.

By analyzing the result of ANOVA, regardless of the risk of punishment, our sample demonstrated that in an environment where the corruption is a way to do business, people reported more inclined to engage in this practice (M=3.81) than an environment where the corruption was not business as usual (M=3.16) ($p<0.1$) (Table 17).

Table 17

Effect of business environment on inclination to act corruptly (ANOVA)

Business environment	N	Inclination to act corruptly	Std. Deviation
Corruption not as business as usual	58	3.16	2.150
Corruption as business as usual	78	3.81	2.039
Total	136	3.53	2.104

Note: difference between groups significant at $p<0.1$

To run the OLS linear regression, we used the dummy variable “corruption as business as usual” as independent variable, where 1 coded the “business as usual” environment, and 0 the “business not as usual” environment (this environment was the base). By analyzing the results, it could be observed that the regression coefficient was significant at $p < 0.1$.

Table 18

Effect of business environment on inclination to act corruptly (OLS)

Dependent variable: Inclination to act corruptly				
Model	Unstandardized Coefficients		T	Sig.
	Beta	Std. Error		
(Constant)	3.481	0.181	19.241	0.000
Corruption as business as usual	0.326	0.181	1.803	0.074
$R^2 = 0.024$; R^2 adjusted = 0.016				

From the results of OLS linear regression, we could confirm the hypothesis H2.

H2.1: When the transactional parties are exposed to the environment “corruption as way to do business”, they perceive corruption as a more acceptable practice.

We assessed this hypothesis using ANOVA test by comparing the mean of how acceptable was the described corruption practice. Regardless of the punishment past event frequencies, it was observed that, in the environment where corruption was viewed as “business as usual” ($M=3.346$), people tended to find the unethical practice more acceptable compared to the “business not as usual” environment ($M=2.732$) ($p < 0.05$) (see Table 19).

Table 19

Effect of business environment on corruption acceptance (ANOVA)

Business Environment	N	Corruption acceptance	Std. Dev.
Corruption not as business as usual	58	2.7328	1.63625
Corruption as business as usual	78	3.3462	1.69282
Total	136	3.0846	1.69045

Note: Difference between groups significant at $p\text{-value} < 0.05$

To complement the ANOVA test, we conducted a linear regression by adopting the dummy variable for “corruption as business as usual” as the independent variable, and corruption acceptance as the dependent. The dummy variable assumed the value 1 when the business environment had corruption as business as usual, and 0 otherwise.

By verifying the result, it could be observed that the regression coefficient was significantly positive, therefore, demonstrating that the more the corruption is viewed as “business as usual”, the more is the corruption acceptance (Table 20).

Table 20

Effect of business environment on corruption acceptance (OLS)

Dependent variable: corruption acceptance				
Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
(Constant)	3.039	0.145	21.007	0.000
Corruption as business as usual	0.307	0.145	2.12	0.036
$R^2 = 0.032$; $R^2_{\text{adjusted}} = 0.025$				

H2.1.1: People who perceive corruption as a more acceptable practice are more inclined to act corruptly.

Considering that, the hypothesis 2.1 had demonstrated that individuals in the business environment where corruption was viewed as “business as usual” found the corruption practice more acceptable. Thus, it would be expected that the more acceptable was corruption for an individual, the more he/she would tend to incline towards acting corruptly. To test this hypothesis, it was performed the OLS liner regression adopting the inclination to act corruptly as the dependent variable, and corruption acceptance as the independent.

By verifying the results, the significant regression coefficient demonstrated that the hypothesis was confirmed: the more acceptable the corrupt practice is for an individual, the higher was his/her inclination towards engaging on corruption.

Table 21

Effect of perception of acceptance on Inclination to act corruptly (OLS)

Dependent Variable: Inclination to act corruptly			
	Unstandardized Coefficients		Sig.
	Beta	Std. Error	
(Constant)	1.127	0.295	0.000
Corruption acceptance	0.779	0.84	0.000

Note: $R^2=0.391$; R^2 -Adjusted = 0.387

H2.1.2: The more an individual perceives corruption as an acceptable practice, the less he/she experiences negative emotions, both in case the corruption is done or not in secret.

As negative emotions could arise from both internalized norms violation and social norms violation, we performed two OLS linear regressions: one with negative emotions arisen from individual values violation, as dependent variable (Negative emotions – Self-conscious), and the other with negative emotions elicited in the case the individual was caught and punished for engaging in a corrupt practice (Negative emotions – other-conscious). In both regressions, corruption acceptance was the independent variable.

The outcome demonstrated that the higher an individual considers corruption as an acceptable practice (significant negative regression coefficients), the lower he/she will experience negative emotions. This means that, the more the individual perceives as acceptable an unethical practice, the less will he feel guilty, ashamed, or embarrassed (Table 22)

Table 22

Effect of perception of acceptance on negative emotions (OLS)

Dependent variable	Model	Unstandardized Coefficients		Sig.	R^2
		Beta	Std. Error		
Negative feeling (Self)	(Constant)	6.670	0.273	0.00	0.388 (adj = 0.384)
	Corruption acceptance	-0.716	0.078	0.00	
Negative feeling (Others)	(Constant)	7.479	0.236	0.00	0.311 (adj = 0.306)
	Corruption acceptance	-0.523	0.067	0.00	

HIPOTHESIS 2.1.3 (H2.1.3): An increase in negative emotions that arise from moral values violation has a negative influence on corruption inclination.

HIPOTHESIS 2.1.4 (H2.1.4): An increase in negative emotions that arise when caught by moral values violation has a negative influence on corruption inclination

Negative emotions, both self-conscious and others-conscious, are significantly and inversely related to the inclination to act corruptly (Table 23).

Table 23

Effect of negative feelings (self/others) on inclination to act corruptly (OLS)

Dependent Variable: Inclination to act corruptly			
	Unstandardized Coefficients		Sig.
	Beta	Std. Error	
(Constant)	7.359	0.555	0.00
Neg. Feeling (self-conscious)	-0.493	0.095	0.00
Neg. Feeling (others-conscious)	-0.278	0.116	0.00

Note: $R^2=0.369$; R^2 -Adjusted = 0.359

4.5.2. Business as usual on risk perception

H3: In a context where corruption is the way to do business, the perceived risk of punishment is perceived as lower than in a context where corruption is the way to do business.

To verify this hypothesis, an ANOVA test was initially performed. Regardless of the frequencies of past punishment events, it was expected that corruption practice “business as usual” would reduce the perceived risk of punishment. By observing the results of ANOVA, it indicated that the perceived risk of punishment in the environment where the corruption is the way to do business was lower than the opposite environment (Table 24).

Table 24

Effect of business environment on perceived risk of punishment (ANOVA)

Business Environment	N	Perceived risk of punishment	Std. Dev.
Corruption not as business as usual	58	4.4181	1.51700
Corruption as business as usual	78	3.7596	1.56434
Total	136	4.0404	1.57298

Note: difference between groups significant at $p < 0.05$

However, to fully assess the hypothesis, it was ran the OLS linear regression creating dummies both for the independent variable “corruption as business as usual” and the dependent variable perceived risk of punishment. The dummies assumed 1 in the environment where corruption is usual, and 0 otherwise.

From the regression, it was possible to observe a significant negative regression coefficient, which demonstrates that the more corruption was considered as the way to do business, the less risky it was perceived. Therefore, confirming hypothesis 3.

Table 25

Effect of business environment on perceived risk of punishment (OLS)

Dependent variable: perceived risk of punishment				
Model	Unstandardized Coefficients		T	Sig.
	B	Std. Error		
(Constant)	4.089	0.134	30.54	0.000
Corruption as business as usual	-0.329	0.134	-2.459	0.015
$R^2 = 0.043$; R^2 adjusted = 0.036				

4.6. Ordinary Least Squares - Reduced Form (OLS)

Before verifying the proposed model on Figure 1, we proposed an alternative model fully based on the direct effects of the independent variables on the inclination to act corruptly. To perform this study, it was adopted the backwards stepwise regression. It began with a linear regression with all the variables and then, progressively removing the least non-significant variable, proceeded with this process until all the remaining coefficients were statistically significant.

Table 26

Reduced form: direct effects on the inclination to act corruptly

Dependent variable: Inclination to act corruptly				
	Model 1	Model 2	Model 3	Model 4
Corruption as business as usual	-0.018	-0.018		
Perceived risk of punishment	-0.363	-0.363**	-0.359**	-0.362**
Risk aversion	0.005			
Risk taking	0.226*	0.462**	0.223**	0.214**
Corruption acceptance	0.462	-0.157**	0.46**	0.498**
Negative emotion (self)	-0.157*	-0.146*	-0.158*	-0.211**
Negative emotion (others)	-0.147	0.167	-0.144	
	R ² adj = 0.53	R ² adj = 0.53	R ² adj = 0.53	R ² adj = 0.53
* p-value<0.1; **p-value < 0.01				

The majority of these results were consistent with the speculated in literature review. An individual will tend to incline less to act corruptly when the higher is the risk of punishment perception, as well as if he/she is less risk taking. It was also expected that when the more an individual considers corruption as an acceptable practice, the more he/she would be inclined to act corruptly.

But this propensity could be reduced when self-conscious negative emotions arise by confronting a corruption practice against his/her ethical values and beliefs.

4.7. Partial Least Squares Structural Equation Modelling (SEM – PLS)

To assess the full model demonstrated on Figure 1, it was employed the Partial Least Square (PLS) structural equation modelling. To support the analysis, it was employed the SmartPLS 2.0 software.

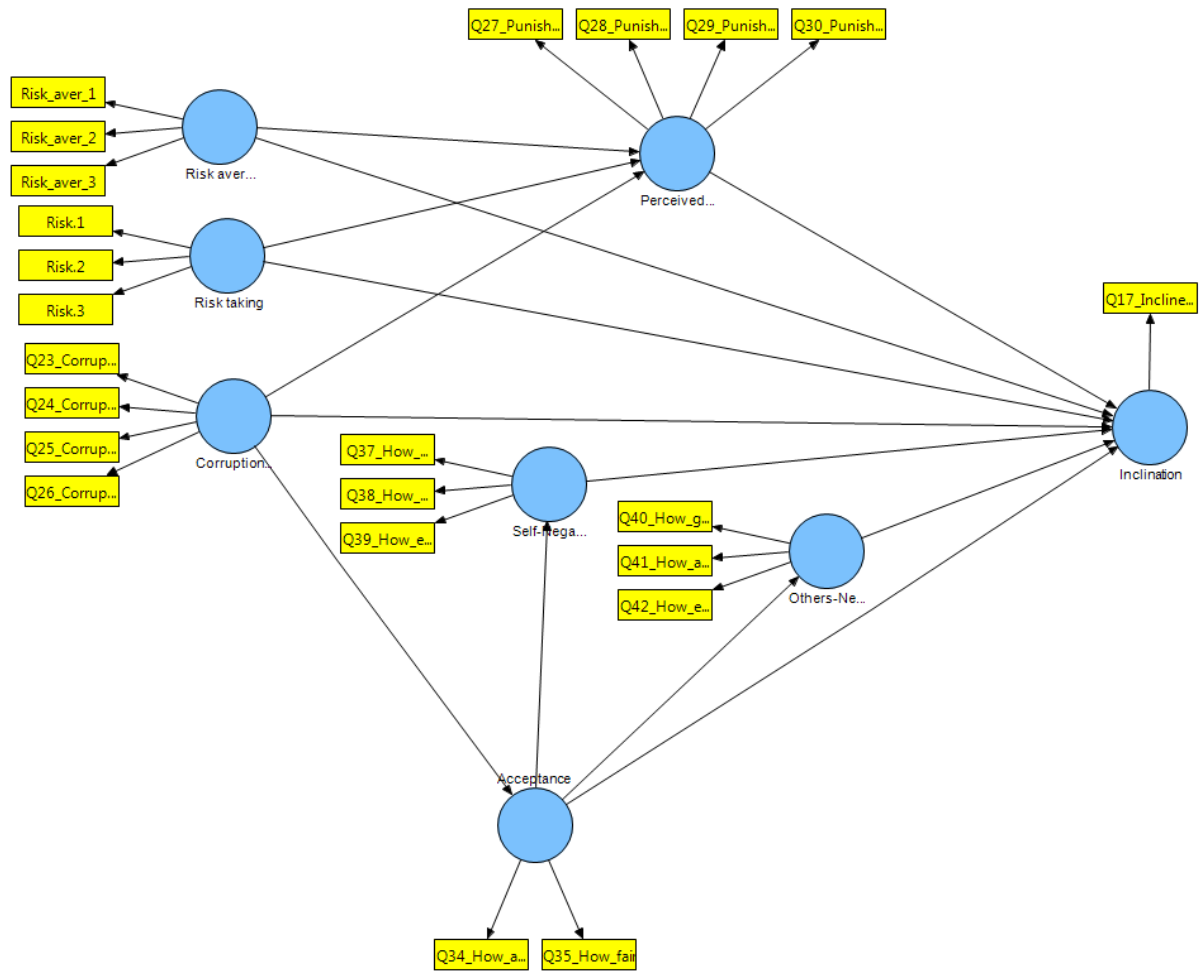


Figure 2 - Initial SEM model

Where: Risk aver... = risk aversion; Perceived...= perceived risk of punishment; Corruption... = corruption as "business as usual"; Self-nega...= negative emotions (self conscious); Others-Neg...= negative emotions (others-conscious); Acceptance = corruption acceptance; Inclination = corruption inclination.

The analysis was ran based on the stepwise linear regression rational: starting with the full model and then, step by step, we removed the less significant path coefficients until all reminiscent path coefficients were significant. To assess the significance testing, we used the bootstrapping technique. In this procedure, there were defined 5000 subsamples to be taken from the original samples, with replacement, to obtain a bootstrap standard error value. Each subsample was composed by 136 cases.

Punishment frequencies were not included in the SEM/PLS model because they were highly correlated with the perceived risk of punishment, and the latter is a better predictor of the inclination to act corruptly.

Table 27

Path coefficients - Inclination to act corruptly

Path	Path modeling						
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Acceptance of corruption -> Inclination to act corruptly	0.365 *	0.369 *	0.363 *	0.365 *	0.393 *	0.392 *	0.394 *
Acceptance of corruption -> Negative emotions (others)	- 0.558 *	- 0.558 *	- 0.557 *	- 0.559 *	- 0.558 *	- 0.559 *	
Acceptance of corruption -> Negative emotions (self)	- 0.625 *	- 0.624 *	- 0.624 *	- 0.626 *	- 0.626 *	- 0.626 *	- 0.626 *
Corruption as business as usual -> Acceptance of corruption	0.190 **	0.188 **	0.191 **	0.192 **	0.189 **	0.192 **	0.191 **
Corruption as business as usual -> Inclination to act corruptly	-0.017	- 0.019 2					
Corruption as business as usual -> Perceived risk of punishment	- 0.242 *	- 0.238 *	- 0.239 **	- 0.239 *	- 0.239 *	- 0.246 *	- 0.243 *
Negative emotions (others) -> Inclination to act corruptly	-0.106	-0.100	-0.101	-0.103			
Negative emotions (self) -> Inclination to act corruptly	-0.152	-0.153	-0.155	-0.153	- 0.196 **	- 0.199 **	- 0.197 **
Perceived risk of punishment -> Inclination to act corruptly	- 0.273 *	- 0.274 *	- 0.270 *	- 0.269 *	- 0.273 *	- 0.272 *	- 0.273 *
Risk aversion -> Inclination to act corruptly	-0.007						
Risk aversion -> Perceived risk of punishment	0.165	0.175	0.178 1	0.142	0.143		
Risk taking -> Inclination to act corruptly	0.163 †	0.169 **	0.170 **	0.171 **	0.164 **	0.164 *	0.163 *
Risk taking -> Perceived risk of punishment	0.036	0.042	0.045 5				
R ²	0.549	0.549	0.549	0.549	0.543	0.543	0.543

Note: * p-value < 0.001; ** p-value < 0.05; † p-value < 0.1

By analysing the Table 27 and the Table 28, it was possible to highlight the effect of business environment on a person's behaviour. Despite of not finding statistically significant direct effect of business as usual on corruption, the business environment influenced on the decision-making through risk perception and corruption acceptance. The latter was partially mediated by negative feeling elicited by violation of individual moral and values. Risk-taking predisposition was positively related to corruption.

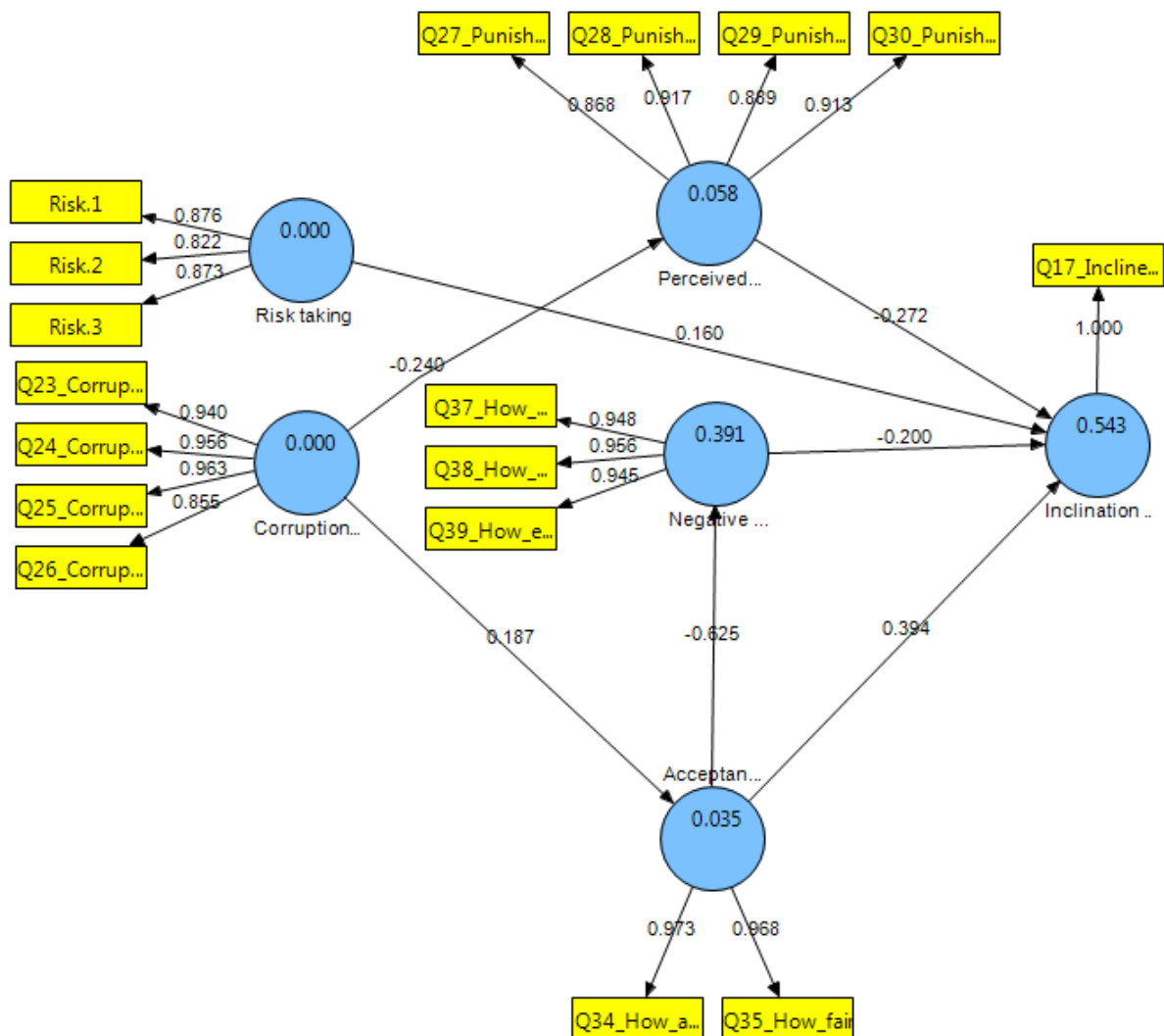


Figure 3- Final SEM PLS model

Where: Perceived...= perceived risk of punishment; Corruption... = corruption as “business as usual”; Negative...= negative emotions (self conscious); Acceptan... = corruption acceptance; Inclination = corruption inclination.

Table 28

Total effects of the PLS model

Total effects of the model			
	Path coeff.	t-stat	p- value
Acceptance of corruption -> Inclination to act corruptly	0.518	7.498	0.000
Acceptance of corruption -> Negative emotions (self)	-0.626	11.558	0.000
Corruption as business as usual -> Acceptance of corruption	0.191	2.129	0.034
Corruption as business as usual -> Inclination to act corruptly	0.165	2.699	0.007
Corruption as business as usual -> Negative emotions (self)	-0.119	2.111	0.033
Corruption as business as usual -> Perceived risk of punishment	-0.243	2.631	0.008
Negative emotions (self) -> Inclination to act corruptly	-0.197	2.219	0.028
Perceived risk of punishment -> Inclination to act corruptly	-0.273	4.108	0.000
Risk taking -> Inclination to act corruptly	0.163	2.674	0.008

5. Discussion

The experiment was overall operationalized successfully and carefully conducted. External and internal validities were assured by the experimental design.

Some measures were taken to increase experimental internal validity. For realism assessment, vignettes were analyzed both by the interviewees from the qualitative phase and business management academics. After that, the vignettes were pre-tested to assess any problem of this study. After polishing up the questionnaires, vignettes and questions', the English writing of the experiment was professionally reviewed. Only after all those steps the actual experiment was conducted. It probably worked for the best, as respondents' answered that a situation as such had a high probability to happen in a real life setting. Thus, it realistically reproduced a business situation that presented an opportunity to engage in corruption and the decision to do or not to do. As for external validity, the sample was composed in average by experienced professionals that had some experience on B2B procurement.

All constructs were found valid and so was the scenario's manipulation, both for risk (punishment events in the past) and for corruption as usual. Risk and corruption as usual behave independently from each other.

Responses validity was rigorously assessed using three parameters: answers' coherence to the scenario, answers' consistency (similar answers for similar questions) and attention checks.

5.1. Rational choice – based framework

5.1.1. Risk

In our model, it was not found significant relationship of risk propensity on risk perception (H1.4), and both were found to influence the inclination to act corruptly (H.1). These results are coherent to rational choice reasoning.

Regarding risk propensity, to the degree an individual is risk attracted, he/she is more likely to engage in corruption. Contrarily, an individual who perceives the risk of being caught and punished as higher would be less likely to engage in the corrupt

behavior (H1.3). However, risk-aversion was highly correlated to risk taking and, thus, eliminated from both OLS and PLS final models. For risk taking, on the other hand, it was attained a robust result as it was significantly correlated to corruption inclination in all three analyses. This is an important finding, since individual risk propensity could be an obstacle to sanctions enforcement as an anticorruption policy.

In average, respondents took past punishment events frequencies as a base for risk assessment (H1.2), and risk perception was negatively related to the inclination to act corruptly. This is coherent to Ranyard et al. (1997). People's mean perception were different for the three levels of risk in the vignettes (high, medium and low), but only high and low differed statistically from each other since the medium-risk scenario data were very dispersed. Maybe the lack of statistical difference and dispersion would be solved with a bigger sample.

As expected, the higher perceived risk of punishment discourages people from engaging in a corrupt act. The extent they are discouraged, however, varies according to personal risk propensity and risk perception. Risk propensity is a persistent trait (Sitkin & Weingart, 1995), but we found that risk perception could be influenced by contextual factors, as it will be further discussed (see 5.1.2). Differently from Sitkin & Weingart's (1995) findings, we found a direct effect of risk propensity on corruption, as they previously hypothesized, but we did not find any effect of risk propensity on risk perception.

5.1.2. Corruption as business as usual/not as

The lack of direct effect of "business as usual" on corruption inclination in the SEM-PLS model demonstrates that the mediator variables were identified consistently with the hypothesized theoretical framework (Zhao, Lynch, & Chen, 2010) (H.2). In other words, the main mechanisms through what corruption environment influences on corruption inclination were successfully determined: acceptancy of corruption and risk perception (H2.1, H3). The significant relationships of business as usual on these two variables demonstrate that not finding a direct effect on OLS did not mean that it had no influence on corruption inclination.

“Business as usual” has a positive effect on corruption acceptance. This result is the same as obtained by Rabl (2012) in her experiment on situational influences on corruption. Corruption acceptance effects on corruption were, in turn, complimentary mediated by negative feelings (H2.1.2.) and had a direct and robust effect on corruption inclination, as it was found significant in all three analysis. The influence of corruption acceptance reducing the negative emotions was also expected, since people use rationalizing mechanisms to protect themselves both from self-blame and social criticism (Albrecht, et al., 2009). However, in the structural model, only self-conscious emotions showed a significant effect on corruption inclination, while other-conscious emotions were removed from the final model. This can be explained because self and others-conscious negative emotions were highly correlated to each other (See Table 5). This result is an evidence that self-conscience may be the main factor in eliciting negative emotions, rather than others-conscience. Self-conscious negative emotions are a robust predictor of corrupt behavior, as it was shown by all three analysis.

In the other hand, corruption acceptance supposedly “direct” effect (H2.1.1.) can also be consequence of an unidentified mediator variable (Zhao, et al., 2010). Perhaps peer effects are the mechanism behind the infringement of the norms valued by the society towards a more restrict group set of norms shared by people’s peers, creating “social cocoons” (Anand, et al., 2004; Gioia, 2016). Social cocoons emerge when groups develop idiosyncratic solutions to the problems they face and actively seek to compartmentalize themselves from external influences (Anand, et al., 2004). The idea of “subjective norms”, that is, the perceived social pressure to perform or not the behavior (Rabl, 2012), is other very similar mechanism that could explain this supposedly direct effect of corruption acceptance. This mechanism depends on the likelihood that important referent individuals or groups approve or disapprove the performance of unethical or corrupt behavior (Rabl, 2012). Individuals can reduce the negative emotions disutility by rationalizing mechanisms in order to justify their acts of corruption (Albrecht, et al., 2009).

5.2. Integrative models

5.2.1. Ordinary Least Squares – reduced form

By analysing the results in the Table 26, the perceived risk of punishment and self-conscious negative emotions elicited by engaging on corruption are strongly and negatively correlated to corruption inclination. On the other hand, corruption acceptance and risk-taking are positively and strongly correlated to corruption. These results were expected from literature review.

However, it was possible to observe that when considering the effects of all the variables on the inclination to act corruptly, the effect of environment on the propensity to act corruptly became insignificant. Making a deeper analysis of this results, it can be deducted that the non-significant coefficient does not necessarily means that there is no impact, but that its influence may be manifested on the inclination to act corruptly indirectly through corruption acceptance mediation, as previously discussed on the literature review (See 3.2.6.).

Risk aversion was highly and inversely correlated to risk taking, and self-conscious negative emotions to others-conscious negative emotions (See Table 5). Therefore, only one of each pair of correlated variables was found significant when modelled jointly.

Finally, it can be stated that this model had a high explanatory power ($R^2=0,53$) of the private corruption phenomenon.

5.2.2. Partial Least Squares – mediation analysis

From the Structural Equation Modelling, the better model ($R^2=0.543$) was selected to explain the phenomenon. Although this model's explanatory power is only slightly higher than the reduced form, this model is very enlightening as it allows to explore the mechanism through what variables influence the dependent variable through mediation analysis. This final model represents an integrative framework for decision-making corruption process, combining behavioral and contextual aspects of this phenomenon at the individual level. It sums to the corruption literature, which is in a need of a comprehensive model to understand the phenomenon combining individual and contextual factors and exploring its underlying mechanisms. It comprises

idiosyncratic, social and risky aspects of the decision whether or not to engage on corruption, mostly coherently to the rational choice paradigm. Even though it was found an evidence of bounded rationality, through this model it is possible to see that the decision-making under corruption risk is mostly rational.

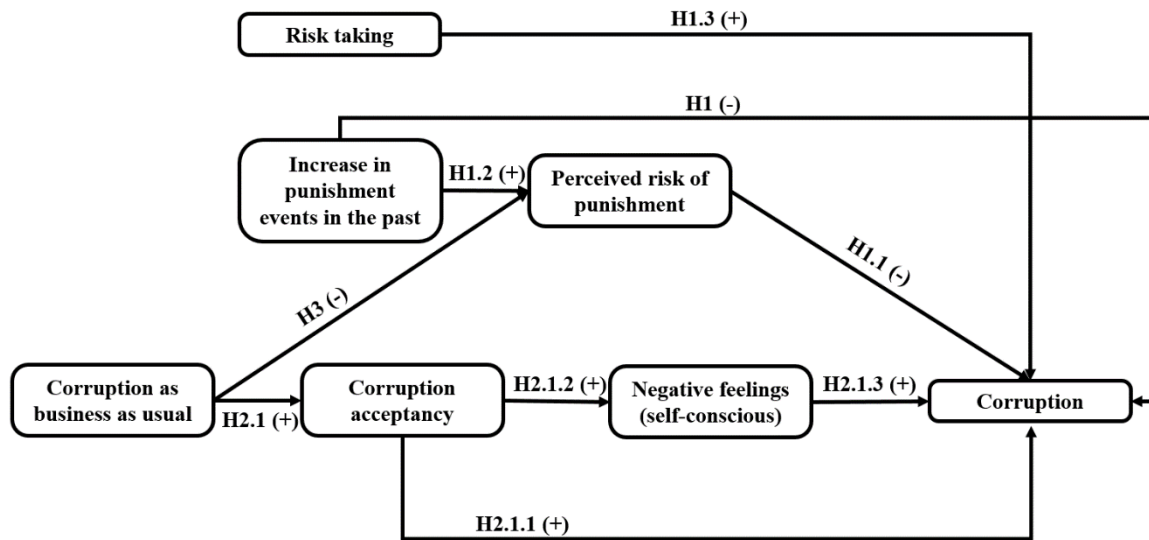


Figure 4: Corruption: integrative model, displaying the significant relationships supported by the empirical data.

5.3. Rational choice theory appropriateness

Rational choice theory has generated many contributions to social sciences so far (Friedman & Hechter, 1988). In corruption case, it had generated valuable insights, such as the contra-intuitive work of Sosa (2004), in which he concluded that an increase on wage could not only not decrease corruption, but even increase it. This sheds light to prior unexpected and not-well understood experimental findings, relating a mild positive relationship between bribery acceptance and salaries (Turner, Taylor, & Hartley, 1995). Also, Huang & Hu (1994) used the rational framework to explore the role of expectation-dependent emotions on supporting social norms against corruption.

In spite of that, for many times rational choice theory was questioned. Although this theory has many shortcomings due to bounded rationality (Morrell, 2004).

There was found, in fact, a sole significant relationship resulting from human bounded rationality: corruption acceptance effect in business environment and risk perception (H3). If we draw onto one of the assumptions of rational choice theory, the utility maximization (Morrell, 2004), this result implies that if the decision-maker's risk perception is biased, he/she may be not deciding for his/her best utility. Without taking bounded rationality into account, we are most likely to downsize norms and, therefore, cultural aspects on corruption, disregarding this effect can lead to heterogeneous effectiveness of sanctions on reducing corruption. These measures would have less of an impact in countries that have a greater tolerance for corruption, leading to a greater inertia.

However, the major robustness of the obtained model is explained by rational choice based relationships between the variables, except from the one above-mentioned. This said, even though that are many evidences of bounded rationality (Morrell, 2004), it was found in this thesis that individuals act mostly rationally, in spite of having a limited rationality.

5.4. Comparison to other experiments' frameworks

Rabl & Kühlmann (2008) explored the decisional process of the individual to act or not corruptly sequentially. Their framework consisted of five steps: the desire to achieve a goal, the intention to achieve this goal, the desire to achieve it through corruption, the intention to achieve it through corruption and, finally, the corrupt action.

In Rabl & Kühlmann's (2008) model, emotions influence the desire to achieve somebody's goals in the predecisional phase of her model. Expected emotions would determine this goal's attractiveness.

Further in the decision-making process, in the desire to achieve somebody's goals through corruption, Rabl & Kühlmann (2008) include social norms role as a social pressure. For the authors, subjective norm refers to the perceived social pressure to perform or not to perform some behavior. Social norms would influence intentions to the extent that they would lead to a desire to act.

This vision is not necessarily conflictive to rational choice theory. Rabl & Kühlmann's (2008) model of action is intentional and deliberate; the decision-maker actively decides concerning his/her best interest. The decision-maker weights his/her negative and positive expected emotions to determine the utility of some goal, and the attitude towards the behavior also is relevant to the decisional process (favorable/not favorable; good/bad; etc.) (Ajzen, 1991; Rabl & Kühlmann, 2008).

Concerning the framework adopted by Rabl & Kühlmann (2008) and Rabl (2012), based on the Theory of Planned Behavior (Ajzen, 1991; Bagozzi, et al., 2003), in this thesis, it was chosen a distinct approach. Concerning goal desire, this thesis brings back the rational decision-making: the rational decision maker in this study aims to maximize his/her expected utility. Furthermore, the present study limited itself to predict the intention to act corruptly. It was chosen to do so because in the case that a behavior or situation affords a person's complete control over behavioral performance, intentions alone should be sufficient to predict this behavior, as specified in the theory of reasoned action (Bagozzi, et al., 2003), which is the present study's vignettes' case.

However, even though both the present thesis and the planned behavior theory have similar assumptions, such as intentional behavior based on expected utilities, contextual variables proposed mechanisms would be different. As, in point of view of this thesis, individuals are rational and seek utility maximization (both emotional and material), social norms would not directly affect the desire to act corruptly as proposed by Rabl & Kuhlman (2008), but its influence on emotions would be the mechanism though what it would influence corruption intention. In this study's case, it was used an informal social norm (business as usual/not as).

Social norms pressure perception in Rabl & Kuhlman (2008) and Albrecht et al. (2009) is understood as subjective norm. In the present study, social norms would influence emotions through this practice acceptability, which resembles partially Rabl & Kuhlman's (2008) concept of "attitude" (good/bad), as favorability was explored through perceived risk analysis and also the term attitude involves a greater range of feelings. Even though it was found support to this hypothesis, a direct influence of

corruption acceptancy regardless of the emotions is consistent with Rabl & Kuhlman's (2008) subjective norms direct effect on desire. The mechanism through what a practice is deemed more or less acceptable according to social norms was not explored by the present thesis, but Albrecht et al. (2009) had an interesting insight on it (see 2.5).

If Rabl & Kuhlman (2008) and Albrecht (2009) focused on the individual and did not directly explored contextual variables, Rabl (2012) did so. She studied a greater number of variables in comparison to the present study. However, she studied judgments on corrupt practices and extrapolated to decision-making, but did not directly studied the decisional process.

Therefore, summing up expected utilities regarding individual to contextual factors, the present thesis could disclose the mechanisms through what contextual variables influenced corruption inclination, as well as individual characteristics. Also, we contributed to external validity relatively to Rabl & Kuhlman (2008) and Albrecht (2009), using a sample that had, in average, working experience and was familiar to the business process described by the scenarios.

Also, differently from previous works (Albrecht, et al., 2009; Rabl, 2011, 2012; Rabl & Kühlmann, 2008), the present study's model explored jointly the rational decision-making taking into account both contextual and individual factors, regarding moral and financial costs – all in one model. Causal effects of both corruption in the business environment and risk of punishment were demonstrated. Furthermore, this thesis disclosed the mechanisms through what these contextual variables are translated by individual perceptions, impacted on feelings and, combined with individual predisposition, influenced the decision-making process. This study adds to existent literature as corroborating the appropriateness of rational choice theory for studying private-to-private corruption, even though we found an evidence of bounded rationality.

5.5. Impact on policy

In an increasingly integrating world, the nexus between globalization and corruption is an important issue, especially for policy purposes (Baksi, Bose, & Pandey, 2009).

Andvig (2002) claimed that government can only rely punitive instruments because it can be difficult or even impossible to change attitudes and norms by direct policy measures.

Evidences was found in this study that the decision on whether to act or not corruptly is mostly rational, and therefore, an increase in punishment risk has, indeed, a negative causal effect on corruption inclination. As people would assess risk analyzing past events frequencies, maybe just giving more visibility to punishment measures alone can have a negative impact on corruption. Even though punitive practices are effective, I would like to question why corruption problem is far from over.

However, as an interviewee stated in the case study phase, people are creative and they will invent many ways to curb anticorruption measures. Also, an interviewee said that the chances of unfolding a corrupt practice could be really low. Therefore, the sole use of punitive anticorruption tactics efficiency in reducing corruption is questionable.

Must the governments resign to law development and enforcement, even though it can be costly and not necessarily effective (Huang & Wu, 1994)? Coherently to our case study findings, a central issue in the monitoring of both private-to-public and private-to-private corruption is that the probability of being caught is likely to remain so low that any legal punishment measure will have only weak effects on the economic calculations of the offenders. (Andvig, 2002). Even if the probability of being caught were higher, who would enforce anti-corruption laws if the police force and the judiciary are, themselves, corrupt (Buttle, Davies, & Meliala, 2015)?

One big reason why punitive measures can fall short on international corruption combat is the strength of social norms. Social norms can prevail over laws, rules and regulations both in private and public sector institutions, making it essential to change a corruption-favoring culture and value system (Buscaglia & Dakolias, 1999).

After our study demonstrated the effect of the business environment on private-to-private corruption, it strengthens other findings that corruption perpetuation can be related to cultural and normative factors (Anand, et al., 2004; Banerjee, 2014;

Reynolds, 2006; Situngkir, 2003; Zyglidopoulos & Fleming, 2008). Therefore, to fight against corruption, it is imperative to create an ethical climate that would positively influence people's thinking (Napal, 2006). Promoting ethical behavior should be marketed in such a way as to foster moral conduct at both business level and in everyday life (Napal, 2006).

Contrary to the assertion of Andvig (2002), Reynolds (2006) built a neurocognitive model that indicates that ethics education is, indeed, possible. Since it is possible, it should not be neglected. There has been evidences that institutional efforts disregarding socio-cultural factors are incomplete strategies to curb corruption (Calderón & Álvarez-Arce, 2011). Taking social norms into account can change the combat against corruption, and to understand the mechanisms through what people comply to norms can be the key in acting beyond the legal system and switching general anticorruption guidelines (Argandoña, 2006; Calderón, 2005) to concrete actions.

6. Final considerations

Both contextual and behavioral aspects of decision-making under corruption risk have been previously studied. Through rational choice and expected utility theory, this thesis was able to demonstrate causal relationships between risk of punishment and corruption as business as usual on corruption inclination, giving an important contribution to literature, where causal relationships were mostly ignored.

Mechanisms through what these contextual variables influenced on corruption inclination were also explored through SEM-PLS technique. An individual will mostly rationally sum expected utilities of contextual and individual factors jointly on the decisional process. It was possible to establish the causal relationship of informal social norms (corruption as business as usual/not as) and risk of punishment in corruption inclination.

Further detailing the findings, it was found that inclination towards corruption is affected by risk perception, as well as individual risk-taking behavior. Most anticorruption strategies focus on punitive measures, in order to increase the risk

and/or magnitude of punishment and, therefore, reduce the expected utility of corruption. People will use past events frequencies to assess the risk of being caught and punished if decided to engage on corruption. Following this logic, giving visibility to punishments in the business environment could have a negative impact on corruption, as well as criminalizing the practice.

Nevertheless, in a business scenario where corruption is viewed as “business as usual”, informal social norms rivalize with broader society acceptable values. An accepting environmental attitude towards corruption acts by two mechanisms favoring corruption: 1) by raising individual’s acceptance towards corruption, what, in turn, diminish the intensity of the negative emotions that hinder corruption and also by direct effect or other unexplored mediating variable, such as peer effects, and 2) by reducing the risk perception associated to that practice. That said, it moderates risk perception and is negatively correlated to it, what can work against a person’s best interests concerning corruption utility. This contradicts the basic maximization utility assumption behind Rational Choice Theory. However, most of the explanatory power of the model is due to rational choice reasoning, making Expected Utility Theory an adequate framework to study private-to-private corruption decision-making. Also, the present study analyzed empirical data through three methods: ANOVA, OLS and SEM-PLS, making it possible to assess variables relationships robustness and reinforce rational choice theory appropriateness to investigate this phenomenon.

This thesis contribution to literature is threefold. In the theoretical perspective, it contributed to literature by reinforcing rational choice theory appropriateness as a framework for studying decision making under corruption risk in the private sector. In the methodological perspective, there were built integrative multiple causation models for corruption (exploring mediating relationships, also), giving an important contribution to literature, which lacked on comprehensive models for corruption and where causal relationships were mostly ignored. In the practical perspective, it contributed by questioning current policy-making strategies: it was found that, despite bounded rationality evidences, people behave mostly rationally when deciding to engage or not in corruption. However, even then we found that punitive strategies that are based on this premise are effective on diminishing corruption, which implies the

fact that other policies based on moral issues should be needed to combat this problem.

A limitation of this study is that it purposefully does not pay respect to deeper cognitive aspects and self-developmental differences among individuals nor to the plurality of the epistemological complexity of morality. Rather, it was chosen not to offer a strict definition of what morality and social norms are or should be, but to keep it within a broad sense of collective values linked to social environment and context. It was explored how these values relate to individual risk proneness and affect his/her perceptions about punishment risks. Although a first look on this study's model can leave the impression that it is so over-simplified that could be insufficient to understand the phenomenon, the high explanatory power of the model of empirical data is an evidence of the contrary.

As this study's model focused on the very principles of decision-making, it may supposedly be generalizable for both private and public corruption and even beyond the supply-chain domain. Reproducing this research in further studies within public and private domains and across cultures could be interesting for assessing these generalizability presumptions and strengthen external validity. Also, it would be enlightening to explore the mechanism behind the supposedly direct effect of corruption acceptance on further studies.

This thesis' findings should lead to reflection on the appropriateness of current anti-corruption measures for addressing the corruption issue. Even though we found that punitive tactics are, in fact, effective to reduce the problem, it remains largely unsolved. Perhaps it is the time to consider stepping up for more unconventional tactics to address environmental impacts on corruption, since punitive measures are subject to the current corruption environment.

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8. Appendixes

8.1. Appendix 1 – Vignette design:

Is expected that part of the respondents would avoid to answer that they are prone to act corruptly. Some respondents probably had doubts on the test's confidentiality and, therefore, perceived it as a risk to their reputation. That is why we expected that the proportion of people predisposed to act corruptly in that situation would be lower compared to in the real life. That is why absolute numbers would have little meaning and this project focused in the comparison among different scenarios.

Everyone knows for instance that the economic duty of business is to maximize profits (Napal, 2006). We expected that our respondents, when faced to the ethical dilemma described in the scenario, would be, in one hand, motivated by the maximization of his firms profit.

Sitkin & Weingart (1995) found that negative loaded language itself did not lead to framing effects on their corruption study, nor Abbink & Hennig-Schmidt (Abbink & Hennig-Schmidt) in a more recent study. Nevertheless, this study took an extra caution measure concerning framing effects, choosing to use neutral language.

Dear respondent,

Thank you for taking this survey. We are conducting a project on business management at the Business Management School of Fundação Getulio Vargas (FGV/EAESP) in collaboration with NEOMA Business School. This is an experiment on business purchasing dynamics. Your information will help us better understand the decision-making process in organizations.

This survey should take about 15-20 minutes to complete. All data collected is confidential and will be used only for academic purposes. Please provide honest answers.

You may find questions that are very similar, or which are inverted, to check if you are paying attention to the study. Please be aware that it is necessary to answer these "checks" correctly in order to receive the payment.

To proceed to the survey, please click on the link below.

Sincerely,

The survey team

Introduction: The introduction consisted of a presentation of the study and the institutions involved. It was highlighted that the study purpose was academic and the confidentiality of the collected data. Respondent's were asked to give honest answers.

It was provided an experiment estimated timespan. Respondent's were made aware of the presence of attention checks. User that provide invalid responses would not be payed. These attention

checks were designed to mitigate inattentive responses that could harm the study.

First part:

It consists of a description of a business situation the respondent are asked to imagine herself as a procurement manager of some medium-sized company. It was chosen a medium-sized company because larger companies may have more sophisticated anti-corruption mechanisms that make corruption in selling/purchasing less likely or also more sophisticated, as learnt from the previous case study.

We describe a situation in what he should solve a problem after a project review. That problem, if left unsolved, would imply in loss of profit for the respondent's company. She depends on her supplier to solve this issue. We did not create a situation where the respondent feel responsible for the company loss, to avoid increasing much the situation complexity with feelings such as guilt, shame and accountability. We cite

Imagine that you are the purchasing manager of a medium-sized company. Your company has just been awarded a new one million dollar project that should start in four weeks. Launching the project requires 30 customized computers. You have placed a routine order with one of your main suppliers, a medium-sized company called HighTech Computers, for 30 customized computers to be delivered in exactly four weeks. The production of these 30 customized computers was on schedule when, one week after you placed the order, your boss came to you with unexpected news. The project had been reviewed and it needed to begin one week earlier to be completed on time. You know that delaying the project will make your company liable to a fine of USD10,000 per day, which will mean you lose any profit from the project.

When you asked HighTech Computers sales department if they would deliver the order one week earlier, they told you that it would not be possible. Changing the delivery schedule would require extra work. Since HighTech Computers is protected by the contract, they rather focus in more profitable activities. In addition, it is impossible to split the delivery due to logistical and technical constraints.

the contract in order to make clear that the supplier is not in obligation to solve. Also, we made clear that solving your problem can imply in a loss of profits to the supplier.

Second part:

Contrary to the supplier's company position, an employee from the supplier's firm offers himself to solve the respondent's problem. As it would make you company avoid losing the project's profit, he demands that the purchasing company shares part of that money with him. It was made clear that the employee is using his power to do something that he was not supposed to do, since this action is against his company's best interest. The motivation is also clear, personal benefit. This situation fits into a corrupt action according to the corruption definition adopted by this study

Despite the unexpected news, Jonathan, the sales manager from HighTech Computers, said that, although it is not his responsibility, he could do you a favor and persuade the production manager to bring forward the delivery date by one week. However, to do so, Jonathan wants to receive a percentage of the money that your company will save.

(Argandoña, 2005).

Third part

The third part is the variable part. There are 6 possible combinations between the independent variables "risk" and "business as usual/not as usual". The operationalization of the "business as usual/not as usual" consists of a brief phrase stating if the supplier's employee demand is or not accepted in that business environment. The proxy for the risk of being caught and punished is the frequency in which other employees had being fired for opting to agree to a demand as such using the purchasing firm's representative budget. A seventh scenario was also distributed and used as a control: a neutral scenario, lacking this third variable part.

	Low risk	Medium risk	High risk
Business as usual	You know that the sales manager's request is a very common practice in the business environment. Additionally, in the last 5 years you have not heard of any purchasing manager of your company being fired for agreeing to such an extra payment using firm's representative budget.	You know that the sales manager's request is a very common practice in the business environment. Additionally, you have heard in the last 5 years of one purchasing manager of your company being fired for agreeing to such an extra payment using firm's representative budget.	You know that the sales manager's request is a very common practice in the business environment. In addition, in the last 2 years you have heard of several purchasing managers being fired for agreeing to such an extra payment using firm's representative budget.
Business not as usual	You know that the sales manager's request is not a common practice in the business environment. Additionally, in the last 5 years you have not heard of any purchasing manager of your company being fired for agreeing to such an extra payment using firm's representative budget.	You know that the sales manager's request is not a common practice in the business environment. Additionally, in the last 5 years you have heard of one purchasing manager of your company being fired for agreeing to such an extra payment using firm's representative budget.	You know that the sales manager's request is not a common practice in the business environment. Additionally, in the last 2 years you have heard of several purchasing managers of your company being fired for agreeing to such an extra payment using firm's representative budget.
Neutral			

8.2. Appendix 3 – Scenarios

Pilot english PTP - Mturk

Logo



Intro Dear respondent, Thank you for taking this survey. We are conducting a project on business management at the Business Management School of Fundação Getulio Vargas (FGV/EAESP) in collaboration with NEOMA Business School. This is an experiment on business purchasing dynamics. Your responses will help us better understand the decision-making process in organizations. This survey should take about 10-15 minutes to complete. All data collected is confidential and will be used only for academic purposes. Please provide honest answers. You may find questions that are very similar, or which are inverted, to check if you are paying attention to the study. Please be aware that it is necessary to answer these "checks" correctly and consistently in order to receive the payment. There are no significant risks of any nature related to your participation in this study. Once beginning the study, you declare that you are aware of the information above and consent to take part of the research. However, if you change your mind, you can quit the survey at any moment before concluding the study. To proceed to the survey, please click on the link below. Sincerely, The survey team

LLCN Please read carefully the text below and answer the questions. Imagine that you are the purchasing manager of a medium-sized company. Your company has just been awarded a new one million dollar project that should start in four weeks.

Launching the project requires 30 customized computers. You have placed a routine order with one of your main suppliers, a medium-sized company called HighTech Computers, for 30 customized computers to be delivered in exactly four weeks. The production of these 30 customized computers was on schedule when, one week after you placed the order, your boss came to you with unexpected news. The project had been reviewed and it needed to begin one week earlier to be completed on time. You know that delaying the project will make your company liable to a fine of USD10,000 per day, which will mean you lose any profit from the project. When you asked HighTech Computers sales department if they would deliver the order one week earlier, they told you that it would not be possible. Changing the delivery schedule would require extra work. Since HighTech Computers is protected by the contract, they rather focus in more profitable activities. In addition, it is impossible to split the delivery due to logistical and technical constraints. Despite the unexpected news, Jonathan, the sales manager from HighTech Computers, said that, although it is not his responsibility, he could do you a favor and persuade the production manager to bring forward the delivery date by one week. However, to do so, Jonathan wants to receive a percentage of the money that your company will save. You know that the sales manager's request is not a common practice in the business environment. Additionally, in the last 5 years you have not heard of any purchasing manager of your company being fired for agreeing to such an extra payment using firm's representative budget.

MPCN Please read carefully the text below and answer the questions. Imagine that you are the purchasing manager of a medium-sized company. Your company has just been awarded a new one million dollar project that should start in four weeks. Launching the project requires 30 customized computers. You have placed a routine order with one of your main suppliers, a medium-sized company called HighTech Computers, for 30 customized computers to be delivered in exactly four weeks. The production of these 30 customized computers was on schedule when, one week after you placed the order, your boss came to you with unexpected news. The project had been reviewed and it needed to begin one week earlier to be completed on time. You

know that delaying the project will make your company liable to a fine of USD10,000 per day, which will mean you lose any profit from the project. When you asked HighTech Computers sales department if they would deliver the order one week earlier, they told you that it would not be possible. Changing the delivery schedule would require extra work. Since HighTech Computers is protected by the contract, they rather focus in more profitable activities. In addition, it is impossible to split the delivery due to logistical and technical constraints. Despite the unexpected news, Jonathan, the sales manager from HighTech Computers, said that, although it is not his responsibility, he could do you a favor and persuade the production manager to bring forward the delivery date by one week. However, to do so, Jonathan wants to receive a percentage of the money that your company will save. You know that the sales manager's request is not a common practice in the business environment. Additionally, in the last 5 years you have heard of one purchasing manager of your company being fired for agreeing to such an extra payment using firm's representative budget.

HPCN Please read carefully the text below and answer the questions. Imagine that you are the purchasing manager of a medium-sized company. Your company has just been awarded a new one million dollar project that should start in four weeks. Launching the project requires 30 customized computers. You have placed a routine order with one of your main suppliers, a medium-sized company called HighTech Computers, for 30 customized computers to be delivered in exactly four weeks. The production of these 30 customized computers was on schedule when, one week after you placed the order, your boss came to you with unexpected news. The project had been reviewed and it needed to begin one week earlier to be completed on time. You know that delaying the project will make your company liable to a fine of USD10,000 per day, which will mean you lose any profit from the project. When you asked HighTech Computers sales department if they would deliver the order one week earlier, they told you that it would not be possible. Changing the delivery schedule would require extra work. Since HighTech Computers is protected by the contract, they rather focus in more profitable activities. In addition, it is impossible to split the

delivery due to logistical and technical constraints. Despite the unexpected news, Jonathan, the sales manager from HighTech Computers, said that, although it is not his responsibility, he could do you a favor and persuade the production manager to bring forward the delivery date by one week. However, to do so, Jonathan wants to receive a percentage of the money that your company will save. You know that the sales manager's request is not a common practice in the business environment. Additionally, in the last 2 years you have heard of several purchasing managers of your company being fired for agreeing to such an extra payment using firm's representative budget.

LPCU Please read carefully the text below and answer the questions. Imagine that you are the purchasing manager of a medium-sized company. Your company has just been awarded a new one million dollar project that should start in four weeks. Launching the project requires 30 customized computers. You have placed a routine order with one of your main suppliers, a medium-sized company called HighTech Computers, for 30 customized computers to be delivered in exactly four weeks. The production of these 30 customized computers was on schedule when, one week after you placed the order, your boss came to you with unexpected news. The project had been reviewed and it needed to begin one week earlier to be completed on time. You know that delaying the project will make your company liable to a fine of USD10,000 per day, which will mean you lose any profit from the project. When you asked HighTech Computers sales department if they would deliver the order one week earlier, they told you that it would not be possible. Changing the delivery schedule would require extra work. Since HighTech Computers is protected by the contract, they rather focus in more profitable activities. In addition, it is impossible to split the delivery due to logistical and technical constraints. Despite the unexpected news, Jonathan, the sales manager from HighTech Computers, said that, although it is not his responsibility, he could do you a favor and persuade the production manager to bring forward the delivery date by one week. However, to do so, Jonathan wants to receive a percentage of the money that your company will save. You know that the sales manager's request is a very common practice in the business environment.

Additionally, in the last 5 years you have not heard of any purchasing manager of your company being fired for agreeing to such an extra payment using firm's representative budget.

MPCU Please read carefully the text below and answer the questions. Imagine that you are the purchasing manager of a medium-sized company. Your company has just been awarded a new one million dollar project that should start in four weeks. Launching the project requires 30 customized computers. You have placed a routine order with one of your main suppliers, a medium-sized company called HighTech Computers, for 30 customized computers to be delivered in exactly four weeks. The production of these 30 customized computers was on schedule when, one week after you placed the order, your boss came to you with unexpected news. The project had been reviewed and it needed to begin one week earlier to be completed on time. You know that delaying the project will make your company liable to a fine of USD10,000 per day, which will mean you lose any profit from the project. When you asked HighTech Computers sales department if they would deliver the order one week earlier, they told you that it would not be possible. Changing the delivery schedule would require extra work. Since HighTech Computers is protected by the contract, they rather focus in more profitable activities. In addition, it is impossible to split the delivery due to logistical and technical constraints. Despite the unexpected news, Jonathan, the sales manager from HighTech Computers, said that, although it is not his responsibility, he could do you a favor and persuade the production manager to bring forward the delivery date by one week. However, to do so, Jonathan wants to receive a percentage of the money that your company will save. You know that the sales manager's request is a very common practice in the business environment. Additionally, you have heard in the last 5 years of one purchasing manager of your company being fired for agreeing to such an extra payment using firm's representative budget.

HPCU Please read carefully the text below and answer the questions. Imagine that you are the purchasing manager of a medium-sized company. Your company has just been awarded a new one million dollar project that should start in four weeks. Launching the project requires 30 customized computers. You have placed a routine order with one of your main suppliers, a medium-sized company called HighTech Computers, for 30 customized computers to be delivered in exactly four weeks. The production of these 30 customized computers was on schedule when, one week after you placed the order, your boss came to you with unexpected news. The project had been reviewed and it needed to begin one week earlier to be completed on time. You know that delaying the project will make your company liable to a fine of USD10,000 per day, which will mean you lose any profit from the project. When you asked HighTech Computers sales department if they would deliver the order one week earlier, they told you that it would not be possible. Changing the delivery schedule would require extra work. Since HighTech Computers is protected by the contract, they rather focus in more profitable activities. In addition, it is impossible to split the delivery due to logistical and technical constraints. Despite the unexpected news, Jonathan, the sales manager from HighTech Computers, said that, although it is not his responsibility, he could do you a favor and persuade the production manager to bring forward the delivery date by one week. However, to do so, Jonathan wants to receive a percentage of the money that your company will save. You know that the sales manager's request is a very common practice in the business environment. In addition, in the last 2 years you have heard of several purchasing managers being fired for agreeing to such an extra payment using firm's representative budget.

neutral Please read carefully the text below and answer the questions. Imagine that you are the purchasing manager of a medium-sized company. Your company has just been awarded a new one million dollar project that should start in four weeks. Launching the project requires 30 customized computers. You have placed a routine order with one of your main suppliers, a medium-sized company called HighTech Computers, for 30 customized computers to be delivered in exactly four weeks. The production of these 30 customized computers was on schedule when, one week after

you placed the order, your boss came to you with unexpected news. The project had been reviewed and it needed to begin one week earlier to be completed on time. You know that delaying the project will make your company liable to a fine of USD10,000 per day, which will mean you lose any profit from the project. When you asked HighTech Computers sales department if they would deliver the order one week earlier, they told you that it would not be possible. Changing the delivery schedule would require extra work. Since HighTech Computers is protected by the contract, they rather focus in more profitable activities. In addition, it is impossible to split the delivery due to logistical and technical constraints. Despite the unexpected news, Jonathan, the sales manager from HighTech Computers, said that, although it is not his responsibility, he could do you a favor and persuade the production manager to bring forward the delivery date by one week. However, to do so, Jonathan wants to receive a percentage of the money that your company will save.

Q01 How inclined are you to agree to the demand of the sales manager?

- ☐ 1= not at all (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4= neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7= would certainly agree (7)

Q02 How much do you think would be fair paying to the sales manager?

_____ USD (1)

Answer If How inclined are you to agree to the demand of the sales manager? 5 Is Selected Or How inclined are you to agree to the demand of the sales manager? 6 Is Selected Or How inclined are you to agree to the demand of the sales manager? 7= would certainly agree Is Selected

Q04C Please write below the reason why you are inclined to make the payment.

Answer If How inclined are you to agree to the demand of the sales manager? 1= not at all Is Selected Or How inclined are you to agree to the demand of the sales manager? 2 Is Selected Or How inclined are you to agree to the demand of the sales manager? 3 Is Selected

Q04A Please write below the reason why you are inclined to not making the payment.

Answer If How inclined are you to agree to the demand of the sales manager? 4= neutral Is Selected

Q04B Please write below the reason why you are uncertain about making the payment.

Q06 How usual is the practice performed by the sales manager in the described business context?

- ☐ 1 = Extremely unusual (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4 = Neutral (4)
- ☐ 5 (5)

- ☐ 6 (6)
- ☐ 7 = Extremely usual (7)

Q07 How frequent is the practice performed by the sales manager in the described business context?

- ☐ 1 = Extremely infrequent (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4 = Neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7 = Extremely frequent (7)

Q08 How common is the practice performed by the sales manager in the described business context?

- ☐ 1 = Extremely uncommon (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4 = Neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7 = Extremely common (7)

Q09 How current is the practice performed by the sales manager in the described business context?

- ☐ 1 = Extremely not current (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4 =Neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7 = Extremely current (7)

Q10 In how much risk of being caught and punished is a purchasing manager who agrees to a demand such as the sales manager's in the described business context?

- ☐ 1 = No risk at all (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4 = Neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7 = Very much risk (7)

Q11 How frequently are purchasing managers caught and punished for agreeing to a demand such as the sales manager's in the described business context?

- ☐ 1 = Extremely infrequent (1)

- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4 = Neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7 = Extremely frequent (7)

Q12 How common is it for a purchasing manager to be caught and punished for agreeing to a demand such as the sales manager's in the described business context?

- ☐ 1 = Extremely uncommon (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4 = Neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7 = Extremely common (7)

Q13 How probable is for a purchasing manager to be caught and punished for agreeing to a demand such as the sales manager's in the described business context?

- ☐ 1 = Extremely not probable (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4 = Neutral (4)

- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7 = Extremely probable (7)

Q14 How possible do you think is for a such a situation to happen in the real life?

- ☐ 1= impossible (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4=neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7=perfectly possible (7)

Q15 How high is the fine for delaying the project, in your opinion?

- ☐ 1= very low (1)
- ☐ 2 (3)
- ☐ 3 (4)
- ☐ 4= neutral (5)
- ☐ 5 (6)
- ☐ 6 (7)
- ☐ 7= very high (8)

Q16 How costly would delaying the project be?

- ☐ 1= not costly at all (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4= neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7= very costly (7)

Q17 In your opinion, how acceptable do you think is the demand of the sales manager?

- ☐ 1= unacceptable (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4= neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7= absolutely acceptable (7)

Q18 In your opinion, how fair do you think is the demand of the sales manager?

- ☐ 1= absolutely unfair (1)
- ☐ 2 (2)
- ☐ 3 (3)

- ☐ 4=neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7= absolutely fair (7)

E01 Answer the following questions regarding how would you feel if agreed to the sales management demand. It is an exercise of imagination, regardless if you are or not inclined to agree to that demand.

Q19 How guilty would you feel if agreed to the sales manager's demand, in the case that only you both knew that arrangement?

- ☐ 1= not guilty at all (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4=neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7= extremely guilty (7)

Q20 How ashamed would you feel if agreed to the sales manager's demand, in the case that only you both knew that arrangement?

- ☐ 1= not ashamed at all (1)
- ☐ 2 (2)
- ☐ 3 (3)

- ☐ 4= neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7= extremely ashamed (7)

Q21 How embarrassed would you feel if agreed to the sales manager's demand, in the case that only you both knew that arrangement?

- ☐ 1= not embarrassed at all (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4=neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7= extremely embarrassed (7)

E02 Answer the following questions regarding how would you feel if agreed to the sales management demand. It is an exercise of imagination, regardless if you are or not inclined to agree to that demand.

Q22 How guilty would you feel if agreed to the sales manager's demand, in the case that you were caught and punished for making that arrangement?

- ☐ 1= not guilty at all (1)
- ☐ 2 (2)

- ☐ 3 (3)
- ☐ 4=neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7= extremely guilty (7)

Q23 How ashamed would you feel if agreed to the sales manager's demand, in the case that you were caught and punished for making that arrangement?

- ☐ 1= not ashamed at all (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4= neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7= extremely ashamed (7)

Q24 How embarrassed would you feel if agreed to the sales manager's demand, in the case that you were caught and punished for making that arrangement?

- ☐ 1= not embarrassed at all (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4=neutral (4)
- ☐ 5 (5)

- ☐ 6 (6)
- ☐ 7= extremely embarrassed (7)

E03 Please, answer the following questions regarding the HighTech computers decision not to deliver your order one week earlier.

Q25 It is not in the best interest of HighTech Computers to do so.

- ☐ 1= totally disagree (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4= neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7= totally agree (7)

Q26 Doing so would not affect HighTech Computers profitability by any means.

- ☐ 1= totally disagree (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4= neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7= totally agree (7)

Q27 HighTech Computers attitude is legitimate.

- ☐ 1= totally disagree (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4= neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7= totally agree (7)

Q28 HighTech Computers is not playing fair.

- ☐ 1= totally disagree (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4= neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7= totally agree (7)

Q29 HighTech Computers has no obligation to do so.

- ☐ 1= totally disagree (1)
- ☐ 2 (2)
- ☐ 3 (3)

- ☐ 4= neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7= totally agree (7)

E04 Please, answer the following questions regarding the sales manager's demand.

Q30 If you do not agree to making payments as such you may be out of the business.

- ☐ 1= totally disagree (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4= neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7= totally agree (7)

Q31 Making this kind of payment is sometimes the only option.

- ☐ 1= totally disagree (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4= neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)

☐ 7= totally agree (7)

Q32 Agreeing to such payment is not playing fair to HighTech Computers.

☐ 1= totally disagree (1)

☐ 2 (2)

☐ 3 (3)

☐ 4= neutral (4)

☐ 5 (5)

☐ 6 (6)

☐ 7= totally agree (7)

Q33 Not everything that is considered acceptable in the business environment is correct.

☐ 1= totally disagree (1)

☐ 2 (2)

☐ 3 (3)

☐ 4= neutral (4)

☐ 5 (5)

☐ 6 (6)

☐ 7= totally agree (7)

Q34 It is the business environment that sets the norm about what is or not acceptable.

☐ 1= totally disagree (1)

- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4= neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7= totally agree (7)

Q35 In this hypothetical scenario, what product were you purchasing?

Q36 What would be the consequence of delaying the project in this hypothetical scenario?

E05 The following questions concern yourself, in the real life, not in the presented scenario. Please, answer accordingly.

Q37 Taking risks can be fun.

- ☐ 1= totally disagree (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4=neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7= totally agree (7)

Q38 I would like to drive a race car.

- ☐ 1= totally disagree (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4=neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7= totally agree (7)

Q39 I sometimes do things I know are dangerous just for fun.

- ☐ 1= totally disagree (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4=neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7= totally agree (7)

Q40 I would rather be safe than sorry.

- ☐ 1= totally disagree (1)
- ☐ 2 (2)
- ☐ 3 (3)

- ☐ 4=neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7= totally agree (7)

Q41 I want to be sure before I purchase anything.

- ☐ 1= totally disagree (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4=neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7= totally agree (7)

Q42 I avoid risky things.

- ☐ 1= totally disagree (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4=neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7= totally agree (7)

E06 You are almost finished with this survey. The following questions concern yourself, in the real life, not in the presented scenario. Please, answer accordingly.

Q43 In the real life, how familiar are you with business selling/purchasing situations?

- ☐ 1= not familiar at all (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4=neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7= very familiar (7)

Q44 In the real life, do you have any experience with business buying/selling situations?

- ☐ 1= no experience (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4=neutral (4)
- ☐ 5 (5)
- ☐ 6 (6)
- ☐ 7= much experience (7)

Q45 Please state your gender:

- ☐ male (1)
- ☐ female (2)

Q46 Please state your age:

_____ years (1)

Q47 What is your profession?

Q48 What is your nationality?

Q49 What is your current country of residence?

Q50 In which country did you spend most of your life?

Q51 How long is your professional experience?

_____ years (1)

Q52 What is the highest level of education that you have completed?

- ☐ Less than High School (1)
- ☐ High School / GED (2)
- ☐ Some College (3)
- ☐ 2-year College Degree (4)
- ☐ 4-year College Degree (5)

- ☐ Masters Degree (6)
- ☐ Doctoral Degree (7)
- ☐ Professional Degree (JD, MD) (8)

Q53 Could you provide your Worker ID below?

8.3. Appendix 4 – Structured Literature Review

Even though there is a great amount of work on corruption in general, there is not as many in private corruption: a research using “corruption” as keyword in all disciplines and all times retrieved 16,963 results in ISI Web of Science (WoS) database, 29,467 in EBSCO database and about 1,360,000 in Google Scholar (GS); the same research using “private corruption” as key expression instead retrieved only 9 results in WoS, 11 in EBSCO and 1,210 in GS.

8.3.1. Method

To understand how this subject has been studied overtime in the fields of business management, economy and accountability, it was made a comprehensive categorization of the manuscripts on this matter which full-texts were available through Fundação Getulio Vargas - EAESP. From those, a sample was randomly selected to more detailed investigation and further coding to obtain a representative view on private corruption. As the goal of this preliminary literature review was to obtain a less biased (and more comprehensive) view on the private-to-private corruption theme, the database chosen was GS, given the scarcity of works on this theme in EBSCO and WoS. Since the focus of this investigation is to assess private-to-private corruption only, not private-public corruption, the results were refined using the expression “private-to-private corruption” in the search.

8.3.2. Results

This search retrieved 240 papers (anytime, including patents and citations). Each one of the citations was manually exported from Google Scholar to EndNote. From those, papers that appeared more than once, from gray literature or in any language but English, Portuguese, Spanish or French were excluded from the database. Then, were selected only the articles in economy, business and accounting areas (n=100). From those, it was granted assess to 80% of the full articles (n=80) through the institutional network. These articles were categorized by research strategy (**Table 29**).

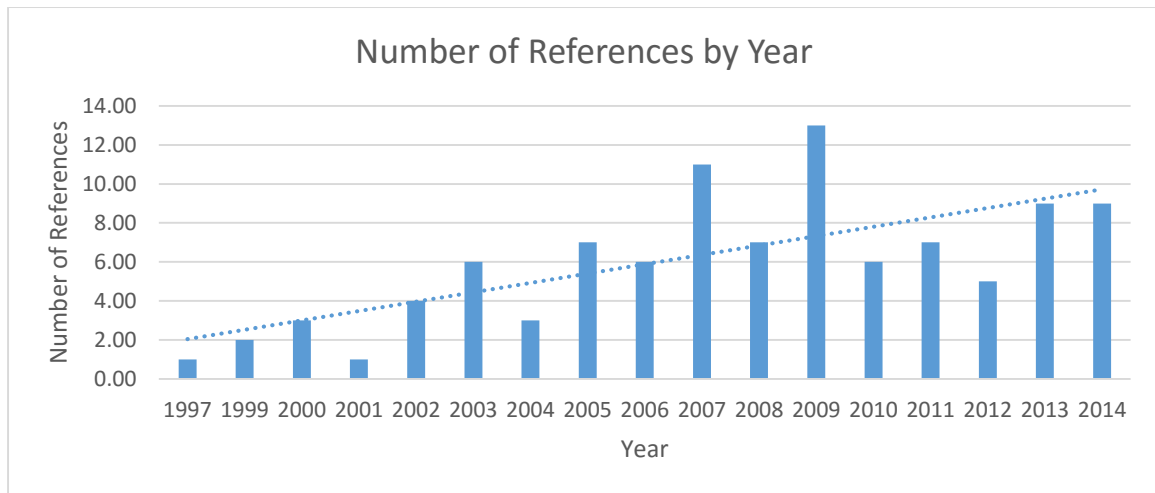


Figure 5: Number of References by Year

Despite its relevance, this literature review has shown that the phenomenon “private-to-private” corruption was recognized and began to be studied as so only in the late 90’s, and only few were published before the 2000’s (Figure 5). Maybe the scarcity and recency of the studies on the theme, at least partially, could explain some of the disagreements between the articles and the greater volume of theoretical studies if compared to empirical studies on the matter. A further analysis on the nature of the empirical studies showed that only a minority were based on primary data (**Table 29**).

Table 29

Comprehensive assessment on private-to-private corruption literature up to February 2015

case study	Empirical			Theoretical	Total
	survey	experiment	documental analysis		
7	6	2	13	7	45
					80

Finally, 17% of remainder of the articles (n=14) were randomly selected to perform further analysis. The analysis was supported by the software Atlas.TI. Article’s excerpts were coded in 18 categories, as shown in **Error! Reference source not found..**

Table 30: Number of excerpts by codes and by articles.

	bribery	classification of corruption	consequences of corruption	contrary arguments	corrupt acts	definition	difficulties	difficulties	defining	studying	what is	extortion	on	influencing	favor exchange	favoritism	misappropriation	private anticorruption	private corruption	private definition	relevance	TOTALS:
Argandoña, 2005	1	1	1	0	1	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	7
Calderón & Arce, 2007	1	0	0	3	1	0	2	9	2	9	0	1	9	0	1	0	0	1	0	0	4	32
Faqir, Abu-Karaki, & Marashdah, 2007	1	4	1	0	0	7	2	0	2	0	0	1	2	0	1	1	0	1	0	0	0	21
Sundberg & Stanković, 2007	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	6	0	0	0	0	9
Ogrean et al., 2008	0	0	2	0	0	1	1	1	1	0	0	0	0	0	0	0	0	2	0	0	2	9
Halter & de Arruda, 2009	1	0	1	0	1	1	0	0	0	0	0	0	5	0	0	0	0	1	0	0	3	13

P. P. Li, 2009	0	1	0	0	1	0	0	0	1	0	1	0	1	0	0	1	0	0	6
Perreault, Keith, & Chin, 2009	2	0	0	0	1	0	0	0	0	0	5	0	2	0	0	1	0	0	11
Charki, Josserand, & Charki, 2011	1	0	2	0	1	2	3	0	0	0	6	0	0	0	0	0	0	0	15
Zhang, 2012	1	0	1	0	0	2	2	0	3	0	1	0	0	0	0	0	0	2	12
Dridi, 2013	0	0	13	0	0	0	0	0	4	0	0	0	0	0	0	0	0	1	18
R. Li, 2013	1	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	2	6
Wedeman, 2013	2	0	1	0	0	1	4	0	1	1	2	0	0	0	0	2	0	2	16
Argandoña, 2006	1	0	4	0	3	0	1	0	0	0	11	0	0	1	0	3	0	1	25
TOTALS:	12	6	26	3	9	16	15	11	10	3	47	0	5	2	6	12	0	17	200

8.3.3. Factors that influences on corruption

Even though some benefits were attributed to corruption, as avoiding the rigidities of bureaucracy (Calderón, 2005; Dridi, 2013), it is uncontestable that the predominant view is that this phenomenon is overall negative. Some academic articles recognize social and economic impacts of corruption (Calderon & Arce, 2007), pointing out damages to economic growth, associating corruption to a low gain in productivity and low levels of foreign direct investment (Zhang, 2012); others illustrated the issue with anecdotal examples. Diverse types of corrupt practices were cited, especially bribery and related practices.

Numerous harmful effects were stated, manifested in many levels: social (Argandoña, 2005, 2006; Faqir, et al., 2007; Ogorean, Herciu, & Belaşcu, 2008), organizational (Argandoña, 2005; Dridi, 2013; Halter, De Arruda, & Halter, 2009), inter-organizational (Charki, Josserand, & Charki, 2011), sectorial (Dridi, 2013; Ogorean, et al., 2008), national (Argandoña, 2006; Dridi, 2013; Halter & de Arruda, 2009; Ogorean, et al., 2008; Zhang, 2012) and international (Argandoña, 2006; Ogorean, et al., 2008) spheres.

The set of factors referred by the sample as possibly influential on corruption are summarized in:



Figure 6: Summary of factors that influence on corruption

Given the deep impact of the corruption in many aspects of the society and that developing countries are particularly inclined to corruption (Halter & de Arruda, 2009; Zhang, 2012), the study of the phenomenon in emerging markets is very relevant (Zhang, 2012). Thus, a transnational study will be very interesting as it can explore if there is really a greater predisposition to engage on corrupt acts in developing countries if compared to developed countries.

Also, in the developing countries context, corruption is still growing as appear opportunities to do business, causing high financial, legal, social and ethical costs – the

latter leading to damage to reputation and to the creation of an atmosphere that favors corruption (Halter & de Arruda, 2009).

Despite its relevance, this literature review has shown that the phenomenon “private-to-private” corruption was recognized and began to be studied as so only in the late 90’s, and only few were published before the 2000’s. Maybe the scarcity and recency of the studies on the theme, at least partially, could explain some of the disagreements between the articles and the greater volume of theoretical studies if compared to empirical studies on the matter. A further analysis on the nature of the empirical studies showed that only a minority were based on primary data.

As asserted by Calderón (Calderón & Álvarez-Arce), the corruption is a very complex phenomenon. It was shown true by the long list of factors pointed by the articles’ sample that can interfere on its manifestation, such as normative, legal and mechanical anticorruption measures (Argandoña, 2007; Calderon & Arce, 2007; Charki, et al., 2011 2011; R. Li, 2013; Sundberg & Stanković, 2007; Zhang, 2012), historical, social, economic, administrative and cultural country’s context (Calderon & Arce, 2007; Faqir, et al., 2007; R. Li, 2013), institutional context (P. P. Li, 2009), media freedom (R. Li, 2013), transparency (Halter & de Arruda, 2009; Zhang, 2012), organizational codes of conduct/ethics or behavior guidelines (Charki, et al., 2011; Perreault, et al., 2009 2009), emergence of new technologies (Charki, et al., 2011), ethical training (Perreault, et al., 2009), meeting the stakeholders expectations (Halter & de Arruda, 2009), public involvement (Sundberg & Stanković, 2007) and reforming incentives (Sundberg & Stanković, 2007).

Nevertheless, the extent of each factor role on the phenomenon was usually not well-known. This is so because of the absence of a systemic corruption model (Calderón & Álvarez-Arce, 2006; P. P. Li, 2009) and the non-trivial relationships and reverse causality between variables that interfere on the phenomenon, challenging its study (Calderón & Álvarez-Arce, 2006).

8.4. Appendix 5 – Exploratory multiple case study

At this first stage, the research aimed to understand an organizational process that could be susceptible private-to-private corruption and how it could be appeared. According to Yin (Yin), there are two possible strategies, the documental analysis and case study, once there are no intention to manipulate the behavioral events and emphasis on the contemporary happenings.

By analyzing each of the research strategy, the documental analysis was not adopted, since private-to-private corruption is expected to be non-formal transaction; therefore, no organizational documents should register this subtle phenomenon. In addition, from the case study, it is possible to infer eventual causal relationship, describe an intervention and the context where it occurs, and illustrate a topic in a context and some ambiguous situation (Eisenhardt, 1989; Yin, 2002).

8.4.1. Method overview

The study was designed to assure its reliability, construct, internal and external validities (Yin, 2002). To assure internal and external validities of the study, the cases and unit of analysis were carefully stablished, with clear research purpose, and structured method of analysis. In the present research, the method of analysis is based on content analysis inspired in grounded approach (Strauss, 2003) and supported by Atlas TI®. The codification of each construct is based on the literature review, then cross-checked with existing literature.

According to Yin (Yin), the data collection is an important part of the research to guarantee the construct validity and the reliability. There are three recommendations for the data collection: (a) multiple source of data, such as interviews, documents, and site observations; (b) creation of a database of all the gathered data to be able to organize, recovered, analyzed and inspected; (c) link and highlight the evidences to provide reliable conclusions.

The first recommendation was followed partially, due the non-formal nature of the subject: there are few written sources of information as corruption tends to be done in secret (Brunelle-Quraishi, 2011). The case selection focused on 1) top management team, since that they could be probably richer in information as they had access to a broader view of the procurement process. (Flyvbjerg, 2006) and 2) people who had experience on b2b purchasing/selling, since this was the phenomenon that would be studied. Also, it was aimed for variety of industries and positions in order to obtain the most generalizable sample as possible. Keeping that in mind, the individual cases were then selected by convenience, because only few people with that profile were open and available to be interviewed. (Flyvbjerg, 2006). Interviews were conducted in person, in a private and isolated room and the audio was recorded.

To accomplish the second and third recommendations, all the interviews records were transferred to a computer, coded and analyzed by qualitative research support software (ATLAS TI®). The usage of this software had as purpose to organize the data, to assist the codification process as well as linking the evidences founded in the study (Bandeira de Melo, 2006; Krippendorff, 2004). The audios were not transcribed because the tone of the voice can provide information that would be lost by doing so.

Table 31

Cases study design

Items of case study design	Description
Phenomenon investigated	Private-to-private corruption
Object	An organizational process that can be susceptible to private-to-private corruption
Unit of analysis	Process
Number of cases	Multiple – five cases
Specific objective	Understand an organizational process that can be susceptible to private-to-private corruption acts
Criteria to analyze and interpret the results	Content analysis / Construct codification / Comparison with existing literature.

8.4.2. Research strategy definition

The definition of a proper research strategy is fundamental to conduct the researchers to achieve their goals; therefore, it should be defined carefully. To answer the key question of this study it was proposed two complementary strategies. First, the qualitative approach to understand an organizational process where the private-to-private corruption can emerge (Eisenhardt, 1989; Voss, Tsikriktsis, & Frohlich, 2002 2002), then an experimental approach to investigate the causal effect of a couple environmental variables over predisposition to perform corruption acts in the organizational process mapped previously (Aguinis & Bradley, 2014; Highhouse, 2009).

Case studies are methods in which the analysis is embedded in a specific context. They are very relevant for knowledge building and very useful as the real life happens within a context. That is why it was employed a case study to better understand the purchasing situations and what are the stages from what corruption can arise.

Adoption of case study to explore could be really challenging given it is a very complex problem, as the factors that influence corruption are numerous and the relations between them, non-trivial. To understand which variables are taken into account when opting for a corrupt practice, it was conducted a multiple case study with top managers. To resolve the endogeneity problem, it was used an experimental approach. Integrating both methods, this study could overcome case study representability issues and bring more realism to the experiment.

Thus, it was conducted a multiple-case study in order to: 1) understand business-to-business purchasing/supplying processes, its differences and commonalities. 2) Create an integrated framework for the business-to-business purchasing/supplying process, highlighting which phases can be potentially subject to corruption; 3) Select from the various factors that can contribute to corruption a couple that are probably very influential to the decision-making process. 4) Used the results to help building a realistic vignette to the experiment to be conducted shortly after.

8.4.2.1. *Sampling*

Due to the phenomenon studied, it is not possible to choose representative cases of private-to-private corruption, because of ethical and media exposition concerns. Additionally, the present study had no intention to test, neither build theory; therefore, the case selection was based on data access convenience. Despite the possible presence of biases, the present study tried to minimize it through multiple cases (five cases), different industry and company sizes, maximizing external validity.

The profiles of the interviewees were top managers of the selected companies; they all had experiences in running business as well as designing the organizational procurement processes.

8.4.2.2. *Data gathering*

The interviews were conducted based on semi-structured questionnaires, in loco and personally by the researcher. They were made in private and isolated offices or environments to make the interviewees conformable.

The questionnaire was elaborated based on the existing literature about the organizational process, specially, organizational purchasing. The main purpose of the interviews was to gather data to understand a possible organizational process possible for private-to-private corruption. The routine of the interviews was inspired in a free flow discussion; despite the researcher had all the questions previously defined, there was not a rigid sequence for the order of the questions. During the interviews of about 60 minutes, the researcher stimulated the interviewees to talk about the organizational processes and their daily examples that they did considered relevant for the situation.

The questionnaire was pre-validated with other researchers of the organizational procurement studies and then improved according to the conduction of the interviews. This was necessary to explore the particularities, freedom and motivations to speak about

their experiences; however, the main structure of the questionnaires had not changed (Voss, et al., 2002).

The interview was conducted in four blocks: (a) Business description and environment; (b) Organizational procurement structure; (c) Organizational procurement process; (d) Examples and experiences.

The questionnaire was elaborated based on the existing literature about the organizational process, specially, organizational procurement. The main purpose of the interviews was to gather data to understand a possible organizational process possible for private-to-private corruption. The routine of the interviews was inspired in a free flow discussion; despite the researcher had all the questions previously defined, there was not a rigid sequence for the order of the questions. During the interviews of about 60 minutes, the researcher stimulated the interviewees to talk about the organizational processes and their daily examples that they did considered relevant for the situation.

8.4.2.3. *Data analysis*

To conduct the analysis of cases study, there are two possible approaches, the discourse and content analysis (Krippendorff, 2004). The first will require interpretation of linguistic and ideological construction of the speech, meanwhile, the second approach will required researcher to categorize the data, tabulate, exam and compare them to find some patterns and logical relationship among (Krippendorff, 2004; R. P. Weber, 1990).

To avoid getting into linguistic domain, this research adopted the content approach, therefore, data was structurally and systematically classified into categories, then, through logical inference, the relationship among them was identified.

To accomplish four quality recommendations suggested by Weber (R. P. Weber): (a) stability; (b) reproducibility; (c) accuracy; (d) validity of the classification, this research had employed the Atlas TI® to support the codification. In sum, it was followed the procedure illustrated in Figure 7:

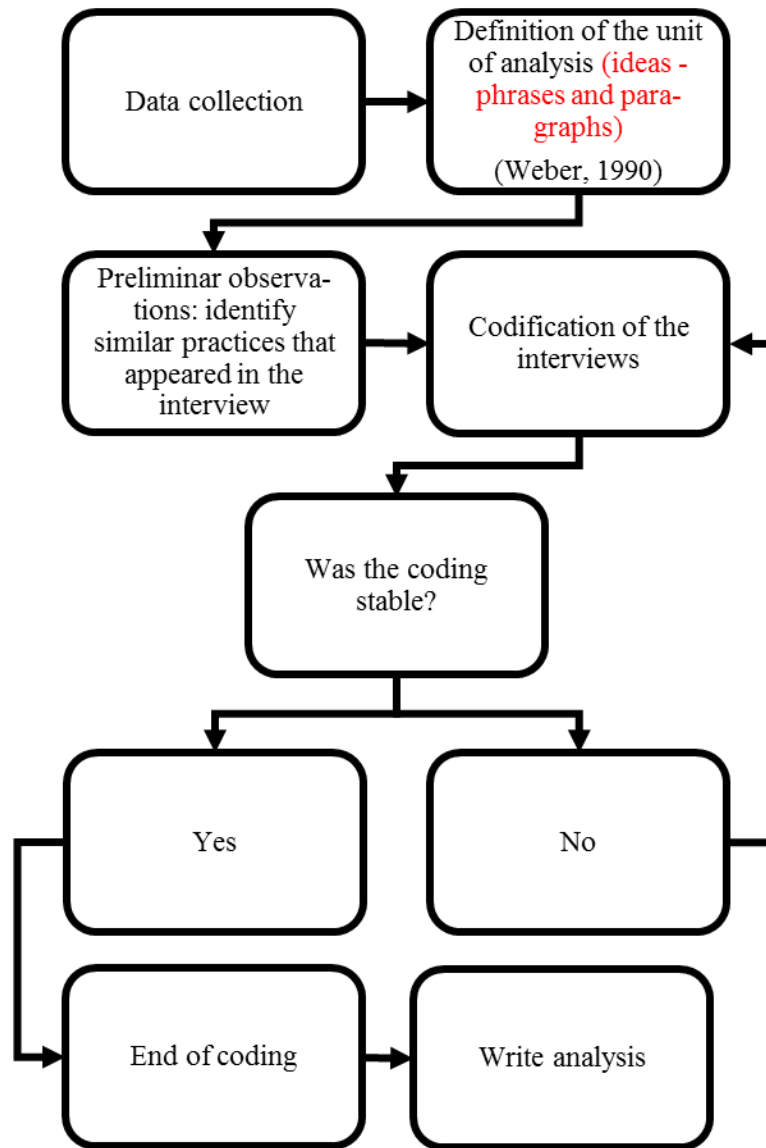


Figure 7: Analysis method.

8.4.3. Results and discussion

8.4.3.1. Sample characterization

All respondents held a top-management position at some point of their careers, such as vice-president, financial director (CFO) or even firm owners. These respondents were all

involved in the procurement process definition as well as its policy and operations. The interviews had an approximate duration between one and two hours.

The sample summary can be found in the Table 32:

Table 32: Sample Summary

Sector	Position	Revenue (2011)/Size
16,7 Autoparts	33,3% Owner/Owner-	66,7% Greater than 1
16,7% Construction	Director	billion BRL/ Big
16,7% Food and Beverage	16,7% CFO	companies
16,7% Services	16,7% CEO	16,7% Between a million
16,7% Pharmaceutical	33,3% Top managers	BRL and a billion BRL/
16,7% Infrastructure /		Medium company
Transportation		16,7% Less than 1 million
		BRL/ Small company

8.4.3.2. Cases description

During the first phase of this research, qualitative research based on cases study was employed. It was studied five cases, which are briefly summarized below. We omitted most case details in order to protect the company and interviewees.

- Case A: It is traditional and well established national company with a billionaire annual revenue. It has received several international awards (name of the awards remained confidential) concerning its Operations Management, Process Management and considered as one of the place to work in 2014.
- Case B: It is a medium familiar construction company. The annual revenue was not revealed. Despite its size, it is founded by former vice presidents of a national wide Corporation. This company has solid process management which was inspired in the originally managed company of the founders, which is a big-sized company.

- Case C: It is a big company with annual revenue about a couple of hundred millions (the precise amount is confidential). This organization is certified by ISO 9001 and constantly audited by governmental regulation agency and external certification parties. It was founded in the late 70's and revenue in 2013 was 2.5 billion BRL
- Case D: It is an American multinational corporation. The business unit explored is focused in only one of its products sales. As well as other cases, this organization also has a well-established process management to run its operations. In addition, it has policies to reinforce sustainable and ethical practices in working environment, manufacturing, and relationship with all the stakeholders and society.
- Case E: It is a company that operates in the beauty industry. It is a small size and family company, therefore, annual revenue was not available. Differently from the other cases, this organization is less process oriented than others, however, the owners are more involved in the daily operations and hierarchical level is almost the minimum.
- Case F: It is a big national company that also operates in several countries throughout the globe. It is a quality oriented company with a well-designed internal process and also certified by ISO 16949 and ISO 14000. It's revenue in 2013 was around a billion BRL ($\approx 300,000,000.00$ USD).

8.4.3.3. *Organizational procurement process*

The organizational process explored was the procurement process of the companies. The procurement process choice was based on its relevance for a firm's national and international competitiveness due to several aspects, such as cost reduction, quality assurance, effectiveness of business strategy implementation and organization reputation. Also, concerning the globalization phenomenon, the increase in international procurement puts firms in greater risk of corruption (Carmel & Tjia, 2005). However, from anecdotal cases, it is known that this process is sensitive to unethical practices, such

as recent “Lava-Jato” scandal in the Brazilian Petroleum Company’s contract awarding process.

The organizational procurement process is a cross-functional process; it involves the demand sector (operations, productions, maintenance, R&D, engineering, or administrative), procurement department, financial, legal and, sometimes, top management.

The demand sector elaborates the specification of the product to be purchased, then this specification is submitted to approval, once it is ok, the purchasing order is prepared by the procurement area. The next step is to send the purchasing order to potential suppliers and wait for the proposals. With the proposals, the purchasing area equalize all the information, afterwards, it is to proceed with the supplier selection.

The supplier selection relies on multi-criteria decision making and a priority for each criterion is established. In some situation, where the procurement process does not use price bidding for awarding, negotiation between buyer and supplier can take place to arrive into a common agreement.

The procurement process could be summarized on Figure 8

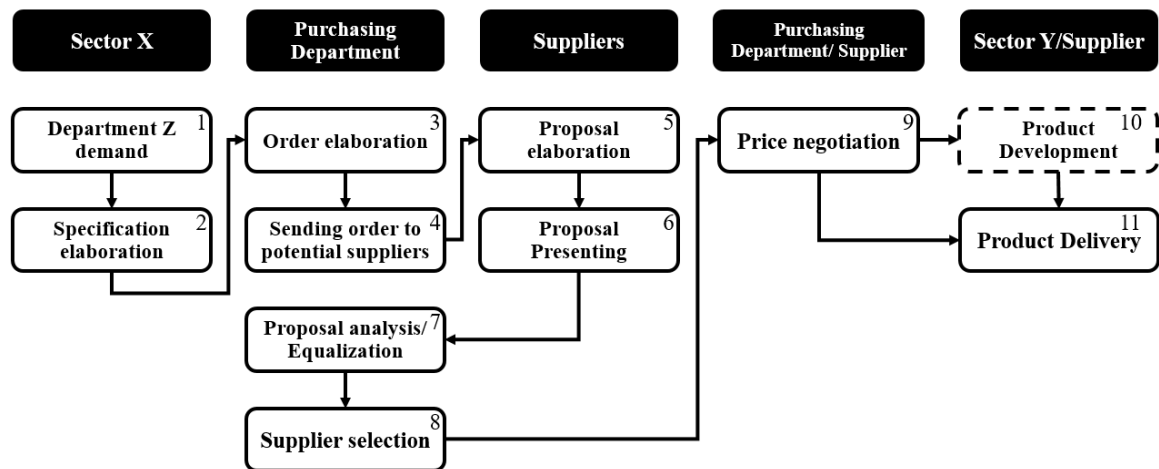


Figure 8: General procurement process

8.4.3.4. Supply chain corruption risks

Several mechanisms through what people corrupt within the private sector were identified. There are opportunities to engage in corruption in various points of the procurement process, listed in Table 33.

Table 33: Corruption mechanisms within the procurement process.

	Purchasing process	Mechanisms	Examples
1	Department Demand	Biased specification;	<p><i>"...we have specified exactly those (products) that we would buy.." (to avoid corruption)..</i></p> <p><i>"each purchase is considered as a new process" (to avoid bias)</i></p>
2	Specif. Elaboration	Buyer-supplier relationship;	
3	Order elaboration	No clear specification; No clear rules	
4	Order to pot. Suppls.	<p>Absence of rules or procedures</p> <p>Buyer-supplier relationship;</p>	<p><i>"...we had a mechanism in our ERP that had the history of quantity purchased and price...when we need the material, it sent directly the purchase order to the supplier..." (to avoid absence of rules).</i></p> <p><i>"...(we quote with) at least three (suppliers)..."</i></p> <p><i>"...we already know where to search, but (if the product) is something new, we go to the internet or through somebody that we know"</i></p> <p><i>"The risk WAS ZERO" When asked what was the odds for an employee that was accidentally caught for making frauding a suppliers' quotation.</i></p>

5	Proposal elaborat.	Price (utility) Opportunism Power; Bribery	<p><i>“...you pretend to be my friend, pretend to be my partner...at the end is all about cost...”</i></p> <p><i>“...A (big chain of) retailer is killing me...”</i></p> <p><i>“...The worst thing for the purchasing is time pressure...”</i></p> <p><i>“...negotiation with (a huge) retailer, it's CEO was there...”</i> <i>”75% of the market belongs to one competitor, the retailer pays 100 to that competitor and 90 to me, then is great!...”</i></p> <p>“</p>
6	Prop. Presentation	Bribery	<p>“...we have ethical codes against bribery, however, our top management team knows that (our distributors bribe the customer to purchase our product), they pretend not knowing and even ask the distributors to do that...”</p>
7	Prop analysis /equalization	Absence of metrics Poor specification	<p>“we have to compare what are comparable...”</p>
8	Supp. selection	Buyer-supplier relationship	<p>“...the guy is purchasing XYZ for 20 years, it arrives at certain point that is complicated.. there will be 4, 5 or 6 (suppliers) and the same purchaser for a long time, there will be problem of sure “</p>

9	Price negotiation	Unfair prices from the supplier Bribery	<i>“we had a mechanism (reverse engineering and cost analysis) to avoid that... we had a department of engineering with that purpose in the sector of purchase exclusively for that (cost decomposition)...”</i>
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From the result analysis, it was inferred that a procurement process of the organization could be exposed to a plethora of possible corrupt situations. The only limit, as an interviewee has said, is the human creativity. One evidence of this phenomenon are the new forms of corruption that emerge from new technologies (Charki, et al., 2011).

From the department demand to the order elaboration resides the initial corruption risks. The first possible unethical practice favouring other party is to define the purchasing of unnecessary products, and then followed by specifying unrealistic quantity and establishing particular characteristics of the products toward certain partner. It is possible to infer this problem from the following extract of the interview: “...(in the procurement process)... we define exactly what should be bought...”

Additionally, the corruption can also be done through defining unrealistic urgency of purchase. As one of the interviewee mentioned: “...one of the most detrimental problem is purchasing in a hurry...”. In this situation, the procurement agent could not arrive to a best agreement in the procurement process.

Still regarding the pre-purchasing phase, the procurement agent could elaborate order which already is already targeting certain suppliers or he can do the selective sending, where only those suppliers that is engaged with him into the corruptive practice will receive the order. This outcome is possible to be inferred from these two extracts from two different interviewees: “...the guy is purchasing XYZ for 20 years, it arrives at certain point that is complicated. there will be 4, 5 or 6 (suppliers) and the same purchaser for a long time, there will be problem of sure...”. In other example, an

interviewee explained a situation where he found by chance a fake quotation. The interviewee came through a supplier's quotation collected by an employee from his company. However, he suspected of a high priced offer from this supplier, thereafter named company X. Coincidentally, he was friends with a company X's manager and called him asking the reason of that price. Company X had never received a proposal nor sent any quotation. When the researcher asked the interviewee what were the odds of being caught in that specific situation, he stated that the odds were "ZERO". It was just very unlucky for the employee that he was friends with a suppliers' manager.

During the supplier proposal elaboration, the corrupted purchasing agent could accept unrealistic information, such as low price, delivery lead time and amount, as well as product characteristic just to award the contract to the corrupting partner. One of the interviewee mentioned: "we had a mechanism (reverse engineering and cost analysis) to avoid that... we had a department of engineering with that purpose in the sector of purchase exclusively for that (cost decomposition)...".

Once having the supplier proposal, the negotiation could be conducted by both corrupted parties against the firm's interests, they can try to take advantages through poor equalization process, bad analysis, inflate the price to appropriate the surplus or even ignoring non conformities of the products. As stated by one interviewee: "(we have to equalize all the proposal before decision)...we must compare what is comparable...".

By signing the contract, the corrupted party could still perform unethical practices, such as relaxing at the quality requirements, delivery delays, extended lead times or even accepting noncompliance products.

Finally, the procurement process, it is susceptible to corruption when there are no formal or clear rules to be followed. As observed by the interviewee: "... (to avoid unethical practices) We have a mechanism in our ERP system that has the quantity and price of the material, then, when we should purchase this material, it goes directly to the supplier".

To summarize the qualitative stage, it could be observed from the interviews that the procurement process is a well-structured and consolidated process; however, corruption mechanisms exist along the process and not evident. It was difficult approaching this issue with the respondents, since it is a sensitive issue. Therefore, it is possible that much was omitted.