

Business corruption: Incidence, mechanisms, and consequences

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Introduction

The phenomenon of corruption and economic theory

Corruption is often defined as the misuse of entrusted authority for personal benefit. The authority is usually public or political. A decision has been made that deviates from the official aim of the institution that holds authority. Through corruption some people have obtained benefits they would not get hold of otherwise. These people represent the two sides of corruption. One has offered a bribe, and the other has abused his or her office. Both parties to the transaction will benefit, though the way the spoils are shared between them will depend on their respective negotiating powers.¹ The functions of public and political institutions are affected when the practice of making such agreements is common. The consequences in a country can be considerable. Several authors have found a correlation between economic growth and perceived extents of corruption in statistical studies that include a large number of countries.²

Corruption has indeed motivated to research, and several of its welfare consequences have been examined in an economic perspective. Today it is bizarre that some of the early contributions defended corruption in terms of promoting economic growth. Huntington (1968) described corruption as the way of approaching "an over-centralized bureaucracy" (Huntington, 1968:386), an opinion he shared with Leff (1964). This interpretation has largely fallen out of favor in economic theory, as elsewhere. Myrdal (1968) was one of the first to challenge the 'grease money' model by showing how bribery creates incentives for civil servants to put pressure on potential bribers, and actually causes bureaucratic delays.³ A broader critique was provided by Rose-Ackerman (1978) who described corruption as an obstacle to welfare from several different perspectives, including that of firms. The conclusions have been supported, specified and elaborated in a number of studies, including those by Lui (1985), Hillman and Katz (1987), Besley and McLaren (1993); several authors have explained the persistence of the problem (Andvig and Moene, 1990; Banerjee, 1997; Tanzi, 1995); and we got case studies of the phenomenon that played important roles in communicating the nature of the problem, see for example Wade (1982) and Klitgaard (1988).

During the 1980s and up until earlier 1990s, the main development in this field of economic theory was concerned with the broader rent-seeking perspective. This trend started with the early works of Tullock (1967), Krueger (1974) and Bhagwati (1982). The welfare implications of various forms of rent-seeking were determined, as were

¹ See Rose-Ackerman (1999), Bardhan (1997) and Aidt (2003) broader explanation and categorization of different circumstances of corruption.

² See Mauro (1995), Mo (2001), Gyimah-Prempong (2002), Pellegrini and Gerlagh (2004), Kaufmann, Kray and Mastruzzi (2006).

³ This theory was empirically supported by Kaufmann and Wei (1999).

the propensity of various actors to take part in rent-seeking. However, very few authors made a distinction between legal and illegal forms of rent-seeking, and much of this literature lacks the perspective that is necessary to understand corruption.⁴ Lambsdorff (2002) explains why the welfare consequences from corruption differ from those of legal rent-seeking. He points particularly at the analytical significance of personal benefits obtained by the one who receives a bribe; legal rent-seeking will often occur as an annoyance to the decision-maker in question.

The focus on corruption in economic research increased significantly after Mauro's (1995) influential paper determining a correlation between corruption and poor economic growth, and the World Bank's focus on this problem. The consequences of corruption have now been shown to materialize in very different ways.⁵ I will not present a complete overview of this literature. However, an important feature of corruption turns out to be its ability to produce less direct welfare consequences. For instance, corruption may encourage civil servants to seek positions that offer the best opportunity to obtain bribes, in that way influence the function of public institutions.⁶ It may result in deliberated delays and obstacles in the reform of business regulations in order to obtain personal benefits for civil servants, such as those relating to the issue of licenses and permits, or the persistence of inefficient business-regulations that easily could be reformed. The resulting transaction cost imposed on firms is in itself a barrier to trade and investments, and has been shown to have serious consequences for the development of trade and industry, especially in developing countries.⁷

In spite of the many facets of corruption, the problem is generally called a "hidden phenomenon". The parties involved will try to keep their arrangement as secret as possible. The problem is nevertheless perceivable, though difficult to prove, difficult to estimate, and difficult to attack through laws and regulations. Yet we believe that the extent of the problem differs between business sectors, firms of different size, firms that operate under different degrees of competitive pressure, geography and local political situation. The challenge of collecting empirical information that supports such assumptions is obvious, and despite the many attempts to explain the phenomenon of corruption, its mechanisms and its consequences, there are still a number of issues that need further examination. The present study aims at contributing in this respect, by exploring various challenges related to business corruption.

⁴ See Buchanan, Tollison and Tullock (1980) for a collection of the pioneering rent-seeking literature. McNutt (2002) provides a more contemporary review.

⁵ See Rose-Ackerman (2004) for an annotated review of the empirical research and Aidt (2003) for a recent survey of economic analyses of corruption.

⁶ See Acemoglu and Verdier (1998).

⁷ See Rao (2003) for an introduction to the economics of transaction costs. The problem is also well described by De Soto (1989). An overview of the many business obstacles that could have been reformed is presented by the IBRD/World Bank (2005). Data on corruption and the business climate are provided by Batra, Kaufmann and Stone (2003).

Business corruption

This form of corruption is defined by the involvement of private companies, and is usually motivated by corporate profits. In contrast to the term ‘political corruption’, or ‘petty corruption’, where we focus on the interests of politicians or civil servants, we usually emphasize the perspective and the interests of the bribers when applying the term business corruption. As noted, however, there are two parties involved. Thus, while the circumstances considered in this thesis are examined primarily from the perspective of business corruption, they clearly count as political corruption from another perspective.⁸

The problem of business corruption has been highlighted by a number of scandals in the recent years, such as ExxonMobil in Kazakhstan, where payments were made in Kazakh officials to obtain a share the Karachaganak oil and gas field; the Lesotho Dam project, in which eight international construction companies were charged with bribery after they allegedly paid bribes to win contracts for a large dam project; or the Titan Corporation’s unofficial payments to the President of Benin to get important business advantages.⁹ The media will often describe such cases as fraud, theft, greed and undeserved advantages. Like corruption in general, however, the consequences of business corruption are usually wider, and related to the inefficiencies introduced in a system that in some way is supposed to ensure welfare in a society.

The consequences will often depend on the specific benefits obtained by the bribery. For example, when bribes are offered to obtain some form of tax evasion, neglected security controls, or exemption from certain standards or rules, the firm’s benefit appear as a reduction in its expenditures. The consequences to society would, accordingly, be a reduction in state revenues, reduced security for employees or for the public, and/or environmental consequences. Another category of benefits provide the firm with an exclusive market position; these could include exemption from trade barriers, waived regulations, and the chance to operate a monopoly. The likely results for the business are higher prices for goods or services in production; for the society it means lower consumer surplus. The classical examples, perhaps, are those of procurement. Firms offer bribes to obtain business contracts that they would probably not obtain in a legal procedure. This can take place in public tenders, but also between firms. Large companies will often have significant procurement expenses, and they also have procurement routines that can be violated by bribery. The consequence of tender-corruption will usually be an inferior combination of price and quality of the goods or services rendered.

The present study describes some of the mechanisms behind these consequences. It begins by explaining the distinct methodological challenges related to empirical

⁸ Shleifer and Vishny (1998) describe several important aspects of the connection between politicians and firms in the light of corruption. Heidenheimer and Johnston (2002) present a collection of contributions on political corruption. See also Clarke and Xu (2004) for an empirical study of the characteristics of firms that are involved in corruption.

⁹ See, for instance, www.againstcorruption.org or www.transparency.org for more information about cases of business corruption.

research on corruption. In spite of these challenges, the thesis continues by an attempt to collect information about business corruption. This information is applied in two theoretical analyses of the phenomenon, one about firms' responses to the problem, a second about their propensity to take part. A final chapter in this thesis explains some of the consequences of business corruption, in terms of industrial organization. I will shortly describe the different studies, and finally summarize some of their policy implications.

This thesis: Incidents, mechanisms, and consequences

(i) Estimating levels of corruption; methodological challenges

Observed differences in the degree of the problem have motivated estimations of the extent of corruption within countries. The World Bank and Transparency International both collect survey results on a significant scale, and make estimates of the local levels of corruption in a number of countries on the basis of the reported perceptions of business people, civil servants, ordinary people, country analysts and other experts. These estimations are then applied in research to determine correlations between the phenomenon of corruption and other parameters. The best known collection of estimates in this respect is the Corruption Perception Index (CPI) of Transparency International.¹⁰ This index ranks countries according to the perceived extent of corruption locally.

The first chapter of this thesis discusses some of the methodological and theoretical problems associated with assessing levels of corruption and discusses the practice of ranking countries according to perceived levels of corruption. A main problem with the CPI is that all forms of corruption in a country are supposed to be included. It is not made clear for the respondents how to classify the local extent of corruption, and thus there is no clear distinction between the illegal and the immoral, between political corruption and petty corruption, or between the supply and demand side of corruption. This makes it difficult to understand the contents of the index.

This chapter highlights the implications of the methodological problems when corruption rankings are used in research. Reliance on an index, such as the CPI, can weaken analysis, and thus affect conclusions about corruption. Besides, the composite corruption index simplifies a complex phenomenon far too much. The information will not provide the data that is required to understand the phenomenon. Detailed empirical information about business corruption is needed to verify the incidence, the mechanisms and the consequences of the phenomenon. Any theory about corruption will have only limited value if there is no empirical support to the mechanism under scrutiny.

The study of the corruption index; its limitations, and the implication of these limitations, implied inquiry into several of the main challenges related to empirical

¹⁰ See www.transparency.org

information about the incidence of corruption. The discussion in Chapter 1 thus goes beyond the role of Transparency International and its index.

(ii) The business survey, Norway 2004

As noted, a major criticism of existing rankings of countries according to perceived levels of corruption is that they do not provide the detailed empirical information that is required to verify the incidence of business corruption, determine the mechanisms involved, and assess the correlations with other variables. Survey results can make an important contribution to research on business corruption, provided detailed information about methodology (including questionnaire design, sample size, rate of response) are made available. Properly conducted surveys can indeed help to compensate for the limitations of the CPI if the aim is to understand the extent of the problem in a given country, market or institution. See Svensson (2003) for a general discussion and results from empirical studies in Uganda.

The third chapter of this thesis reports on an attempt to collect detailed empirical information about business corruption through survey work (Søreide, 2006). The aim was to collect data for analytical work, to test for the presence of correlations, to identify research questions, and to support analytical results. The resulting survey data provided the empirical basis for two analytical studies, presented here as Chapters 3 and 4. However, the study also aimed broadly at collecting more general information about firms' attitudes, preferences, and choices in respect of business corruption.

The survey project was conducted in cooperation with the Confederation of Norwegian Enterprise (NHO), and had three components. It began with a pilot study involving interviews with executives in charge of international sales and marketing in seven large Norwegian firms. A mail questionnaire containing close to 100 questions relating to corruption was then developed and circulated to more than 500 firms, to which 82 top managers in Norwegian exporting firms responded. Several issues were examined in this study: (i) the grey zones between illegal business corruption and similar legal practices that have welfare consequences that resemble those of corruption. (ii) The role of competitive pressure and firms' preferences when exposed to corruption-related challenges. (iii) Firms' options and choices when they lose contracts because competitors offer bribes. (iv) The effectiveness of procurement rules to prevent tender corruption. (v) The coherence between codes of conduct and actual business practice in respect of corruption related issues.

The survey-project included a smaller survey of Norwegian embassies in countries outside the OECD region. Embassy officials were asked about their perspective on local business practices and their potential role in anti-corruption work. The embassy survey complemented the business survey by providing an idea of the Norwegian firms' corruption-related challenges from a perspective other than the firms themselves.

(iii) The reaction to corruption

One of the key results revealed by the business survey was that Norwegian firms rarely react to corruption, even when they have lost important contracts as a result. The paper presented in Chapter 3 in this thesis explores this disinclination to take action in the light of market structures, business efficiency, judicial institutions, and political corruption. It develops some theories about how these four variables deter firms from reacting against corruption, and, in particular, how the potential for collusion reinforces the incentives to remain silent.

The analysis begins by exploring several of the pragmatic issues that a firm may consider when encountering corruption. One issue is whether a reaction to corruption may spoil opportunities to cooperate with competitors in some form of cartel agreement. A second aspect is the expected response from judicial institutions; if the response is expected to be weak or non-existent, there may not be a point in speaking out about corruption. And thirdly, a firm will seldom expect support to an anti-corruption reaction in a market where there are secret ties between firms and politicians in key positions. Considered in combination, the various impediments to anti-corruption reaction are shown occur under different circumstances. When conditions in market structure suggest that the best response would be to take action, political conditions may favor inaction. When a potential whistle-blower expects support from local politicians or legal institutions, the given offender may be impervious to sanctions; its role in the market will not be altered by the threat of prosecution. As a result, firms rarely take action against corruption.

(iv) Business corruption, uncertainty and risk aversion.

The business survey conducted in 2004 revealed not only that firms would seldom speak out about the problem if they lost contracts due to corruption but that very few of them would leave a market as a result. Many firms reported that they accepted that corruption was “part of the game”, and that they preferred to “adjust to the local business culture”. Adjustment to local business culture could seem to imply that firms might adopt procedures that would be considered unacceptable in Norway. However, reliable data on the extent to which this adjustment entails illegal business practices are very difficult to obtain. The choice between a legal and illegal business approach is still a basic issue of business corruption, and this is examined in Chapter 4.

The focus of the study is the specific distinction between legal and illegal business practice, and how a firm’s strategy may be subject to various uncertainties. Business corruption can bring about substantial benefits for the firm that practices it. The success in the choice of strategy will though depend on uncertain information about the extent of corruption, and there will usually be a risk of sanctions if caught in the crime.

The hazards associated with business corruption prompt the question of how different attitudes towards risk may influence the propensity of a firm to offer bribes. Intuitively, one might assume that risk neutral or risk attracted firms are more likely

to offer bribes than their risk averse competitors. This paper demonstrates that this is not necessarily the case: firms that are risk averse can in fact have a stronger propensity to offer bribes. The presence of business corruption implies that the option of staying honest carries a higher risk of losing contracts. When the marginal expected benefit of offering bribes exceeds the risk of being caught in the crime, even the most risk averse firms may offer bribes to protect themselves from the potential loss associated with honesty.

(v) Business corruption, privatization and industrial organization

One of the consequences of illegal business corruption is demonstrated in the fifth and final chapter. This study was conducted in collaboration with my supervisor, Kjetil Bjorvatn (Bjorvatn and Søreide, 2005). It was motivated by empirical conclusions that market reform and privatization, commenced in many countries to improve market efficiency, had failed to produce the expected welfare improvements (Puntillo, 1996; Black et al., 2000; Stiglitz, 2002; Kikeri and Nellis, 2004).

The study explores analytically the effects of business corruption in the context of privatization and analogous transactions such as the sales of licenses and concessions. The study demonstrates a connection between the final acquisition price on the privatized item and political corruption. This price is likely to be higher when government officials responsible for the sale are corrupt, rather than honest or just moderately corrupt. In spite of this, the model predicts that a stronger propensity among responsible politicians to embezzle state revenues may reduce these politicians' benefits from corruption. The more concerned the politicians are about corrupt benefits, the cheaper they are to buy.

However, the more important result from this study, in terms of welfare consequences, relates to the resulting industrial structure in markets where privatization of firms has occurred. The analysis predicts that privatization in countries with highly corrupt government results in a higher degree of market concentration than in countries where governments are benevolent. These results correspond to the conclusions by Ades and Di Tella (1999), that corruption is more common in countries that are less open to foreign trade.

4 Policy implications of the research

The various findings presented in this thesis are highly relevant in a policy perspective given the global importance of combating corruption. The policy implications of particular findings are discussed in the specific papers. However, there are some issues that appear particularly generic and that are therefore relevant to devising effective anti-corruption policies.

The first issue concerns the distinction between legal and illegal business activity. To combat corruption we need legal clarifications of the problem and we need to reduce

the grey zones of business corruption. A main challenge in this respect is probably the interlinkages between politics and industry. Diplomatic conventions of esteem and respect still inhibit the establishment of measures and policies to deal with corruption; they can even prevent political discussions about counter-efforts. However, as is explained in Chapter 1, we also need more operative definitions to estimate the problem, and we need to extend the language of corruption. When no legal definition of corruption applies to the specific circumstance, we should perhaps apply words such as fraud, theft, grabbing, unethical business practices, marketing directed at individual decision-makers, political pressure, quid pro quos, etc. A related problem is the presence of “legal” corruption, i.e. practices that seem corrupt but are not actually illegal under local law. In these cases, judicial reform is required, though difficult to carry through. In addition, court systems in many countries will require significant upgrading if they are to be capable of taking on the challenges of political corruption.

Another side of this policy implication relates to the propensity of those affected by corruption to actually report about the case, and get it investigated and prosecuted. The survey results, combined with the analysis in Chapter 3, suggest that firms need to be made more aware of the advantages of reporting cases of corruption and carry through court cases. Whistle-blowing could be particularly important to firms that invest directly in foreign markets (FDI). Many respondents to the business survey suggested the worry of having competitors who offer bribes to a main motivation behind bribery. This worry underscores the importance for firms to make credible signals about an honest business approach. One way of signaling this attitude is to blow the whistle about cases of corruption, and take cases to court.

Official control systems are obvious targets of anti-corruption efforts. The analyses in Chapter 3 and 4, however, describe the importance of “efficient sanctions” on those apprehended in corruption; penalties for corruption that correlates with the offender’s revenues and the gains obtained by the bribery. Internal security systems within firms have proved effective in some cases of corruption.¹¹ The survey work revealed, however, that these security systems were not considered efficient by many respondents, and several of the people interviewed for the study described this security work as a challenge.

A policy aspect that seldom is included in anti-corruption efforts is the role of antitrust authorities in preventing and combating business corruption. Antitrust systems reduce the opportunity for corrupt politicians to siphon off cartel profits, and they can reduce the potential of firms to acquire monopoly powers through business corruption. This is explained in Chapter 5. This chapter also explains why the welfare result of privatization and similar market reforms highly depends on the procedure of the reform. The efficiency of tender procedures is described as limited by the respondents to the survey in Chapter 3, and it functions worse in the cases of large

¹¹ One example is an IBM corruption case from 1993, where the ex-head of state-run Banco Nacion allegedly had accepted bribes from the local unit of computer maker International Business Machines Corp. in order to secure the firm a \$250 million contract. The case was uncovered by IBM security systems, and the SEC was informed by the firm.

contracts compared to smaller tenders. This is an issue that needs critical attention from a policy perspective, not only in public procurement but also in cases of privatization and the sales of licenses and concessions. Corruption can influence the industrial structure significantly, and reduce consumer surplus.

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Is it wrong to rank?

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Abstract

This paper emphasizes the importance of collecting information on corruption, while still stressing critical aspects of the most applied sources of such information, the cross-country composite corruption indices. Are these indices damaging and misleading or are they informative and useful? The paper points to the implication of the lack of a clear distinction between legal and illegal payments or ways of gaining influence. It summarizes the main limitations of Transparency International's Corruption Perceptions Index (CPI), underscores the problem of expecting perceptions to be reliable, and discusses the problem of incorrect understanding and usage of the index. Publicity does not necessarily mean progress, and the construction of the CPI should be influenced by the way this index is applied by the public. A final question is whether it is possible to increase the CPI's value by creating incentives for states to improve their achievements under, for instance, the OECD anti-bribery convention.

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1 Information about corruption

The extent of corruption in a society is often debated on the basis weak information. Data on corruption will usually have limitations since people involved in the crime seldom will speak out about their practice. However, there are several reasons why information about this problem is required. It is important to understand the phenomenon, explaining changes and determining efficient countermeasures. As a part of this, it is important to estimate the impact of anti-corruption initiatives that have been introduced.

The impact of most anti-corruption efforts is uncertain. Incentives to take part in corruption are not necessarily removed by more stringent regulation, and are hardly reduced if the probability of being detected in and convicted of corruption is not increased. There has, for example, been several international judicial improvements in controlling corruption in a number of countries, often as part of the implementation of new international conventions or as part of procurement reform. The enforcement of such improvements appears to be a challenge in many countries. When it comes to the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, there have been few court cases of cross-border corruption since its implementation, and the effect of the reform has been difficult to determine. The OECD evaluation process, the Phase 2 reports on Japan and the UK, highlights the fact that there is more to anti-corruption efforts than conventions (OECD, 2005a, 2005b).² In procurement reform too, we need information about the extent of corruption to monitor the actual anti-corruption impacts. In a business survey of Norwegian exporters conducted last year, 55% of the firms that participated, all of them with long experience in international markets, had no trust in procurement rules as an obstacle to corruption. Only 6% thought procurement rules could limit corruption efficiently (Søreide, 2006).

Another demand for information about the extent of corruption relates to aid. The problem of corruption is now widely recognized as a considerable obstacle to the efficiency of development aid.³ Several donors have started to require a verification of corruption control as one of several conditions for continued aid, a policy that may prove important in encouraging critical improvement of governmental and judicial institutions in poor countries. Information about the level of corruption and the bureaucratic business environment are also important aspects in multinationals' entry decisions, which in many cases are far more important in raising developing countries' revenues than is aid.

² The OECD examiners expressed concern about the complete lack of bribery cases actually investigated and brought to court in Japan and the UK. The press in both countries had reported widely on several cases of alleged bribery of foreign public officials.

³ For more explanation, see Alesina and Weder (2002) and Svensson (2000), and also Tavares (2003) who finds a correlation between development aid and reductions in the levels of corruption. See information on the Bush Administration's Millennium Challenge Account: <http://www.mca.gov/> (includes the evaluation of countries).

The need for information about the extent of corruption has triggered a number of empirical studies. Several institutions have developed corruption-related criteria on which they rank countries. By far the most famous index of this sort is the Corruption Perceptions Index (CPI), published yearly by Transparency International (TI).⁴ This index aims to measure what people think about corruption, and is not presented by TI as true facts about the actual levels of corruption. The CPI is an "index of indices"; it is composed from a number of different sources that all provide a relevant ranking of countries. The World Bank has constructed a similar index, which is part of its efforts to estimate the quality of governance.⁵ The World Bank's approach to estimating corruption is similar to the methodology TI applies to make their ranking; several of the sources are the same, and the two indices correlate well. The main objectives behind the indices are to raise awareness, enable statistical research to understand and better confront the problem, and to encourage governments in their anti-corruption efforts.

The present paper explains that also significant challenges are presented by these corruption indices, and it raises a particular concern about their significance for developing countries. Some of the problems relate to the construction of the indices, others to the way in which the information is referred to. I will shortly explain how these indices are constructed and notify about some of the ambiguities in this information. Then I turn to their contents and discuss the problem of an unclear distinction between illegal and "legal" corruption. I discuss the common practice of interpreting these indices as reliable information about actual extents of corruption within a country, and I raise concerns that common misinterpretation of the CPI can be damaging. Proposals follow, first about how the challenges related to the CPI can be reduced, second on how its value as an anti-corruption tool can be enhanced. The paper concludes by summarizing the main arguments.

2 Limits of the CPI

Corruption estimation has been a topic of much debate, mainly since the CPI was first published in 1995. Since then, Transparency International has become the most important institution in collecting and distributing corruption-related information. The CPI is one of several ways in which TI systematizes such information. This index is the most famous and applied source on information about the level of corruption in countries, and therefore the issue of debate in this paper: to what extent is this detailed ranking fruitful and useful? Should its information be referred to with more caution? While the CPI gets the most attention, many of the comments on this type of estimation are relevant also to the World Bank index. TI and the World Bank are fully aware of measurement problems, and do indeed encourage debate.⁶ Some of the recent

⁴ <http://www.transparency.org>

⁵ <http://www.worldbank.org/wbi/governance>

⁶ TI publishes every year a background paper to the Corruption Perception Index (CPI) in which the methodology is explained (Lambsdorff, 2004). The World Bank describes their project, the methodology and various measurement problems in several papers; see Kaufmann, Kraay and Zoido-Lobaton (1999) and Kaufmann, Kraay and Mastruzzi (2005).

contributions, to which I will return, are Svensson and Reinikka (2003), Andvig (2004), Rose-Ackerman (2004), Weber (2005) and Galtung (2005).

2.1 Construction and interpretation

The elements in the construction of the composite corruption indices are data from externally conducted polls and surveys and a method of scaling these data into one index. The data are collected by independent institutions, these are non-profit organizations and consultancy companies, and the respondents are business people, the general public and country analysts. When the surveys include several issues, only the data on corruption is applied for the corruption index. The assessment of a country is based on several data sources, and the data must represent current conditions, as well as a ranking of countries.

Each survey is given equal weight when integrated into the index, independently of age and correlation to the other surveys. For aggregation and accurate ranking, data from the different sources have to be standardized and converted into the same scaling system. This is mainly done by transforming the standard deviations and the means in the different sets of data, to fit with the mean value and standard deviation of the index from the previous year. When this is done for all the sources, the index is estimated by computing the simple mean for each country. The result is a CPI score between 0 and 10 for each country included in the index. Lambsdorff (2005) describes and explains the specific formula.

The strength of the composite indices lies in their ability to be more informative than individual data sources. However, given all the information about the methodology and the sources, the content of the index continues to be unclear to many of us. What does it mean that China is ranked number 71 with a score of 3.4, while the UK is ranked number 11 with a score of 8.6? The lack of a standardized approach to estimating the level of corruption makes it difficult to know whether the rankings reflect the number of transactions affected by corruption, legal or illegal activities, the level of bribes or the cost to society.

The relation between numbers on the ranking is unclear, and the ranking must be considered ordinal. A ranking of 6 does not imply that the country in question has twice the amount of corruption compared to a country with a ranking of 3; it just means that the former country has "more corruption".⁷ The index is still readable as a presentation of the countries' ranking, but it is often referred to as if these precision problems were not present. It is also difficult to interpret a dynamic dimension of the index. The media pays significant attention to changes in the relative position of countries. "Is our country

⁷ A cardinal index with a known mathematical ratio between two levels of corruption on the CPI would depend on how corruption is being measured (which is debated in the following sections). To illustrate the problem of imprecision in the present measure, assume that a bribe represents 10% of all payments in country X, while it represents only 2% of half of all transactions in country Y. If measuring the volume of corruption, that is the total sum paid in bribes, country X would be ten times more corrupt than country Y. If measuring the number of corrupt transactions, country X would be twice as corrupt as country Y.

performing better this year?" However, if country X is ranked below country Y one year, then placed above it the next, it is difficult to tell if there has been a reduction of corruption in country X, or if there has been an increase of the problem in country Y. The change is also likely to be a matter of arbitrary fluctuations within the error band. A change of the score from one year to the next can of course represent a true change in the perceived level of corruption within a country. However, it can also be explained by a change of the mean and standard variation of the whole sample of countries, an inclusion of new sources, or an improvement in the methodology. Transparency International aims at using the most reliable and up to date sources, which also means that the contents of the underlying studies vary.

The problems related to definition and quantification mean that empirical research on corruption is also affected. There have been a number of studies in which the correlation between the level of corruption, as measured either by the World Bank indicator or TI's CPI, and some other phenomena is analyzed, such as economic growth, inequality, religion, barriers to trade, the level of foreign direct investment, and so on.⁸ Independent of the quality of the calculation behind such studies, the extent to which we can rely on the conclusions is uncertain when the underlying information is weak.

2.2 Crimes or legal activities?

There have been numerous discussions about how corruption should be defined. A major problem is that the word is applied to activities that are both legal and illegal. This means that it is difficult to tell whether a bad score on a corruption index refers to officially permitted activities or to violations of the law. Some people will say that all kinds of corruption-like activity are harmful, and it is not important to distinguish between them. Others will consider this matter in the light of defamation, restrict the use of the term corruption to its legal sense, and try not to label people, companies or countries as "corrupt" unless there is good reason to assume that laws have been violated. When trying to estimate even less precise aspects of a society, such as the quality of governance or social capital, it is obvious that these are subjective and uncertain qualities. As for corruption, which also is a legal term, we do not have international consensus on the term's meaning, which should ideally have been in place before we started ranking countries based on people's subjective perceptions of its extent.

The impediments to reach such an international consensus are significant. The legal definitions of corruption and cross-border bribery of public officials differ somewhat from country to country. Even within countries there are doubts and discussions about the boundary between legal and illegal activities. Most jurisdictions have far too few precedents for this sort of legislation. No detailed judicial discussion will be undertaken in this paper. The following three grey zones are important, however, because (a) they are common to most countries, (b) they have not been clarified by the new international

⁸ See Rose-Ackerman (2004) and Lambsdorff (2005) for annotated reviews of empirical research on the causes and consequences of corruption.

conventions, (c) they are causing most of the ambiguities about the term corruption, and (d) they tend to inhibit welfare improvements.

(i) Facilitation payments

Unofficial fees paid to get things done, and smaller bribes demanded for services that a public official is expected to provide in any case, such as the issuing of licenses or customs clearance. The justification for facilitation payments is often based on a lack of bargaining power. The question of whether the person who makes the payment commits an offence according to the cross-border legislation on corruption will depend on judicial details in his/her/its country of origin.⁹

Marketing

(ii) Marketing targeted at specific individuals who represent a client, either a public or private institution, where expensive gifts and excursions are offered to encourage informal relations with the potential client. Many firms claim this kind of marketing to be essential. While procurement rules are usually in place for large contracts to ensure free and fair competition, there will always be legal ways around these statutes. There are loopholes in the rules of exception which allow for direct negotiations, and there are ways of making it appear as if the procurement rules have been respected, by violating the rules of communication, for instance (Søreide, 2006). This form of influence deters competition, and thus welfare improvements.

Political pressure

(iii) Political pressure applied to influence the outcome of tenders on big contracts. This kind of pressure is conducted with the help of subsidies, export-credit deals, aid to the buyer linked formally or informally to the purchase, commercial pricing issues and trade barriers, tied defence/arms deals, or threats of political sanctions or specific voting in international organizations. These practices are difficult to attack legally, as they are carried out by political leaders at the highest state level.

Domestic judicial clarifications will not automatically solve the CPI's problem of unclear legal meaning of the term corruption. Countries differ, for instance, inherently in their degree of institutionalizing influence on important financial decisions. In the USA it is legal to finance political parties. This is a form of lobbyism in which private firms pay huge amounts in campaign finance.¹⁰ The border between lobbyism and corruption can be unclear. In its legal form, however, it may lead to political support for

⁹ Most discussions on the grey zone of facilitation payments concentrate solely on the question of its cross-border legal status or its status according to the US Foreign Corrupt Practices Act, not its legal status locally (as if this were less important). It is therefore a disappointment that this issue is poorly described by the OECD anti-bribery convention, which leaves it to each single jurisdiction to determine whether these payments, if made to public officials in foreign countries, are legal or not. Bribes of more than \$20, 000, for instance, should be illegal. When it can be defined as a "facilitation payment", the payer normally fears no corruption charges, due to unclear laws.

¹⁰ Democratic challenges related to campaign finance are well described by Ackerman and Ayres (2002), and also by the recent Abramoff affair, in which a Republican lobbyist, prosecuted for bribery, tax evasion and fraud, is now willing to witness against a number of members of Congress and other officials. The Financial Times, Jan. 05, 2006.

changes that mainly benefits individual firms or their executives, while consumer welfare is reduced. In many other countries, private influence on politics is not legalized or institutionalized in a similar manner. In other words, while payments made to influence specific political issues are legal in some places, this is called corruption in others. The outcome can be equivalent. The extent to which the respondents to the CPI's different surveys make a distinction at this point is not known; whatever they do will be wrong in terms of definitions. It is wrong to describe the practice as corruption when the payments are completely legal. In an international ranking of corruption, it would also be wrong not to include similar ways of buying influence.¹¹

An index score is supposed to cover all kinds of corruption, from huge oil contracts to the payments made to get assistance when giving birth. Being this all-encompassing, the index fails to distinguish between the forms of corruption that represent welfare problems, and the corruption that functions as a substitute for prices or public solutions in cases of weak or absent public institutions. Rose-Ackerman (1999) makes an important distinction at this point. She explains why the basic feature of the market does not necessarily depend on the extent to which public services are legally privatized, or if more informal solutions are in function, and organized by means of facilitation payments/informal rates. The welfare implication depends on the presence of markets and the supply of the many different services requested, not necessarily on how the payments correspond to formal rules. The variation across countries, in the achievements made on how to organize or institutionalize public services, depends on their quality of governance, GDP level, political system, political stability, and so on. Weak states will easily come out as more corrupt when informal solutions, illegal payments and bribes occur to replace wages, for instance in the lack of governmental financial transfers to local providers of public services, such as education, health care, or infrastructure. To the extent to which this is a measurement problem for the CPI ranking, it is limited by the fact that the group of countries with widespread and harmful corruption overlaps considerably with the group of those that are unable to offer public services that they are required by law to supply.¹²

2.3 Perceptions and the actual extent of corruption

Measuring perceptions of corruption is meant to be a best possible solution to get indications of true levels of corruption in a situation with vast measurement challenges. Measuring different people's perceptions of corruption provides in itself interesting information about people's opinion. Some problems arise, however, when these data are treated as reliable information about the actual extent of corruption in a country.

¹¹ This problem points at the need to increase our vocabulary when discussing corruption-related problems, and make the language more precise, perhaps by use of words like *political grabbing*, *pre-determination of contracts*, *business climate qualities*, *deliberated bureaucratic delays*, *business corruption*, *fraud*, *theft*, "legal corruption", *facilitation payments*, and *quid pro quos*.

¹² See Miller, Grødeland and Koshechkina (2001) for an in-depth study of local citizens' experience of bureaucratic corruption. Galtung (2005) points to another related problem of surveying these forms of corruption, and says that "90% of the world is missing" in the CPI because the underlying surveys ignore large parts of the economies.

Many of us would consider newspaper headlines or court cases unreliable estimates of the actual frequency of corruption. Whereas regular media coverage of corruption might inform on freedom of speech, the media can be biased and interested in scandalizing the problem, or it may be controlled by the state. The number of court cases on corruption in a given country would not necessarily be a better indicator. The judicial system may not have the capacity to investigate and prosecute all the cases that emerge. In addition, the police force may lack the necessary independence, or may even be corrupt itself. However, the individual's opinion, and the view of the survey respondents who form the basis for the construction of the indices, will be influenced by the same sources, the media and court cases, and it is a question how detailed a country ranking should be made when based on perceptions.

One challenge is related to the quantification of the problem, which is highly ambiguous. It is not clear to what extent the level of corruption reflects the frequency of corrupt acts, the damage done to society or the size of the bribes. The polls and surveys behind the CPI ask different questions related to corruption, and do not cover precisely the same issue. Some sources aim at political corruption, while others ask about lower-level bureaucratic corruption. Most of the polls and surveys ask for a general opinion on the magnitude of the problem ("how widespread" is the problem), usually not the respondents' personal experiences, which basically means that they ask for people's subjective intuition of the extent of something unobservable. Given the discussion in the previous section, it is even unclear what this unobservable phenomenon is.

The respondents are, without explicit definitions, asked to quantify "the misuse of public office for private or political party gain" and encouraged to rate "the severity of corruption within the state." This strong reliance on individual perceptions makes the interpretation of the index too dependent on assumptions of how people develop their opinions. Rumours, prejudices or media attention have an impact on experts as well as on ordinary people. TI, being concerned about this matter, also states on their web page that the most important sources of information about corruption are media, friends and contacts. Of course, if several individuals share a perception of reality, the perception may reflect the truth, but this is far from obvious.

There are several reasons why a gap between perceptions and the actual level of corruption is to be expected. I will first discuss some problems due to ambiguities about definitions, and then go on to some systematic biases. People's perception of more or less of something is instinctively based on comparison. An estimation of the level of corruption, as an inexperienced quantification, may be based on comparison with the situation in a neighbouring country, the situation in countries where corruption is more or less frequent, what the situation ought to be, or their personal high ethical values. The problem of corruption in Italy may seem negligible compared to the situation in Bolivia. Compared to Sweden, however, Italy faces a big challenge. While corruption must be expected to vary between state institutions, economic sectors and professions, we cannot expect respondents to describe the average level of corruption within the country in question. The CPI should accordingly not be applied as an indicator of this average.

The respondents' perceptions will also differ with their different perspectives, their background, wealth and experience. And, ironically, one of the more severe challenges to the objectivity of the CPI is probably its own fame. Many of the respondents, the experts in particular, "know" the level of corruption from the index published the previous year, and the most recent CPI will automatically be correlated with the previous ones. Andvig (2004) explains these problems by describing how informational cascades can easily develop and complicate the measurement of true levels of corruption.¹³

The World Bank and Transparency International both make the assumption that the stochastic errors across the sub-indicators are independent. Given the respondents' way of developing their perceptions of the level of corruption, however, such dependence is likely to occur, as the different underlying surveys seldom ask for each individual respondent's own experience, but rather their general impression of the problem. One specific bias that has got some attention recently is a "poor is bad" effect: that poor countries are perceived to be corrupt simply because they are poor while rich countries come out as clean because they are rich.¹⁴ Kaufmann et al. (2005) analyze this bias for the quality of governance, and conclude that the variance in the estimated quality of governance due to the measurement error must be implausibly strong for this effect to be significant. Their conclusion relies to a large extent on the above-mentioned assumption, that measurement error is uncorrelated across the different sources of data. Whether this bias is significant for the estimation of corruption levels is unclear. Weber (2005), who applies TI's Global Corruption Barometer to distinguish between respondents' perceptions and reported experiences, finds more evidence for this type of bias among the subjective variables.

2.4 Implications of publicity

We know that the unreliability of the CPI as an indicator for actual extents of corruption implies that countries are perceived as less or more corrupt than they actually are. TI's openness about the estimation problems increases the organization's credibility. One problem, though, is that the background documents and warnings about how to read the index are not, apparently, read by the public. Incorrect interpretation in the press is the rule rather than the exception, and, based on the CPI, countries are referred to as "the third most corrupt country in the world" and so on. The fallacy in this interpretation of the CPI, as true information about the extent of corruption, is described in the discussions above. In addition, the CPI does not include all countries, i.e. corruption can be even more frequent in the countries not included in the CPI.

¹³ Andvig (2004:347) explains: "the experts read the same reports and gauge other experts' statements. Since the assessments are often not based on individual experience, when expert X claims that corruption in country A is very high, expert Z has no clear evidence to the contrary, so when knowing X's statement it may be optimal to make an assessment close to hers. Informational cascades may easily develop in this context."

¹⁴ See Glaeser et al. (2004) for a broader discussion of this problem.

The broad media attention paid to the CPI is often considered a value as it may improve the public's awareness of problems related to corruption. This is a value that clearly depends on perspective. Incorrect interpretation may have damaging implications, and developing countries are the most vulnerable to this problem. A poor ranking is undeniably a message to the world about flourishing corruption, fraud and bribes, about low ethical values, about greed, and about lousy politicians. The scepticism that develops towards the country and its inhabitants, the honest as well as the dishonest, may encourage anti-corruption campaigns. Whether anything is achieved in the form of welfare improvements is difficult to tell if this achievement balances for the local economic consequences, in the form of possible lost private investment and aid, for instance.

It is also difficult to gauge the local aggregated response to a signal of widespread corruption. Everybody will denounce this kind of practice in public, of course, but there will also be those who see new opportunities as it is apparently easy to obtain benefits with the help of corruption. Foreign firms may happen to worsen the local market culture by offering bribes or gifts above the "usual level".¹⁵ In this way, the publishing of a poor corruption rating can contribute to higher levels of corruption in countries where the actual extent of corruption is lower than indicated by the CPI.

This self-fulfilling prophecy problem is general and also present when information about the extent of other forms of undesired activities in a society is published, such as tax evasion, the breaking of speed limits, smuggling, and so on. Information that a specific offence is common has different effects on individuals. We still wish to be informed, but it is important to consider and limit possible undesired consequences.

The publicity around the CPI has indeed raised attention to the problem of corruption and thus probably had an impact on corruption control in a broader sense. It is, though, a challenge to single out the different mechanisms and determine their impact. During the years of the CPI we have seen far more international cooperation on this issue, significant judicial improvements and the removal of tax deductibility for cross-border bribery. Even so, the problems that prompted these efforts appear to be present at least to the same extent as one decade ago. Kaufmann et al. (2005) find no reason to assume that corruption is on the decrease worldwide.¹⁶ The effect of anti-corruption efforts may still be positive. It takes some years to have a bearing on attitudes and choices, and we do not know what the situation would have been if these efforts had not been made.

¹⁵ See Hellman et al. (2002) for a study of foreign investors' propensity to take part in local corruption.

¹⁶ Kaufmann et al. (2005:14) find "substantial disagreement among sources about even the direction of changes in global averages of governance", and the measurement problems prevent the production of credible empirical results on global levels of corruption.

3 Proposals

Given the noted limits to the CPI, we can hardly conclude that it is right to rank countries in the way it is being done in this index; it simplifies a complex phenomenon far too much. One solution is, of course, to accentuate the remarkable collection of data behind the composite corruption indices, and let the interpretation of a corruption level be up to each individual reader. These single indices and rankings, based on one individual question or a more measurable issue, for instance, do not bear the same risk of misinterpretation as all the information is visible. This is also a solution in research. The contribution to science is, for example, no less important if, rather than studying the correlation between economic growth and the CPI, we analyze the connection between GDP and the average number of procedures a firm has to go through to start up a business in different countries. If combined with one similar regression on firms' reported facilitation payments and one on the quality of antitrust institutions, it is far easier for the reader to comprehend the meaning of the study, and make his or her own interpretation of the link between growth and the more general but indefinite level of corruption.¹⁷

There are also several alternative approaches to information about the extent of corruption. This paper will not provide an overview, just a few relevant comments.¹⁸ Svensson and Reinikka (2001, 2003) describe the use of local surveys to obtain more detailed information on the extent of corruption. Public expenditure tracking surveys (PETS) and business surveys in particular are able to provide more accurate information for the quantification of corruption locally, and also its implications and its geographical and sector-related variation. More projects of this type are expected. Donors concerned about the problem of providing aid to countries with a low score on the CPI will more frequently require PETS as a form of control and evaluation. Another relevant indicator of corruption is the functioning of antitrust institutions, or surveys that aim at gathering such information.¹⁹ Corruption is not a problem if competition in all markets is free and fair, an understanding that can be applied to estimate the extent of corruption in several ways.²⁰

¹⁷ Creativity in the search for relevant empirical information will often imply a need for theoretical studies to support or understand relations and incentives which point to connections between corruption and other, more measurable, phenomena. Our intuitive assumptions about correlations are not always sufficient, which is demonstrated in a few recent examples. The role of the media in controlling corruption is not necessarily as obvious as is often assumed (Vaidya, 2005); a bureaucratic crackdown may not lead to the expected reduction of corruption levels (Bjorvatn et al., 2005); whereas the role of the security of property rights in promoting growth may actually help us understand the link between corruption and inequality (Glaser et al., 2003).

¹⁸ See the web pages of Transparency International and the World Bank for more information.

¹⁹ The connection between competition and firms' propensity to offer bribes is not clear in the literature on corruption, partly because it is difficult to include in empirical estimations the dynamic aspect of how bribery may lead to market power (Svensson, 2003; Søreide, 2006).

²⁰ One approach is that applied by *Transparência Brasil* and Santa Catarina Supreme Audit Institution, which have collected information and compared prices on public purchases made by municipalities of the

Yet, these alternative approaches cannot replace the information provided by an index of corruption that informs about the estimated perceptions about the level of corruption in a large number of countries. It will never be possible to rank right on this issue. The estimation problems should not discourage TI, but rather encourage continued critical debate about presentation and methodological improvements.

3.1 Reduce precision in the presentation of the CPI

One overall ambition in the work to develop corruption indices will of course be to increase precision in the estimates. When presented to the public through newspapers, most readers are likely to assume that the precision is of the order of the steps in the ranking (one decimal), and that a country with the score 7.3 is less corrupt than a country with a score of 7.1. Further, the CPI is generally perceived by the public as an estimated corruption level, not as a perceived corruption level.

Together with the ranking of countries, TI publishes the margins of error, which indicate the "error bands". These are usually an order of magnitude higher than the precision in the ranking. As an example, a country like Malta, with the score of 6.8 on position 25 in the CPI of 2004, has an uncertainty band of 5.3 to 8.2; it could therefore be less corrupt than Canada on position 12 or more corrupt than Suriname on position 49. But since these uncertainty bands are rarely communicated to the audience by the press, the current presentation with decimal accuracy is misleading to many readers. The following specific points are noted:

(1) The margins of error are determined by the variability in the perception of the different sources behind the CPI. In theory all these sources will not be independent, and may be influenced by the same errors. The ranking is still made with the assumption that the margins of error are uncorrelated.

(2) Being a representation of perceptions, the margins of error refer only to variation in the perceptions, which do not include the total potential divergence between true and perceived levels of corruption. The fact that the CPI uncertainty estimates only indicate scatter among its sources, and not uncertainty in estimated corruption level, is well illustrated by a country score for Bolivia, for example, which is ranked 112 at score 2.3, with an uncertainty band only from 2.2 to 2.4. Such precision in a corruption estimate would be far from realistic.

As already mentioned, the position of the ranking can have consequences for countries and their inhabitants. This particularly applies to a perceived negative development from one year to the next, even if this will usually be far from significant, considering the large uncertainty bands. For these reasons, it is suggested that the precision of the CPI, if it is going to be published on the basis of its present methodology, will be

Brazilian state Santa Catarina since 1997. They also monitor how announcements of public procurement tenders compare with the requirements of the law. <https://www.transparencia.org.br>

reduced from decimal precision to whole numbers. This means that all the countries with a score of 9.5 and above would get a 10, from 8.5 to 9.4 would become 9, and so on.²¹ Within each of these classes no ranking should be published.

The steps of the ranking would then be much closer to the uncertainty estimate for each country. Given the way the current CPI is used and misused, this might be a more ethical way of presenting the index, as the level of precision reflects the uncertainty better. For most countries, it can be assumed that they belong to the class in which they are ranked, or one class below or above. The few countries with a larger than +/- 1 error estimate can be marked with an asterisk (*) in the table. With a more compact presentation of the 2004 index, as shown in the table, it is more likely that newspapers referring to the index would be able to publish the whole table of countries rather than focus on which countries are marginally better or worse than their own country, which is a common way of presenting the index today.

TABLE 1: SUGGESTED PRESENTATION OF THE CPI

CPI	Ranking 2004, Countries (Listed in alphabetical order)
10	Denmark, Finland, Iceland, New Zealand
9	Australia, Canada, Netherlands, Norway, Singapore, Sweden, Switzerland, UK
8	Austria, Belgium, Germany, Hong Kong, Ireland, Luxembourg, USA
7	Barbados, Chile, France, Japan, Malta*, Spain
6	Bahrain, Botswana, Estonia, Israel, Oman, Portugal, Slovenia, Taiwan, Uruguay, UAE*
5	Cyprus, Costa Rica, Hungary, Italy, Jordan, Kuwait, Lithuania, Malaysia, Qatar, South Africa, South Korea, Tunisia
4	Belize, Bulgaria, Brazil, Colombia, Croatia, Cuba*, Czech Republic, El Salvador, Ghana, Greece, Latvia, Mauritius, Mexico, Namibia, Panama, Peru, Poland, Seychelles, Slovakia, Sri Lanka, Suriname*, Thailand, Trinidad and Tobago
3	Albania, Algeria, Argentina, Armenia, Belarus*, Benin, Bosnia and Herzegovina, China, Dominican Republic, Egypt, Eritrea, Gabon, Gambia, India, Iran, Jamaica, Lebanon, Libya, Macedonia, Madagascar, Malawi, Mali, Morocco, Mongolia, Mozambique, Nepal, Nicaragua, Palestinian Authority, Papua New Guinea, Philippines, Romania, Russia, Saudi Arabia, Senegal, Serbia and Montenegro, Tanzania, Turkey, Uganda, Vietnam, Zambia
2	Angola, Azerbaijan, Bangladesh, Bolivia, Cameroon, Chad, Congo (Dem. Rep.), Cote d'Ivoire, Ecuador, Ethiopia, Georgia, Guatemala, Haiti, Honduras, Indonesia, Iraq, Kazakhstan, Kenya, Kyrgyzstan, Moldova, Myanmar, Niger, Nigeria, Pakistan, Paraguay, Sierra Leone, Sudan, Tajikistan, Turkmenistan, Ukraine, Uzbekistan, Venezuela, Yemen, Congo (Rep. of), Zimbabwe

* For these countries the uncertainty in the estimate is more than +/- 1

Even if this suggestion implies that details in the information collected are not to be released, it does not obscure the index, and it does not discourage the use and publishing of information that is actually available.²² Because the CPI is frequently perceived and

²¹ One intuitive solution could be a categorization in groups that do not overlap in their standard deviation. However, the standard deviations are too large for this approach, and there will always be overlap between the groups.

²² A leap from one stage to another will perhaps appear larger with this suggestion. Some countries will be closer to the border of their category than others, and the difference between Zambia and Angola, for instance, will seem to be larger than it perhaps is. It is therefore important to emphasize that each country

used as a true corruption level estimate, it should be considered wrong to rank countries on a decimal scale when the true uncertainty in the estimates is one order of magnitude higher. The change suggested would probably not take away the interest among newspapers in referring to the CPI, but it could take away some of its possible negative consequences. A reduction of precision in the presentation would probably not limit the value of the index when being used for statistical research.

3.2 Increase the CPI's value as an anti-corruption tool

A challenge in present anti-corruption work is to ensure the enforcement of new international conventions. This challenge requires: (1) actual cooperation across countries to enable better control of economic crime, and (2) incentives for governments to actually investigate and prosecute "their own" companies for bribery of public officials in foreign countries (even if the offences have helped them obtain large contracts with an impact on the trade balance). In a globalized world we need to evaluate governments not only by their domestic performance but also by their cross-border achievements. A corruption ranking should ideally include also estimates of the conduct of representatives of governments and countries, individuals or firms when they operate internationally. Separate information about national levels would still be included. However, a CPI ranking of countries with an international aspect included could make a difference in several ways:

(i) Governments would get a poorer rating if "their" companies were perceived to be taking part in cross-border bribery, or if their politicians appeared to be applying political pressure, of the kind mentioned in Section 2.2, to obtain political or industrial benefits. Governments' incentives to ensure honest conduct outside their own borders would perhaps be somewhat strengthened.²³

(ii) The problem of variation across countries in their willingness to sign, implement or enforce the OECD anti-bribery convention would be reduced. Companies from countries without this judicial improvement in place may now consider it a benefit to be able to operate without this restriction.²⁴ Such a CPI change would perhaps reduce the difference between exporters in this sense, because countries would be rated independently of their governments' attitude to this OECD convention.

(iii) It would encourage better consistency in the foreign politics of rich countries which operate with corruption control as one condition for development aid. The situation now is usually that a donor government which finds a certain country too corrupt and

is estimated to belong to the class in which it is placed, or one class above or one below. The countries with an asterisk can even belong to two classes up or down, given the estimated error band.

²³ The problem of bribe-offering competitors would be reduced if governments really were to restrict their own companies from offering bribes abroad. In addition, incentives to support international anti-corruption work would be stronger.

²⁴ See Montigny (2004), who describes this problem by explaining how the OECD convention may function as an obstacle to the development of honest trade in African countries.

therefore ineligible to receive financial assistance, at the same time finds it unproblematic that "their" companies conduct trade or investment in the same poor country. When this trade leads the poor aid-dependent country to receive tax revenues which by far exceed the amounts that it is relevant to supply in the form of aid, the policy appears somewhat inconsistent. This inconsistency is even more apparent in cases where the exporting firms are state-owned. Trade and investment are crucial in economic development, and should not be hindered by these aspects. Nevertheless, most governments in rich countries may need more encouragement to monitor the ways in which their firms operate in countries where the relevant institutions fail to function in a welfare-enhancing manner.

4 Conclusion

The comments on the composite corruption indices can be clarified by an invented example on intelligence. Assume that we have one survey of mathematical skills in twenty different countries, another one on politicians' abilities to read in fifty countries, a third on language skills in seventy different countries, and a fourth on children's abilities to build Lego castles. Each individual survey may provide important information for its purpose. It is only when we put them all together to rank countries according to the citizens' intelligence level that the difficulties occur. When it comes to corruption rankings, we do not claim that people are stupid, but we do, without reliable information, indicate that they are committing crimes.²⁵

There is clearly a need for information on corruption, and Transparency International and the World Bank both make important contributions. The following aspects of composite corruption rankings are problematic, even so. (1) We do not know if the CPI refers to legal or illegal activities; (2) the lack of consensus on the meaning of the term corruption makes it difficult to understand the criteria behind the ranking; (3) the ratio between the different scores has no significance and is not constant; (4) individual perceptions of hidden activities are not reliable and can be systematically biased; (5) the weaknesses are not comprehended by the public and the ranking is generally not referred to with the necessary care; (6) its value for statistical studies is uncertain; (7) its value for poor countries in which corruption is a huge challenge is uncertain.

Given that the practice of corruption rankings probably continues, this paper has presented two proposals about reform of this practice: a reduction in the precision of the CPI, and the inclusion of information about the countries' cross-border achievements. The first suggestion is indeed possible and realistic. The second suggestion, however, is inconsistent with the estimation problems already mentioned, and is proposed mainly to raise the debate. The methodological challenges of the CPI could have been even larger with such aspects included. New underlying surveys would have to be conducted and there would be the additional challenges of controlling for the difference in the extent of

²⁵ This problem is even more relevant for the UN's Human Development Index.

trade and sorting out large firms' country of origin.²⁶ But the number of values associated with the CPI would have been higher.

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²⁶ Perhaps the Bribe Payers Index by TI could have been extended, and presented together with the CPI.

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Corruption in international business transactions: The perspective of Norwegian firms

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Abstract

This paper presents a study of corruption in international markets from the perspective of Norwegian firms. The study consisted of three parts, (i) interviews at executive level in seven large firms, (ii) a business survey, where 82 exporting firms with a headquarter in Norway responded to a questionnaire, and (iii) a survey of Norwegian embassies outside the OECD region. The study, that broadly aimed at information about firms' challenges, their experiences, and their preferred strategies, had six particular issues in focus: (1) The choices firms make when experiencing a business climate that is worse than expected prior to entry in the given market; (2) firms' common reluctance to speak out about the problem when they lose business opportunities because of corruption; (3) the connection between corruption and market power; (4) the significance of procurement procedures and how they are violated; (5) the grey zones of facilitation payments, marketing strategies, and political pressure; and (6) business strategies versus codes of conduct. The study was conducted in collaboration with NHO, the Confederation of Norwegian Enterprise.

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1 Introduction

Despite recent efforts to combat corruption in international business, it is difficult to tell whether such corruption is decreasing. It is probably premature to evaluate the general impact of the relatively new international anti-corruption conventions.¹ New rules may take many years to affect attitudes and choices, especially in an area such as corruption. The phenomenon is not only hidden, rules and norms are also inconsistent and variable, firms invoke moral justifications for breaking the law, and politicians and states have been unconvincing in their efforts to combat this crime.

Even so, it is not too early to discuss potential impacts of the new legal initiatives on firms' actual choices. Although improved regulation will enhance business integrity and conformity to professional standards of conduct, we must still expect that business executives will calculate probable gains against possible losses, even for illegal or unethical practices. The cost of being caught in corrupt practice may have increased as a result of the new international regulations. However, unless the probability of being caught in the crime also increases, the impact of these regulations may not be very significant.

Increasing the risk for those involved in international business corruption is a considerable challenge for two reasons. First, the probability of being subject to local prosecution in host countries is generally low. The risk of being detected is low when corruption is common, and if detected, the chances of having charges withdrawn by bribing the prosecutor, or someone above the prosecutor, increases with the level of corruption. Accepting payoffs may also ensure a certain level of income for individuals in key government positions, and hence diminish their motivation to investigate this crime.²

Second, the most important international treaty dealing with cross-border corruption has several weaknesses. This treaty, the OECD Convention Against Bribery of Foreign Public Officials in International Business Transactions, makes it illegal to offer bribes to public officials in foreign countries. It has been ratified by 36 countries, including the home countries of most major multi-nationals.³ However, most states wish to increase the probability of "their" domestic companies getting contracts in foreign countries, and thus have few incentives to

¹ The OECD convention against bribery of foreign public officials in international business transactions has been in effect since February 1999. The UN convention, an agreement on the criminalization of a broad range of corruption-related activities and co-operation on investigation, was introduced in 2003. See the paper by Kaufmann et al. (2005) for an investigation of possible improvements in various governance indicators, corruption included.

² Andvig and Moene (1990) describe this dynamics of corruption levels.

³ For more information, see <http://www.oecd.org>. The OECD country evaluation reports on the implementation of the OECD anti-bribery convention are particularly interesting in this respect. See also <http://www.u4.no/> for an overview of other important anti-corruption conventions.

encourage investigations of “their own” firms, even if contracts are obtained in a way that appear to violate the treaty. When the enforcement of new cross-border rules is the responsibility of each individual jurisdiction, it can, accordingly, be difficult to put this type of international convention into effect. A Transparency International (TI) report which compares the implementation of the OECD-convention in the signatory states does describe some progress, but there is significant variation between countries in their level of enforcement, and the total number of cases based on the OECD convention, internationally, has so far been low (Heimann et al., 2005).

To better understand international business corruption and the challenges of curbing this problem, we need more research on details in how the different facets of globalization such as the increase of international trade, cross-border competition, and legislative cooperation, affect the differences in business climates across the globe and the strategic choices of the players. The World Bank’s business surveys are important contributions in this respect (Batra et al, 2003). Nevertheless, a number of issues related to corruption and similar problems are not included in these studies. Given this background, I conducted a survey of Norwegian exporters during 2004, which asked close to 100 questions related to corruption. The study was motivated by the following six questions:

1. *Where are the main grey zones?* The definition of corruption varies, in layman’s language as well as in legal terms. There are different forms of corruption; they have different consequences, and the tolerance of corruption will often vary with the circumstances. This study explores three areas in which the judicial status of corruption is unclear. In each area the impact on public officials is very similar to corruption, although the persons involved defend the practices as not being corrupt. The three areas are:

- (i) *Facilitation payments*, or smaller bribes paid to get things done. The defense of facilitation payments is often based on a lack of bargaining power.
- (ii) *Marketing* targeted at specific individuals, where expensive gifts and excursions are offered to encourage informal relations with the potential client. Many firms claim this kind of marketing to be essential.
- (iii) *Political pressure*, for instance in the form of subsidies, export-credit deals or aid, sometimes also presented as threats of political sanctions. These practices are difficult to attack legally, as they are carried out by political leaders at the highest state level.

2. *Will competitive pressure make firms more or less inclined to offer bribes?* The link between competition and corruption is not clear in the relevant literature. It has been argued that market power enables corruption because net profits are required to cover the expenses of making bribe payments. However, empirical studies that find a positive correlation between corruption and market power may have failed to include an important dynamic aspect. Firms in competitive markets pay bribes to obtain market power, and thereby change the industrial organization.

Given such a correlation, it can be the case that competitive pressures lead to a higher propensity to offer bribes in an effort to obtain monopoly power. Besides, the amount offered in a bribe can be covered by the total contract, and the cost of making a bribe payment will depend on the relative bargaining power of those involved. Competitive pressure is only one of several qualities we shall consider in exploring which firms are involved in bribery.

3. *Which strategy do firms prefer when competitors offer bribes?* And what are the options for a firm that loses important contracts because competitors offer bribes? In general, it can (i) leave the specific market and shift its business to other regions or lines of business; (ii) complain, speak out, and try to improve the underlying situation for the better; (iii) adjust to the local business climate, make the right contacts, and be patient; or (iv) offer a bribe if that seems required. This study explores the prevalence of these four reactions, and studies how they correlate with other qualities and choices.

4. *What may explain a reluctance to speak out?* There is reason to take a closer look at option (ii) above, because, while private firms often are the most likely to understand that corruption has taken place between a competitor and a client, they often seem reluctant to speak out about the problem. There are alternative channels for responding to suspected crime. A firm can follow formal procedures and appeal to the client or the tender authorities, or it can encourage local authorities to look into the deal. Given sufficient proof, it can itself bring the case to court, either locally or in the home country of the bribing firm. Other options are to go through intelligence services, embassies, newspapers or anti-corruption groups, or just submit a letter of complaint to the firm that has paid a bribe. Do any of these things happen and under what conditions?

5. *To what extent can procurement rules be expected to prevent corruption?* The bidding process for large contracts is one of the main arenas for business corruption. Many countries have reformed their procurement procedures in recent years in order to ensure fair and unbiased competition for public contracts. This study explores the ability of procurement procedures in preventing corruption, and aims at identifying particular challenges in this respect. It also asks if the presence of tender rules has an impact on the way firms seek to influencing clients.

6. *Do they practice what they preach?* A visible and unquestionable attitude against corruption at the highest levels of a firm is important to prevent the temptation of bribery throughout the organization. However, the promises of business leaders and the words in their codes of conduct will not always have an impact on their actual incentives and choices. This project has collected information about various measures introduced internally in firms to prevent corruption, such as codes of conduct and anti-corruption control routines, and has considered these issues in the light of the firms' reported strategies when operating in challenging business climates. By addressing embassy officials, the study also raises the question of countries' political commitments to international

anti-corruption conventions. What is the attitude of representatives of states who are located in countries where corruption is considered a significant problem?

The structure of this chapter follows roughly the order of these questions. First, however, the methodology and details behind the survey is then addressed. This part is followed by a summary of the embassies' and firms' reported experience with corruption. The question of which firms are involved in corruption is then addressed. This section includes the results on competitive pressure, but reports also about the significance of other features such as size, sector, length, type of international experience and home country norms. The third and the fourth research questions, on firms' strategic choices and their reluctance to react against corruption are addressed in a third section called 'responses to corruption'. This section also describes the firms' reported motivation to take part in corruption. The fourth section provides results and comments on corruption and tender procedures, a section that also includes the results about political pressure. The fifth and final section is called 'internal control and anti-corruption measures', and examines the responding firms' tendency to practice what they preach. The three grey zone areas are each discussed in their most relevant section.

2 The survey

The study consists of three parts, (i) a pilot study with interviews at the executive level in seven large firms, three of them being on the FT list of the 500 largest companies⁴; (ii) a business-survey, where executives in 82 firms with headquarters in Norway responded to a questionnaire, and (iii) a survey of Norwegian embassies outside the OECD-region, to which 24 embassies responded. The survey was carried out with the cooperation of the Norwegian Confederation of Norwegian Business and Industry (NHO), the largest business-association in Norway.

Norwegian industry, chosen for practical reasons, provides an interesting case for exploring the above-mentioned issues. Norwegian industry is outward oriented and well exposed to international attitudes and business cultures. Its most important sectors of operation are among those described by TI's Bribe Payers Index as the more exposed to corruption, such as oil and gas, power transmission and construction. Nevertheless, Norway scores well on international corruption rankings and has been commended by OECD for its implementation of the new anti-corruption treaty. The tension between operating in markets in which corruption is considered a problem and accepting a clear obligation to respect the treaty's restrictions on bribery in foreign markets is thus sharply presented to many Norwegian firms.

⁴ <http://news.ft.com/companies>. These firms were Telenor, Statoil and ABB, while the other companies in the pilot study were Jotun, Aker Kværner, Eidesvik Shipping, and DNV (Det Norske Veritas). I am grateful for their time and cooperative attitude.

About half the individuals responding to the business survey were managing directors, another two out of five were executives responsible for sales and marketing. The remaining respondents had other functions in the management group; they were country managers or members of the board. The respondents, all first contacted individually by the business organization, were supposed to have a direct responsibility for the firm's main areas of operation, other than social responsibility, security issues or public relations. Promises of anonymity and confidentiality were important concerns when arranging for the delivery of and response to the questionnaires, and NHO assisted appreciably in assuring the credibility of these promises. The 82 responses represented a response rate of 16-17 percent of the about 500 CEOs who initially received the questionnaire. Given the length of the questionnaire and the sensitivity of the issues, this compares well to the response rate of several comparable surveys.⁵

The trade and investment patterns of survey respondents' firms correspond with public statistics on Norwegian exporting industries. Most of the firms were mainly Norwegian owned, and 84 percent had their headquarters in Norway. Two out of ten had a state ownership share of more than 50 percent. The firms not owned by Norwegians were mainly owned by other Europeans. The size of the firms varied: 45 percent of the responding firms had an annual turnover of less than NOK 100 million (hereinafter "small firms"). One third had sales of between NOK 100 million and one billion ("medium-sized firms"), and 23 percent were above NOK one billion in turnover ("large firms") (one billion NOK is about \$150 million). The sectors of operation were as follows: 20 percent of the responding firms operate in construction, 20 percent in oil, gas, and power transmission⁶, 15 percent in agri/food industries, 13 percent in telecommunications and IT, 8 percent in heavy industry, 8 percent in other types of service, 6 percent in consulting, and 5 percent in light manufacturing. Shipping, a significant part of Norwegian industry, is included in construction, oil, heavy industry or transportation, depending on their main group of clients. Tourism, transportation, civil aerospace, banking, finance, insurance, and the pharmaceutical industry are sectors less represented among the respondents to this survey.

All the firms operated internationally. One third had done so for more than 30 years, and about half for 10-30 years. The surveyed firms operated throughout the world, although most concentrated in Europe and USA/Canada. Other regions were represented in the following order: East European countries and Central Asia, Asia other than mainland China, Latin America and the Caribbean, Sub-Saharan Africa, the Middle East and North Africa, mainland China and Oceania. Almost half the firms produced goods outside Norway. More than one third said that they carry out projects for foreign governmental institutions.

⁵ Like for instance, Graham and Harvey (2001), CRG (2002) and Batra et al. (2003).

⁶ For the sake of anonymity, oil and power are put together in the same category.

Competitive pressure is important to understand the behavior of firms but is difficult to measure. This survey attempted to get at this issue through the following question: “Are the prices for your main products or services forced to a level that makes it hard to make profits?” Given this question, 44 percent operated under competitive pressures. There appeared to be no clear pattern of competitive pressures across sectors in the surveyed firms, except in agri/food industries, where a clear majority finds it difficult to make profits. The price pressure was also reported to be strong in construction, oil, gas, and power transmission and was lower in telecommunications/IT. The large firms did not appear to be less exposed to pressure on prices than the small firms.

The responses are analyzed using non-parametric statistics and the results do not allow for statistical generalizations. The results outlined here are the reported frequencies in the given data, cross-tabulations in the responses, and the results of probit analyses. Correlations described as “significant” or “clear” are statistically significant at the five percent level or better.⁷ However, the reliability of empirical research on corruption is always uncertain (Søreide, 2005). Respondents have incentives to protect the reputation of their sector and, in this case, Norwegian firms in general. Bribery is usually known only to a very small number of persons, and might also be hidden from high-level employees. The lack of actual knowledge about the phenomenon makes it probable that many respondents base their beliefs on occasional incidents. It may even induce some respondents to overstate the problem and claim corruption to be more widespread than it really is. Thus, when designing or interpreting surveys on corruption, one must recognize that the results, for various reasons, may be biased. One of the goals of the present survey design is to base the value of the material on what the respondents say, while recognizing its limitations in reflecting the firms’ actual choices.

To understand what the respondents say it is important to be aware of definitions and common terminology. In this setting, the pilot study was important to make the questionnaire fit with the perspectives of business executives and their everyday vocabulary. Although this study concentrates mainly on bribery in procurement contracts, it should be noted that it is common to distinguish between the following terms. *Grand corruption* refers to the bribery of politicians or bureaucrats with influence over large projects and important contracts. High level corruption is sometimes described as *crony capitalism*, in which political networks dominate important private assets, or *state capture*, in which private firms are able to influence public power to their own benefit.⁸ *Petty corruption* is at the other end of the scale: small payments offered to or demanded from persons representing a lower level of an institution, such as local tax collectors, customs

⁷ The cross-tabulations are studied using chi-square statistics. Note also that most numbers are presented in percentages, even if the number of respondents is below 100. Ten percent is therefore the response from 8 persons. Most respondents have responded to all questions, and, *n*, the total number of responses to each question, is equal or close to 82 in all tables or presentations of the results.

⁸ This is thoroughly discussed in the paper by Hellman et al. (2000).

officers, health personnel or bureaucrats providing firms with the required licenses or permits. The relevant business term is *facilitation payments*, which, according to Transparency International, refers to payments “made to secure or expedite the performance of a routine or necessary action to which the payer of the facilitation payment has legal or other entitlement.” See for instance The World Bank/IBRD (2005) for an overview of various bureaucratic obstacles to business in different countries and the types of challenges that are sometimes reduced by a “facilitation payment.”

A firm bribes *actively* if it offers a bribe where payments are not requested, while *passive* bribery means acquiescing to demands for bribes; the difference between the two will often be unclear. The present study does not make this distinction, since it is assumed that corruption for important business contracts generally is a result of shared understanding between the parts involved.⁹ *Private-private* corruption denotes the situation when one firm bribes a representative of another firm, neither of them representing a public institution. Judicial definitions of corruption will not always include situations in which a public institution is not involved. The participants in this study do not seem to discriminate, finding corruption a challenge irrespective of whether the client is a public institution or a private firm. It is important, therefore, to note that some of the business practices reported in this study may not be covered by international anti-corruption legislation.¹⁰

During several of the interviews the term corruption was itself a strain on the conversation. Terms sometimes preferred were undue business practices, pre-determination of contracts, bid rigging, silent digression from ethical rules, extralegal activities, ties and connections, inducements and shabby or low quality business climate. The use of such terms may indicate a lack of exact knowledge about the business practices used by other firms and also a reluctance of executives to describe practices, either their own or those of competitors, by using terms that describe unquestionably criminal activities.

⁹ Although the issue of bargaining power is important in understanding corruption, as is well described by Rose-Ackerman (1978), it was not a central research topic in this study.

¹⁰ There is, in spite of vast improvements in the rules, a significant grey zone between legal and illegal business practices, particularly when it comes to payments made to reduce barriers to business or certain marketing strategies directed towards specific individuals. Recent judicial documents, such as the anti-corruption conventions of the Council of Europe, the OECD and the United Nations allow for alternative ways of gaining influence by referring to actions that obviously have a “corrupt intention” or proposals for “improper advantage”.

3 Experience of corruption

This section summarizes the firms' general experience with corruption, the extent to which this is considered a problem, and also responses regarding the firms' direct involvement. The smaller embassy survey complements the business survey by providing an idea of the Norwegian firms' corruption-related challenges from respondents other than the firms themselves, and I shall describe these results before I turn to the firms' responses.

3.1 The embassy perspective

Ambassadors are among the public officials who are best able to follow up and monitor the recent improvements on international anti-corruption legislation. Embassy representatives usually reside in a specific country for a significant period of time, they observe its society with the eyes of a foreigner, and they take part in political gatherings. At the same time, they are expected to know the local markets and industries in order to be able to advise home-country firms entering the local market, as well as to inform home-country public institutions. Ambassadors will often become involved if home-country citizens commit some kind of crime locally. What is the embassy representatives' view on local business corruption in their country of operation? Do they ever make any effort to react against the problem?

This part of the study was conducted as a mail survey to which 24 out of 44 Norwegian embassies outside the OECD-region responded to nine questions. Eleven of the responding embassies are in developing countries and 13 are in middle-income countries. There are no significant systematic differences between their responses. The participating embassies can not be identified, and I cannot say for certain if it always were the ambassador him or herself who responded.

The main impression from these responses is that local embassy representatives experience corruption in the poor or middle-income country which they are located as a real challenge for Norwegian and other foreign firms:

i) Nineteen of these respondents said that corruption is frequently or always part of the business culture, and only three respondents considered this problem seldom to be an issue in local business.

ii) Eighteen respondents found the business climate in their country of operation clearly inferior to what they observe in Norway. These 18 respondents also assumed that a refusal to make irregular or informal payments will reduce foreign firms' opportunities to do business in the specific country. A weak majority believed that foreign firms that operate in the local market adopt business practices that most likely deviate from their own official codes of conduct.

iii) Twenty-one of these 24 respondents assumed that Norwegian firms operating in the specific area are sometimes or often confronted with challenges related to illegitimate business practices, irregular payments, and corruption. Adjustment to local practices and informal conventions will, according to a clear majority, often imply business procedures that would be considered less acceptable in Norway.

Given this depressing picture of the local business culture, what would the embassies recommend Norwegian firms to do if entering the specific markets? Would they recommend firms “to adjust to the local business culture, even if it could imply business behavior that would not be accepted in Norway”? In the given setting it was reasonable to interpret this question as asking whether the embassy-respondent would recommend some kind of bribery. Fourteen of the respondents stated that they would never give such advice. More than one third were in doubt on this issue, and one out of five embassy-representatives were prepared to give such an advice.

However, the embassies were also ready to support firms that actually lose contracts because of corruption and give advice on how to handle such a situation. A clear majority would mention the issue to local authorities, and only five would probably not do so. Eleven embassies had actually taken this kind of action and had raised the issue of corruption at high political level. Six of these eleven said they had done so several times.

3.2 The firms’ experience

With this background, I will now consider the firms’ responses. The results in this business survey are consistent with the embassy survey; corruption is influencing the operations of many firms. Two thirds of those responding to this survey actually thought they had lost a contract because of corruption; almost half of these were convinced that they had done so.¹¹ Forty-two percent found unethical business practices to be common; one third had decided not to operate in a specific country because of corruption or similar problems; and half of those with production located outside the OECD region found corruption to impede these activities. Only one third of the respondents had seldom or never been confronted with problems related to corruption when operating in foreign areas, and just 26 percent had never had reason to believe that competitors have influenced tender procedures unduly.

¹¹ The response on lost business due to corruption, a question which in this study was not restricted to a specific period of time, is higher than the average result of a business survey carried out by CRG during 2002. In the CRG study, 27 percent of the responding firms believed that they had lost business contracts because a competitor paid a bribe during the last year, almost 40 percent during the last five years. The responses from the five countries included in the CRG survey differed significantly. Fifty-six percent of Hong Kong firms claimed to have lost business due to corruption during the past 12 months, compared to 16 percent of UK firms (CRG, 2002).

Given these reported challenges, does it ever happen that the responding firms take part in corruption themselves? The category of corruption most frequently admitted was “facilitation payments.” This is a form of corruption which has an unclear legal status to many business people, and which several respondents and interviewees justified.¹² Half the respondents said that they never make “irregular payments to get things done,” 24 percent said they seldom do so, and 17 percent admitted that they sometimes or frequently make this kind of payment. The sizes of facilitation payments varied. The majority would not offer facilitation payments or at least not pay more than \$2000. Some firms would offer payments between \$2,000 and \$8,000, and just a few would pay \$15,000 or more to get things done. There was no clear link between the size of these payments and the size of the responding firms. Almost half of the respondents who paid facilitation payments said that they did not have any problems respecting present regulations in this field.

The respondents were then asked if whether is necessary to offer valuable gifts or pay bribes to clients, directly or through an agent, to be able to operate in certain countries. While many respondents did not have sufficient information, as many as 27 percent of the total found valuable gifts or bribes a prerequisite in certain regions (see Table 1 for variation between sectors in this response). This number, even if substantial, appears at first sight to represent a significant improvement compared to a PriceWaterhouse-Coopers (PWC) survey among the largest Norwegian firms in 1998. This survey found that 62 percent of the respondents considered it necessary to offer gifts to be able to operate in or get contracts in developing country markets.

However, the indicated improvement of attitudes probably does not reflect a similar change in actual business practices. The PWC survey appears to reflect general attitudes in a year when international attention to corruption was still fairly low. The present survey, in contrast, asked about the respondents’ own experiences. It also asked for their opinion in the post-Enron year of 2004, after the implementation of the OECD anti-bribery convention and several information campaigns, just after a corruption scandal in a large Norwegian company, and during a time when corporate social responsibility was a main topic of debate. Moreover, it asked the respondents to mark the specific areas where they considered bribes a prerequisite “to be able to operate”, areas in which they actually had business experience. The regions mentioned most frequently were much the same as those pointed out by the respondents to the aforementioned World Bank survey as particularly challenging and where corruption is a real

¹² The examiners who conducted the OECD evaluation of Norway’s implementation of new anti-bribery rules were concerned that information about facilitation payments was not sufficiently communicated to the business sector (OECD, 2004:28). This concern is justified by the present findings. The unclear legal status of facilitation payments and other forms of corruption is not always improved by the literature on business risks. Poole-Robb and Bailey (2002:59) is just one example: “It appears that what is and is not a bribe is a matter of presentation and perception in much the same way as the concept of corruption itself”.

business constraint (Batra et al., 2003: 51). Nevertheless, the World Bank survey found that there are always many firms that are able to operate in the most challenging markets without having to pay bribes, and we do not know how much effort firms that do pay bribes have put into the reform of their business practices.

When the respondents were asked about their own direct involvement in corruption, nine percent admitted having accepted a request from an agent, an adviser or a consultant for money that would most likely be used for bribery; another six percent said that they probably had done so. A few firms admitted that during the last decade they had tried to obtain a contract, a license, or a concession in a way that was important to keep confidential.

4 Which firms are involved in bribery?

The most important differences in attitudes and exposure to corruption are related to company size, competitive pressure, industry group, and the extent of experience from international markets. However, the connection between these qualities and corruption is not straightforward; it is not obvious how to separate the impacts of different characteristics, and different categories of firms can be exposed to different types of corruption. These problems should be kept in mind in this section, as we discuss some important factors that determine which firms are most likely to be involved in corruption.

4.1 Size

The corruption scandals exposed in the media are often those involving famous and large companies. However, is it really the case that business corruption mainly entails firms of a certain size? Can we actually generalize about corruption in this sense? The results of this study suggest that we can, and we can also assume that size matters in these questions. Large firms were significantly more likely than smaller firms to consider the international competition for important contracts biased in their own respective industry. The large firms found themselves more able to influence the outcome of tender procedures, they more frequently thought that they had lost contracts because of corruption, and they were clearly more exposed to the problem of political pressure on international tenders.

There are a few aspects that have to be considered when large and small firms are compared in their problems with corruption. Large firms will usually be involved in a higher number of projects and they enter into more contracts. Their probability of experiencing corruption now and then will thus be larger per se, but not necessarily in each single business transaction. There are also differences between large and small firms in the way they are exposed to or involved in corruption. Large firms will more often operate in markets where alternatives to

active bribery are possible, such as political donations or political pressure, and where they can have contacts that make them able to avoid demands for bribes requested at lower bureaucratic levels. Smaller firms may not take part in public tenders on large construction projects, contracts with a relatively high risk of corruption. Being part of a larger bid is still suggested by several of the small firms in this survey as being a common motivation for bribery.

Given these considerations, we can still generalize about size and the results in the present study reveal a clear tendency of large firms of being more involved in business corruption. However, in the aforementioned World Bank study they distinguished between different types of corruption: grand corruption and state capture as ways of influencing laws and regulations, on one side, and lower-level corruption, bureaucratic red tape, and facilitation payments, on the other. They found smaller and younger firms to be more constrained by corruption as they were more likely to be the victims of grand scale corruption and state capture, leading to lost contracts, and reduced transparency and predictability of laws and regulations. Large firms were more likely to be involved in political and “state capture” forms of corruption (Batra et al., 2003).

4.2 Sector

The results from this survey are not able to provide a full picture of the variations in the different business sectors’ exposure to corruption. However, business sector comes out as a critical factor in the choices of firms, and certain industries appear significantly more likely to be exposed to corruption than others.

Firms in telecom/IT, oil, gas and power generation, and construction clearly had more doubts about the capacity of tender rules to prevent corruption. These firms more often believed that tender specifications are designed to fit with the offer of one specific company, they more frequently thought that competitors win contracts by help of political pressure, and they were more likely to negotiate all through the tender procedures themselves.

Firms in oil, gas and power generation would more often admit that they “during the last decade had tried to obtain a contract, a license or a concession in a way that is important to keep confidential” (a result that is significant only at the 10 percent level). Table 1 describes responses about the firms’ frustrations because of corruption. Answers from firms in “construction and heavy industry” are compared to those from firms in “oil, gas and power transmission,” which have been treated as one sector in this survey. The percentages are those who have responded *sometimes* or *frequently* to the given questions, as opposed to *seldom* or *never*. The numbers in the sector-columns are the share of total response within each sector, i.e. holding sector as dependent variable.

TABLE 1
Different sectors, different exposure to corruption

Question	Percentage responding <i>sometimes or frequently.</i>		
	All	Constr. & heavy industry	Oil, gas & power
<i>Do you ever have reason to believe that your competitors influence tender procedures unduly?</i>	42%	57%	53%
<i>Has your company ever decided not to operate in a specific country or region mainly because of corruption or similar problems?</i>	34%	37%	47%
<i>Have you ever lost contract(s) because of competitors' unethical business practices?*</i>	67%	78%	76%
<i>When operating in foreign markets, do you ever have to make irregular "additional payments" to get things done?</i>	17%	26%	29%
<i>Is it necessary to offer valuable gifts or pay a bribe to clients or public officials, directly or through an agent, to be able to operate in certain countries? **</i>	27%	40%	58%

Note: several of the indicated correlations in this table are not statistically significant. *This question is presented in a way that fits with the alternative responses; the reported response here is *probably* or *for certain*. **The respondents described which regions where this is the case, and the percentages in the table represent those who find this required in one or more regions.

The sectors perceived to be most exposed to corruption according to the mentioned TI Bribe Payers Index, are “public works/construction,” “arms and defense,” and “oil and gas.” Telecommunications and power generation/transmission are ranked number five and six. Heavy manufacturing and IT are ranked less corrupt by the TI respondents. Even if the TI ranking is based on a completely different question, the results are comparable with the findings in this study. Also a study conducted by Control Risk Group in 2002 (see endnote 12) places the same sectors as being the more corrupt. However, according to the CRG study, “oil, gas and mining” were the most likely to give up an otherwise attractive investment because of corruption, and also the firms most likely to review their business practices on account of new laws in this field. Telecommunications firms were found to be the least likely to be deterred by corruption, and also the least likely to review their practices (GRG, 2002).

4.3 Competitive pressure

The large size of business bribes in media cases about corruption might give the impression that firms with large profits are more involved in this way of making business than firms that are exposed to competitive pressure. Nevertheless, the results in this survey do not support that intuition: firms that consider themselves too pressured on prices to make profits actually come out as more exposed to corruption, and also more likely to find bribery required to be able to operate in

certain markets.¹³ Table 2 presents some of the results on the reported exposure to corruption as a function of size and competitive pressure.

TABLE 2
Exposure to corruption, given differences in turnover and competitive pressure

Response	Total	Turnover			Competitive Pressure	
		L	M	S	Low	High
<i>We think/are convinced that we have lost a contract due to corruption</i>	66%	84%	65%	56%	47%	73%
<i>Our firm has decided not to operate in a country mainly because of corruption or similar problems</i>	34%	42%	39%	25%	22%	42%

Note: L, M and S refer to large, medium and small firms. High and low competitive pressure refer to the answers when asked whether prices for main products are reduced to a level that makes it hard to make a profit.

Firms exposed to competitive pressure more frequently experienced a gap between formal and informal rules, and they more often decided not to operate in a specific country, region, or segment of the market because of corruption. By separating the firms that were *strongly* pressured on prices from those just *usually* pressured on prices, we get a similar pattern: the former are significantly (at the 5 percent level) more likely to believe that the tender procedures have been rigged, they negotiate all through the tender procedures themselves (without following the rules), and they have more often problems with corruption in their FDI-operations.

This result implies that firms in competitive environments are no less exposed to corruption and similar undue business practices, and thus not less likely to become involved in bribery, compared with firms with more market power. This is interesting because several authors have suggested a positive correlation between firm profitability and bribe payments in developing countries, see for instance Myrdal (1968), Ades and Di Tella (1999), Kaufmann and Wei (1999), Clarke and Xu (2002) and Svensson (2003).

There are, however, explanations for these inconsistencies. First, the different studies describe different forms of corruption, and competitive pressure will have different impacts on lower level bureaucratic corruption and facilitation payments, on one side, and procurement contracts and higher level business corruption, on the other. Second, firms exposed to competitive pressure will more frequently lose

¹³ The result is controlled for size and sector.

contracts with products that are close or equal to the winning bid in their price and quality. They will thus be more inclined to believe that they actually had the best offer when they lose contracts, and they will perhaps suspect corruption more frequently. Third, there are some dynamics in the connection between competitive pressure and corruption that is difficult to measure by statistical studies. Corruption may provide the briber with relatively more contracts than what more honest competitors manage to acquire, which means that the firm turns profitable and is no longer in the category of competitive market firms. Companies experience competitive pressures and use corruption to limit their impact. This is a problem that emphasizes the link between corruption and industrial organization, and underscores the role of antitrust bodies in anti-corruption policy decisions.

4.4 The length of experience from international markets

The number of years a firm had operated in international markets had a significant impact on several responses in this study. Not surprisingly, firms with long experience had more often lost contracts because of corruption. However, they were also more likely to believe that competitors operate unduly in the present, they more frequently found the outcome of tender procedures to be pre-determined, and they more often admitted to having obtained a contract, a license or a concession in a way they considered important to keep confidential. Interestingly, they were more likely than any other category to consider corruption a problem in the competition for Scandinavian procurement contracts. Nevertheless, longer experience did not make the firms more tolerant to corruption. They were close to the average in considering this problem “never acceptable.”

4.5 The type of experience from international markets

Whereas the length of experience from international markets apparently had no impact on the firms' stated tolerance for corruption, the type of experience made a significant difference. Firms with parts of their production located in foreign countries were clearly more inclined to consider corruption acceptable, for instance “if the contract is necessary to avoid insolvency,” “when there is no other way of operating in the market,” or just because it can “make the firm end up with an important contract.” Firms with production located in foreign countries more frequently believed that “competitors influence tender procedures unduly,” they more often thought that they had lost contracts because of corruption, and they generally had a lower trust in tender procedures. They did not admit more involvement in corruption than other firms.

Firms that carry out projects for governmental institutions represent a category that many of us associate with corruption. Nevertheless, this type of experience did not seem to make the firms more tolerant to corruption or reduce their trust in tender procedures. However, these firms' responses differed significantly from the

average in two ways. They reported far more frequently about demands for quid pro quos, like the use of local resources, the building of additional infrastructure, or other contributions to the local society. And, they more frequently admitted to having obtained a contract during the last decade in a way that is “important to keep confidential.”

Aid-financed business ventures are another important cross-cutting category. International aid to developing countries is sometimes mentioned as a field particularly exposed to corruption. The risk of corruption is present at several stages of the procedures, beginning with the choice of a contractor for the project. In this survey, only 16 of the responding firms had carried out projects financed by multilateral or bilateral aid. Half of those had the impression that corruption is more common in aid-funded projects than in other projects. In most other respects this category did not differ significantly from the average; they were not more tolerant to corruption, they had anti-corruption codes of conduct in similar degrees as other firms, and they did not differ in their confidence in procurement procedures. However, these firms reported significantly more often, and also more definitely, that they had “accepted a request from an agent, an adviser or a consultant about money that probably would be applied for bribery.”

4.6 Home country norms and activities abroad

A final question in this section is whether firms from countries perceived to be less corrupt have a lower propensity to make bribe payments. Lambsdorff (2001), who linked the level of corruption in import markets with bilateral trade statistics, found significant differences between exporters with regard to their tendency to offer bribes. Also, TI found by their Bribe Payers Survey that firms from different countries differ in their propensity to offer bribes in foreign markets. This implies that we should expect Norwegian firms to be less involved in corruption because the levels of corruption in Norway are perceived to be low. Since it surveyed only Norwegian firms, this survey was of course incapable of testing such a hypothesis. What we did, however, was to ask the business people about their views.

While the firms’ “home country norm” is difficult to identify, most respondents did not consider corruption an important problem when operating inside of Scandinavia. More than half found the competition for important Scandinavian contracts to be relatively free and fair. Nevertheless, when it comes to active bribery in foreign countries, 41 percent of the respondents claimed that there is no difference between firms from Scandinavian countries and firms from other OECD countries.¹⁴

¹⁴ The fact that firms from OECD countries are responsible for about 70 percent of world trade in goods and services (www.unctad.org), makes it relevant to search for distinctions between OECD countries in their firms’ propensity to offer bribes. Nevertheless, the OECD-convention on cross-border bribery and the vast attention to corporate social responsibility in the OECD region, makes it plausible to find the largest differences between OECD countries, on the one hand, and countries without this kind of restriction, on the other. See also Montigny (2004) who describes the

When asking the respondents whether Scandinavian firms were more or less exposed to corrupt demands than competitors from other countries, including non-OECD countries, 56 percent said that there is no difference. These results are not qualified to produce general conclusions. When such a large share of the firms admit that home country corruption levels make no difference, it still questions the strength of this impact on the business practices applied internationally. Given the increasing multinationality of big firms, it also seems likely that the firms' culture of origin will become less important in this regard.

5 Responses to corruption

The presence of a challenging business climate can obviously force a foreign company to make choices that it can avoid when operating in markets where corruption is less common. We have so far discussed which firms are most inclined to be involved in corruption themselves. However, a study of the mechanisms of corruption raises questions that go beyond this information. In this section we shall consider the firms' reported choices when competitors get contracts by offering bribes. We shall also explore the purposes of bribery: what are the actual benefits obtained?

5.1 Strategic choices

In general, judicial systems preserve existing values by making already accepted behavior legal or unaccepted behavior illegal. When it comes to corruption, it has not always been clear what the commonly accepted behavior is.¹⁵ In the past, although corruption was illegal locally in most host countries, cross-border bribery was tax deductible under domestic regulations in many home countries. This may explain why there has been, and still is, a certain acceptance of the bribery that goes on in countries where the problem is perceived to be common.¹⁶ New international rules have been vital in raising the profile of cross-border bribery and in criminalizing its practice. One consequence, however, is that it has become more difficult to tell whether firms act in respect of the law, or if they just pretend to do so. A cynical gap between actual and asserted business practices is not a consequence of the new rules themselves, but may perhaps occur if the new rules are not sufficiently enforced. In Europe there are very few court cases involving large scale corruption or cross-border bribery. Despite improved co-

difference between firms from countries with restrictions on cross-border bribery and firms from other countries as a challenge and an obstacle to the development of sound industry and trade in African countries: Many "clean" firms prefer alternative markets for fear of being involved in corruption, and African countries are left with an "adverse selection" of foreign investors.

¹⁵ See an interesting and relevant discussion by Bardhan (1997).

¹⁶ One recent example is the Swedish Foreign Ministry's refusal to sanction bribes for exports to Vietnam, claiming that "one sometimes has to pay bribes to do business in this country" (*BBC Monitoring Service, 11.03.2004*).

operation in international crime prevention, the probability of being caught is very small for firms involved in corruption.¹⁷

This study approached this issue by asking the respondents if they ever found it difficult to respect the law. Forty-four percent of the total did sometimes find this difficult, 33 percent never found it difficult, while the rest were not familiar with the relevant legal regulations. Table 3 combines the sub-group of those who could find it difficult to respect the law with some results on attitudes and exposure to corruption. The percentages in the table are those responding “yes” or “frequently,” as opposed to “no” and “seldom.”

Those who sometimes found the laws difficult to respect are also those who are more likely to be exposed to corruption or to be actively involved themselves. However, the group of firms that found it difficult to respect the law is also more familiar with the relevant legislation and the OECD anti-bribery convention. This result can be interpreted in at least two ways: (i) those who found the law easy to respect may not be fully aware of the legal status of corrupt practices, or (ii) firms that are more exposed to and frustrated by corruption are also more aware of new rules.

TABLE 3
Corruption and other undue business practices

Question	Total	Not always easy to respect the law
<i>Do you ever experience a gap between formal and informal rules in any of the areas where you operate?</i>	32%	52%
<i>When operating in foreign markets, do you ever have to pay some irregular “additional payments” to get things done?</i>	17%	29%
<i>Is it necessary to offer valuable gifts or pay a bribe to clients or public officials, directly or through an agent, to be able to operate in certain countries?</i>	27%	32%
<i>Has your own company ever accepted a request from an agent, an adviser or a consultant about money that would probably be used for bribery?</i>	15%	35%
<i>Has your own company, during the last decade, tried to obtain a contract, a license or a concession in a way that is important to keep confidential?</i>	6%	13%
<i>Are you familiar with the OECD convention against the bribery of foreign public officials?</i>	30%	48%

Note: The reported response represents those who responded ‘often’ or ‘frequently’. On the third question, however, (‘required to pay’), the response represents those who responded by pointing to specific geographical regions. The dependent variable for the subgroup is response within that category.

¹⁷ In this regard, the USA comes out as more resolute than Europe. Cross-border bribery has been forbidden for US firms since 1977, when the Foreign Corrupt Practices Act (FCPA) was introduced. There have been a number of court cases in which firms have been heavily penalized. One recent example is Exxon Mobil’s bribery of a Kazakhstan public official to get access to the country’s largest oil field.

5.2 Tolerance of corruption

When respondents were asked directly, their acceptance of corruption was low. Some respondents, about six percent, still tolerated or defended corruption if the contract was “necessary to avoid insolvency” or “if corrupt practice is common to get contracts.” Other respondents, 18 percent, found corruption acceptable “if there is no other way of operating in the market.” The majority, 58 percent, found it to be never acceptable.

Even so, the disapproval of the crime is challenged in the respondents’ daily business life. Whereas a large share of the firms claimed to have lost contracts due to corruption (66 percent), only five percent would actively lodge an appeal to the customer or the tender authorities if encountering a competitor who they suspected of bribery. Twenty-six percent would seek a formal explanation from the client under such circumstances. Such an explanation is a routine part of any formal tendering process, however, so a firm’s request cannot be considered an active response to corruption.

If formal complaints are ignored or rejected, only 13 percent would try to respond in alternative ways, for instance, through political channels, in branch fairs, or through journalists. As many as 45 percent say that they would prefer not to react by any means if they were in this situation. A majority of these firms agree with the statement “corruption is part of the game.” Among the persons who claim that corruption is never acceptable, 35 percent say that they prefer not to report or react against the practice. These responses question the reported intolerance of corruption. Many respondents seem to consider corruption a fact of life where their own reactions will have no more than a marginal impact. This assumption is supported by the 65 percent who claim that they would have been more inclined to respond to bribery if it took place in a country where corruption is perceived to be uncommon.

What explains this common lack of response to corruption? If competitors pay bribes, the companies lose not only their fair chance of gaining the contract but also the cost of taking part in the tender, often a significant amount of time and, at least for the large firms, it can amount to several million Euros. In spite of these losses, they prefer not to complain or claim for compensation.

The most plausible explanation is perhaps the lack of proof in these cases. It will often be impossible to verify that corruption has taken place, and there is, of course, a general reluctance to accuse somebody of being “corrupt” without clear evidence. However, firms that have participated in a tender where the outcome has probably been affected by corruption will often have reason to be confident of their suspicion. They may have been asked for bribes themselves, they pick up reliable rumors, or by other means they realize that the tender procedure is flawed.

In an effort to explore this issue, the respondents were asked to rank alternative explanations. The result is presented in Table 4.

TABLE 4
Absence of reaction

Question	Response	%
<i>Independently of the experiences of your own business unit, what do you think is the most common reason for a company to keep quiet when encountering a competitor in bribery?</i>	Concern about sanctions from the bribing company	5%
	Concern about sanctions from other companies	5%
	Concern about future business cooperation	31%
	Concern about sanctions from customers	18%
	Lack of knowledge about the illegality of the act	15%
	Lack of proof	12%
	Other reasons	0%
	I do not know	5%

Note: The respondents were asked to rank the explanations suggested in the questionnaire. This table describes the total score based on a summary of the alternatives, ranked as numbers one and two.

Lack of proof and concern about sanctions from accused firms are not major factors. The most important reason for staying silent is a worry about future business cooperation. Accordingly, if one loses business because a competitor paid a bribe, it prefers not to react against the practice out of concern for future business cooperation with other firms in the market.

More surprisingly, the firms that never cooperated officially with other firms in the market were just as concerned about losing future business cooperation as those that did occasionally have this kind of cooperation.¹⁸ This worry was somewhat higher among firms able to make more profit than is usually possible in a competitive market. By contrast, the firms that operated under higher competitive pressure on prices were more worried about sanctions from clients than about lost business cooperation with other firms. These differences are interesting because they suggest that profitable firms are relatively more dependent on good relations to other firms in the same line of business; a result that could be explained, for instance, by theories on collusion.

5.3 Local business practices and the use of agents and advisers

Given that firms seldom raise their voice to report corrupt suspicions, they are left with two options when operating in challenging business environments: exit from the market or adjust to local business practices. About half the respondents say

¹⁸ One explanation is the formulation of the question, as it encourages distance from the practices of one's own business unit. However, the high number of firms that claimed to have lost contracts due to corruption makes it reasonable to assume that most answers were based on the firms' own experiences.

that they would adjust to the local business culture if they had lost contracts due to corruption—or they would accept corruption as “a part of the game.” Table 5 describes these responses.

TABLE 5
Corruption as an obstacle to business

Question	Response	%
<i>If you generally choose not to complain [about bribery], or if complaints are ignored or rejected, what do you typically do?</i>	No big reaction, corruption is part of the game	28%
	We adjust our strategies to the local business culture	24%
	We retreat from the country	5%
	We report the case in alternative ways	13%
	I do not know	28%

“Adjustment to local practice” can of course refer to legitimate ways of behaving and doing business, but it does also include the option of active bribery. One way to get around anti-corruption laws is to go through agents, consultants, and joint venture partners. The firms’ benefit of using such intermediaries was therefore a relevant issue in this project, and the respondents were asked to rank the importance of different qualities that an adviser can have.

The firms were clearly most interested in ties to relevant decision-makers. Almost 50 percent of the respondents ranked this alternative number one although they still avoided the relatives of persons in high-ranking positions. Agents able to deal with local formalities were most frequently ranked number two. Other advisers were ranked in the following order: international business advisers and/or country analysts, local business advisers without ties to the government, lawyers with the relevant competence, bureaucrats and politicians. In addition, 44 percent of the responding firms said that they had contacts positioned at, or with access to, a high level of the government in countries where they operate.

The importance of ties to decision-makers is often justified by referring to cultural differences in the ways of doing business. As part of globalization, however, business practices are becoming standardized. Work towards a standardized WTO government procurement agreement is progressing; the EU has introduced new tender rules, and standardized bidding procedures are already widely applied, including in developing countries. The impact of these initiatives is partly dependent on the motivation of firms to respect the procedures, rather than just assume that personal ties are what really matters. As long as firms do not recognize this responsibility, the emphasis on agents and ties will continue. And certainly, the more emphasis there is on ties to decision-makers, the stronger the suspicion will be that firms are involved in corruption and the less reason there will be to expect free and fair competition.

5.4 Motivation behind bribery

Increasing sales is perhaps the main motivating factor for the choice of any business strategy, corruption included. Given this main driving force, there are still differences in what firms seek to achieve with the help of bribery. This study gathered information about the purposes behind corruption, and even about “the underlying motivation behind the crime.”

Table 4 presents the respondents’ rankings of given suggestions about the direct purpose of secret ties to clients. The questionnaire did not ask about the respondents’ own motivation, but rather that of other companies in their line of business. The present data should therefore not be applied as a basis for general conclusions about the respondents.

TABLE 6
The purpose of bribes

Question	Answers	%
<i>If companies in your line of business operate unduly, for instance by establishing secret ties to specific decision-makers, what would you suggest that they typically would be aiming at?</i>	Adjustments in tender specifications	14%
	Being part of a bid for a larger contract or concession	7%
	Improve economic conditions, such as tax reductions	5%
	Obtain the contract through direct negotiations	26%
	Secret information about evaluation or tender specifications	19%
	Secret information about the other companies’ bids	15%
	Promises of neglected quality controls	1%
	Reduced political risk	1%
	Other benefits	0
	I do not know	14%

Note: The table is a summary of the responses most frequently ranked numbers 1, 2 or 3.

If tender rules are applied, it becomes more difficult for representatives of the customer, whether it is a public institution or a large firm, to promise the potential briber a specific contract. Without such a guarantee, the “price” offered, which in this case is a bribe, is reduced accordingly, sometimes down to the level of “marketing expenses.” If a guarantee of the contract is not obtainable, firms are left with less direct ways of influencing the choice of contractor - ways that provide the firm with some kind of advantage vis-à-vis competitors. As a consequence, many of the respondents suggest that secret information about evaluation criteria or tender specifications are common purposes of bribery.

However, the respondents suggested that bribes are most often paid to obtain a contract through direct negotiations, which means the abandonment of tender procedures altogether. Common justifications for direct negotiations are the familiarity of operators with similar equipment, the uniformity of spare parts, a

preference for previous suppliers, or the fact that a tender procedure would be too expensive or time consuming. Although these justifications can be legitimate, they may also enable corruption. Note also, the firms' interest in direct negotiations underscores the importance of tender rules for reducing corruption. There is no logic in offering bribes to avoid tender procedures if these rules are not functioning.

The respondents were asked to suggest the most important underlying motivation for companies in their line of business to offer bribes. The survey question is based on George Moody-Stuart's (1997:21) explanation of why companies pay bribes. The respondents were given three alternatives in addition to the obvious goal of getting a contract. Table 7 presents the results.

TABLE 7
The underlying motivation behind bribery

Alternatives	%
1. The fear of losing contracts because someone else has bribed the decision-makers	43%
2. The goods or services offered would not have been chosen in a fair competition	21%
3. Persuading decision-makers to buy goods or services that otherwise would not have been demanded	5%
4. I do not know	31%

The third alternative motivation behind bribery, persuading decision-makers to buy goods or services which they basically do not need, had a surprisingly low rate of response. However, one might anticipate a bias against this alternative because most producers have a strong belief in their own products. We cannot expect salespersons to believe that their products are not needed. Besides, goods purchased from multinationals will often be expensive and technologically advanced. Moody-Stuart suggests that military hardware is the classic example of this kind of corruption.

The second alternative, goods that would not have been chosen in a fair competition, refers to products or services that are of poor quality or are overpriced. The buyer demands compensation, a bribe, for choosing the specific product because better alternatives exist. This motivation is probably quite common but still was suggested by only 21 percent.

The alternative suggested most frequently, by more than half of those who had a view, was the concern about losing contracts simply because someone else have bribed the decision-makers. The majority of bribers appears to be motivated by a lack of trust in their competitors. This result reveals a considerable information problem, but also a challenge when it comes to the firms' internal controls and the measures they take against corruption.

6 Corruption and tender procedures

This section continues the discussion about how corruption works. What we shall consider now is one of the main arenas of business corruption, and discuss some challenges in its regulation. We have already referred to the tender procedure, where the competition for public contracts is supposed to follow explicit rules to ensure fair and “clean” competition between the bidders. However, there is little information about the efficiency of procurement rules in preventing corruption, and the distinction between acceptable business practices and corruption is often ambiguous. Firms competing for a contract will often try to influence the tender procedure and the tender specifications, as well as try to influence the officials directly responsible for the contract. Influence on tender procedures is not only conducted by the firms. A considerable fraction of the respondents to this survey also consider political pressure a common problem in international tenders.

6.1 Influence on tenders

Marketing strategies verge on corruption when customers’ agents are offered benefits of significant private value, particularly when the benefits have a job-related aspect, such as business excursions and tickets to events to which job contacts are also invited. Several of the persons interviewed for the survey admitted that the intention behind these gifts is similar or identical to the purpose behind bribery. Among the respondents, 26 percent offer valuable tickets to clients, while 36 percent offer excursions. These practices are clearly more common in sectors perceived to be more exposed to corruption. The survey explored the meaning of “gifts” in this setting. During interviews it was made clear that the “gifts” or “bribes” requested can be very small, even in countries where the level of corruption is perceived to be high. In countries where gifts are often expected, it can be sufficient to offer small gifts at values far below what we would call bribery - “ridiculous items like cheap souvenirs or chocolate,” in the words of one interviewee. Firms that misinterpret a culture may offer gifts that are too valuable, thus encouraging corruption and disturbing the local business culture. However, the PWC survey of Norwegian firms in 1998 found that gifts of rather small value create a bond between business partners that is able to influence the outcome of tender procedures.

Other ways of influencing clients are less direct. For instance, due to their undoubted expertise, firms are frequently asked to advise clients on technical aspects of tender specifications, even if they are among the competitors for the contract. This consultative service will in some cases represent an opportunity to influence the specifications in a direction that benefits the firm itself or one of its associates. Table 8 reports some of the survey findings on firms’ influence on tenders. A majority of those who operate in markets where it is possible to influence tenders, where the winning bidder is determined ahead of time, or where negotiations are common all through the tender procedure, describe the competition in the market as “often biased.”

In addition to the Table 8 results, two thirds of the respondents found it essential or an obvious benefit to obtain or maintain a relationship to a potential customer prior to prequalification for a contract; only 24 percent found this to be unimportant. Early contacts were considered more important by respondents in firms that operate under competitive pressure, compared to those in less competitive lines of business.

TABLE 8
Influence on tenders

Question	Total
<i>Are you ever able to influence or asked to advise clients on tender specifications?</i>	33%
<i>Does it ever happen that tender specifications are designed to fit with the offer of one specific company?</i>	41%
<i>Will there often be negotiations between tender participants and decision-makers during the tender procedure?</i>	49%*

Note, the percentages represent those responding yes/frequently/often, as opposed to no/never/seldom.

*Almost a fifth of those reporting communication all through the tender claim that the communication is being copied to all tender participants.

6.2 Predetermination of contracts

Pre-tender contact may reflect biased tender procedures, but this is not invariably an indicator of corruption. Although early and mutual trust is necessary to make illegal corrupt deals on big contracts, there are also cases where it leads to personal relationships that are more decisive for a customer than a bribe offered by a newcomer. A more obvious sign of unfair competition is the high reported frequency of contracts that are designed to fit with the offer of one specific tenderer (Table 8, second question). The technical tender procedure may appear correct on the surface even though the qualifications have been set to give a comparative advantage to the bribing company. This firm will thus offer the lowest price, and the formal procedures appear satisfactory. Such bid rigging will often affect the choice of technology, a choice that typically has more consequences the larger the project. The choice of technology will, for instance, often directly affect what subcontractors are used, and also smaller firms can have incentives to influence the relevant decision-makers on large projects. Note, however, that pre-selection of bidders is not necessarily a result of corruption. Clients may be obligated to use tender procedures, regardless of justified preferences for a specific company, for instance because of satisfaction with its past performance. According to the persons interviewed, pre-selection is also applied by clients to control the spread of contracts when there are few competitors in order to reduce their possibilities to operate as a cartel.

6.3 Do tender rules prevent corruption?

Pre-selection and pre-tender contact make it reasonable to consider the efficiency of tender rules in controlling corruption. In fact, as many as 55 percent of the respondents did not think that tender rules could prevent this problem. Fifteen percent said that tender rules do function as an obstacle, while only six percent considered tender rules to be an *efficient* obstacle to corruption. However, as briefly discussed already, there are significant variations between firms in their opinion about procurement procedures. Firms with production located in several countries and/or many years of experience from trade in international markets had significantly lower confidence in the ability of procurement procedures to prevent corruption. And, the longer the experience from international markets, the stronger was the firms' propensity to negotiate all through the tender procedures.

The most important quality in this regard was the size of the responding firms: the larger the firms, (i) the "better" their possibility was to influence tender specifications; (ii) the more frequently they suspected that the outcome of a tender was determined ahead of the procurement procedure; (iii) the more often they believed that political pressure had an influence on the competition for important contracts, and (iv) the lower their trust was in procurement procedures to ensure fair competition. These results emphasize the challenge of designing procurement procedures for large international tenders. What we also can conclude is that common procurement procedures make a significantly better defense against corruption when the participating firms are small and medium sized.¹⁹

6.4 The rules of communication

One specific problem that may enable corruption seems to be that rules of communication are often neglected in tender procedures. Although access to information and transparency are important in ensuring fair competition, it is crucial to keep critical information about the bids as secret as possible. Communication rules are supposed to prevent the distribution of such critical information, which for obvious reasons is a frequent object of bribery. A central element in most formal tender rules is the way the contact between client and bidders should take place once the tender process has started. At this stage, the rules often require that communication between one firm and the client is copied to all tenderers. Nevertheless, the results presented in Table 8 reveal a high tendency for negotiations to occur at all stages of a tender, too often without having critical information copied to other tender participants.

Also this procurement-related problem is clearly more common among the largest firms. The contracts are of course larger and more complex at this level, and they

¹⁹ See Søreide (2005) where I discuss these results in light of the EU procurement reform. Della Porta and Vannucci (1999) describe many different ways of cheating on tender rules. Corruption can obviously take place in spite of such procedures.

will often include details that need thorough discussion. These are, however, aspects that will also make it easier to cover up corruption. I discussed this issue with the people interviewed in the pilot study, who represented large firms. They generally associated a lack of respect for these communication rules with unacceptable business procedures, and found it “very problematic” when the rules were not followed. This group considered the rules of communication particularly important for complex contracts.

Although a low respect for communication rules seems to reduce the efficiency of tender rules designed to prevent corruption, it should, again, be noted that a violation of communication rules is not necessarily a result of corruption or a lack of respect for the rules among firms taking part in a tender. To hold down prices or to make a certain firm win the tender, the client may have an incentive to inform one or several of the competing tenderers about the secret tender information.

6.5 Political pressure

The outcome of tenders on big contracts is sometimes affected by political pressure to the benefit of one specific firm, specifically when the client is another government. The pressure takes the form of a subsidy, such as an export credit deal, aid to the buyer linked formally or informally to the purchase, diplomatic or political pressure, commercial pricing issues, impediments to trade, or tied defense/arms deals. This kind of pressure may reduce the prospect of ending up with the outcome most beneficial to the host country’s citizens. The link to corruption becomes clear when the privileged firm has paid its own government to put pressure on the client.²⁰ However, the local welfare implications of such political influence are, of course, independent of the type of ties between the bidding foreign firm and its own government, and even without such a payment, it resembles corruption. The buyer is, in effect, bribed by the contractor’s government, while the responsible minister can refer to jobs and exports.²¹

Only one out of five respondents to this survey had received assistance from Norwegian governmental institutions to guarantee the financial aspects of the deal or to ensure a specific contract in other ways. One third believed that competitors had obtained contracts this way. The TI Bribe Payers Survey found significant differences in the propensity of governments to influence the international business ventures of domestic firms - the USA, France, and the UK appear to be particularly active. Several respondents to the present survey considered political

²⁰ The pressure can also be a threat of political sanctions. According to people interviewed for this survey, in some countries firms sometimes pay their national politicians, for instance in the form of party financing, to sanction a client, or the client’s government (when the client is a firm), after the contract has been given to “the wrong firm”, a competitor.

²¹ “...without mentioning the fact that such jobs are in fact subsidized” – from an article in *The Economist*, “Don’t be salesmen”, 1 February 1997

pressure to the benefit of international competitors a significant disadvantage and called for more political assistance from Norwegian authorities. Some also said, however, that Norwegian authorities tend to prefer Norwegian firms in governmental tenders and that foreign competitors probably consider this a comparable disadvantage.

Quid pro quo is a different form of political pressure, still connected to big contracts, but now instigated by local political authorities. It refers to a reciprocal exchange in which the chosen firm provides benefits for local governments and their constituents. For example, a multinational firm might promise to build a school or infrastructure, or to use local human resources during their operations in the given country. In the present study, 18 percent reported that they frequently experienced a request for a quid pro quo, 33 percent seldom, and 35 percent never met such a request. Local content demands are clearly more common among the large firms, compared to small- and middle-sized ones, and appears - from this limited material - more common in construction and oil, gas and power transmission than in other areas of business.

It has been argued that social responsibility, or the inclusion of such local content, is a form of bribery as it may induce a government to choose a particular bidder. About half the respondents to the survey conducted by the Control Risk Group thought that companies made donations to charities now and then for the purpose of gaining a business advantage (CRG, 2002). It is, however, legitimate to hope for an improved reputation in return for generosity. And local content will not necessarily influence the choice of bidder. The same local content can be expected from any winning bidder, independently of which firm is selected. Besides, such benefits are unlikely to provide private profits to the public contracting official although it may benefit incumbent politicians seeking reelection. Even if the development implications of local content in business contracts varies a great deal²², it is important not to lump this practice together with the criminal act of bribery.

7 Internal control and measures

Although the general emphasis on corporate social responsibility seems to have changed attitudes in many firms, its impact on the extent of international business corruption has not been convincing thus far. Many firms that operate in international markets are still not prevented from taking part in unethical business practices by their own codes of conduct or by home-country regulations. Other firms may continue to pay bribes, in spite of such codes and rules, perhaps in fear of losing contracts because competitors pay bribes. This study explores the responding firms' internal anti-corruption measures and their views of

²² See for instance the paper by Heum et al. (2003)

management's responsibility in dealing with allegations of corruption inside their firm

7.1 Codes of conduct, control- routines and campaigns

Internal anti-corruption measures introduced by firms vary significantly. Eighty-nine percent of the large firms in this study have internal written codes of conduct that restrict employees from paying bribes, compared to only 19 percent of the small firms. Altogether, 36 percent of the total have such codes. Even more firms, 48 percent, say that they have routines to detect bribery carried out by employees on behalf of the firm. There is a clear overlap between these groups: almost 70 percent of those with routines to detect bribery conducted by employees also have anti-corruption codes of conduct, while those without routines do not have codes either.

However, only 21 percent believed that their routines to detect corruption were efficient. The fact that 74 percent claimed to have efficient routines to detect other economic offences, like false consultancy fees, fake invoices, or illegal transactions made, for instance, to avoid taxes, makes it plausible to assume that firms' control mechanisms are less able to detect bribery than other forms of economic crime. Several of the interviewees also admitted that they needed advice about how to introduce efficient controls to detect corruption offered on behalf of the firm. When it came to the detection of bribes received by employees, 30 percent said they have relevant control routines, and 13 percent had actually detected an employee engaging in corruption.

Almost half the firms encouraged employees to report the case internally if they uncovered bribery or other types of crime carried out by the firm. Eleven percent would actually not encourage employees to do so, whereas 35 percent said that they did "not actively" encourage employees to speak out. The category of firms which encouraged "internal whistle-blowing" overlapped significantly with the group of firms that never offer "additional payments to get things done." And, the firms which sometimes offer this type of facilitation payments were mainly in the category which find it less important to encourage employees to speak out.

During the past decade, NHO, the business organization, has arranged several anti-corruption conferences and informed their members about the problem of corruption and the importance of keeping to professional standards of conduct. When asked about the impact of these campaigns, 35 percent already had a clear attitude against bribery while 26 percent, with a significant majority of large firms, found the campaigns to have influenced their views. A significant ambition of the NHO campaigns was to inform firms about the implementation of the OECD anti-bribery convention and its implications for firms' business practices. Although the questionnaire reminded the respondents about its content, as many as 70 percent of the respondents still were not familiar with the convention. This number is surprisingly large, especially as a considerable share of the respondents

claimed to be aware of the NHO's distribution of anti-corruption information. Only 26 percent said that the relevant employees are informed by the company of the content of the OECD convention. These firms were mainly large.

7.2 Company culture and the responsibility in case of scandal

When asked about the main reason for not paying bribes when operating in foreign markets, one of the most frequent answers was "it is not part of our company culture." Codes of conduct may reduce the demands for bribes as it becomes easier for representatives of the firm to reject such requests, and future expectations about bribes will be reduced. However, does it follow automatically that such codes also reduce a firm's potential for losing contracts because competitors make use of unethical business practices?

The CRG (2002) study finds that firms from countries where anti-corruption codes are common, the USA and the UK, are less exposed to corruption in the sense that these firms report a lower tendency to lose contracts because competitors pay bribes. By contrast, the present survey does not find any lower exposure to corruption among those with best practice codes. There are in fact significantly more losses of contracts reported due to corruption in the group of firms that have implemented anti-corruption codes, compared to the category without such codes. What this means is that the Norwegian firms that have introduced best practice codes are also most likely to be those that are most exposed to such problems. Moreover, respecting codes of conduct in such a setting is likely to increase a firm's propensity to lose contracts due to corruption. This perhaps obvious implication is often neglected in anti-corruption debates.

The commitment to anti-corruption codes will also depend on the executives' role in and attitude to corruption. Top executives are, in addition to the board, officially responsible for a firm's operations, and there are reasons to believe that decisions about bribery are made at the same level. When CRG (2002) asked which sections of a company were most likely to be involved when bribery occurs, the most common response was "senior management." In the present study, the respondents represented senior management, and most of them said that they would have been informed if bribery had taken place on behalf of the firm. More than half, 55 percent - mostly small and medium sized firms - would "certainly" have been informed, and 29 percent would "probably" have been informed if bribery had taken place to obtain a contract or a significant benefit.

Some of the respondents, nevertheless, admitted that it might be difficult to control their agents. Almost one third (29 percent) did not think they would be able to discover whether a considerable part of the compensation to an agent was used for bribery, compared to 54 percent who positively thought it would be possible to notice this. Only 16 percent said that they would not know whether the firm took part in corruption, a response that may reflect the fact that several respondents were in charge of just one branch of a multinational firm and thus

were not responsible for the operations of other divisions. In addition, some firms have employees in positions that may provide them with incentives to pay bribes out of their private pocket to increase their chance of doing business and hence their personal career opportunities. The bribe in such cases is still paid on behalf of the firm.²³

Executives' tendency to avoid unpleasant information about "grease" payments and bribery taking place in foreign countries of operation was perhaps more common in the past. In this material, only 18 percent had actually considered it a benefit *not* to be informed if an agent applies his/her compensation to questionable payments, compared to 70 percent who would never consider this a benefit.

Accordingly, when there is a deviation between actual and asserted business practice, the accountability appears to lie, both formally and actually, with those who promulgate anti-corruption codes of conduct. The risk of corruption is, therefore, connected to executive decisions and to the probability of being caught engaging in a corrupt practice. Firms that carry out projects as a joint venture or a consortium face the additional risk of cooperating firms who seek to influence clients in an unethical manner. Of the firms in the survey, 42 percent have carried out projects in a foreign country as a joint venture or as a part of a consortium. One-third of these firms said that they had experienced the problem of a cooperating firm that sought to influence a client in a way that the respondent found difficult to acknowledge. Most of these firms complained to their partners about the specific practice.²⁴

Cases of corruption can cause vast reputational damage, and it is obvious that most firms that face a corruption scandal are cautious about publicity. When asked about the typical reaction from the company if a serious violation of ethical codes, such as corruption, were detected, the responses were as follows: 42 percent would initiate an "internal inquiry," while 13 percent would have an "internal discussion." Only 11 percent thought they would involve the police, and just one firm would open the way for investigation by an external committee or consultancy. However, the survey question is difficult to answer. The firms' reactions would obviously depend on the actual circumstances, and 32 percent said that they in fact did not know how they would react. The survey reveals a significant anxiety about discussing the problem with persons outside the firm.

²³ The unclear liability of the firm in such situations should not be a loophole in laws against corruption. Too many firms have escaped prosecution by placing the guilt on a scapegoat. In Norway, for instance, only individuals had, until recently, been held responsible for the offence of bribery.

²⁴ However, some firms may carry the concept of due diligence a bit too far. Some respondents said that illegal methods, similar to the practices of intelligence services, are applied by firms in international markets to be assured that potential business partners will not operate in a way that may represent a risk to the firm.

8 Conclusion

The aim of this project was to understand the strategic choices and preferences of a group of business leaders in situations when they experience corruption and in similar ways a challenging business climate. Most of these business leaders live in a country with relatively low levels of corruption, and they are thus expected to have “good home country norms.” The distinctive feature of this study is its specific focus on such a group’s way of handling corruption when operating with trade and investments in international markets. Some of us would perhaps consider this group to be among those who are best able to cope with the problems of corruption – since it is supposed to be “cleaner” and at the same time able to operate successfully in challenging sectors and countries. However, the impact of home country norms for choices made in international markets is uncertain. Many firms in this survey did not themselves consider such aspects decisive, and also respondents to the embassy survey described local corruption as a challenge for all foreign firms. Moreover, a significant share of the firms in this business survey said that they consider corruption “a part of the game” in some foreign markets, and preferred to “adjust to local practices” when being challenged by corruption, rather than, for instance, leaving the specific market. The barrier to taking action against the practice when losing contracts in such a situation is also high. This attitude was often explained by a “concern about future business cooperation.”

Many respondents revealed confusion about the legal status of certain forms of corruption. Several respondents found it easy to respect relevant regulations, while at the same time admitted the use of business practices that clearly violate Norwegian or local law. Even so, those firms that found themselves unable to respect the law in certain situations were the most informed about the OECD anti-bribery convention. There were also significantly more losses of contracts due to corruption in the group of firms that had implemented anti-corruption codes, compared to the category without such codes.

The propensity to be involved in corruption differed significantly between different categories of firms. Size, sector, type of international experience, and the number of years in foreign markets proved to be critical factors in this respect. In addition, firms that operated in competitive environments were actually more inclined to take part in corruption, compared to those more able to make profits. This is perhaps surprising, considering the fact that corruption is not a problem when the competition for important contracts is free and fair. However, intuition suggests that firms operating on the margin can have a stronger incentive to take certain shortcuts.

Procurement procedures have been established, and in many countries significantly improved, in recent years to ensure free and fair competition. Nevertheless, tender procedures are not believed to be an efficient obstacle to corruption. Avoiding or influencing such procedures are still the main purposes of bribery. Bid rigging and forged tender procedures appear to be serious problems

in international business, and the study emphasizes the challenge of designing procurement procedures that can efficiently prevent corruption. This is particularly an issue in tenders for complex contracts and large firms. The results in this study imply that common procurement procedures are far better able to ensure free and fair competition when the participating firms are small and medium-sized. Another matter that is most relevant for the large and complex contracts is the influence of political pressure, which was described by the respondents as an alternative to corruption or as a form of corruption. This problem should obviously be included in debates about the quality of procurement procedures.

While corruption in tender procedures tends to concentrate on certain advantages vis-à-vis competitors, it is also important to understand the underlying driving forces behind corruption. A critical problem in this regard appears to be a worry that competitors will offer bribes. As a logical consequence, instilling anti-corruption commitment in firms should involve a signal of reliable anti-corruption commitment to other firms, which often will require a more creative incentive program than the introduction of internal anti-corruption codes. The survey also found that top executives are informed and responsible, not only formally, if corruption does take place, and the business-risk of corruption is strongly connected to decisions made at this level.

As a final point, this study exemplifies the possibilities of getting responses to a large number of questions related to this very sensitive topic. In that sense I hope it may serve to establish guidelines for future larger or more specific surveys on similar issues. Such empirical studies can have a significant value in supporting or rejecting assumptions, or can make us aware of correlations and mechanisms. Particularly in combination with more theoretical analyses, this can be a fruitful approach to understanding corruption.

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Beaten by bribery: Why not blow the whistle?

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Abstract

A recent business survey in Norway reveals that firms rarely react to corruption, even when they have lost important contracts as a result. This disinclination to take action is explored in the light of market structures, business efficiency, judicial institutions and political corruption. The paper develops a theory about how these four variables deter firms from reacting against corruption, and, in particular, how the potential for collusion reinforces the incentives to remain silent. Considered separately, each of the factors are unable to explain the low frequency of anti-corruption reactions between firms. Considered in combination, however, the various impediments suggest a more complete explanation: When conditions in market structure suggest that the best response would be to take action, political conditions may favour inaction. When a potential whistle-blower expects support from local politicians or legal institutions, the given offender may be impervious to sanctions; its role in the market will not be altered by the given case. The sum of preconditions for action suggests that firms rarely react against corruption.

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1 Introduction

Several studies describe corruption as an obstacle to local welfare-effects from business and industry (Bardhan, 1997; Kaufmann et al., 2005; Shleifer and Vishny, 1993). This problem has triggered debates about the responsibility of multinationals to refrain from corruption-related temptations in their interaction with local markets and governments (Rose-Ackerman, 2002; Seubert, 2005; Bray, 2005). Several measures have also been taken to strengthen international anti-bribery regulations (OECD, 2005).

The presence of business-corruption implies that firms lose contracts because competitors offer bribes. An interesting aspect of this corruption thus relates to the responses of the victimized firms: What is the common reaction if a contract is lost because a competitor has offered a bribe? Firms that lose contracts because competitors offer bribes are often the best placed to perceive instances of corruption. The potential impact on the business climate if firms were to react against each others' bribery is significant. This suggests that multinationals may have a broader responsibility in respect of combatting corruption than simply adopting a passive "we-do not-pay-bribes-ourselves" stance.

In practice, reactions against competitors who offer bribes rarely take place. Firms prefer to stay silent about this form of corporate offense even when they have lost important business opportunities and wasted significant amounts in tender expenses as a result. They rarely lodge complaints against the tender procedures, they do not seek legal redress by initiating a court action, and they seldom ask their home country to intervene at a diplomatic level. Furthermore, they do not make liability claims for lost tender expenses, and they do not make their suspicions public in other ways.

These preferences were revealed in a recent business survey (Søreide, 2006). The survey was conducted in cooperation with the Confederation of Norwegian Enterprise (NHO), the largest business organization in Norway, and the respondents were Norwegian exporters. Two thirds of the responding firms believed that they had lost important contracts because competitors had offered bribes. Even so, a clear majority of these firms would never make a whistle-blower reaction against competitors who engaged in corrupt practices.

A lack of proof was the reason cited for inaction by 12 percent of the respondents. The explanation most frequently cited, though, was a concern about "future business cooperation", which was referred to by 31 percent of

the firms. Curiously, firms that had never cooperated formally with other firms in the industry were just as concerned about the adverse impact of any whistle-blowing on future business cooperation as those which had this kind of cooperation. The concern about business cooperation was significantly stronger among highly profitable firms, whereas firms that operated under a stronger degree of price pressure were more concerned about how customers would consider a whistle-blower reaction about corruption.

These findings on business cooperation and market power do not necessarily point at issues related to collusion between firms. They do, however, reveal a strong link between profitability, relations with other firms in the market, and a low propensity to react proactively against corruption.

However, the quality of local institutions also appeared important. Firms were significantly more prepared to react proactively to perceived instances of corruption in a country where the level of corruption is perceived to be low than in a country where corruption is perceived to be widespread.

This connection between the propensity to speak out and the perceived level of corruption was not further explored in the survey. One possible interpretation is that firms will not react against bribery unless they expect local judicial institutions to respond to a complaint with proper investigation of the facts. The level of corruption referred to by the survey-respondents at this issue could also relate to other arenas. For instance, firms may not wish to react against cases of bribery if local politicians benefit from this corruption.

The present article builds on data generated by the business survey and aims at explaining some of the survey results with the help of economic theory. It is thus an attempt to shed light on the way in which industry structure and institutional quality may affect a company's incentive to react against corruption.

Connections between industry structure and corruption-related decision-making have not been much explored. Svensson (2000) describes the level of bribes as a function of profits and sunk cost. Ades and Di Tella (1999) found corruption to be more widespread in countries where companies obtain high rents, where antitrust regulation function poorly, and where domestic firms are sheltered from foreign competition. Evidence for a similar connection is provided by the World Bank's investment climate studies, in which a number of business climate qualities have been estimated. According to these data, published by Batra, Kaufmann and Stone (2003), there is a strong correlation between the function of antitrust institutions in a given country and the firms'

reported problems related to corruption, as is illustrated in Table 1.¹

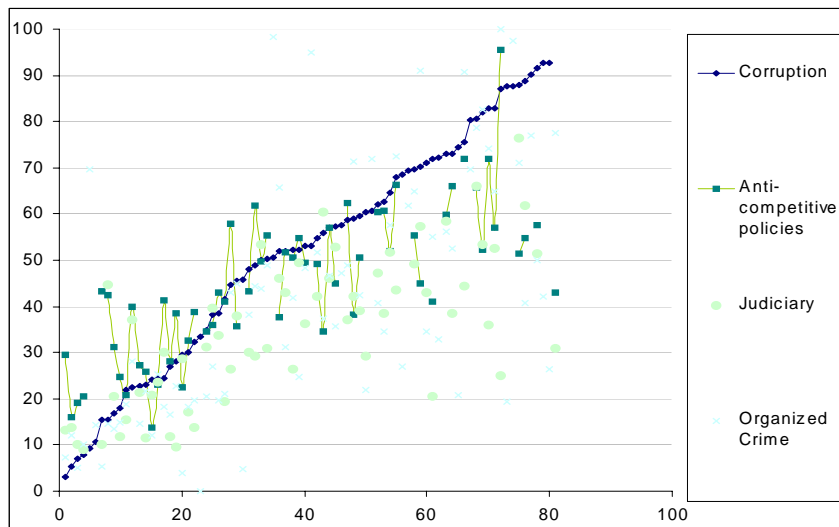


Table 1. Percentages of business people in various countries who consider the level of corruption and local antitrust policies, respectively, as obstacles to business. The quality of the judiciary and the level of organized crime are included with weak colours.

The results of the study reported in Table 1, in combination with the survey results (Søreide, 2006), suggest that: (i) industrial structure is an important factor in understanding corruption-related decisions; (ii) the opportunity for firms to collude is higher in markets where corruption is common. These suggestions are not controversial. The pertinent question is whether industrial structure and the opportunity for collusion can explain the absence of whistle-blowing reactions against perceived cases of corruption. I will explore this issue by drawing on standard theories of industrial organization. From this perspective, I will consider the importance of heterogeneity among firms, the quality of local institutions and the presence of political corruption.

Although the empirical evidence shows a link between corruption and collusion, there are few theoretical models on this topic. Corruption is, for instance, not an issue in Levenstein and Suslow's (2004) extensive review of the literature on cartel stability and success. An important contribution is made by Lambert and Sonin (2003), however, who apply game theory to explain

¹Own estimates based on data in Batra et al (2003). The correlation is significant at the 1% level, with a correlation coefficient of 0.48.

why corruption stabilizes collusion in public procurement tenders. They find corruption and collusion to be "strategic complements", a statement that may apply for other situations than public procurement. Corruption can, intuitively, function as a barrier to entry in so far as clients can be bribed by the cartel. Corruption may also have a stabilizing function because it can be difficult for colluders to withdraw from the cartel if they have been involved in corruption.

A firm's potential profit if a cartel can be established, as compared to competitive market structures, is an important part of the present study. One relevant background paper is therefore Schmalensee's (1987) study of the trade-off between collusion and Cournot-competition in the case of heterogeneous firms. Friedman and Thisse (1994) analyze the stability of a given cartel in a symmetric oligopolistic market with homogenous firms and where it is difficult to prevent entry. They describe how entrants who are disliked by a local cartel may end up as cartel members with profits that gradually become equal to the incumbent firms. Like this present paper, they too point to connections between profits and incentives to blow the whistle on corporate crime. The present paper differs from the Friedman-Thisse study by concentrating on corruption, heterogeneity between firms, a political environment and judicial institutions. A good overview of the economics of collusion is provided by Ivaldi et al. (2003).

This paper builds on this body of work and continues by describing a simple theory about the importance of and connection between elements that may prevent a firm from reacting to a case of corruption. Under which circumstances will a company react actively against the bribery conducted by competitors?

It begins by considering the issue of market structures and the potential benefits from collusion. A firm with ambitions about some form of cooperation with competitors will usually be cautious in its interactions with its competitors, and I assume that firms in this position will not take action against their competitors' corporate crime. The point of this exercise is to sort out firms that may consider themselves inhibited by market incentives from speaking out about corruption.

Secondly, the paper examines the role of local judicial institutions. The perceived ability of these institutions to respond effectively to an allegation of corruption is demonstrated to exert considerable influence over a firm's decision to take anticorruption action or not.

The third aspect considered is political corruption. Politicians in key

positions may respond to information about a case of business corruption, by encouraging or preventing the investigation of the facts. The final question thus regards the extent to which political corruption will prevent a firm from reacting against a case of bribery.

The conclusion draws together the propositions described in the paper into a general model of why firms rarely take action against corruption.

2 Why not react?

A firm is convinced that it has just lost an important business project because a competitor has offered a bribe. Whether it decides to reveal its grievance or stay silent about it depends on its assessment of the expected costs and benefits. Although there are several options in this situation, this analysis concentrates on the choice between (1) blowing the whistle about the corruption and (2) remaining silent about it. For simplicity I will assume that the firm is able to prove that an incident of corruption has taken place. However, the effects in many cases would be similar if the firm was only able to reveal suspicions of corruption.

There are four main reasons why a firm may decide to react proactively against the offense. First, it may be motivated by a desire for revenge; the bribery has cost it an important contract. Secondly, it may be the prospect of undertaking a liability claims. International law has made it possible for companies to sue for compensation in respect of lost tender expenses in cases of bribery, which can amount to huge numbers. Thirdly, by reacting against the bribery, the firm may want to signal its anti-corruption practices to the market; this can improve its market image both overseas and back home. Fourthly, the firm is driven by principles; its ability to prove the offence presents it with a specific opportunity to improve the local business climate.

In this paper I will not consider the morality, the connection to the given country, or, in other ways, the background of the potential whistle-blower. The focus is rather on describing the costs and benefits of whistle-blowing on corruption for a firm that is operating in a market as one of several competitors, while also being subject to political conditions.

As a possible cost, executives are worried that speaking out about corruption will mean that in the future they will be unable to establish a profitable cooperation with their competitors, some form of a cartel. They will not reveal the bribery conducted by competitors if they wish to keep an oppor-

tunity to collude with the same competitors.² The relevance of calculating on collusion when considering a reaction against a case of bribery follows directly from the correlation illustrated in Table 1: antitrust institutions function poorly when corruption is part of the business climate. This implies that the opportunity to obtain cartel profits is higher than elsewhere.

One possible benefit of whistle-blowing for the whistle-blower is the chance of eliminating one or more competitors, while emerging from the incident with its own reputation for clean and honest business practice enhanced. This incentive to react against corruption corresponds to the third category of motive, the signal-effect.

However, the business survey revealed a common worry that reacting against corruption might lead to undesired consequences, such as jeopardizing different forms of future business cooperation. These can be official forms of cooperation, like consortial agreements, i.e. they do not have to resemble collusion. And during interviews, which were conducted as part of the survey project, several executives said that they preferred not to make any fuss about competitors' corruption although it had cost them contracts. I will therefore assume that firms will react against corruption only if they expect some benefit.

2.1 Market incentives

Consider an exogenously given number, $N > 1$, of heterogenous firms that meet regularly in the same oligopolistic markets. They each produce the quantity of $q_i \in [0, \infty)$ at the variable cost of $c_i q_i$, and thus a marginal cost of $c_i < 1$. The firms produce a homogenous output, the demand for which is given by the inverse linear demand function, $p(Q) = 1 - Q$, where $Q = \sum_{i=1}^N q_i$. Cournot competition implies the following profit for each firm:

$$\max_{q_i} \pi_i^C(q_i, q_{-i}) = q_i \left[1 - q_i - \left(\sum_{j \neq i}^N q_j \right) - c_i \right] \quad (1)$$

We do not need information about the distribution of costs in an oligopoly to determine price and quantities since the equilibrium can be found by the

²This assumption is independent of the possible benefits of competitors in the market, which in many cases would suggest an opening for collusion. The business-survey suggests a concern in these situations, which according to basic profitmaximization is unfounded. If there already is a cartel in the market, the theory and the results would be similar.

sum of marginal costs across the producers (Bergstrom and Varian, 1985). Using the average marginal cost, $\bar{c} = \sum_{i=1}^N c_i/N$, we can derive from (1) that $p^C = \frac{1+N\bar{c}}{N+1}$ and $q_i^C = \bar{c} - c_i + \frac{1-\bar{c}}{N+1}$, which leads to the following profit function of each firm:³

$$\begin{aligned}\pi_i^C &= \left(\bar{c} - c_i + \frac{1 - \bar{c}}{N + 1} \right) \left[\frac{1 + N\bar{c}}{N + 1} - c_i \right] \\ &= \frac{[N(c_i - \bar{c}) + c_i - 1]^2}{(N + 1)^2}\end{aligned}\quad (2)$$

The potential cooperation between the firms would imply some form of cartel profit that represents potential revenues that are higher than Cournot-competition, given by a joint profit maximization:

$$\max \Pi^m = Qp^m - \sum_{i=1}^N q_i c_i \quad (3)$$

The efficiency of a considered cartel, in terms of production shares according to production costs, is not given. From the theory of collusion we know that a completely efficient cartel of heterogenous producers will seldom occur (see, for instance, Ivaldi et al., 2003) and a firm would rarely make such an assumption. We can assume that efficient firms consider collusion only if they expect at least as large a market share as other firms in the cartel. Less efficient firms, with higher than average marginal costs, will always benefit from collusion. In the given context, where the firms only consider the opportunities to get a higher profit than in Cournot-competition, we can thus make the simplifying assumption that potential cartel members will get the same market share. The revenues of a cartel member will still depend on their own efficiency.⁴

Optimization over the average marginal cost, $\bar{c} = \sum_i^N c_i/N$, leads to the symmetric output of $q^m = \frac{1-\bar{c}}{2N}$, the price $p^m = \frac{1+\bar{c}}{2}$ and the total production of $Q = Nq = \frac{1-\bar{c}}{2}$. Each firm would thus expect at least the following profit if a cartel is established:

$$\pi_i^m = \frac{(1 - c_i)^2}{4N} \quad (4)$$

³The result is found by solving for the aggregate production level. The first-order condition will then lead to: $q_i = 1 - Q^c - c_i$, and $Q = \frac{N(1-\bar{c})}{N+1}$, which is substituted into the q_i - expression and rewritten.

⁴See the appendix for the case of heterogenous quantities and increasing marginal cost.

The firm's decision on whether or not to react to a case of corruption depends on its comparison of a potential cartel profit, in (4), with its present Cournot-profit. The profit under both circumstances obviously depends on the number of firms in the market, N , as well as the firm's relative productivity. Solving for $\pi_i^C > \pi_i^m$, we find how large the marginal cost advantage would have to be to make a firm consider a whistle-blower reaction, without the risk of giving up higher profits.

$$\bar{c} - c_i > \frac{(1 - c_i)(2N + N^{\frac{3}{2}} + \sqrt{N})}{2N^2} \quad (5)$$

Proposition 1 *The greater the cost advantage and the higher the number of firms in the market, the less likely is the firm to be prevented from whistle-blowing by market incentives.*

Proof. The argument about cost advantage is given by (2), (4) and (5). The derivative of (5) with respect to N is negative:

$$\frac{\partial}{\partial N} \frac{(1 - c_i)(2N + N^{\frac{3}{2}} + \sqrt{N})}{2N^2} = \frac{c_i - 1 (4\sqrt{N} + N + 3)}{4N^{\frac{5}{2}}} < 0.$$

■

The more efficient the cartel is expected to become, the more productive the firm would have to be to put its potential cartel profit at risk. The greater the number of firms in the market, the lower the cartel profit will be, and the less there is to lose if a reaction against bribery makes it difficult to collude.⁵

Thus far, the analysis applies common terms to describe why a firm's tolerance or intolerance of bribery conducted by a competitor may depend on the possibilities to obtain cartel profits, its own efficiency, and the number of firms in the market. This provides us with the features of firms that would be unlikely to be deterred from a reaction against corruption by their own profit-incentives. Whether these firms will actually reveal incidents of corruption is a secondary issue, which depends on their assessments of other consequences of such an action.

⁵The correlation in Table 1 suggests that this potential cartel profit may depend on the level of corruption. If cartel efficiency decreases in the quality of antitrust institutions, the firm will expect higher cartel profits the higher the levels of corruption. Its incentive to collude, rather than blow the whistle about corruption, increases accordingly.

2.2 Local judicial institutions

The term "whistle-blower" usually refers to individuals who speak out about some form of misconduct carried out by other actors in his or her own environment. The offenders will always dislike the whistle-blowing, and they might wish to react against the whistle-blower in some way. This aspect can also be present in interactions between corporations.

Executives will seldom speak out about competitors' involvement in corruption, unless they expect local institutions to respond to their allegations in a constructive way, i.e. with an impartial and thorough investigation of the allegation and subsequent prosecution of the alleged offender(s). Expectations about the likelihood of a successful prosecution of a firm or firms that have been involved in corruption are therefore relevant to the decision taken by a potential whistle-blower.

It follows directly from the given analysis that a legal sanction that is severe enough to provide the potential whistle-blower with a cost advantage, could influence the firm's decision if it changes the sign of $E(\pi_i^C) - E(\pi_i^m)$. However, a legal sanction against bribery will not usually imply an increase in the sanctioned firm's marginal production costs. The typical sanction is debarment from future tenders or a penalty in the form of a fine. It will not influence the optimal Cournot-competition production quantities, q_i^C , but it may lead the firm whose bribery has been detected to leave the market.

To cover the possibility that more than one competitor is involved in the corruption, let $n \geq 0$ denote the expected number of firms that will exit the market. The expectation of n depends on the potential whistle-blower's assumptions about the quality of local judicial institutions. The expected profit in a more competitive market is now described as a function of n :

$$\pi_i^C = \frac{[(N - n)(c_i - \bar{c}) + c_i - 1]^2}{(N - n + 1)^2} \quad (6)$$

The expression in (6) is illustrated in Figure 1 with profits on the vertical axis and the number of firms on the horizontal axis. The weaker curves describe the case of Cournot-competition when $n = 1$ and $n = 3$, respectively. The dashed curve is the competitive outcome when no firm leaves the market. The potential for cartel profits is still considered, and is represented by the solid curve. The potential whistle-blower is an "ordinary producer" in this

picture, no more than average efficient, $c_i = \bar{c}$.⁶

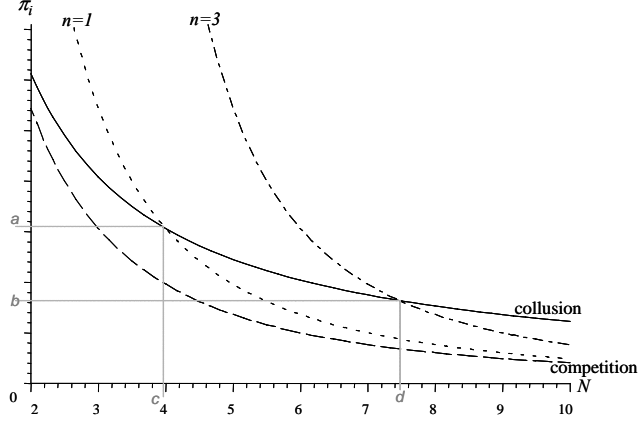


Figure 1: Collusion versus Cournot profits. Collusion is the solid curve.

The size of a penalty, θ , required to make an average firm exit the market, would have to be equal to this firm's Cournot-profit.⁷ And, if $\theta = \bar{\pi}_j^C$ we have the following result:

Proposition 2 *For a given penalty, a firm's incentive to react against an incident of bribery decreases in the offender's efficiency.*

Proof.

$$\begin{aligned} c_j < \bar{c} &\Rightarrow \pi^C - \theta > 0 \Rightarrow n = 0 \\ c_j > \bar{c} &\Rightarrow \pi^C - \theta < 0 \Rightarrow n > 0 \end{aligned} \quad (7)$$

and $\partial\pi_i^C/\partial n > 0$ (in 6). ■

The prosecution and sanction of a producer that has been involved in corruption will, accordingly, be more beneficial to the potential whistle-blower if the producer is relatively inefficient.

⁶The average marginal cost is not adjusted to changes in N for the two dotted lines in Figure 1. The point is only that the entrant does not need to have a cost-advantage compared to the incumbent firms to benefit from the Cournot-situation.

⁷This size of such a penalty is not unrealistic. US penalties for corruption can amount to ten times the profits from the given contract. Besides, the size of π_j^C could be close to zero for the least efficient producers.

This is perhaps an unexpected result as most firms would prefer to eliminate efficient competitors. What it describes is that the chances of reducing the number of competitors is higher when the offender is an inefficient producer. The expected benefit in continued Cournot competition is thus expected to be higher when the offender is inefficient, given that any penalty imposed is independent of the offender's productivity. The benefit of a potential cooperation with competitors, and the "cost" of speaking out about the bribery, both decrease in the offender's inefficiency. In this respect, the analysis underscores the importance of efficient penalties.

A firm's decision will depend on its expectations about the outcomes of a possible prosecution, i.e. the efficiency of local judicial institutions, which could include an economic crime unit. The higher the perceived level of corruption in a country, the less efficient are these institutions expected to be: The more frequent the corruption, the weaker public institutions will be, in general, and the easier it will be for an offender to bribe its way out of the mess.⁸ The potential whistle-blower's incentive to react pro-actively decreases accordingly.

This intuition corresponds to the reported survey result, that a firm's propensity to react to an incident of corruption is higher, the lower the perceived level of corruption in the given country. Note also that this connection suggests that firms involved in corruption have strong incentives to try to convince their competitors that corruption is more widespread in the local context than it really is.

Homogenous firms In the case of homogenous producers there is no marginal cost variation, and the expected response of local judicial institutions becomes critical to whistle-blowing decisions. A firm would always protect a potential for collusion, and never react against corruption, unless it expects a prosecution to lead some competitors to exit. Let $c_i = \bar{c}$ and $n > 0$, and (6) can be simplified as follows:

$$\pi_i^{C_H} = \frac{(1 - c)^2}{(N - n + 1)^2} \quad (8)$$

To find the expected number of firms, n , that would have to go out of this business in order for a firm to undertake an anti-corruption reaction,

⁸See Andvig and Moene (1989) for a multiple equilibria model of corruption levels, and where this argument is described.

compare (8) and (4). Apply $r = (N - n)/N$ to determine $\pi_i^{C_H} > \pi_i^m$. If so, we find that $r = \frac{1}{N} \pm \frac{2}{\sqrt{N}}$, and thus the given condition on n :⁹

$$n > 1 + N - 2\sqrt{N} \quad (9)$$

A firm would consider speaking out about the bribery only for certain combinations of N and $n > 0$. When the firm's executives have little or no confidence in local judicial institutions, and think that a whistle-blowing reaction would be unlikely to trigger investigation by the authorities, they will assume $n = 0$, and will always keep the opportunities for a cartel solution, regardless of N . The case of homogeneity demonstrates one way in which the efficiency of local judicial institutions influences those who are best placed to uncover corruption, namely, the firms competing to tender, to speak out about these offences. The more identical the producers, the more critical is the quality of local judicial institutions in this setting.

2.3 Political corruption

I will now consider how the presence of political corruption can also influence a firm's incentive to react against a case of bribery. We know that political interests and commercial interests are often closely entangled in many of the countries where corruption presents a significant challenge. Some politicians strive to advance their personal interests, to the benefit of particular firms, while officially proclaiming welfare improvement to be their one and only aim.¹⁰ This is well described by Shleifer and Vishny (1993, 1994) and more recently by Kaufmann and Vicente (2005).

Greedy politicians will obviously have a greater opportunity to obtain bribes when the firms get some form of cartel profits rather than compete, and they will have greater opportunities to get away with bribe-taking when corruption is common. Political corruption therefore suggests further opportunities for the firms to collude and obtain higher profits. This adds to the pragmatic issues that a potential whistle-blower will consider.

⁹Applying r to determine $\pi_i^{C'} > \pi_i^m$ leads to $(rN + 1)^2 < 4N \Rightarrow N^2r^2 + 2rN + (1 - 4N) < 0$

$$\Rightarrow r = \frac{-2N \pm \sqrt{4N^2 - 4N^2(1-4N)}}{2N^2} = -\frac{1}{N} \pm \frac{\sqrt{16N^3}}{2N^2} = \frac{1}{N} \pm \frac{2}{\sqrt{N}}$$

¹⁰Bjorvatn and Søreide (2005) demonstrate the implication of this trade-off between political and personal interests in cases of privatization.

As noted, I assume that a firm will react against a case of business corruption only if it expects some consequence. The possible consequences were described in the previous section, i.e. some form of legal sanction against the firms that offers bribes. This sanction is now assumed to depend on the attitude of politicians in key positions. I will assume that politicians have some choice in how they react when someone speaks out about corruption. They can try to silence the complaint by ignoring it, hinder judicial investigations and prevent prosecution of the case by direct or indirect strategies. Or, they can consider the whistle-blower act as an opportunity to clamp down on the corruption. Perhaps they have been aware of the problem, though found it difficult to attack legally without a certain case.¹¹

In the cases where local politicians would support a whistle-blower the consequences of an expected investigation will often be unpredictable. An eventual sanction may lead the offender to leave the market, but obviously, this is not known to the whistle-blower when it blows the whistle. The important question for the potential whistle-blower relates to the political response. It will indeed make a difference if there is some reason to expect investigations, as follows by political support ($n \geq 0$), rather than no response at all, $n = 0$. Expectations of no responses could imply politically impeded investigations, but also opportunities for a potential whistle-blower to rather obtain cartel profits if keeping quiet. Whether the politicians give their support to the prosecution of a case of corruption depends on how they value possible personal benefits versus public obligations and welfare.

The presence of political corruption is independent of the given competition in the market. I will assume, however, that the size of the bribes they can obtain increases with the market profit, i.e. the politicians have some bargaining power when negotiating on the size of the bribes and can demand higher bribes when the firms' revenues are higher.¹²

¹¹Note, a response to a whistle-blower reaction would improve the reputation of corrupt politicians and judicial institutions. Thus, corrupt politicians can have incentives to support a specific anti-corruption reaction. Politicians in key positions are treated here as one group. The view of politicians in opposition are not considered, although it can be highly relevant.

¹²The bribes are of course paid in exchange for some benefit, for instance, the opportunity to operate as a cartel, the grant of contracts or tax advantages. The specific "product" in the corrupt transaction is not described in the model. Whether the politicians were involved in the specific case, is not determined. To retain the focus of analysis on the behaviour of competing firms, I will assume that the politicians' own involvement in the corruption will not be investigated.

Corrupt politicians will thus prefer as few firms as possible if there is Cournot-competition in the market. A whistle-blower reaction about corruption will then be supported only in so far as the potential offender can be forced to exit the market, and only in cases where the politicians will have no risk of having their own corruption uncovered.

However, politicians who benefit from bribes from the firms in a market will benefit even more if the firms collude. Cartel profits will quickly exceed the revenues in Cournot competition when the number of firms increases. Besides, when negotiating on the bribes, the politicians' bargaining power will probably increase if the firms cooperate in a way that is illegal.¹³

A distinction between collusion and competition is thus clearly relevant also in this setting: The more profit in the market the more likely corrupt politicians will be to protect the firms in the market. Hence, the more profit in the market, the more hazardous it will be for the potential whistle-blower to speak out about a case of corruption when political corruption is a common problem.

Assume for now that the firms in the market are homogenous producers. The potential for bribes depend on the total market profit, $N\pi_i$. The degree of political corruption will depend on how much weight, $\gamma \in [0, 1]$, politicians place on the potential for personal benefits, at the expense of local consumer surplus, CS. The politicians' utility function follows:

$$U_p = \gamma [\sum_{i=1}^N \pi_i] + (1 - \gamma) [CS] \quad (10)$$

The consumer surplus depends on the market structure. Following the conventional term, $(1 - p)Q(p)/2$:

$$\begin{aligned} CS^C &= (1 - (\frac{1 + Nc}{N + 1})(\frac{N(1 - c)}{N + 1}))/2 = \frac{N^2(1 - c)^2}{2(N + 1)^2} \\ CS^m &= \frac{(1 - (1 + c)/2)}{2}(\frac{1 - c}{2}) = \frac{(1 - c)^2}{8} . \end{aligned} \quad (11)$$

Equations (4) and (8) determine the size of $\sum_{i=1}^N \pi_i$, and thus the politicians' utility, in (10), in case of collusion, U_p^m , and Cournot-competition, U_p^C , respectively:

¹³The stronger bargaining power if firms take part in collusion is only a comment, and an aspect that is not part of the analysis. See the appendix for the case of ties between politicians and only one of the firms in the market.

$$U_p^m = \gamma \left(\frac{N(1-c)^2}{4N} \right) + (1-\gamma) \frac{(1-c)^2}{8} \quad (12)$$

$$U_p^C = \gamma \left(\frac{N(1-c)^2}{(N+1)^2} \right) + (1-\gamma) \frac{N^2(c-1)^2}{2(N+1)^2} \quad (13)$$

Note, the attitude of corrupt versus benevolent politicians in their inclination, γ , to let personal benefits influence the choices they make in public duty, is independent of the (homogenous) firms' production costs. Let $U_p^m = U_p^C$ and solve for γ , to get the critical value, $\gamma^* \in [0, 1]$, for which the politicians would be indifferent to supporting prosecution or encouraging corruption and collusion.

$$\gamma^* = \frac{3N+1}{5N-1} \quad (14)$$

The utility functions are illustrated in Figure 2, with the utility, (12) and (13), on the vertical axis, and the number of firms, N , on the horizontal axis. The politicians' utility in case of collusion is independent of the number of firms in the market.¹⁴

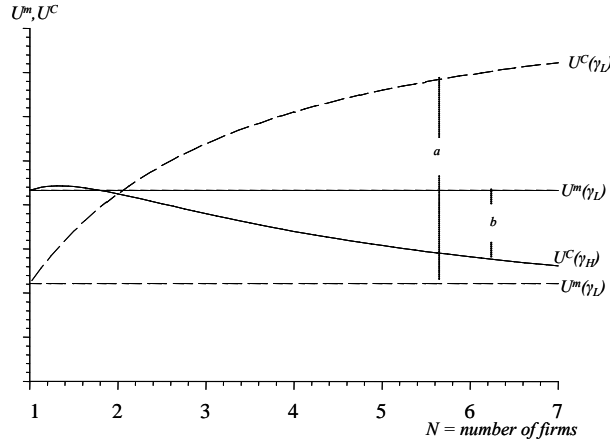


Figure 2: The politicians' expected utility

¹⁴The firms are identical and their monopoly-price is independent of their number.

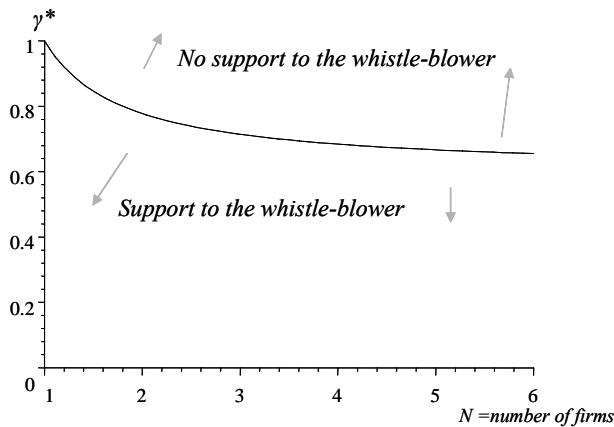
In this figure $U^C(\gamma_L)$ and $U^m(\gamma_L)$, the dashed curves, denote the utility of benevolent politicians (when γ is low), in the two cases of competition and collusion, respectively. The politicians are less interested in the potential sizes of bribes from firms in the given market. They are more concerned about consumer surplus. The relative utility of these benevolent politicians obviously increases in the number of firms, when compared with a potential situation of collusion.¹⁵ This is illustrated with the a in Figure 2. Firms in the given market will not be "protected" if someone speaks out about their offenses. A whistle-blower is more likely to be heard, a reaction about corruption may trigger investigations and sanctions.

The situation with high levels of political corruption, by contrast, is denoted with $U^C(\gamma_L)$ and $U^m(\gamma_L)$, the solid curve in Figure 2. The politicians are far less concerned about the consumer surplus. These politicians' utility increases if the firms are able to offer higher bribes. The benefit of collusion, compared to the case of competition, is described by b in Figure 2. Also this relative benefit increases with the the number of firms.

The result of this exercise can summarized in the following proposition:

Proposition 3 *The higher the number of firms, N , (i) the more likely the politicians are to support the whistle-blower if $\gamma < \tilde{\gamma}$, and (ii) the more likely they are to dislike it if $\gamma > \gamma^*$.*

Figure 3 illustrates γ^* as a function of N .



Indifference to the whistle-blower, γ^* , as a function of the number of firms in the market, N .

¹⁵Of course, the benevolence of these politicians may just reflect a well-functioning democracy, and a wish for re-election.

When the parameter $\gamma \rightarrow 0$, the politicians are concerned about the consumer surplus only, which increases in the number of Cournot-competing firms. When $\gamma \rightarrow 0$, by contrast, the politicians will mind only about profits, which obviously falls in the number of Cournot-competing firms.

3 Conclusion

The situation in many markets is that firms that offer bribes will seldom need to worry about reactions from those most able to uncover the practice, namely, their competitors. Survey results presented in the introduction and data collected by the World Bank suggest a strong connection between profitability, relations with other firms in the market, and the propensity to react against corruption.

Questioned about the absence of whistle-blowing reactions, executives in the business survey tended to explain that firms do not react because there is no point in doing so, or because they lack proof that corruption has taken place. This paper has explored the motivation to keep quiet more thoroughly, by detailing costs and benefits, and has suggested additional details in the explanation.

The results suggested, first, that firms will not react against a case of business corruption if that may disturb their opportunities to obtain cartel profits. The strong empirical correlation between corruption and the opportunities to operate as a cartel supports this theory. And, second, the more efficient the offender of the crime, the lower is the motivation for a potential whistle-blower to react. The penalty is then likely to have lower or no impact on the offender's role as a competitor in the market. Besides, as a third aspect, a whistle-blower reaction on corruption can cause other obstacles if there are connections between local politicians and firms in the given market. The presence of such connections, however, can imply opportunities for cartel profits, and the potential whistle-blower's incentives to speak out may decrease.

When these different aspects have been examined the preconditions for a whistle-blower reaction appear as follows: (i) A firm will not speak out about corruption unless it is a relatively efficient producer. (ii) A firm is less likely to speak out about corruption if the offender is an efficient producer. (iii) A firm will not speak out if local politicians in key positions benefit personally from the given market.

The theories described in this article are able to explain the conclusions of the business survey: Firms will not engage in whistle-blowing against corruption-related challenges in the local business climate unless local levels of corruption are considered to be low. The theories also suggest a possible explanation to the correlation between corruption and the function of antitrust institutions shown in Table 1: The possibilities to collude may influence firms' incentive to react against incidents of corporate crime. The greater or better the possibilities for collusion, the lower is the incentive to react against corruption.

Note, however, the preconditions for reaction are not absolute, they are suggested by these exercises as mechanisms that are likely to explain an aspect of business practices. There are obviously important reasons why firms should expose corruption, also when these conditions are not present. Respondents to the business survey described the worry of having competitors who offer bribes as the most important underlying motivation behind bribery (Søreide, 2006). This suggests that firms are induced to offer bribes themselves only by the thought that competitors are offering bribes. The signal-effect of reacting against a case of corruption can thus have an important influence on the business climate.

If the level of corruption is high, or the effectiveness of local judicial institutions is low, there are still benefits to be gained by reacting against the problem. Anti-corruption efforts are part of public politics in most countries today. A high level of corruption does not imply that all public officials are corrupt; there will usually be some investigators or politicians who are both able and willing to respond to allegations of corruption and to prosecute the case.

Penalties and debarment of firms will usually require proof, which in many cases can be difficult to supply. However, a lack of proof was not described by the survey respondents as the most important reason for keeping quiet about bribery. Indeed, there are several alternative channels for responding to this form of corporate crime, and they do not all require proof. Firms can follow formal procedures, and lodge an appeal to the client or tender authorities. In this case, they will only have to draw attention to the existence of other bids that offered better price-quality combinations than the winning bid. They can encourage local authorities to take a closer look at the deal; they do not have to identify the firm(s) suspected of offering bribes.

Other forms of redress include making representations through intelligence services, embassies, journalists or anti-corruption groups, such as anti-

corruption offices established by the local government or chapters of Transparency International. Alternatively, a company may submit a letter of complaint to the firm that has paid a bribe. According to the business survey, none of these channels are much applied by Norwegian firms, although the problem of corruption appeared to them as a significant challenge.

The policy implications of this study are obvious. The findings emphasize the value of considering business climate improvements in the light of the incentives for firms to react against corruption. The study also demonstrates the value of local judicial institutions. Where the quality of these institutions is high, this has a direct impact on the incentives of firms to react against an unfavourable business climate rather than take part.

However, there are indeed directions in which this research should be continued. This present analysis assumes, for instance, that firms only consider the profitability of alternative strategies when deciding how to respond to corruption; the paper does not explore cases when firms are inherently honest or very risk averse. Technicalities such as quantity limitations and discount rates are important aspects of commercial decision-making, and are not considered here. And, although the findings help to explain the correlation between corruption and collusion, the study does not identify the further implications of this correlation, for instance, on polarization of business climates. Moreover, the paper describes, but does not solve, the problem that only firms with above average profitability can act responsibly, that is, more responsibly than firms with low to average profitability. Overcoming this obstacle to ethical business practice constitutes a major challenge in so far as consumer surplus and welfare obviously depend on competitive market structures.

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5 Appendix

The potential cartel optimizes over quantities at heterogenous and increasing marginal costs The setting is as given in Section 2.1. The firms produce a homogenous output, the demand for which is given by the inverse linear demand function, $p(Q) = 1 - Q$, where $Q = \sum_{i=1}^N q_i$. Assume sunk fixed cost and the variable cost of $\frac{c_i q_i^2}{2}$.

$$\max \Pi^m = Q \left[p^m - \sum_{i=1}^N \frac{c_i q_i^2}{2} \right] \quad (15)$$

Marginal cost, MC, is thus $c_i q_i$, while average MC is $\sum_i^N c_i q_i / N$. If average production is $q = Q/N$ while c represents the average "technology" applied by the cartel, the colluders' average marginal cost is $MC = cq = c(Q/N)$. Each cartel member's output depends on its relative marginal costs. For the average participant,

$$MC_i = MC \Rightarrow c_i q_i = c(Q/N) \Rightarrow q_i = \frac{cQ}{c_i N}$$

Applying the average variable cost, $VC = cq^2/2 = c\frac{(Q/N)^2}{2}$, in (15), implies:

$$\Pi^m = p^m Q - N(VC) = (1 - Q)Q - \frac{cQ^2}{2N}$$

The first order condition of this expression leads to the optimal total quantity, $Q^m = \frac{N}{2N+c}$, which provides us with a total cartel profit of $\Pi^m = \frac{N}{2(2N+c)}$. The individual firm's quantity is thus

$$q_i = \frac{cQ}{c_i N} = \frac{c\left(\frac{N}{2N+c}\right)}{c_i N} = \frac{c}{(2N+c)c_i}$$

and its profit:

$$\pi_i^m = \frac{c}{2(2N+c)c_i} \quad (16)$$

Cournot-competition under the same assumptions imply $Q^C = \frac{N}{1+N+c}$ and $q_i = \frac{1+c}{(1+N+c)(2+c_i)}$, which leads to:

$$\pi_i^C = \frac{1}{2} \frac{(1+c)^2}{(1+N+c)^2 (2+c_i)^2} \quad (17)$$

$\pi_i^m > \pi_i^C$ is true for all values of c_i , and the potential whistle-blower will always prefer collusion, and never speak out about cases of business-corruption if this could harm the wished for cooperation. The assumptions of increasing marginal costs and optimization across q_i implies that the benefit of relative efficiency is larger in collusion compared to Cournot-competition. A firm would never react against corruption under these assumptions. The expected efficiency of the considered cartel is thus important in a firm's propensity to confront a competitor that is responsible for corporate crime. If higher levels of corruption imply opportunities for more efficient forms of collusion, no firm would speak out about bribery given the negative influence this could have on its cooperation with its "competitors".

Political corruption: Ties between politicians and only one of the firms Consider the case when politicians in key positions obtain personal benefits from only one of the local firms, benefits which take the form of either illegal bribes or legal ownership shares. Although the politicians maximize the same utility function, (10), the significance of the difference in the situation follows directly from the analysis in Section 2. The politicians' benefits depend directly on the profit of "their" specific firm. The calculation of this profit and the trade-off underpinning the politicians' choice are identical to the calculations involved in the potential whistle-blower's decision about revealing corruption or not. However, the perspective differs if we now consider the benefits of another firm with political ties. By help of (4) and (2) we consider the revenues and marginal costs of the firm, j , and not the potential whistle-blower, firm i . Firm i , will influence firm j 's profit by raising or reducing the average marginal cost, \bar{c} .

Following this line of argument we hypothesize that a potential whistle-blower would not be supported by corrupt politicians with personal benefits in one of the firms in the market unless: (i) the potential whistle-blower is an inefficient producer, and (ii), the firm offering bribes, or other benefits to the given politicians, is relatively efficient. It follows from (2) that $\partial\pi_j^C/\partial\bar{c} > 0$: The firm with political ties would benefit under Cournot-competition if the whistle-blower is relatively inefficient since this would raise the average marginal cost in the industry. But, from (5) we know that a local producer will keep to the cartel solution, unless this firm has a certain marginal cost advantage. Only an inefficient firm could increase the briber's relative marginal cost advantage, as specified by (5), so that the Cournot alternative becomes

the more profitable solution, $\partial\pi_j^C > \partial\pi_j^m$. According to (4) and (2), however, the firm would always try to establish some form of collusion if operating with lower than average marginal costs, and in this case there would be no whistle-blower for the politicians to support.

Business corruption, uncertainty and risk aversion.

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Abstract

The presence of business-corruption in a market provokes firms to make choices between legal business approaches and illegal bribery. The outcome of a chosen strategy will usually be uncertain at the time the decision is made, and a firm's decision will depend partly on its attitude towards risk. Drawing on the empirical data provided by a survey of 82 Norwegian exporting businesses, the paper proposes a theory about firms' choices between legal and illegal business practices. It begins by describing the risks, uncertainties and benefits attached to bribery, and specifies their impact on firms' propensity to offer bribes. It then demonstrates how risk averse firms can be more inclined to offer bribes than risk neutral, and even risk attracted firms. Although the analysis diverges from existing theory in stressing the differences between illegal and legal forms of rent-seeking, the findings correspond to the results reported in the literature on legal forms of rent-seeking. (*JEL D81, F23, K40*)

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1 Introduction

Firms with similar ethical codes and compliance systems can respond to corruption-related challenges in very different ways. Whereas many firms operate honestly and consistently with their codes of conduct, others offer secret bribes to procure contracts and/or other business benefits. The consequences of their chosen behavior are often uncertain, partly because they depend on external factors which are difficult to predict. A firm's attitude towards risk is thus intuitively an important element in any attempt to understand its propensity to offer bribes. However, the connection between attitude towards risk and bribery is not obvious.

The decision to offer a bribe carries several kinds of risk. The punishment for firms detected in bribery is now higher than ever, at least in the USA.¹ Customer reaction to a firm involved in corruption can be severe. At the same time, the benefits to be gained from bribery are often uncertain as bribery is an essentially illegal agreement that generally cannot be enforced in a court. Besides, the offer of one bribe may be followed by a demand for others, initiating an open-ended process of extortion.

The hazards of bribery suggest an incompatibility between risk aversion and bribery. However, the strategy of operating honestly also involves uncertainty and risk. When corruption is perceived to be widespread, it is more probable that a firm will have competitors who offer bribes. A firm that adopts an honest approach is more likely to fail in its attempt to procure contracts.² The distribution of unfair benefits and contracts among firms according to their different attitudes towards risk is therefore difficult to predict.

The propensity of firms to offer illegal bribes has not been fully explored by economists. This is in spite of a rapidly increasing literature on the phenomenon of corruption, the environments in which it thrives, the incentives of

¹Titan Corporation paid \$3.5 million to support the President of Benin's election campaigns and was subsequently fined \$ 28.5 million under the US *Foreign Corrupt Practices Act* (FCPA). During 1998-2003 the Switzerland-based ABB offered bribes of more than \$ 1.1 million in Nigeria, Angola and Azerbaijan. It too was prosecuted in United States and under the FCPA, and had to pay fines amounting to \$16.4 million. Further examples of FCPA prosecutions are available on the homepages of the US Securities and Exchange Commission (www.sec.gov) and of anti-corruption organisations, such as Transparency International (www.transparency.org).

²See Ehrlich and Becker (1972) who explain the implications of this form of self-protection.

politicians or public officials to demand bribes, and the welfare consequences thereof. In an early contribution to this literature, Huntington (1968) described bribery as the way of approaching "an over-centralized bureaucracy" (Huntington, 1968: 386), an approach also shared by Leff (1964). This attitude has largely fallen out of favour in economic theory. Myrdal (1968) was one of the first to challenge the 'grease money model' by showing how bribery creates incentives for public officials to put pressure on potential bribers, and actually causes bureaucratic delays. Rose-Ackerman (1978) described how corruption is an obstacle to welfare from several different perspectives, including that of firms. Andvig and Moene (1990) explain changes in the level of corruption on the basis of both supply and demand of bribes. The risk of being caught in corruption is included in their theory. Kaufmann and Wei (1999) also reject the grease money hypothesis, that bribery increases efficiency, and find a positive correlation between the propensity of firms to offer bribes and the time they waste through bureaucratic delays. Svensson (2003) considers the connection between the ability of an enterprise to pay bribes and its propensity to do so. Monezes and Montiro (2005) describe corruption in the context of auctions, and find the size of the bribes to increase in relation to the value of the benefit up for auction when the bidders are risk neutral.

Good recent overviews of the economic literature on corruption are provided by Bardhan (1997), Rose-Ackerman (1999, 2004), Aidt (2003) and Lambsdorff (2005). However, the connections between a firms' propensity to offer bribes, its attitude towards risk, and its reliance on self-estimated probabilities are not clear in this literature. There are, however, several results in the more general rent-seeking literature that are relevant, in particular those presented by Hillman and Katz (1984), Skaperdas and Gan (1995), Konrad and Schlesinger (1997), which I will discuss below, but also by Foster (1981) and Skaperdas (1991). An important question for the present paper is thus the extent to which these results are applicable to understanding the propensity of firms to offer business bribes.

Rent-seeking is an investment of resources made to obtain an uncompensated benefit as the result of a "favorable decision" on some public policy. Business corruption is indeed a form of such practice. However, most of the rent-seeking literature does not differentiate between legal lobbying and illegal corruption (Buchanan, Tollison and Tullock, 1980). Lambsdorff (2002) explains, in terms of welfare implications, the distinctions between rent-seeking in its general forms, and the specific category of corruption. He

points to the lack of transparency in cases of corruption and the consequences of these forms of misuse of authority. Bribery also differs from legal lobbying in that both parties to the transaction benefit from the offence. Legal lobbying, by contrast, only benefits the lobbyist and can constitute an annoyance to the decision-makers. Bhagwati (1982) discusses the distinction between legal and illegal forms of rent-seeking, but concludes that it is unimportant in analytical work on this topic.³ Tirole (1997:78), by contrast, underscores the problems of generalizing about the phenomenon of rent-seeking: “As the rent-seeking games vary considerably in practice, we are obliged to analyze the issue case by case.”

This paper focuses on the case of business-corruption from the perspective of the firms. It aims at defining the uncertainties and risks of bribery, and specifying their impacts on firms’ propensity to offer bribes. A theory about business corruption is developed using empirical data from a business survey. The paper begins by presenting background information about this survey and some of its results (Søreide, 2006). This study provided important information about aspects of real life business corruption. For instance, it revealed how corruption imposes uncertainties on firms and the benefits they might expect from taking part in corruption.

The third section develops a more analytical approach to the question of bribery. It begins by presenting assumptions about the choices firms make between a legal and an illegal business approach. The significance of various uncertainties is examined, including the risk that the award of a tender might be influenced by corruption, the chances of getting contracts by an honest approach, and the risk of being caught in offering bribes. These uncertainties are treated as self-estimated probabilities, and it is demonstrated how they are likely to influence a firm’s business approach.

The significance of business attitudes towards risk is examined in the fourth section. The section starts with a discussion of relevant results reported in the rent-seeking literature, and explains important differences between legal and illegal rent-seeking. The significance of risk aversion and risk attraction is then examined in terms of the model that was presented in the third section. This model differs from the rent-seeking models in four important ways: (i) there is a choice between a legal form of rent-seeking and illegal bribery; (ii) there is a risk of choosing the wrong strategy and be

³Bhagwati (1982) applies the broader term “Directly unproductive profit-seeking activities” (DUP).

excluded from the competition, i.e choosing an honest approach when the benefit is awarded in a corrupt procedure, and vice versa; (iii) there is a risk of being apprehended in a crime and sanctioned; (iv) this study focuses on the choice between a legal and illegal business strategy; rent-seeking models explain the connection between the size of the rent-seeking investment and the probability of obtaining a benefit.

However, the final results correspond to some extent with the most relevant results in the established rent-seeking theory, although the underlying assumptions and circumstances are different in the present study.

2 The perspective of firms

The survey was conducted among Norwegian exporters during 2004, with the broad objective of getting detailed empirical information about firms' experiences of corruption in overseas markets, their attitudes to it, and the actual choices they make in response (Søreide, 2006). Although the survey chose to focus on Norwegian industry for primarily practical reasons, this proved to be an excellent choice in terms of presenting an interesting case for the study of firms' propensity to offer bribes. Norwegian industry is oriented to overseas markets and well exposed to international business cultures and attitudes. Its primary sectors of operation are among the most prone to corruption, notably construction, communications (IT/telecom), and energy (gas, oil, electricity). Even so, Norway scores well on corruption rankings, such as the Corruption Perceptions Index (CPI) by Transparency International (2005), and is also commended by the OECD for its implementation of new anti-bribery legislation (OECD, 2004). Thus, many Norwegian firms probably experience the challenge of combining the pressures of operating in markets where corruption is considered a common problem with the obligation to respect the new restrictions on bribery.

The survey-project, which was conducted in cooperation with the Confederation of Norwegian Enterprise (NHO), had three components: (i) A pilot study involving interviews with executives in charge of international sales and marketing in seven large Norwegian firms:⁴ (ii) a mail survey questionnaire with about 100 questions on corruption to which top managers in 82 exporting firms responded. (iii) a smaller survey of Norwegian embassies in

⁴These were large firms, three of them on the FT list of the 500 largest companies.

countries outside the OECD area.⁵

The secrecy surrounding business corruption makes it difficult to estimate the actual scale of the practice. The respondents to the present business survey though described corruption as a widespread phenomenon in international business. And, the embassy representatives did not find it uncommon that foreign firms make use of business practices that most likely deviate from their own official anti-corruption codes of conduct.

A clear majority of the embassy representatives thought that Norwegian firms are sometimes or often confronted with corruption, and that an adjustment to local informal conventions would imply adopting procedures that would be considered unacceptable in Norway. Similarly, 18 of the 24 embassy respondents believed that a refusal to make irregular or informal payments could reduce business opportunities significantly. More than one third of the embassy respondents was either in doubt or likely to recommend firms to adjust to the local culture, even if this implied bribery.⁶

The majority of the responding firms reported encountering some form of corruption in their international operations. When asked about the extent to which “unethical business practices have placed the firm in a more adverse competitive position”, almost 70 per cent claimed that unethical business practices by competitors had certainly or probably cost them important contracts. 42 per cent said that they had reason to believe that competitors influence tender procedures unduly. Few respondents admitted to practising bribery themselves. Ten per cent had agreed to meet a request for payment from an agent, an adviser or a consultant in the knowledge that this payment would most likely be used for bribery. 27 per cent of firms reported that they had been required to give valuable presents or bribes to be able to operate in certain markets.

The respondents did not respond to questions explicitly on risk aversion, but they can be categorized on competitive pressure as they were asked how pressured they were on the prices on their main products. The exposure to competitive pressure will perhaps inform about a firm’s ability to take risk. However, it can be difficult to interpret this indicator. Competitive pressure may reflect a firm’s ability to survive in spite of lost contracts, but also a more pressured situation where one single contract can be very important,

⁵Details and results are presented in Søreide (2006).

⁶The embassy respondents were also prepared to take up complaints about specific instances of business corruption at higher political levels.

and where the firm is forced to take greater risk. Nevertheless, exposure to competitive pressure tells us only about a firm's financial situation and external market conditions, not its attitude towards risk in the sense of utility functions.

The responding firms that considered themselves strongly exposed to competition were significantly more likely to believe that they had lost contracts because of corruption. They were also more inclined to think that tender procedures were pre-determined, and they were more likely to consider corruption a significant challenge to their foreign direct investments (FDI).⁷ It is not clear if these results reflect actual higher levels of corruption in competitive markets, or rather greater suspicion about corruption in markets where the firms compete with more homogenous products. What it does reveal is a *perception* of higher extents of business-corruption among the firms which are exposed to competitive pressure.

The specific benefits obtained by business corruption take various forms. Probably the most common objective is to secure a contract. But by offering bribes firms can obtain other more indirect benefits such as reduced levels of taxation, ignorance of profitable collusion in the market, or a change in the legislation that provides the firm with market power or reduces its expenditure. The most common objectives of tender corruption, apart from securing a contract, were assumed by the respondents to be (in the following order): exemption from tender rules; secret inside information about the criteria used to evaluate tenders; secret information about competitors' bids; and advantageous adjustments in tender specifications. According to the respondents, the most important underlying motivation for bribery was "the fear of losing contracts because someone else has bribed the decision-makers".

Most firms preferred not to make any public reaction when losing contracts because competitors offer bribes, although five per cent would appeal to the tender authorities.⁸ The survey asked what the firms would do if the challenge continued, and if complaints were ignored and/or rejected. 25 per cent replied that in such a case they would "adjust their strategies to the local business climate", 30 per cent considered "corruption part of the game",

⁷All results are significant within the five per cent level. According to a probit analysis, the respondents who considered themselves exposed to strong competitive pressure were 26 per cent more likely to believe that competitors had offered bribes.

⁸However, 26 per cent would request a formal explanation from the client. This is something they are supposed to get in any case, according to common tender rules, and is not a proactive response to corruption.

and very few would retreat from the market. The propensity to complain about the situation, whether to the authorities, through political channels or in other ways, was dependent on the level of corruption.⁹

These results, based on responses provided by firms with significant experience of international markets, reveal the extent to which corruption disturbs the business of many firms and introduces uncertainties into their overseas operations. On the other hand, the results also reveal a general reluctance to retreat from markets simply because of business corruption as well as a marked disinclination to speak out about corruption-related challenges and expenses.¹⁰ One implication of these findings is that business corruption creates major challenges for Norwegian exporters, forcing them to choose between a legal business approach and illegal bribery.¹¹

3 Uncertainty and bribery

I now develop a more analytical approach to the question of bribery. The survey results will form the basis for a simple theory about how a firm's propensity to offer bribes is subject to its calculation of probabilities. The purpose of the exercise is to illustrate a firm's uncertainties and risks in the choice between a legal and an illegal business approach. This then provides the context for a discussion of business attitudes towards risk in section 4.

3.1 Assumptions

Consider a firm whose goal is to make profits in a market where it operates in competition with other firms. The firm makes a number of choices, and this involves considering various forms of rent-seeking: The firm can hope to obtain benefits by lobbying on behalf of its industry and hope to win contracts by promoting its products with honest business procedures. Or, it

⁹The respondents were anxious about various consequences of speaking out about corruption. The impact on future business cooperation was the most frequent concern, although the possibility of customer sanctions was also an important consideration.

¹⁰However, one third of the firms surveyed had decided not to enter a market because of business corruption.

¹¹There are, however, judicial grey zones between legal and illegal practices, and a firm may well adopt a combination of strategies, from legal forms of rent-seeking at one end of the continuum to the payment of large illegal bribes at the other end of the scale.

can seek to obtain benefits by offering illegal bribes to corrupt representatives of a bureaucracy, or to a client, at the risk of being caught in corruption.

As noted, the benefits obtained by rent-seeking or business corruption can take many forms. It can be a contract, a concession, a legal adjustment which produces tax cuts for the firm, or a political decision which favours some form of business strategy or reductions in the firm's production costs. Let us assume in this setting that a firm aims for an exclusive benefit, $\kappa > 0$, awarded by the authorities, for instance a license to operate or trade, that will be awarded to only one of several interested firms.¹² Pursuing this benefit, the firm's choice between a legal and an illegal business approach is not straightforward since important parameters and outcomes are uncertain. The firm will have to rely on its own estimations of the different probabilities. I will now describe uncertainties and risks in this situation, they will also be illustrated in Figure 1.

The level of corruption The perceived level of corruption, $c \in [0, 1]$, is important in a firm's choice between a legal and illegal business approach. The firm assumes that the authorities' decision-making process will be influenced by corruption with a probability which reflects the perceived extent of corruption, c , in the given institutions (or the country). This perceived extent of corruption also indicates the probability of succeeding with an honest business procedure ($1 - c$). From the perspective of the firms, however, the extent of corruption is only an estimated parameter; corruption is essentially a hidden phenomenon about which firms form opinions but about which they seldom have certain knowledge. Their opinions about levels of corruption will be based on various kinds of evidence, including rumors, experience of other markets, published cross-country indices of corruption, or country analyses.¹³

Firm specific probabilities A firm's probability of gaining κ through its chosen strategy depends also on aspects that are independent of the presence of corruption. These can be market conditions and efficiency, but also personal relationships, which can be decisive in these settings. This firm specific

¹²The benefit κ will now be thought of as constant, and can not be increased by a bribe. This study concerns the uncertainties and risks of taking part in bribery, and rent-augmentation is not a central question.

¹³The challenges of estimating the level of corruption in a country in a particular country are discussed in Søreide (2005).

probability, $\rho_i \in [0, 1]$, will differ between the case of bribery, ρ_b , and the case of legal rent-seeking, ρ_h , because firm specific conditions for success will differ in the two alternative strategies.¹⁴

A legal business approach With a legal and honest business approach, the firm will invest an amount $h > 0$ in various forms of rent-seeking expenditures, like lobbying, promotion, etc., but also the cost of taking part in the competition, like tender expenses. The probability for success depends on the business climate, $(1 - c)$, and its own specific qualities, ρ_h . The probability of gaining the contract will thus depend on other factors than the size of the investments made by (all) firms to be able to participate in the competition.

If the firm chooses an honest approach, by investing no more than the amount h in the procedures, it runs the risk of losing the contract, not only because of its own qualities, ρ_h , but also because the authorities' decision-making process is corrupt, which happens with the probability c . The cost of failing in the choice of strategy is identical to the investment, h . If the firm succeeds its outcome is $\kappa - h$.

An illegal business approach Also in the choice of an illegal business strategy a firm will have expenses similar to those invested in legal rent-seeking. Before it offers a bribe, the firm may have invested significantly in the process of market positioning, establishing the right contacts, and also tender expenses. These expenses are not part of the illegal bribe, still an investment which is lost if the firm fails in its business strategy. In the following, this cost will be assumed symmetric to the alternative case of a legal business approach, and equal to the rent-seeking expenses of h .

The firm's probability for success in the choice of an illegal business strategy depends on the level of corruption, c , and the firm specific probability, ρ_b . If the firm succeeds it gains the business benefit, κ , by offering an illegal bribe, $b > 0$, while also investing h in the process. However, the firm will not necessarily gain the business benefit if it decides to offer an illegal bribe, even if the level of corruption is assumed high. The representatives of the authorities may reject the proposed bribe, and the firm does not make any bribe payment. In such a case, the firm will not know whether it has been rejected because the public officials are honest (c reflects a *probability*), or

¹⁴The probabilities are individual and will differ between firms. However, I will consider only one firm's perspective here, and will not need the i -notation.

because they already have agreed a hidden agenda with another competitor. In either case, a rejected proposal of a bribe excludes the firm from the number of candidates, and the firm has wasted an amount h in a failed attempt to get the benefit through corruption.

The risk of sanctions The firm's concern if taking part in corruption, relates to the probability of getting caught and prosecuted for the crime, and incurring a penalty, $\theta > 0$. The probability of this outcome is likely to decrease in relation to the level of corruption, although it is difficult to determine the specific correlation.¹⁵ Assume that $(1 - c)^\gamma$ denotes this probability, and that $\gamma \in [0, 1]$. The investigation and successful prosecution of a firm for corruption do not necessarily imply that the firm will forfeit the contract or other benefit it gained through the corruption. These cases tend to take time to come to court, and the firm has often secured the commercial benefit and/or carried out the content of the illegally secured contract by the time it is sentenced for the crime. The business benefit, κ , is therefore assumed independent of the consequence if caught in corruption, $\theta > 0$.

Figure 1 summarizes the different risks, and illustrates the uncertainties in the choice between a legal and an illegal business approach. The probabilities are denoted in italics, on the branches. The possible outcomes are described at the decision nodes.¹⁶ To read the figure, assume that a strategy has been chosen, either legal, H , or illegal, B . The right-hand branch for both strategies denotes the probability, c , that the decision-making process is corrupt, the left-hand branch denotes the probability that this process is honest, $(1 - c)$. For each strategy there is a given individual probability, ρ_h or ρ_b , that the firm's chosen strategy will succeed. An illegal strategy includes the additional risk of being caught in the crime.

The choice between a legal and an illegal business approach can now be formalized into a simple model. Let $E(H)$ denote a firm's expected revenue if

¹⁵The connection between the level of corruption and the probability of being caught in the crime is explained by Andvig and Moene (1990). However, firms can be caught by local institutions, by institutions in their country of origin, by their own security systems, and by the SEC in the USA if registered on a US stock exchange.

¹⁶The figure has the form of a tree only as an illustration; it does not reflect interaction between several players. Note also, the aim of this figure is to illustrate the different uncertainties and risks of firms in this situation, not to describe one single mechanism by the simplest possible model.

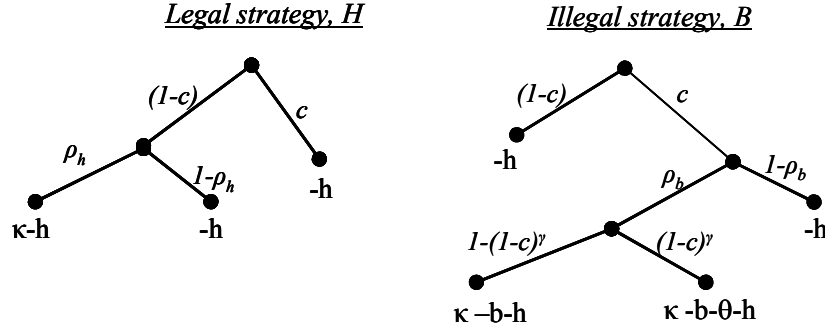


Figure 1: Outcomes and risks that a firm will consider in its choice between a legal and illegal business strategy.

it chooses an honest business strategy, and let $E(B)$ be the expected revenue in the choice of bribery. The forms of these expressions follow directly from Figure 1:

$$\begin{aligned}
 E(H) &= (1 - c) [\rho_h(\kappa - h) + (1 - \rho_h)(-h)] - ch \\
 &= \kappa(1 - c)\rho_h - h
 \end{aligned} \tag{1}$$

$$\begin{aligned}
 E(B) &= c\rho_b(\kappa - b - h) - c\rho_b(1 - c)^\gamma\theta - (1 - c)h - c(1 - \rho_b)h \\
 &= c\rho_b[\kappa - b - (1 - c)^\gamma\theta] - h
 \end{aligned} \tag{2}$$

Figure 2 illustrates (1) and (2), which are denoted H and B , respectively.¹⁷ The vertical axis describes the expected value of the chosen business approach, $E(H)$ or $E(B)$, while the horizontal axis is the perceived level of corruption, c .

A firm is indifferent between a legal and an illegal business approach for the levels of corruption, c^* , at which the curves intersect, i.e. where $E(H) = E(B)$. The expected value of an honest business approach decreases in the perceived level of corruption, c , while the expected value of an illegal business approach increases in this level.¹⁸

¹⁷The parameter values applied in Figure 1: $\kappa = 8$, $b = 2$, $h = 0.5$, $\rho_h = 0.4$, $\rho_b = 0.4$, $\theta = 5$, $\gamma = 0.7$.

¹⁸ $\partial E(B)/\partial c = \kappa - b - (1 - c)^\gamma\theta$. These parameters can take values which result in

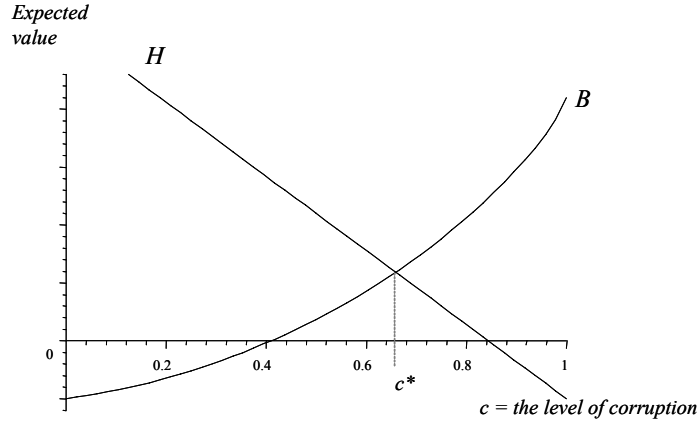


Figure 2: The expected revenues of bribery versus legal rent-seeking.

3.2 Comparative statics

The size of the business benefit Intuitively, the size of the benefit, κ , will have some impact on a firm's decision to operate legally or to participate in corruption. The specific connection, however, is not obvious. The sanction if caught in corruption, θ , is assumed independent of κ , and the expected outcomes of both bribery and of a legal rent-seeking strategy will increase if the potential business advantage, κ , increases:

$$\begin{aligned} \frac{\partial E(H)}{\partial \kappa} &= (1 - c) \rho_h \\ \frac{\partial E(B)}{\partial \kappa} &= c \rho_b \end{aligned} \quad (3)$$

The impact of an increase in κ on a firm's propensity to offer bribes, will thus depend on the firm's perception of the level of corruption, c . Hence, $\Delta c^* > 0$ if $\partial E(H)/\partial \kappa > \partial E(B)/\partial \kappa$, which is the case when $(1 - c) \rho_h > c \rho_b$, and the impact on a firm's propensity to offer bribes is uncertain. It will

$\partial E(B)/\partial c < 0$, i.e. that $E(B)$ decreases in the level of corruption. Note, however, that $E(B) < 0$ if $[K - b - (1 - c)\gamma\theta] < 0$, and a firm will not choose the illegal strategy unless $\partial E(B)/\partial c > 0$. The value of $E(B)$ increases therefore in c , when conditions under which a firm may consider this strategy is met.

depend on the level of corruption, and the firm's estimated probability to succeed in the two alternative strategies, ρ_h and ρ_b .¹⁹

The bribe and the rent-seeking expenses The impact of a change in the size of the bribe, b , or the rent-seeking expenses, h , is visible in (1) and (2). A change Δh will alter both curves in Figure 2 exactly the same, and the firm's decision, c^* , will not change. When h is equal in the two alternative strategies it is unimportant for the firm's decision to operate legally or take part in corruption. The effect if h differs in the case of corruption and the case of legal rent-seeking is also visible in (1) and (2). An increase only in the rent-seeking expenses as part of a legal strategy would decrease the expected outcome of an honest business approach. Bribery becomes relatively more rewarding, and c^* is reduced, which means that bribes will be offered at lower levels of corruption.²⁰

A change in the size of the bribe that is required in the given context to get the benefit through corruption, b , alters only the expected outcome of bribery, $E(B)$. An increase in the size of the bribe, Δb , increases c^* , and the propensity to offer bribes is reduced.

The risk of sanctions An increase in the size of the fine, θ , if apprehended and penalized for bribery, will have an effect only on the expected value of an illegal strategy, $\partial E(B)/\partial \theta = -c\rho_b(1-c)^\gamma$. An increase in θ will reduce the propensity to take part in corruption, by increasing c^* . The effect is stronger if the firm's probability of obtaining the contract through corruption, ρ_b , is low. When this probability is high, the firm has a higher expected revenue of bribery, and will be more likely to offer bribes, in spite of the risk of being sanctioned with a significant penalty, θ .

¹⁹The expected benefit of bribery would be reduced if θ were a function of κ . The empirical connection between these parameters is not obvious. The penalty will usually be in proportion to the firm's total turnover. Whether it also increases in relation to the size of the business benefit obtained is unclear. This has been the trend in some of the latest court cases in the USA. Fines imposed in other cases of corruption have borne little relation to the resulting commercial gains.

²⁰The probability of obtaining the benefit is independent of the size of the rent-seeking expenses, h . In this way the model differs from the rent-seeking theories, where the probability of gaining the benefit increases proportionally to h . Which one of them is the most realistic assumption depends on the circumstances, and the connection is not even obvious even when it comes to lobbying.

The effect of a large penalty will also depend on the connection between the level of corruption and the risk of being caught in the crime, γ . When the risk of being caught is lower for high levels of corruption (i.e. γ is high) the risk of sanctions decreases in the level of corruption, and hence the impact of a change in θ decreases in the level of corruption. Accordingly, if there is a strong connection, γ , between the local level of corruption and the risk of being apprehended in bribery, the consequences of being caught in corruption, θ , will have to be larger for higher levels of corruption than for lower levels of corruption, if the sanction is supposed to have the same deterrent effect on potential bribers for all levels of corruption, c .²¹

3.3 Overestimating the level of corruption

As noted, the extent of corruption is an uncertain variable in this model. The likelihood of a firm operating with unfounded perceptions about the level of corruption is thus significant, since the extent of corruption is difficult to estimate and is a variable that varies between countries, markets, sectors and individuals. The results of the business survey revealed a higher perception of corruption among the firms that were exposed to competitive pressure. There can be several explanations to this result, but it is possible that firms exposed to competitive pressure may consistently overestimate levels of corruption. For instance, in competitive markets firms may have lost contracts with offers that were very close to the winning bid, rather than because of corruption practiced by competitors as they allege.

To understand the consequence of overestimating the level of corruption in the local marketplace, let us assume that a firm thinks that the level of corruption is c^+ , while it actually is $c^- < c^+$. Figure 3 illustrates this situation and its consequences when $c^- < c^* < c^+$, with the level of corruption on the horizontal axis and the expected value of the strategies on the vertical axis.

The figure thus shows how an overestimation of the extent of corruption can lead the firm to make the "wrong" choice of business approach, given the expected values described by (1) and (2) and $c^- < c^* < c^+$. If $E(B, c^+) >$

²¹The connection between the level of corruption and the risk of being caught in corruption, γ , will be reduced by the risk of being sanctioned in courts in other countries than the country where the benefit κ is to be awarded. This risk is increased by US legislation (the Foreign Corrupt Practices Act) and the OECD convention on combatting bribery of foreign public officials in international business transactions, a convention which now has entered into force in about 30 countries.

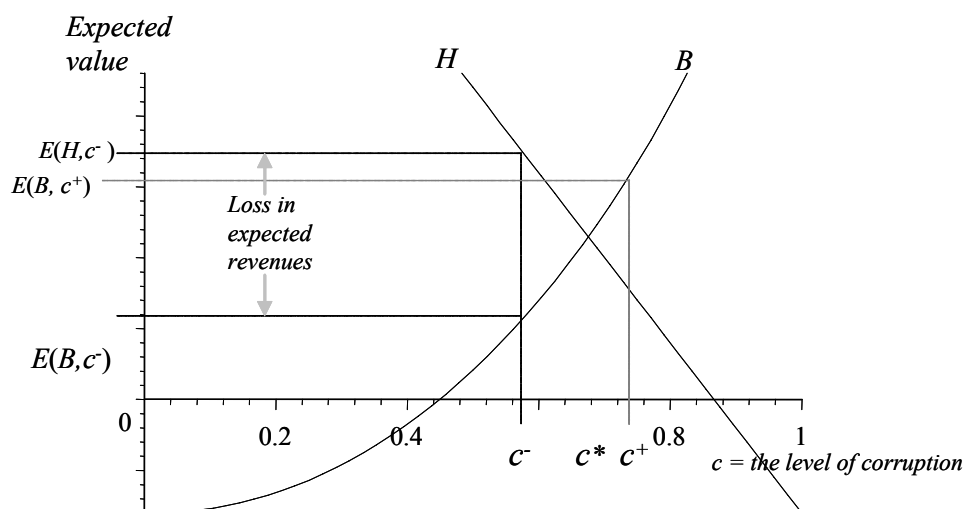


Figure 3: The loss in expected outcome if the extent of corruption is over-estimated.

$E(H, c^+)$ the firm would choose an illegal business approach, B , whereas its highest probability of securing the business benefit might in fact lie in the choice of a legal rent-seeking approach, H . The expected loss in case of such an error of judgement is $E(H, c^-) - E(B, c^-)$, as is illustrated in Figure 3.

To offer a bribe to representatives of the decision-making authority can obviously result in failure if the latter are honest. If, on the other hand, these representatives are corrupt, an honest business approach reduces the firm's likelihood of securing the commercial benefit in question. If firms that are exposed to competitive pressure consistently overestimate levels of corruption, they also consistently suffer higher loss in revenues due to business corruption.

4 The significance of risk aversion

The significance of risk aversion in the given context is interesting as it may alter the choice between a legal and illegal business strategy. I will begin by summarizing how the connection between risk aversion and rent seeking has

been explained in economic theory. A discussion follows about the ability of this theory to explain business corruption as a specified instance of rent-seeking. Finally, I will describe the significance of risk-aversion in the given context of business corruption, and discuss the results in light of the rent-seeking theory.

4.1 Results on risk aversion and rent-seeking

Conventional approaches to understanding the implication of risk aversion for rent-seeking draw on the concept of the decision-makers' utility function.²² According to this approach, risk aversion would entail that the utility of participation in the given rent-seeking contest is lower than the utility of the expected value of taking part in the rent-seeking contest, i.e. a fixed amount, κ , achieved with certainty gives higher utility than the participation in a lottery where κ is the expected gain. Risk attraction would correspond to the opposite opinion: in this case participation in the contest would be preferred. Risk neutrality means that the firm is indifferent between the two alternative situations.

This definition of risk aversion has been applied to understanding the impact of risk aversion on the more general issue of rent-seeking. Hillman and Katz (1984) find risk aversion to reduce the investments in rent-seeking activity in cases where rents are particularly large and where there is competition among the rent-seekers. The consequence is a limited spread in the dissipation of rents, in the sense that risk averse firms will invest less in rent seeking, and be less likely to obtain the given benefit. This result, however, holds only if the rent is large, such as monopoly profits.

Skaperdas and Gan (1995) examine the implications of risk aversion in several forms of rent-seeking contests where two rent-seekers have different attitudes towards risk. They demonstrate how the significance of risk aversion depends on assumptions about the rent-seekers' particular utility function. They compare the expected utility of competitors with different *contest success functions* (CSF) in winner-takes-all forms of contests. Most of the rent-seeking literature assumes a CSF such that $\rho_i = (h_i)/(h_i + h_j)$, in the

²²Standard risk aversion refers to von Neumann-Morgenstern utility functions. The form of the utility function determines how the individual compares the expected utility of an investment versus the utility of the sum invested. See Kimball (1993) for a broad discussion. Shapiro and Titman (1985) and Greenwald and Stiglitz (1993) explain why firms act as if they were risk averse, in the sense of this conventional form of risk aversion.

case of two competitors, i and j , and where h is the rent-seeking investment. Skaperdas and Gan suggest an additional case, a logit CSF where $\rho_i = \exp(kh_i) / [\exp(kh_i) + \exp(kh_j)]$, and determine the impact of risk aversion under both cases. They find risk aversion is likely to increase the relative rent-seeking efforts in the first case, while the impact is ambiguous in the second case.

Skaperdas and Gan (1995) also study the impact of risk aversion under the circumstances when firms can borrow money to fund their rent-seeking activities. The firms are thus liable for the repayment of the loans even if they are unsuccessful and lose the contest in question. The surprising result in these cases is that a Nash equilibrium exists in pure strategies, in which the more risk averse agent will always make greater rent-seeking effort and thus increase its probability of securing the benefit. Skaperdas and Gan draw the intuitive conclusion that “the more risk averse are more fearful of ruin, bankruptcy and disaster and they thus put more efforts into avoiding it” (Skaperdas and Gan, 1995:960).

Konrad and Schlesinger (1997) separate the effects of rent-seeking expenditures into two categories. The first category refers to *rent-augmentation games*, in which efforts are made to increase the value of the given benefit. The second category denotes the more common model of rent-seeking, in which efforts are directed to increasing the probability of securing the benefit. The authors suggest that the effect of risk aversion differs between these two forms of rent-seeking. Rent-augmentation will always increase the (marginal) risk, and lead the risk averse decision-maker to decrease its investment. By contrast, rent-seeking, aimed at increasing the probability of securing the benefit, is proved to have an ambiguous impact on the marginal risk.

Risk aversion is thus proved to have an indeterminate effect on rent-seeking efforts in the context of winner-takes-all contests, and in this respect the results by Konrad and Schlesinger (1997) correspond to the conclusions drawn by Skaperdas and Gan (1995).

4.2 The relevance to business corruption

The analyses presented by Hillman and Katz (1984), Skaperdas and Gan (1995) and Konrad and Schlesinger (1997) offer important insights into how the propensity of firms for involvement in corruption is subject to their attitude towards risk, even if they fall short of specifying the precise relationship. The results reported by all three studies clarify the connections that can be

applied to understand the connection between the size of business bribes, firms' initial financial situation and the expected revenues of the given contest.

However, there are also some important distinctions between the basic forms of rent-seeking considered in these studies and the typical features of business corruption, as they were described under Figure 1. Hillman and Katz (1984), Skaperdas and Gan (1995) and Konrad and Schlesinger (1997) all assume that rent-seekers have symmetric possibilities of increasing their likelihood, ρ_h , of securing the benefit, κ , by investing an amount, h , in rent-seeking. One firm's probability of securing the benefit is assumed to decrease in relation to its competitors' rent-seeking investments. This assumption will usually be realistic for legal forms of rent-seeking. However, once rent-seeking efforts encompass illegal transactions and favoritism, assumptions about the fair distribution of opportunities appear optimistic. In cases of business corruption it could be more realistic to suppose that one firm's investment in illegal rent-seeking, b , actually excludes its competitors from the contest.

In most of the cited analyses, rent-seeking investments are limited by the rent-seekers' financial situation. Few, if any, rent-seekers will choose a strategy which implies expected deficit, and there is a restriction on the size of the rent-seeking expense, h . This assumption will not apply in many cases of business corruption. The expenses related to bribery, b , will not necessarily imply a reduction in the firm's endowment as the cost can be covered by the contract that is awarded as a result, for instance by inflating a price. Moreover, corrupt civil servants will be as willing as contractors to make arrangements to cover these expenses as both sides benefit from corrupt transactions. In the cases of legal rent-seeking, by contrast, it is obvious that the rent-seekers must cover all expenses.

The lack of a distinction between legal and illegal forms of rent-seeking in current economic theory also implies that there is no risk of sanctions, θ , a threat which both has potentially serious consequences and is difficult to predict. The legal rent-seekers' risk-related worries will usually be limited to the possible loss of their rent-seeking investments, $h < \kappa$. In illegal rent-seeking, however, the additional risk of being apprehended may imply a penalty which may be larger than κ . Threat of insolvency can thus constitute a direct risk in cases of business corruption, whereas it is either indirect or absent in cases of legal rent-seeking. However, there is one relevant parallel between legal and illegal rent-seeking, in this respect. The result presented by Skaperdas and Gan (1995) on risk aversion and liability includes an el-

ement of risk which analytically resembles that of a penalty. They explain that in cases of “soft budget constraints”, where the rent-seeking expenses can exceed the firm’s financial endowment, legal rent-seekers also take the risk of insolvency. As noted, Skaperdas and Gan find risk-aversion to increase rent-seeking expenditures under these circumstances. The risk is defined as a reduction in expected utility, and the increase in efforts, h , is explained by the self-protection argument. Higher efforts in respect of rent-seeking investments reduces the probability of deficit.

The argument made by Konrad and Schlesinger (1997) concerning rent-augmentation will not necessarily apply to business corruption. Their model describes circumstances in which rent-seeking is invested on behalf of a group (for instance when construction companies cooperate to lobby for a more extensive highways building programme than the authorities have planned). An illegal bribe will seldom be offered on behalf of a group of companies. Besides, an individual firm will seldom offer an illegal payment to increase the value of a contract, unless it already is certain that it will be offered the contract in question. The rent-augmentation argument will usually be relevant to business corruption in cases when a firm already knows that it is assigned the given benefit, and the elements of risk and uncertainty are reduced.²³

To summarize, current rent-seeking models explain the implication of risk aversion with a focus on the legal forms of rent-seeking. However, as explained, there are some aspects of business corruption that may result in different conclusions when it comes to the connections between (illegal) bribery, the various uncertainties and the rent-seekers attitudes toward risk. The most relevant contrasts between firms’ decision to offer illegal bribes and their decision to take part in legal rent-seeking are as follows: One, bribery may exclude competitors from the contest; under legal rent-seeking entry into the competition and engagement in rent-seeking is open to all. Second, a bribe may lead corrupt authorities to promise the briber the benefit in question. This effect is seldom present in cases of legal rent-seeking. Third, the risks attached to involvement in bribery are usually larger than the risks involved in taking part in legal rent-seeking.

In addition, the illegality if bribery involves a lack of transparency; legal

²³The issue of creating a rent by help of corruption and legal rent-seeking is a related but different situation. Rent-creation activities are well illustrated by Naylor’s (1998) study of the modern arms business.

lobbying occurs in the open.²⁴ Both parties of the transaction benefit under illegal rent-seeking; legal forms of lobbyism benefit only the firms and the lobbyists, while it may annoy the decision-makers. Besides, business corruption requires that someone with influence is willing and able to misuse his or her power, and the possibilities to gain from bribery depends on the extent of corruption. Lobbyism, by contrast, is an element in the freedom of expression, and a recognized way to voice opinion and gain influence.²⁵

4.3 Risk aversion and the propensity to offer bribes

Concern about the risk of being caught in corruption differs between firms. Their ability to take risk/deficit varies, their sunk cost varies, and executives have different levels of risk aversion. Some investors may even be attracted to risk. The rent-seeking theory suggests a relationship between a firm's attitude towards risk and its propensity to offer bribes. This theory suggests the following proposition, which will be examined using the model in (1) and (2), a model that includes important features of the distinction between legal and illegal rent-seeking.

Proposition 1 *Increased risk aversion may increase the propensity to offer bribes.*

Let the actual expected outcomes of the contest be determined by the expressions in (1) and (2). Let $u_i > 0$ be firm i 's utility, π_j is the firm's revenue, where j denotes the different outcomes, as described by Figure 1. Let risk aversion be determined by a concave utility function, $u_p = \pi_j^{1/2}$, let risk attraction be determined by a convex function, $u_o = \pi_j^2$, and let risk neutrality be the case where the utility of the competition is equal to expected revenues, i.e. the case illustrated by (1) and (2), $u_n = \pi_j$. The subscripts, p, o, n on the firm's utility denote risk aversion (pessimist), risk attraction (optimist), and risk neutrality, respectively. Hence, we have three

²⁴This distinction has an impact on the size of the rent-seeking expenses. The size of payments made to the personal benefit of corrupt officials can be very small, and still have a larger effect than official rent-seeking, as was early explained by Buchanan et al. (1980). However, the difference between these expenses will also depend on bargaining power and other aspects (level of corruption, size of contracts, business sector), and it is difficult to determine a general rule about business bribes versus legal rent seeking expenses.

²⁵Lambsdorff (2002) explains several of these arguments in detail, and categorizes the welfare consequences of legal rent-seeking versus illegal corruption.

functions of a firm's utility of the expected outcome of each of the optional strategies, H and B : risk attraction, risk neutrality and risk aversion. The appendix explains the calculation of the utility in these cases.

Figure 4 and 5 describe a firm's propensity to offer bribes when its decision is dependent of the firm's attitude towards risk. The curves represent the expressions in (1) and (2), now also with different attitudes toward risk. Both figures are drawn with expected utility on the vertical axis, and the level of corruption on the horizontal axis. The parameter values are the same for both figures.²⁶ Figure 4 compares the cases of risk neutrality and risk aversion. Figure 5 compares the cases of risk neutrality and risk attraction.

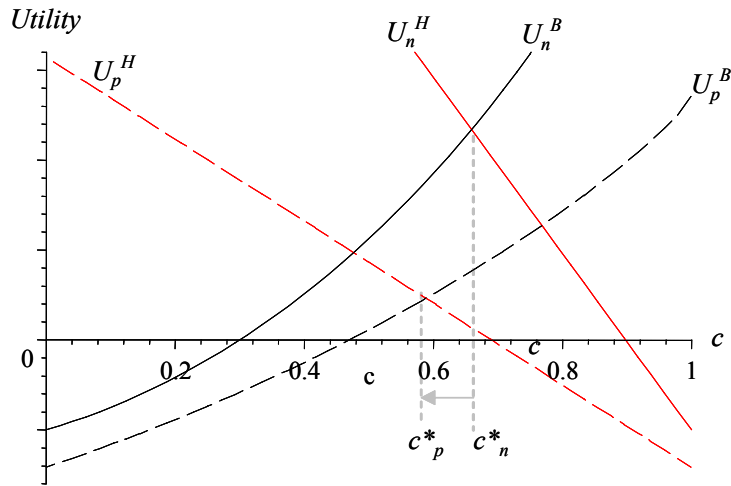


Figure 4: Utility of alternative choices in the cases of risk neutrality (solid curves) and risk aversion (dashed curves).

Figure 4 illustrates that a risk averse utility function reduces the critical level of corruption, c^* , in this example. The firm is indifferent between a legal business strategy, H , and bribery, B , at a lower level of corruption, which means that a risk averse firm will be more likely to offer bribes than a risk neutral competitor. Figure 5 illustrates the opposite effect. A risk attracted firm will have a higher expected outcome than the risk neutral, whatever strategy it chooses. However, in the choice between a legal and an illegal

²⁶Parameter-values for both Figure 4 and 5: $\kappa = 7$, $h = 0.5$, $b = 2$, $\rho_b = 0.7$, $\rho_h = 0.7$, $\gamma = 0.7$, $\theta = 4$

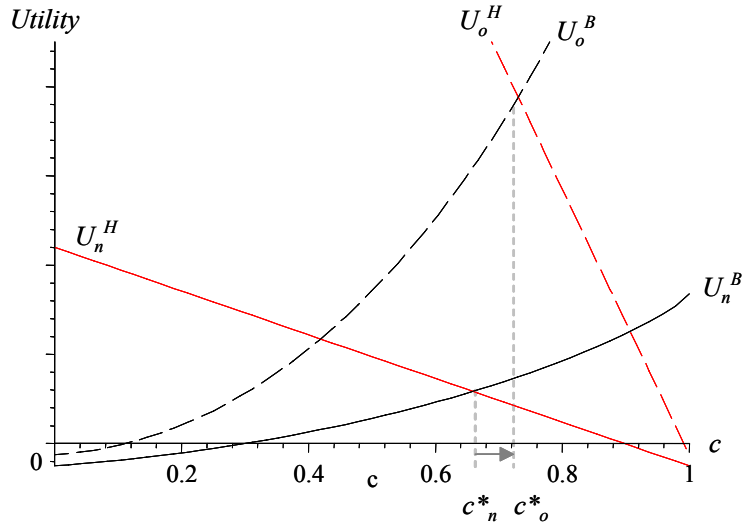


Figure 5: Utility in the cases of risk neutrality (solid curves) and risk attraction (dashed curves).

business approach, the risk attracted firm will be more likely to stay honest.

The model in (1) and (2), the utility functions described above, and Figure 4 and 5 make an example that is able to prove Proposition 1: those who participate in corrupt business practice are not necessarily more attracted to risk than those who prefer an honest business approach. The connection can actually be the reverse. Firms with risk averse attitudes can be more likely to offer bribes than their risk attracted or tolerant competitors.

4.4 Discussion

The result from this analysis seems surprising given the hazards associated with bribery, noted in the introduction. However, the result corresponds to Skaperdas and Gan's (1995) conclusions about risk aversion in the context of financial liability, although the underlying assumptions and functions in the two models are very different.²⁷ Will this result also imply that the significance of the differences between illegal corruption and legal rent-seeking

²⁷The parallel results reported by Konrad and Schlesinger (1997) suggested an indeterminate effect, and do not contradict the result in the present paper.

are of limited importance when it comes to the relationship between risk aversion and the tendency to invest in rent-seeking?

Not necessarily, the correspondence between the two forms of analysis is not complete. The present result corresponds only to one specific result in the rent-seeking theory, that of an additional financial obligation and potential indebtedness. This result will not inform about the ability of rent-seeking theories in general to explain illegal business corruption. Besides, the present study does not explain a firm's willingness to make rent-seeking investments, which is the focus in corresponding rent-seeking models. This paper rather assumes that a firm in any case will invest in some form of rent-seeking, while the main question relates to its choice between legal and illegal business practice.

The intuition in the result follows from the self-protection argument; the marginal risk of losing the benefit in question increases with increasing levels of corruption. The mechanisms, however, are explained by the expressions in (1) and (2). The attitudes towards risk determine the forms of the utility functions (concave, linear, or convex). Given these expressions, a risk attracted firm will generally have a higher expected benefit of the contest, compared to a risk averse firm. One firm's decision between a legal and illegal business approach, whatever its attitude towards risk, will depend on the parameter-values in (1) and (2).

However, the important question in this analysis relates to the relationship between the corruption levels for which the different curves in Figure 4 and 5 intersect; the left-hand side of this corruption level, c^* , implies honesty, the right hand side implies an illegal business strategy. The parameter-values are only important to the extent to that they alter the relationship between the different critical corruption levels, which are subject to the different attitudes toward risk.

Figure 6 and 7 below illustrate an example where this relationship is altered, and where a risk attracted firm will be more likely to offer bribes than a risk averse. These figures present the same curves with the same axes as Figure 4 and 5, now with a change in the parameter values. The firm is thus indifferent between honesty and bribery, $E(H) = E(B)$, at a lower level of corruption, i.e. c^* has a low value. The arrow in Figure 6 points to the change in the relationship between the indifference level of risk neutrality, c_n^* , and the indifference level of risk aversion, c_p^* . Similarly, the arrow in Figure 7 points to the change in the indifference level of risk neutrality, c_n^* , and the indifference level of risk attraction, c_p^* . The parameter values in Figure 6 and

7 are identical.²⁸ The figures describe the difference between a risk averse firm and a risk attracted firm; the risk averse will stay honest for higher levels of corruption under the circumstances given by the parameter values. The risk attracted will offer bribes for lower levels of corruption.

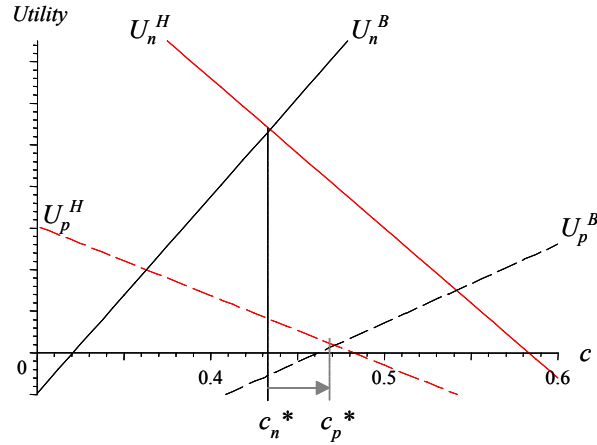


Figure 6: Utility of alternative choices in the cases of risk neutrality (solid curves) and risk aversion (dashed curves).

When a firm consider $E(H) > E(B)$ for most levels of corruption, c , its critical level, c^* , is high, which means that the firm is likely to stay honest, unless the level of corruption is very high. In this setting, however, a risk averse firm will have a stronger propensity to offer bribes than a risk neutral firm, under the given assumptions. When the firm considers $E(H) > E(B)$ only for low levels of corruption, the critical level of corruption, c^* , is low. In this case, when most firms consider bribery the more rewarding strategy, the risk attracted firms have the highest propensity to offer bribes in the given example.

The relation between $E(H)$ and $E(B)$ is determined by the parameter values. The circumstances in a real world will seldom suggest that $E(H) < E(B)$ for low levels of corruption. This may, however, be the case when there is a combination of several factors, for example, when the expected size of

²⁸Parameter values applied in both Figure 6 and 7: $\kappa = 9$, $h = 3$, $b = 0.1$, $\rho_h = 0.8$, $\rho_b = 0.8$, $\gamma = 1$, $\theta = 0.3$.

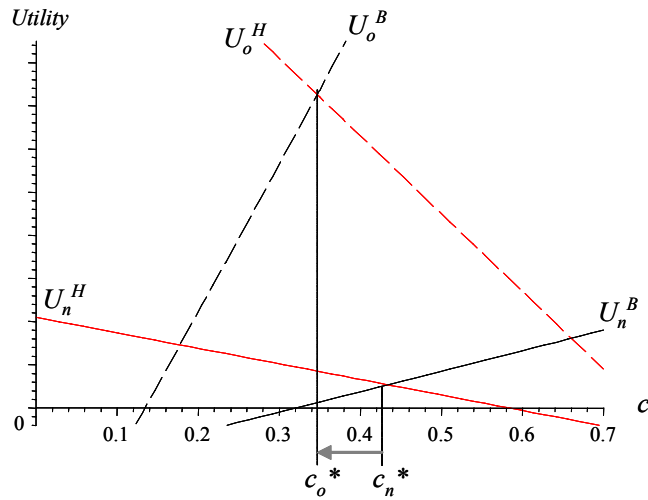


Figure 7: Utility in the cases of risk neutrality (solid curves) and risk attraction (dashed curves).

the bribe, b , is very low; when the legal rent-seeking expenditures, h , are high; when the sanction if caught in the crime, θ , is negligible; and/or when the firm has a very high individual probability to win through with an offer of a bribe, ρ_b , perhaps because of very good contacts. Under more realistic assumptions, however, the example shows that risk aversion will increase a firm's propensity to offer bribes when the level of corruption is high.

5 Conclusion

This paper explains the various elements of uncertainty and risk associated with business corruption. A main objective has been to describe how these factors will influence a firm's decision to approach a business opportunity by legal or illegal business practices.

The exercise demonstrated that the size of a potential business advantage will not necessarily increase a firm's propensity to offer bribes; this connection depends on the level of corruption. The risk of sanctions has an obvious impact on this propensity. However, for the sanction to have a constant deterrent impact on the firms' behavior, the costs incurred by firms caught

in corruption will have to increase if the level of corruption increases. The perceived level of corruption in markets is assumed to be important in a firm's decision-making. The model describes the expected cost for a firm if it incorrectly assesses this level. Overestimating corruption levels may lead the firm to offer a bribe when honesty would secure a better outcome for the firm, while underestimating corruption levels may lead the firm to be honest when offering a bribe would secure a more profitable result.

The second part of the analysis examined the significance of risk aversion. Although a considerable literature had already described the connection between risk aversion and rent-seeking, it considers mainly the legal forms of rent-seeking, and is not necessarily applicable to understand business corruption. However, when standard theory of risk aversion was applied on the model presented on business corruption, the most relevant results in the rent-seeking literature appeared to correspond with the results on business corruption: Risk aversion will not necessarily prevent a firm from taking part in corruption. On the contrary, this study demonstrates that increased risk aversion can actually strengthen the propensity to offer bribes.

In the real world there are greyzones between legal and illegal business practice, and the distinction between the two will not necessarily be as clearcut as the models developed in this paper assume. However, real life choices will resemble the models in that firms generally will have to choose between strategies that are closer to illegal or legal business practice. The number of court cases involving business corruption is increasing, and the difference between legal or illegal business practice will become clearer in the years to come.

There are some very clear directions in which the research should be continued. The business survey revealed that business corruption takes many different forms, and that it can have various objectives. Better understandings of the phenomenon will obviously require the inclusion of more details on the specific circumstances. The differences between legal and illegal rent-seeking can also have implications beyond those considered in this study, for instance, on the scale of the investment. As noted, the size of the illegal bribe can sometimes (though not always) exceed the investment in legal rent-seeking. The factors that determine the size of these investments are unclear and require further research.

Finally, the consequences of overestimating the extent of corruption require closer investigation. The business survey is relevant here because it revealed that firms exposed to competitive pressure are more likely to con-

sider corruption a challenge in business. This suggests that the connection between market power and the propensity to take part in corruption should be a key issue for future research.

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7 Appendix

This appendix explains the calculation behind the curves in Figure 4-7. Let the expected outcomes of the contest be determined by the expressions in (1) and (2). Let $u_i > 0$ be firm i 's utility, while risk aversion is determined by a concave utility function, $u_p = \pi_j^{1/2}$, risk attraction is determined by a convex function, $u_o = \pi_j^2$, and risk neutrality by the expected revenues, $u_n = \pi_j$. j denotes the different outcomes, so that $\pi_1 = \kappa - h$, $\pi_2 = -h$, $\pi_3 = \kappa - b$, and $\pi_4 = \kappa - b - \theta$. This leads to three expressions of utility in the choice of a legal business strategy, H , and three expressions to describe utility in the choice of an illegal strategy, B :

$$\begin{aligned}
 u_n^H(c) &= (1-c)(\rho_h \pi_1 + (1-\rho_h)\pi_2) + c\pi_2 \\
 u_p^H(c) &= (1-c)(\rho_h \pi_1^{1/2} + (1-\rho_h)\pi_2^{1/2}) + c\pi_2 \\
 u_o^H(c) &= (1-c)(\rho_h \pi_1^2 + (1-\rho_h)\pi_2^2) + c\pi_2
 \end{aligned} \tag{4}$$

And in the case of an illegal business approach:

$$\begin{aligned}
 u_n^B(c) &= c\rho_b(1-(1-c)^\gamma)\pi_3 + c\rho_b(1-c)^\gamma\pi_4 + c(1-\rho_b)\pi_2 + (1-c)\pi_2 \\
 u_p^B(c) &= c\rho_b(1-(1-c)^\gamma)\pi_3^{1/2} + c\rho_b(1-c)^\gamma\pi_4^{1/2} + c(1-\rho_b)\pi_2^{1/2} + (1-c)\pi_2^{1/2} \\
 u_o^B(c) &= c\rho_b(1-(1-c)^\gamma)\pi_3^2 + c\rho_b(1-c)^\gamma\pi_4^2 + c(1-\rho_b)\pi_2^2 + (1-c)\pi_2^2
 \end{aligned} \tag{5}$$

Corruption and privatization

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Abstract

This paper analyses how corruption may affect privatization. In particular, we study how corruption affects the acquisition price and the post-privatization market structure. The model predicts that privatization in highly corrupt countries will result in a higher degree of market concentration than in less corrupt countries. The acquisition price is also likely to be higher when the government officials in charge of the sale are highly corrupt than if they are honest or moderately corrupt. Finally, and perhaps surprisingly, we demonstrate that a stronger propensity to embezzle state revenues, may reduce government officials' benefits from corruption.

Keywords: Corruption, privatization, market structure, welfare
JEL codes: F23, L12

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1 Introduction

Market reforms, such as privatization and deregulation, are often aimed at improving economic efficiency by reducing the role of the state and increasing the degree of private sector competition. Assessments of privatization campaigns typically conclude that the effect on the local economy has been positive (Boubakri and Cosset, 1998; Meggison and Netter, 2001). However, as emphasised by Kikeri and Nellis (2002:15), the measure of success is often very narrow, typically only dealing with the profitability of the privatized company. If improved profits are due to higher prices to consumers, the net welfare effect is not necessarily positive.

In many cases, and in particular in developing and transition economies, concerns have been raised about the privatization process, both in terms of the price paid for the assets and the resulting effect on the local economy. Stories about corruption flourish. In the words of Joseph Stiglitz (2002:58): “Perhaps the most serious concern with privatization, as it has so often been practiced, is corruption. (...) Not surprisingly, the rigged privatization process was designed to maximize the amount government ministers could appropriate for themselves, not the amount that would accrue to the government’s treasury, let alone the overall efficiency of the economy.”

One way to design the privatization process so as to maximize bribes to the government ministers, is to offer the acquiring firm a monopoly position in the post-privatized market. This would increase the acquiring firm’s willingness to pay for the state assets. Indeed, there are clear signs that corruption and market concentration go hand in hand. In an empirical study, Ades and Di Tella (1999) report that: “...corruption is higher in countries where domestic firms are sheltered from foreign competition by natural or policy induced barriers to trade, with economies dominated by a few number of firms, or where antitrust regulation is not effective in preventing anti-competitive practices. The size of the effect is rather large...” This conclusion is consistent with Djankov et al (2002) who argue that countries with heavier regulation of entry have higher corruption and larger unofficial economies.

One explanation of the correlation between corruption and market concentration can be that market concentration causes corruption. Rent-seeking firms may wish to offer bribes to maintain a monopoly position, or to gain access to such a privileged position. The causality may also go the other way: Motivated by bribes, rent-seeking politicians may allow for market concentration. It is the latter mechanism we focus on in the present paper.

Particularly in connection with privatization, the hypothesis that corruption can shape the market structure seems plausible. In our model, selling the state assets to a local firm creates monopoly whereas selling to an outside firm creates duopoly competition.

A number of studies show that privatization does not necessarily lead to increased competition and efficiency. Manzetti (1999:328) argues that many cases of privatization in South-America have resulted in more market concentration, not less. Puntillo (1996) and Black et al (2000) report that the hasty process of privatization in Russia in the 1990s often resulted in very limited improvements in productivity and negligible state revenue.

One reason why corruption may be a particularly severe problem in the sale of public assets, is that it is typically very difficult to place a value on these assets. Hence, it is not easy for a third party to judge whether or not the price announced after the sale of the asset is reasonable or not. In the case of privatization, Rose-Ackerman (1999:35) notes that: "Corrupt officials may present information to the public that makes the company look weak while revealing to favored insiders that it is actually doing well." There may be a gap between the actual price of the asset and the one announced to the public, with the difference ending up in the pockets of corrupt bureaucrats and politicians.

The ambition of the present paper is to analyse how the propensity of government officials to be corrupt may influence the outcome of privatization. Our paper is closely related to Norbäck and Persson (2004), which also deals with privatization and market structure. They analyse a bidding contest between a foreign and a local firm for some state assets. A priori, one should perhaps think that a foreign firm facing high trade costs and high greenfield investment costs is the more likely winner of the auction for the state assets. When the alternative modes of entering the market are very costly, this should be reflected in a high willingness to pay to enter through acquisition. However, Norbäck and Persson demonstrate that a foreign firm facing high entry costs does not necessarily offer the highest bid. High entry costs for the foreign firm affects the domestic firm's willingness to pay for the assets. If by acquiring the assets the domestic firm can keep its foreign rival out of the market, or at least keep it at some distance from the market, the domestic firm could have the higher willingness to pay for the state assets.

While Norbäck and Persson emphasise the way in which differences in entry costs affect the outcome of the privatization process, our focus is on how political preferences, and in particular the degree of government-level

corruption, affects this process. In contrast to Norbäck and Persson, the present paper deals with a situation where the government is not necessarily concerned with the acquisition price alone. In our model, the government officials in charge of the sale of state assets take into account consumer surplus, the producer surplus of a locally owned firm (if one exists), the revenue that goes to the public, and the revenue that goes to the officials themselves. The goal of the paper is to analyse how government officials' propensity to be corrupt affects the trade off between these potentially conflicting objectives, and thereby how corruption affects the outcome of privatization, in terms of choice of buyer, acquisition price, and economic efficiency.

We demonstrate that the sale of the public asset by a highly corrupt regime may result in a highly concentrated industry structure and therefore reduced economic efficiency. Moreover, the analysis demonstrates that the acquisition price is likely to be higher when the government officials are highly corrupt than when they are moderately corrupt or honest. Interestingly, we also show that the equilibrium price of these assets and level of embezzlement of state revenues may well fall as the officials' propensity to be corrupt increases.

Other related contributions include Shleifer (1998), Shleifer and Vishny (1994), Laffont and Meleu (1999), and Coolidge and Rose-Ackerman (1997), who discuss the link between corruption and the decision to privatize, and Kaufmann and Siegelbaum (1997) who discuss corruption and the optimal design of privatization. In the present study, we take the sale of the public asset as given, and analyse how a government's propensity to embezzle state revenues may affect the outcome of privatization.

2 The model

The government of a country has decided to privatize a state-owned firm.¹ We do not discuss *why* the government has decided to privatize the company. It could be part of a reform program imposed on the country by the IMF as a condition for new loans. It could be the result of domestic political pressure to reform the economy as the result of, say, the electoral victory of a right-wing party. Or, privatization could be motivated by the greed of

¹Our analysis is also relevant for other types of policies, such as the issuing of new investment and production licenses or the re-allocation of natural resources necessary for local production.

corrupt politicians in need of quick cash.

There are two firms in the market, in addition to the state-owned firm. The state-owned firm is to be sold to one of them. One firm is an “outsider”: it can enter the market only through acquisition. The other firm is an “insider”: this firm is already established in the market. If the insider acquires the assets, it gets a monopoly position after privatization.² If the outsider acquires the assets, the resulting market structure is duopoly. We concentrate on the simplest possible form of Cournot-competition. The firms sell an identical good q , the demand for which is given by $q = 1 - p$, where p is the market price for the good. Marginal production costs are identical between the two firms and are normalized to zero. In case firm 1 buys the state owned firm, it will gain a monopoly position in the post-privatized market. Its operating profits are then given by:

$$\pi^m = \frac{1}{4}, \quad (1)$$

where superscript m denotes monopoly. The net profits of firm 1 in case it acquires the state assets are given by:

$$\mu^m = \mu^1 = \pi^m - \theta_1^* = \frac{1}{4} - \theta_1^*, \quad (2)$$

where θ_1^* denotes the equilibrium acquisition price, to be derived later. Consumer surplus in case the inside firm acquires the assets is given by:

$$\sigma^m = \sigma^1 = \frac{1}{8}, \quad (3)$$

where superscript 1 indicates that firm 1 is the acquiring firm. If the outside firm acquires the state owned firm, the post-privatization market structure will be characterized by duopoly. Each firm would then receive operating profits:

$$\mu^2 = \pi^d = \frac{1}{9}, \quad (4)$$

where superscript d indicates duopoly. Consumer surplus in this case is given by

²The insider could then service the market using either its existing plant or the acquired plant, or both plants. In the present model, each of these alternatives is equally profitable.

$$\sigma^d = \sigma^2 = \frac{2}{9}, \quad (5)$$

where superscript 2 indicates that the state owned firm has been taken over by firm 2. The difference between monopoly and duopoly profits represents firm 1's reservation price for the state assets:

$$\theta_1^{\max} = \pi^m - \pi^d = \frac{1}{4} - \frac{1}{9}. \quad (6)$$

The outside firm has acquisition as its only entry option. Since losing the tender would yield zero profits, the reservation price of firm 2 in its bid for the state assets is given by:

$$\theta_2^{\max} = \pi^d = \frac{1}{9}. \quad (7)$$

Note that $\theta_1^{\max} > \theta_2^{\max}$, implying that the inside firm has a higher willingness to pay for the state assets. On the other hand, $\sigma^1 < \sigma^2$. The advantage of selling the state assets to the outside firm is that it delivers higher consumer surplus.

Transfers to the public from the sale of the state owned firm is given by r^i . The size of the transfers to the public depends on whether the government officials in charge of the sale are honest or corrupt.³ When the government officials are honest, all of the revenues generated from the sale goes to the public. When they are corrupt, they will only make an exogenously given minimum payment $\lambda > 0$ to the public, and keep everything else for themselves. The embezzlement of state revenues is given by $c^i = \theta_i - \lambda$.⁴ Transfers to the public, when the government officials are honest and corrupt, respectively, are thus given by:

$$r^i = \begin{cases} \theta_i & \text{if honest} \\ \lambda & \text{if corrupt.} \end{cases} \quad (8)$$

Similarly, the amount of embezzlement is given by:

$$c^i = \begin{cases} 0 & \text{if honest} \\ \theta_i - \lambda & \text{if corrupt.} \end{cases} \quad (9)$$

³We simplify by assuming that the government officials share the same preferences.

⁴We abstract from other sources of corruption income, and therefore do not consider the potential for corruption after the sale of the state assets.

Private sector welfare, which we shall also refer to as a measure of economic efficiency, is defined as consumer surplus, σ , plus the net profits of locally owned firms, μ . The sum of these two surpluses can be seen as a measure of economic efficiency in the economy. In addition, private sector welfare includes the transfers, r , to the private sector. Private sector welfare when firm i acquires the state asset can therefore be written as

$$\omega^i = \sigma^i + \mu^i + r^i. \quad (10)$$

Of course, $\mu^i = 0$ if there are no locally owned firms present in the market. The government officials' choice of buyer is based on two considerations. On the one hand, they have to please the public in order to survive politically, for instance in order to be re-elected. This is an argument in favour of maximizing ω . On the other hand, the government official may wish to obtain personal benefits from the sale of the state owned firm, given by c . Let the officials' utility derived from selling the state assets to firm i be given by:

$$U^i = (1 - \beta)\omega^i + \beta c^i, \quad (11)$$

where $\beta \in (0, 1)$ is the weight placed on personal benefits from the sale relative to the welfare of the private sector. We shall sometimes refer to β as the propensity of officials to embezzle state revenues, and sometimes as the degree of fraudulence amongst the officials. For $\beta < \frac{1}{2}$, the officials place a higher value on public welfare than on their personal revenues from the sale. In this case, no corruption takes place. We shall refer to such officials as "honest". It may reflect a situation where political competition is sufficiently tough to make private sector welfare the priority issue. If $\beta > \frac{1}{2}$, personal income carries the larger weight in the objective function, and corruption takes place. In this case, the officials are "corrupt". The closer β is to unity, the more corrupt, or the more fraudulent, are the government officials. Hence,

Lemma 1 *For $\beta < \frac{1}{2}$, the government officials are honest. For $\beta > \frac{1}{2}$, the officials are corrupt. The larger is $\beta > \frac{1}{2}$, the more corrupt are the officials.*

When the government officials are corrupt, and the firms are aware of this fact, the firms also know that at least part of what they pay for the state assets will end up in the government officials' pockets. The firms can

therefore be seen as paying bribes. Our analysis would, however, remain intact if the firms pay for the state assets in good faith.⁵

The two firms simultaneously bid for the state owned enterprise. The winner of the auction is the firm offering the higher utility to the government official. Note that this is not necessarily the firm offering the higher price for the state assets, since the official also takes private sector welfare into consideration.

In order to derive the outcome of the auction, it is instructive to refer to a standard result in Bertrand competition. When firms produce a homogenous goods but differ in their marginal costs, the Nash-equilibrium price will be marginally below the marginal cost of the higher-cost producer. Hence, the lower-cost producer supplies the entire market and makes a positive profit, while the higher cost producer makes zero profits. Our model is slightly more complicated than this standard case, since the two firms can be seen as supplying different qualities, in the sense that one firm generates more private sector welfare than the other. The successful firm is the one that supplies the preferred combination of price and quality, and thereby the higher utility for the officials in charge of the sale.

As we shall see, which of the two firms is the more efficient contributor to utility depends on the government officials' preferences, as given by β . A high β implies a large degree of fraudulence, and since fraud is based on income from the sale of the state assets, a greater emphasis on the acquisition price. The inside firm has a higher willingness to pay for the assets and can therefore contribute more "efficiently" to the government officials' utility in this case. When this is the case, we shall refer to the inside firm as the more efficient firm. Similarly, a low β implies a large emphasis on private sector welfare. Since selling the assets to the outside firm results in higher consumer surplus, the outside firm can in this case be seen as the more efficient firm.

The more efficient firm and the equilibrium acquisition price can be found as follows:

⁵There are certainly legitimate reasons for the government to have a high β , and therefore prefer to sell the assets to the highest bidder, even if the result is higher market concentration. For instance, in a situation with a high public debt, the government may wish to sell the assets to the highest bidder in order to pay back as much of the debt as possible. While our analysis focuses on corruption, and on β as a measure of the degree of corruption, our results could easily be interpreted in terms of officials' legitimate emphasis on government revenue.

Lemma 2 a) Let θ_i^* be such that for $\theta_i = \theta_i^*$, $U^i(\theta_i) = U^j(\theta_j^{\max})$. If $\theta_i^{\max} > \theta_i^*$, then firm i is the more efficient firm, and therefore acquires the state assets. Assume that the government officials, if indifferent between two bids, sell the assets to the more efficient firm. If $\theta_i^{\max} > \theta_i^*$, the equilibrium price pair is given by $(\theta_i, \theta_j) = (\theta_i^*, \theta_j^{\max})$.

b) The two firms are equally efficient when $U^i(\theta_i^{\max}) = U^j(\theta_j^{\max})$, implying that $\theta_i^{\max} = \theta_i^*$ and $\theta_j^{\max} = \theta_j^*$. In this case, the equilibrium price pair is given by $(\theta_i, \theta_j) = (\theta_i^{\max}, \theta_j^{\max})$, and the state assets are sold to firm i with probability a half, and to firm j with an equal probability.

Proof. a) For the less efficient firm j , a higher price than θ_j^{\max} would lead to negative profits. A lower price by firm j is a weakly dominated strategy, since it gains nothing by doing so. For the more efficient firm i , raising the price above θ_i^* reduces profits, since it pays a higher price for the assets. Offering a lower price is also not profitable, since it would then lose the tender. In equilibrium, therefore, j offers θ_j^{\max} , i offers θ_i^* , and firm i wins the contest.

b) If both firms bid their reservation prices θ_i^{\max} and θ_j^{\max} , and these bids realize the same level of utility for the government officials, then there is clearly no incentive for any of the two firms to deviate from their bids. The government is indifferent between selling to firm i or firm j , and the firms are assumed to win the auction with equal probability. ■

Using equations (8) to (11), we can express the government officials' utility as a function of the acquisition price when selling to firm i as:

$$U^i(\theta_i) = \begin{cases} (1 - \beta)(\theta_i + \sigma^i + \mu^i) & \text{if honest} \\ (1 - \beta)(\sigma^i + \mu^i + \lambda) + \beta(\theta_i - \lambda) & \text{if corrupt.} \end{cases} \quad (12)$$

Similarly, the utility of the officials if selling to firm j at j 's reservation price, is given by:

$$U^j(\theta_j^{\max}) = \begin{cases} (1 - \beta)(\theta_j^{\max} + \sigma^j + \mu^j) & \text{if honest} \\ (1 - \beta)(\sigma^j + \mu^j + \lambda) + \beta(\theta_j^{\max} - \lambda) & \text{if corrupt.} \end{cases} \quad (13)$$

Using (12) and (13), the condition $U^i(\theta_i) = U^j(\theta_j^{\max})$ results in:

$$\theta_i^* = \begin{cases} \sigma^j + \mu^j - \sigma^i - \mu^i + \theta_j^{\max} & \text{if honest} \\ \frac{(1-\beta)}{\beta}(\sigma^j + \mu^j - \sigma^i - \mu^i) + \theta_j^{\max} & \text{if corrupt.} \end{cases} \quad (14)$$

When firm 1 is foreign owned, given that firm 1 is the more efficient firm, the acquisition price is given by:

$$\theta_1^* = \begin{cases} \sigma^d - \sigma^m + \theta_2^{\max} = \frac{5}{24} & \text{if honest} \\ \frac{(1-\beta)}{\beta} (\sigma^d - \sigma^m) + \theta_2^{\max} = \frac{7+\beta}{72\beta} & \text{if corrupt.} \end{cases} \quad (15)$$

If firm 2 is the more efficient firm, the acquisition price is:

$$\theta_2^* = \begin{cases} \sigma^m - \sigma^d + \theta_1^{\max} = \frac{1}{24} & \text{if honest} \\ \frac{(1-\beta)}{\beta} (\sigma^m - \sigma^d) + \theta_1^{\max} = \frac{17\beta-7}{72\beta} & \text{if corrupt.} \end{cases} \quad (16)$$

When firm 1 is locally owned and the government officials are honest, their utility is independent of the acquisition price paid by firm 1. To see this, note that in this case $\mu^1 = \pi^m - \theta_1$, resulting in $U^1 = (1 - \beta) (\sigma^m + \pi^m)$. Clearly, in this situation firm 1 has no incentive to offer a positive bid for the state assets, so that $\theta_1 = \theta_1^{\max} = \theta_1^* = 0$. Hence, if firm 1 is the more efficient firm, the acquisition price is given by:

$$\theta_1^* = \begin{cases} 0 & \text{if honest} \\ \frac{(1-\beta)}{\beta} (\sigma^d + \mu^d - \sigma^m - \mu^m) + \theta_2^{\max} = \frac{11\beta-3}{72(2\beta-1)} & \text{if corrupt.} \end{cases} \quad (17)$$

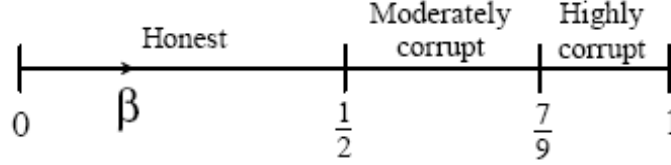
If firm 2 is the more efficient firm, the acquisition price is:

$$\theta_2^* = \begin{cases} \sigma^m + \pi^m - \sigma^d - \mu^d = \frac{1}{24} & \text{if honest} \\ \frac{(1-\beta)}{\beta} (\sigma^m + \mu^m - \sigma^d - \mu^d) + \theta_1^{\max} = \frac{5(5\beta-3)}{72(2\beta-1)} & \text{if corrupt.} \end{cases} \quad (18)$$

Which firm is the more efficient contributor to utility for the government officials? To answer this question, we compare θ_1^* and θ_2^* with the two firms' reservation prices, θ_1^{\max} and θ_2^{\max} . Clearly, no firm would make an offer in excess of its reservation price. Hence, a necessary condition for firm 1 to acquire the state owned firm is that $\theta_1^{\max} > \theta_1^*$ and for firm 2 that $\theta_2^{\max} > \theta_2^*$. Using equations (6), (7), and (15) to (18), irrespective of whether firm 1 is locally owned or foreign owned, it can be shown that:

Lemma 3 For $\beta = \frac{7}{9}$, $\theta_1^{\max} = \theta_1^*$ and $\theta_2^{\max} = \theta_2^*$, and the two firms are equally efficient in providing utility for the government officials. For $\beta < \frac{7}{9}$, $\theta_2^{\max} > \theta_2^*$ and $\theta_1^{\max} < \theta_1^*$, and firm 2 is the more efficient firm. For $\beta > \frac{7}{9}$, $\theta_1^{\max} > \theta_1^*$ and $\theta_2^{\max} < \theta_2^*$, and firm 1 is the more efficient firm.

We shall call government officials characterized by $\beta \in (\frac{7}{9}, 1)$ “highly” corrupt and those characterized by $\beta \in (\frac{1}{2}, \frac{7}{9})$ “moderately” corrupt, as illustrated in Figure 1.



The different types of government officials.

Using equations (6), (7), (15) to (18), and Lemma 3, we can conclude that:

Proposition 1 a) *Honest government officials sell the state assets to the outside firm. The equilibrium price is $\theta_2^* = \frac{1}{24}$, irrespective of whether firm 1 is locally owned or foreign owned.*

b) *Moderately corrupt government officials sell the state assets to the outside firm. In case firm 1 is foreign owned, the acquisition price is $\theta_2^* = \frac{17\beta-7}{72\beta}$ and in case firm 1 is locally owned, $\theta_2^* = \frac{5(5\beta-3)}{72(2\beta-1)}$. The acquisition price increases in β .*

c) *Highly corrupt government officials sell the state assets to the inside firm. In case firm 1 is foreign owned, the acquisition price is $\theta_1^* = \frac{7+\beta}{72\beta}$, and in case it is locally owned, $\theta_1^* = \frac{11\beta-3}{72(2\beta-1)}$. The acquisition price falls in β , and equals θ_2^{\max} for $\beta = 1$.*

d) *For $\beta = \frac{7}{9}$, the government officials are indifferent between selling to the inside or the outside firm. With a fifty percent probability, the assets are sold to the inside firm at a price $\theta_1^* = \theta_1^{\max} = \frac{5}{36}$, with an equal probability, the assets are sold to the outside firm at a price $\theta_2^* = \theta_2^{\max} = \frac{1}{9}$.*

While the issue of who owns firm 1 does not influence the decision of whether to sell the assets to the inside or outside firm, it does, however, affect the acquisition price when the government officials are corrupt. It can be shown that θ_1^* is larger under local ownership than under foreign ownership. The reason is that a locally owned firm has to compensate for

the fact that it pays for the state assets using “local” money, a fact which reduces private welfare, by offering an even higher price. Similarly, θ_2^* is smaller under local ownership of firm 1 than when this firm is foreign owned. Intuitively, the disadvantage of a locally owned inside firm in the bidding contest is the outside firm’s advantage.

Defining economic efficiency as private sector welfare, we can also show that:

Proposition 2 *Selling the state assets to the outside firm creates a higher level of private sector welfare than selling the assets to the inside firm. Hence, privatization administered by highly corrupt government officials leads to lower private sector welfare.*

Proof. If the inside firm is foreign owned and the officials are corrupt, $\omega^1 = \sigma^m + \lambda$ and $\omega^2 = \sigma^d + \lambda$. Clearly, $\omega^2 > \omega^1$ since $\sigma^d > \sigma^m$. If the inside firm is locally owned and the officials are corrupt, $\omega^1 = \sigma^m + \pi^m - \theta_1^* + \lambda$ and $\omega^2 = \sigma^d + \pi^d + \lambda$. Since the acquisition price for firm 1 is $\theta_1^* \geq \theta_2^{\max} = \frac{1}{9}$, it is easy to demonstrate that $\omega^2 > \omega^1$ also in this case. ■

In this way, our paper demonstrates that competition between firms in a highly corrupt environment does not necessarily lead to an efficient solution for the economy as a whole. This should be contrasted with our result that competition for the state assets in an honest or moderately corrupt environment leads to a sale of these assets to the outside firm, and hence an efficient allocation of resources.

Figure 2 illustrates the relation between the government officials’ propensity to embezzle state revenues and the two firms’ reservation prices and the equilibrium acquisition price, marked with a bold line, for $\beta > \frac{1}{2}$.

The figure shows that the acquisition price rises in β for $\beta \in (\frac{1}{2}, \frac{7}{9})$, then falls in β for $\beta \in (\frac{7}{9}, 1)$, with a discrete increase in the acquisition price at $\beta = \frac{7}{9}$.

There are three important insights that one can derive from our analysis. First, privatization in a highly corrupt system is likely to lead to a less efficient resource allocation than privatization in a less corrupt system. More precisely, when the government officials’ emphasis on personal benefits is such that $\beta > \frac{7}{9}$, the assets are sold to the inside firm, and the post-privatization market structure will be characterized by monopoly. For $\beta < \frac{7}{9}$, the assets are sold to the outside firm, resulting in duopoly and thus a higher level of economic efficiency. This result is consistent with the empirical findings

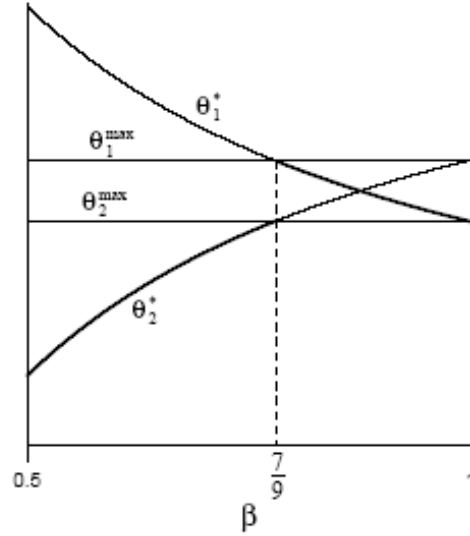


Figure 1: Corruption and the acquisition price.

of Ades and Di Tella (1999) and Djankov et al (2001) that corruption is positively correlated with market concentration.

Second, the acquisition price tends to be higher when the government officials are highly corrupt than when they are moderately corrupt or honest. This is true because the highest acquisition price offered by firm 2 is $\theta_2^* = \theta_2^{\max}$, at $\beta = \frac{7}{9}$, whereas the lowest acquisition price offered by firm 1 is $\theta_1^* = \theta_2^{\max}$, at $\beta = 1$. Hence, for $\beta < 1$, $\theta_1^* > \theta_2^*$, and for $\beta = 1$, $\theta_1^* = \theta_2^*$. This means that for a given λ , embezzlement is typically higher when selling to the inside firm than when the assets are sold to the outside firm. Intuitively, the inside firm has to offer a higher price for the assets in order to compensate for the fact that it generates lower private sector welfare than the outside firm. In this way, corruption and economic inefficiency go together.

Third, increased propensity to embezzle state revenues for a moderately corrupt official, i.e., $\beta \in (\frac{1}{2}, \frac{7}{9})$, leads to a higher acquisition price, and hence, for a given λ , to higher level of embezzlement. On the other hand, increased fraudulence for a highly corrupt official, i.e., $\beta \in (\frac{7}{9}, 1)$, leads to a lower acquisition price and hence less income from embezzlement. The observation that the size of corruption decreases as the government officials'

fraudulence increases, is perhaps surprising. Even so, the intuition is quite simple. To acquire the state asset, the inside firm must compensate for the loss in consumer surplus caused by monopoly relative to duopoly. The less the government cares about private sector welfare, the less the inside firm needs to pay for the assets in order to outbid its competitor, the outside firm, whose comparative advantage in the bidding contest is precisely the delivery of private sector welfare. When the officials are moderately corrupt, the level of embezzlement increases in β . Intuitively, the less the officials care about private sector welfare, the more the outside firm needs to pay in order to win the auction.

3 Concluding remarks

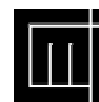
The present paper describes how corruption may affect the outcome of a privatization process, both in terms of acquisition price and post-privatization market structure and therefore economic efficiency. We show that government officials primarily concerned with generating personal benefits from the sale of the state assets will be more inclined to sell the assets to an inside firm, giving this firm a monopoly position in the market. When these officials are honest, or just moderately corrupt, on the other hand, they will prefer to sell the assets to an outside firm, which results in duopoly competition after privatization. Since duopoly competition yields higher private sector welfare than monopoly, our model shows that privatization in a highly corrupt environment is likely to lead to a less efficient resource allocation than privatization in a less corrupt environment.

We also show that the acquisition price is likely to be higher in a highly corrupt environment than in a moderately corrupt one. The reason is that the inside firm has to compensate for the fact that it delivers very low private sector welfare by offering a higher price for the assets. Moreover, we demonstrate that when the government officials are highly corrupt, increased fraudulence leads to a lower acquisition price and hence less embezzlement of state revenues in equilibrium. Hence, the more corrupt are the highly corrupt government officials, the cheaper they are to buy.

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Corruption Survey

This is a survey on corruption in international business transactions. It is carried out by CMI researcher Tina Søreide in cooperation with NHO. The study is part of a PhD. project at the Norwegian School of Economics and Business Administration (NHH) and financed by The Norwegian Research Council (NFR).

Corruption, or similar ways of making influence on decision-makers, is a challenge for those who want to enter or operate in certain markets. The objective of this survey is to examine some aspects of the problem, and particularly how Norwegian firms encounter unethical business practices when operating in foreign areas. The data collected will be applied for research purposes. The information obtained will be treated strictly anonymously and confidentially. Neither your name nor the name of your company will be mentioned in any documents related to this study.

The survey focuses on corruption and similar undue business practices related to the assignment of important contracts; generous bribes, gifts or benefits offered typically to influence the tender procedure or the outcome of negotiations. More explanations to terms in use, the underlined terms, can be found on the last page. If you would like to add any comments related to your responses, or on the topic in general, we encourage you to do so on the last page. Any questions can be directed to Tina Søreide at CMI or Jon Veia at NHO.*

Questionnaire

General information			
A1	What is your position in the company? Please indicate your field of responsibility	----- -----	
A2	Where is your headquarter localized? Circle the answer that applies the most	Norway Other Scandinavian country Other European country USA/Canada Outside the areas mentioned	1 2 3 4 5
A3	Ownership	Size of state ownership: -----% Nationality of leading owner: -----	
A4	Annual turnover worldwide for your company	>1 billion NOK 100-1000 million NOK <100 million NOK	1 2 3
A5	Major activity of company Please specify (If part of a larger conglomerate, circle the category most applicable for your unit)	Agri /food industries Arms and defence Banking, finance and insurance Construction (roads, dams, tunnels, buildings, ships, etc.) Consultancy Light manufacturing (textiles, crockery, toys, etc.) Heavy industry, including mining and quarrying Oil, gas and power generation/transmission	1 2 3 4 5 6 7 8

* tina.soreide@cmi.no or jon.veia@nho.no

		Pharmaceutical/medicare	9
		Telecoms and IT	10
		Tourism, transportation and civilian aerospace	11
		Other kind of service	12
A6	For how long has your company been operating with either trade or investments in foreign markets?	0-10 years	1
		10-30 years	2
		more than 30 years	3
A7	Are the prices for your main products or services pressed to a level that makes it hard to make profits?	No	1
		Generally not	2
		Usually	3
		Yes	4
A8	In which parts of the world does your firm do <u>business</u> ? Please rank the <i>three</i> most important markets with <i>numbers</i>	USA and Canada	...
		West and North European countries	...
		South European countries	...
		East European countries and central Asia	...
		Latin America and the Caribbean	...
		The Middle East and North Africa	...
		Sub-Saharan Africa	...
		Mainland China (excl. Taiwan and Hong Kong)	...
		The rest of Asia	...
		Oceania	...
A9	Is part of your firm's production located outside of Norway?	No	1
		Yes, in other <u>OECD</u> country(ies)	2
		Yes, outside the <u>OECD</u> area	3
A10	Have you ever traded with or carried out a project for a governmental institution in any of the foreign countries where you operate?	No	1
		Yes, sporadically	2
		Yes, many times	3
		I do not know	4
<i>Experiences with unethical business practices</i>			
B1	If any, please rank the <i>three</i> geographical areas in which unethical business practices are influencing your operations the most. Please rank with numbers	USA and Canada	...
		West and North European countries	...
		South European countries	...
		Latin America and the Caribbean	...
		East European countries and central Asia	...
		The Middle East and North Africa	...
		Sub-Saharan Africa	...
		Mainland China (excl. Taiwan and Hong Kong)	...
		The rest of Asia	...
		Oceania	...
B2	Do you ever experience a gap between formal and informal rules in any of the areas just mentioned?	Never	1
		Seldom	2
		Frequently	3
		Often	4
		Always	5
		I do not know	6
B3	Do you ever experience that problems related to corruption impede <u>foreign direct investments</u> in any of the mentioned areas?	Never	1
		Seldom	2
		Frequently	3
		Often	4
		Always	5
		We do not have the relevant experience	6
		I do not know	7

B4	When competing for a contract in the areas mentioned, do you ever have reason to believe that your competitors influence tender procedures unduly?		Never Seldom Frequently Often Always	1 2 3 4 5
B5	a) Has your company ever decided <i>not</i> to operate in a specific country or region mainly because of corruption or similar problems? b) Has your company ever decided <i>not</i> to operate in a specific sector or segment of the market mainly because of corruption or similar problems?	a) b)	No Yes I do not know No Yes I do not know	1 2 3 1 2 3
B6	Have you experienced that unethical business practices by competitors have placed your company in a more adverse competitive position?		No <i>We think</i> it has made us lose a contract(s) We are convinced that it has made us lose a contract(s) We often lose contracts because of corruption I do not know	1 2 3 4 5
B7	a) If losing an important contract (probably) because of corruption, or similar practices, what is your most typical reaction(s)? Please circle all that apply b) If you generally chose <i>not</i> to complain, or if complaints are ignored or rejected, what do you typically do?		No big reaction, corruption is part of the game We ask for a formal explanation from the customer We lodge an appeal to the customer or the tender authorities We prefer not to report the case We retreat from the country I do not know No big reaction, corruption is part of the game We adjust our strategies to the business culture We retreat from the country We report the case in <u>alternative ways</u> I do not know	1 2 3 4 5 6 1 2 3 4 5
B8	Independently of the experiences of your own business unit, what do you think is the most common reason for a company to keep quiet when encountering a competitor in bribery? Please <i>rank</i> the most important alternatives with numbers		Concern about sanctions from the bribing company Concern about sanctions from other companies Concern about future business cooperation Concern about sanctions from customers Lack of knowledge about the illegality of the act Lack of proof Other? Please specify----- I do not know
B9	Would you be <i>more</i> inclined to react on such bribery if it takes place within a country where corruption is perceived to be unusual?		Yes No I do not know	1 2 3
B10	a) Has your company ever carried out a project in a foreign country as a <u>joint venture</u> or as a part of a <u>consortium</u> ? b) If so, has your company ever experienced that a cooperating firm has aimed at influencing clients in a way that you find difficult to acknowledge? c) And if yes on (b), did your company (typically) utter some kind of reaction against this practice?	a) b) c)	Yes No I do not know Yes No I do not know Yes No I do not know	1 2 3 1 2 3 1 2 3

B11	a) Have any of your projects ever been financed by either bilateral or multilateral aid?	Yes No I do not know	1 2 3
	b) If so, do you have the impression that there is more or less corruption, or similar trade of influence, connected to aid projects?	No difference compared to other projects More Less I do not know	1 2 3 4
Intermediaries, advisers and agents			
C1	Does your company have contacts positioned at, or with access to, a high level of the government in any of the countries where you operate? Please circle all that apply	No Yes, in Norway Yes, in some other countries within the OECD area Yes, in foreign countries with a less familiar culture Yes, in all the countries where we operate I do not know	1 2 3 4 5 6
C2	What kind of assistance is typically preferred by your company when entering foreign markets? Please rank the most important alternatives with numbers	Agents and advisors with ties to relevant decision-makers Bureaucrats and/or politicians International business advisors and/or country analysts Relatives of people in governmental institutions Lawyers with the relevant competence Agents able to deal with local formalities Local business advisors without ties to the government I do not know
C3	If relevant, what is the typical way for your company to compensate a middleman? Please circle all the answers that apply	Periodic payments A lump sum A pre-agreed percentage share of the total contract amount A success-fee A combination Other	1 2 3 4 5 6
C4	Given that you reimburse the agent in terms of a share of the total contract, what is the typical percentage?	1-5% 6-10% 11-15% Above 15% I do not know	1 2 3 4 5
Tenders and negotiations			
D1	Does your company place any effort in obtaining or maintaining a relationship to a potential customer prior to pre-qualification for a contract?	No, this is not important Yes, this is an obvious benefit Yes, this is essential I do not know	1 2 3 4
D2	Are you ever able to influence or asked to advise clients on tender specifications?	Never Seldom Frequently Often Always I do not know	1 2 3 4 5 6
D3	Does it ever happen that tender specifications are designed to fit with the offer of one specific company?	Never Seldom Frequently Often Always I do not know	1 2 3 4 5 6
D4	Will there often be negotiations between the tender participants and the decision-makers during the tender	No Usually not	1 2

	procedure?	Sometimes Yes, we negotiate at all stages of the procedure Yes, but all communication during tender is copied to all participating companies I do not know	3 4 5 6
D5	Do you consider standardised tender rules (like <u>international competitive bidding</u>) an obstacle to corruption and similar ways of making influence on clients?	No, tender rules are not an obstacle to corruption Tender rules do not necessarily prevent corruption Generally, tender rules do prevent corruption Yes, tender rules prevent corruption efficiently I do not know	1 2 3 4 5
D6	In which geographical areas, if any, do you typically experience that standardized procurement procedures are <i>not</i> applied when contracts are awarded? Please circle all the areas that apply.	USA and Canada West and North European countries South European countries East European countries and central Asia Latin America and the Caribbean The Middle East and North Africa Sub-Saharan Africa Mainland China (excl. Taiwan and Hong Kong) The rest of Asia Oceania	1 2 3 4 5 6 7 8 9 10
D7	When operating internationally, do you ever experience a demand for a quid pro quo, like the use of local resources, the building of infrastructure or other contributions to the local society?	Never Seldom Frequently Often Always I do not know	1 2 3 4 5 6
D8	Have any state institutions from Norway ever taken part in the negotiations to ensure a contract, or to guarantee for financial aspects?	No Yes I do not know	1 2 3
D9	Have you ever experienced that a competitor has won a contract by help of political pressure?	No Yes I do not know	1 2 3
D10	Do you perceive your industry free and unbiased when it comes to the international competition for important contracts?	No, the procedures are always biased The procedures are often biased The procedures are sometimes biased The procedures are seldom biased The procedures are never biased I do not know	1 2 3 4 5 6
<i>Operating in markets where corruption is more common</i>			
E1	When operating in foreign markets, do you ever have to pay some irregular “additional payments” to get things done?	Never Seldom Sometimes Frequently Often Always I do not know	1 2 3 4 5 6 7
E2	What is the maximum acceptable size of such payments in your industry?	0 - 1000 NOK 1 000 - 10 000 NOK 10 000 -50 000 NOK 50 000 -100 000 NOK Above 100 000 NOK I do not know	1 2 3 4 5 6
E3	Is it required to offer valuable gifts or pay a bribe to clients	USA and Canada	1

	<p>or public officials, directly or through an agent, to be able to operate in certain countries?</p> <p>Please circle all the geographical areas that apply</p>	<p>West and North European countries 2</p> <p>South European countries 3</p> <p>East European countries and central Asia 4</p> <p>Latin America and the Caribbean 5</p> <p>The Middle East and North Africa 6</p> <p>Sub-Saharan Africa 7</p> <p>Mainland China (excl. Taiwan and Hong Kong) 8</p> <p>The rest of Asia 9</p> <p>Oceania 10</p> <p>I do not know 11</p>
E4	<p>How common would you expect it to be, for companies in your line of business, to influence clients by help of corruption or similar undue business practices?</p>	<p>I think it never happens 1</p> <p>I think it happens in around 1-10% of the cases 2</p> <p>I think it happens in around 10-20% of the cases 3</p> <p>I think it happens in 20-30% of the cases 4</p> <p>I think it happens in more than 30% of the cases 5</p> <p>I do not know 6</p>
E5	<p>If companies in your line of business operate unduly, for instance by establishing secret ties to specific decision-makers, what would you suggest that they typically would be aiming at?</p> <p>Please <i>rank</i> the most important alternatives with numbers</p>	<p>Adjustments in tender specifications ...</p> <p>Being part of a bid for a larger contract or concession ...</p> <p>Improve economic conditions, like tax reductions ...</p> <p>Obtain the contract through direct negotiations ...</p> <p>Secret information about evaluation or tender specifications ...</p> <p>Secret information about the other companies' bids ...</p> <p>Promises of neglected quality controls ...</p> <p>Reduce political risk ...</p> <p>Other benefits? Please specify</p> <p>I do not know ...</p>
E6	<p>Under what circumstances could it be acceptable for a company to influence clients by help of a significant benefit, a valuable gift or a bribe?</p>	<p>As long as the firm may end up with an important contract 1</p> <p>When there is no other way of operating in the market 2</p> <p>When the contract is necessary to avoid insolvency 3</p> <p>It is not accepted under any circumstances 4</p> <p>I do not know 5</p>
E7	<p>Does your own company sometimes provide clients with less tradable benefits, like ...</p> <p>Please circle all that apply</p>	<p>excursions and trips? 1</p> <p>promises of career opportunities in the firm? 2</p> <p>a seat in the company board? 3</p> <p>education for their children? 4</p> <p>tickets to expensive sports-arrangements, musicals, etc.? 5</p> <p>Other benefits? Please specify 6</p> <p>I do not know 7</p>
E8	<p>To your knowledge, has your company ever accepted a request from an agent, an adviser or a consultant about money that probably would be applied for bribery?</p>	<p>No 1</p> <p>Probably not 2</p> <p>Probably 3</p> <p>Yes 4</p> <p>I do not know 5</p>
E9	<p>Has your own company during the last decade tried to obtain a contract, a license or a concession in a way that is important to keep confidential?</p>	<p>No 1</p> <p>Seldom 2</p> <p>Probably not 3</p> <p>Probably 4</p> <p>Often 5</p> <p>I do not know 6</p>
E10	<p>Would you be informed if someone in your company paid a bribe, on behalf of the company, to obtain an important</p>	<p>No 1</p> <p>Probably not 2</p>

	contract or a significant benefit?	Probably Certainly I do not know	3 4 5
E11	a) Would you, generally, be able to discover it if a significant part of the compensation to an agent is applied for bribery? b) Have you ever considered it a benefit <i>not</i> to be informed if the agent applies the compensation for questionable payments?	No Yes I do not know No Yes I do not know	1 2 3 1 2 3
E12	Considering the following alternatives, what would you suggest is the most important underlying motivation for companies in your line of business to offer bribes?	‘The fear of losing contracts because someone else has bribed the decision-makers’ ‘Because the goods or services offered would never be chosen in a fair competition’ ‘To persuade decision-makers to buy goods or services that otherwise would not have been demanded’ I do not know	1 2 3 4
Perceptions about Scandinavian conditions			
F1	Do you think Scandinavian companies in general are less or more likely to pay bribes than companies from other <u>OECD countries</u> ?	Less No difference More	1 2 3
F2	Do you think Scandinavian companies are less or more exposed to demands for bribes than companies from other countries?	Less No difference More	1 2 3
F3	Do you generally perceive the competition for important contracts free and fair when operating in Scandinavia?	No, the procedures are always biased The procedures are often biased The procedures are sometimes biased The procedures are seldom biased Yes, the procedures are never biased I do not know	1 2 3 4 5 6
F4	Do you think corruption and similar ways of making influence on clients, affect the outcome of tender procedures in Norway?	Never Seldom Sometimes Frequently Often Always I do not know	1 2 3 4 5 6 7
Control			
G1	Do you think anti-corruption efforts made by your own business organization have influenced the attitudes against bribery in your company?	No No, we already had a clear attitude against bribery Yes, it has influenced our attitude to some extent Yes, it has clearly altered our attitude I am not familiar with their campaigns I do not know	1 2 3 4 5 6
G2	a) Are you familiar with the <u>OECD-convention</u> against bribery of foreign public officials? b) Are most employees in relevant positions informed by the company about the content of this convention?	a) No Yes b) No Yes I do not know	1 2 1 2 3
G3	Given that you are familiar with the Norwegian anti-	No	1

	<p>corruption legislation, do you find it difficult to respect?</p> <p>If yes, please specify why? (There is more space for comments on the last page)</p>	<p>Usually not 2</p> <p>Often 3</p> <p>Yes 4</p> <p>I am not familiar with the legislation on this area 5</p> <p>-----</p> <p>-----</p>	
G4	<p>What do you consider the major reason for <i>not</i> paying bribes when operating in foreign markets?</p> <p>Please <i>rank</i> the most important alternatives with numbers</p>	<p>It is illegal ...</p> <p>It is immoral ...</p> <p>It may harm the reputation ...</p> <p>It may place our employees in an unsafe situation ...</p> <p>It is expensive ...</p> <p>Accounting practices make it difficult ...</p> <p>It is not part of our company culture ...</p> <p>Corruption disturbs the function of markets ...</p> <p>I do not know ...</p>	
G5	<p>a) Does your company have a set of internal written codes of conduct that restricts employees from paying bribes?</p> <p>b) Do you have routines to detect violations of these codes?</p> <p>c) What is the typical reaction from the company if a serious violation of ethical codes (like corruption) is detected?</p>	<p>No 1</p> <p>Yes 2</p> <p>No 1</p> <p>Yes, we some routines 2</p> <p>Yes, we have efficient routines 3</p> <p>No big reaction 1</p> <p>Internal discussions 2</p> <p>Internal inquiry 3</p> <p>Investigation by an external committee or consultancy 4</p> <p>Involve the police 5</p> <p>I do not know 6</p>	
G6	<p>Do you have efficient routines to detect false consultancy fees, fake invoices or illegal transactions, made for instance to avoid taxes?</p>	<p>No 1</p> <p>Yes 2</p> <p>I do not know 3</p>	
G7	<p>a) Do you have routines to detect your own employees in <i>receiving</i> bribes?</p> <p>b) Has your company ever detected an employee in receiving a bribe?</p>	<p>No 1</p> <p>Yes 2</p> <p>I do not know 3</p> <p>No 1</p> <p>Yes 2</p> <p>I do not know 3</p>	
G8	<p>Does your company encourage employees to report the case internally if they uncover bribery or other types of crime carried out by the firm?</p>	<p>No 1</p> <p>Not actively 2</p> <p>Yes, we do 3</p> <p>I do not know 4</p>	
G9	<p>a) Has your company's attitude towards corruption changed during the last years?</p> <p>b) If your attitude has changed, when do you think the change took place?</p>	<p>a) No 1</p> <p>Yes, paying bribes was more accepted previously 2</p> <p>Yes, paying bribes was less accepted previously 3</p> <p>I do not know 4</p> <p>b) Last autumn 1</p> <p>During the last two years 2</p> <p>During the last five years 3</p>	

	c) Do you think the competition for important contracts in your industry has become more fair and unbiased during the last years?	During the last decade 4 I do not know 5 No 1 Yes 2 I do not know 3	
<p>We would appreciate any thoughts you might like to add related to your responses or to the topic in general. Comments on this survey are of course also welcome. (Please add a sheet if the space here is too limited)</p>			

Thank you for your contribution!

Explanation to terms in use

An **agent** is a company or a person that assist you in facilitating the business in a foreign country. The term includes intermediaries, middlemen, information brokers and advisors on local business. The representative is not an employee of the firm.

Alternative ways of reporting on corruption, in cases where a complaint to the tender authorities is (expected to be) ignored, are to inform newspapers (either in the country of business or in the home-country of the bribing firm), political authorities, embassies, anti-corruption groups, etc.

Bribe: In this survey we mainly refer to grand scale corruption, generous gifts offered typically to influence the assignment of important contracts. The receiver of the bribe is often, but not always, employed by the state.

Business relates to export and imports of goods and services, also included are foreign direct investments. The term does not refer to strictly financial investments.

Consortium: An international business and/or banking agreement that includes more than two companies, often with the aim of cooperating on a larger business project or to control a significant share of a market. The responsibility of each company is restricted to what it delivers in the specific project.

Corruption: Corruption is often defined as the misuse of entrusted authority for private gain. An official demands or is offered a bribe, in money or other values, either to do what s/he is supposed to do in any case or to make a certain decision that probably not would have been made without the bribe.

Foreign Direct Investment (FDI) is the acquisition abroad of physical assets, such as plant and equipment, with operating control residing in the parent corporation. Greenfield investment is the form of FDI where you invest in new facilities rather than acquiring already operating firms.

International Competitive Bidding (ICB) refers to tender rules that are developed to provide all eligible prospective bidders with timely and adequate notification of a tender and an equal opportunity to bid for the contract.

Joint venture: Partnership or cooperative agreement between two or more companies restricted to a single specific project. Each company will typically have joint liability.

OECD countries: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey, United Kingdom, United States.

OECD-convention: The OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions entered into force on February 15, 1999. The Convention makes it a crime to offer, promise or give a bribe to a foreign public official in order to obtain or retain international business deals.



Corruption Survey

This questionnaire is part of a Norwegian survey on corruption in international business transactions. It is carried out by CMI researcher Tina Søreide in cooperation with NHO. The study is part of a Ph.D. project at the Norwegian School of Economics and Business Administration (NHH) and financed by The Norwegian Research Council (NFR).

Corruption, or similar ways of making influence on decision-makers, is a challenge for those who want to enter or operate in certain markets. The objective of this survey is to examine some aspects of the problem, and particularly how Norwegian firms encounter unethical business practices when operating in foreign areas. Information is gathered by help of questionnaires and interviews in the headquarters of Norwegian firms. This part of the project aims at complementing the study by addressing Norwegian embassies and consulates with a few questions.

The data collected will be applied for research purposes. The information obtained will be treated strictly anonymously and confidentially. Neither your name nor the name of your country of operation will be mentioned in any document related to this study. In fact, the procedures applied prevent us from obtaining identifiable information. Any questions can be directed to Tina Søreide at CMI or Jon Veia at NHO.*

Questionnaire

1	How would you categorize your area or country of operation?	Developing country Medium income country Rich country	1 2 3
2	How frequently do you think corruption is part of the business culture in your country of operation? Please circle the answer that applies the most	Never Seldom Sometimes Frequently Often Always	1 2 3 4 5 6
3	How often would you assume that Norwegian firms operating in the area are confronted with challenges related to illegitimate business practices, irregular payments and corruption?	Never Seldom Sometimes Frequently Often Constantly	1 2 3 4 5 6
4	Will adjustment to local informal conventions in your country of operation ever imply business procedures that would be considered less acceptable in Norway?	Never Seldom Sometimes Frequently Often Always I do not know	1 2 3 4 5 6 7
5	Is it likely that the refusal of making irregular or informal payments might reduce the opportunities for foreign firms to make business in your country of operation?	No Seldom Sometimes Frequently Often In general, yes I do not know	1 2 3 4 5 6 7

* tina.soreide@cmi.no or jon.veia@nho.no

6	Do you ever notice that foreign firms that operate in the area make use of business practices that most likely deviate from their own official codes of conduct?	Never Seldom Sometimes Frequently Often Always	1 2 3 4 5 6
7	Would you recommend Norwegian firms to adjust to local culture, even if it could imply business behaviour that would not be accepted in Norway?	No Seldom Maybe Sometimes Usually Yes	1 2 3 4 5 6
8	Given that a Norwegian firm has lost an important contract due to corruption, would you be willing to mention the issue to local authorities?	No Probably not Probably Certainly I do not know	1 2 3 4 5
9	Have you ever reacted against corruption by raising the issue at a higher political level?	No It has happened Several times	1 2 3

We would appreciate any thoughts you might like to add related to your responses or to the topic in general. (Please add a sheet if the space here is too limited)

Thank you for your contribution!